Refrigerant R410A
INVERTER

AIRSTAGE™ J-IIIL

DESIGN & TECHNICAL MANUAL





FUJITSU GENERAL LIMITED

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Refrigerant R410A
INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

1. GENERAL INFORMATION

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2017.03.31

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GENERAL INFORMATION

1. MODEL LINE UP

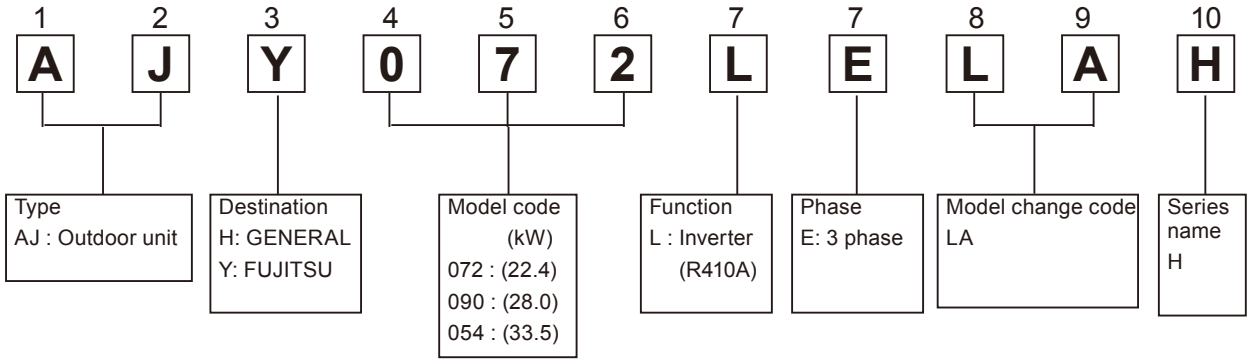
1-1. OUTDOOR UNIT

- Line up from 8HP to 12HP in 2HP increments.

■ LINE UP (SINGLE)

HP	Capacity (kW)	Model name	Chassis	Connectable indoor unit
8	22.4	AJ∗072LELAH		1 to 20
10	28.0	AJ∗090LELAH		1 to 25
12	33.5	AJ∗108LELAH		1 to 30

■ MODEL DESIGNATION



GENERAL INFORMATION

1-2. INDOOR UNIT

■ LINE UP (1/2)

Various combinations of types and capacity, ranging from 1.1kW to 28.0kW.

Capacity		Compact Cassette	Cassette				Mini Duct	Slim Duct/ Slim Concealed Floor	Medium Static Pressure Duct
kW	Model code		XM	XK	XD	XA			
1.1	04	●					●		
2.2	07	●					●	●	
2.8	09	●					●	●	
3.6	12	●					●	●	
4.5	14	●					●	●	
5.6	18	●	●	●	●		●	●	
7.1	24	●	●	●	●		●	●	●
9.0	30		●	●		●			●
10.0	34			●		●			
11.2	36			●		●			●
12.5	45			●		●			●
14.0	54			●		●			
18.0	60								
22.4	72								
25.0	90								
28.0	96								

Compact Cassette

AUXB04GBLH
AUXB07GALH
AUXB09GALH
AUXB12GALH
AUXB14GALH
AUXB18GALH
AUXB24GALH



Cassette

AUXM018GLAH
AUXM024GLAH
AUXM030GLAH
AUXK018GLAH
AUXK024GLAH
AUXK030GLAH
AUXK034GLAH
AUXK036GLAH
AUXK045GLAH
AUXK054GLAH



AUXD18GALH
AUXD24GALH
AUXA30GALH
AUXA34GALH
AUXA36GALH
AUXA45GALH
AUXA54GALH



Mini Duct

ARXK04GCLH
ARXK07GCLH
ARXK09GCLH
ARXK12GCLH
ARXK14GCLH
ARXK18GCLH
ARXK24GCLH







Slim Duct/Slim Concealed Floor

ARXD07GALH
ARXD09GALH
ARXD12GALH
ARXD14GALH
ARXD18GALH
ARXD24GALH







Medium Static Pressure Duct

ARXA24GBLH
ARXA30GBLH
ARXA36GBLH
ARXA45GBLH



GENERAL INFORMATION

■ LINE UP (2/2)

Various combinations of types and capacity, ranging from 1.1kW to 28.0kW.

Capacity		High Static Pressure Duct	Compact Floor	Compact Floor (EEV external)	Floor / Ceiling	Ceiling	Wall Mounted	Wall Mounted (EEV external)
kW	Model code							
1.1	04		●	●			●	●
2.2	07		●	●			●	●
2.8	09		●	●			●	●
3.6	12		●	●	●		●	●
4.5	14		●	●	●		●	●
5.6	18				●		●	
7.1	24				●		●	
9.0	30					●	●	
10.0	34						●	
11.2	36	●				●		
12.5	45	●				●		
14.0	54					●		
18.0	60	●						
22.4	72	●						
25.0	90	●						
28.0	96	●						

High Static Pressure Duct

ARXC36GBTH
ARXC45GATH
ARXC60GATH



ARXC72GBTH
ARXC90GBTH



ARXC96GATH



Compact Floor

AG∗A004GCAH
AG∗A007GCAH
AG∗A009GCAH
AG∗A012GCAH
AG∗A014GCAH



Compact Floor (EEV external)

AG∗E004GCAH
AG∗E007GCAH
AG∗E009GCAH
AG∗E012GCAH
AG∗E014GCAH



EV kit



Floor / Ceiling

AB∗A12GATH
AB∗A14GATH
AB∗A18GATH
AB∗A24GATH



Ceiling

AB∗A30GATH
AB∗A36GATH
AB∗A45GATH
AB∗A54GATH



Wall Mounted

AS∗A004GTAH
AS∗A007GTAH
AS∗A009GTAH



AS∗A12GACH
AS∗A14GACH



AS∗A18GBCH
AS∗A24GBCH



AS∗A030GTAH
AS∗A034GTAH



Wall Mounted (EEV external)

AS∗E004GTAH
AS∗E007GTAH
AS∗E009GTAH



AS∗E12GACH
AS∗E14GACH

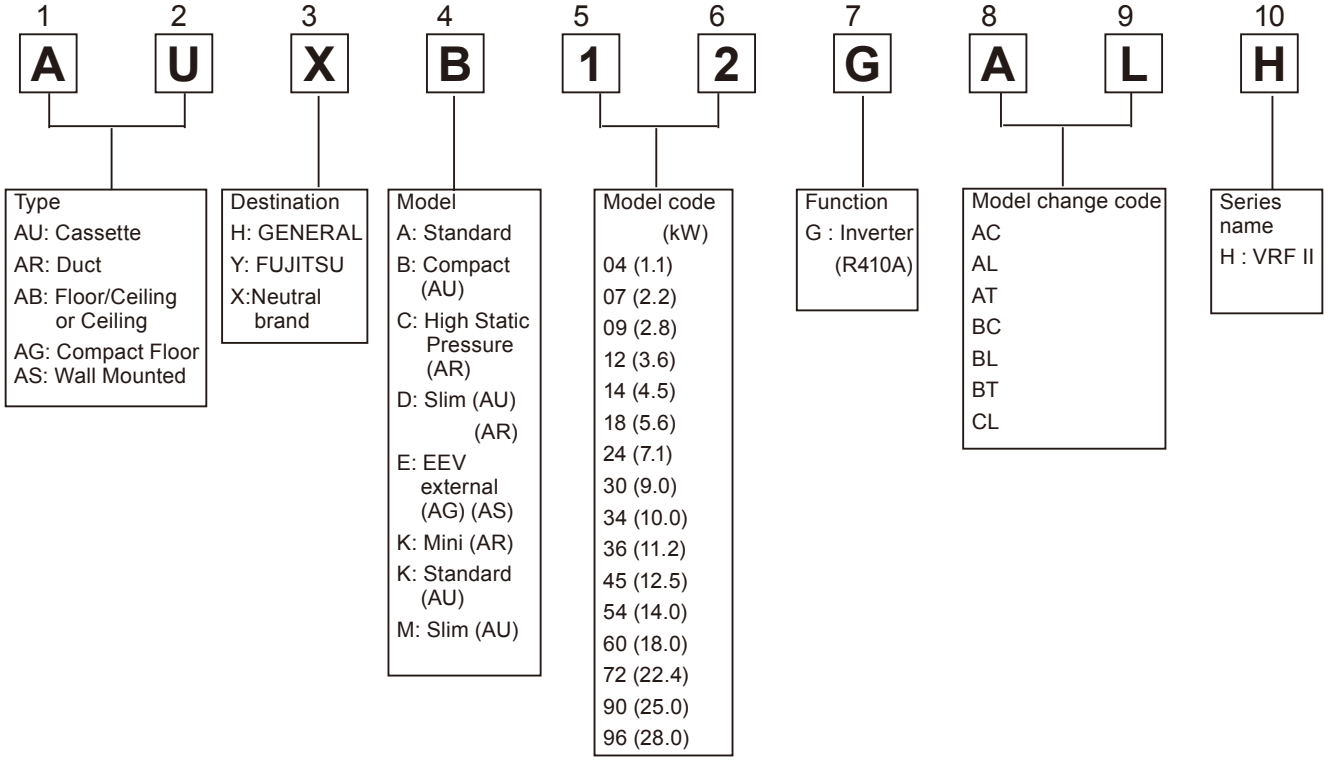


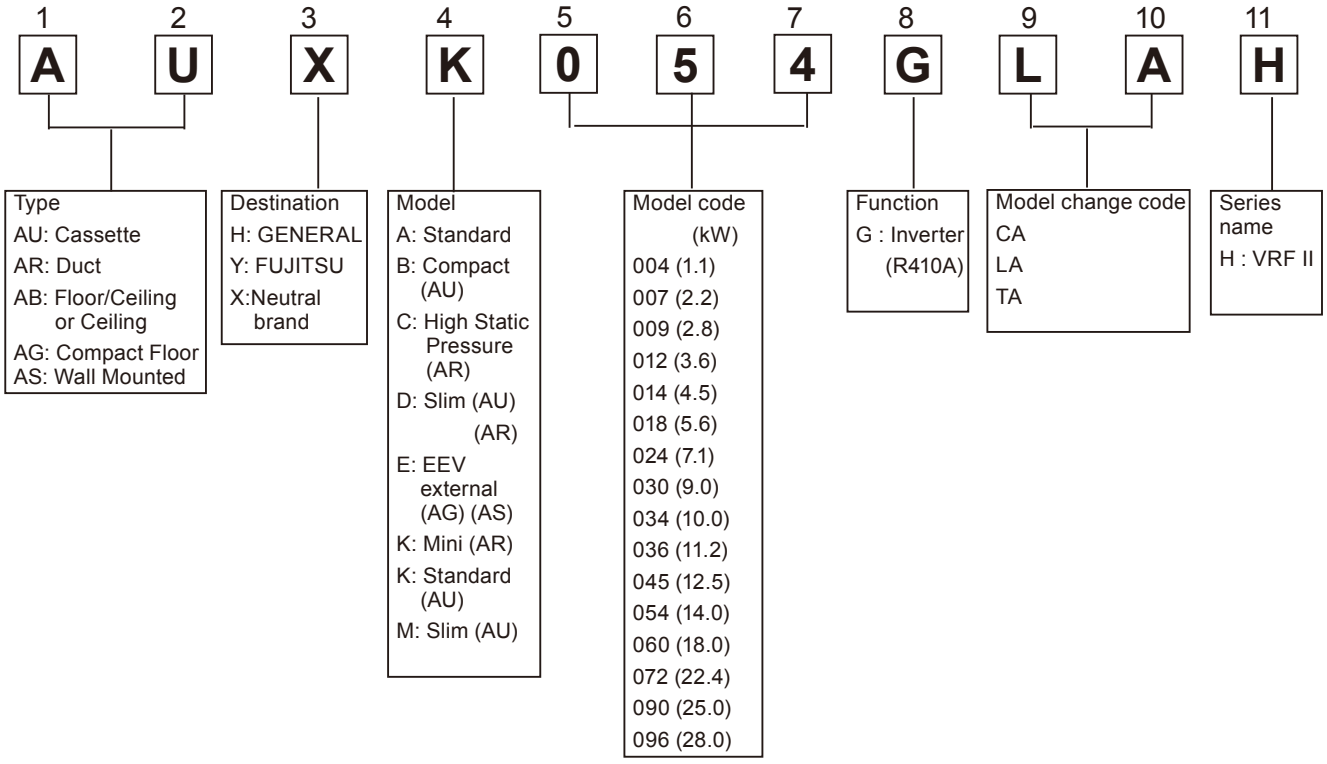
EV kit



GENERAL INFORMATION

■ MODEL DESIGNATION





GENERAL INFORMATION

1-3. CONTROLLER

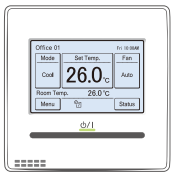
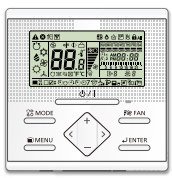
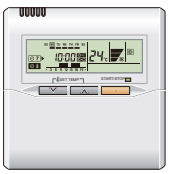
■ LINE UP

Type	Model	Remarks
System Controller	UTY-APGXZ1	Option: UTY-PEGXZ1, UTY-PPGXP2
System Controller Lite	UTY-ALGXZ1	Option: UTY-PLGXA2, UTY-PLGXR2, UTY-PLGXE2, UTY-PLGXP2, UTY-PLGXX2
Touch Panel Controller	UTY-DTG∗Z1	Option: UTY-PTGXA
Central Remote Controller	UTY-DCG∗	-
Group Remote Controller	UTY-CGG∗	-
Wired Remote Controller (Touch panel)	UTY-RNR∗Z2	2-wire type
Wired Remote Controller	UTY-RLR∗	
Wired Remote Controller	UTY-RNK∗	3-wire type
Simple Remote Controller (With operation mode)	UTY-RSR∗	2-wire type
Simple Remote Controller (Without operation mode)	UTY-RHR∗	
Simple Remote Controller (With operation mode)	UTY-RSK∗	3-wire type
Simple Remote Controller (Without operation mode)	UTY-RHK∗	
Wireless Remote Controller	UTY-LNH∗	-

■ CENTRAL CONTROL

System Controller / System Controller Lite	Touch Panel Controller	Central Remote Controller	Group Remote Controller
 UTY-APGXZ1 / UTY-ALGXZ1	 UTY-DTG∗Z1	 UTY-DCG∗	 UTY-CGG∗ Network Convertor (UTY-VGGXZ1) is necessary to connect Group Remote Controller to VRF network system.

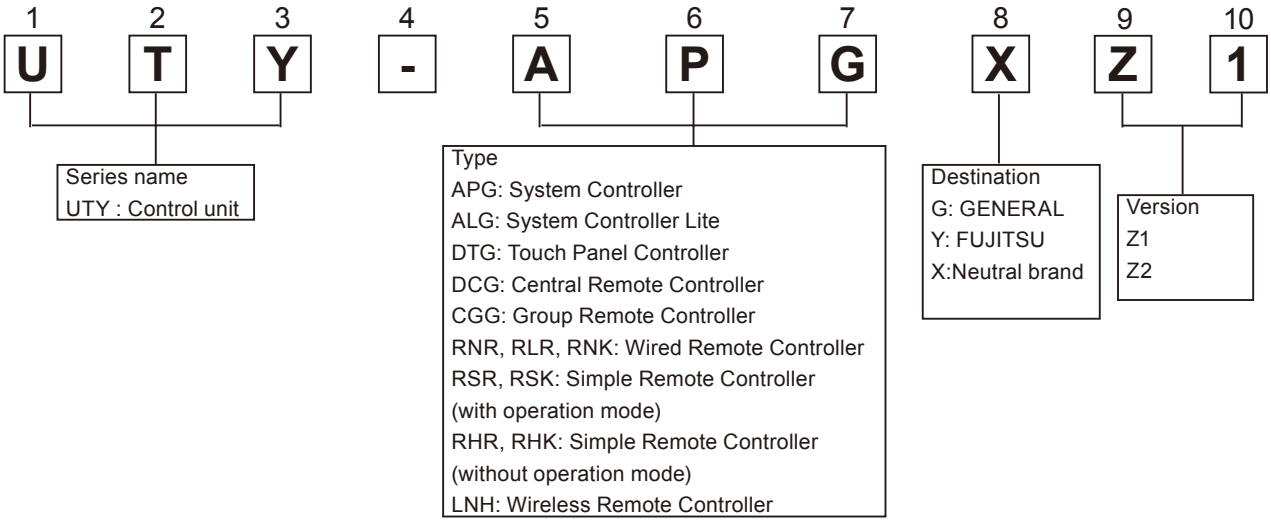
■ INDIVIDUAL CONTROL

Wired Remote Controller	Simple Remote Controller
(Touch panel)  UTY-RNR∗Z2  UTY-RLR∗  UTY-RNK∗	(With operation mode)  UTY-RSR∗  UTY-RSK∗ (Without operation mode)  UTY-RHR∗  UTY-RHK∗

Wireless Remote Controller
 UTY-LNH∗

GENERAL INFORMATION

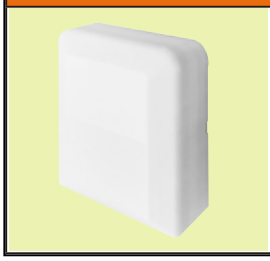
■ MODEL DESIGNATION



GENERAL INFORMATION

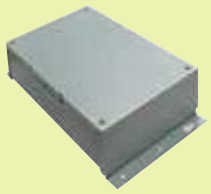
1-4. ADAPTOR / CONVERTOR / MAINTENANCE TOOL

Network Convertor
Model : UTY-VTGX



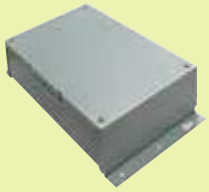
Split type systems can be controlled from a central controller via the convertor.

Network Convertor (AC power supply)
Model : UTY-VTGXV



Split type systems can be controlled from a central controller via the convertor.

Modbus® Convertor for VRF
Model : UTY-VMGX



For connection between VRF network system and a MODBUS® open network.

Network Convertor
Model : UTY-VGGXZ1



Split type systems can be controlled from a central controller via the convertor.

Group remote controller can be controlled up to two refrigerant systems via the convertor.

Network Convertor for LONWORKS®
Model : UTY-VLGX



For connection between VRF network system and a LONWORKS® open network for management of small to medium-sized BMS.

BACnet® Gateway
Model : UTY-ABGXZ1



The central control of maximum 1600 indoor units can be realized by connecting the VRF network system to the BACnet®, a global standard for open network.

Wireless LAN Interface
Model : UTY-TFSXZ1



Remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, and tablets.

GENERAL INFORMATION

Signal Amplifier

Model : UTY-VSGXZ1



If the total length of transmission line exceeds 500m, or the number of units exceeds 64, a Signal Amplifier will be necessary.

External Switch Controller

Model : UTY-TERX



Air conditioner switching can be controlled by connecting other external sensor switches.

Service Tool

Model : UTY-ASGXZ1



Extensive monitoring and analysis functions for installation and maintenance. Operation status and error history can be grasped promptly and adequately.

Web Monitoring Tool

Model : UTY-AMGXZ1



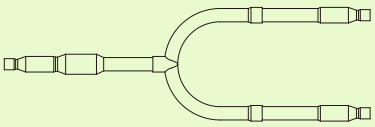
Trouble free operation at all times by web monitoring system. The operation status of the VRF network system within the building can be monitored in real time over the Internet.

GENERAL INFORMATION

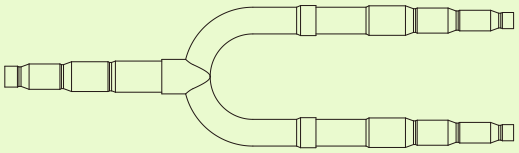
1-5. BRANCH KIT

Separation Tube
Model :UTP-AX054A

Liquid Pipe

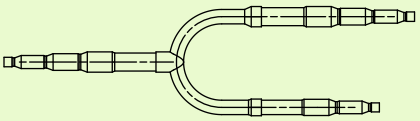


Gas Pipe

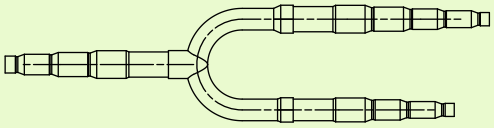


Separation Tube
Model: UTP-AX090A

Liquid Pipe

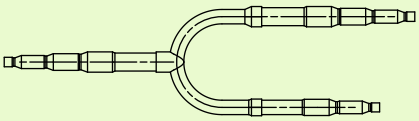


Gas Pipe

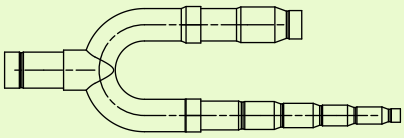


Separation Tube
Model: UTP-AX180A

Liquid Pipe

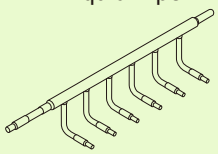
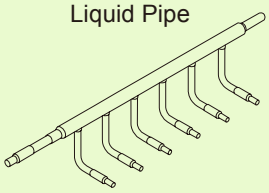
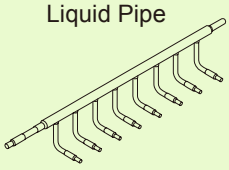
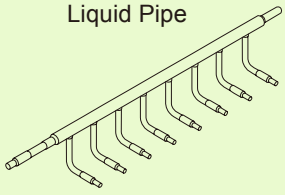
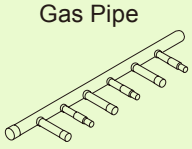
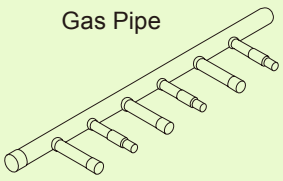
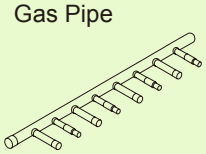
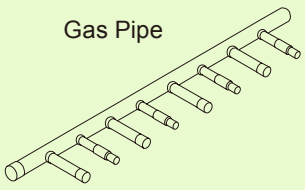


Gas Pipe



1-6. HEADER

Header

Model : UTR-H0906L	Model : UTR-H1806L	Model : UTR-H0908L	Model : UTR-H1808L
Liquid Pipe 	Liquid Pipe 	Liquid Pipe 	Liquid Pipe 
Gas Pipe 	Gas Pipe 	Gas Pipe 	Gas Pipe 

GENERAL INFORMATION

1-7. EV KIT

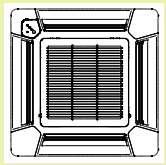
EV Kit — Models : UTR-EV09XB, UTR-EV14XB



For Compact Wall Mounted type and Compact Floor type (EEV external)

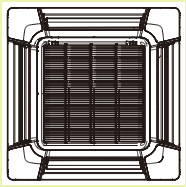
1-8. CASSETTE GRILLE

Cassette grille — Models : UTG-UFYC-W, UTG-UFGC-W



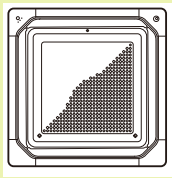
For Compact Cassette type

Cassette grille — Models : UTG-UGYA-W, UTG-UGGA-W



For Cassette type

Cassette grille — Models : UTG-UKYC-W, UTG-UKGC-W, UTG-UKYA-B, UTG-UKGA-B



For Cassette type (Circular Flow)

GENERAL INFORMATION

1-9. OTHERS (optional parts)

Flange (Square)

Model : UTD-SF045T

For Medium Static Pressure Duct type
205 x 1,063 ; L=40 (mm)



Flange (Round)

Model : UTD-RF204

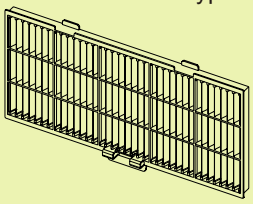
For Medium Static Pressure Duct type
ø195 (ø205) ; L=85 (mm)



Long-life Filter

Model : UTD-LF25NA

For Medium Static Pressure Duct type

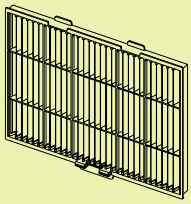


x 2 pcs

Long-life Filter

Model : UTD-LF60KA

For High Static Pressure Duct type



x 2 pcs

Drain Pump Unit

Model : UTZ-PX1NBA



For Medium Static Pressure Duct type

Drain Pump Unit

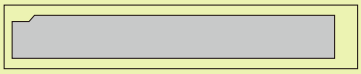
Model : UTR-DPB24T



For Ceiling type

Air outlet shutter plate

Model : UTR-YDZB



For Compact Cassette type

Air outlet shutter plate

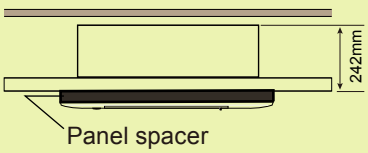
Model: UTR-YDZK



For Cassette type

Panel spacer

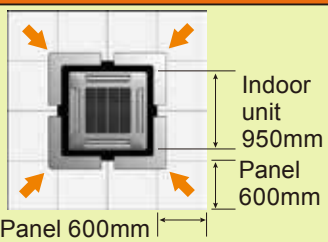
Model: UTG-BKXA-W



For Cassette type

Wide panel

Model: UTG-AKXA-W

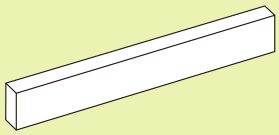


For Cassette type

GENERAL INFORMATION

Half concealed kit

Model : UTR-STA



For Compact Floor type

IR Receiver Unit

Model: UTB-YWC



For all Duct type

IR Receiver Unit

Models : UTY-LRHYB1
UTY-LRHGB1



For Cassette type

IR Receiver Unit

Model: UTY-LBHXD



For Cassette type (Circular Flow)

Human Sensor Kit

Model: UTY-SHZXC



For Cassette type (Circular Flow)

Remote Sensor Unit

Model : UTY-XSZX

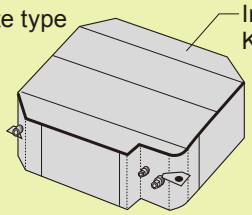


Thermo-sensor for sensing the temperature of arbitrary place in the room

Insulation Kit for High Humidity

Models: UTZ-KXGC *1
UTZ-KXRA *2

*1 For Compact Cassette type
*2 For Cassette type



Install when the condition under the roof is over 80% in humidity and over 30°C in temperature.

Fresh air intake kit

Model : UTZ-VXAA



For Compact Cassette type

Fresh air intake kit

Model: UTZ-VXRA



For Cassette type

GENERAL INFORMATION

Auto louver grille kit

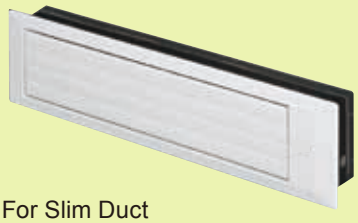
Models : UTD-GXTA-W
UTD-GXTB-W
UTD-GXTC-W



For Mini Duct, Slim Duct

Auto louver grille kit

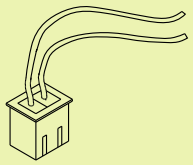
Models : UTD-GXSA-W
UTD-GXSB-W
UTD-GXSC-W



For Slim Duct

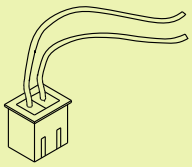
GENERAL INFORMATION

External connect kit
Model: UTY-XWZXZ6



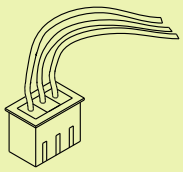
For Outdoor unit / RB unit

External connect kit
Model : UTY-XWZXZ7



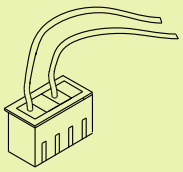
For Indoor unit /
Central remote controller

External connect kit
Model: UTY-XWZXZ8



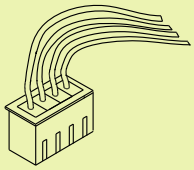
For Central remote controller

External connect kit
Model : UTY-XWZXZ9



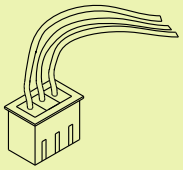
For Outdoor unit

External connect kit
Model : UTY-XWZXZA



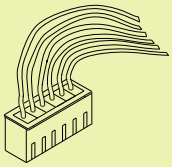
For Touch panel controller /
Central remote controller

External connect kit
Model : UTY-XWZXZB



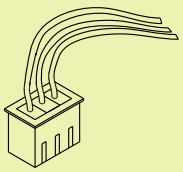
For Indoor unit / RB unit

External connect kit
Model: UTY-XWZXZC



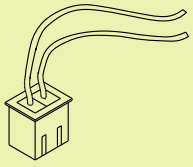
For Indoor unit

External connect kit
Model: UTY-XWZXZD



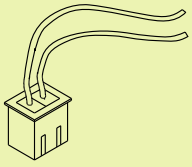
For Indoor unit

External connect kit
Model: UTY-XWZXZE



For Indoor unit

External connect kit
Model: UTY-XWZXZF



For Outdoor unit

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

2. MODEL SELECTION

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2. MODEL SELECTION

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2. MODEL SELECTION

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1. MODEL SELECTION PROCEDURE

Selection of indoor units → See 2-2.MODEL LINE UP (INDOOR UNIT) and 3-1. SELECTION PROCEDURE OF INDOOR UNIT AND OUTDOOR UNIT

↓

Selection of required optional parts
- Cassette grille for all Cassette type
- EV kit for AS∗E004-009,12,14 and AG∗E004-014

→ See 2-3.MODEL LINE UP (OPTIONAL PARTS)

↓

Selection of outdoor unit → See 2-1.MODEL LINE UP (OUTDOOR UNIT) and 3-1. SELECTION PROCEDURE OF INDOOR UNIT AND OUTDOOR UNIT

↓

Selection of controller units
- System Controller
- System Controller Lite
- Touch Panel Controller
- Central Remote Controller
- Group Remote Controller
- Wired Remote Controller
- Simple Remote Controller (with operation mode)
- Simple Remote Controller (without operation mode)
- Wireless Remote Controller

→ See 2-3.MODEL LINE UP (OPTIONAL PARTS)

↓

Selection of adaptor / convertor
- Network Convertor
- Network Convertor for LonWorks®
- Modbus® Convertor for VRF
- BACnet® Gateway
- Wireless LAN Interface
- Signal Amplifier
- External Switch Controller

→ See 2-3.MODEL LINE UP (OPTIONAL PARTS)

↓

Selection of branch kit
- Separation Tube
- Header

→ See 2-3.MODEL LINE UP (OPTIONAL PARTS)

↓

Selection of other optional parts
- Flange (square)
- Flange (round)
- Long-Life Filter
- IR Receiver Unit
- Remote Sensor Unit
- Drain Pump Unit
- Air Outlet Shutter Plate
- Panel Spacer
- Wide Panel
- Half concealed kit
- Insulation Kit for High humidity
- Fresh air intake kit
- Auto louver grille kit

→ See 2-3.MODEL LINE UP (OPTIONAL PARTS)

↓

END

2. MODEL LINE UP

2-1. OUTDOOR UNIT

■ LINE UP

HP	Capacity (kW)		Model name	Connectable indoor unit	Indoor unit connectable cooling capacity (kW)
	Cooling	Heating			
8	22.4	25.0	AJ∗072LELAH	1 to 20	11.2 to 33.6
10	28.0	31.5	AJ∗090LELAH	1 to 25	14.0 to 42.0
12	33.5	37.5	AJ∗108LELAH	1 to 30	16.8 to 50.2

MODEL SELECTION

2-2. INDOOR UNIT

■ LINE UP

Type	Rated capacity (kW)		Model name	Dimensions H x W x D (mm)	Remarks
	Cooling	Heating			
Compact Cassette	1.1	1.3	AUXB04GBLH	245 x 570 x 570	UTG-UFYC-W (FUJITSU) UTG-UFGC-W (GENERAL)
	2.2	2.8	AUXB07GALH		
	2.8	3.2	AUXB09GALH		
	3.6	4.1	AUXB12GALH		
	4.5	5.0	AUXB14GALH		
	5.6	6.3	AUXB18GALH		
	7.1	8.0	AUXB24GALH		
Cassette	5.6	6.3	AUXM018GLAH	246 x 840 x 840	UTG-UKYC-W(FUJITSU) UTG-UKGC-W(GENERAL) UTG-UKYA-B(FUJITSU) UTG-UKGA-B(GENERAL)
	7.1	8.0	AUXM024GLAH		
	9.0	10.0	AUXM030GLAH		
	5.6	6.3	AUXK018GLAH	288 x 840 x 840	
	7.1	8.0	AUXK024GLAH		
	9.0	10.0	AUXK030GLAH		
	10.0	11.2	AUXK034GLAH		
	11.2	12.5	AUXK036GLAH		
	12.5	14.0	AUXK045GLAH		
	14.0	16.0	AUXK054GLAH		
	5.6	6.3	AUXD18GALH	246 x 840 x 840	UTG-UGYA-W (FUJITSU) UTG-UGGA-W (GENERAL)
	7.1	8.0	AUXD24GALH		
	5.6	6.3	AUXA18GALH	288 x 840 x 840	
	7.1	8.0	AUXA24GALH		
	9.0	10.0	AUXA30GALH		
	10.0	11.2	AUXA34GALH		
	11.2	12.5	AUXA36GALH		
	12.5	14.0	AUXA45GALH		
	14.0	16.0	AUXA54GALH		
Mini duct	1.1	1.3	ARXK04GCLH	198 x 700 x 450	
	2.2	2.8	ARXK07GCLH		
	2.8	3.2	ARXK09GCLH		
	3.6	4.0	ARXK12GCLH		
	4.5	5.0	ARXK14GCLH		
	5.6	6.3	ARXK18GCLH	198 x 900 x 450	
	7.1	8.0	ARXK24GCLH	198 x1,100 x 450	
Slim Duct / Slim Concealed Floor	2.2	2.8	ARXD07GALH	198 x 700 x 620	
	2.8	3.2	ARXD09GALH		
	3.6	4.0	ARXD12GALH		
	4.5	5.0	ARXD14GALH		
	5.6	6.3	ARXD18GALH	198 x 900 x 620	
	7.1	8.0	ARXD24GALH	198 x 1,100 x 620	
Medium Static Pressure Duct	7.1	8.0	ARXA24GBLH	270 x 1,135 x 700	
	9.0	10.0	ARXA30GBLH		
	11.2	12.5	ARXA36GBLH		
	12.5	14.0	ARXA45GBLH		
High Static Pressure Duct	11.2	12.5	ARXC36GBTH	400 x 1,050 x 500	
	12.5	14.0	ARXC45GATH		
	18.0	20.0	ARXC60GATH		
	22.4	25.0	ARXC72GBTH	450 x 1,587 x 700	
	25.0	28.0	ARXC90GBTH		
	28.0	31.5	ARXC96GATH	550 x 1,587 x 700	
Floor / Ceiling	3.6	4.0	AB∗A12GATH	199 x 990 x 655	
	4.5	5.0	AB∗A14GATH		
	5.6	6.3	AB∗A18GATH		
	7.1	8.0	AB∗A24GATH		
Ceiling	9.0	10.0	AB∗A30GATH	240 x 1,660 x 700	
	11.2	12.5	AB∗A36GATH		
	12.5	14.0	AB∗A45GATH		
	14.0	16.0	AB∗A54GATH		

MODEL SELECTION

■ LINE UP

Type	Rated capacity (kW)		Model name	Dimensions H x W x D (mm)	Remarks
	Cooling	Heating			
Compact floor	1.1	1.3	AG∗A004GCAH	600 x 740 x 200	
	2.2	2.8	AG∗A007GCAH		
	2.8	3.2	AG∗A009GCAH		
	3.6	4.0	AG∗A012GCAH		
	4.0	4.5	AG∗A014GCAH		
Compact floor (EEV external model)	1.1	1.3	AG∗E004GCAH		UTR-EV09XB
	2.2	2.8	AG∗E007GCAH		
	2.8	3.2	AG∗E009GCAH		
	3.6	4.0	AG∗E012GCAH		UTR-EV14XB
	4.0	4.5	AG∗E014GCAH		
Wall mounted	1.1	1.3	AS∗A004GTAH	262 x 820 x 206	
	2.2	2.8	AS∗A007GTAH		
	2.8	3.2	AS∗A009GTAH		
	3.6	4.1	AS∗A12GACH	275 x 790 x 215	
	4.5	5.0	AS∗A14GACH		
	5.6	6.3	AS∗A18GBCH	320 x 998 x 238	
	7.1	8.0	AS∗A24GBCH		
	9.0	10.0	AS∗A030GTAH	340 x 1,150 x 280	
	10.0	11.2	AS∗A034GTAH		
Wall mounted (EEV external model)	1.1	1.3	AS∗E004GTAH	262 x 820 x 206	UTR-EV09XB
	2.2	2.8	AS∗E007GTAH		
	2.8	3.2	AS∗E009GTAH		
	3.6	4.1	AS∗E12GACH	275 x 790 x 215	UTR-EV14XB
	4.5	5.0	AS∗E14GACH		

2-3. OPTIONAL PARTS

■ CONTROLLER

Items	Model name	Remarks
System Controller	UTY-APGXZ1	Option: UTY-PEGX1, UTY-PPGXP2
System Controller Lite	UTY-ALGXZ1	Option: UTY-PLGXA2, UTY-PLGXR2, UTY-PLGXE2, UTY-PLGXP2, UTY-PLGXX2
Touch Panel Controller	UTY-DTG∗Z1	Option: UTY-PTGXA
Central Remote Controller	UTY-DCG∗	
Group Remote Controller	UTY-CGG∗	
Wired Remote Controller (Touch panel)	UTY-RNR∗Z2	2-wire type
Wired Remote Controller	UTY-RLR∗	
Wired Remote Controller	UTY-RNK∗	3-wire type
Simple Remote Controller (With operation mode)	UTY-RSR∗	2-wire type
Simple Remote Controller (Without operation mode)	UTY-RHR∗	
Simple Remote Controller (With operation mode)	UTY-RSK∗	3-wire type
Simple Remote Controller (Without operation mode)	UTY-RHK∗	
Wireless Remote Controller	UTY-LNH∗	

■ ADAPTOR / CONVERTOR / MAINTENANCE TOOL

Items	Model name	Remarks
Network Convertor	UTY-VTGX	
Network Convertor (AC power supply)	UTY-VTGXV	
Modbus® Convertor for VRF	UTY-VMGX	
Network Convertor	UTY-VGGXZ1	
Network Convertor for LonWorks®	UTY-VLGX	
Signal Amplifier	UTY-VSGXZ1	
External Switch Controller	UTY-TERX	
Service Tool	UTY-ASGXZ1	
Web Monitoring Tool	UTY-AMGXZ1	
BACnet® Gateway	UTY-ABGXZ1	
Wireless LAN Interface	UTY-TFSXZ1	

■ BRANCH KIT

Items	Model name	Total cooling capacity of indoor units (kW) *1
Separation Tube	UTP-AX054A	19.6 or less
	UTP-AX090A	28.0 or less
	UTP-AX180A	28.1 to 56.0
Header	UTR-H0906L	28.0 or less
	UTR-H0908L	28.0 or less

■ EV KIT

Items	Model name	Applicable indoor unit
EV Kit	UTR-EV09XB	AG∗E004GCAH, AG∗E007GCAH, AG∗E009GCAH AS∗E004GTAH, AS∗E007GTAH, AS∗E009GTAH
	UTR-EV14XB	AG∗E012GCAH, AG∗E014GCAH AS∗E12GACH, AS∗E14GACH

■ CASSETTE GRILLE

Items	Model name	Remarks
Cassette grille	UTG-UF∗C-W	For Compact Cassette type
	UTG-UG∗A-W	For Cassette type
	UTG-UK∗C-W	For Cassette type (Circular Flow)
	UTG-UK∗A-B	

∗1 : Total cooling capacity of indoor units means the total value of indoor unit cooling capacity connected downstream.

MODEL SELECTION

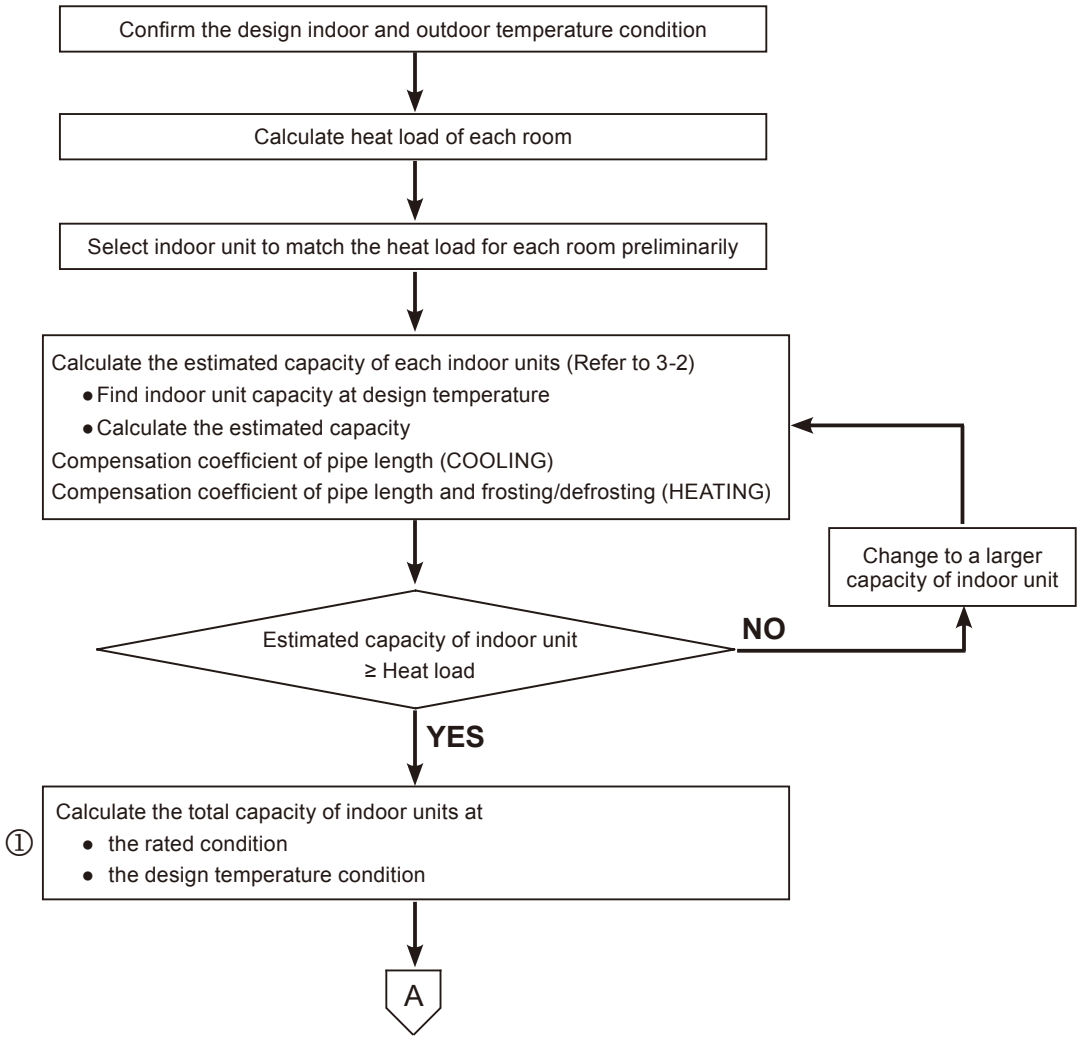
■ OTHERS

Items	Model name	Remarks
Flange (Square)	UTD-SF045T	For Medium Static Pressure Duct type
Flange (Round)	UTD-RF204	For Medium Static Pressure Duct type
Long-Life Filter	UTD-LF25NA	For Medium Static Pressure Duct type
	UTD-LF60KA	For High Static Pressure Duct type
Drain Pump Unit	UTZ-PX1NBA	For Medium Static Pressure Duct type
	UTR-DPB24T	For Ceiling type
Air Outlet Shutter Plate	UTR-YDZB	For Compact Cassette type
	UTR-YDZK	For Cassette type
Panel Spacer	UTG-BKXA-W	For Cassette type
Wide Panel	UTG-AKXA-W	For Cassette type
Half concealed kit	UTR-STA	For Compact Floor type
IR Receiver Unit	UTB-∗WC	For all Duct type
	UTY-LRH∗B1	For Cassette type
	UTY-LBHXD	For Cassette type (Circular Flow)
Human Sensor Kit	UTY-SHZXC	For Cassette type (Circular Flow)
Remote Sensor Unit	UTY-XSZX	For all Duct type
Insulation Kit for High Humidity	UTZ-KXRA	For Cassette type
	UTZ-KXGC	For Compact Cassette type
Fresh air intake kit	UTZ-VXAA	For Compact Cassette type
	UTZ-VXRA	For Cassette type
Auto louver grille kit	UTD-GXSA-W	For Slim Duct type
	UTD-GXSB-W	
	UTD-GXSC-W	
	UTD-GXTA-W	For Mini Duct type, Slim Duct type
	UTD-GXTB-W	
	UTD-GXTC-W	
External connect kit	UTY-XWZXZ6	For Outdoor unit / RB unit
	UTY-XWZXZ7	For Indoor unit / Central remote controller
	UTY-XWZXZ8	For Central remote controller
	UTY-XWZXZ9	For Outdoor unit
	UTY-XWZXZA	For Touch panel controller / Central remote controller
	UTY-XWZXZB	For Indoor unit / RB unit
	UTY-XWZXZC	For Indoor unit
	UTY-XWZXZD	For Indoor unit
	UTY-XWZXZE	For Indoor unit
	UTY-XWZXZF	For Outdoor unit

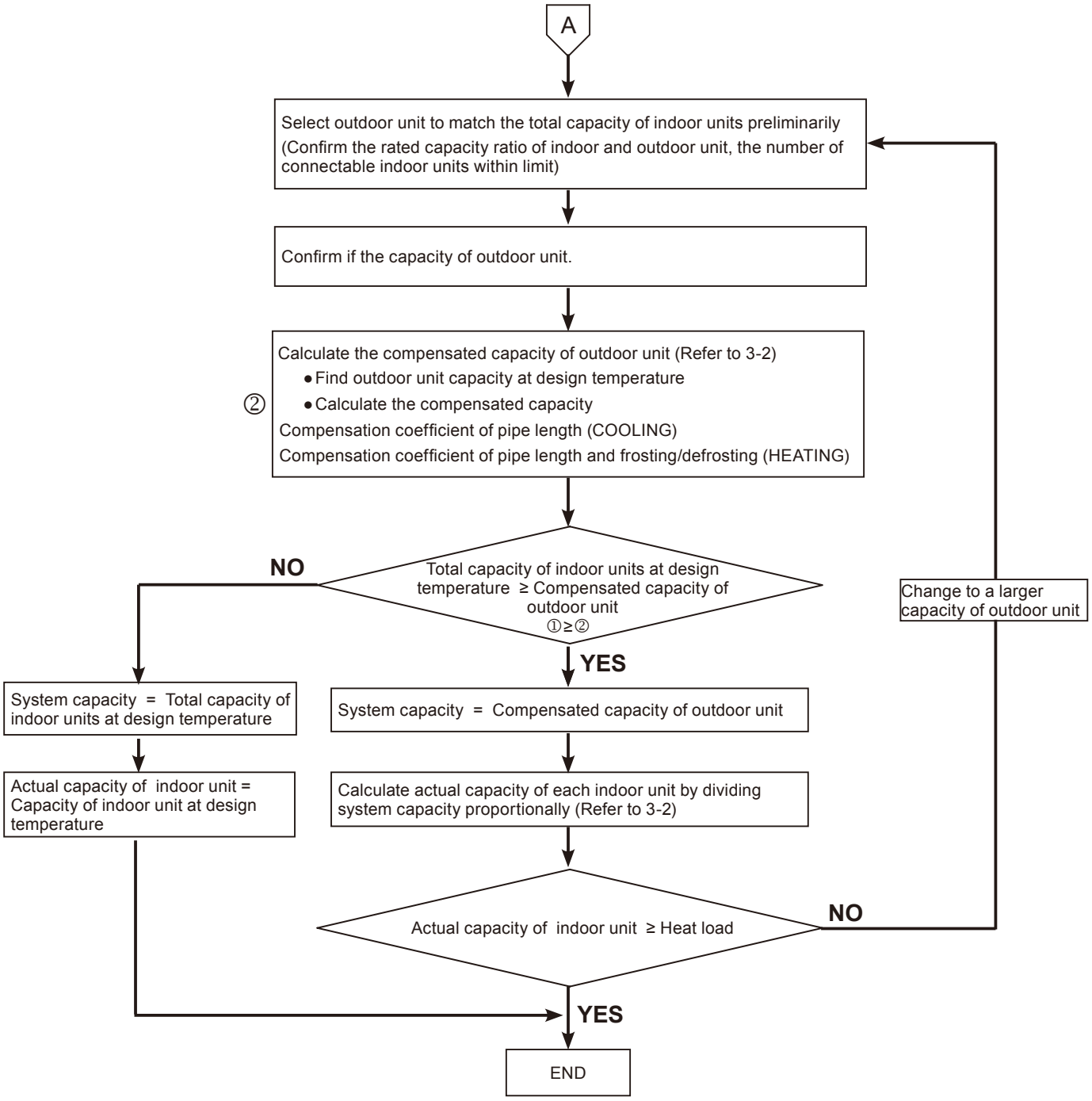
3. MODEL SELECTION AND CAPACITY CALCULATION

3-1. SELECTION PROCEDURE OF INDOOR UNIT AND OUTDOOR UNIT

Please select indoor units and outdoor unit and make the capacity of each indoor unit be larger than cooling and heating load.



MODEL SELECTION



MODEL SELECTION

3-2. METHOD OF CAPACITY CALCULATION

The capacity calculation method which takes the effects of air temperature, pipe length and frosting/defrosting into consideration is shown below.

1. Calculate the estimated capacity of each indoor unit.

(1) Find **capacity of indoor unit at rated condition (TCin)r and at design temperature (TCin)d**
[from 7. CAPACITY TABLE COOLING (INDOOR UNIT) or 8. CAPACITY TABLE HEATING (INDOOR UNIT)]

(2) Find the following compensation coefficient [From 6. CAPACITY COMPENSATION COEFFICIENT].

- **Compensation coefficient of pipe length**
- **Compensation coefficient of frosting/defrosting** (Heating calculation only)

(3) Calculate **the estimated capacity of indoor unit (TCin)e.**

COOLING:

Estimated capacity of indoor unit (TCin)e
= Capacity of indoor unit at design temperature (TCin)d
x Compensation coefficient of pipe length

HEATING:

Estimated capacity of indoor unit (TCin)e
= Capacity of indoor unit at design temperature (TCin)d
x Compensation coefficient of pipe length
x Compensation coefficient of frosting/defrosting

2. Calculate the compensated capacity of outdoor unit.

(4) Find **capacity of outdoor unit at rated condition (TCout)r** [From 2. MODEL LINE UP].

(5) Calculate **total rated capacity of indoor units : ∑(TCin)r**
and **ratio to the rated capacity of outdoor unit : ∑(TCin)r / (TCout)r** .

(6) Find capacity of outdoor unit at design temperature (TCout)d
[using result of (5) and 4. CAPACITY TABLE (OUTDOOR UNIT)].

(7) Calculate the compensated capacity of outdoor unit (TCout)c.

COOLING:

Compensated capacity of outdoor unit (TCout)c
= Capacity of outdoor unit at design temperature (TCout)d
x Compensation coefficient of pipe length

HEATING:

Compensated capacity of outdoor unit (TCout)c
= Capacity of outdoor unit at design temperature (TCout)d
x Compensation coefficient of pipe length
x Compensation coefficient of frosting/defrosting

3. Decide system capacity.

(8) Calculate **total capacity of indoor units at design temperature ∑(TCin)d.**

(9) **System capacity** = the smaller one of (TCout)c and ∑(TCin)d. ••••••••• **(7) or (8)**

4. Calculate actual capacity of each indoor unit.

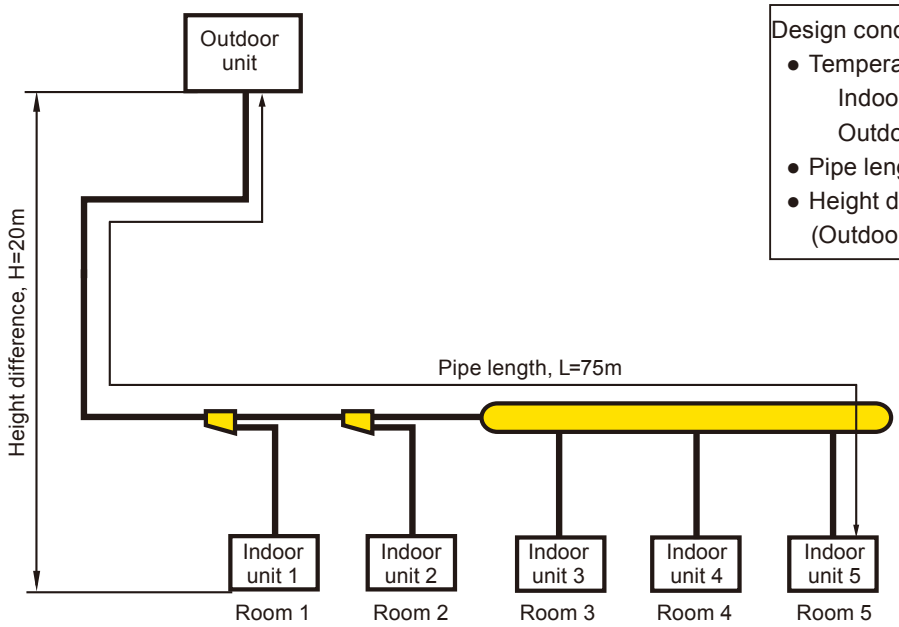
(10) Calculate actual capacity of each indoor unit by dividing system capacity proportionally.

Actual capacity of indoor unit = (System capacity) x (Rated capacity of indoor unit) / (Total rated capacity of indoor unit)
= (System capacity) x (TCin)r / ∑(TCin)r ••••• **(9) x (1) / (5)**

3-3. THE EXAMPLE OF CALCULATION

■ EXAMPLE 1

Fig.1 Outline of the system



Design conditions:
- Temperature
  - Indoor : 28°CDB / 20°CWB
  - Outdoor : 35°CDB
- Pipe length : 75m
- Height difference : 20m
  (Outdoor unit upper side)

● Selection of indoor unit

			Room 1	Room 2	Room 3	Room 4	Room 5	Remark
A-1	Cooling heat load	kW	6.0	6.0	6.0	2.0	1.5	
A-2	Indoor unit models		AUXK24	AUXK24	AUXK24	AUXB09	AUXB07	
A-3	Rated capacity $(TC_{in})_r$	kW	7.1	7.1	7.1	2.8	2.2	See 7
A-4	Capacity at design temperature $(TC_{in})_d$	kW	7.7	7.7	7.7	3.0	2.4	See 7
A-5	Compensation coefficient of pipe length		0.90					See 6
A-6	Estimated capacity of indoor unit $(TC_{in})_e$	kW	6.9	6.9	6.9	2.7	2.2	(A-4) x (A-5)
A-7	Total rated capacity $\sum(TC_{in})_r$	kW	26.3					Sum of A-3
A-8	Total capacity at design temperature $\sum(TC_{in})_d$	kW	28.5					Sum of A-4

● Preliminary selection of outdoor unit

				Remark
B-1	Outdoor unit model		8HP : AJ∗072LELAH	
B-2	Rated capacity $(TC_{out})_r$	kW	22.4	See 2
B-3	Total rated capacity of indoor unit / Rated capacity of outdoor unit $\sum(TC_{in})_r$ / $(TC_{out})_r$	%	117.4	(A-7) / (B-2)
B-4	Capacity at design temperature $(TC_{out})_d$	kW	25.8	See Fig.2 2)
B-5	Compensation coefficient of pipe length		0.90	See 6
B-6	Compensated capacity of outdoor unit $(TC_{out})_c$	kW	23.2	(B-4) x (B-5)

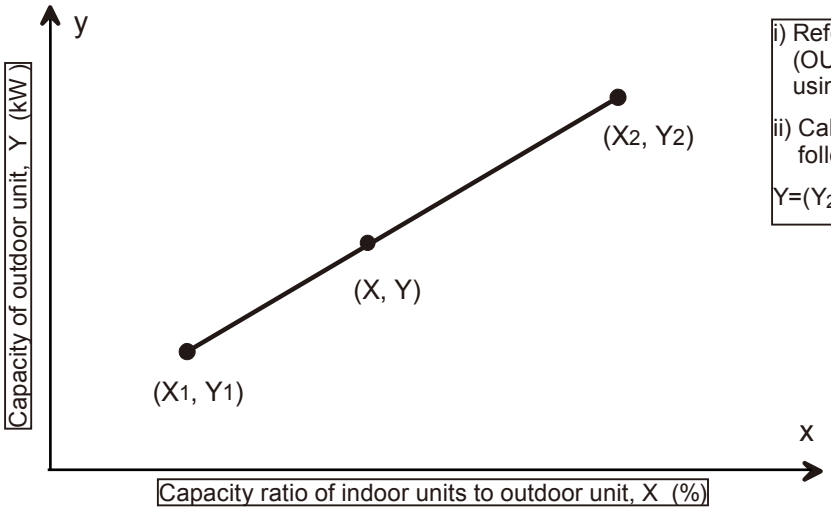
● Decide system capacity

				Remark
C-1	System capacity	kW	23.2	Smaller one of (A-8) and (B-6)

● Calculate actual capacity of each indoor unit

		Room 1	Room 2	Room 3	Room 4	Room 5	Remark
Actual capacity of each indoor unit	kW	6.3	6.3	6.3	2.5	1.9	(C-1) x (A-3) / (A-7)

1) Equation for capacity calculation of outdoor unit.



i) Refer to 4. CAPACIYY TABLE (OUTDOOR UNIT) to find Y_1 and Y_2 using X_1 and X_2.

ii) Calculate capacity of outdoor unit using following equation:

$Y=(Y_2-Y_1) / (X_2-X_1) \times (X-X_1) + Y_1$

2) Cooling capacity table of 8HP outdoor units: AJ∗072LELAH

Total rated cooling capacity of indoor unit	Outdoor temperature	Indoor temperature									
		18°CDB / 14 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
	-15	15.5	2.65	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	.	.	.	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.	.	.	.
26.8 (120%)	35	15.5	3.93	25.4	7.67	25.9	7.73	27.0	7.86	27.6	7.93
X_2	.	.	.	.	.	Y_2	.	.	.	.	.
	46	15.5	5.94	18.4	6.67		6.67	19.5	6.67	19.9	6.67
	-15	14.2	2.44	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	.	.	.	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.	.	.	.
24.6 (110%)	35	14.2	3.61	24.6	7.48	25.4	7.67	26.4	7.79	27.0	7.86
X_1	.	.	.	.	.	Y_1	.	.	.	.	.
	46	14.2	5.22	18.2	6.72		6.72	19.3	6.72	19.7	6.72

Capacity ratio of indoor units to outdoor unit	X1 = 110 %	X = 117.4 %	X2 = 120 %
Capacity of outdoor units (kW)	Y1 = 25.4	Y	Y2 = 25.9

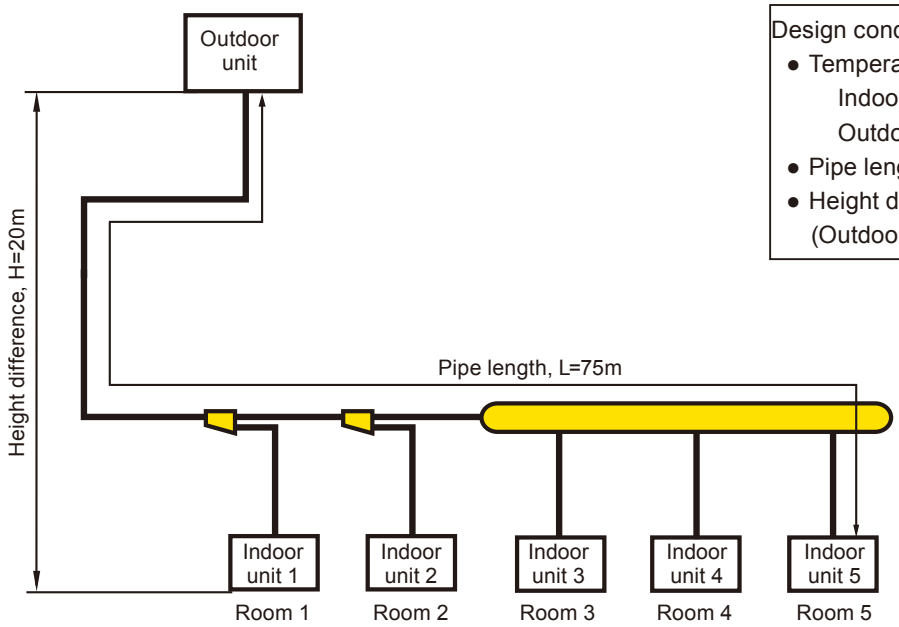
$Y= (25.9-25.4) / (120-110) \times (117.4-110) + 25.4 =$ **25.8 (kW)**

Fig.2 Method for calculation of capacity of outdoor unit from capacity tables

MODEL SELECTION

■ EXAMPLE 2

Fig.1 Outline of the system



Design conditions:
- Temperature
  - Indoor : 28°CDB / 20°CWB
  - Outdoor : 35°CDB
- Pipe length : 75m
- Height difference : 20m
  (Outdoor unit upper side)

● Selection of indoor unit

			Room 1	Room 2	Room 3	Room 4	Room 5	Remark
A-1	Cooling heat load	kW	7.5	7.5	7.5	0.8	0.8	
A-2	Indoor unit models		AUXK30	AUXK30	AUXK30	AUXB04	AUXB04	
A-3	Rated capacity $(TC_{in})_r$	kW	9.0	9.0	9.0	1.1	1.1	See 7
A-4	Capacity at design temperature $(TC_{in})_d$	kW	9.7	9.7	9.7	1.2	1.2	See 7
A-5	Compensation coefficient of pipe length		0.90					See 6
A-6	Estimated capacity of indoor unit $(TC_{in})_e$	kW	8.7	8.7	8.7	1.1	1.1	(A-4) x (A-5)
A-7	Total rated capacity $\sum(TC_{in})_r$	kW	29.2					Sum of A-3
A-8	Total capacity at design temperature $\sum(TC_{in})_d$	kW	31.5					Sum of A-4

● Preliminary selection of outdoor unit

				Remark
B-1	Outdoor unit model		10HP : AJ∗090LELAH	
B-2	Rated capacity $(TC_{out})_r$	kW	28.0	See 2
B-3	Total rated capacity of indoor unit / Rated capacity of outdoor unit $\sum(TC_{in})_r$ / $(TC_{out})_r$	%	104.3	(A-7) / (B-2)
B-4	Capacity at design temperature $(TC_{out})_d$	kW	28.9	See Fig.2 2)
B-5	Compensation coefficient of pipe length		0.90	See 6
B-6	Compensated capacity of outdoor unit $(TC_{out})_c$	kW	26.0	(B-4) x (B-5)

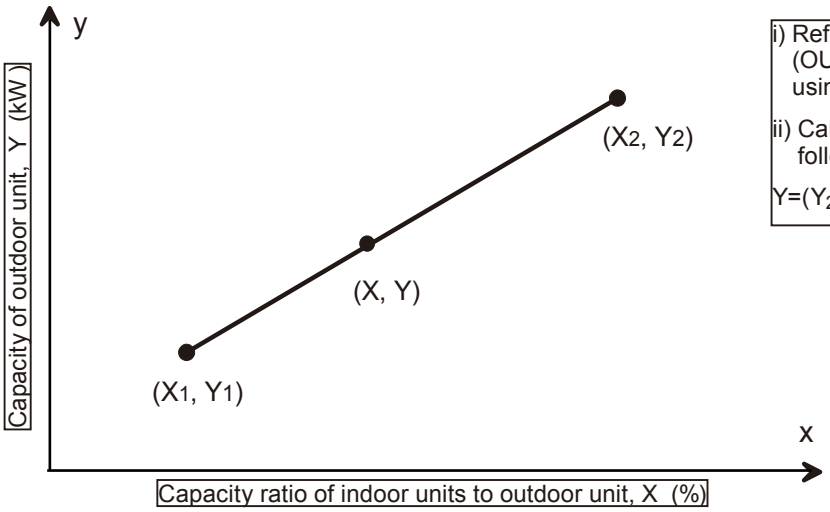
● Decide system capacity

				Remark
C-1	System capacity	kW	26.0	Smaller one of (A-8) and (B-6)

● Calculate actual capacity of each indoor unit

		Room 1	Room 2	Room 3	Room 4	Room 5	Remark
Actual capacity of each indoor unit	kW	8.0	8.0	8.0	1.0	1.0	(C-1) x (A-3) / (A-7)

1) Equation for capacity calculation of outdoor unit.



i) Refer to 4. CAPACIYY TABLE (OUTDOOR UNIT) to find Y_1 and Y_2 using X_1 and X_2.

ii) Calculate capacity of outdoor unit using following equation:

$Y=(Y_2-Y_1) / (X_2-X_1) \times (X-X_1) + Y_1$

2) Cooling capacity table of 10HP outdoor units: AJ∗090LELAH

Total rated cooling capacity of indoor unit	Outdoor temperature	Indoor temperature									
		18°CDB / 14 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
	-15	17.7	3.88	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	.	.	.	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.	.	.	.
30.8 (110%)	35	17.7	5.07	28.7	8.63	29.3	8.67	30.6	8.74	31.3	8.78
X_2	.	.	.	.	.	Y_2	.	.	.	.	.
	46	17.7	6.67	20.0	6.70		6.70	21.4	6.70	21.8	6.70
	-15	16.1	3.54	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	.	.	.	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.	.	.	.
28.0 (100%)	35	16.1	4.63	28.0	8.59	28.6	8.63	29.9	8.70	30.5	8.73
X_1	.	.	.	.	.	Y_1	.	.	.	.	.
	46	16.1	5.92	19.7	6.73		6.73	21.1	6.73	21.5	6.73

Capacity ratio of indoor units to outdoor unit	X1 = 100 %	X = 104.3 %	X2 = 110 %
Capacity of outdoor units (kW)	Y1 = 28.6	Y	Y2 = 29.3

Y= (29.3-28.6) / (110-100) × (104.3-100) + 28.6 = **28.9 (kW)**

Fig.2 Method for calculation of capacity of outdoor unit from capacity tables

4. CAPACITY TABLE COOLING (OUTDOOR UNIT)

COOLING CAPACITY

■ MODEL : AJ*072LELAH

● Capacity : 22.4 kW (8HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
33.6 (150%)	-15	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	-10	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	-5	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	0	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	5	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	10	19.4	3.29	22.2	3.75	25.1	4.22	27.9	4.69	30.8	5.15	31.6	5.15	32.4	5.13	34.0	5.09	34.8	5.07
	15	19.4	3.43	22.2	3.91	25.1	4.40	27.9	4.89	30.5	5.32	31.3	5.31	32.1	5.29	33.7	5.25	34.5	5.23
	21	19.4	3.70	22.2	4.23	25.1	4.75	27.9	5.28	30.0	5.61	30.8	5.60	31.4	5.64	32.8	5.73	33.4	5.78
	23	19.4	3.82	22.2	4.36	25.1	4.91	27.9	5.45	29.6	5.85	30.2	5.90	30.9	5.95	32.2	6.04	32.8	6.09
	25	19.4	3.95	22.2	4.52	25.1	5.08	27.9	5.88	29.0	6.15	29.6	6.20	30.3	6.25	31.6	6.35	32.2	6.40
	27	19.4	4.10	22.2	4.69	25.1	5.34	27.8	6.40	28.4	6.46	29.1	6.51	29.7	6.56	31.0	6.66	31.6	6.72
	30	19.4	4.36	22.2	5.00	25.1	6.11	27.0	6.86	27.6	6.91	28.2	6.97	28.8	7.02	30.1	7.13	30.7	7.19
	33	19.4	4.66	22.2	5.70	25.1	6.97	26.1	7.33	26.7	7.39	27.3	7.46	27.9	7.53	29.1	7.67	29.7	7.74
	35	19.4	5.01	22.2	6.22	24.9	7.62	25.5	7.68	26.1	7.75	26.6	7.82	27.2	7.89	28.4	8.03	29.0	8.10
	37	19.4	5.46	22.2	6.87	24.3	7.97	24.9	8.04	25.4	8.11	26.0	8.18	26.6	8.25	27.7	8.40	28.3	8.47
	40	19.4	6.32	20.0	6.49	20.5	6.49	20.9	6.49	21.3	6.49	21.7	6.49	22.2	6.49	23.0	6.49	23.5	6.49
	43	18.2	6.50	18.6	6.50	19.0	6.50	19.4	6.50	19.8	6.50	20.2	6.50	20.6	6.50	21.4	6.50	21.9	6.50
	46	16.8	6.52	17.2	6.52	17.6	6.52	18.0	6.52	18.4	6.52	18.8	6.52	19.2	6.52	19.9	6.52	20.3	6.51
31.3 (140%)	-15	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	-10	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	-5	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	0	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	5	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	10	18.1	3.07	20.7	3.51	23.4	3.95	26.0	4.38	28.7	4.82	31.0	5.16	31.7	5.15	33.3	5.11	34.1	5.09
	15	18.1	3.21	20.7	3.66	23.4	4.12	26.0	4.57	28.7	5.02	30.7	5.32	31.5	5.30	33.0	5.27	33.8	5.25
	21	18.1	3.46	20.7	3.95	23.4	4.44	26.0	4.94	28.7	5.43	30.2	5.61	30.9	5.61	32.2	5.69	32.9	5.74
	23	18.1	3.57	20.7	4.08	23.4	4.59	26.0	5.10	28.7	5.64	29.7	5.86	30.4	5.91	31.6	6.00	32.3	6.05
	25	18.1	3.69	20.7	4.22	23.4	4.75	26.0	5.27	28.6	6.12	29.2	6.17	29.8	6.21	31.1	6.31	31.7	6.36
	27	18.1	3.83	20.7	4.38	23.4	4.93	26.0	5.70	28.0	6.42	28.6	6.47	29.2	6.52	30.5	6.62	31.1	6.68
	30	18.1	4.07	20.7	4.66	23.4	5.44	26.0	6.53	27.2	6.87	27.8	6.93	28.4	6.98	29.6	7.09	30.2	7.15
	33	18.1	4.35	20.7	5.11	23.4	6.20	25.7	7.28	26.3	7.35	26.9	7.42	27.5	7.48	28.7	7.62	29.3	7.68
	35	18.1	4.56	20.7	5.57	23.4	6.80	25.1	7.64	25.7	7.71	26.3	7.78	26.8	7.84	28.0	7.98	28.6	8.05
	37	18.1	4.92	20.7	6.10	23.4	7.53	24.5	8.00	25.1	8.07	25.6	8.14	26.2	8.21	27.3	8.35	27.9	8.42
	40	18.1	5.66	19.9	6.54	20.3	6.54	20.8	6.54	21.2	6.54	21.6	6.54	22.0	6.54	22.9	6.54	23.3	6.54
	43	18.1	6.54	18.5	6.55	18.9	6.55	19.3	6.56	19.7	6.56	20.1	6.56	20.5	6.56	21.3	6.55	21.7	6.55
	46	16.7	6.57	17.1	6.57	17.5	6.57	17.9	6.57	18.3	6.57	18.7	6.57	19.0	6.57	19.8	6.57	20.2	6.57
29.1 (130%)	-15	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	-10	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	-5	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	0	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	5	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	10	16.8	2.86	19.2	3.27	21.7	3.67	24.2	4.08	26.7	4.48	29.1	4.88	31.1	5.16	32.6	5.13	33.3	5.11
	15	16.8	2.99	19.3	3.41	21.7	3.83	24.2	4.25	26.7	4.67	29.1	5.10	30.8	5.32	32.3	5.29	33.0	5.27
	21	16.8	3.22	19.2	3.68	21.7	4.13	24.2	4.59	26.7	5.05	29.1	5.51	30.3	5.61	31.6	5.65	32.3	5.70
	23	16.8	3.32	19.2	3.80	21.7	4.27	24.2	4.74	26.7	5.21	29.1	5.79	29.8	5.87	31.1	5.96	31.7	6.01
	25	16.8	3.44	19.2	3.93	21.7	4.42	24.2	4.91	26.7	5.42	28.7	6.13	29.3	6.17	30.5	6.27	31.1	6.32
	27	16.8	3.57	19.2	4.08	21.7	4.58	24.2	5.09	26.7	5.94	28.1	6.43	28.7	6.48	30.0	6.58	30.6	6.63
	30	16.8	3.79	19.2	4.33	21.7	4.87	24.2	5.75	26.7	6.80	27.3	6.89	27.9	6.94	29.1	7.05	29.7	7.10
	33	16.8	4.05	19.2	4.63	21.7	5.50	24.2	6.56	25.9	7.30	26.5	7.36	27.0	7.43	28.2	7.56	28.8	7.63
	35	16.8	4.25	19.2	4.97	21.7	6.00	24.2	7.22	25.3	7.66	25.8	7.72	26.4	7.79	27.5	7.93	28.1	7.99
	37	16.8	4.46	19.3	5.41	21.7	6.60	24.1	7.95	24.7	8.02	25.2	8.09	25.8	8.15	26.9	8.29	27.4	8.36
	40	16.8	5.04	19.2	6.26	20.2	6.60	20.6	6.60	21.0	6.60	21.4	6.60	21.8	6.60	22.7	6.60	23.1	6.60
	43	16.8	5.82	18.4	6.61	18.7	6.61	19.1	6.61	19.5	6.61	19.9	6.61	20.3	6.61	21.1	6.61	21.5	6.61
	46	16.6	6.62	17.0	6.62	17.4	6.62	17.8	6.62	18.1	6.62	18.5	6.62	18.9	6.62	19.7	6.62	20.1	6.62
26.8 (120%)	-15	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	-10	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	-5	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	0	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	5	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	10	15.5	2.65	17.8	3.02	20.0	3.40	22.3	3.77	24.6	4.14	26.9	4.52	29.2	4.89	31.8	5.15	32.5	5.13
	15	15.5	2.76	17.8	3.15	20.0	3.54	22.3	3.93	24.6	4.32	26.9	4.71	29.2	5.10	31.5	5.30	32.2	5.29
	21	15.5	2.98	17.8	3.40	20.0	3.83	22.3	4.25	24.6	4.67	26.9	5.09	29.2	5.51	31.0	5.61	31.6	5.65
	23	15.5	3.08	17.8	3.51	20.0	3.95	22.3	4.38	24.6	4.82	26.9	5.26	29.2	5.80	30.4	5.91	31.0	5.96
	25	15.5	3.18	17.8	3.63	20.0	4.09	22.3	4.54	24.6	4.99	26.9	5.50	28.7	6.13	29.9	6.22	30.5	6.27
	27	15.5	3.30	17.8	3.77	20.0	4.24	22.3	4.71	24.6	5.18	26.9	6.03	28.2	6.43	29.3	6.53	29.9	6.58
	30	15.5	3.51	17.8	4.01	20.0	4.51	22.3	5.04	24.6	5.92	26.8	6.84	27.4	6.89	28.5	6.99	29.1	7.05
	33	15.5	3.75	17.8	4.28	20.0	4.85	22.3	5.75	24.6	6.75	26.0	7.31	26.5	7.37	27.6	7.50	28.2	7.56
	35	15.5	3.93	17.8	4.49	20.0	5.29	22.3	6.27	24.6	7.46	25.4	7.67	25.9	7.73	27.0	7.86	27.6	7.93
	37	15.5	4.13	17.8	4.80	20.0	5.77	22.3	6.93	24.2	7.96	24.8	8.03	25.3	8.10	26.4	8.23	26.9	8.30
	40	15.5	4.48	17.8	5.51	20.0	6.65	20.4	6.65	20.8	6.65	21.2	6.65	21.6	6.65	22.5	6.65	22.9	6.65
	43	15.5	5.15	17.8	6.36	18.6	6.66	19.0	6.66	19.4	6.66	19.8	6.66	20.1	6.66	20.9	6.66	21.3	6.66
	46	15.5	5.94	16.9	6.67	17.2	6.67	17.6	6.67	18.0	6.67	18.4	6.67	18.7	6.67	19.5	6.67	19.9	6.67

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳072LELAH

● Capacity : 22.4 kW (8HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
24.6 (110%)	-15	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	-10	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	-5	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	0	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	5	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	10	14.2	2.44	16.3	2.78	18.4	3.12	20.5	3.47	22.6	3.81	24.6	4.15	26.7	4.49	30.9	5.17	31.6	5.15
	15	14.2	2.54	16.3	2.90	18.4	3.26	20.5	3.62	22.6	3.97	24.6	4.33	26.7	4.69	30.6	5.32	31.3	5.31
	21	14.2	2.74	16.3	3.13	18.4	3.52	20.5	3.90	22.5	4.29	24.6	4.68	26.7	5.06	30.1	5.61	30.8	5.60
	23	14.2	2.83	16.3	3.23	18.4	3.63	20.5	4.03	22.6	4.43	24.6	4.83	26.7	5.23	29.7	5.86	30.3	5.90
	25	14.2	2.93	16.3	3.34	18.4	3.75	20.5	4.17	22.6	4.58	24.6	5.00	26.7	5.45	29.2	6.17	29.8	6.21
	27	14.2	3.04	16.3	3.47	18.4	3.90	20.5	4.33	22.6	4.76	24.6	5.19	26.7	5.97	28.7	6.47	29.2	6.52
	30	14.2	3.23	16.3	3.68	18.4	4.14	20.5	4.60	22.6	5.13	24.6	5.94	26.7	6.83	27.9	6.94	28.4	6.99
	33	14.2	3.44	16.3	3.93	18.4	4.42	20.5	5.01	22.6	5.85	24.6	6.77	25.9	7.31	27.0	7.43	27.6	7.49
	35	14.2	3.61	16.3	4.13	18.4	4.64	20.5	5.46	22.6	6.38	24.6	7.48	25.4	7.67	26.4	7.79	27.0	7.86
	37	14.2	3.79	16.3	4.34	18.4	5.04	20.5	5.97	22.6	7.05	24.2	7.97	24.8	8.03	25.8	8.16	26.4	8.23
	40	14.2	4.12	16.3	4.82	18.4	5.81	20.2	6.71	20.6	6.71	21.0	6.71	21.4	6.71	22.2	6.71	22.6	6.71
	43	14.2	4.54	16.3	5.56	18.4	6.72	18.8	6.72	19.1	6.72	19.5	6.72	19.9	6.72	20.7	6.72	21.1	6.72
	46	14.2	5.22	16.3	6.41	17.1	6.72	17.4	6.72	17.8	6.72	18.2	6.72	18.5	6.72	19.3	6.72	19.7	6.72
22.4 (100%)	-15	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	-10	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	-5	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	0	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	5	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	10	12.9	2.23	14.8	2.54	16.7	2.85	18.6	3.16	20.5	3.47	22.4	3.78	24.3	4.10	28.1	4.72	30.0	5.03
	15	12.9	2.32	14.8	2.65	16.7	2.97	18.6	3.30	20.5	3.62	22.4	3.95	24.3	4.27	28.1	4.92	30.0	5.25
	21	12.9	2.50	14.8	2.86	16.7	3.21	18.6	3.56	20.5	3.91	22.4	4.26	24.3	4.61	28.1	5.32	29.8	5.62
	23	12.9	2.58	14.8	2.95	16.7	3.31	18.6	3.67	20.5	4.04	22.4	4.40	24.3	4.76	28.1	5.49	29.5	5.84
	25	12.9	2.67	14.8	3.05	16.7	3.42	18.6	3.80	20.5	4.18	22.4	4.55	24.3	4.93	28.1	5.95	29.0	6.15
	27	12.9	2.77	14.8	3.16	16.7	3.55	18.6	3.94	20.5	4.33	22.4	4.72	24.3	5.12	27.9	6.41	28.5	6.46
	30	12.9	2.94	14.8	3.36	16.7	3.77	18.6	4.19	20.5	4.61	22.4	5.07	24.3	5.80	27.1	6.87	27.7	6.92
	33	12.9	3.14	14.8	3.59	16.7	4.03	18.6	4.48	20.5	5.03	22.4	5.78	24.3	6.61	26.3	7.35	26.9	7.41
	35	12.9	3.29	14.8	3.76	16.7	4.23	18.6	4.72	20.5	5.47	22.4	6.30	24.3	7.29	25.6	7.58	26.0	7.58
	37	12.9	3.46	14.8	3.95	16.7	4.44	18.6	5.14	20.5	5.99	22.4	6.97	23.7	7.58	24.5	7.59	25.0	7.59
	40	12.9	3.75	14.8	4.29	16.7	5.01	18.6	5.92	20.3	6.77	20.6	6.77	21.0	6.77	21.8	6.77	22.2	6.77
	43	12.9	4.13	14.8	4.82	16.7	5.78	18.5	6.77	18.9	6.77	19.3	6.77	19.6	6.77	20.4	6.77	20.8	6.77
	46	12.9	4.58	14.8	5.55	16.7	6.67	17.2	6.78	17.6	6.78	17.9	6.78	18.3	6.78	19.0	6.78	19.4	6.78
20.1 (90%)	-15	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	-10	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	-5	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	0	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	5	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	10	11.6	2.02	13.3	2.30	15.0	2.58	16.7	2.86	18.5	3.14	20.2	3.42	21.9	3.70	25.3	4.26	27.0	4.54
	15	11.6	2.10	13.3	2.39	15.0	2.69	16.7	2.98	18.5	3.27	20.2	3.56	21.9	3.86	25.3	4.44	27.0	4.73
	21	11.6	2.26	13.3	2.58	15.0	2.90	16.7	3.21	18.5	3.53	20.2	3.85	21.9	4.16	25.3	4.80	27.0	5.11
	23	11.6	2.34	13.3	2.66	15.0	2.99	16.7	3.32	18.5	3.64	20.2	3.97	21.9	4.30	25.3	4.95	27.0	5.28
	25	11.6	2.42	13.3	2.75	15.0	3.09	16.7	3.43	18.5	3.77	20.2	4.11	21.9	4.45	25.3	5.12	27.0	5.54
	27	11.6	2.50	13.3	2.86	15.0	3.21	16.7	3.56	18.5	3.91	20.2	4.26	21.9	4.62	25.3	5.42	27.0	6.07
	30	11.6	2.66	13.3	3.03	15.0	3.41	16.7	3.78	18.5	4.16	20.2	4.53	21.9	4.91	25.3	6.20	26.8	6.83
	33	11.6	2.84	13.3	3.24	15.0	3.64	16.7	4.04	18.5	4.44	20.2	4.90	21.9	5.56	25.3	7.08	26.1	7.32
	35	11.6	2.97	13.3	3.40	15.0	3.82	16.7	4.24	18.5	4.66	20.2	5.33	21.9	6.06	24.9	7.54	25.3	7.54
	37	11.6	3.12	13.3	3.57	15.0	4.01	16.7	4.45	18.5	5.07	20.2	5.83	21.9	6.69	23.9	7.60	24.4	7.60
	40	11.6	3.39	13.3	3.87	15.0	4.35	16.7	5.02	18.5	5.85	20.2	6.76	20.6	6.83	21.4	6.83	21.8	6.83
	43	11.6	3.73	13.3	4.26	15.0	4.93	16.7	5.80	18.5	6.76	18.9	6.83	19.3	6.83	20.0	6.83	20.4	6.83
	46	11.6	4.13	13.3	4.77	15.0	5.68	16.7	6.70	17.3	6.83	17.6	6.83	18.0	6.83	18.7	6.83	19.1	6.83
17.9 (80%)	-15	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	-10	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	-5	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	0	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	5	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	10	10.3	1.81	11.8	2.05	13.4	2.30	14.9	2.55	16.4	2.80	17.9	3.05	19.4	3.30	22.5	3.80	24.0	4.05
	15	10.3	1.88	11.8	2.14	13.4	2.40	14.9	2.66	16.4	2.92	17.9	3.18	19.4	3.44	22.5	3.96	24.0	4.22
	21	10.3	2.03	11.8	2.31	13.4	2.59	14.9	2.87	16.4	3.15	17.9	3.43	19.4	3.71	22.5	4.28	24.0	4.56
	23	10.3	2.09	11.8	2.38	13.4	2.67	14.9	2.96	16.4	3.25	17.9	3.54	19.4	3.83	22.5	4.41	24.0	4.70
	25	10.3	2.16	11.8	2.46	13.4	2.76	14.9	3.06	16.4	3.36	17.9	3.66	19.4	3.97	22.5	4.57	24.0	4.87
	27	10.3	2.24	11.8	2.55	13.4	2.86	14.9	3.18	16.4	3.49	17.9	3.80	19.4	4.12	22.5	4.74	24.0	5.05
	30	10.3	2.38	11.8	2.71	13.4	3.04	14.9	3.37	16.4	3.71	17.9	4.04	19.4	4.37	22.5	5.10	24.0	5.68
	33	10.3	2.54	11.8	2.89	13.4	3.25	14.9	3.61	16.4	3.96	17.9	4.32	19.4	4.67	22.5	5.81	24.0	6.48
	35	10.3	2.66	11.8	3.03	13.4	3.40	14.9	3.78	16.4	4.15	17.9	4.53	19.4	5.04	22.5	6.34	24.0	7.12
	37	10.3	2.79	11.8	3.18	13.4	3.58	14.9	3.97	16.4	4.36	17.9	4.86	19.4	5.49	22.5	7.01	23.7	7.61
	40	10.3	3.02	11.8	3.45	13.4	3.88	14.9	4.31	16.4	4.87	17.9	5.58	19.0	6.09	19.8	6.09	20.1	6.09
	43	10.3	3.33	11.8	3.80	13.4	4.27	14.9	4.86	16.4	5.62	17.4	6.09	17.8	6.09	18.5	6.09	18.8	6.09
	46	10.3	3.69	11.8	4.21	13.4	4.79	14.9	5.59	15.9	6.09	16.2	6.09	16.5	6.09	17.2	6.09	17.6	6.09

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳072LELAH

● Capacity : 22.4 kW (8HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
15.6 (70%)	-15	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	-10	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	-5	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	0	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	5	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	10	9.0	1.59	10.4	1.81	11.7	2.03	13.0	2.25	14.4	2.46	15.7	2.68	17.0	2.90	19.7	3.34	21.0	3.55
	15	9.0	1.66	10.4	1.89	11.7	2.11	13.0	2.34	14.4	2.57	15.7	2.80	17.0	3.02	19.7	3.48	21.0	3.71
	21	9.0	1.79	10.4	2.03	11.7	2.28	13.0	2.52	14.4	2.77	15.7	3.02	17.0	3.26	19.7	3.76	21.0	4.00
	23	9.0	1.84	10.4	2.10	11.7	2.35	13.0	2.60	14.4	2.86	15.7	3.11	17.0	3.37	19.7	3.88	21.0	4.13
	25	9.0	1.90	10.4	2.17	11.7	2.43	13.0	2.69	14.4	2.96	15.7	3.22	17.0	3.48	19.7	4.01	21.0	4.27
	27	9.0	1.97	10.4	2.25	11.7	2.52	13.0	2.79	14.4	3.07	15.7	3.34	17.0	3.62	19.7	4.16	21.0	4.44
	30	9.0	2.09	10.4	2.38	11.7	2.68	13.0	2.97	14.4	3.26	15.7	3.55	17.0	3.84	19.7	4.42	21.0	4.71
	33	9.0	2.23	10.4	2.54	11.7	2.86	13.0	3.17	14.4	3.48	15.7	3.79	17.0	4.10	19.7	4.73	21.0	5.22
	35	9.0	2.34	10.4	2.67	11.7	2.99	13.0	3.32	14.4	3.65	15.7	3.98	17.0	4.30	19.7	5.13	21.0	5.68
	37	9.0	2.46	10.4	2.80	11.7	3.14	13.0	3.49	14.4	3.83	15.7	4.18	17.0	4.52	19.7	5.59	21.0	6.23
	40	9.0	2.66	10.4	3.03	11.7	3.41	13.0	3.78	14.4	4.16	15.7	4.55	17.0	5.15	18.0	5.34	18.3	5.34
	43	9.0	2.93	10.4	3.34	11.7	3.75	13.0	4.17	14.4	4.61	15.7	5.25	16.1	5.34	16.8	5.34	17.1	5.34
	46	9.0	3.24	10.4	3.70	11.7	4.16	13.0	4.62	14.4	5.30	14.7	5.34	15.0	5.34	15.6	5.34	15.9	5.34
13.4 (60%)	-15	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	-10	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	-5	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	0	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	5	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	10	7.7	1.38	8.9	1.57	10.0	1.76	11.2	1.94	12.3	2.13	13.4	2.32	14.6	2.50	16.9	2.88	18.0	3.06
	15	7.7	1.44	8.9	1.63	10.0	1.83	11.2	2.02	12.3	2.22	13.4	2.41	14.6	2.61	16.9	3.00	18.0	3.19
	21	7.7	1.55	8.9	1.76	10.0	1.97	11.2	2.18	12.3	2.39	13.4	2.60	14.6	2.81	16.9	3.24	18.0	3.45
	23	7.7	1.59	8.9	1.81	10.0	2.03	11.2	2.25	12.3	2.47	13.4	2.68	14.6	2.90	16.9	3.34	18.0	3.56
	25	7.7	1.65	8.9	1.87	10.0	2.10	11.2	2.33	12.3	2.55	13.4	2.78	14.6	3.00	16.9	3.45	18.0	3.68
	27	7.7	1.71	8.9	1.94	10.0	2.18	11.2	2.41	12.3	2.65	13.4	2.88	14.6	3.11	16.9	3.58	18.0	3.82
	30	7.7	1.81	8.9	2.06	10.0	2.31	11.2	2.56	12.3	2.81	13.4	3.06	14.6	3.31	16.9	3.81	18.0	4.06
	33	7.7	1.93	8.9	2.20	10.0	2.46	11.2	2.73	12.3	3.00	13.4	3.27	14.6	3.53	16.9	4.07	18.0	4.33
	35	7.7	2.02	8.9	2.30	10.0	2.58	11.2	2.86	12.3	3.14	13.4	3.42	14.6	3.70	16.9	4.27	18.0	4.55
	37	7.7	2.12	8.9	2.42	10.0	2.71	11.2	3.01	12.3	3.30	13.4	3.60	14.6	3.89	16.9	4.48	18.0	4.89
	40	7.7	2.30	8.9	2.62	10.0	2.94	11.2	3.26	12.3	3.58	13.4	3.90	14.6	4.22	16.9	5.08	17.3	5.13
	43	7.7	2.52	8.9	2.88	10.0	3.23	11.2	3.59	12.3	3.94	13.4	4.30	14.6	4.72	15.9	5.20	16.2	5.20
	46	7.7	2.79	8.9	3.19	10.0	3.58	11.2	3.97	12.3	4.37	13.4	4.83	14.4	5.26	14.9	5.26	15.2	5.26
11.2 (50%)	-15	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	-10	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	-5	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	0	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	5	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	10	6.5	1.17	7.4	1.33	8.4	1.48	9.3	1.64	10.3	1.79	11.2	1.95	12.1	2.10	14.0	2.42	15.0	2.57
	15	6.5	1.22	7.4	1.38	8.4	1.54	9.3	1.70	10.3	1.87	11.2	2.03	12.1	2.19	14.0	2.52	15.0	2.68
	21	6.5	1.31	7.4	1.48	8.4	1.66	9.3	1.84	10.3	2.01	11.2	2.19	12.1	2.36	14.0	2.71	15.0	2.89
	23	6.5	1.35	7.4	1.53	8.4	1.71	9.3	1.89	10.3	2.07	11.2	2.26	12.1	2.44	14.0	2.80	15.0	2.98
	25	6.5	1.39	7.4	1.58	8.4	1.77	9.3	1.96	10.3	2.14	11.2	2.33	12.1	2.52	14.0	2.90	15.0	3.09
	27	6.5	1.44	7.4	1.64	8.4	1.83	9.3	2.03	10.3	2.22	11.2	2.42	12.1	2.61	14.0	3.01	15.0	3.20
	30	6.5	1.53	7.4	1.74	8.4	1.94	9.3	2.15	10.3	2.36	11.2	2.57	12.1	2.78	14.0	3.19	15.0	3.40
	33	6.5	1.63	7.4	1.85	8.4	2.07	9.3	2.30	10.3	2.52	11.2	2.74	12.1	2.96	14.0	3.41	15.0	3.63
	35	6.5	1.70	7.4	1.94	8.4	2.17	9.3	2.40	10.3	2.64	11.2	2.87	12.1	3.11	14.0	3.57	15.0	3.81
	37	6.5	1.79	7.4	2.03	8.4	2.28	9.3	2.52	10.3	2.77	11.2	3.02	12.1	3.26	14.0	3.75	15.0	4.00
	40	6.5	1.93	7.4	2.20	8.4	2.47	9.3	2.74	10.3	3.00	11.2	3.27	12.1	3.54	14.0	4.07	15.0	4.34
	43	6.5	2.12	7.4	2.42	8.4	2.71	9.3	3.01	10.3	3.30	11.2	3.60	12.1	3.90	14.0	4.49	15.0	4.91
	46	6.5	2.35	7.4	2.67	8.4	3.00	9.3	3.33	10.3	3.66	11.2	3.99	12.1	4.32	14.0	5.14	14.5	5.27

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ*090LELAH

● Capacity : 28.0 kW (10HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
42.0 (150%)	-15	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	-10	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	-5	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	0	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	5	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	10	24.2	5.24	27.8	5.98	31.3	6.73	33.9	7.19	34.7	7.17	35.6	7.16	36.5	7.15	38.3	7.11	39.3	7.10
	15	24.2	5.38	27.8	6.15	31.3	6.91	33.5	7.29	34.4	7.28	35.3	7.27	36.2	7.25	38.0	7.22	38.9	7.21
	21	24.2	5.65	27.8	6.46	31.3	7.27	32.9	7.49	33.8	7.48	34.7	7.47	35.5	7.46	37.3	7.43	38.2	7.42
	23	24.2	5.77	27.8	6.60	31.3	7.43	32.7	7.57	33.5	7.56	34.4	7.55	35.3	7.54	36.9	7.57	37.7	7.59
	25	24.2	5.91	27.8	6.76	31.3	7.60	32.4	7.67	33.2	7.67	34.0	7.70	34.7	7.72	36.2	7.78	37.0	7.80
	27	24.2	6.06	27.8	6.93	31.1	7.82	31.8	7.84	32.6	7.87	33.3	7.90	34.1	7.93	35.6	7.99	36.3	8.01
	30	24.2	6.32	27.8	7.28	30.2	8.12	30.9	8.15	31.6	8.18	32.4	8.20	33.0	8.20	34.4	8.20	35.0	8.20
	33	24.2	6.63	27.8	7.98	29.3	8.42	30.0	8.45	30.7	8.48	31.4	8.52	32.1	8.55	33.6	8.62	34.3	8.66
	35	24.2	7.00	27.8	8.49	28.6	8.63	29.3	8.67	30.0	8.71	30.7	8.75	31.4	8.78	32.8	8.87	33.5	8.91
	37	24.2	7.44	27.3	8.82	27.9	8.86	28.6	8.90	29.3	8.94	30.0	8.98	30.6	9.03	32.0	9.11	32.7	9.15
	40	21.0	6.56	21.5	6.56	22.0	6.56	22.5	6.56	23.1	6.56	23.6	6.56	24.1	6.56	25.1	6.55	25.7	6.55
	43	19.7	6.57	20.2	6.57	20.7	6.57	21.1	6.57	21.6	6.57	22.1	6.56	22.6	6.56	23.6	6.56	24.1	6.56
	46	18.4	6.58	18.9	6.57	19.3	6.57	19.8	6.57	20.3	6.57	20.7	6.57	21.2	6.57	22.2	6.57	22.6	6.57
39.2 (140%)	-15	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	-10	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	-5	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	0	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	5	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	10	22.6	4.90	25.9	5.59	29.2	6.29	32.6	6.99	34.1	7.18	35.0	7.17	35.9	7.16	37.6	7.13	38.5	7.11
	15	22.6	5.03	25.9	5.75	29.2	6.46	32.6	7.18	33.8	7.29	34.7	7.28	35.5	7.26	37.3	7.24	38.2	7.22
	21	22.6	5.29	25.9	6.04	29.2	6.80	32.4	7.50	33.2	7.49	34.1	7.48	34.9	7.47	36.7	7.44	37.6	7.43
	23	22.6	5.40	25.9	6.17	29.2	6.94	32.1	7.58	33.0	7.57	33.8	7.56	34.7	7.55	36.3	7.55	37.1	7.57
	25	22.6	5.53	25.9	6.32	29.2	7.11	31.9	7.67	32.7	7.66	33.5	7.68	34.2	7.70	35.7	7.76	36.5	7.78
	27	22.6	5.67	25.9	6.48	29.2	7.29	31.4	7.83	32.1	7.85	32.8	7.88	33.6	7.91	35.0	7.96	35.8	7.99
	30	22.6	5.91	25.9	6.76	29.2	7.84	30.5	8.13	31.2	8.16	31.9	8.19	32.6	8.22	34.0	8.24	34.6	8.24
	33	22.6	6.20	25.9	7.24	28.9	8.40	29.6	8.43	30.2	8.46	30.9	8.50	31.7	8.53	33.1	8.60	33.8	8.64
	35	22.6	6.41	25.9	7.69	28.2	8.61	28.9	8.64	29.6	8.68	30.3	8.72	31.0	8.76	32.3	8.84	33.0	8.88
	37	22.6	6.78	25.9	8.22	27.6	8.84	28.2	8.88	28.9	8.92	29.6	8.96	30.2	9.00	31.6	9.08	32.3	9.12
	40	20.9	6.59	21.4	6.59	21.9	6.59	22.4	6.59	22.9	6.59	23.4	6.59	23.9	6.59	25.0	6.59	25.5	6.59
	43	19.6	6.60	20.0	6.60	20.5	6.60	21.0	6.60	21.5	6.60	22.0	6.60	22.5	6.60	23.5	6.60	24.0	6.59
	46	18.3	6.61	18.7	6.61	19.2	6.61	19.7	6.61	20.1	6.60	20.6	6.60	21.1	6.60	22.0	6.60	22.5	6.60
36.4 (130%)	-15	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	-10	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	-5	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	0	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	5	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	10	21.0	4.56	24.1	5.21	27.1	5.85	30.2	6.50	33.3	7.15	34.3	7.18	35.2	7.17	36.9	7.14	37.8	7.12
	15	21.0	4.68	24.1	5.35	27.1	6.01	30.2	6.68	33.2	7.30	34.0	7.29	34.8	7.27	36.6	7.25	37.4	7.23
	21	21.0	4.92	24.1	5.62	27.1	6.32	30.2	7.02	32.6	7.49	33.4	7.48	34.2	7.47	35.9	7.45	36.8	7.44
	23	21.0	5.03	24.1	5.74	27.1	6.46	30.2	7.17	32.3	7.58	33.2	7.57	34.0	7.56	35.7	7.54	36.5	7.55
	25	21.0	5.14	24.1	5.88	27.1	6.61	30.2	7.34	32.1	7.67	32.9	7.66	33.6	7.68	35.1	7.74	35.8	7.76
	27	21.0	5.27	24.1	6.03	27.1	6.78	30.2	7.53	31.6	7.83	32.3	7.86	33.0	7.89	34.5	7.94	35.2	7.97
	30	21.0	5.50	24.1	6.29	27.1	7.07	30.0	8.11	30.7	8.14	31.4	8.17	32.1	8.20	33.5	8.26	34.2	8.28
	33	21.0	5.77	24.1	6.59	27.1	7.73	29.1	8.41	29.8	8.44	30.5	8.47	31.1	8.51	32.5	8.57	33.2	8.61
	35	21.0	5.96	24.1	6.95	27.1	8.22	28.5	8.62	29.1	8.66	29.8	8.69	30.5	8.73	31.8	8.81	32.5	8.85
	37	21.0	6.18	24.1	7.38	27.1	8.81	27.8	8.86	28.5	8.90	29.1	8.93	29.8	8.97	31.1	9.05	31.8	9.09
	40	20.7	6.63	21.2	6.63	21.7	6.63	22.2	6.63	22.7	6.63	23.2	6.62	23.7	6.62	24.7	6.62	25.2	6.62
	43	19.4	6.63	19.9	6.63	20.4	6.63	20.8	6.63	21.3	6.63	21.8	6.63	22.3	6.63	23.3	6.63	23.8	6.63
	46	18.2	6.64	18.6	6.64	19.1	6.64	19.5	6.64	20.0	6.64	20.4	6.64	20.9	6.64	21.8	6.63	22.3	6.63
33.6 (120%)	-15	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	-10	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	-5	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	0	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	5	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	10	19.4	4.22	22.2	4.82	25.1	5.41	27.9	6.01	30.8	6.61	33.5	7.19	34.4	7.18	36.0	7.15	36.9	7.14
	15	19.4	4.34	22.2	4.95	25.1	5.56	27.9	6.18	30.8	6.79	33.2	7.29	34.1	7.28	35.7	7.26	36.6	7.25
	21	19.4	4.56	22.2	5.20	25.1	5.85	27.9	6.49	30.8	7.14	32.7	7.49	33.5	7.48	35.1	7.46	36.0	7.45
	23	19.4	4.65	22.2	5.31	25.1	5.97	27.9	6.63	30.8	7.29	32.4	7.58	33.2	7.57	34.9	7.55	35.7	7.54
	25	19.4	4.76	22.2	5.44	25.1	6.11	27.9	6.79	30.8	7.47	32.2	7.67	33.0	7.66	34.4	7.71	35.1	7.74
	27	19.4	4.88	22.2	5.58	25.1	6.27	27.9	6.96	30.7	7.70	31.7	7.84	32.4	7.86	33.8	7.92	34.5	7.94
	30	19.4	5.09	22.2	5.81	25.1	6.54	27.9	7.33	30.1	8.11	30.8	8.14	31.5	8.17	32.9	8.23	33.6	8.26
	33	19.4	5.33	22.2	6.09	25.1	6.91	27.9	8.04	29.2	8.42	29.9	8.45	30.6	8.48	31.9	8.54	32.6	8.57
	35	19.4	5.52	22.2	6.31	25.1	7.34	27.9	8.55	28.6	8.63	29.3	8.66	29.9	8.70	31.3	8.78	31.9	8.82
	37	19.4	5.72	22.2	6.62	25.1	7.82	27.3	8.83	28.0	8.87	28.6	8.90	29.2	8.94	30.5	9.02	31.2	9.06
	40	19.4	6.08	21.0	6.66	21.5	6.66	22.0	6.66	22.5	6.66	23.0	6.66	23.5	6.66	24.5	6.66	25.0	6.66
	43	19.2	6.67	19.7	6.67	20.2	6.66	20.6	6.66	21.1	6.66	21.6	6.66	22.1	6.66	23.0	6.66	23.5	6.66
	46	18.0	6.67	18.4	6.67	18.9	6.67	19.3	6.67	19.8	6.67	20.2	6.67	20.7	6.67	21.6	6.67	22.1	6.67

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ*090LELAH

● Capacity : 28.0 kW (10HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
30.8 (110%)	-15	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	-10	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	-5	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	0	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	5	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	10	17.7	3.88	20.4	4.43	23.0	4.98	25.6	5.52	28.2	6.07	30.8	6.62	33.4	7.17	35.1	7.17	35.9	7.16
	15	17.7	3.99	20.4	4.55	23.0	5.11	25.6	5.68	28.2	6.24	30.8	6.80	33.2	7.30	34.8	7.27	35.6	7.26
	21	17.7	4.19	20.4	4.78	23.0	5.37	25.6	5.97	28.2	6.56	30.8	7.15	32.6	7.49	34.2	7.47	35.0	7.46
	23	17.7	4.28	20.4	4.88	23.0	5.49	25.6	6.09	28.2	6.70	30.8	7.31	32.4	7.58	34.0	7.56	34.8	7.55
	25	17.7	4.38	20.4	5.00	23.0	5.62	25.6	6.24	28.2	6.86	30.8	7.48	32.2	7.67	33.6	7.68	34.3	7.71
	27	17.7	4.49	20.4	5.12	23.0	5.76	25.6	6.40	28.2	7.03	30.8	7.72	31.7	7.84	33.0	7.89	33.7	7.92
	30	17.7	4.68	20.4	5.34	23.0	6.01	25.6	6.67	28.2	7.44	30.1	8.11	30.8	8.14	32.2	8.20	32.8	8.23
	33	17.7	4.90	20.4	5.60	23.0	6.30	25.6	7.11	28.2	8.15	29.3	8.42	29.9	8.45	31.3	8.51	31.9	8.54
	35	17.7	5.07	20.4	5.79	23.0	6.53	25.6	7.56	28.0	8.59	28.7	8.63	29.3	8.67	30.6	8.74	31.3	8.78
	37	17.7	5.26	20.4	6.01	23.0	6.93	25.6	8.06	27.4	8.83	28.0	8.87	28.7	8.91	29.9	8.98	30.6	9.02
	40	17.7	5.58	20.4	6.49	21.2	6.69	21.7	6.69	22.2	6.69	22.7	6.69	23.2	6.69	24.2	6.69	24.6	6.69
	43	17.7	6.01	19.5	6.70	19.9	6.70	20.4	6.70	20.9	6.70	21.3	6.70	21.8	6.70	22.7	6.70	23.2	6.70
	46	17.7	6.67	18.2	6.70	18.7	6.70	19.1	6.70	19.6	6.70	20.0	6.70	20.5	6.70	21.4	6.70	21.8	6.70
28.0 (100%)	-15	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	-10	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	-5	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	0	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	5	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	10	16.1	3.54	18.5	4.04	20.9	4.54	23.3	5.04	25.6	5.53	28.0	6.03	30.4	6.53	34.0	7.18	34.8	7.17
	15	16.1	3.64	18.5	4.15	20.9	4.66	23.3	5.17	25.6	5.69	28.0	6.20	30.4	6.71	33.8	7.29	34.5	7.28
	21	16.1	3.82	18.5	4.36	20.9	4.90	23.3	5.44	25.6	5.98	28.0	6.52	30.4	7.05	33.2	7.49	34.0	7.48
	23	16.1	3.90	18.5	4.45	20.9	5.01	23.3	5.56	25.6	6.11	28.0	6.66	30.4	7.21	33.0	7.57	33.8	7.56
	25	16.1	3.99	18.5	4.56	20.9	5.12	23.3	5.68	25.6	6.25	28.0	6.81	30.4	7.38	32.7	7.66	33.4	7.68
	27	16.1	4.10	18.5	4.67	20.9	5.25	23.3	5.83	25.6	6.41	28.0	6.99	30.4	7.57	32.2	7.86	32.9	7.88
	30	16.1	4.27	18.5	4.87	20.9	5.48	23.3	6.08	25.6	6.69	28.0	7.37	30.0	8.11	31.3	8.17	32.0	8.19
	33	16.1	4.47	18.5	5.11	20.9	5.74	23.3	6.37	25.6	7.13	28.0	8.08	29.2	8.42	30.5	8.48	31.1	8.51
	35	16.1	4.63	18.5	5.28	20.9	5.94	23.3	6.63	25.6	7.58	28.0	8.59	28.6	8.63	29.9	8.70	30.5	8.73
	37	16.1	4.79	18.5	5.48	20.9	6.16	23.3	7.05	25.6	8.08	27.4	8.83	28.0	8.87	29.2	8.94	29.8	8.98
	40	16.1	5.09	18.5	5.82	20.9	6.72	21.4	6.73	21.8	6.73	22.3	6.73	22.8	6.73	23.8	6.73	24.3	6.73
	43	16.1	5.47	18.5	6.34	19.6	6.73	20.1	6.73	20.5	6.73	21.0	6.73	21.5	6.73	22.4	6.73	22.9	6.73
	46	16.1	5.92	18.0	6.74	18.4	6.73	18.9	6.73	19.3	6.73	19.7	6.73	20.2	6.73	21.1	6.73	21.5	6.73
25.2 (90%)	-15	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	-10	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	-5	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	0	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	5	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	10	14.5	3.21	16.7	3.65	18.8	4.10	20.9	4.55	23.1	5.00	25.2	5.45	27.3	5.89	31.6	6.79	33.6	7.19
	15	14.5	3.29	16.7	3.75	18.8	4.21	20.9	4.67	23.1	5.13	25.2	5.59	27.3	6.05	31.6	6.97	33.3	7.29
	21	14.5	3.46	16.7	3.94	18.8	4.43	20.9	4.91	23.1	5.40	25.2	5.88	27.3	6.37	31.6	7.33	32.8	7.49
	23	14.5	3.53	16.7	4.02	18.8	4.52	20.9	5.02	23.1	5.51	25.2	6.01	27.3	6.50	31.6	7.49	32.6	7.57
	25	14.5	3.61	16.7	4.12	18.8	4.63	20.9	5.13	23.1	5.64	25.2	6.15	27.3	6.65	31.6	7.67	32.3	7.67
	27	14.5	3.70	16.7	4.22	18.8	4.74	20.9	5.26	23.1	5.78	25.2	6.31	27.3	6.83	31.2	7.82	31.9	7.84
	30	14.5	3.86	16.7	4.40	18.8	4.95	20.9	5.49	23.1	6.03	25.2	6.58	27.3	7.13	30.4	8.13	31.0	8.15
	33	14.5	4.04	16.7	4.61	18.8	5.18	20.9	5.75	23.1	6.32	25.2	6.97	27.3	7.80	29.6	8.43	30.2	8.46
	35	14.5	4.18	16.7	4.77	18.8	5.36	20.9	5.95	23.1	6.56	25.2	7.40	27.3	8.30	28.9	8.59	29.5	8.59
	37	14.5	4.33	16.7	4.94	18.8	5.56	20.9	6.17	23.1	6.97	25.2	7.89	26.9	8.61	27.9	8.61	28.5	8.61
	40	14.5	4.60	16.7	5.25	18.8	5.90	20.9	6.74	21.4	6.76	21.9	6.76	22.4	6.76	23.3	6.76	23.8	6.76
	43	14.5	4.94	16.7	5.65	18.8	6.47	19.7	6.77	20.2	6.77	20.6	6.77	21.1	6.77	22.0	6.77	22.4	6.77
	46	14.5	5.35	16.7	6.13	18.1	6.77	18.5	6.77	19.0	6.77	19.4	6.77	19.8	6.77	20.7	6.77	21.1	6.77
22.4 (80%)	-15	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	-10	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	-5	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	0	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	5	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	10	12.9	2.87	14.8	3.27	16.7	3.66	18.6	4.06	20.5	4.46	22.4	4.86	24.3	5.26	28.1	6.05	30.0	6.45
	15	12.9	2.94	14.8	3.35	16.7	3.76	18.6	4.17	20.5	4.58	22.4	4.99	24.3	5.40	28.1	6.22	30.0	6.63
	21	12.9	3.09	14.8	3.52	16.7	3.95	18.6	4.38	20.5	4.81	22.4	5.25	24.3	5.68	28.1	6.54	30.0	6.97
	23	12.9	3.16	14.8	3.60	16.7	4.04	18.6	4.48	20.5	4.92	22.4	5.36	24.3	5.80	28.1	6.68	30.0	7.12
	25	12.9	3.23	14.8	3.68	16.7	4.13	18.6	4.58	20.5	5.03	22.4	5.48	24.3	5.93	28.1	6.84	30.0	7.29
	27	12.9	3.31	14.8	3.77	16.7	4.23	18.6	4.70	20.5	5.16	22.4	5.62	24.3	6.09	28.1	7.01	30.0	7.47
	30	12.9	3.45	14.8	3.93	16.7	4.41	18.6	4.90	20.5	5.38	22.4	5.86	24.3	6.35	28.1	7.41	29.1	7.63
	33	12.9	3.61	14.8	4.12	16.7	4.62	18.6	5.13	20.5	5.64	22.4	6.15	24.3	6.65	28.1	8.12	29.1	8.41
	35	12.9	3.73	14.8	4.26	16.7	4.78	18.6	5.31	20.5	5.83	22.4	6.36	24.3	7.04	28.0	8.59	28.6	8.60
	37	12.9	3.87	14.8	4.41	16.7	4.96	18.6	5.50	20.5	6.05	22.4	6.70	24.3	7.48	27.1	8.63	27.6	8.62
	40	12.9	4.11	14.8	4.68	16.7	5.27	18.6	5.84	20.5	6.55	21.4	6.80	21.8	6.80	22.7	6.80	23.2	6.80
	43	12.9	4.41	14.8	5.04	16.7	5.66	18.6	6.39	19.7	6.80	20.2	6.80	20.6	6.80	21.5	6.80	21.9	6.80
	46	12.9	4.77	14.8	5.45	16.7	6.16	18.1	6.80	18.6	6.80	19.0	6.80	19.4	6.80	20.2	6.80	20.7	6.80

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳090LELAH

● Capacity : 28.0 kW (10HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
19.6 (70%)	-15	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	-10	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	-5	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	0	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	5	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	10	11.3	2.53	13.0	2.88	14.6	3.23	16.3	3.57	17.9	3.92	19.6	4.27	21.3	4.62	24.6	5.32	26.2	5.66
	15	11.3	2.60	13.0	2.95	14.6	3.31	16.3	3.67	17.9	4.03	19.6	4.39	21.3	4.74	24.6	5.46	26.2	5.82
	21	11.3	2.73	13.0	3.10	14.6	3.48	16.3	3.86	17.9	4.23	19.6	4.61	21.3	4.99	24.6	5.74	26.2	6.12
	23	11.3	2.78	13.0	3.17	14.6	3.55	16.3	3.94	17.9	4.32	19.6	4.71	21.3	5.09	24.6	5.86	26.2	6.25
	25	11.3	2.84	13.0	3.24	14.6	3.63	16.3	4.03	17.9	4.42	19.6	4.82	21.3	5.21	24.6	6.00	26.2	6.40
	27	11.3	2.92	13.0	3.32	14.6	3.72	16.3	4.13	17.9	4.54	19.6	4.94	21.3	5.35	24.6	6.15	26.2	6.56
	30	11.3	3.04	13.0	3.46	14.6	3.88	16.3	4.31	17.9	4.73	19.6	5.15	21.3	5.57	24.6	6.42	26.2	6.84
	33	11.3	3.18	13.0	3.62	14.6	4.07	16.3	4.51	17.9	4.95	19.6	5.40	21.3	5.84	24.6	6.73	26.2	7.37
	35	11.3	3.29	13.0	3.75	14.6	4.21	16.3	4.66	17.9	5.12	19.6	5.58	21.3	6.04	24.6	7.15	26.2	7.83
	37	11.3	3.40	13.0	3.88	14.6	4.36	16.3	4.84	17.9	5.31	19.6	5.79	21.3	6.27	24.6	7.61	26.2	8.37
	40	11.3	3.61	13.0	4.12	14.6	4.63	16.3	5.13	17.9	5.64	19.6	6.17	20.9	6.69	21.8	6.69	22.2	6.69
	43	11.3	3.88	13.0	4.43	14.6	4.97	16.3	5.52	17.9	6.08	19.4	6.69	19.8	6.69	20.6	6.69	21.0	6.69
	46	11.3	4.20	13.0	4.79	14.6	5.38	16.3	5.98	17.8	6.69	18.2	6.69	18.6	6.69	19.4	6.69	19.8	6.69
16.8 (60%)	-15	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	-10	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	-5	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	0	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	5	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	10	9.7	2.19	11.1	2.49	12.5	2.79	14.0	3.09	15.4	3.39	16.8	3.68	18.2	3.98	21.1	4.58	22.5	4.88
	15	9.7	2.25	11.1	2.55	12.5	2.86	14.0	3.17	15.4	3.48	16.8	3.78	18.2	4.09	21.1	4.70	22.5	5.01
	21	9.7	2.36	11.1	2.68	12.5	3.00	14.0	3.33	15.4	3.65	16.8	3.97	18.2	4.30	21.1	4.94	22.5	5.27
	23	9.7	2.41	11.1	2.74	12.5	3.07	14.0	3.40	15.4	3.73	16.8	4.06	18.2	4.39	21.1	5.05	22.5	5.38
	25	9.7	2.46	11.1	2.80	12.5	3.14	14.0	3.48	15.4	3.81	16.8	4.15	18.2	4.49	21.1	5.17	22.5	5.50
	27	9.7	2.52	11.1	2.87	12.5	3.22	14.0	3.56	15.4	3.91	16.8	4.26	18.2	4.60	21.1	5.30	22.5	5.65
	30	9.7	2.63	11.1	2.99	12.5	3.35	14.0	3.71	15.4	4.08	16.8	4.44	18.2	4.80	21.1	5.53	22.5	5.89
	33	9.7	2.75	11.1	3.13	12.5	3.51	14.0	3.89	15.4	4.27	16.8	4.65	18.2	5.03	21.1	5.79	22.5	6.17
	35	9.7	2.84	11.1	3.23	12.5	3.63	14.0	4.02	15.4	4.41	16.8	4.81	18.2	5.20	21.1	5.99	22.5	6.38
	37	9.7	2.94	11.1	3.35	12.5	3.76	14.0	4.17	15.4	4.58	16.8	4.99	18.2	5.39	21.1	6.21	22.5	6.74
	40	9.7	3.12	11.1	3.55	12.5	3.99	14.0	4.42	15.4	4.86	16.8	5.29	18.2	5.73	19.6	5.92	20.0	5.92
	43	9.7	3.35	11.1	3.82	12.5	4.29	14.0	4.76	15.4	5.22	16.8	5.69	17.8	5.95	18.5	5.94	18.9	5.94
	46	9.7	3.62	11.1	4.13	12.5	4.64	14.0	5.14	15.4	5.65	16.4	5.97	16.8	5.97	17.5	5.96	17.9	5.96
14.0 (50%)	-15	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	-10	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	-5	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	0	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	5	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	10	8.1	1.85	9.3	2.10	10.4	2.35	11.6	2.60	12.8	2.85	14.0	3.10	15.2	3.35	17.6	3.84	18.7	4.09
	15	8.1	1.90	9.3	2.16	10.4	2.41	11.6	2.67	12.8	2.92	14.0	3.18	15.2	3.43	17.6	3.95	18.7	4.20
	21	8.1	1.99	9.3	2.26	10.4	2.53	11.6	2.80	12.8	3.07	14.0	3.34	15.2	3.61	17.6	4.15	18.7	4.42
	23	8.1	2.03	9.3	2.31	10.4	2.58	11.6	2.86	12.8	3.13	14.0	3.41	15.2	3.68	17.6	4.23	18.7	4.51
	25	8.1	2.08	9.3	2.36	10.4	2.64	11.6	2.92	12.8	3.20	14.0	3.49	15.2	3.77	17.6	4.33	18.7	4.61
	27	8.1	2.13	9.3	2.42	10.4	2.71	11.6	3.00	12.8	3.29	14.0	3.57	15.2	3.86	17.6	4.44	18.7	4.73
	30	8.1	2.22	9.3	2.52	10.4	2.82	11.6	3.12	12.8	3.42	14.0	3.73	15.2	4.03	17.6	4.63	18.7	4.93
	33	8.1	2.32	9.3	2.63	10.4	2.95	11.6	3.27	12.8	3.58	14.0	3.90	15.2	4.22	17.6	4.85	18.7	5.17
	35	8.1	2.39	9.3	2.72	10.4	3.05	11.6	3.38	12.8	3.71	14.0	4.03	15.2	4.36	17.6	5.02	18.7	5.35
	37	8.1	2.48	9.3	2.82	10.4	3.16	11.6	3.50	12.8	3.84	14.0	4.18	15.2	4.52	17.6	5.20	18.7	5.54
	40	8.1	2.63	9.3	2.99	10.4	3.35	11.6	3.71	12.8	4.08	14.0	4.44	15.2	4.80	17.6	5.53	18.7	5.89
	43	8.1	2.82	9.3	3.21	10.4	3.60	11.6	3.99	12.8	4.38	14.0	4.77	15.2	5.16	17.6	5.94	18.0	5.95
	46	8.1	3.04	9.3	3.47	10.4	3.89	11.6	4.31	12.8	4.74	14.0	5.16	15.2	5.58	16.7	5.98	17.0	5.98

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳108LBLAH

● Capacity : 33.5 kW (12HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
50.2 (150%)	-15	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	-10	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	-5	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	0	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	5	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	10	29.0	6.71	33.2	7.65	37.5	8.59	40.5	9.17	41.6	9.16	42.6	9.15	43.7	9.14	45.9	9.11	47.0	9.09
	15	29.0	6.86	33.2	7.82	37.5	8.79	40.1	9.26	41.2	9.25	42.2	9.24	43.3	9.23	45.4	9.21	46.5	9.19
	21	29.0	7.15	33.2	8.16	37.5	9.16	39.4	9.44	40.4	9.43	41.5	9.42	42.5	9.41	44.7	9.39	45.8	9.38
	23	29.0	7.28	33.2	8.30	37.5	9.33	39.1	9.51	40.1	9.50	41.2	9.50	42.2	9.49	44.1	9.52	45.1	9.54
	25	29.0	7.42	33.2	8.47	37.5	9.51	38.8	9.59	39.7	9.61	40.6	9.63	41.5	9.65	43.3	9.70	44.3	9.72
	27	29.0	7.58	33.2	8.65	37.2	9.73	38.1	9.76	39.0	9.78	39.8	9.81	40.7	9.83	42.5	9.88	43.5	9.91
	30	29.0	7.86	33.2	9.04	36.1	10.00	37.0	10.02	37.8	10.05	38.7	10.08	39.6	10.10	41.4	10.16	42.3	10.19
	33	29.0	8.18	33.2	9.76	35.0	10.26	35.8	10.29	36.7	10.32	37.6	10.35	38.4	10.38	40.1	10.44	41.0	10.47
	35	29.0	8.58	33.2	10.29	34.3	10.44	35.1	10.48	35.9	10.51	36.7	10.55	37.6	10.58	39.3	10.65	40.1	10.69
	37	29.0	9.03	32.6	10.61	33.4	10.65	34.2	10.68	35.0	10.72	35.9	10.75	36.7	10.79	38.4	10.86	39.2	10.90
	40	27.9	9.33	28.6	9.33	29.2	9.33	29.9	9.33	30.6	9.33	31.3	9.33	32.0	9.33	33.4	9.33	34.1	9.32
	43	26.3	9.34	27.0	9.33	27.6	9.33	28.3	9.33	28.9	9.33	29.6	9.33	30.2	9.33	31.6	9.33	32.3	9.33
	46	24.8	9.34	25.4	9.34	26.0	9.34	26.7	9.34	27.3	9.34	27.9	9.34	28.6	9.34	29.8	9.33	30.5	9.33
46.9 (140%)	-15	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	-10	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	-5	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	0	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	5	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	10	27.0	6.28	31.0	7.16	35.0	8.04	39.0	8.92	40.8	9.17	41.9	9.16	42.9	9.14	45.0	9.12	46.1	9.10
	15	27.0	6.42	31.0	7.32	35.0	8.22	39.0	9.12	40.5	9.26	41.5	9.25	42.5	9.24	44.6	9.22	45.7	9.20
	21	27.0	6.70	31.0	7.63	35.0	8.58	38.7	9.44	39.7	9.44	40.8	9.43	41.8	9.42	43.9	9.40	44.9	9.38
	23	27.0	6.82	31.0	7.77	35.0	8.73	38.4	9.52	39.4	9.51	40.4	9.50	41.5	9.49	43.4	9.50	44.4	9.52
	25	27.0	6.95	31.0	7.92	35.0	8.90	38.1	9.60	39.1	9.59	40.0	9.61	40.9	9.64	42.7	9.68	43.6	9.71
	27	27.0	7.10	31.0	8.09	35.0	9.09	37.5	9.74	38.4	9.77	39.3	9.79	40.1	9.82	41.9	9.86	42.8	9.89
	30	27.0	7.35	31.0	8.39	35.0	9.68	36.4	10.01	37.3	10.03	38.1	10.06	39.0	10.09	40.7	10.14	41.6	10.17
	33	27.0	7.65	31.0	8.90	34.5	10.25	35.3	10.27	36.2	10.30	37.0	10.33	37.9	10.36	39.6	10.42	40.4	10.45
	35	27.0	7.88	31.0	9.38	33.8	10.42	34.6	10.46	35.4	10.49	36.2	10.52	37.0	10.56	38.7	10.63	39.5	10.66
	37	27.0	8.27	31.0	9.92	33.0	10.63	33.8	10.66	34.6	10.70	35.4	10.73	36.2	10.77	37.8	10.84	38.7	10.87
	40	27.0	9.01	28.3	9.36	29.0	9.36	29.7	9.36	30.3	9.36	31.0	9.36	31.7	9.36	33.0	9.36	33.7	9.36
	43	26.1	9.37	26.8	9.37	27.4	9.37	28.0	9.37	28.7	9.37	29.3	9.37	30.0	9.37	31.3	9.36	32.0	9.36
	46	24.6	9.37	25.2	9.37	25.8	9.37	26.4	9.37	27.1	9.37	27.7	9.37	28.3	9.37	29.6	9.37	30.2	9.37
43.5 (130%)	-15	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	-10	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	-5	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	0	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	5	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	10	25.1	5.86	28.8	6.67	32.5	7.49	36.2	8.30	39.9	9.12	41.0	9.17	42.1	9.15	44.1	9.13	45.2	9.12
	15	25.1	5.99	28.8	6.82	32.5	7.66	36.2	8.49	39.7	9.27	40.7	9.26	41.7	9.25	43.7	9.23	44.8	9.21
	21	25.1	6.24	28.8	7.11	32.5	7.98	36.2	8.86	39.0	9.44	40.0	9.43	41.0	9.43	43.0	9.41	44.0	9.39
	23	25.1	6.35	28.8	7.24	32.5	8.13	36.2	9.01	38.7	9.52	39.7	9.51	40.7	9.50	42.7	9.48	43.6	9.51
	25	25.1	6.47	28.8	7.38	32.5	8.28	36.2	9.19	38.4	9.60	39.3	9.60	40.2	9.62	41.9	9.66	42.8	9.69
	27	25.1	6.61	28.8	7.54	32.5	8.47	36.2	9.39	37.8	9.75	38.6	9.77	39.5	9.80	41.2	9.85	42.1	9.87
	30	25.1	6.85	28.8	7.81	32.5	8.77	35.9	9.99	36.7	10.02	37.5	10.04	38.4	10.07	40.1	10.12	40.9	10.14
	33	25.1	7.13	28.8	8.13	32.5	9.47	34.8	10.25	35.6	10.28	36.4	10.31	37.3	10.34	38.9	10.39	39.8	10.42
	35	25.1	7.34	28.8	8.51	32.5	9.98	34.1	10.43	34.9	10.47	35.7	10.50	36.5	10.53	38.1	10.60	38.9	10.64
	37	25.1	7.57	28.8	8.97	32.5	10.60	33.3	10.64	34.1	10.68	34.8	10.71	35.6	10.74	37.2	10.81	38.0	10.85
	40	25.1	8.18	28.0	9.40	28.7	9.40	29.3	9.40	30.0	9.40	30.7	9.40	31.3	9.40	32.7	9.40	33.4	9.39
	43	25.1	8.96	26.5	9.40	27.1	9.40	27.7	9.40	28.4	9.40	29.0	9.40	29.7	9.40	31.0	9.40	31.6	9.40
	46	24.4	9.41	25.0	9.40	25.6	9.40	26.2	9.40	26.8	9.40	27.4	9.40	28.0	9.40	29.3	9.40	29.9	9.40
40.2 (120%)	-15	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	-10	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	-5	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	0	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	5	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	10	23.2	5.43	26.6	6.18	30.0	6.94	33.4	7.69	36.8	8.44	40.1	9.17	41.1	9.16	43.1	9.14	44.1	9.13
	15	23.2	5.55	26.6	6.32	30.0	7.09	33.4	7.86	36.8	8.63	39.8	9.27	40.8	9.26	42.7	9.24	43.7	9.23
	21	23.2	5.78	26.6	6.59	30.0	7.39	33.4	8.20	36.8	9.00	39.1	9.44	40.1	9.43	42.0	9.42	43.0	9.41
	23	23.2	5.88	26.6	6.71	30.0	7.52	33.4	8.34	36.8	9.17	38.8	9.52	39.8	9.51	41.7	9.49	42.7	9.48
	25	23.2	6.00	26.6	6.84	30.0	7.67	33.4	8.51	36.8	9.34	38.5	9.60	39.4	9.60	41.1	9.64	42.0	9.67
	27	23.2	6.13	26.6	6.98	30.0	7.84	33.4	8.69	36.8	9.61	37.9	9.75	38.7	9.78	40.4	9.82	41.3	9.85
	30	23.2	6.35	26.6	7.23	30.0	8.12	33.4	9.10	36.0	9.99	36.8	10.02	37.6	10.04	39.3	10.09	40.2	10.12
	33	23.2	6.60	26.6	7.53	30.0	8.52	33.4	9.83	35.0	10.26	35.8	10.29	36.6	10.31	38.2	10.37	39.0	10.40
	35	23.2	6.80	26.6	7.75	30.0	8.97	33.4	10.36	34.2	10.44	35.0	10.47	35.8	10.51	37.4	10.57	38.2	10.61
	37	23.2	7.01	26.6	8.09	30.0	9.47	32.7	10.62	33.5	10.65	34.2	10.68	35.0	10.72	36.6	10.78	37.4	10.82
	40	23.2	7.39	26.6	8.81	28.3	9.43	29.0	9.43	29.6	9.43	30.3	9.43	30.9	9.43	32.3	9.43	32.9	9.43
	43	23.2	8.07	26.2	9.43	26.8	9.43	27.4	9.43	28.0	9.43	28.7	9.43	29.3	9.43	30.6	9.43	31.2	9.43
	46	23.2	8.86	24.7	9.44	25.3	9.44	25.9	9.44	26.5	9.44	27.1	9.44	27.7	9.44	28.9	9.44	29.6	9.43

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳108LBLAH

● Capacity : 33.5 kW (12HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
36.8 (110%)	-15	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	-10	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	-5	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	0	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	5	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	10	21.2	5.00	24.4	5.69	27.5	6.38	30.6	7.08	33.7	7.77	36.9	8.45	40.0	9.14	42.0	9.16	43.0	9.14
	15	21.2	5.11	24.4	5.82	27.5	6.53	30.6	7.23	33.7	7.94	36.8	8.65	39.7	9.27	41.6	9.25	42.6	9.24
	21	21.2	5.33	24.4	6.07	27.5	6.80	30.6	7.54	33.7	8.28	36.8	9.02	39.1	9.44	40.9	9.43	41.9	9.42
	23	21.2	5.42	24.4	6.17	27.5	6.92	30.6	7.67	33.7	8.43	36.9	9.18	38.8	9.52	40.7	9.50	41.6	9.49
	25	21.2	5.53	24.4	6.29	27.5	7.06	30.6	7.83	33.7	8.59	36.9	9.36	38.5	9.60	40.2	9.62	41.0	9.64
	27	21.2	5.64	24.4	6.43	27.5	7.21	30.6	7.99	33.7	8.78	36.9	9.63	37.9	9.75	39.5	9.80	40.3	9.82
	30	21.2	5.84	24.4	6.66	27.5	7.47	30.6	8.29	33.7	9.22	36.0	10.00	36.8	10.02	38.5	10.07	39.3	10.09
	33	21.2	6.08	24.4	6.93	27.5	7.78	30.6	8.75	33.7	9.97	35.0	10.26	35.8	10.29	37.4	10.34	38.2	10.37
	35	21.2	6.26	24.4	7.13	27.5	8.02	30.6	9.22	33.6	10.41	34.3	10.45	35.1	10.48	36.6	10.54	37.4	10.57
	37	21.2	6.45	24.4	7.36	27.5	8.44	30.6	9.74	32.8	10.62	33.5	10.65	34.3	10.69	35.8	10.75	36.6	10.79
	40	21.2	6.80	24.4	7.86	27.5	9.22	28.5	9.47	29.2	9.47	29.8	9.47	30.5	9.47	31.8	9.47	32.4	9.47
	43	21.2	7.24	24.4	8.61	26.4	9.47	27.0	9.47	27.6	9.47	28.3	9.47	28.9	9.47	30.1	9.47	30.8	9.47
	46	21.2	7.92	24.4	9.47	24.9	9.47	25.5	9.47	26.1	9.47	26.7	9.47	27.3	9.47	28.5	9.47	29.1	9.47
33.5 (100%)	-15	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	-10	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	-5	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	0	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	5	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	10	19.3	4.58	22.1	5.20	25.0	5.83	27.8	6.46	30.7	7.09	33.5	7.71	36.3	8.34	40.7	9.17	41.7	9.16
	15	19.3	4.68	22.1	5.32	25.0	5.96	27.8	6.60	30.7	7.25	33.5	7.89	36.3	8.53	40.4	9.26	41.3	9.25
	21	19.3	4.87	22.1	5.54	25.0	6.21	27.8	6.88	30.7	7.56	33.5	8.23	36.3	8.90	39.7	9.44	40.7	9.43
	23	19.3	4.96	22.1	5.64	25.0	6.32	27.8	7.01	30.7	7.69	33.5	8.37	36.3	9.06	39.5	9.51	40.4	9.50
	25	19.3	5.05	22.1	5.75	25.0	6.45	27.8	7.14	30.7	7.84	33.5	8.54	36.3	9.23	39.2	9.59	40.0	9.61
	27	19.3	5.16	22.1	5.87	25.0	6.58	27.8	7.30	30.7	8.01	33.5	8.72	36.3	9.45	38.5	9.77	39.3	9.79
	30	19.3	5.34	22.1	6.08	25.0	6.82	27.8	7.56	30.7	8.30	33.5	9.14	35.9	9.99	37.5	10.04	38.3	10.06
	33	19.3	5.55	22.1	6.33	25.0	7.10	27.8	7.87	30.7	8.77	33.5	9.87	34.9	10.26	36.5	10.31	37.2	10.34
	35	19.3	5.72	22.1	6.51	25.0	7.31	27.8	8.15	30.7	9.24	33.5	10.41	34.2	10.44	35.7	10.50	36.5	10.54
	37	19.3	5.89	22.1	6.72	25.0	7.54	27.8	8.58	30.7	9.77	32.8	10.62	33.5	10.65	35.0	10.72	35.7	10.75
	40	19.3	6.21	22.1	7.07	25.0	8.12	27.8	9.37	28.7	9.50	29.3	9.50	29.9	9.50	31.2	9.50	31.8	9.50
	43	19.3	6.61	22.1	7.62	25.0	8.90	26.6	9.50	27.2	9.50	27.8	9.50	28.4	9.50	29.6	9.50	30.2	9.50
	46	19.3	7.08	22.1	8.35	24.5	9.50	25.1	9.50	25.7	9.50	26.3	9.50	26.9	9.50	28.0	9.50	28.6	9.50
30.1 (90%)	-15	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	-10	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	-5	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	0	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	5	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	10	17.4	4.15	19.9	4.72	22.5	5.28	25.0	5.84	27.6	6.41	30.2	6.97	32.7	7.54	37.8	8.67	40.2	9.17
	15	17.4	4.24	19.9	4.82	22.5	5.40	25.0	5.97	27.6	6.55	30.1	7.13	32.7	7.71	37.8	8.86	39.9	9.27
	21	17.4	4.42	19.9	5.02	22.5	5.62	25.0	6.23	27.6	6.83	30.1	7.43	32.7	8.04	37.8	9.24	39.2	9.44
	23	17.4	4.49	19.9	5.11	22.5	5.72	25.0	6.34	27.6	6.95	30.1	7.57	32.7	8.18	37.8	9.41	39.0	9.51
	25	17.4	4.58	19.9	5.20	22.5	5.83	25.0	6.46	27.6	7.09	30.2	7.71	32.7	8.34	37.8	9.60	38.7	9.59
	27	17.4	4.67	19.9	5.31	22.5	5.96	25.0	6.60	27.6	7.24	30.1	7.88	32.7	8.52	37.3	9.74	38.1	9.76
	30	17.4	4.84	19.9	5.50	22.5	6.17	25.0	6.84	27.6	7.50	30.1	8.17	32.7	8.85	36.4	10.01	37.1	10.03
	33	17.4	5.03	19.9	5.72	22.5	6.42	25.0	7.11	27.6	7.81	30.1	8.59	32.7	9.56	35.4	10.27	36.1	10.30
	35	17.4	5.18	19.9	5.89	22.5	6.61	25.0	7.32	27.6	8.06	30.2	9.04	32.7	10.08	34.7	10.46	35.4	10.49
	37	17.4	5.34	19.9	6.07	22.5	6.81	25.0	7.55	27.6	8.49	30.1	9.55	32.6	10.61	34.0	10.67	34.7	10.70
	40	17.4	5.62	19.9	6.40	22.5	7.18	25.0	8.15	27.6	9.27	28.6	9.54	29.3	9.54	30.5	9.54	31.1	9.54
	43	17.4	5.98	19.9	6.81	22.5	7.77	25.0	8.93	26.6	9.54	27.2	9.54	27.8	9.54	29.0	9.54	29.6	9.54
	46	17.4	6.40	19.9	7.31	22.5	8.52	24.6	9.54	25.2	9.54	25.7	9.54	26.3	9.54	27.5	9.54	28.0	9.54
26.8 (80%)	-15	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	-10	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	-5	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	0	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	5	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	10	15.4	3.72	17.7	4.23	20.0	4.73	22.3	5.23	24.5	5.73	26.8	6.23	29.1	6.74	33.6	7.74	35.9	8.24
	15	15.4	3.80	17.7	4.32	20.0	4.83	22.3	5.35	24.5	5.86	26.8	6.37	29.1	6.89	33.6	7.91	35.9	8.43
	21	15.4	3.96	17.7	4.50	20.0	5.03	22.3	5.57	24.5	6.11	26.8	6.64	29.1	7.18	33.6	8.25	35.9	8.79
	23	15.4	4.03	17.7	4.57	20.0	5.12	22.3	5.67	24.5	6.21	26.8	6.76	29.1	7.31	33.6	8.40	35.9	8.94
	25	15.4	4.10	17.7	4.66	20.0	5.22	22.3	5.78	24.5	6.33	26.8	6.89	29.1	7.45	33.6	8.57	35.9	9.12
	27	15.4	4.19	17.7	4.76	20.0	5.33	22.3	5.90	24.5	6.47	26.8	7.04	29.1	7.61	33.6	8.75	35.9	9.32
	30	15.4	4.33	17.7	4.93	20.0	5.52	22.3	6.11	24.5	6.70	26.8	7.29	29.1	7.89	33.6	9.18	35.8	9.99
	33	15.4	4.51	17.7	5.12	20.0	5.74	22.3	6.36	24.5	6.97	26.8	7.59	29.1	8.21	33.6	9.92	34.9	10.26
	35	15.4	4.64	17.7	5.27	20.0	5.91	22.3	6.54	24.5	7.18	26.8	7.82	29.1	8.62	33.5	10.41	34.2	10.44
	37	15.4	4.78	17.7	5.43	20.0	6.09	22.3	6.75	24.5	7.41	26.8	8.18	29.1	9.08	32.8	10.62	33.5	10.65
	40	15.4	5.03	17.7	5.72	20.0	6.41	22.3	7.11	24.5	7.94	26.8	8.91	27.9	9.24	29.1	9.24	29.7	9.24
	43	15.4	5.35	17.7	6.09	20.0	6.83	22.3	7.67	24.5	8.69	26.0	9.24	26.5	9.24	27.7	9.24	28.2	9.24
	46	15.4	5.73	17.7	6.52	20.0	7.34	22.3	8.41	24.1	9.24	24.6	9.24	25.1	9.24	26.2	9.24	26.8	9.24

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : AJ✳108LBLAH

● Capacity : 33.5 kW (12HP)

Total rated capacity of indoor unit	Outdoor temperature	Indoor temperature																	
		18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
	(°CDB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
23.4 (70%)	-15	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	-10	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	-5	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	0	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	5	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	10	13.5	3.30	15.5	3.74	17.5	4.18	19.5	4.61	21.5	5.05	23.4	5.49	25.4	5.93	29.4	6.81	31.4	7.25
	15	13.5	3.37	15.5	3.82	17.5	4.27	19.5	4.72	21.5	5.17	23.4	5.62	25.4	6.06	29.4	6.96	31.4	7.41
	21	13.5	3.50	15.5	3.97	17.5	4.44	19.5	4.91	21.5	5.38	23.4	5.85	25.4	6.32	29.4	7.26	31.4	7.73
	23	13.5	3.56	15.5	4.04	17.5	4.52	19.5	5.00	21.5	5.48	23.4	5.95	25.4	6.43	29.4	7.39	31.4	7.87
	25	13.5	3.63	15.5	4.12	17.5	4.60	19.5	5.09	21.5	5.58	23.4	6.07	25.4	6.56	29.4	7.53	31.4	8.02
	27	13.5	3.70	15.5	4.20	17.5	4.70	19.5	5.20	21.5	5.70	23.4	6.20	25.4	6.70	29.4	7.69	31.4	8.19
	30	13.5	3.83	15.5	4.35	17.5	4.87	19.5	5.39	21.5	5.90	23.4	6.42	25.4	6.94	29.4	7.98	31.4	8.49
	33	13.5	3.98	15.5	4.52	17.5	5.06	19.5	5.60	21.5	6.14	23.4	6.68	25.4	7.22	29.4	8.32	31.4	9.06
	35	13.5	4.09	15.5	4.65	17.5	5.21	19.5	5.76	21.5	6.32	23.4	6.88	25.4	7.43	29.4	8.75	31.4	9.54
	37	13.5	4.22	15.5	4.79	17.5	5.37	19.5	5.94	21.5	6.52	23.4	7.09	25.4	7.67	29.4	9.23	31.4	10.10
	40	13.5	4.44	15.5	5.05	17.5	5.65	19.5	6.26	21.5	6.87	23.4	7.49	25.4	8.32	27.4	8.81	27.9	8.81
	43	13.5	4.72	15.5	5.37	17.5	6.02	19.5	6.67	21.5	7.32	23.4	8.20	25.0	8.83	26.0	8.83	26.6	8.82
	46	13.5	5.05	15.5	5.75	17.5	6.44	19.5	7.14	21.5	8.03	23.2	8.85	23.7	8.84	24.8	8.84	25.3	8.84
20.1 (60%)	-15	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	-10	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	-5	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	0	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	5	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	10	11.6	2.87	13.3	3.25	15.0	3.62	16.7	4.00	18.4	4.38	20.1	4.75	21.8	5.13	25.2	5.88	26.9	6.26
	15	11.6	2.93	13.3	3.32	15.0	3.70	16.7	4.09	18.4	4.47	20.1	4.86	21.8	5.24	25.2	6.01	26.9	6.40
	21	11.6	3.05	13.3	3.45	15.0	3.85	16.7	4.25	18.4	4.66	20.1	5.06	21.8	5.46	25.2	6.27	26.9	6.67
	23	11.6	3.10	13.3	3.51	15.0	3.92	16.7	4.33	18.4	4.74	20.1	5.15	21.8	5.56	25.2	6.38	26.9	6.79
	25	11.6	3.16	13.3	3.57	15.0	3.99	16.7	4.41	18.4	4.83	20.1	5.25	21.8	5.66	25.2	6.50	26.9	6.92
	27	11.6	3.22	13.3	3.65	15.0	4.07	16.7	4.50	18.4	4.93	20.1	5.36	21.8	5.79	25.2	6.64	26.9	7.07
	30	11.6	3.33	13.3	3.77	15.0	4.22	16.7	4.66	18.4	5.10	20.1	5.55	21.8	5.99	25.2	6.88	26.9	7.32
	33	11.6	3.46	13.3	3.92	15.0	4.38	16.7	4.84	18.4	5.31	20.1	5.77	21.8	6.23	25.2	7.16	26.9	7.62
	35	11.6	3.55	13.3	4.03	15.0	4.51	16.7	4.98	18.4	5.46	20.1	5.94	21.8	6.42	25.2	7.37	26.9	7.85
	37	11.6	3.66	13.3	4.15	15.0	4.65	16.7	5.14	18.4	5.63	20.1	6.13	21.8	6.62	25.2	7.60	26.9	8.22
	40	11.6	3.85	13.3	4.37	15.0	4.89	16.7	5.41	18.4	5.93	20.1	6.45	21.8	6.97	25.2	8.22	26.7	8.83
	43	11.6	4.09	13.3	4.65	15.0	5.20	16.7	5.76	18.4	6.31	20.1	6.87	21.8	7.47	25.0	8.84	25.5	8.84
	46	11.6	4.37	13.3	4.97	15.0	5.57	16.7	6.16	18.4	6.76	20.1	7.39	21.8	8.19	23.7	8.85	24.2	8.85
16.8 (50%)	-15	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	-10	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	-5	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	0	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	5	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	10	9.7	2.44	11.1	2.76	12.5	3.07	13.9	3.38	15.3	3.70	16.8	4.01	18.2	4.33	21.0	4.95	22.4	5.27
	15	9.7	2.49	11.1	2.82	12.5	3.14	13.9	3.46	15.3	3.78	16.8	4.10	18.2	4.42	21.0	5.06	22.4	5.38
	21	9.7	2.59	11.1	2.93	12.5	3.26	13.9	3.60	15.3	3.93	16.8	4.27	18.2	4.60	21.0	5.27	22.4	5.61
	23	9.7	2.63	11.1	2.98	12.5	3.32	13.9	3.66	15.3	4.00	16.8	4.34	18.2	4.68	21.0	5.37	22.4	5.71
	25	9.7	2.68	11.1	3.03	12.5	3.38	13.9	3.73	15.3	4.07	16.8	4.42	18.2	4.77	21.0	5.47	22.4	5.82
	27	9.7	2.73	11.1	3.09	12.5	3.45	13.9	3.80	15.3	4.16	16.8	4.52	18.2	4.87	21.0	5.59	22.4	5.94
	30	9.7	2.83	11.1	3.20	12.5	3.57	13.9	3.94	15.3	4.31	16.8	4.68	18.2	5.04	21.0	5.79	22.4	6.15
	33	9.7	2.93	11.1	3.32	12.5	3.70	13.9	4.09	15.3	4.48	16.8	4.86	18.2	5.25	21.0	6.02	22.4	6.40
	35	9.7	3.01	11.1	3.41	12.5	3.81	13.9	4.21	15.3	4.60	16.8	5.00	18.2	5.40	21.0	6.19	22.4	6.59
	37	9.7	3.10	11.1	3.51	12.5	3.92	13.9	4.33	15.3	4.75	16.8	5.16	18.2	5.57	21.0	6.39	22.4	6.80
	40	9.7	3.26	11.1	3.69	12.5	4.13	13.9	4.56	15.3	4.99	16.8	5.43	18.2	5.86	21.0	6.73	22.4	7.16
	43	9.7	3.46	11.1	3.92	12.5	4.39	13.9	4.85	15.3	5.31	16.8	5.78	18.2	6.24	21.0	7.16	22.4	7.74
	46	9.7	3.70	11.1	4.19	12.5	4.69	13.9	5.19	15.3	5.69	16.8	6.18	18.2	6.68	21.0	7.81	22.4	8.49

TC : Total Capacity kW.

IP : Input Power kW (Compressor + Outdoor fan motor).

The data is based on the following conditions. Pipe length : 7.5m , Height difference : 0m.

5. CAPACITY TABLE HEATING (OUTDOOR UNIT)

HEATING CAPACITY

■ MODEL : AJ✱072LELAH

● Capacity : 22.4 kW (8HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
33.6 (150%)	-19.3	-20.0	17.7	3.87	17.7	4.15	17.7	4.43	17.7	4.57	17.6	4.71	17.6	4.99	17.6	5.26
	-15.0	-16.0	19.5	4.29	19.5	4.56	19.4	4.82	19.4	4.96	19.4	5.09	19.3	5.35	19.2	5.62
	-12.0	-13.0	21.0	4.59	21.0	4.85	20.9	5.10	20.8	5.23	20.8	5.36	20.7	5.62	20.6	5.87
	-9.0	-10.0	22.6	4.87	22.5	5.12	22.4	5.37	22.3	5.50	22.3	5.62	22.1	5.87	22.0	6.12
	-7.0	-8.0	23.7	5.05	23.6	5.30	23.4	5.54	23.4	5.67	23.3	5.79	23.1	6.04	23.0	6.28
	-5.0	-6.0	24.8	5.22	24.7	5.47	24.5	5.71	24.4	5.83	24.4	5.95	24.2	6.20	24.0	6.44
	-3.0	-4.0	26.0	5.39	25.8	5.63	25.6	5.87	25.5	6.00	25.5	6.12	25.3	6.36	25.1	6.60
	-1.0	-2.0	27.2	5.56	27.0	5.80	26.8	6.04	26.7	6.15	26.6	6.27	26.4	6.51	26.2	6.75
	0.0	-1.0	27.8	5.64	27.6	5.88	27.4	6.11	27.3	6.23	27.1	6.35	26.9	6.59	26.4	6.69
	2.0	1.0	29.0	5.80	28.8	6.03	28.5	6.27	28.4	6.39	28.3	6.51	28.1	6.75	26.4	6.37
	5.0	4.0	30.8	6.03	30.6	6.27	30.3	6.51	30.2	6.62	30.1	6.74	28.8	6.55	26.4	5.91
	7.0	6.0	32.1	6.19	31.8	6.43	31.6	6.66	31.5	6.78	31.2	6.85	28.8	6.23	26.4	5.62
	9.0	7.8	33.3	6.33	33.0	6.57	32.7	6.80	32.4	6.85	31.2	6.54	28.8	5.95	26.4	5.37
	12.0	10.6	35.1	6.55	34.8	6.78	33.6	6.67	32.4	6.38	31.2	6.09	28.8	5.53	26.4	4.99
	15.0	13.5	37.0	6.77	36.0	6.74	33.6	6.19	32.4	5.92	31.2	5.65	28.8	5.13	26.4	4.63
31.3 (140%)	-19.3	-20.0	17.7	4.02	17.7	4.30	17.6	4.58	17.6	4.71	17.6	4.85	17.6	5.13	17.6	5.41
	-15.0	-16.0	19.5	4.45	19.5	4.71	19.4	4.98	19.4	5.11	19.3	5.24	19.3	5.51	19.2	5.77
	-12.0	-13.0	21.0	4.75	20.9	5.01	20.8	5.26	20.8	5.39	20.7	5.52	20.6	5.78	20.5	6.03
	-9.0	-10.0	22.5	5.04	22.4	5.29	22.3	5.54	22.2	5.66	22.2	5.79	22.0	6.04	21.9	6.28
	-7.0	-8.0	23.6	5.22	23.5	5.47	23.3	5.71	23.3	5.84	23.2	5.96	23.0	6.21	22.9	6.45
	-5.0	-6.0	24.7	5.40	24.6	5.64	24.4	5.89	24.3	6.01	24.2	6.13	24.1	6.37	23.9	6.61
	-3.0	-4.0	25.9	5.58	25.7	5.82	25.5	6.06	25.4	6.18	25.3	6.30	25.1	6.54	24.6	6.64
	-1.0	-2.0	27.0	5.75	26.8	5.99	26.6	6.22	26.5	6.34	26.4	6.46	26.2	6.70	24.6	6.34
	0.0	-1.0	27.6	5.83	27.4	6.07	27.2	6.31	27.1	6.43	27.0	6.54	26.8	6.78	24.6	6.18
	2.0	1.0	28.8	6.00	28.6	6.24	28.3	6.47	28.2	6.59	28.1	6.71	26.9	6.51	24.6	5.89
	5.0	4.0	30.6	6.25	30.4	6.48	30.1	6.72	30.0	6.84	29.1	6.63	26.9	6.04	24.6	5.46
	7.0	6.0	31.9	6.41	31.6	6.65	31.3	6.88	30.2	6.60	29.1	6.31	26.9	5.74	24.6	5.19
	9.0	7.8	33.0	6.56	32.7	6.80	31.4	6.59	30.2	6.30	29.1	6.03	26.9	5.48	24.6	4.95
	12.0	10.6	34.8	6.79	33.6	6.67	31.4	6.13	30.2	5.87	29.1	5.61	26.9	5.10	24.6	4.61
	15.0	13.5	35.8	6.70	33.6	6.19	31.4	5.69	30.2	5.44	29.1	5.20	26.9	4.73	24.6	4.27
29.1 (130%)	-19.3	-20.0	17.7	4.19	17.7	4.47	17.6	4.74	17.6	4.88	17.6	5.02	17.6	5.30	17.6	5.57
	-15.0	-16.0	19.5	4.62	19.4	4.89	19.3	5.15	19.3	5.29	19.3	5.42	19.2	5.68	19.1	5.94
	-12.0	-13.0	20.9	4.93	20.8	5.19	20.7	5.45	20.7	5.57	20.6	5.70	20.5	5.96	20.4	6.21
	-9.0	-10.0	22.4	5.23	22.3	5.48	22.2	5.73	22.1	5.85	22.1	5.98	21.9	6.22	21.8	6.47
	-7.0	-8.0	23.5	5.42	23.4	5.67	23.2	5.91	23.1	6.03	23.1	6.15	22.9	6.40	22.8	6.64
	-5.0	-6.0	24.6	5.61	24.4	5.85	24.3	6.09	24.2	6.21	24.1	6.33	23.9	6.57	22.9	6.40
	-3.0	-4.0	25.7	5.79	25.5	6.03	25.3	6.27	25.2	6.39	25.2	6.50	25.0	6.74	22.9	6.11
	-1.0	-2.0	26.8	5.97	26.6	6.20	26.4	6.44	26.3	6.56	26.2	6.68	25.0	6.43	22.9	5.83
	0.0	-1.0	27.4	6.06	27.2	6.29	27.0	6.53	26.9	6.64	26.8	6.76	25.0	6.27	22.9	5.68
	2.0	1.0	28.6	6.23	28.4	6.47	28.1	6.70	28.0	6.82	27.0	6.55	25.0	5.97	22.9	5.41
	5.0	4.0	30.4	6.49	30.1	6.73	29.1	6.63	28.1	6.36	27.0	6.08	25.0	5.54	22.9	5.01
	7.0	6.0	31.6	6.67	31.2	6.85	29.1	6.31	28.1	6.04	27.0	5.78	25.0	5.27	22.9	4.76
	9.0	7.8	32.7	6.82	31.2	6.54	29.1	6.03	28.1	5.77	27.0	5.52	25.0	5.03	22.9	4.55
	12.0	10.6	33.3	6.59	31.2	6.09	29.1	5.61	28.1	5.37	27.0	5.13	25.0	4.67	22.9	4.23
	15.0	13.5	33.3	6.12	31.2	5.65	29.1	5.20	28.1	4.98	27.0	4.76	25.0	4.33	22.9	3.92
26.8 (120%)	-19.3	-20.0	17.7	4.38	17.6	4.66	17.6	4.94	17.6	5.08	17.6	5.22	17.6	5.49	17.6	5.77
	-15.0	-16.0	19.4	4.83	19.4	5.09	19.3	5.36	19.3	5.49	19.2	5.62	19.2	5.88	19.1	6.14
	-12.0	-13.0	20.8	5.15	20.8	5.40	20.7	5.66	20.6	5.78	20.6	5.91	20.4	6.16	20.3	6.41
	-9.0	-10.0	22.3	5.45	22.2	5.70	22.1	5.95	22.0	6.07	22.0	6.19	21.8	6.44	21.1	6.41
	-7.0	-8.0	23.4	5.65	23.2	5.89	23.1	6.14	23.0	6.26	22.9	6.38	22.8	6.62	21.1	6.13
	-5.0	-6.0	24.4	5.84	24.3	6.08	24.1	6.32	24.0	6.44	23.9	6.56	23.0	6.45	21.1	5.86
	-3.0	-4.0	25.5	6.03	25.3	6.27	25.1	6.51	25.1	6.62	25.0	6.74	23.0	6.16	21.1	5.59
	-1.0	-2.0	26.6	6.22	26.4	6.45	26.2	6.69	25.9	6.71	25.0	6.43	23.0	5.87	21.1	5.33
	0.0	-1.0	27.2	6.31	27.0	6.55	26.8	6.78	25.9	6.55	25.0	6.27	23.0	5.73	21.1	5.20
	2.0	1.0	28.3	6.50	28.1	6.73	26.9	6.51	25.9	6.24	25.0	5.97	23.0	5.45	21.1	4.94
	5.0	4.0	30.1	6.77	28.8	6.55	26.9	6.04	25.9	5.79	25.0	5.54	23.0	5.06	21.1	4.58
	7.0	6.0	30.7	6.72	28.8	6.23	26.9	5.74	25.9	5.50	25.0	5.27	23.0	4.80	21.1	4.35
	9.0	7.8	30.7	6.42	28.8	5.95	26.9	5.48	25.9	5.25	25.0	5.03	23.0	4.58	21.1	4.15
	12.0	10.6	30.7	5.98	28.8	5.53	26.9	5.10	25.9	4.89	25.0	4.67	23.0	4.26	21.1	3.86
	15.0	13.5	30.7	5.55	28.8	5.13	26.9	4.73	25.9	4.53	25.0	4.33	23.0	3.95	21.1	3.58
24.6 (110%)	-19.3	-20.0	17.6	4.62	17.6	4.89	17.6	5.17	17.6	5.31	17.6	5.45	17.6	5.72	17.5	5.99
	-15.0	-16.0	19.4	5.07	19.3	5.33	19.2	5.60	19.2	5.73	19.2	5.86	19.1	6.12	19.0	6.37
	-12.0	-13.0	20.8	5.40	20.7	5.65	20.6	5.90	20.5	6.03	20.5	6.16	20.3	6.41	19.4	6.20
	-9.0	-10.0	22.2	5.71	22.1	5.96	22.0	6.20	21.9	6.33	21.8	6.45	21.1	6.41	19.4	5.83
	-7.0	-8.0	23.2	5.92	23.1	6.16	22.9	6.40	22.8	6.52	22.8	6.64	21.1	6.13	19.4	5.57
	-5.0	-6.0	24.2	6.12	24.1	6.36	23.9	6.59	23.8	6.68	22.9	6.40	21.1	5.86	19.4	5.32
	-3.0	-4.0	25.3	6.32	25.1	6.55	24.6	6.64	23.8	6.38	22.9	6.11	21.1	5.59	19.4	5.08
	-1.0	-2.0	26.4	6.51	26.2	6.74	24.6	6.34	23.8	6.08	22.9	5.83	21.1	5.33	19.4	4.84
	0.0	-1.0	26.9	6.61	26.4	6.69	24.6	6.18	23.8	5.93	22.9	5.68	21.1	5.20	19.4	4.72
	2.0	1.0	28.0	6.80	26.4	6.37	24.6	5.89	23.8	5.65	22.9	5.41	21.1	4.94	19.4	4.49
	5.0	4.0	28.2	6.38	26.4	5.91	24.6	5.46	23.8	5.24	22.9	5.01	21.1	4.58	19.4	4.16
	7.0	6.0	28.2	6.06	26.4	5.62	24.6	5.19	23.8	4.97	22.9	4.76	21.1	4.35	19.4	3.95
	9.0	7.8	28.2	5.79	26.4	5.37	24.6	4.95	23.8	4.75	22.9	4.55	21.1	4.15	19.4	3.77
	12.0	10.6	28.2	5.39	26.4	4.99	24.6	4.61	23.8	4.42	22.9	4.23	21.1	3.86	19.4	3.50
	15.0	13.5	28.2	4.99	26.4	4.63	24.6	4.27	23.8	4.09	22.9	3.92	21.1	3.58	19.4	3.25
22.4 (100%)	-19.3	-20.0	17.6	4.89	17.6	5.17	17.6	5.45	17.6	5.58	17.6	5.72	17.5	5.99	17.5	6.26
	-15.0	-16.0	19.3	5.36	19.2	5.62	19.2	5.88	19.1	6.01	19.1	6.14	19.0	6.40	17.6	5.93
	-12.0	-13.0	20.6	5.70	20.5	5.95	20.4	6.20	20.4	6.32	20.3	6.44	19.2	6.15	17.6	5.60
	-9.0	-10.0	22.0	6.02	21.9	6.26	21.8	6.50	21.6	6.56	20.8	6.30	19.2	5.77	17.6	5.26
	-7.0	-8.0	23.0	6.23	22.9	6.47	22.4	6.54	21.6	6.28	20.8	6.03	19.2	5.52	17.6	5.03
	-5.0	-6.0	24.0	6.44	23.8	6.68	22.4	6.25	21.6	6.01	20.8	5.76	19.2	5.28	17.6	4.80
	-3.0	-4.0	25.0	6.65	24.0	6.45	22.4	5.97	21.6	5.73	20.8	5.49	19.2	5.03	17.6	4.58
	-1.0	-2.0	25.6	6.62	24.0	6.15	22.4	5.69	21.6	5.46	20.8	5.24	19.2	4.79	17.6	4.36
	0.0	-1.0	25.6	6.46	24.0	6.00	22.4	5.55	21.6	5.33	20.8	5.11	19.2	4.67	17.6	4.25
	2.0	1.0	25.6	6.15	24.0	5.71	22.4	5.28	21.6	5.07	20.8	4.86	19.2	4.45	17.6	4.04
	5.0	4.0	25.6	5.71	24.0	5.30	22.4	4.90	21.6	4.70	20.8	4.50	19.2	4.12	17.6	3.74
	7.0	6.0	25.6	5.42	24.0	5.03	22.4	4.65	21.6	4.46	20.8	4.28	19.2	3.91	17.6	3.55
	9.0	7.8	25.6	5.18	24.0	4.80	22.4	4.44	21.6	4.26	20.8	4.08	19.2	3.73	17.6	3.39
	12.0	10.6	25.6	4.81	24.0	4.47	22.4	4.13	21.6	3.96	20.8	3.79	19.2	3.47	17.6	3.15
	15.0	13.5	25.6	4.46	24.0	4.14	22.4	3.82	21.6	3.67	20.8	3.52	19.2	3.22	17.6	2.92

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AJ✳072LELAH

● Capacity : 22.4 kW (8HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
20.1 (90%)	-19.3	-20.0	17.6	5.23	17.6	5.51	17.5	5.78	17.5	5.92	17.5	6.05	17.3	6.21	15.8	5.67
	-15.0	-16.0	19.2	5.71	19.1	5.96	19.1	6.22	19.0	6.35	18.7	6.33	17.3	5.82	15.8	5.31
	-12.0	-13.0	20.5	6.05	20.4	6.30	20.2	6.48	19.4	6.23	18.7	5.98	17.3	5.49	15.8	5.01
	-9.0	-10.0	21.8	6.39	21.6	6.56	20.2	6.09	19.4	5.85	18.7	5.62	17.3	5.16	15.8	4.70
	-7.0	-8.0	22.8	6.61	21.6	6.28	20.2	5.83	19.4	5.60	18.7	5.37	17.3	4.93	15.8	4.49
	-5.0	-6.0	23.0	6.45	21.6	6.01	20.2	5.57	19.4	5.35	18.7	5.13	17.3	4.71	15.8	4.29
	-3.0	-4.0	23.0	6.16	21.6	5.73	20.2	5.31	19.4	5.10	18.7	4.89	17.3	4.49	15.8	4.08
	-1.0	-2.0	23.0	5.87	21.6	5.46	20.2	5.06	19.4	4.86	18.7	4.66	17.3	4.27	15.8	3.89
	0.0	-1.0	23.0	5.73	21.6	5.33	20.2	4.93	19.4	4.74	18.7	4.55	17.3	4.17	15.8	3.79
	2.0	1.0	23.0	5.45	21.6	5.07	20.2	4.69	19.4	4.51	18.7	4.32	17.3	3.96	15.8	3.60
	5.0	4.0	23.0	5.06	21.6	4.70	20.2	4.35	19.4	4.18	18.7	4.00	17.3	3.67	15.8	3.34
	7.0	6.0	23.0	4.80	21.6	4.46	20.2	4.13	19.4	3.97	18.7	3.80	17.3	3.48	15.8	3.17
	9.0	7.8	23.0	4.58	21.6	4.26	20.2	3.94	19.4	3.79	18.7	3.63	17.3	3.32	15.8	3.02
	12.0	10.6	23.0	4.26	21.6	3.96	20.2	3.66	19.4	3.52	18.7	3.37	17.3	3.09	15.8	2.81
	15.0	13.5	23.0	3.95	21.6	3.67	20.2	3.40	19.4	3.26	18.7	3.13	17.3	2.86	15.8	2.61
17.9 (80%)	-19.3	-20.0	17.6	5.65	17.5	5.92	17.5	6.19	17.3	6.21	16.6	5.97	15.4	5.49	14.1	5.03
	-15.0	-16.0	19.1	6.13	19.0	6.39	17.9	6.04	17.3	5.82	16.6	5.59	15.4	5.14	14.1	4.70
	-12.0	-13.0	20.3	6.49	19.2	6.15	17.9	5.71	17.3	5.49	16.6	5.28	15.4	4.85	14.1	4.43
	-9.0	-10.0	20.5	6.19	19.2	5.77	17.9	5.36	17.3	5.16	16.6	4.95	15.4	4.55	14.1	4.15
	-7.0	-8.0	20.5	5.93	19.2	5.52	17.9	5.13	17.3	4.93	16.6	4.73	15.4	4.35	14.1	3.96
	-5.0	-6.0	20.5	5.66	19.2	5.28	17.9	4.89	17.3	4.71	16.6	4.52	15.4	4.15	14.1	3.78
	-3.0	-4.0	20.5	5.40	19.2	5.03	17.9	4.67	17.3	4.49	16.6	4.31	15.4	3.95	14.1	3.60
	-1.0	-2.0	20.5	5.15	19.2	4.79	17.9	4.44	17.3	4.27	16.6	4.10	15.4	3.76	14.1	3.43
	0.0	-1.0	20.5	5.02	19.2	4.67	17.9	4.33	17.3	4.17	16.6	4.00	15.4	3.67	14.1	3.34
	2.0	1.0	20.5	4.78	19.2	4.45	17.9	4.12	17.3	3.96	16.6	3.80	15.4	3.49	14.1	3.18
	5.0	4.0	20.5	4.43	19.2	4.12	17.9	3.82	17.3	3.67	16.6	3.52	15.4	3.23	14.1	2.94
	7.0	6.0	20.5	4.20	19.2	3.91	17.9	3.62	17.3	3.48	16.6	3.34	15.4	3.07	14.1	2.79
	9.0	7.8	20.5	4.01	19.2	3.73	17.9	3.46	17.3	3.32	16.6	3.19	15.4	2.93	14.1	2.67
	12.0	10.6	20.5	3.73	19.2	3.47	17.9	3.21	17.3	3.09	16.6	2.97	15.4	2.72	14.1	2.48
	15.0	13.5	20.5	3.46	19.2	3.22	17.9	2.98	17.3	2.86	16.6	2.75	15.4	2.52	14.1	2.30
15.6 (70%)	-19.3	-20.0	17.5	6.18	16.8	6.03	15.7	5.61	15.1	5.41	14.6	5.20	13.4	4.79	12.3	4.39
	-15.0	-16.0	17.9	6.04	16.8	5.65	15.7	5.25	15.1	5.06	14.6	4.86	13.4	4.48	12.3	4.09
	-12.0	-13.0	17.9	5.71	16.8	5.33	15.7	4.96	15.1	4.77	14.6	4.58	13.4	4.22	12.3	3.85
	-9.0	-10.0	17.9	5.36	16.8	5.00	15.7	4.65	15.1	4.47	14.6	4.30	13.4	3.95	12.3	3.61
	-7.0	-8.0	17.9	5.13	16.8	4.78	15.7	4.44	15.1	4.27	14.6	4.11	13.4	3.78	12.3	3.45
	-5.0	-6.0	17.9	4.89	16.8	4.56	15.7	4.24	15.1	4.08	14.6	3.92	13.4	3.60	12.3	3.29
	-3.0	-4.0	17.9	4.67	16.8	4.35	15.7	4.04	15.1	3.89	14.6	3.73	13.4	3.43	12.3	3.13
	-1.0	-2.0	17.9	4.44	16.8	4.14	15.7	3.85	15.1	3.70	14.6	3.55	13.4	3.26	12.3	2.98
	0.0	-1.0	17.9	4.33	16.8	4.04	15.7	3.75	15.1	3.61	14.6	3.47	13.4	3.18	12.3	2.91
	2.0	1.0	17.9	4.12	16.8	3.84	15.7	3.57	15.1	3.43	14.6	3.29	13.4	3.03	12.3	2.76
	5.0	4.0	17.9	3.82	16.8	3.56	15.7	3.30	15.1	3.18	14.6	3.05	13.4	2.80	12.3	2.56
	7.0	6.0	17.9	3.62	16.8	3.38	15.7	3.14	15.1	3.02	14.6	2.90	13.4	2.66	12.3	2.43
	9.0	7.8	17.9	3.46	16.8	3.22	15.7	2.99	15.1	2.88	14.6	2.76	13.4	2.54	12.3	2.32
	12.0	10.6	17.9	3.22	16.8	3.00	15.7	2.78	15.1	2.67	14.6	2.57	13.4	2.36	12.3	2.16
	15.0	13.5	17.9	2.98	16.8	2.78	15.7	2.58	15.1	2.48	14.6	2.38	13.4	2.19	12.3	2.00
13.4 (60%)	-19.3	-20.0	15.4	5.49	14.4	5.14	13.4	4.79	13.0	4.62	12.5	4.44	11.5	4.10	10.6	3.75
	-15.0	-16.0	15.4	5.14	14.4	4.81	13.4	4.48	13.0	4.31	12.5	4.15	11.5	3.82	10.6	3.50
	-12.0	-13.0	15.4	4.85	14.4	4.53	13.4	4.22	13.0	4.06	12.5	3.91	11.5	3.60	10.6	3.29
	-9.0	-10.0	15.4	4.55	14.4	4.25	13.4	3.95	13.0	3.81	12.5	3.66	11.5	3.37	10.6	3.08
	-7.0	-8.0	15.4	4.35	14.4	4.06	13.4	3.78	13.0	3.63	12.5	3.49	11.5	3.22	10.6	2.94
	-5.0	-6.0	15.4	4.15	14.4	3.87	13.4	3.60	13.0	3.47	12.5	3.33	11.5	3.07	10.6	2.81
	-3.0	-4.0	15.4	3.95	14.4	3.69	13.4	3.43	13.0	3.30	12.5	3.17	11.5	2.92	10.6	2.67
	-1.0	-2.0	15.4	3.76	14.4	3.51	13.4	3.26	13.0	3.14	12.5	3.02	11.5	2.78	10.6	2.54
	0.0	-1.0	15.4	3.67	14.4	3.42	13.4	3.18	13.0	3.06	12.5	2.95	11.5	2.71	10.6	2.48
	2.0	1.0	15.4	3.49	14.4	3.26	13.4	3.03	13.0	2.91	12.5	2.80	11.5	2.58	10.6	2.36
	5.0	4.0	15.4	3.23	14.4	3.01	13.4	2.80	13.0	2.70	12.5	2.59	11.5	2.39	10.6	2.18
	7.0	6.0	15.4	3.07	14.4	2.86	13.4	2.66	13.0	2.56	12.5	2.46	11.5	2.27	10.6	2.07
	9.0	7.8	15.4	2.93	14.4	2.73	13.4	2.54	13.0	2.44	12.5	2.35	11.5	2.16	10.6	1.98
	12.0	10.6	15.4	2.72	14.4	2.54	13.4	2.36	13.0	2.27	12.5	2.19	11.5	2.01	10.6	1.84
	15.0	13.5	15.4	2.52	14.4	2.35	13.4	2.19	13.0	2.11	12.5	2.03	11.5	1.87	10.6	1.71
11.2 (50%)	-19.3	-20.0	12.8	4.56	12.0	4.27	11.2	3.98	10.8	3.84	10.4	3.70	9.6	3.41	8.8	3.13
	-15.0	-16.0	12.8	4.26	12.0	3.98	11.2	3.71	10.8	3.58	10.4	3.44	9.6	3.18	8.8	2.91
	-12.0	-13.0	12.8	4.01	12.0	3.75	11.2	3.50	10.8	3.37	10.4	3.24	9.6	2.99	8.8	2.74
	-9.0	-10.0	12.8	3.76	12.0	3.51	11.2	3.27	10.8	3.15	10.4	3.03	9.6	2.80	8.8	2.56
	-7.0	-8.0	12.8	3.59	12.0	3.36	11.2	3.12	10.8	3.01	10.4	2.90	9.6	2.67	8.8	2.45
	-5.0	-6.0	12.8	3.42	12.0	3.20	11.2	2.98	10.8	2.87	10.4	2.76	9.6	2.55	8.8	2.33
	-3.0	-4.0	12.8	3.26	12.0	3.05	11.2	2.84	10.8	2.73	10.4	2.63	9.6	2.43	8.8	2.22
	-1.0	-2.0	12.8	3.10	12.0	2.90	11.2	2.70	10.8	2.60	10.4	2.50	9.6	2.31	8.8	2.11
	0.0	-1.0	12.8	3.02	12.0	2.83	11.2	2.63	10.8	2.54	10.4	2.44	9.6	2.25	8.8	2.06
	2.0	1.0	12.8	2.88	12.0	2.69	11.2	2.50	10.8	2.41	10.4	2.32	9.6	2.14	8.8	1.96
	5.0	4.0	12.8	2.66	12.0	2.49	11.2	2.32	10.8	2.23	10.4	2.15	9.6	1.98	8.8	1.82
	7.0	6.0	12.8	2.53	12.0	2.36	11.2	2.20	10.8	2.12	10.4	2.04	9.6	1.88	8.8	1.73
	9.0	7.8	12.8	2.41	12.0	2.26	11.2	2.10	10.8	2.03	10.4	1.95	9.6	1.80	8.8	1.65
	12.0	10.6	12.8	2.24	12.0	2.10	11.2	1.96	10.8	1.88	10.4	1.81	9.6	1.67	8.8	1.54
	15.0	13.5	12.8	2.08	12.0	1.95	11.2	1.81	10.8	1.75	10.4	1.68	9.6	1.55	8.8	1.43

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL : AJ✱090LELAH

● Capacity : 28.0 kW (10HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
42.0 (150%)	-19.3	-20.0	19.8	6.48	19.6	6.64	19.4	6.80	19.3	6.89	19.2	6.97	19.0	7.13	18.9	7.29
	-15.0	-16.0	21.9	6.72	21.6	6.88	21.4	7.04	21.3	7.11	21.2	7.19	21.0	7.35	20.7	7.50
	-12.0	-13.0	23.6	6.89	23.3	7.05	23.1	7.20	23.0	7.28	22.8	7.35	22.6	7.50	22.3	7.65
	-9.0	-10.0	25.4	7.06	25.1	7.21	24.8	7.36	24.7	7.43	24.6	7.50	24.3	7.65	24.0	7.80
	-7.0	-8.0	26.7	7.16	26.4	7.31	26.1	7.46	25.9	7.53	25.8	7.60	25.4	7.75	25.1	7.89
	-5.0	-6.0	28.0	7.26	27.6	7.41	27.3	7.55	27.2	7.63	27.0	7.70	26.7	7.84	26.3	7.99
	-3.0	-4.0	29.3	7.36	29.0	7.50	28.6	7.65	28.5	7.72	28.3	7.79	27.9	7.94	27.6	8.08
	-1.0	-2.0	30.7	7.45	30.3	7.60	30.0	7.74	29.8	7.81	29.6	7.88	29.2	8.03	28.9	8.17
	0.0	-1.0	31.4	7.50	31.0	7.64	30.6	7.79	30.5	7.86	30.3	7.93	29.9	8.07	29.5	8.21
	2.0	1.0	32.8	7.59	32.4	7.74	32.0	7.88	31.8	7.95	31.6	8.02	31.2	8.16	30.8	8.30
	5.0	4.0	35.0	7.73	34.6	7.87	34.2	8.01	33.9	8.08	33.7	8.15	33.3	8.29	32.9	8.44
	7.0	6.0	36.5	7.82	36.0	7.96	35.6	8.10	35.4	8.17	35.2	8.24	34.7	8.38	33.0	8.02
	9.0	7.8	37.8	7.90	37.4	8.04	36.9	8.18	36.7	8.25	36.5	8.32	36.0	8.45	33.0	7.62
	12.0	10.6	40.0	8.02	39.5	8.16	39.0	8.30	38.8	8.38	38.6	8.45	36.0	7.81	33.0	7.04
	15.0	13.5	42.2	8.15	41.8	8.29	41.3	8.44	40.5	8.32	39.0	7.94	36.0	7.20	33.0	6.49
39.2 (140%)	-19.3	-20.0	19.7	6.55	19.5	6.72	19.3	6.88	19.2	6.96	19.1	7.04	19.0	7.20	18.8	7.36
	-15.0	-16.0	21.7	6.80	21.5	6.96	21.3	7.12	21.2	7.19	21.1	7.27	20.9	7.43	20.6	7.58
	-12.0	-13.0	23.4	6.98	23.2	7.13	22.9	7.28	22.8	7.36	22.7	7.43	22.4	7.58	22.2	7.73
	-9.0	-10.0	25.2	7.15	25.0	7.29	24.7	7.44	24.5	7.52	24.4	7.59	24.1	7.74	23.8	7.88
	-7.0	-8.0	26.5	7.25	26.2	7.40	25.9	7.55	25.7	7.62	25.6	7.69	25.3	7.84	24.9	7.98
	-5.0	-6.0	27.8	7.36	27.4	7.50	27.1	7.65	27.0	7.72	26.8	7.79	26.5	7.93	26.1	8.08
	-3.0	-4.0	29.1	7.46	28.7	7.60	28.4	7.74	28.2	7.82	28.1	7.89	27.7	8.03	27.3	8.17
	-1.0	-2.0	30.4	7.56	30.1	7.70	29.7	7.84	29.5	7.91	29.3	7.98	29.0	8.12	28.6	8.27
	0.0	-1.0	31.1	7.61	30.7	7.75	30.4	7.89	30.2	7.96	30.0	8.03	29.6	8.17	29.2	8.31
	2.0	1.0	32.5	7.70	32.1	7.84	31.7	7.98	31.5	8.05	31.3	8.13	30.9	8.27	30.5	8.41
	5.0	4.0	34.6	7.85	34.2	7.99	33.8	8.13	33.6	8.20	33.4	8.27	33.0	8.41	30.8	7.82
	7.0	6.0	36.1	7.94	35.7	8.08	35.2	8.22	35.0	8.29	34.8	8.36	33.6	8.19	30.8	7.39
	9.0	7.8	37.4	8.02	37.0	8.16	36.5	8.30	36.3	8.37	36.1	8.44	33.6	7.78	30.8	7.02
	12.0	10.6	39.5	8.15	39.1	8.30	38.6	8.44	37.8	8.29	36.4	7.92	33.6	7.19	30.8	6.49
	15.0	13.5	41.8	8.29	41.3	8.43	39.2	7.99	37.8	7.64	36.4	7.30	33.6	6.63	30.8	5.98
36.4 (130%)	-19.3	-20.0	19.6	6.64	19.4	6.80	19.2	6.96	19.1	7.05	19.1	7.13	18.9	7.29	18.7	7.45
	-15.0	-16.0	21.6	6.90	21.4	7.05	21.2	7.21	21.1	7.28	21.0	7.36	20.7	7.51	20.5	7.67
	-12.0	-13.0	23.3	7.08	23.0	7.23	22.8	7.38	22.7	7.45	22.5	7.53	22.3	7.68	22.0	7.82
	-9.0	-10.0	25.0	7.25	24.8	7.40	24.5	7.54	24.3	7.61	24.2	7.69	23.9	7.83	23.6	7.98
	-7.0	-8.0	26.3	7.36	26.0	7.50	25.7	7.65	25.5	7.72	25.4	7.79	25.0	7.94	24.7	8.08
	-5.0	-6.0	27.5	7.47	27.2	7.61	26.9	7.75	26.7	7.82	26.6	7.90	26.2	8.04	25.9	8.18
	-3.0	-4.0	28.8	7.57	28.5	7.71	28.1	7.86	28.0	7.93	27.8	8.00	27.4	8.14	27.1	8.28
	-1.0	-2.0	30.1	7.68	29.8	7.82	29.4	7.96	29.2	8.03	29.0	8.10	28.7	8.24	28.3	8.38
	0.0	-1.0	30.8	7.73	30.4	7.87	30.1	8.01	29.9	8.08	29.7	8.15	29.3	8.29	28.6	8.27
	2.0	1.0	32.2	7.83	31.8	7.97	31.4	8.11	31.2	8.18	31.0	8.24	30.6	8.38	28.6	7.82
	5.0	4.0	34.3	7.98	33.8	8.12	33.4	8.25	33.2	8.32	33.0	8.39	31.2	7.94	28.6	7.18
	7.0	6.0	35.7	8.08	35.3	8.21	34.8	8.35	34.6	8.42	33.8	8.25	31.2	7.50	28.6	6.78
	9.0	7.8	37.0	8.17	36.5	8.30	36.1	8.44	35.1	8.20	33.8	7.84	31.2	7.13	28.6	6.44
	12.0	10.6	39.0	8.31	38.6	8.44	36.4	7.92	35.1	7.58	33.8	7.24	31.2	6.58	28.6	5.95
	15.0	13.5	41.2	8.45	39.0	7.94	36.4	7.30	35.1	6.98	33.8	6.67	31.2	6.07	28.6	5.48
33.6 (120%)	-19.3	-20.0	19.5	6.74	19.3	6.90	19.1	7.06	19.0	7.14	18.9	7.22	18.8	7.38	18.6	7.54
	-15.0	-16.0	21.5	7.00	21.3	7.16	21.0	7.31	20.9	7.39	20.8	7.46	20.6	7.61	20.4	7.77
	-12.0	-13.0	23.1	7.19	22.8	7.34	22.6	7.49	22.5	7.56	22.3	7.63	22.1	7.78	21.8	7.93
	-9.0	-10.0	24.8	7.37	24.5	7.51	24.3	7.66	24.1	7.73	24.0	7.80	23.7	7.94	23.4	8.09
	-7.0	-8.0	26.0	7.48	25.7	7.62	25.4	7.77	25.3	7.84	25.1	7.91	24.8	8.05	24.5	8.19
	-5.0	-6.0	27.2	7.59	26.9	7.73	26.6	7.87	26.4	7.94	26.3	8.01	25.9	8.16	25.6	8.30
	-3.0	-4.0	28.5	7.70	28.2	7.84	27.8	7.98	27.7	8.05	27.5	8.12	27.1	8.26	26.4	8.22
	-1.0	-2.0	29.8	7.81	29.4	7.95	29.1	8.09	28.9	8.16	28.7	8.22	28.3	8.36	26.4	7.77
	0.0	-1.0	30.4	7.86	30.1	8.00	29.7	8.14	29.5	8.21	29.3	8.28	28.8	8.34	26.4	7.55
	2.0	1.0	31.8	7.97	31.4	8.11	31.0	8.24	30.8	8.31	30.6	8.38	28.8	7.88	26.4	7.13
	5.0	4.0	33.8	8.13	33.4	8.26	33.0	8.40	32.4	8.30	31.2	7.94	28.8	7.23	26.4	6.55
	7.0	6.0	35.2	8.23	34.8	8.37	33.6	8.19	32.4	7.84	31.2	7.50	28.8	6.83	26.4	6.18
	9.0	7.8	36.5	8.33	36.0	8.45	33.6	7.78	32.4	7.45	31.2	7.13	28.8	6.49	26.4	5.87
	12.0	10.6	38.4	8.45	36.0	7.81	33.6	7.19	32.4	6.88	31.2	6.58	28.8	6.00	26.4	5.42
	15.0	13.5	38.4	7.79	36.0	7.20	33.6	6.63	32.4	6.35	31.2	6.07	28.8	5.53	26.4	5.00
30.8 (110%)	-19.3	-20.0	19.3	6.86	19.2	7.02	19.0	7.18	18.9	7.26	18.8	7.34	18.6	7.49	18.4	7.65
	-15.0	-16.0	21.3	7.13	21.1	7.28	20.9	7.43	20.7	7.51	20.6	7.58	20.4	7.73	20.2	7.88
	-12.0	-13.0	22.9	7.32	22.6	7.46	22.4	7.61	22.3	7.68	22.1	7.76	21.9	7.90	21.6	8.05
	-9.0	-10.0	24.6	7.50	24.3	7.64	24.0	7.79	23.9	7.86	23.7	7.93	23.4	8.07	23.1	8.21
	-7.0	-8.0	25.7	7.62	25.4	7.76	25.1	7.90	25.0	7.97	24.8	8.04	24.5	8.18	24.2	8.32
	-5.0	-6.0	26.9	7.74	26.6	7.88	26.3	8.01	26.1	8.08	26.0	8.15	25.6	8.29	24.2	7.88
	-3.0	-4.0	28.1	7.85	27.8	7.99	27.5	8.13	27.3	8.19	27.1	8.26	26.4	8.22	24.2	7.45
	-1.0	-2.0	29.4	7.96	29.0	8.10	28.7	8.24	28.5	8.30	28.3	8.37	26.4	7.77	24.2	7.04
	0.0	-1.0	30.0	8.02	29.7	8.16	29.3	8.29	29.1	8.36	28.6	8.27	26.4	7.55	24.2	6.84
	2.0	1.0	31.3	8.13	30.9	8.27	30.6	8.40	29.7	8.16	28.6	7.82	26.4	7.13	24.2	6.46
	5.0	4.0	33.3	8.30	32.9	8.43	30.8	7.82	29.7	7.50	28.6	7.18	26.4	6.55	24.2	5.93
	7.0	6.0	34.6	8.41	33.0	8.02	30.8	7.39	29.7	7.08	28.6	6.78	26.4	6.18	24.2	5.60
	9.0	7.8	35.2	8.23	33.0	7.62	30.8	7.02	29.7	6.73	28.6	6.44	26.4	5.87	24.2	5.32
	12.0	10.6	35.2	7.60	33.0	7.04	30.8	6.49	29.7	6.21	28.6	5.95	26.4	5.42	24.2	4.92
	15.0	13.5	35.2	7.01	33.0	6.49	30.8	5.98	29.7	5.73	28.6	5.48	26.4	5.00	24.2	4.53
28.0 (100%)	-19.3	-20.0	19.2	7.00	19.0	7.16	18.8	7.31	18.7	7.39	18.7	7.47	18.5	7.63	18.3	7.78
	-15.0	-16.0	21.1	7.27	20.9	7.42	20.6	7.57	20.5	7.65	20.4	7.72	20.2	7.87	20.0	8.02
	-12.0	-13.0	22.6	7.47	22.4	7.61	22.1	7.76	22.0	7.83	21.9	7.90	21.6	8.05	21.3	8.19
	-9.0	-10.0	24.2	7.66	24.0	7.80	23.7	7.94	23.5	8.01	23.4	8.08	23.1	8.22	22.0	7.91
	-7.0	-8.0	25.4	7.78	25.1	7.92	24.8	8.06	24.6	8.13	24.5	8.20	24.0	8.25	22.0	7.50
	-5.0	-6.0	26.5	7.90	26.2	8.04	25.9	8.18	25.7	8.25	25.6	8.31	24.0	7.81	22.0	7.09
	-3.0	-4.0	27.7	8.02	27.4	8.16	27.0	8.29	26.9	8.36	26.0	8.08	24.0	7.38	22.0	6.70
	-1.0	-2.0	28.9	8.14	28.6	8.28	28.0	8.30	27.0	7.97	26.0	7.63	24.0	6.98	22.0	6.33
	0.0	-1.0	29.5	8.20	29.2	8.34	28.0	8.07	27.0	7.74	26.0	7.42	24.0	6.78	22.0	6.16
	2.0	1.0	30.8	8.32	30.0	8.26	28.0	7.63	27.0	7.32	26.0	7.01	24.0	6.40	22.0	5.81
	5.0	4.0	32.0	8.18	30.0	7.59	28.0	7.00	27.0	6.72	26.0	6.43	24.0	5.88	22.0	5.33
	7.0	6.0	32.0	7.73	30.0	7.17	28.0	6.61	27.0	6.34	26.0	6.08	24.0	5.55	22.0	5.04
	9.0	7.8	32.0	7.34	30.0	6.81	28.0	6.28	27.0	6.03	26.0	5.77	24.0	5.27	22.0	4.79
	12.0	10.6	32.0	6.78	30.0	6.29	28.0	5.80	27.0	5.57	26.0	5.33	24.0	4.87	22.0	4.42
	15.0	13.5	32.0	6.25	30.0	5.80	28.0	5.35	27.0	5.13	26.0	4.91	24.0	4.49	22.0	4.08

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AJ✳090LELAH

● Capacity : 28.0 kW (10HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
25.2 (90%)	-19.3	-20.0	19.0	7.17	18.8	7.32	18.6	7.48	18.6	7.55	18.5	7.63	18.3	7.79	18.1	7.94
	-15.0	-16.0	20.8	7.45	20.6	7.59	20.4	7.74	20.3	7.81	20.2	7.89	19.9	8.03	19.7	8.18
	-12.0	-13.0	22.3	7.65	22.1	7.79	21.8	7.93	21.7	8.00	21.6	8.07	21.3	8.22	19.8	7.64
	-9.0	-10.0	23.9	7.85	23.6	7.98	23.3	8.12	23.2	8.19	23.0	8.26	21.6	7.76	19.8	7.06
	-7.0	-8.0	25.0	7.97	24.7	8.11	24.4	8.25	24.2	8.31	23.4	8.02	21.6	7.35	19.8	6.69
	-5.0	-6.0	26.1	8.10	25.8	8.24	25.2	8.24	24.3	7.92	23.4	7.59	21.6	6.95	19.8	6.32
	-3.0	-4.0	27.2	8.23	26.9	8.36	25.2	7.80	24.3	7.49	23.4	7.18	21.6	6.57	19.8	5.97
	-1.0	-2.0	28.4	8.35	27.0	7.97	25.2	7.37	24.3	7.07	23.4	6.78	21.6	6.21	19.8	5.64
	0.0	-1.0	28.8	8.34	27.0	7.74	25.2	7.16	24.3	6.88	23.4	6.59	21.6	6.03	19.8	5.48
	2.0	1.0	28.8	7.88	27.0	7.32	25.2	6.77	24.3	6.49	23.4	6.23	21.6	5.70	19.8	5.18
	5.0	4.0	28.8	7.23	27.0	6.72	25.2	6.21	24.3	5.96	23.4	5.71	21.6	5.23	19.8	4.75
	7.0	6.0	28.8	6.83	27.0	6.34	25.2	5.86	24.3	5.63	23.4	5.39	21.6	4.94	19.8	4.49
	9.0	7.8	28.8	6.49	27.0	6.03	25.2	5.57	24.3	5.35	23.4	5.13	21.6	4.69	19.8	4.26
	12.0	10.6	28.8	6.00	27.0	5.57	25.2	5.15	24.3	4.94	23.4	4.73	21.6	4.33	19.8	3.94
	15.0	13.5	28.8	5.53	27.0	5.13	25.2	4.74	24.3	4.55	23.4	4.36	21.6	3.99	19.8	3.63
22.4 (80%)	-19.3	-20.0	18.8	7.37	18.6	7.52	18.4	7.67	18.3	7.75	18.2	7.83	18.0	7.98	17.6	7.96
	-15.0	-16.0	20.5	7.66	20.3	7.80	20.1	7.94	20.0	8.02	19.9	8.09	19.2	7.97	17.6	7.27
	-12.0	-13.0	21.9	7.87	21.7	8.00	21.4	8.14	21.3	8.21	20.8	8.06	19.2	7.40	17.6	6.74
	-9.0	-10.0	23.4	8.07	23.1	8.21	22.4	8.07	21.6	7.76	20.8	7.45	19.2	6.83	17.6	6.23
	-7.0	-8.0	24.5	8.21	24.0	8.25	22.4	7.65	21.6	7.35	20.8	7.05	19.2	6.47	17.6	5.89
	-5.0	-6.0	25.5	8.34	24.0	7.81	22.4	7.23	21.6	6.95	20.8	6.67	19.2	6.12	17.6	5.57
	-3.0	-4.0	25.6	7.94	24.0	7.38	22.4	6.84	21.6	6.57	20.8	6.30	19.2	5.78	17.6	5.26
	-1.0	-2.0	25.6	7.50	24.0	6.98	22.4	6.46	21.6	6.21	20.8	5.96	19.2	5.46	17.6	4.97
	0.0	-1.0	25.6	7.29	24.0	6.78	22.4	6.28	21.6	6.03	20.8	5.79	19.2	5.30	17.6	4.83
	2.0	1.0	25.6	6.89	24.0	6.40	22.4	5.93	21.6	5.70	20.8	5.46	19.2	5.01	17.6	4.56
	5.0	4.0	25.6	6.32	24.0	5.88	22.4	5.44	21.6	5.23	20.8	5.01	19.2	4.60	17.6	4.18
	7.0	6.0	25.6	5.97	24.0	5.55	22.4	5.14	21.6	4.94	20.8	4.73	19.2	4.34	17.6	3.95
	9.0	7.8	25.6	5.67	24.0	5.27	22.4	4.88	21.6	4.69	20.8	4.50	19.2	4.12	17.6	3.76
	12.0	10.6	25.6	5.24	24.0	4.87	22.4	4.51	21.6	4.33	20.8	4.16	19.2	3.81	17.6	3.47
	15.0	13.5	25.6	4.83	24.0	4.49	22.4	4.16	21.6	3.99	20.8	3.83	19.2	3.51	17.6	3.20
19.6 (70%)	-19.3	-20.0	18.5	7.62	18.3	7.77	18.1	7.92	18.0	7.99	17.9	8.07	16.8	7.59	15.4	6.94
	-15.0	-16.0	20.1	7.92	19.9	8.06	19.6	8.15	18.9	7.84	18.2	7.53	16.8	6.93	15.4	6.33
	-12.0	-13.0	21.5	8.13	21.0	8.14	19.6	7.56	18.9	7.27	18.2	6.99	16.8	6.42	15.4	5.86
	-9.0	-10.0	22.4	8.07	21.0	7.52	19.6	6.98	18.9	6.72	18.2	6.45	16.8	5.93	15.4	5.41
	-7.0	-8.0	22.4	7.65	21.0	7.13	19.6	6.61	18.9	6.36	18.2	6.11	16.8	5.61	15.4	5.12
	-5.0	-6.0	22.4	7.23	21.0	6.74	19.6	6.25	18.9	6.01	18.2	5.77	16.8	5.30	15.4	4.84
	-3.0	-4.0	22.4	6.84	21.0	6.37	19.6	5.91	18.9	5.68	18.2	5.46	16.8	5.01	15.4	4.57
	-1.0	-2.0	22.4	6.46	21.0	6.02	19.6	5.58	18.9	5.37	18.2	5.15	16.8	4.73	15.4	4.31
	0.0	-1.0	22.4	6.28	21.0	5.85	19.6	5.42	18.9	5.21	18.2	5.01	16.8	4.60	15.4	4.19
	2.0	1.0	22.4	5.93	21.0	5.52	19.6	5.12	18.9	4.92	18.2	4.73	16.8	4.34	15.4	3.96
	5.0	4.0	22.4	5.44	21.0	5.07	19.6	4.70	18.9	4.52	18.2	4.34	16.8	3.98	15.4	3.63
	7.0	6.0	22.4	5.14	21.0	4.78	19.6	4.44	18.9	4.27	18.2	4.10	16.8	3.76	15.4	3.43
	9.0	7.8	22.4	4.88	21.0	4.55	19.6	4.22	18.9	4.05	18.2	3.89	16.8	3.57	15.4	3.26
	12.0	10.6	22.4	4.51	21.0	4.20	19.6	3.90	18.9	3.75	18.2	3.60	16.8	3.30	15.4	3.02
	15.0	13.5	22.4	4.16	21.0	3.87	19.6	3.59	18.9	3.46	18.2	3.32	16.8	3.05	15.4	2.79
16.8 (60%)	-19.3	-20.0	18.1	7.94	17.9	8.09	16.8	7.59	16.2	7.31	15.6	7.03	14.4	6.48	13.2	5.93
	-15.0	-16.0	19.2	7.97	18.0	7.45	16.8	6.93	16.2	6.67	15.6	6.41	14.4	5.90	13.2	5.40
	-12.0	-13.0	19.2	7.40	18.0	6.91	16.8	6.42	16.2	6.18	15.6	5.94	14.4	5.47	13.2	5.00
	-9.0	-10.0	19.2	6.83	18.0	6.38	16.8	5.93	16.2	5.70	15.6	5.48	14.4	5.04	13.2	4.61
	-7.0	-8.0	19.2	6.47	18.0	6.03	16.8	5.61	16.2	5.40	15.6	5.19	14.4	4.77	13.2	4.36
	-5.0	-6.0	19.2	6.12	18.0	5.71	16.8	5.30	16.2	5.10	15.6	4.90	14.4	4.51	13.2	4.12
	-3.0	-4.0	19.2	5.78	18.0	5.39	16.8	5.01	16.2	4.82	15.6	4.63	14.4	4.26	13.2	3.89
	-1.0	-2.0	19.2	5.46	18.0	5.09	16.8	4.73	16.2	4.55	15.6	4.37	14.4	4.02	13.2	3.67
	0.0	-1.0	19.2	5.30	18.0	4.95	16.8	4.60	16.2	4.42	15.6	4.25	14.4	3.91	13.2	3.57
	2.0	1.0	19.2	5.01	18.0	4.67	16.8	4.34	16.2	4.18	15.6	4.01	14.4	3.69	13.2	3.37
	5.0	4.0	19.2	4.60	18.0	4.29	16.8	3.98	16.2	3.83	15.6	3.68	14.4	3.39	13.2	3.10
	7.0	6.0	19.2	4.34	18.0	4.05	16.8	3.76	16.2	3.62	15.6	3.48	14.4	3.20	13.2	2.93
	9.0	7.8	19.2	4.12	18.0	3.85	16.8	3.57	16.2	3.44	15.6	3.31	14.4	3.04	13.2	2.78
	12.0	10.6	19.2	3.81	18.0	3.56	16.8	3.30	16.2	3.18	15.6	3.06	14.4	2.81	13.2	2.58
	15.0	13.5	19.2	3.51	18.0	3.28	16.8	3.05	16.2	2.94	15.6	2.82	14.4	2.60	13.2	2.38
14.0 (50%)	-19.3	-20.0	16.0	7.22	15.0	6.75	14.0	6.29	13.5	6.07	13.0	5.84	12.0	5.38	11.0	4.93
	-15.0	-16.0	16.0	6.58	15.0	6.16	14.0	5.73	13.5	5.52	13.0	5.31	12.0	4.90	11.0	4.49
	-12.0	-13.0	16.0	6.10	15.0	5.70	14.0	5.31	13.5	5.11	13.0	4.92	12.0	4.53	11.0	4.15
	-9.0	-10.0	16.0	5.63	15.0	5.26	14.0	4.90	13.5	4.72	13.0	4.54	12.0	4.18	11.0	3.83
	-7.0	-8.0	16.0	5.33	15.0	4.98	14.0	4.63	13.5	4.46	13.0	4.29	12.0	3.95	11.0	3.62
	-5.0	-6.0	16.0	5.03	15.0	4.70	14.0	4.38	13.5	4.22	13.0	4.05	12.0	3.74	11.0	3.42
	-3.0	-4.0	16.0	4.76	15.0	4.44	14.0	4.14	13.5	3.98	13.0	3.83	12.0	3.53	11.0	3.23
	-1.0	-2.0	16.0	4.49	15.0	4.20	14.0	3.91	13.5	3.76	13.0	3.62	12.0	3.33	11.0	3.05
	0.0	-1.0	16.0	4.36	15.0	4.08	14.0	3.79	13.5	3.65	13.0	3.52	12.0	3.24	11.0	2.97
	2.0	1.0	16.0	4.12	15.0	3.85	14.0	3.58	13.5	3.45	13.0	3.32	12.0	3.06	11.0	2.80
	5.0	4.0	16.0	3.78	15.0	3.53	14.0	3.29	13.5	3.17	13.0	3.05	12.0	2.81	11.0	2.58
	7.0	6.0	16.0	3.57	15.0	3.34	14.0	3.11	13.5	2.99	13.0	2.88	12.0	2.66	11.0	2.44
	9.0	7.8	16.0	3.40	15.0	3.17	14.0	2.96	13.5	2.85	13.0	2.74	12.0	2.53	11.0	2.32
	12.0	10.6	16.0	3.14	15.0	2.94	14.0	2.73	13.5	2.64	13.0	2.54	12.0	2.34	11.0	2.15
	15.0	13.5	16.0	2.90	15.0	2.71	14.0	2.53	13.5	2.43	13.0	2.34	12.0	2.16	11.0	1.99

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AJ✳108LELAH

● Capacity : 33.5 kW (12HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
50.2 (150%)	-19.3	**-20.0**	21.2	6.57	21.0	6.80	20.9	7.03	20.8	7.14	20.7	7.25	20.6	7.48	20.4	7.71
	-15.0	**-16.0**	23.6	6.91	23.4	7.13	23.2	7.34	23.1	7.45	23.0	7.56	22.8	7.78	22.6	7.99
	-12.0	**-13.0**	25.6	7.14	25.3	7.35	25.1	7.56	25.0	7.67	24.9	7.77	24.6	7.99	24.4	8.20
	-9.0	**-10.0**	27.7	7.36	27.4	7.56	27.1	7.77	27.0	7.88	26.8	7.98	26.6	8.19	26.3	8.39
	-7.0	**-8.0**	29.1	7.49	28.8	7.70	28.5	7.90	28.4	8.01	28.2	8.11	27.9	8.31	27.6	8.52
	-5.0	**-6.0**	30.6	7.63	30.3	7.83	30.0	8.03	29.8	8.14	29.7	8.24	29.3	8.44	29.0	8.64
	-3.0	**-4.0**	32.2	7.76	31.8	7.96	31.5	8.16	31.3	8.26	31.1	8.36	30.8	8.56	30.4	8.76
	-1.0	**-2.0**	33.7	7.88	33.4	8.08	33.0	8.28	32.8	8.38	32.6	8.48	32.3	8.68	31.9	8.88
	0.0	**-1.0**	34.5	7.94	34.2	8.14	33.8	8.34	33.6	8.44	33.4	8.54	33.0	8.74	32.6	8.94
	2.0	**1.0**	36.2	8.06	35.8	8.26	35.4	8.46	35.2	8.56	35.0	8.66	34.6	8.86	34.2	9.05
	5.0	**4.0**	38.7	8.24	38.2	8.44	37.8	8.63	37.6	8.73	37.4	8.83	36.9	9.03	36.5	9.23
	7.0	**6.0**	40.4	8.35	39.9	8.55	39.5	8.75	39.3	8.85	39.0	8.95	38.6	9.15	38.1	9.34
	9.0	**7.8**	41.9	8.45	41.5	8.65	41.0	8.85	40.8	8.95	40.5	9.05	40.1	9.25	39.5	9.41
	12.0	**10.6**	44.4	8.61	43.9	8.81	43.4	9.01	43.2	9.11	42.9	9.21	42.4	9.41	39.5	8.71
	15.0	**13.5**	47.0	8.78	46.5	8.98	46.0	9.18	45.7	9.28	45.5	9.38	43.1	8.91	39.5	8.04
46.9 (140%)	-19.3	**-20.0**	21.1	6.67	21.0	6.90	20.8	7.12	20.7	7.23	20.6	7.35	20.5	7.57	20.3	7.80
	-15.0	**-16.0**	23.5	7.01	23.3	7.23	23.1	7.44	23.0	7.55	22.9	7.66	22.7	7.87	22.5	8.09
	-12.0	**-13.0**	25.5	7.25	25.2	7.46	25.0	7.67	24.9	7.77	24.7	7.88	24.5	8.09	24.2	8.30
	-9.0	**-10.0**	27.5	7.47	27.2	7.68	27.0	7.88	26.8	7.99	26.7	8.09	26.4	8.29	26.1	8.50
	-7.0	**-8.0**	29.0	7.61	28.7	7.82	28.4	8.02	28.2	8.12	28.1	8.22	27.8	8.43	27.4	8.63
	-5.0	**-6.0**	30.4	7.75	30.1	7.95	29.8	8.15	29.6	8.25	29.5	8.35	29.1	8.56	28.8	8.76
	-3.0	**-4.0**	31.9	7.88	31.6	8.08	31.3	8.28	31.1	8.38	30.9	8.48	30.6	8.68	30.2	8.88
	-1.0	**-2.0**	33.5	8.01	33.1	8.21	32.8	8.41	32.6	8.51	32.4	8.61	32.0	8.81	31.6	9.00
	0.0	**-1.0**	34.3	8.08	33.9	8.28	33.5	8.47	33.3	8.57	33.2	8.67	32.8	8.87	32.4	9.07
	2.0	**1.0**	35.9	8.20	35.5	8.40	35.1	8.60	34.9	8.70	34.7	8.79	34.3	8.99	33.9	9.19
	5.0	**4.0**	38.4	8.39	37.9	8.59	37.5	8.78	37.3	8.88	37.1	8.98	36.6	9.17	36.2	9.37
	7.0	**6.0**	40.0	8.51	39.6	8.71	39.1	8.90	38.9	9.00	38.7	9.10	38.2	9.30	36.8	9.13
	9.0	**7.8**	41.6	8.62	41.1	8.82	40.6	9.01	40.4	9.11	40.2	9.21	39.7	9.41	36.8	8.68
	12.0	**10.6**	44.0	8.79	43.5	8.98	43.0	9.18	42.8	9.28	42.5	9.38	40.2	8.90	36.8	8.03
	15.0	**13.5**	46.6	8.96	46.0	9.16	45.5	9.36	45.2	9.46	43.5	9.03	40.2	8.21	36.8	7.42
43.5 (130%)	-19.3	**-20.0**	21.0	6.78	20.9	7.00	20.7	7.23	20.7	7.34	20.6	7.45	20.4	7.68	20.3	7.90
	-15.0	**-16.0**	23.4	7.13	23.2	7.34	23.0	7.56	22.9	7.66	22.8	7.77	22.6	7.99	22.4	8.20
	-12.0	**-13.0**	25.3	7.37	25.1	7.58	24.8	7.79	24.7	7.89	24.6	8.00	24.4	8.21	24.1	8.41
	-9.0	**-10.0**	27.3	7.60	27.1	7.80	26.8	8.01	26.7	8.11	26.5	8.21	26.2	8.42	26.0	8.62
	-7.0	**-8.0**	28.8	7.75	28.5	7.95	28.2	8.15	28.0	8.25	27.9	8.35	27.6	8.55	27.2	8.75
	-5.0	**-6.0**	30.2	7.89	29.9	8.09	29.6	8.29	29.4	8.39	29.2	8.49	28.9	8.69	28.6	8.89
	-3.0	**-4.0**	31.7	8.03	31.4	8.23	31.0	8.43	30.8	8.52	30.7	8.62	30.3	8.82	30.0	9.02
	-1.0	**-2.0**	33.2	8.17	32.9	8.36	32.5	8.56	32.3	8.66	32.1	8.76	31.7	8.95	31.4	9.15
	0.0	**-1.0**	34.0	8.23	33.6	8.43	33.2	8.62	33.1	8.72	32.9	8.82	32.5	9.02	32.1	9.21
	2.0	**1.0**	35.6	8.37	35.2	8.56	34.8	8.76	34.6	8.85	34.4	8.95	34.0	9.15	33.6	9.34
	5.0	**4.0**	38.0	8.56	37.6	8.75	37.1	8.95	36.9	9.05	36.7	9.14	36.3	9.34	34.2	8.86
	7.0	**6.0**	39.6	8.69	39.2	8.88	38.7	9.08	38.5	9.18	38.3	9.27	37.3	9.26	34.2	8.38
	9.0	**7.8**	41.1	8.80	40.7	9.00	40.2	9.19	40.0	9.29	39.7	9.39	37.3	8.81	34.2	7.97
	12.0	**10.6**	43.5	8.98	43.0	9.18	42.5	9.38	42.0	9.37	40.4	8.96	37.3	8.16	34.2	7.38
	15.0	**13.5**	46.0	9.17	45.5	9.37	43.5	9.03	42.0	8.65	40.4	8.27	37.3	7.53	34.2	6.81
40.2 (120%)	-19.3	**-20.0**	20.9	6.91	20.8	7.13	20.6	7.35	20.6	7.47	20.5	7.58	20.3	7.80	20.2	8.02
	-15.0	**-16.0**	23.3	7.26	23.1	7.47	22.9	7.69	22.8	7.80	22.7	7.90	22.5	8.11	22.2	8.33
	-12.0	**-13.0**	25.2	7.51	24.9	7.72	24.7	7.93	24.6	8.03	24.4	8.13	24.2	8.34	23.9	8.55
	-9.0	**-10.0**	27.2	7.75	26.9	7.95	26.6	8.15	26.5	8.26	26.3	8.36	26.0	8.56	25.8	8.76
	-7.0	**-8.0**	28.5	7.90	28.2	8.10	27.9	8.30	27.8	8.40	27.6	8.50	27.3	8.70	27.0	8.90
	-5.0	**-6.0**	30.0	8.05	29.6	8.25	29.3	8.45	29.2	8.55	29.0	8.64	28.7	8.84	28.3	9.04
	-3.0	**-4.0**	31.4	8.20	31.1	8.39	30.7	8.59	30.6	8.69	30.4	8.78	30.0	8.98	29.7	9.17
	-1.0	**-2.0**	32.9	8.34	32.5	8.53	32.2	8.73	32.0	8.83	31.8	8.92	31.4	9.12	31.1	9.31
	0.0	**-1.0**	33.7	8.41	33.3	8.60	32.9	8.80	32.7	8.89	32.5	8.99	32.1	9.18	31.6	9.30
	2.0	**1.0**	35.2	8.55	34.8	8.74	34.4	8.93	34.2	9.03	34.0	9.13	33.6	9.32	31.6	8.80
	5.0	**4.0**	37.6	8.76	37.1	8.95	36.7	9.14	36.5	9.24	36.3	9.33	34.5	8.93	31.6	8.09
	7.0	**6.0**	39.2	8.89	38.7	9.09	38.3	9.28	38.0	9.37	37.3	9.27	34.5	8.45	31.6	7.65
	9.0	**7.8**	40.6	9.02	40.2	9.21	39.7	9.40	38.8	9.21	37.3	8.81	34.5	8.04	31.6	7.28
	12.0	**10.6**	42.9	9.21	42.4	9.40	40.2	8.90	38.8	8.52	37.3	8.16	34.5	7.44	31.6	6.74
	15.0	**13.5**	45.4	9.41	43.1	8.91	40.2	8.21	38.8	7.87	37.3	7.53	34.5	6.87	31.6	6.22
36.8 (110%)	-19.3	**-20.0**	20.8	7.05	20.7	7.28	20.5	7.50	20.5	7.61	20.4	7.72	20.2	7.94	20.1	8.16
	-15.0	**-16.0**	23.1	7.42	22.9	7.63	22.7	7.84	22.6	7.95	22.5	8.05	22.3	8.26	22.1	8.47
	-12.0	**-13.0**	25.0	7.68	24.7	7.88	24.5	8.09	24.4	8.19	24.2	8.29	24.0	8.50	23.7	8.70
	-9.0	**-10.0**	26.9	7.92	26.6	8.12	26.4	8.32	26.2	8.42	26.1	8.52	25.8	8.72	25.5	8.92
	-7.0	**-8.0**	28.3	8.08	28.0	8.28	27.7	8.48	27.5	8.58	27.4	8.67	27.1	8.87	26.8	9.07
	-5.0	**-6.0**	29.7	8.24	29.3	8.43	29.0	8.63	28.9	8.73	28.7	8.82	28.4	9.02	28.0	9.21
	-3.0	**-4.0**	31.1	8.39	30.7	8.58	30.4	8.78	30.2	8.87	30.0	8.97	29.7	9.16	29.0	9.17
	-1.0	**-2.0**	32.5	8.54	32.2	8.73	31.8	8.92	31.6	9.02	31.4	9.12	31.1	9.31	29.0	8.68
	0.0	**-1.0**	33.3	8.61	32.9	8.81	32.5	9.00	32.3	9.09	32.1	9.19	31.6	9.30	29.0	8.44
	2.0	**1.0**	34.8	8.76	34.4	8.95	34.0	9.14	33.8	9.24	33.6	9.33	31.6	8.80	29.0	7.99
	5.0	**4.0**	37.1	8.98	36.6	9.17	36.2	9.36	35.5	9.25	34.2	8.86	31.6	8.09	29.0	7.34
	7.0	**6.0**	38.6	9.13	38.2	9.32	36.9	9.13	35.5	8.75	34.2	8.38	31.6	7.65	29.0	6.95
	9.0	**7.8**	40.0	9.26	39.5	9.41	36.9	8.68	35.5	8.33	34.2	7.97	31.6	7.28	29.0	6.61
	12.0	**10.6**	42.1	9.40	39.5	8.71	36.9	8.03	35.5	7.70	34.2	7.38	31.6	6.74	29.0	6.12
	15.0	**13.5**	42.1	8.68	39.5	8.04	36.9	7.42	35.5	7.11	34.2	6.81	31.6	6.22	29.0	5.65
33.5 (100%)	-19.3	**-20.0**	20.7	7.23	20.6	7.45	20.4	7.67	20.3	7.78	20.3	7.89	20.1	8.11	19.9	8.33
	-15.0	**-16.0**	23.0	7.60	22.7	7.81	22.5	8.02	22.4	8.13	22.3	8.23	22.1	8.44	21.9	8.65
	-12.0	**-13.0**	24.7	7.87	24.5	8.07	24.3	8.28	24.1	8.38	24.0	8.48	23.8	8.68	23.5	8.88
	-9.0	**-10.0**	26.6	8.13	26.4	8.32	26.1	8.52	26.0	8.62	25.8	8.72	25.5	8.92	25.2	9.11
	-7.0	**-8.0**	28.0	8.29	27.7	8.49	27.4	8.68	27.2	8.78	27.1	8.88	26.7	9.07	26.3	9.20
	-5.0	**-6.0**	29.3	8.45	29.0	8.65	28.7	8.84	28.5	8.94	28.3	9.03	28.0	9.22	26.3	8.72
	-3.0	**-4.0**	30.7	8.62	30.3	8.81	30.0	9.00	29.8	9.09	29.6	9.19	28.7	9.08	26.3	8.26
	-1.0	**-2.0**	32.1	8.77	31.7	8.96	31.4	9.15	31.2	9.25	31.0	9.34	28.7	8.60	26.3	7.82
	0.0	**-1.0**	32.8	8.85	32.4	9.04	32.1	9.23	31.9	9.32	31.1	9.14	28.7	8.36	26.3	7.60
	2.0	**1.0**	34.2	9.01	33.9	9.20	33.5	9.38	32.3	9.02	31.1	8.65	28.7	7.91	26.3	7.19
	5.0	**4.0**	36.5	9.24	35.9	9.36	33.5	8.65	32.3	8.30	31.1	7.96	28.7	7.28	26.3	6.61
	7.0	**6.0**	38.0	9.40	35.9	8.85	33.5	8.18	32.3	7.85	31.1	7.52	28.7	6.88	26.3	6.26
	9.0	**7.8**	38.3	9.08	35.9	8.42	33.5	7.78	32.3	7.47	31.1	7.16	28.7	6.55	26.3	5.95
	12.0	**10.6**	38.3	8.40	35.9	7.79	33.5	7.20	32.3	6.91	31.1	6.62	28.7	6.06	26.3	5.51
	15.0	**13.5**	38.3	7.75	35.9	7.19	33.5	6.65	32.3	6.38	31.1	6.12	28.7	5.60	26.3	5.09

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AJ✳108LELAH

● Capacity : 33.5 kW (12HP)

Total rated capacity of indoor unit	Outdoor temperature		Indoor temperature													
			16°CDB		18°CDB		20°CDB		21°CDB		22°CDB		24°CDB		26°CDB	
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
30.1 (90%)	-19.3	-20.0	20.6	7.44	20.4	7.66	20.3	7.88	20.2	7.99	20.1	8.10	20.0	8.31	19.8	8.53
	-15.0	-16.0	22.7	7.82	22.5	8.03	22.3	8.24	22.2	8.34	22.1	8.45	21.9	8.65	21.7	8.86
	-12.0	-13.0	24.5	8.10	24.2	8.30	24.0	8.50	23.9	8.60	23.7	8.70	23.5	8.90	23.2	9.10
	-9.0	-10.0	26.3	8.37	26.0	8.56	25.8	8.76	25.6	8.86	25.5	8.95	25.2	9.15	23.7	8.67
	-7.0	-8.0	27.6	8.54	27.3	8.73	27.0	8.93	26.8	9.02	26.7	9.12	25.8	9.02	23.7	8.22
	-5.0	-6.0	28.9	8.71	28.6	8.90	28.2	9.09	28.1	9.19	27.9	9.28	25.8	8.55	23.7	7.79
	-3.0	-4.0	30.2	8.88	29.9	9.07	29.5	9.26	29.1	9.21	28.0	8.84	25.8	8.10	23.7	7.37
	-1.0	-2.0	31.6	9.05	31.2	9.24	30.2	9.08	29.1	8.72	28.0	8.36	25.8	7.66	23.7	6.98
	0.0	-1.0	32.2	9.13	31.9	9.32	30.2	8.83	29.1	8.48	28.0	8.13	25.8	7.45	23.7	6.79
	2.0	1.0	33.6	9.30	32.3	9.02	30.2	8.35	29.1	8.02	28.0	7.69	25.8	7.05	23.7	6.42
	5.0	4.0	34.5	8.93	32.3	8.30	30.2	7.68	29.1	7.38	28.0	7.08	25.8	6.48	23.7	5.90
	7.0	6.0	34.5	8.45	32.3	7.85	30.2	7.27	29.1	6.98	28.0	6.69	25.8	6.13	23.7	5.58
	9.0	7.8	34.5	8.04	32.3	7.47	30.2	6.91	29.1	6.64	28.0	6.37	25.8	5.83	23.7	5.31
	12.0	10.6	34.5	7.44	32.3	6.91	30.2	6.40	29.1	6.14	28.0	5.89	25.8	5.40	23.7	4.92
	15.0	13.5	34.5	6.87	32.3	6.38	30.2	5.91	29.1	5.67	28.0	5.44	25.8	4.99	23.7	4.55
26.8 (80%)	-19.3	-20.0	20.4	7.70	20.2	7.92	20.1	8.13	20.0	8.24	19.9	8.35	19.8	8.56	19.6	8.77
	-15.0	-16.0	22.5	8.10	22.3	8.30	22.1	8.50	22.0	8.61	21.8	8.71	21.6	8.91	21.1	8.89
	-12.0	-13.0	24.1	8.38	23.9	8.58	23.7	8.78	23.5	8.88	23.4	8.97	23.0	9.06	21.1	8.27
	-9.0	-10.0	25.9	8.66	25.6	8.85	25.3	9.04	25.2	9.14	24.9	9.13	23.0	8.39	21.1	7.66
	-7.0	-8.0	27.1	8.84	26.8	9.03	26.5	9.22	25.8	9.02	24.9	8.67	23.0	7.96	21.1	7.26
	-5.0	-6.0	28.3	9.03	28.0	9.21	26.8	8.90	25.8	8.55	24.9	8.21	23.0	7.54	21.1	6.88
	-3.0	-4.0	29.6	9.20	28.7	9.08	26.8	8.42	25.8	8.10	24.9	7.77	23.0	7.14	21.1	6.51
	-1.0	-2.0	30.6	9.24	28.7	8.60	26.8	7.97	25.8	7.66	24.9	7.36	23.0	6.75	21.1	6.16
	0.0	-1.0	30.6	8.99	28.7	8.36	26.8	7.75	25.8	7.45	24.9	7.16	23.0	6.57	21.1	5.99
	2.0	1.0	30.6	8.50	28.7	7.91	26.8	7.33	25.8	7.05	24.9	6.77	23.0	6.21	21.1	5.66
	5.0	4.0	30.6	7.82	28.7	7.28	26.8	6.75	25.8	6.48	24.9	6.22	23.0	5.71	21.1	5.21
	7.0	6.0	30.6	7.40	28.7	6.88	26.8	6.38	25.8	6.13	24.9	5.89	23.0	5.40	21.1	4.93
	9.0	7.8	30.6	7.03	28.7	6.55	26.8	6.07	25.8	5.83	24.9	5.60	23.0	5.14	21.1	4.69
	12.0	10.6	30.6	6.51	28.7	6.06	26.8	5.62	25.8	5.40	24.9	5.19	23.0	4.76	21.1	4.35
	15.0	13.5	30.6	6.01	28.7	5.60	26.8	5.19	25.8	4.99	24.9	4.79	23.0	4.40	21.1	4.02
23.4 (70%)	-19.3	-20.0	20.2	8.02	20.0	8.24	19.8	8.45	19.8	8.55	19.7	8.66	19.5	8.87	18.4	8.47
	-15.0	-16.0	22.1	8.43	21.9	8.63	21.7	8.83	21.6	8.93	21.5	9.03	20.1	8.48	18.4	7.75
	-12.0	-13.0	23.7	8.73	23.5	8.92	23.2	9.12	22.6	8.91	21.8	8.56	20.1	7.88	18.4	7.20
	-9.0	-10.0	25.4	9.02	25.1	9.21	23.5	8.57	22.6	8.25	21.8	7.93	20.1	7.29	18.4	6.66
	-7.0	-8.0	26.5	9.22	25.1	8.75	23.5	8.13	22.6	7.82	21.8	7.52	20.1	6.91	18.4	6.32
	-5.0	-6.0	26.8	8.90	25.1	8.30	23.5	7.71	22.6	7.41	21.8	7.12	20.1	6.55	18.4	5.98
	-3.0	-4.0	26.8	8.42	25.1	7.86	23.5	7.29	22.6	7.02	21.8	6.74	20.1	6.20	18.4	5.66
	-1.0	-2.0	26.8	7.97	25.1	7.43	23.5	6.90	22.6	6.64	21.8	6.38	20.1	5.87	18.4	5.36
	0.0	-1.0	26.8	7.75	25.1	7.23	23.5	6.71	22.6	6.46	21.8	6.20	20.1	5.70	18.4	5.21
	2.0	1.0	26.8	7.33	25.1	6.84	23.5	6.35	22.6	6.11	21.8	5.87	20.1	5.40	18.4	4.93
	5.0	4.0	26.8	6.75	25.1	6.29	23.5	5.84	22.6	5.62	21.8	5.40	20.1	4.96	18.4	4.54
	7.0	6.0	26.8	6.38	25.1	5.95	23.5	5.52	22.6	5.31	21.8	5.11	20.1	4.70	18.4	4.30
	9.0	7.8	26.8	6.07	25.1	5.66	23.5	5.26	22.6	5.06	21.8	4.86	20.1	4.47	18.4	4.09
	12.0	10.6	26.8	5.62	25.1	5.24	23.5	4.87	22.6	4.68	21.8	4.50	20.1	4.14	18.4	3.79
	15.0	13.5	26.8	5.19	25.1	4.84	23.5	4.50	22.6	4.33	21.8	4.16	20.1	3.83	18.4	3.51
20.1 (60%)	-19.3	-20.0	19.9	8.44	19.7	8.65	19.5	8.86	19.4	8.92	18.7	8.58	17.2	7.92	15.8	7.25
	-15.0	-16.0	21.7	8.87	21.5	9.06	20.1	8.48	19.4	8.17	18.7	7.86	17.2	7.24	15.8	6.63
	-12.0	-13.0	23.0	9.06	21.5	8.47	20.1	7.88	19.4	7.59	18.7	7.30	17.2	6.72	15.8	6.16
	-9.0	-10.0	23.0	8.39	21.5	7.84	20.1	7.29	19.4	7.02	18.7	6.75	17.2	6.22	15.8	5.69
	-7.0	-8.0	23.0	7.96	21.5	7.43	20.1	6.91	19.4	6.66	18.7	6.40	17.2	5.90	15.8	5.40
	-5.0	-6.0	23.0	7.54	21.5	7.04	20.1	6.55	19.4	6.31	18.7	6.06	17.2	5.58	15.8	5.11
	-3.0	-4.0	23.0	7.14	21.5	6.66	20.1	6.20	19.4	5.97	18.7	5.74	17.2	5.29	15.8	4.84
	-1.0	-2.0	23.0	6.75	21.5	6.31	20.1	5.87	19.4	5.65	18.7	5.43	17.2	5.00	15.8	4.58
	0.0	-1.0	23.0	6.57	21.5	6.13	20.1	5.70	19.4	5.49	18.7	5.28	17.2	4.87	15.8	4.46
	2.0	1.0	23.0	6.21	21.5	5.80	20.1	5.40	19.4	5.20	18.7	5.00	17.2	4.60	15.8	4.22
	5.0	4.0	23.0	5.71	21.5	5.34	20.1	4.96	19.4	4.78	18.7	4.60	17.2	4.24	15.8	3.88
	7.0	6.0	23.0	5.40	21.5	5.05	20.1	4.70	19.4	4.52	18.7	4.35	17.2	4.01	15.8	3.68
	9.0	7.8	23.0	5.14	21.5	4.80	20.1	4.47	19.4	4.31	18.7	4.14	17.2	3.82	15.8	3.50
	12.0	10.6	23.0	4.76	21.5	4.45	20.1	4.14	19.4	3.99	18.7	3.84	17.2	3.54	15.8	3.25
	15.0	13.5	23.0	4.40	21.5	4.12	20.1	3.83	19.4	3.69	18.7	3.56	17.2	3.28	15.8	3.01
16.8 (50%)	-19.3	-20.0	19.1	8.81	17.9	8.25	16.8	7.69	16.2	7.42	15.6	7.14	14.4	6.60	13.2	6.05
	-15.0	-16.0	19.1	8.06	17.9	7.55	16.8	7.04	16.2	6.78	15.6	6.53	14.4	6.03	13.2	5.53
	-12.0	-13.0	19.1	7.49	17.9	7.01	16.8	6.53	16.2	6.30	15.6	6.06	14.4	5.59	13.2	5.13
	-9.0	-10.0	19.1	6.93	17.9	6.49	16.8	6.04	16.2	5.83	15.6	5.61	14.4	5.17	13.2	4.75
	-7.0	-8.0	19.1	6.57	17.9	6.15	16.8	5.73	16.2	5.52	15.6	5.31	14.4	4.90	13.2	4.50
	-5.0	-6.0	19.1	6.22	17.9	5.82	16.8	5.43	16.2	5.23	15.6	5.03	14.4	4.65	13.2	4.26
	-3.0	-4.0	19.1	5.89	17.9	5.51	16.8	5.14	16.2	4.95	15.6	4.77	14.4	4.40	13.2	4.04
	-1.0	-2.0	19.1	5.57	17.9	5.22	16.8	4.86	16.2	4.68	15.6	4.51	14.4	4.16	13.2	3.82
	0.0	-1.0	19.1	5.42	17.9	5.07	16.8	4.73	16.2	4.56	15.6	4.39	14.4	4.05	13.2	3.72
	2.0	1.0	19.1	5.13	17.9	4.80	16.8	4.47	16.2	4.31	15.6	4.15	14.4	3.83	13.2	3.52
	5.0	4.0	19.1	4.72	17.9	4.42	16.8	4.12	16.2	3.97	15.6	3.82	14.4	3.53	13.2	3.25
	7.0	6.0	19.1	4.47	17.9	4.18	16.8	3.90	16.2	3.76	15.6	3.62	14.4	3.35	13.2	3.08
	9.0	7.8	19.1	4.25	17.9	3.98	16.8	3.71	16.2	3.58	15.6	3.45	14.4	3.19	13.2	2.93
	12.0	10.6	19.1	3.94	17.9	3.69	16.8	3.45	16.2	3.32	15.6	3.20	14.4	2.96	13.2	2.73
	15.0	13.5	19.1	3.65	17.9	3.42	16.8	3.19	16.2	3.08	15.6	2.97	14.4	2.75	13.2	2.53

TC : Total Capacity kW.

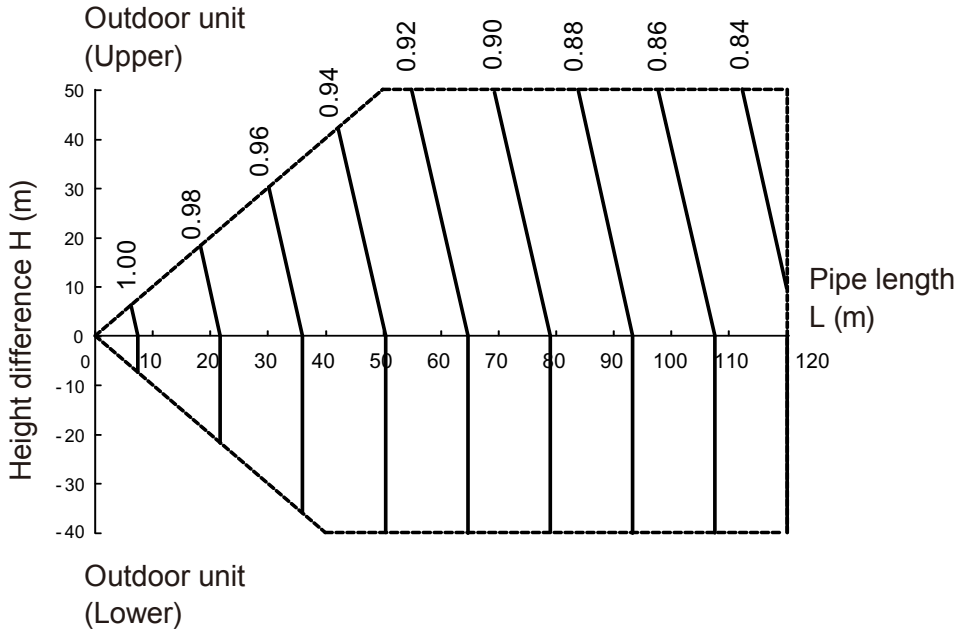
MODEL SELECTION

6. CAPACITY COMPENSATION COEFFICIENT

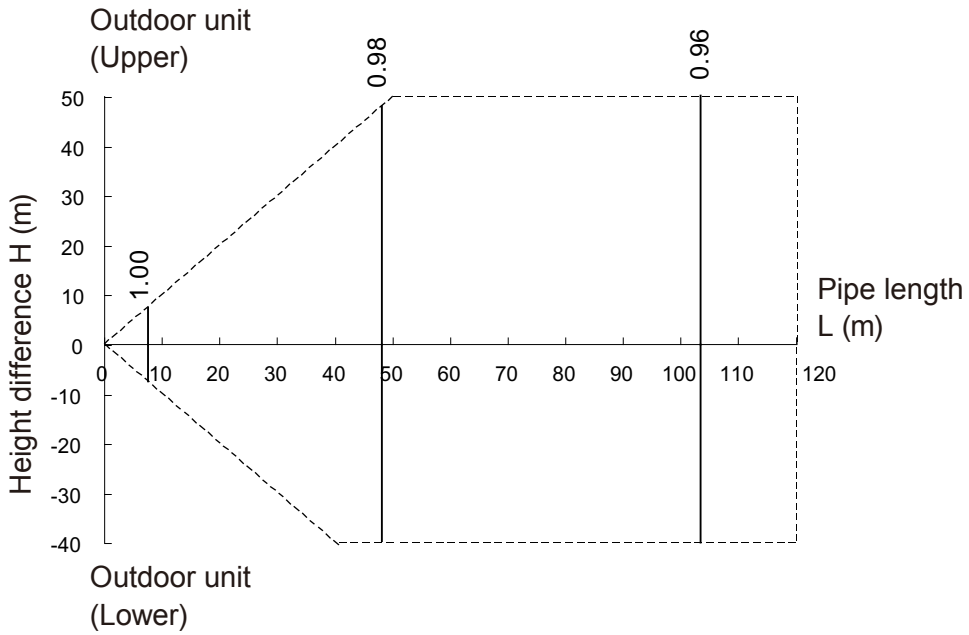
■ COMPENSATION COEFFICIENT OF PIPE LENGTH

The tables give the compensation coefficient of pipe length owing to installation position (pipe length, height difference). Pipe length and height difference are the length and the height difference between outdoor unit and indoor unit.

● Cooling



● Heating



■ COMPENSATION COEFFICIENT OF FROSTING / DEFROSTING (HEATING OPERATION)

To take the effects of accumulated frost and defrosting operation on heating capacity into consideration, the capacity of outdoor unit should be corrected by compensation coefficient shown in the table below.

Outdoor temperature (°CDB / °CWB)	-15 / -16	-9 / -10	-7 / -8	-5 / -6	-3 / -4	0 / -1	2 / 1	5 / 4	7 / 6
Compensation coefficient	0.96	0.94	0.92	0.89	0.86	0.83	0.84	0.90	1.00

7. CAPACITY TABLE COOLING (INDOOR UNIT)

7-1. COMPACT CASSETTE TYPE

■ MODEL : AUXB04GBLH

COOLING CAPACITY

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.4	1.0
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	1.0	1.4	1.0
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.4	1.0
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	1.0
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	1.0
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	1.0
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.2	0.9	1.3	1.0
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.2	0.9	1.2	1.0
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.1	0.9	1.2	0.9	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.1	0.9	1.1	0.9	1.2	0.9

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXB07GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
15	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
21	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
23	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.8	1.9	2.8	2.0
25	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.7	1.9	2.8	2.0
27	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.7	1.9	2.7	2.0
30	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.6	1.8	2.7	1.9
33	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.6	1.8	2.6	1.9
35	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.5	1.8	2.6	1.9
37	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.4	1.8	2.5	1.8	2.5	1.9
40	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.3	1.8	2.4	1.8	2.5	1.9
43	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.3	1.8	2.4	1.8	2.4	1.9
46	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.7	2.2	1.8	2.2	1.8	2.3	1.7	2.3	1.8

■ MODEL : AUXB09GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
15	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
21	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.7	2.3
23	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.6	2.3
25	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.5	2.3
27	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.2	3.5	2.3
30	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.4	2.2
33	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.3	2.1	3.3	2.2
35	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.3	2.2
37	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.2	2.2
40	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.1	2.0	3.1	2.1
43	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	2.9	2.0	3.0	2.0	3.1	2.1
46	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.0	2.8	2.0	2.9	2.0	3.0	2.1

■ MODEL : AUXB12GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.1
15	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.1
21	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.7	3.0
23	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	3.0
25	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	3.0
27	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.4	2.8	4.5	2.9
30	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.3	2.8	4.4	2.9
33	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.2	2.7	4.3	2.9
35	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.8
37	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.1	2.8
40	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.6	4.0	2.8
43	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.7	2.7	3.9	2.6	3.9	2.7
46	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.5	2.6	3.6	2.6	3.8	2.6	3.8	2.7

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXB14GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.6	3.4	6.0	3.7
15	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.6	3.4	6.0	3.7
21	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.6	3.4	5.9	3.6
23	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.6	3.4	5.8	3.6
25	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.6	3.4	5.7	3.6
27	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.5	3.4	5.6	3.5
30	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.4	3.3	5.5	3.5
33	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.3	3.3	5.4	3.4
35	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.2	3.2	5.3	3.4
37	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.9	3.3	5.1	3.2	5.2	3.4
40	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.8	3.2	5.0	3.2	5.0	3.3
43	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.9	3.3
46	3.0	2.2	3.3	2.7	3.7	2.8	4.1	3.1	4.4	3.2	4.5	3.1	4.7	3.1	4.8	3.2

■ MODEL : AUXB18GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	7.0	4.2	7.5	4.5
15	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	7.0	4.2	7.5	4.5
21	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	7.0	4.2	7.3	4.4
23	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	7.0	4.2	7.2	4.3
25	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	7.0	4.1	7.1	4.3
27	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	6.8	4.1	7.0	4.2
30	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	6.7	4.0	6.8	4.2
33	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	6.5	4.0	6.7	4.1
35	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	6.4	3.9	6.5	4.1
37	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	6.1	4.0	6.3	3.9	6.4	4.0
40	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	5.9	3.9	6.2	3.8	6.3	4.0
43	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.6	3.9	5.8	3.8	6.0	3.8	6.1	3.9
46	3.7	2.6	4.2	3.2	4.6	3.4	5.1	3.7	5.5	3.8	5.6	3.8	5.8	3.7	5.9	3.8

■ MODEL : AUXB24GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
15	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
21	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.3	5.8
23	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.1	5.8
25	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.8	5.5	9.0	5.7
27	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.7	5.4	8.8	5.7
30	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.5	5.3	8.6	5.6
33	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.3	5.3	8.4	5.5
35	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.1	5.2	8.3	5.4
37	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.0	5.2	8.2	5.4
40	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.5	5.2	7.8	5.1	8.0	5.3
43	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.3	5.1	7.6	5.0	7.8	5.3
46	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.0	5.1	7.1	5.1	7.4	5.0	7.5	5.2

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-2. CASSETTE TYPE

COOLING CAPACITY

■ MODEL : AUXM018GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
-10	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
-5	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
0	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
5	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
10	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
15	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.5	5.0
21	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.3	4.9
23	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.2	4.9
25	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.1	4.8
27	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.8	4.6	7.0	4.8
30	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.7	4.5	6.8	4.7
33	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.5	4.5	6.7	4.7
35	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.4	4.4	6.5	4.6
37	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.3	4.4	6.4	4.6
40	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	5.9	4.4	6.2	4.3	6.3	4.6
43	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.6	4.4	5.8	4.4	6.0	4.3	6.1	4.5
46	3.2	2.5	3.7	3.0	4.2	3.7	4.6	3.9	5.1	4.3	5.5	4.3	5.6	4.3	5.8	4.2	5.9	4.4

■ MODEL : AUXM024GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
-10	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
-5	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
0	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
5	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
10	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
15	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.5	5.9
21	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.3	5.8
23	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.9	5.5	9.1	5.7
25	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.8	5.5	9.0	5.7
27	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.7	5.4	8.8	5.6
30	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.5	5.3	8.6	5.5
33	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.3	5.2	8.4	5.5
35	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.1	5.2	8.3	5.4
37	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.7	5.3	8.0	5.1	8.2	5.4
40	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.5	5.2	7.8	5.1	8.0	5.3
43	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.1	5.1	7.3	5.1	7.6	5.0	7.8	5.2
46	4.1	3.0	4.7	3.5	5.3	4.3	5.9	4.5	6.5	5.0	7.0	5.1	7.1	5.0	7.4	4.9	7.5	5.1

■ MODEL : AUXM030GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
-10	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
-5	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
0	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
5	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
10	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
15	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	12.1	7.7
21	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	11.7	7.6
23	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.3	7.2	11.5	7.5
25	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.2	7.1	11.4	7.5
27	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	11.0	7.1	11.2	7.4
30	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	10.8	7.0	11.0	7.3
33	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	10.5	6.9	10.7	7.2
35	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	10.3	6.8	10.5	7.2
37	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.7	6.9	10.2	6.8	10.4	7.1
40	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.5	6.8	9.9	6.7	10.1	7.0
43	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.8	9.3	6.7	9.6	6.6	9.8	6.9
46	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	8.8	6.7	9.0	6.6	9.4	6.5	9.5	6.8

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXK018GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
-10	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
-5	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
0	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
5	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
10	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
15	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.5	4.6
21	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.3	4.5
23	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.3	7.2	4.5
25	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	7.0	4.2	7.1	4.4
27	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	6.8	4.2	7.0	4.4
30	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	6.7	4.1	6.8	4.3
33	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	6.5	4.1	6.7	4.3
35	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	6.4	4.0	6.5	4.2
37	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	6.1	4.1	6.3	4.0	6.4	4.2
40	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	5.9	4.0	6.2	3.9	6.3	4.1
43	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.6	4.0	5.8	4.0	6.0	3.9	6.1	4.0
46	3.2	2.3	3.7	2.7	4.2	3.3	4.6	3.5	5.1	3.9	5.5	3.9	5.6	3.9	5.8	3.8	5.9	4.0

■ MODEL : AUXK024GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
-10	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
-5	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
0	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
5	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
10	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
15	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
21	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.3	5.8
23	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.1	5.8
25	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.8	5.5	9.0	5.7
27	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.7	5.4	8.8	5.7
30	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.5	5.4	8.6	5.6
33	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.3	5.3	8.4	5.5
35	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.1	5.2	8.3	5.5
37	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.7	5.3	8.0	5.2	8.2	5.4
40	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.5	5.2	7.8	5.1	8.0	5.4
43	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.1	5.2	7.3	5.2	7.6	5.0	7.8	5.3
46	4.1	3.0	4.7	3.5	5.3	4.4	5.9	4.6	6.5	5.0	7.0	5.1	7.1	5.1	7.4	5.0	7.5	5.2

■ MODEL : AUXK030GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
-10	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
-5	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
0	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
5	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
10	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
15	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	12.1	7.2
21	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	11.7	7.1
23	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.3	6.7	11.5	7.0
25	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.2	6.7	11.4	6.9
27	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	11.0	6.6	11.2	6.9
30	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	10.8	6.5	11.0	6.8
33	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	10.5	6.4	10.7	6.7
35	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	10.3	6.3	10.5	6.6
37	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.7	6.4	10.2	6.3	10.4	6.5
40	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.5	6.3	9.9	6.2	10.1	6.4
43	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	9.0	6.3	9.3	6.2	9.6	6.1	9.8	6.3
46	5.2	3.7	5.9	4.3	6.7	5.3	7.5	5.5	8.2	6.1	8.8	6.2	9.0	6.1	9.4	6.0	9.5	6.2

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXK034GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
-10	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
-5	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
0	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
5	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
10	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
15	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.4	8.1
21	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	13.0	7.9
23	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.5	7.5	12.8	7.8
25	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.4	7.5	12.6	7.8
27	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.2	7.4	12.5	7.7
30	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	12.0	7.3	12.2	7.6
33	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	11.7	7.2	11.9	7.5
35	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	11.5	7.1	11.7	7.4
37	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.8	7.2	11.3	7.0	11.5	7.3
40	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.6	7.1	11.0	6.9	11.2	7.2
43	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	10.0	7.0	10.3	7.0	10.7	6.8	10.9	7.1
46	5.7	4.1	6.6	4.8	7.4	5.9	8.3	6.1	9.1	6.8	9.8	6.9	10.0	6.8	10.4	6.7	10.6	7.0

■ MODEL : AUXK036GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
-10	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
-5	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
0	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
5	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
10	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
15	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	15.0	9.1
21	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	14.6	9.0
23	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	14.0	8.5	14.4	8.9
25	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	13.9	8.5	14.2	8.8
27	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	13.7	8.4	14.0	8.7
30	6.4	4.6	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	13.4	8.3	13.6	8.6
33	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	13.1	8.1	13.3	8.5
35	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	12.8	8.0	13.1	8.4
37	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	12.1	8.2	12.6	8.0	12.9	8.3
40	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	11.8	8.0	12.3	7.8	12.6	8.2
43	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.2	8.0	11.5	7.9	12.0	7.7	12.2	8.1
46	6.4	4.7	7.4	5.4	8.3	6.7	9.3	7.0	10.2	7.7	11.0	7.9	11.2	7.8	11.7	7.6	11.9	8.0

■ MODEL : AUXK045GLAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
-10	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
-5	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
0	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
5	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
10	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
15	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.7	10.3
21	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.3	10.1
23	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.7	9.6	16.0	10.0
25	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.5	9.6	15.8	9.9
27	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.3	9.4	15.6	9.9
30	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	15.0	9.3	15.2	9.7
33	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	14.6	9.2	14.9	9.6
35	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	14.3	9.1	14.6	9.5
37	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.5	9.2	14.1	9.0	14.4	9.4
40	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	13.2	9.1	13.8	8.9	14.0	9.3
43	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.5	9.0	12.9	8.9	13.4	8.7	13.7	9.1
46	7.2	5.2	8.2	6.2	9.3	7.6	10.4	7.9	11.4	8.7	12.3	8.9	12.5	8.8	13.0	8.6	13.3	9.0

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

■ MODEL : AUXK054GLAH

COOLING CAPACITY

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
-10	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
-5	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
0	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
5	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
10	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
15	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.8	11.7
21	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.3	11.5
23	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.6	10.9	18.0	11.4
25	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.4	10.9	17.7	11.3
27	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	17.1	10.8	17.5	11.2
30	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	16.8	10.6	17.1	11.1
33	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	16.4	10.5	16.7	10.9
35	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	16.1	10.3	16.4	10.8
37	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	15.2	10.5	15.8	10.2	16.1	10.7
40	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	14.8	10.3	15.4	10.1	15.7	10.6
43	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	14.0	10.2	14.4	10.2	15.0	9.9	15.3	10.4
46	8.0	6.0	9.2	7.0	10.4	8.7	11.6	9.0	12.8	10.0	13.8	10.1	14.0	10.0	14.6	9.8	14.9	10.3

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXD18GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	7.0	4.8	7.5	5.2
15	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	7.0	4.8	7.5	5.2
21	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	7.0	4.8	7.3	5.2
23	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	7.0	4.8	7.2	5.1
25	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	7.0	4.8	7.1	5.1
27	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	6.8	4.8	7.0	5.0
30	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	6.7	4.7	6.8	5.0
33	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	6.5	4.7	6.7	4.9
35	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	6.4	4.6	6.5	4.9
37	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	6.1	4.7	6.3	4.6	6.4	4.9
40	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	5.9	4.6	6.2	4.5	6.3	4.8
43	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.6	4.6	5.8	4.6	6.0	4.5	6.1	4.8
46	3.7	3.1	4.2	3.9	4.6	4.1	5.1	4.5	5.5	4.6	5.6	4.5	5.8	4.4	5.9	4.7

■ MODEL : AUXD24GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.9	5.9	9.5	6.4
15	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.9	5.9	9.5	6.4
21	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.9	5.9	9.3	6.3
23	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.9	5.9	9.1	6.2
25	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.8	5.9	9.0	6.2
27	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.7	5.8	8.8	6.1
30	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.5	5.8	8.6	6.1
33	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.3	5.7	8.4	6.0
35	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.1	5.6	8.3	6.0
37	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.7	5.7	8.0	5.6	8.2	5.9
40	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.5	5.7	7.8	5.5	8.0	5.9
43	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.1	5.6	7.3	5.6	7.6	5.5	7.8	5.8
46	4.7	3.8	5.3	4.8	5.9	4.9	6.5	5.5	7.0	5.6	7.1	5.5	7.4	5.4	7.5	5.7

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AUXA30GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.3	7.5	12.1	8.0
15	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.3	7.5	12.1	8.0
21	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.3	7.5	11.7	7.9
23	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.3	7.5	11.5	7.9
25	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.2	7.4	11.4	7.8
27	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	11.0	7.4	11.2	7.7
30	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	10.8	7.3	11.0	7.6
33	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	10.5	7.2	10.7	7.6
35	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	10.3	7.1	10.5	7.5
37	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.7	7.2	10.2	7.1	10.4	7.4
40	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.5	7.1	9.9	7.0	10.1	7.4
43	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	9.0	7.1	9.3	7.0	9.6	6.9	9.8	7.3
46	5.9	4.8	6.7	6.0	7.5	6.2	8.2	6.9	8.8	6.9	9.0	7.0	9.4	6.8	9.5	7.2

■ MODEL : AUXA34GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.6	8.3	13.4	8.9
15	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.6	8.3	13.4	8.9
21	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.6	8.3	13.1	8.8
23	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.6	8.3	12.9	8.7
25	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.5	8.3	12.7	8.6
27	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.3	8.2	12.5	8.6
30	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	12.0	8.1	12.2	8.5
33	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	11.7	8.0	11.9	8.4
35	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	11.5	7.9	11.7	8.3
37	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.9	8.0	11.3	7.8	11.5	8.3
40	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.6	7.9	11.0	7.7	11.3	8.2
43	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	10.0	7.8	10.3	7.8	10.8	7.7	11.0	8.1
46	6.6	5.4	7.5	6.7	8.3	6.9	9.2	7.7	9.9	7.8	10.0	7.7	10.5	7.6	10.7	8.0

■ MODEL : AUXA36GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	14.0	8.9	15.0	9.6
15	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	14.0	8.9	15.0	9.6
21	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	14.0	8.9	14.6	9.5
23	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	14.0	8.9	14.4	9.3
25	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	13.9	8.9	14.2	9.3
27	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	13.7	8.8	14.0	9.2
30	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	13.4	8.7	13.6	9.1
33	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	13.1	8.6	13.3	9.0
35	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	12.8	8.5	13.1	8.9
37	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	12.1	8.6	12.6	8.4	12.9	8.8
40	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	11.8	8.5	12.3	8.3	12.6	8.7
43	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.2	8.4	11.5	8.4	12.0	8.2	12.2	8.6
46	7.4	5.7	8.3	7.1	9.3	7.4	10.2	8.2	11.0	8.2	11.2	8.2	11.7	8.1	11.9	8.5

■ MODEL : AUXA45GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.7	9.7	16.7	10.5
15	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.7	9.7	16.7	10.5
21	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.7	9.7	16.3	10.3
23	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.7	9.7	16.0	10.2
25	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.5	9.7	15.8	10.1
27	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.3	9.6	15.6	10.0
30	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	15.0	9.5	15.2	9.9
33	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	14.6	9.3	14.9	9.8
35	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	14.3	9.2	14.6	9.7
37	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.5	9.3	14.1	9.1	14.4	9.6
40	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	13.2	9.2	13.8	9.0	14.0	9.5
43	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.5	9.1	12.9	9.1	13.4	8.9	13.7	9.3
46	8.2	6.3	9.3	7.7	10.4	8.0	11.4	8.9	12.3	9.0	12.5	9.0	13.0	8.8	13.3	9.2

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

MODEL SELECTION

■ MODEL : AUXA54GALH

COOLING CAPACITY

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.6	10.7	18.8	11.5
15	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.6	10.7	18.8	11.5
21	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.6	10.7	18.3	11.3
23	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.6	10.7	18.0	11.1
25	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.4	10.6	17.7	11.0
27	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	17.1	10.5	17.5	10.9
30	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	16.8	10.4	17.1	10.8
33	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	16.4	10.2	16.7	10.6
35	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	16.1	10.1	16.4	10.5
37	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	15.2	10.2	15.8	10.0	16.1	10.4
40	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	14.8	10.1	15.4	9.9	15.7	10.3
43	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	14.0	10.0	14.4	9.9	15.0	9.7	15.3	10.2
46	9.2	6.8	10.4	8.4	11.6	8.8	12.8	9.7	13.8	9.8	14.0	9.8	14.6	9.6	14.9	10.0

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-3. MINI DUCT TYPE

■ MODEL : ARXK04GCLH

COOLING CAPACITY

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.4	1.0
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.2	0.9	1.3	0.9
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.2	0.9	1.2	0.9	1.2	0.9
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.1	0.9	1.2	0.9	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	0.9	1.1	0.9	1.1	0.8	1.2	0.9

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : ARXK07GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
15	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
21	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
23	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.8	1.7	2.8	1.8
25	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.7	1.7	2.8	1.7
27	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.7	1.7	2.7	1.7
30	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.6	1.6	2.7	1.7
33	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.6	1.6	2.6	1.7
35	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.5	1.6	2.6	1.7
37	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.4	1.6	2.5	1.6	2.5	1.7
40	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
43	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.6	2.3	1.6	2.4	1.5	2.4	1.6
46	1.4	1.1	1.6	1.3	1.8	1.4	2.0	1.5	2.2	1.5	2.2	1.5	2.3	1.5	2.3	1.6

■ MODEL : ARXK09GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.5	2.1	3.8	2.3
15	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.5	2.1	3.8	2.3
21	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.5	2.1	3.7	2.3
23	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.5	2.1	3.6	2.2
25	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.5	2.1	3.5	2.2
27	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.4	2.1	3.5	2.2
30	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.4	2.1	3.4	2.2
33	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.3	2.1	3.3	2.1
35	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.2	2.0	3.3	2.1
37	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.1	3.2	2.0	3.2	2.1
40	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	3.0	2.0	3.1	2.0	3.1	2.1
43	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	2.9	2.0	3.0	1.9	3.1	2.0
46	1.8	1.4	2.1	1.7	2.3	1.8	2.6	1.9	2.8	2.0	2.8	2.0	2.9	1.9	3.0	2.0

■ MODEL : ARXK12GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.5	2.8	4.8	3.0
15	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.5	2.8	4.8	3.0
21	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.5	2.8	4.7	2.9
23	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.5	2.8	4.6	2.9
25	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.5	2.8	4.6	2.9
27	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.4	2.7	4.5	2.8
30	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.7	4.4	2.8
33	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.2	2.6	4.3	2.8
35	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.1	2.6	4.2	2.7
37	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.1	2.6	4.1	2.7
40	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.8	2.6	4.0	2.6	4.0	2.7
43	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.6	2.6	3.7	2.6	3.9	2.5	3.9	2.6
46	2.4	1.8	2.7	2.2	3.0	2.3	3.3	2.5	3.5	2.5	3.6	2.5	3.8	2.5	3.8	2.6

TC : Total Capacity kW.

SHC : Sensible Heat Capacity kW.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : ARXK14GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.6	3.5	6.0	3.8
15	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.6	3.5	6.0	3.8
21	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.6	3.5	5.9	3.7
23	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.6	3.5	5.8	3.7
25	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.6	3.5	5.7	3.6
27	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.5	3.4	5.6	3.6
30	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.4	3.4	5.5	3.5
33	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.3	3.3	5.4	3.5
35	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.2	3.3	5.3	3.5
37	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.4	5.1	3.3	5.2	3.4
40	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.8	3.3	5.0	3.2	5.0	3.4
43	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.6	3.3	4.8	3.2	4.9	3.3
46	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.4	3.2	4.5	3.2	4.7	3.1	4.8	3.3

■ MODEL : ARXK18GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	7.0	4.4	7.5	4.7
15	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	7.0	4.4	7.5	4.7
21	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	7.0	4.4	7.3	4.6
23	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	7.0	4.4	7.2	4.6
25	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	7.0	4.4	7.1	4.5
27	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	6.8	4.3	7.0	4.5
30	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	6.7	4.3	6.8	4.5
33	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	6.5	4.2	6.7	4.4
35	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	6.4	4.2	6.5	4.3
37	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	6.1	4.2	6.3	4.1	6.4	4.3
40	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	5.9	4.2	6.2	4.1	6.3	4.3
43	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.6	4.1	5.8	4.1	6.0	4.0	6.1	4.2
46	3.7	2.8	4.2	3.5	4.6	3.6	5.1	4.0	5.5	4.0	5.6	4.0	5.8	3.9	5.9	4.1

■ MODEL : ARXK24GCLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
15	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.5	5.9
21	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.3	5.8
23	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.9	5.5	9.1	5.8
25	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.8	5.5	9.0	5.7
27	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.7	5.4	8.9	5.7
30	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.5	5.3	8.6	5.6
33	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.3	5.3	8.4	5.5
35	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.1	5.2	8.3	5.4
37	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.7	5.3	8.0	5.2	8.2	5.4
40	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.5	5.2	7.8	5.1	8.0	5.3
43	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.1	5.2	7.3	5.1	7.6	5.0	7.8	5.2
46	4.7	3.5	5.3	4.4	5.9	4.5	6.5	5.0	7.0	5.1	7.1	5.0	7.4	4.9	7.5	5.2

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-4. SLIM DUCT/SLIM CONCEALED FLOOR TYPE

COOLING CAPACITY

■ MODEL : ARXD07GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.1
15	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.1
21	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
23	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.8	2.0
25	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.8	2.0
27	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.7	2.0
30	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.9	2.7	2.0
33	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.8	2.6	1.9
35	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.6	1.9
37	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.5	1.9
40	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.8	2.5	1.9
43	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.8	2.4	1.9
46	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.2	1.8	2.3	1.7	2.3	1.8

■ MODEL : ARXD09GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.5	2.3	3.8	2.4
15	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.5	2.3	3.8	2.4
21	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.5	2.3	3.7	2.4
23	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.5	2.3	3.6	2.4
25	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.5	2.3	3.5	2.4
27	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.5	2.3
30	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.4	2.3
33	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.3	2.2	3.3	2.3
35	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.2	2.2	3.3	2.3
37	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.2	2.1	3.2	2.2
40	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.1	2.1	3.1	2.2
43	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	2.9	2.1	3.0	2.1	3.1	2.2
46	1.8	1.5	2.1	1.8	2.3	1.9	2.6	2.1	2.8	2.1	2.8	2.1	2.9	2.1	3.0	2.2

■ MODEL : ARXD12GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.1
15	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.1
21	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.7	3.0
23	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	3.0
25	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	3.0
27	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.4	2.8	4.5	2.9
30	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.3	2.8	4.4	2.9
33	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.2	2.7	4.3	2.9
35	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.8
37	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.1	2.8
40	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.6	4.0	2.8
43	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.7	2.7	3.9	2.6	3.9	2.7
46	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.5	2.7	3.6	2.6	3.8	2.6	3.8	2.7

■ MODEL : ARXD14GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.6	3.6	6.0	3.9
15	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.6	3.6	6.0	3.9
21	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.6	3.6	5.9	3.9
23	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.6	3.6	5.8	3.8
25	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.6	3.6	5.7	3.8
27	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.5	3.6	5.6	3.8
30	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.4	3.5	5.5	3.7
33	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.3	3.5	5.4	3.7
35	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.2	3.5	5.3	3.6
37	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.9	3.5	5.1	3.4	5.2	3.6
40	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.8	3.5	5.0	3.4	5.0	3.6
43	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.5	3.4	4.6	3.4	4.8	3.4	4.9	3.5
46	3.0	2.4	3.3	2.9	3.7	3.0	4.1	3.4	4.4	3.4	4.5	3.4	4.7	3.3	4.8	3.5

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : ARXD18GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
15	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
21	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.3	4.7
23	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.2	4.7
25	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.1	4.6
27	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.8	4.4	7.0	4.6
30	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.7	4.3	6.8	4.5
33	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.5	4.3	6.7	4.5
35	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.4	4.2	6.5	4.4
37	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.3	4.2	6.4	4.4
40	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	5.9	4.2	6.2	4.1	6.3	4.3
43	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	5.8	4.2	6.0	4.1	6.1	4.3
46	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.5	4.2	5.6	4.1	5.8	4.0	5.9	4.2

■ MODEL : ARXD24GALH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.9	6.0	9.5	6.5
15	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.9	6.0	9.5	6.5
21	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.9	6.0	9.3	6.4
23	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.9	6.0	9.1	6.4
25	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.8	6.0	9.0	6.3
27	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.7	5.9	8.8	6.3
30	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.5	5.9	8.6	6.2
33	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.3	5.8	8.4	6.1
35	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.1	5.8	8.3	6.1
37	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.7	5.8	8.0	5.7	8.2	6.0
40	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.5	5.8	7.8	5.7	8.0	6.0
43	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.1	5.7	7.3	5.7	7.6	5.6	7.8	5.9
46	4.7	3.9	5.3	4.9	5.9	5.0	6.5	5.6	7.0	5.7	7.1	5.6	7.4	5.5	7.5	5.8

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-5. MEDIUM STATIC PRESSURE DUCT TYPE

COOLING CAPACITY

■ MODEL : ARXA24GBLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.8	5.3	4.7	5.9	4.9+	6.5	5.4	7.1	5.6	7.7	5.7	8.9	5.9	9.5	6.3
15	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.9	5.9	9.5	6.3
21	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.9	5.9	9.3	6.2
23	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.9	5.9	9.1	6.2
25	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.8	5.8	9.0	6.1
27	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.7	5.8	8.8	6.1
30	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.5	5.7	8.6	6.0
33	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.3	5.7	8.4	5.9
35	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.1	5.6	8.3	5.9
37	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.7	5.7	8.0	5.5	8.2	5.8
40	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.5	5.6	7.8	5.5	8.0	5.8
43	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.1	5.6	7.3	5.5	7.6	5.4	7.8	5.7
46	4.7	3.8	5.3	4.7	5.9	4.9	6.5	5.4	7.0	5.5	7.1	5.5	7.4	5.3	7.5	5.6

■ MODEL : ARXA30GBLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.3	7.1	12.1	7.6
15	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.3	7.1	12.1	7.6
21	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.3	7.1	11.7	7.5
23	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.3	7.1	11.5	7.4
25	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.2	7.1	11.4	7.4
27	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	11.0	7.0	11.2	7.3
30	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	10.8	6.9	11.0	7.2
33	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	10.5	6.8	10.7	7.1
35	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	10.3	6.7	10.5	7.0
37	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.7	6.8	10.2	6.7	10.4	7.0
40	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.5	6.7	9.9	6.6	10.1	6.9
43	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	9.0	6.7	9.3	6.6	9.6	6.5	9.8	6.8
46	5.9	4.6	6.7	5.6	7.5	5.9	8.2	6.5	8.8	6.6	9.0	6.5	9.4	6.4	9.5	6.7

■ MODEL : ARXA36GBLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.7	15.0	9.5
15	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.7	15.0	9.5
21	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.7	14.6	9.4
23	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.7	14.4	9.3
25	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	13.9	8.7	14.2	9.2
27	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	13.7	8.6	14.0	9.1
30	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	13.4	8.4	13.6	9.0
33	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	13.1	8.3	13.3	8.9
35	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	12.8	8.2	13.1	8.8
37	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	12.1	8.4	12.6	8.2	12.9	8.7
40	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	11.8	8.3	12.3	8.0	12.6	8.6
43	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.2	8.2	11.5	8.2	12.0	7.9	12.2	8.5
46	7.4	5.7	8.3	7.0	9.3	7.3	10.2	8.0	11.0	8.1	11.2	8.1	11.7	7.8	11.9	8.4

■ MODEL : ARXA45GBLH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.7	9.9	16.7	10.6
15	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.7	9.9	16.7	10.6
21	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.7	9.9	16.3	10.5
23	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.7	9.9	16.0	10.4
25	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.5	9.8	15.8	10.3
27	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.3	9.7	15.6	10.2
30	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	15.0	9.6	15.2	10.0
33	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	14.6	9.5	14.9	9.9
35	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	14.3	9.4	14.6	9.8
37	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.5	9.5	14.1	9.3	14.4	9.7
40	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	13.2	9.4	13.8	9.2	14.0	9.6
43	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.5	9.3	12.9	9.3	13.4	9.0	13.7	9.5
46	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.0	12.3	9.2	12.5	9.1	13.0	8.9	13.3	9.4

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-6. HIGH STATIC PRESSURE DUCT TYPE

COOLING CAPACITY

■ MODEL : ARXC36GBTH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.8	15.0	9.4
15	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.8	15.0	9.4
21	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.8	14.6	9.3
23	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	14.0	8.8	14.4	9.2
25	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	13.9	8.7	14.2	9.1
27	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	13.7	8.6	14.0	9.0
30	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	13.4	8.5	13.6	8.9
33	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	13.1	8.4	13.3	8.8
35	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	12.8	8.3	13.1	8.7
37	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	12.1	8.4	12.6	8.2	12.9	8.6
40	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	11.8	8.3	12.3	8.1	12.6	8.5
43	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.2	8.2	11.5	8.2	12.0	8.0	12.2	8.4
46	7.4	5.6	8.3	6.9	9.3	7.2	10.2	8.0	11.0	8.2	11.2	8.1	11.7	7.9	11.9	8.3

■ MODEL : ARXC45GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.7	11.3	16.7	12.2
15	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.7	11.3	16.7	12.2
21	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.7	11.3	16.3	12.0
23	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.7	11.3	16.0	11.9
25	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.5	11.2	15.8	11.8
27	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.3	11.1	15.6	11.8
30	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	15.0	11.0	15.2	11.6
33	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	14.6	10.9	14.9	11.5
35	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	14.3	10.8	14.6	11.4
37	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.5	10.9	14.1	10.7	14.4	11.4
40	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	13.2	10.8	13.8	10.6	14.0	11.3
43	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.5	10.8	12.9	10.7	13.4	10.5	13.7	11.2
46	8.2	7.3	9.3	9.2	10.4	9.5	11.4	10.5	12.3	10.6	12.5	10.6	13.0	10.4	13.3	11.1

■ MODEL : ARXC60GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.6	15.1	24.1	16.2
15	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.6	15.1	24.1	16.2
21	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.6	15.1	23.5	16.0
23	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.6	15.1	23.1	15.9
25	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.4	15.0	22.8	15.8
27	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	22.0	14.8	22.4	15.6
30	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	21.5	14.7	21.9	15.5
33	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	21.0	14.5	21.4	15.3
35	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	20.6	14.4	21.0	15.1
37	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.5	14.6	20.3	14.3	20.7	15.1
40	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	19.0	14.4	19.8	14.1	20.2	14.9
43	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	18.0	14.3	18.5	14.2	19.3	13.9	19.7	14.7
46	11.8	9.7	13.4	12.2	14.9	12.6	16.5	13.9	17.7	14.0	18.0	14.1	18.8	13.8	19.1	14.6

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

MODEL SELECTION

COOLING CAPACITY

■ MODEL : ARXC72GBTH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	28.1	18.8	30.0	20.2
15	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	28.1	18.8	30.0	20.2
21	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	28.1	18.8	29.2	20.0
23	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	28.1	18.8	28.7	19.8
25	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	27.8	18.7	28.3	19.6
27	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	27.4	18.5	27.9	19.5
30	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	26.8	18.3	27.3	19.2
33	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	26.2	18.1	26.6	19.0
35	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	25.7	17.9	26.2	18.8
37	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	24.2	18.1	25.3	17.8	25.8	18.7
40	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	23.7	17.9	24.6	17.6	25.1	18.5
43	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.4	17.8	23.0	17.7	24.0	17.4	24.5	18.3
46	14.7	12.1	16.6	15.1	18.6	15.7	20.5	17.3	22.0	17.5	22.4	17.5	23.4	17.2	23.8	18.1

■ MODEL : ARXC90GBTH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	31.3	19.6	33.5	21.1
15	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	31.3	19.6	33.5	21.1
21	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	31.3	19.6	32.6	20.8
23	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	31.3	19.6	32.1	20.5
25	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	31.1	19.5	31.6	20.3
27	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	30.5	19.3	31.2	20.2
30	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	29.9	19.0	30.4	19.9
33	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	29.2	18.8	29.7	19.6
35	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	28.7	18.6	29.2	19.4
37	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	27.1	18.8	28.2	18.4	28.8	19.3
40	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	26.4	18.6	27.5	18.2	28.0	19.1
43	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	25.0	18.4	25.7	18.3	26.8	17.9	27.3	18.8
46	16.4	12.6	18.6	15.6	20.7	16.2	22.9	17.9	24.6	18.1	25.0	18.1	26.1	17.7	26.5	18.6

■ MODEL : ARXC96GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	35.1	21.3	37.5	22.8
15	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	35.1	21.3	37.5	22.8
21	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	35.1	21.3	36.5	22.4
23	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	35.1	21.3	35.9	22.2
25	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	34.8	21.2	35.4	22.0
27	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	34.2	20.9	34.9	21.8
30	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	33.5	20.6	34.1	21.5
33	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	32.7	20.3	33.3	21.2
35	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	32.1	20.1	32.7	21.0
37	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	30.3	20.4	31.6	19.9	32.2	20.8
40	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	29.6	20.1	30.8	19.6	31.4	20.5
43	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	28.0	19.9	28.8	19.7	30.0	19.3	30.6	20.2
46	18.4	13.6	20.8	16.7	23.2	17.4	25.6	19.3	27.5	19.6	28.0	19.4	29.2	19.0	29.7	19.8

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-7. COMPACT FLOOR TYPE

COOLING CAPACITY

■ MODEL : AG∗A004GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	0.9
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.4	0.9
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.2	0.9	1.3	0.9
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.2	0.8	1.2	0.9
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.1	0.8	1.2	0.8	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.8	1.1	0.8	1.1	0.8	1.2	0.9

■ MODEL : AG∗A007GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
-10	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
-5	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
0	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
5	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
10	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
15	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
21	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
23	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.8	1.8
25	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.7	1.7	2.8	1.8
27	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.7	1.7	2.7	1.8
30	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.6	1.7	2.7	1.7
33	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.6	1.6	2.6	1.7
35	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.5	1.6	2.6	1.7
37	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.5	1.6	2.5	1.7
40	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.7
43	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.4	1.6
46	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.6

■ MODEL : AG∗A009GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
-10	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
-5	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
0	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
5	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
10	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
15	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
21	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.7	2.3
23	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.6	2.3
25	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.5	2.3
27	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.2	3.5	2.3
30	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.4	2.2
33	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.3	2.1	3.3	2.2
35	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.3	2.2
37	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.2	2.2
40	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.1	2.0	3.1	2.1
43	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	2.9	2.0	3.0	2.0	3.1	2.1
46	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.0	2.8	2.0	2.9	2.0	3.0	2.1

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AG*A012GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
-10	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
-5	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
0	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
5	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
10	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
15	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
21	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.7	3.0
23	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
25	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
27	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.4	2.8	4.5	3.0
30	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.3	2.8	4.4	2.9
33	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.2	2.7	4.3	2.9
35	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.1	2.7	4.2	2.9
37	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.1	2.7	4.1	2.8
40	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.7	4.0	2.8
43	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.7	2.7	3.9	2.6	3.9	2.8
46	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.5	2.7	3.6	2.6	3.8	2.6	3.8	2.7

■ MODEL : AG*A014GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
-10	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
-5	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
0	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
5	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
10	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
15	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
21	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.2	3.4
23	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.1	3.4
25	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.1	3.4
27	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.9	3.2	5.0	3.3
30	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.8	3.1	4.9	3.3
33	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.7	3.1	4.8	3.2
35	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.6	3.1	4.7	3.2
37	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.5	3.0	4.6	3.2
40	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.2	3.1	4.4	3.0	4.5	3.2
43	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.1	3.0	4.3	3.0	4.4	3.1
46	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	3.9	3.0	4.0	3.0	4.2	2.9	4.2	3.1

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-8. COMPACT FLOOR TYPE (EEV external model)

COOLING CAPACITY

■ MODEL : AG∗E004GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	1.0
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.4	0.9	1.4	0.9
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.4	0.9
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.3	0.9	1.3	0.9
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.2	0.9	1.3	0.9
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.2	0.9	1.2	0.8	1.2	0.9
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.9	1.1	0.8	1.2	0.8	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.8	1.1	0.8	1.1	0.8	1.1	0.8	1.2	0.9

■ MODEL : AG∗E007GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
-10	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
-5	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
0	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
5	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
10	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
15	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
21	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.9	1.8
23	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.8	1.7	2.8	1.8
25	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.7	1.7	2.8	1.8
27	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.7	1.7	2.7	1.8
30	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.6	1.7	2.7	1.7
33	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.6	1.6	2.6	1.7
35	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.5	1.6	2.6	1.7
37	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.6	2.5	1.6	2.5	1.7
40	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.7
43	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.4	1.6
46	1.3	0.9	1.4	1.1	1.6	1.4	1.8	1.4	2.0	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.6

■ MODEL : AG∗E009GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
-10	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
-5	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
0	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
5	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
10	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
15	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.8	2.4
21	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.7	2.3
23	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.6	2.3
25	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.5	2.2	3.5	2.3
27	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.2	3.5	2.3
30	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.4	2.2
33	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.3	2.1	3.3	2.2
35	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.3	2.2
37	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.2	2.2
40	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.1	2.0	3.1	2.1
43	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.1	2.9	2.0	3.0	2.0	3.1	2.1
46	1.6	1.2	1.8	1.4	2.1	1.7	2.3	1.8	2.6	2.0	2.8	2.0	2.8	2.0	2.9	2.0	3.0	2.1

TC : Total Capacity kW.

SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AG∗E012GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
-10	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
-5	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
0	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
5	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
10	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
15	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
21	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.7	3.0
23	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
25	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
27	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.4	2.8	4.5	3.0
30	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.3	2.8	4.4	2.9
33	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.2	2.7	4.3	2.9
35	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.1	2.7	4.2	2.9
37	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.9	2.8	4.1	2.7	4.1	2.8
40	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.7	4.0	2.8
43	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.6	2.7	3.7	2.7	3.9	2.6	3.9	2.8
46	2.1	1.6	2.4	1.8	2.7	2.3	3.0	2.4	3.3	2.6	3.5	2.7	3.6	2.6	3.8	2.6	3.8	2.7

■ MODEL : AG∗E014GCAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
-10	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
-5	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
0	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
5	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
10	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
15	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.4	3.5
21	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.2	3.4
23	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.1	3.4
25	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	5.0	3.2	5.1	3.4
27	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.9	3.2	5.0	3.3
30	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.8	3.1	4.9	3.3
33	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.7	3.1	4.8	3.2
35	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.6	3.1	4.7	3.2
37	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.3	3.1	4.5	3.0	4.6	3.2
40	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.2	3.1	4.4	3.0	4.5	3.2
43	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	4.0	3.0	4.1	3.0	4.3	3.0	4.4	3.1
46	2.3	1.8	2.6	2.1	3.0	2.5	3.3	2.7	3.7	3.0	3.9	3.0	4.0	3.0	4.2	2.9	4.2	3.1

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-9. FLOOR / CEILING TYPE

COOLING CAPACITY

■ MODEL : AB∗A12GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.5	3.0	4.8	3.3
15	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.5	3.0	4.8	3.3
21	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.5	3.0	4.7	3.2
23	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.5	3.0	4.6	3.2
25	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.5	3.0	4.6	3.2
27	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.4	3.0	4.5	3.1
30	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.3	3.0	4.4	3.1
33	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.2	2.9	4.3	3.1
35	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.1	2.9	4.2	3.0
37	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.9	2.9	4.1	2.9	4.1	3.0
40	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.8	2.9	4.0	2.8	4.0	3.0
43	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.6	2.9	3.7	2.9	3.9	2.8	3.9	3.0
46	2.4	2.0	2.7	2.4	3.0	2.5	3.3	2.8	3.5	2.9	3.6	2.8	3.8	2.8	3.8	2.9

■ MODEL : AB∗A14GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.6	3.7	6.0	4.0
15	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.6	3.7	6.0	4.0
21	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.6	3.7	5.9	3.9
23	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.6	3.7	5.8	3.9
25	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.6	3.7	5.7	3.9
27	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.5	3.6	5.6	3.8
30	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.4	3.6	5.5	3.8
33	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.3	3.6	5.4	3.7
35	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.2	3.5	5.3	3.7
37	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.9	3.6	5.1	3.5	5.2	3.7
40	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.8	3.5	5.0	3.4	5.0	3.6
43	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.5	3.5	4.6	3.5	4.8	3.4	4.9	3.6
46	3.0	2.4	3.3	3.0	3.7	3.1	4.1	3.4	4.4	3.5	4.5	3.4	4.7	3.4	4.8	3.5

■ MODEL : AB∗A18GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.7	7.5	5.0
15	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.7	7.5	5.0
21	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.7	7.3	5.0
23	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.7	7.2	4.9
25	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	7.0	4.6	7.1	4.9
27	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.8	4.6	7.0	4.8
30	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.7	4.5	6.8	4.8
33	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.5	4.5	6.7	4.7
35	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.4	4.4	6.5	4.7
37	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	6.1	4.5	6.3	4.4	6.4	4.6
40	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	5.9	4.4	6.2	4.4	6.3	4.6
43	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.6	4.4	5.8	4.4	6.0	4.3	6.1	4.5
46	3.7	3.0	4.2	3.8	4.6	3.9	5.1	4.3	5.5	4.4	5.6	4.3	5.8	4.2	5.9	4.5

■ MODEL : AB∗A24GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.9	5.4	9.5	5.8
15	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.9	5.4	9.5	5.8
21	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.9	5.4	9.3	5.7
23	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.9	5.4	9.1	5.6
25	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.8	5.4	9.0	5.6
27	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.7	5.3	8.8	5.5
30	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.5	5.2	8.6	5.4
33	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.3	5.2	8.4	5.4
35	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.1	5.1	8.3	5.3
37	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.7	5.2	8.0	5.0	8.2	5.3
40	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.5	5.1	7.8	5.0	8.0	5.2
43	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.1	5.0	7.3	5.0	7.6	4.9	7.8	5.1
46	4.7	3.4	5.3	4.2	5.9	4.4	6.5	4.9	7.0	5.0	7.1	4.9	7.4	4.8	7.5	5.0

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-10. CEILING TYPE

COOLING CAPACITY

■ MODEL : AB∗A30GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.3	7.5	12.1	8.1
15	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.3	7.5	12.1	8.1
21	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.3	7.5	11.7	8.0
23	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.3	7.5	11.5	7.9
25	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.2	7.5	11.4	7.9
27	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	11.0	7.4	11.2	7.8
30	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	10.8	7.3	11.0	7.7
33	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	10.5	7.3	10.7	7.6
35	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	10.3	7.2	10.5	7.6
37	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.7	7.3	10.2	7.1	10.4	7.5
40	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.5	7.2	9.9	7.0	10.1	7.4
43	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	9.0	7.1	9.3	7.1	9.6	7.0	9.8	7.4
46	5.9	4.9	6.7	6.1	7.5	6.3	8.2	7.0	8.8	7.1	9.0	7.0	9.4	6.9	9.5	7.3

■ MODEL : AB∗A36GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	14.0	8.7	15.0	9.3
15	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	14.0	8.7	15.0	9.3
21	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	14.0	8.7	14.6	9.2
23	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	14.0	8.7	14.4	9.1
25	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	13.9	8.7	14.2	9.0
27	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	13.7	8.6	14.0	8.9
30	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	13.4	8.5	13.6	8.8
33	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	13.1	8.3	13.3	8.7
35	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	12.8	8.2	13.1	8.6
37	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	12.1	8.3	12.6	8.2	12.9	8.6
40	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	11.8	8.3	12.3	8.1	12.6	8.5
43	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.2	8.2	11.5	8.1	12.0	8.0	12.2	8.3
46	7.4	5.6	8.3	6.9	9.3	7.2	10.2	7.9	11.0	8.1	11.2	8.0	11.7	7.8	11.9	8.2

■ MODEL : AB∗A45GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.7	10.0	16.7	10.7
15	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.7	10.0	16.7	10.7
21	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.7	10.0	16.3	10.6
23	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.7	10.0	16.0	10.4
25	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.5	9.9	15.8	10.3
27	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.3	9.8	15.6	10.3
30	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	15.0	9.7	15.2	10.1
33	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	14.6	9.6	14.9	10.0
35	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	14.3	9.4	14.6	9.9
37	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.5	9.6	14.1	9.4	14.4	9.8
40	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	13.2	9.5	13.8	9.3	14.0	9.7
43	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.5	9.4	12.9	9.3	13.4	9.1	13.7	9.6
46	8.2	6.4	9.3	7.9	10.4	8.2	11.4	9.1	12.3	9.3	12.5	9.2	13.0	9.0	13.3	9.5

■ MODEL : AB∗A54GATH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.6	11.2	18.8	12.0
15	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.6	11.2	18.8	12.0
21	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.6	11.2	18.3	11.9
23	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.6	11.2	18.0	11.7
25	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.4	11.1	17.7	11.6
27	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	17.1	11.0	17.5	11.5
30	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	16.8	10.9	17.1	11.4
33	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	16.4	10.7	16.7	11.2
35	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	16.1	10.6	16.4	11.1
37	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	15.2	10.8	15.8	10.5	16.1	11.1
40	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	14.8	10.6	15.4	10.4	15.7	10.9
43	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	14.0	10.5	14.4	10.5	15.0	10.3	15.3	10.8
46	9.2	7.2	10.4	8.9	11.6	9.3	12.8	10.3	13.8	10.5	14.0	10.3	14.6	10.1	14.9	10.6

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-11. WALL MOUNTED TYPE

COOLING CAPACITY

■ MODEL : AS∗A004GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	0.9
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	0.9
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.4	0.9
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.2	0.8	1.3	0.9
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.2	0.8	1.2	0.9
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.1	0.8	1.2	0.8	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.1	0.8	1.1	0.8	1.2	0.9

■ MODEL : AS∗A007GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
-10	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
-5	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
0	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
5	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
10	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
15	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
21	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
23	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.8	2.0
25	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.8	2.0
27	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.7	2.0
30	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.8	2.7	1.9
33	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.8	2.6	1.9
35	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.6	1.9
37	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.5	1.9
40	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.8	2.5	1.9
43	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.7	2.4	1.9
46	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.2	1.8	2.3	1.7	2.3	1.8

■ MODEL : AS∗A009GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
-10	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
-5	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
0	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
5	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
10	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
15	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
21	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.7	2.7
23	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.6	2.7
25	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.5	3.5	2.7
27	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.4	2.5	3.5	2.7
30	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.4	2.5	3.4	2.7
33	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.3	2.5	3.3	2.6
35	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.2	2.5	3.3	2.6
37	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.2	2.4	3.2	2.6
40	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.1	2.4	3.1	2.6
43	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	2.9	2.4	3.0	2.4	3.1	2.5
46	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	2.8	2.4	2.9	2.4	3.0	2.5

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AS∗A12GACH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.0
15	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.8	3.0
21	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.7	3.0
23	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	3.0
25	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.5	2.8	4.6	2.9
27	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.4	2.8	4.5	2.9
30	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.3	2.8	4.4	2.9
33	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.2	2.7	4.3	2.8
35	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.8
37	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.9	2.7	4.1	2.7	4.1	2.8
40	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.6	4.0	2.8
43	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.7
46	2.4	1.8	2.7	2.3	3.0	2.3	3.3	2.6	3.5	2.6	3.6	2.6	3.8	2.6	3.8	2.7

■ MODEL : AS∗A14GACH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.6	3.5	6.0	3.7
15	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.6	3.5	6.0	3.7
21	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.6	3.5	5.9	3.7
23	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.6	3.5	5.8	3.6
25	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.6	3.5	5.7	3.6
27	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.5	3.4	5.6	3.6
30	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.4	3.4	5.5	3.5
33	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.3	3.3	5.4	3.5
35	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.2	3.3	5.3	3.4
37	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.9	3.3	5.1	3.3	5.2	3.4
40	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.8	3.3	5.0	3.2	5.0	3.4
43	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.5	3.3	4.6	3.3	4.8	3.2	4.9	3.3
46	3.0	2.2	3.3	2.8	3.7	2.9	4.1	3.2	4.4	3.2	4.5	3.2	4.7	3.1	4.8	3.3

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AS∗A18GBCH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
-10	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
-5	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
0	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
5	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
10	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
15	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.5	4.8
21	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.3	4.7
23	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.2	4.6
25	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	7.0	4.4	7.1	4.6
27	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.8	4.4	7.0	4.6
30	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.7	4.3	6.8	4.5
33	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.5	4.3	6.7	4.5
35	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.4	4.2	6.5	4.4
37	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	6.1	4.3	6.3	4.2	6.4	4.4
40	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	5.9	4.2	6.2	4.1	6.3	4.3
43	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.6	4.2	5.8	4.1	6.0	4.0	6.1	4.3
46	3.2	2.4	3.7	2.9	4.2	3.5	4.6	3.7	5.1	4.1	5.5	4.1	5.6	4.1	5.8	4.0	5.9	4.2

■ MODEL : AS∗A24GBCH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
-10	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
-5	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
0	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
5	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
10	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
15	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.5	6.1
21	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.3	6.0
23	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.9	5.7	9.1	6.0
25	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.8	5.7	9.0	5.9
27	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.7	5.6	8.8	5.9
30	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.5	5.5	8.6	5.8
33	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.3	5.5	8.4	5.7
35	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.1	5.4	8.3	5.7
37	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.7	5.5	8.0	5.4	8.2	5.6
40	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.5	5.4	7.8	5.3	8.0	5.6
43	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.1	5.4	7.3	5.3	7.6	5.2	7.8	5.5
46	4.1	3.1	4.7	3.7	5.3	4.6	5.9	4.7	6.5	5.2	7.0	5.3	7.1	5.3	7.4	5.2	7.5	5.4

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AS∗A30GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
-10	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
-5	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
0	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
5	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
10	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
15	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	12.1	7.7
21	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	11.7	7.6
23	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.3	7.2	11.5	7.5
25	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.2	7.1	11.4	7.4
27	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	11.0	7.0	11.2	7.4
30	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	10.8	7.0	11.0	7.3
33	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	10.5	6.9	10.7	7.2
35	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	10.3	6.8	10.5	7.1
37	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.7	6.9	10.2	6.7	10.4	7.1
40	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.5	6.8	9.9	6.6	10.1	7.0
43	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	9.0	6.7	9.3	6.7	9.6	6.5	9.8	6.9
46	5.2	3.9	5.9	4.6	6.7	5.7	7.5	5.9	8.2	6.6	8.8	6.7	9.0	6.6	9.4	6.4	9.5	6.8

■ MODEL : AS∗A34GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
-10	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
-5	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
0	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
5	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
10	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
15	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.4	8.7
21	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	13.0	8.5
23	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.5	8.1	12.8	8.5
25	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.4	8.0	12.6	8.4
27	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.2	7.9	12.5	8.3
30	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	12.0	7.8	12.2	8.2
33	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	11.7	7.7	11.9	8.1
35	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	11.5	7.7	11.7	8.0
37	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.8	7.8	11.3	7.6	11.5	8.0
40	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.6	7.7	11.0	7.5	11.2	7.9
43	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	10.0	7.6	10.3	7.5	10.7	7.4	10.9	7.8
46	5.7	4.4	6.6	5.2	7.4	6.5	8.3	6.7	9.1	7.4	9.8	7.5	10.0	7.4	10.4	7.3	10.6	7.7

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

7-12. WALL MOUNTED TYPE (EEV external model)

COOLING CAPACITY

■ MODEL : AS∗E004GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
-10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
-5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
0	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
5	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
10	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
15	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.5	1.0
21	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	1.0
23	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	0.9
25	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.4	0.9	1.4	0.9
27	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.4	0.9
30	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
33	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
35	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.3	0.9	1.3	0.9
37	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.2	0.8	1.3	0.9
40	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.2	0.9	1.2	0.8	1.2	0.9
43	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.1	0.8	1.2	0.8	1.2	0.9
46	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.7	1.0	0.8	1.1	0.8	1.1	0.8	1.1	0.8	1.2	0.9

■ MODEL : AS∗E007GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
-10	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
-5	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
0	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
5	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
10	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
15	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
21	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.9	2.0
23	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.8	1.9	2.8	2.0
25	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.8	2.0
27	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.7	1.9	2.7	2.0
30	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.8	2.7	1.9
33	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.6	1.8	2.6	1.9
35	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.6	1.9
37	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.8	2.5	1.8	2.5	1.9
40	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.8	2.5	1.9
43	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.3	1.8	2.4	1.7	2.4	1.9
46	1.3	1.0	1.4	1.2	1.6	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.2	1.8	2.3	1.7	2.3	1.8

■ MODEL : AS∗E009GTAH

Outdoor temperature	Indoor temperature																	
	18°CDB / 14 °CWB		20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
-15	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
-10	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
-5	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
0	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
5	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
10	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
15	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.8	2.8
21	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.7	2.7
23	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.6	3.6	2.7
25	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.5	2.5	3.5	2.7
27	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.4	2.5	3.5	2.7
30	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.4	2.5	3.4	2.7
33	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.3	2.5	3.3	2.6
35	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.2	2.5	3.3	2.6
37	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.2	2.4	3.2	2.6
40	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	3.0	2.5	3.1	2.4	3.1	2.6
43	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	2.9	2.4	3.0	2.4	3.1	2.5
46	1.6	1.4	1.8	1.7	2.1	2.0	2.3	2.2	2.6	2.4	2.8	2.4	2.8	2.4	2.9	2.4	3.0	2.5

TC : Total Capacity kW.

SHC : Sensible Heat Capacity kW.

COOLING CAPACITY

■ MODEL : AS∗E12GACH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
15	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.5	2.9	4.8	3.1
21	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.5	2.9	4.7	3.1
23	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
25	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.5	2.9	4.6	3.0
27	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.4	2.8	4.5	3.0
30	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.3	2.8	4.4	2.9
33	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.2	2.8	4.3	2.9
35	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.1	2.7	4.2	2.9
37	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.9	2.8	4.1	2.7	4.1	2.9
40	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.8	2.8	4.0	2.7	4.0	2.8
43	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.6	2.7	3.7	2.7	3.9	2.7	3.9	2.8
46	2.4	1.9	2.7	2.3	3.0	2.4	3.3	2.7	3.5	2.7	3.6	2.7	3.8	2.6	3.8	2.8

■ MODEL : AS∗E14GACH

Outdoor temperature	Indoor temperature															
	20°CDB / 15 °CWB		23°CDB / 16 °CWB		24°CDB / 17 °CWB		26°CDB / 18 °CWB		27°CDB / 19 °CWB		28°CDB / 20 °CWB		30°CDB / 22 °CWB		32°CDB / 23 °CWB	
(°CDB)	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
10	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.6	3.6	6.0	3.8
15	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.6	3.6	6.0	3.8
21	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.6	3.6	5.9	3.8
23	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.6	3.6	5.8	3.7
25	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.6	3.6	5.7	3.7
27	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.5	3.5	5.6	3.7
30	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.4	3.5	5.5	3.6
33	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.3	3.4	5.4	3.6
35	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.2	3.4	5.3	3.6
37	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.9	3.4	5.1	3.4	5.2	3.5
40	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.8	3.4	5.0	3.3	5.0	3.5
43	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.5	3.4	4.6	3.3	4.8	3.3	4.9	3.4
46	3.0	2.3	3.3	2.8	3.7	3.0	4.1	3.3	4.4	3.3	4.5	3.3	4.7	3.2	4.8	3.4

TC : Total Capacity kW.
SHC : Sensible Heat Capacity kW.

MODEL SELECTION

8. CAPACITY TABLE HEATING (INDOOR UNIT)

8-1. COMPACT CASSETTE TYPE

HEATING CAPACITY

■ MODEL : AUXB04GBLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	-16.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	-13.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	-10.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	-8.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	-6.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	-4.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	-2.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	-1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	1.0	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	4.0	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	6.0	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	7.8	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	10.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	13.5	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL : AUXB07GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	-16.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	-13.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	-10.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	-8.0	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	-6.0	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	-4.0	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	-2.0	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	-1.0	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	1.0	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	4.0	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	6.0	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	7.8	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	10.6	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	13.5	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : AUXB09GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	-16.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	-13.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	-10.0	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	-8.0	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	-6.0	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	-4.0	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	-2.0	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	-1.0	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	1.0	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	4.0	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	6.0	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	7.8	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	10.6	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	13.5	3.6	3.4	3.2	3.1	3.0	2.8	2.6

■ MODEL : AUXB12GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-15.0	-16.0	2.5	2.5	2.5	2.4	2.4	2.4	2.4
-12.0	-13.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7
-9.0	-10.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9
-7.0	-8.0	3.2	3.2	3.2	3.2	3.1	3.1	3.1
-5.0	-6.0	3.4	3.4	3.4	3.3	3.3	3.3	3.2
-3.0	-4.0	3.6	3.6	3.5	3.5	3.5	3.5	3.2
-1.0	-2.0	3.8	3.7	3.7	3.7	3.7	3.5	3.2
0.0	-1.0	3.9	3.8	3.8	3.8	3.8	3.5	3.2
2.0	1.0	4.1	4.0	4.0	3.9	3.8	3.5	3.3
5.0	4.0	4.4	4.3	4.1	4.0	3.8	3.6	3.3
7.0	6.0	4.5	4.4	4.1	4.0	3.8	3.6	3.3
9.0	7.8	4.6	4.4	4.1	4.0	3.8	3.6	3.3
12.0	10.6	4.6	4.4	4.1	4.0	3.8	3.6	3.3
15.0	13.5	4.6	4.4	4.1	4.0	3.8	3.6	3.3

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL : AUXB14GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	-16.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	-13.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	-10.0	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	-8.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	-6.0	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	-4.0	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	-2.0	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	-1.0	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	1.0	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	4.0	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	6.0	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	7.8	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	10.6	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	13.5	5.7	5.3	5.0	4.8	4.7	4.3	4.0

■ MODEL : AUXB18GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	-16.0	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	-13.0	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	-10.0	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	-8.0	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	-6.0	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	-4.0	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	-2.0	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	-1.0	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	1.0	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	4.0	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	6.0	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	7.8	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	10.6	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	13.5	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : AUXB24GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	-16.0	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	-13.0	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	-10.0	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	-8.0	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	-6.0	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	-4.0	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	-2.0	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	-1.0	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	1.0	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	4.0	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	6.0	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	7.8	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	10.6	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	13.5	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

MODEL SELECTION

8-2. CASSETTE TYPE

HEATING CAPACITY

■ MODEL : AUXM018GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : AUXM024GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

■ MODEL : AUXM030GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	**-16.0**	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	**-13.0**	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	**-10.0**	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	**-8.0**	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	**-6.0**	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	**-4.0**	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	**-2.0**	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	**-1.0**	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	**1.0**	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	**4.0**	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	**6.0**	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	**7.8**	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	**10.6**	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	**13.5**	11.3	10.7	10.0	9.7	9.3	8.7	8.0

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL: AUXK018GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL: AUXK024GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

■ MODEL: AUXK030GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	**-16.0**	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	**-13.0**	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	**-10.0**	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	**-8.0**	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	**-6.0**	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	**-4.0**	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	**-2.0**	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	**-1.0**	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	**1.0**	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	**4.0**	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	**6.0**	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	**7.8**	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	**10.6**	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	**13.5**	11.3	10.7	10.0	9.7	9.3	8.7	8.0

■ MODEL: AUXK034GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.8	5.8	5.8	5.8	5.8	5.8	5.7
-15.0	**-16.0**	6.8	6.7	6.7	6.7	6.7	6.6	6.6
-12.0	**-13.0**	7.5	7.5	7.4	7.4	7.4	7.4	7.3
-9.0	**-10.0**	8.2	8.2	8.1	8.1	8.1	8.1	8.0
-7.0	**-8.0**	8.7	8.7	8.6	8.6	8.6	8.6	8.5
-5.0	**-6.0**	9.2	9.2	9.2	9.1	9.1	9.1	8.8
-3.0	**-4.0**	9.8	9.7	9.7	9.6	9.6	9.6	8.9
-1.0	**-2.0**	10.3	10.2	10.2	10.1	10.1	9.6	8.9
0.0	**-1.0**	10.6	10.5	10.4	10.4	10.3	9.6	8.9
2.0	**1.0**	11.1	11.0	11.0	10.7	10.4	9.6	8.9
5.0	**4.0**	11.9	11.8	11.2	10.8	10.5	9.7	9.0
7.0	**6.0**	12.4	11.9	11.2	10.8	10.4	9.7	9.0
9.0	**7.8**	12.7	11.9	11.2	10.8	10.5	9.7	9.0
12.0	**10.6**	12.7	11.9	11.2	10.8	10.5	9.7	9.0
15.0	**13.5**	12.7	11.9	11.2	10.8	10.5	9.7	9.0

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL: AUXK036GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	6.5	6.5	6.5	6.5	6.4	6.4	6.4
-15.0	**-16.0**	7.5	7.5	7.5	7.5	7.5	7.4	7.4
-12.0	**-13.0**	8.4	8.3	8.3	8.3	8.3	8.2	8.2
-9.0	**-10.0**	9.2	9.2	9.1	9.1	9.0	9.0	9.0
-7.0	**-8.0**	9.8	9.7	9.6	9.6	9.6	9.6	9.5
-5.0	**-6.0**	10.3	10.3	10.2	10.2	10.2	10.1	9.8
-3.0	**-4.0**	10.9	10.8	10.8	10.8	10.7	10.7	9.9
-1.0	**-2.0**	11.5	11.4	11.3	11.3	11.3	10.7	9.9
0.0	**-1.0**	11.8	11.7	11.6	11.6	11.5	10.7	9.9
2.0	**1.0**	12.4	12.3	12.2	12.0	11.6	10.8	9.9
5.0	**4.0**	13.3	13.2	12.5	12.1	11.7	10.8	10.0
7.0	**6.0**	13.8	13.3	12.5	12.1	11.7	10.8	10.0
9.0	**7.8**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
12.0	**10.6**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
15.0	**13.5**	14.2	13.3	12.5	12.1	11.7	10.8	10.0

■ MODEL: AUXK045GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	7.3	7.2	7.2	7.2	7.2	7.2	7.2
-15.0	**-16.0**	8.4	8.4	8.4	8.4	8.4	8.3	8.3
-12.0	**-13.0**	9.4	9.3	9.3	9.2	9.2	9.2	9.2
-9.0	**-10.0**	10.3	10.3	10.2	10.2	10.1	10.1	10.0
-7.0	**-8.0**	10.9	10.9	10.8	10.8	10.8	10.7	10.7
-5.0	**-6.0**	11.6	11.5	11.5	11.4	11.4	11.3	11.0
-3.0	**-4.0**	12.2	12.1	12.1	12.0	12.0	12.0	11.1
-1.0	**-2.0**	12.9	12.8	12.7	12.7	12.6	12.0	11.1
0.0	**-1.0**	13.2	13.1	13.0	13.0	12.9	12.0	11.1
2.0	**1.0**	13.9	13.8	13.7	13.4	13.0	12.0	11.1
5.0	**4.0**	14.9	14.8	14.0	13.5	13.1	12.1	11.2
7.0	**6.0**	15.5	14.9	14.0	13.5	13.1	12.1	11.2
9.0	**7.8**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
12.0	**10.6**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
15.0	**13.5**	15.9	14.9	14.0	13.5	13.1	12.1	11.2

■ MODEL: AUXK054GLAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	8.3	8.3	8.3	8.3	8.2	8.2	8.2
-15.0	**-16.0**	9.7	9.6	9.6	9.5	9.5	9.5	9.5
-12.0	**-13.0**	10.7	10.7	10.6	10.6	10.6	10.5	10.5
-9.0	**-10.0**	11.8	11.7	11.6	11.6	11.6	11.5	11.5
-7.0	**-8.0**	12.5	12.4	12.3	12.3	12.3	12.2	12.2
-5.0	**-6.0**	13.2	13.2	13.1	13.1	13.0	13.0	12.6
-3.0	**-4.0**	14.0	13.9	13.8	13.8	13.7	13.7	12.6
-1.0	**-2.0**	14.7	14.6	14.5	14.5	14.4	13.7	12.6
0.0	**-1.0**	15.1	15.0	14.9	14.8	14.8	13.7	12.6
2.0	**1.0**	15.8	15.7	15.6	15.3	14.8	13.8	12.7
5.0	**4.0**	17.0	16.9	16.0	15.4	14.9	13.9	12.8
7.0	**6.0**	17.7	17.0	16.0	15.4	14.9	13.9	12.8
9.0	**7.8**	18.1	17.0	16.0	15.4	14.9	13.9	12.8
12.0	**10.6**	18.1	17.1	16.0	15.4	14.9	13.9	12.8
15.0	**13.5**	18.1	17.1	16.0	15.4	14.9	13.9	12.8

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AUXD18GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : AUXD24GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AUXA30GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	-16.0	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	-13.0	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	-10.0	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	-8.0	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	-6.0	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	-4.0	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	-2.0	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	-1.0	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	1.0	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	4.0	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	6.0	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	7.8	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	10.6	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	13.5	11.3	10.7	10.0	9.7	9.3	8.7	8.0

■ MODEL : AUXA34GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	5.6	5.5	5.5	5.5	5.5	5.5	5.5
-15.0	-16.0	6.5	6.4	6.4	6.4	6.4	6.4	6.4
-12.0	-13.0	7.2	7.2	7.2	7.2	7.1	7.1	7.1
-9.0	-10.0	8.0	8.0	7.9	7.9	7.9	7.8	7.8
-7.0	-8.0	8.5	8.5	8.4	8.4	8.4	8.3	8.3
-5.0	-6.0	9.1	9.0	9.0	9.0	8.9	8.9	8.6
-3.0	-4.0	9.6	9.5	9.5	9.5	9.4	9.4	8.7
-1.0	-2.0	10.1	10.1	10.1	10.0	10.0	9.5	8.8
0.0	-1.0	10.4	10.4	10.3	10.3	10.2	9.5	8.8
2.0	1.0	11.0	10.9	10.9	10.7	10.3	9.6	8.8
5.0	4.0	11.9	11.8	11.1	10.8	10.4	9.7	8.9
7.0	6.0	12.5	12.0	11.2	10.9	10.5	9.7	9.0
9.0	7.8	12.7	12.0	11.2	10.9	10.5	9.7	9.0
12.0	10.6	12.7	12.0	11.2	10.9	10.5	9.7	9.0
15.0	13.5	12.7	12.0	11.2	10.9	10.5	9.7	9.0

■ MODEL: AUXA36GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	6.5	6.5	6.5	6.5	6.4	6.4	6.4
-15.0	-16.0	7.5	7.5	7.5	7.5	7.5	7.4	7.4
-12.0	-13.0	8.4	8.3	8.3	8.3	8.3	8.2	8.2
-9.0	-10.0	9.2	9.2	9.1	9.1	9.0	9.0	9.0
-7.0	-8.0	9.8	9.7	9.6	9.6	9.6	9.6	9.5
-5.0	-6.0	10.3	10.3	10.2	10.2	10.2	10.1	9.8
-3.0	-4.0	10.9	10.8	10.8	10.8	10.7	10.7	9.9
-1.0	-2.0	11.5	11.4	11.3	11.3	11.3	10.7	9.9
0.0	-1.0	11.8	11.7	11.6	11.6	11.5	10.7	9.9
2.0	1.0	12.4	12.3	12.2	12.0	11.6	10.8	9.9
5.0	4.0	13.3	13.2	12.5	12.1	11.7	10.8	10.0
7.0	6.0	13.8	13.3	12.5	12.1	11.7	10.8	10.0
9.0	7.8	14.2	13.3	12.5	12.1	11.7	10.8	10.0
12.0	10.6	14.2	13.3	12.5	12.1	11.7	10.8	10.0
15.0	13.5	14.2	13.3	12.5	12.1	11.7	10.8	10.0

■ MODEL: AUXA45GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	7.3	7.2	7.2	7.2	7.2	7.2	7.2
-15.0	-16.0	8.4	8.4	8.4	8.4	8.4	8.3	8.3
-12.0	-13.0	9.4	9.3	9.3	9.2	9.2	9.2	9.2
-9.0	-10.0	10.3	10.3	10.2	10.2	10.1	10.1	10.0
-7.0	-8.0	10.9	10.9	10.8	10.8	10.8	10.7	10.7
-5.0	-6.0	11.6	11.5	11.5	11.4	11.4	11.3	11.0
-3.0	-4.0	12.2	12.1	12.1	12.0	12.0	12.0	11.1
-1.0	-2.0	12.9	12.8	12.7	12.7	12.6	12.0	11.1
0.0	-1.0	13.2	13.1	13.0	13.0	12.9	12.0	11.1
2.0	1.0	13.9	13.8	13.7	13.4	13.0	12.0	11.1
5.0	4.0	14.9	14.8	14.0	13.5	13.1	12.1	11.2
7.0	6.0	15.5	14.9	14.0	13.5	13.1	12.1	11.2
9.0	7.8	15.9	14.9	14.0	13.5	13.1	12.1	11.2
12.0	10.6	15.9	14.9	14.0	13.5	13.1	12.1	11.2
15.0	13.5	15.9	14.9	14.0	13.5	13.1	12.1	11.2

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AUXA54GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	8.3	8.3	8.3	8.3	8.2	8.2	8.2
-15.0	**-16.0**	9.7	9.6	9.6	9.5	9.5	9.5	9.5
-12.0	**-13.0**	10.7	10.7	10.6	10.6	10.6	10.5	10.5
-9.0	**-10.0**	11.8	11.7	11.6	11.6	11.6	11.5	11.5
-7.0	**-8.0**	12.5	12.4	12.3	12.3	12.3	12.2	12.2
-5.0	**-6.0**	13.2	13.2	13.1	13.1	13.0	13.0	12.6
-3.0	**-4.0**	14.0	13.9	13.8	13.8	13.7	13.7	12.6
-1.0	**-2.0**	14.7	14.6	14.5	14.5	14.4	13.7	12.6
0.0	**-1.0**	15.1	15.0	14.9	14.8	14.8	13.7	12.6
2.0	**1.0**	15.8	15.7	15.6	15.3	14.8	13.8	12.7
5.0	**4.0**	17.0	16.9	16.0	15.4	14.9	13.9	12.8
7.0	**6.0**	17.7	17.0	16.0	15.4	14.9	13.9	12.8
9.0	**7.8**	18.1	17.0	16.0	15.4	14.9	13.9	12.8
12.0	**10.6**	18.1	17.1	16.0	15.4	14.9	13.9	12.8
15.0	**13.5**	18.1	17.1	16.0	15.4	14.9	13.9	12.8

TC : Total Capacity kW.

8-3. MINI DUCT TYPE

HEATING CAPACITY

■ MODEL: ARXK04GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	-16.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	-13.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	-10.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	-8.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	-6.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	-4.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	-2.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	-1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	1.0	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	4.0	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	6.0	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	7.8	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	10.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	13.5	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL: ARXK07GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	-16.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	-13.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	-10.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	-8.0	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	-6.0	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	-4.0	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	-2.0	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	-1.0	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	1.0	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	4.0	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	6.0	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	7.8	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	10.6	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	13.5	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL: ARXK09GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	-16.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	-13.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	-10.0	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	-8.0	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	-6.0	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	-4.0	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	-2.0	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	-1.0	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	1.0	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	4.0	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	6.0	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	7.8	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	10.6	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	13.5	3.6	3.4	3.2	3.1	3.0	2.8	2.6

■ MODEL: ARXK12GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0
-15.0	-16.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
-12.0	-13.0	2.7	2.7	2.7	2.6	2.6	2.6	2.6
-9.0	-10.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
-7.0	-8.0	3.1	3.1	3.1	3.1	3.1	3.1	3.0
-5.0	-6.0	3.3	3.3	3.3	3.3	3.3	3.2	3.1
-3.0	-4.0	3.5	3.5	3.5	3.4	3.4	3.4	3.2
-1.0	-2.0	3.7	3.7	3.6	3.6	3.6	3.4	3.2
0.0	-1.0	3.8	3.7	3.7	3.7	3.7	3.4	3.2
2.0	1.0	4.0	3.9	3.9	3.8	3.7	3.4	3.2
5.0	4.0	4.3	4.2	4.0	3.9	3.7	3.5	3.2
7.0	6.0	4.4	4.3	4.0	3.9	3.7	3.5	3.2
9.0	7.8	4.5	4.3	4.0	3.9	3.7	3.5	3.2
12.0	10.6	4.5	4.3	4.0	3.9	3.7	3.5	3.2
15.0	13.5	4.5	4.3	4.0	3.9	3.7	3.5	3.2

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL: ARXK14GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	**-16.0**	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	**-13.0**	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	**-10.0**	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	**-8.0**	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	**-6.0**	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	**-4.0**	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	**-2.0**	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	**-1.0**	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	**1.0**	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	**4.0**	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	**6.0**	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	**7.8**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	**10.6**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	**13.5**	5.7	5.3	5.0	4.8	4.7	4.3	4.0

■ MODEL: ARXK18GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL: ARXK24GCLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

8-4. SLIM DUCT/SLIM CONCEALED FLOOR TYPE

HEATING CAPACITY

■ MODEL: ARXD07GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	-16.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	-13.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	-10.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	-8.0	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	-6.0	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	-4.0	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	-2.0	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	-1.0	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	1.0	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	4.0	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	6.0	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	7.8	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	10.6	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	13.5	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : ARXD09GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	-16.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	-13.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	-10.0	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	-8.0	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	-6.0	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	-4.0	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	-2.0	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	-1.0	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	1.0	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	4.0	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	6.0	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	7.8	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	10.6	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	13.5	3.6	3.4	3.2	3.1	3.0	2.8	2.6

■ MODEL : ARXD12GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0
-15.0	-16.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
-12.0	-13.0	2.7	2.7	2.7	2.6	2.6	2.6	2.6
-9.0	-10.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
-7.0	-8.0	3.1	3.1	3.1	3.1	3.1	3.1	3.0
-5.0	-6.0	3.3	3.3	3.3	3.3	3.3	3.2	3.1
-3.0	-4.0	3.5	3.5	3.5	3.4	3.4	3.4	3.2
-1.0	-2.0	3.7	3.7	3.6	3.6	3.6	3.4	3.2
0.0	-1.0	3.8	3.7	3.7	3.7	3.7	3.4	3.2
2.0	1.0	4.0	3.9	3.9	3.8	3.7	3.4	3.2
5.0	4.0	4.3	4.2	4.0	3.9	3.7	3.5	3.2
7.0	6.0	4.4	4.3	4.0	3.9	3.7	3.5	3.2
9.0	7.8	4.5	4.3	4.0	3.9	3.7	3.5	3.2
12.0	10.6	4.5	4.3	4.0	3.9	3.7	3.5	3.2
15.0	13.5	4.5	4.3	4.0	3.9	3.7	3.5	3.2

■ MODEL : ARXD14GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	-20.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	-16.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	-13.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	-10.0	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	-8.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	-6.0	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	-4.0	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	-2.0	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	-1.0	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	1.0	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	4.0	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	6.0	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	7.8	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	10.6	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	13.5	5.7	5.3	5.0	4.8	4.7	4.3	4.0

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : ARXD18GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : ARXD24GALH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

8-5. MEDIUM STATIC PRESSURE DUCT TYPE

HEATING CAPACITY

■ MODEL : ARXA24GBLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

■ MODEL : ARXA30GBLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	**-16.0**	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	**-13.0**	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	**-10.0**	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	**-8.0**	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	**-6.0**	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	**-4.0**	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	**-2.0**	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	**-1.0**	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	**1.0**	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	**4.0**	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	**6.0**	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	**7.8**	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	**10.6**	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	**13.5**	11.3	10.7	10.0	9.7	9.3	8.7	8.0

■ MODEL : ARXA36GBLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	6.5	6.5	6.5	6.5	6.4	6.4	6.4
-15.0	**-16.0**	7.5	7.5	7.5	7.5	7.5	7.4	7.4
-12.0	**-13.0**	8.4	8.3	8.3	8.3	8.3	8.2	8.2
-9.0	**-10.0**	9.2	9.2	9.1	9.1	9.0	9.0	9.0
-7.0	**-8.0**	9.8	9.7	9.6	9.6	9.6	9.6	9.5
-5.0	**-6.0**	10.3	10.3	10.2	10.2	10.2	10.1	9.8
-3.0	**-4.0**	10.9	10.8	10.8	10.8	10.7	10.7	9.9
-1.0	**-2.0**	11.5	11.4	11.3	11.3	11.3	10.7	9.9
0.0	**-1.0**	11.8	11.7	11.6	11.6	11.5	10.7	9.9
2.0	**1.0**	12.4	12.3	12.2	12.0	11.6	10.8	9.9
5.0	**4.0**	13.3	13.2	12.5	12.1	11.7	10.8	10.0
7.0	**6.0**	13.8	13.3	12.5	12.1	11.7	10.8	10.0
9.0	**7.8**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
12.0	**10.6**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
15.0	**13.5**	14.2	13.3	12.5	12.1	11.7	10.8	10.0

■ MODEL : ARXA45GBLH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	7.3	7.2	7.2	7.2	7.2	7.2	7.2
-15.0	**-16.0**	8.4	8.4	8.4	8.4	8.4	8.3	8.3
-12.0	**-13.0**	9.4	9.3	9.3	9.2	9.2	9.2	9.2
-9.0	**-10.0**	10.3	10.3	10.2	10.2	10.1	10.1	10.0
-7.0	**-8.0**	10.9	10.9	10.8	10.8	10.8	10.7	10.7
-5.0	**-6.0**	11.6	11.5	11.5	11.4	11.4	11.3	11.0
-3.0	**-4.0**	12.2	12.1	12.1	12.0	12.0	12.0	11.1
-1.0	**-2.0**	12.9	12.8	12.7	12.7	12.6	12.0	11.1
0.0	**-1.0**	13.2	13.1	13.0	13.0	12.9	12.0	11.1
2.0	**1.0**	13.9	13.8	13.7	13.4	13.0	12.0	11.1
5.0	**4.0**	14.9	14.8	14.0	13.5	13.1	12.1	11.2
7.0	**6.0**	15.5	14.9	14.0	13.5	13.1	12.1	11.2
9.0	**7.8**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
12.0	**10.6**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
15.0	**13.5**	15.9	14.9	14.0	13.5	13.1	12.1	11.2

TC : Total Capacity kW.

8-6. HIGH STATIC PRESSURE DUCT TYPE

HEATING CAPACITY

■ MODEL : ARXC36GBTH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	6.5	6.5	6.5	6.5	6.4	6.4	6.4
-15.0	**-16.0**	7.5	7.5	7.5	7.5	7.5	7.4	7.4
-12.0	**-13.0**	8.4	8.3	8.3	8.3	8.3	8.2	8.2
-9.0	**-10.0**	9.2	9.2	9.1	9.1	9.0	9.0	9.0
-7.0	**-8.0**	9.8	9.7	9.6	9.6	9.6	9.6	9.5
-5.0	**-6.0**	10.3	10.3	10.2	10.2	10.2	10.1	9.8
-3.0	**-4.0**	10.9	10.8	10.8	10.8	10.7	10.7	9.9
-1.0	**-2.0**	11.5	11.4	11.3	11.3	11.3	10.7	9.9
0.0	**-1.0**	11.8	11.7	11.6	11.6	11.5	10.7	9.9
2.0	**1.0**	12.4	12.3	12.2	12.0	11.6	10.8	9.9
5.0	**4.0**	13.3	13.2	12.5	12.1	11.7	10.8	10.0
7.0	**6.0**	13.8	13.3	12.5	12.1	11.7	10.8	10.0
9.0	**7.8**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
12.0	**10.6**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
15.0	**13.5**	14.2	13.3	12.5	12.1	11.7	10.8	10.0

■ MODEL : ARXC45GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	7.3	7.2	7.2	7.2	7.2	7.2	7.2
-15.0	**-16.0**	8.4	8.4	8.4	8.4	8.4	8.3	8.3
-12.0	**-13.0**	9.4	9.3	9.3	9.2	9.2	9.2	9.2
-9.0	**-10.0**	10.3	10.3	10.2	10.2	10.1	10.1	10.0
-7.0	**-8.0**	10.9	10.9	10.8	10.8	10.8	10.7	10.7
-5.0	**-6.0**	11.6	11.5	11.5	11.4	11.4	11.3	11.0
-3.0	**-4.0**	12.2	12.1	12.1	12.0	12.0	12.0	11.1
-1.0	**-2.0**	12.9	12.8	12.7	12.7	12.6	12.0	11.1
0.0	**-1.0**	13.2	13.1	13.0	13.0	12.9	12.0	11.1
2.0	**1.0**	13.9	13.8	13.7	13.4	13.0	12.0	11.1
5.0	**4.0**	14.9	14.8	14.0	13.5	13.1	12.1	11.2
7.0	**6.0**	15.5	14.9	14.0	13.5	13.1	12.1	11.2
9.0	**7.8**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
12.0	**10.6**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
15.0	**13.5**	15.9	14.9	14.0	13.5	13.1	12.1	11.2

■ MODEL : ARXC60GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	10.4	10.3	10.3	10.3	10.3	10.3	10.2
-15.0	**-16.0**	12.1	12.0	12.0	11.9	11.9	11.9	11.9
-12.0	**-13.0**	13.4	13.3	13.3	13.2	13.2	13.1	13.1
-9.0	**-10.0**	14.7	14.7	14.5	14.5	14.5	14.4	14.3
-7.0	**-8.0**	15.6	15.6	15.4	15.4	15.4	15.3	15.2
-5.0	**-6.0**	16.5	16.4	16.4	16.3	16.3	16.2	15.7
-3.0	**-4.0**	17.5	17.3	17.3	17.2	17.1	17.1	15.8
-1.0	**-2.0**	18.4	18.3	18.2	18.1	18.0	17.1	15.8
0.0	**-1.0**	18.9	18.7	18.6	18.5	18.5	17.1	15.8
2.0	**1.0**	19.8	19.7	19.6	19.2	18.5	17.2	15.9
5.0	**4.0**	21.3	21.1	20.0	19.3	18.7	17.3	16.0
7.0	**6.0**	22.2	21.3	20.0	19.3	18.7	17.3	16.0
9.0	**7.8**	22.7	21.3	20.0	19.3	18.7	17.3	16.0
12.0	**10.6**	22.7	21.3	20.0	19.3	18.7	17.3	16.0
15.0	**13.5**	22.7	21.3	20.0	19.3	18.7	17.3	16.0

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL : ARXC72GBTH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	13.0	12.9	12.9	12.9	12.9	12.9	12.8
-15.0	**-16.0**	15.1	15.0	15.0	14.9	14.9	14.8	14.8
-12.0	**-13.0**	16.7	16.7	16.6	16.5	16.5	16.4	16.3
-9.0	**-10.0**	18.4	18.3	18.2	18.2	18.1	18.0	17.9
-7.0	**-8.0**	19.5	19.4	19.3	19.3	19.2	19.1	19.0
-5.0	**-6.0**	20.6	20.6	20.5	20.4	20.3	20.2	19.7
-3.0	**-4.0**	21.8	21.7	21.6	21.5	21.4	21.3	19.8
-1.0	**-2.0**	23.0	22.9	22.7	22.6	22.5	21.4	19.8
0.0	**-1.0**	23.6	23.4	23.3	23.2	23.1	21.4	19.8
2.0	**1.0**	24.8	24.6	24.4	24.0	23.2	21.5	19.8
5.0	**4.0**	26.6	26.4	25.0	24.1	23.3	21.7	20.0
7.0	**6.0**	27.7	26.6	25.0	24.1	23.3	21.7	20.0
9.0	**7.8**	28.3	26.6	25.0	24.1	23.3	21.7	20.0
12.0	**10.6**	28.3	26.7	25.0	24.1	23.3	21.7	20.0
15.0	**13.5**	28.3	26.7	25.0	24.1	23.3	21.7	20.0

■ MODEL : ARXC90GBTH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	14.6	14.5	14.5	14.5	14.4	14.4	14.3
-15.0	**-16.0**	16.9	16.8	16.8	16.7	16.7	16.6	16.6
-12.0	**-13.0**	18.8	18.7	18.6	18.5	18.5	18.4	18.3
-9.0	**-10.0**	20.6	20.5	20.4	20.4	20.3	20.2	20.1
-7.0	**-8.0**	21.9	21.8	21.6	21.6	21.5	21.4	21.3
-5.0	**-6.0**	23.1	23.0	22.9	22.8	22.8	22.7	22.0
-3.0	**-4.0**	24.4	24.3	24.2	24.1	24.0	23.9	22.1
-1.0	**-2.0**	25.8	25.6	25.4	25.3	25.2	24.0	22.1
0.0	**-1.0**	26.4	26.2	26.0	26.0	25.9	24.0	22.1
2.0	**1.0**	27.7	27.6	27.4	26.8	26.0	24.1	22.2
5.0	**4.0**	29.8	29.6	28.0	27.0	26.1	24.3	22.4
7.0	**6.0**	31.0	29.8	28.0	27.0	26.1	24.3	22.4
9.0	**7.8**	31.7	29.8	28.0	27.0	26.1	24.3	22.4
12.0	**10.6**	31.7	29.9	28.0	27.0	26.1	24.3	22.4
15.0	**13.5**	31.7	29.9	28.0	27.0	26.1	24.3	22.4

■ MODEL : ARXC96GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	16.4	16.3	16.3	16.3	16.2	16.2	16.1
-15.0	**-16.0**	19.0	18.9	18.9	18.8	18.8	18.7	18.7
-12.0	**-13.0**	21.1	21.0	20.9	20.8	20.8	20.7	20.6
-9.0	**-10.0**	23.2	23.1	22.9	22.9	22.8	22.7	22.6
-7.0	**-8.0**	24.6	24.5	24.3	24.3	24.2	24.1	24.0
-5.0	**-6.0**	26.0	25.9	25.8	25.7	25.6	25.5	24.8
-3.0	**-4.0**	27.5	27.3	27.2	27.1	27.0	26.9	26.9
-1.0	**-2.0**	29.0	28.8	28.6	28.5	28.4	27.0	24.9
0.0	**-1.0**	29.7	29.5	29.3	29.2	29.1	27.0	24.9
2.0	**1.0**	31.2	31.0	30.8	30.2	29.2	27.1	25.0
5.0	**4.0**	33.5	33.3	31.5	30.4	29.4	27.3	25.2
7.0	**6.0**	34.9	33.5	31.5	30.4	29.4	27.3	25.2
9.0	**7.8**	35.7	33.5	31.5	30.4	29.4	27.3	25.2
12.0	**10.6**	35.7	33.6	31.5	30.4	29.4	27.3	25.2
15.0	**13.5**	35.7	33.6	31.5	30.4	29.4	27.3	25.2

TC : Total Capacity kW.

8-7. COMPACT FLOOR TYPE

HEATING CAPACITY

■ MODEL : AG∗A004GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	**-16.0**	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	**-13.0**	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	**-10.0**	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	**-8.0**	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	**-6.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	**-4.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	**-2.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	**-1.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	**1.0**	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	**4.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	**6.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	**7.8**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	**10.6**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	**13.5**	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL : AG∗A007GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	**-16.0**	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	**-13.0**	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	**-10.0**	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	**-8.0**	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	**-6.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	**-4.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	**-2.0**	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	**-1.0**	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	**1.0**	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	**4.0**	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	**6.0**	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	**7.8**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	**10.6**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	**13.5**	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : AG∗A009GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	**-16.0**	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	**-13.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	**-10.0**	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	**-8.0**	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	**-6.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	**-4.0**	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	**-2.0**	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	**-1.0**	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	**1.0**	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	**4.0**	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	**6.0**	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	**7.8**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	**10.6**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	**13.5**	3.6	3.4	3.2	3.1	3.0	2.8	2.6

■ MODEL : AG∗A012GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.0
-15.0	**-16.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.4
-12.0	**-13.0**	2.7	2.7	2.7	2.6	2.6	2.6	2.6
-9.0	**-10.0**	2.9	2.9	2.9	2.9	2.9	2.9	2.9
-7.0	**-8.0**	3.1	3.1	3.1	3.1	3.1	3.1	3.0
-5.0	**-6.0**	3.3	3.3	3.3	3.3	3.3	3.2	3.1
-3.0	**-4.0**	3.5	3.5	3.5	3.4	3.4	3.4	3.2
-1.0	**-2.0**	3.7	3.7	3.6	3.6	3.6	3.4	3.2
0.0	**-1.0**	3.8	3.7	3.7	3.7	3.7	3.4	3.2
2.0	**1.0**	4.0	3.9	3.9	3.8	3.7	3.4	3.2
5.0	**4.0**	4.3	4.2	4.0	3.9	3.7	3.5	3.2
7.0	**6.0**	4.4	4.3	4.0	3.9	3.7	3.5	3.2
9.0	**7.8**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
12.0	**10.6**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
15.0	**13.5**	4.5	4.3	4.0	3.9	3.7	3.5	3.2

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AG∗A014GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.3
-15.0	**-16.0**	2.7	2.7	2.7	2.7	2.7	2.7	2.7
-12.0	**-13.0**	3.0	3.0	3.0	3.0	3.0	3.0	2.9
-9.0	**-10.0**	3.3	3.3	3.3	3.3	3.3	3.2	3.2
-7.0	**-8.0**	3.5	3.5	3.5	3.5	3.5	3.4	3.4
-5.0	**-6.0**	3.7	3.7	3.7	3.7	3.7	3.6	3.5
-3.0	**-4.0**	3.9	3.9	3.9	3.9	3.9	3.8	3.6
-1.0	**-2.0**	4.1	4.1	4.1	4.1	4.1	3.9	3.6
0.0	**-1.0**	4.2	4.2	4.2	4.2	4.2	3.9	3.6
2.0	**1.0**	4.5	4.4	4.4	4.3	4.2	3.9	3.6
5.0	**4.0**	4.8	4.8	4.5	4.3	4.2	3.9	3.6
7.0	**6.0**	5.0	4.8	4.5	4.3	4.2	3.9	3.6
9.0	**7.8**	5.1	4.8	4.5	4.3	4.2	3.9	3.6
12.0	**10.6**	5.1	4.8	4.5	4.3	4.2	3.9	3.6
15.0	**13.5**	5.1	4.8	4.5	4.3	4.2	3.9	3.6

TC : Total Capacity kW.

8-8. COMPACT FLOOR TYPE (EEV external model)

HEATING CAPACITY

■ MODEL : AG∗E004GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	**-16.0**	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	**-13.0**	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	**-10.0**	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	**-8.0**	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	**-6.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	**-4.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	**-2.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	**-1.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	**1.0**	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	**4.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	**6.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	**7.8**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	**10.6**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	**13.5**	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL : AG∗E007GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	**-16.0**	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	**-13.0**	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	**-10.0**	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	**-8.0**	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	**-6.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	**-4.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	**-2.0**	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	**-1.0**	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	**1.0**	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	**4.0**	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	**6.0**	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	**7.8**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	**10.6**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	**13.5**	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : AG∗E009GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	**-16.0**	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	**-13.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	**-10.0**	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	**-8.0**	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	**-6.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	**-4.0**	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	**-2.0**	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	**-1.0**	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	**1.0**	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	**4.0**	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	**6.0**	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	**7.8**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	**10.6**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	**13.5**	3.6	3.4	3.2	3.1	3.0	2.8	2.6

■ MODEL : AG∗E012GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.0
-15.0	**-16.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.4
-12.0	**-13.0**	2.7	2.7	2.7	2.6	2.6	2.6	2.6
-9.0	**-10.0**	2.9	2.9	2.9	2.9	2.9	2.9	2.9
-7.0	**-8.0**	3.1	3.1	3.1	3.1	3.1	3.1	3.0
-5.0	**-6.0**	3.3	3.3	3.3	3.3	3.3	3.2	3.1
-3.0	**-4.0**	3.5	3.5	3.5	3.4	3.4	3.4	3.2
-1.0	**-2.0**	3.7	3.7	3.6	3.6	3.6	3.4	3.2
0.0	**-1.0**	3.8	3.7	3.7	3.7	3.7	3.4	3.2
2.0	**1.0**	4.0	3.9	3.9	3.8	3.7	3.4	3.2
5.0	**4.0**	4.3	4.2	4.0	3.9	3.7	3.5	3.2
7.0	**6.0**	4.4	4.3	4.0	3.9	3.7	3.5	3.2
9.0	**7.8**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
12.0	**10.6**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
15.0	**13.5**	4.5	4.3	4.0	3.9	3.7	3.5	3.2

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AG∗E014GCAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.3
-15.0	**-16.0**	2.7	2.7	2.7	2.7	2.7	2.7	2.7
-12.0	**-13.0**	3.0	3.0	3.0	3.0	3.0	3.0	2.9
-9.0	**-10.0**	3.3	3.3	3.3	3.3	3.3	3.2	3.2
-7.0	**-8.0**	3.5	3.5	3.5	3.5	3.5	3.4	3.4
-5.0	**-6.0**	3.7	3.7	3.7	3.7	3.7	3.6	3.5
-3.0	**-4.0**	3.9	3.9	3.9	3.9	3.9	3.8	3.6
-1.0	**-2.0**	4.1	4.1	4.1	4.1	4.1	3.9	3.6
0.0	**-1.0**	4.2	4.2	4.2	4.2	4.2	3.9	3.6
2.0	**1.0**	4.5	4.4	4.4	4.3	4.2	3.9	3.6
5.0	**4.0**	4.8	4.8	4.5	4.3	4.2	3.9	3.6
7.0	**6.0**	5.0	4.8	4.5	4.3	4.2	3.9	3.6
9.0	**7.8**	5.1	4.8	4.5	4.3	4.2	3.9	3.6
12.0	**10.6**	5.1	4.8	4.5	4.3	4.2	3.9	3.6
15.0	**13.5**	5.1	4.8	4.5	4.3	4.2	3.9	3.6

TC : Total Capacity kW.

8-9. FLOOR / CEILING TYPE

HEATING CAPACITY

■ MODEL : AB∗A12GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.0
-15.0	**-16.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.4
-12.0	**-13.0**	2.7	2.7	2.7	2.6	2.6	2.6	2.6
-9.0	**-10.0**	2.9	2.9	2.9	2.9	2.9	2.9	2.9
-7.0	**-8.0**	3.1	3.1	3.1	3.1	3.1	3.1	3.0
-5.0	**-6.0**	3.3	3.3	3.3	3.3	3.3	3.2	3.1
-3.0	**-4.0**	3.5	3.5	3.5	3.4	3.4	3.4	3.2
-1.0	**-2.0**	3.7	3.7	3.6	3.6	3.6	3.4	3.2
0.0	**-1.0**	3.8	3.7	3.7	3.7	3.7	3.4	3.2
2.0	**1.0**	4.0	3.9	3.9	3.8	3.7	3.4	3.2
5.0	**4.0**	4.3	4.2	4.0	3.9	3.7	3.5	3.2
7.0	**6.0**	4.4	4.3	4.0	3.9	3.7	3.5	3.2
9.0	**7.8**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
12.0	**10.6**	4.5	4.3	4.0	3.9	3.7	3.5	3.2
15.0	**13.5**	4.5	4.3	4.0	3.9	3.7	3.5	3.2

■ MODEL : AB∗A14GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	**-16.0**	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	**-13.0**	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	**-10.0**	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	**-8.0**	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	**-6.0**	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	**-4.0**	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	**-2.0**	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	**-1.0**	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	**1.0**	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	**4.0**	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	**6.0**	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	**7.8**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	**10.6**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	**13.5**	5.7	5.3	5.0	4.8	4.7	4.3	4.0

■ MODEL : AB∗A18GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : AB∗A24GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

8-10. CEILING TYPE

HEATING CAPACITY

■ MODEL : AB∗A30GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	**-16.0**	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	**-13.0**	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	**-10.0**	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	**-8.0**	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	**-6.0**	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	**-4.0**	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	**-2.0**	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	**-1.0**	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	**1.0**	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	**4.0**	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	**6.0**	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	**7.8**	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	**10.6**	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	**13.5**	11.3	10.7	10.0	9.7	9.3	8.7	8.0

■ MODEL : AB∗A36GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	6.5	6.5	6.5	6.5	6.4	6.4	6.4
-15.0	**-16.0**	7.5	7.5	7.5	7.5	7.5	7.4	7.4
-12.0	**-13.0**	8.4	8.3	8.3	8.3	8.3	8.2	8.2
-9.0	**-10.0**	9.2	9.2	9.1	9.1	9.0	9.0	9.0
-7.0	**-8.0**	9.8	9.7	9.6	9.6	9.6	9.6	9.5
-5.0	**-6.0**	10.3	10.3	10.2	10.2	10.2	10.1	9.8
-3.0	**-4.0**	10.9	10.8	10.8	10.8	10.7	10.7	9.9
-1.0	**-2.0**	11.5	11.4	11.3	11.3	11.3	10.7	9.9
0.0	**-1.0**	11.8	11.7	11.6	11.6	11.5	10.7	9.9
2.0	**1.0**	12.4	12.3	12.2	12.0	11.6	10.8	9.9
5.0	**4.0**	13.3	13.2	12.5	12.1	11.7	10.8	10.0
7.0	**6.0**	13.8	13.3	12.5	12.1	11.7	10.8	10.0
9.0	**7.8**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
12.0	**10.6**	14.2	13.3	12.5	12.1	11.7	10.8	10.0
15.0	**13.5**	14.2	13.3	12.5	12.1	11.7	10.8	10.0

■ MODEL : AB∗A45GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	7.3	7.2	7.2	7.2	7.2	7.2	7.2
-15.0	**-16.0**	8.4	8.4	8.4	8.4	8.4	8.3	8.3
-12.0	**-13.0**	9.4	9.3	9.3	9.2	9.2	9.2	9.2
-9.0	**-10.0**	10.3	10.3	10.2	10.2	10.1	10.1	10.0
-7.0	**-8.0**	10.9	10.9	10.8	10.8	10.8	10.7	10.7
-5.0	**-6.0**	11.6	11.5	11.5	11.4	11.4	11.3	11.0
-3.0	**-4.0**	12.2	12.1	12.1	12.0	12.0	12.0	11.1
-1.0	**-2.0**	12.9	12.8	12.7	12.7	12.6	12.0	11.1
0.0	**-1.0**	13.2	13.1	13.0	13.0	12.9	12.0	11.1
2.0	**1.0**	13.9	13.8	13.7	13.4	13.0	12.0	11.1
5.0	**4.0**	14.9	14.8	14.0	13.5	13.1	12.1	11.2
7.0	**6.0**	15.5	14.9	14.0	13.5	13.1	12.1	11.2
9.0	**7.8**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
12.0	**10.6**	15.9	14.9	14.0	13.5	13.1	12.1	11.2
15.0	**13.5**	15.9	14.9	14.0	13.5	13.1	12.1	11.2

■ MODEL : AB∗A54GATH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	8.3	8.3	8.3	8.3	8.2	8.2	8.2
-15.0	**-16.0**	9.7	9.6	9.6	9.5	9.5	9.5	9.5
-12.0	**-13.0**	10.7	10.7	10.6	10.6	10.6	10.5	10.5
-9.0	**-10.0**	11.8	11.7	11.6	11.6	11.6	11.5	11.5
-7.0	**-8.0**	12.5	12.4	12.3	12.3	12.3	12.2	12.2
-5.0	**-6.0**	13.2	13.2	13.1	13.1	13.0	13.0	12.6
-3.0	**-4.0**	14.0	13.9	13.8	13.8	13.7	13.7	12.6
-1.0	**-2.0**	14.7	14.6	14.5	14.5	14.4	13.7	12.6
0.0	**-1.0**	15.1	15.0	14.9	14.8	14.8	13.7	12.6
2.0	**1.0**	15.8	15.7	15.6	15.3	14.8	13.8	12.7
5.0	**4.0**	17.0	16.9	16.0	15.4	14.9	13.9	12.8
7.0	**6.0**	17.7	17.0	16.0	15.4	14.9	13.9	12.8
9.0	**7.8**	18.1	17.0	16.0	15.4	14.9	13.9	12.8
12.0	**10.6**	18.1	17.1	16.0	15.4	14.9	13.9	12.8
15.0	**13.5**	18.1	17.1	16.0	15.4	14.9	13.9	12.8

TC : Total Capacity kW.

8-11. WALL MOUNTED TYPE

HEATING CAPACITY

■ MODEL : AS∗A004GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	**-16.0**	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	**-13.0**	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	**-10.0**	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	**-8.0**	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	**-6.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	**-4.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	**-2.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	**-1.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	**1.0**	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	**4.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	**6.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	**7.8**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	**10.6**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	**13.5**	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL : AS∗A007GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	**-16.0**	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	**-13.0**	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	**-10.0**	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	**-8.0**	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	**-6.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	**-4.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	**-2.0**	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	**-1.0**	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	**1.0**	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	**4.0**	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	**6.0**	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	**7.8**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	**10.6**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	**13.5**	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : AS∗A009GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	**-16.0**	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	**-13.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	**-10.0**	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	**-8.0**	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	**-6.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	**-4.0**	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	**-2.0**	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	**-1.0**	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	**1.0**	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	**4.0**	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	**6.0**	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	**7.8**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	**10.6**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	**13.5**	3.6	3.4	3.2	3.1	3.0	2.8	2.6

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL : AS∗A12GACH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-15.0	**-16.0**	2.5	2.5	2.5	2.4	2.4	2.4	2.4
-12.0	**-13.0**	2.7	2.7	2.7	2.7	2.7	2.7	2.7
-9.0	**-10.0**	3.0	3.0	3.0	3.0	3.0	3.0	2.9
-7.0	**-8.0**	3.2	3.2	3.2	3.2	3.1	3.1	3.1
-5.0	**-6.0**	3.4	3.4	3.4	3.3	3.3	3.3	3.2
-3.0	**-4.0**	3.6	3.6	3.5	3.5	3.5	3.5	3.2
-1.0	**-2.0**	3.8	3.7	3.7	3.7	3.7	3.5	3.2
0.0	**-1.0**	3.9	3.8	3.8	3.8	3.8	3.5	3.2
2.0	**1.0**	4.1	4.0	4.0	3.9	3.8	3.5	3.3
5.0	**4.0**	4.4	4.3	4.1	4.0	3.8	3.6	3.3
7.0	**6.0**	4.5	4.4	4.1	4.0	3.8	3.6	3.3
9.0	**7.8**	4.6	4.4	4.1	4.0	3.8	3.6	3.3
12.0	**10.6**	4.6	4.4	4.1	4.0	3.8	3.6	3.3
15.0	**13.5**	4.6	4.4	4.1	4.0	3.8	3.6	3.3

■ MODEL : AS∗A14GACH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	**-16.0**	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	**-13.0**	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	**-10.0**	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	**-8.0**	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	**-6.0**	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	**-4.0**	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	**-2.0**	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	**-1.0**	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	**1.0**	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	**4.0**	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	**6.0**	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	**7.8**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	**10.6**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	**13.5**	5.7	5.3	5.0	4.8	4.7	4.3	4.0

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AS∗A18GBCH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	3.3	3.3	3.3	3.3	3.2	3.2	3.2
-15.0	**-16.0**	3.8	3.8	3.8	3.8	3.8	3.7	3.7
-12.0	**-13.0**	4.2	4.2	4.2	4.2	4.2	4.1	4.1
-9.0	**-10.0**	4.6	4.6	4.6	4.6	4.6	4.5	4.5
-7.0	**-8.0**	4.9	4.9	4.9	4.9	4.8	4.8	4.8
-5.0	**-6.0**	5.2	5.2	5.2	5.1	5.1	5.1	5.0
-3.0	**-4.0**	5.5	5.5	5.4	5.4	5.4	5.4	5.0
-1.0	**-2.0**	5.8	5.8	5.7	5.7	5.7	5.4	5.0
0.0	**-1.0**	5.9	5.9	5.9	5.8	5.8	5.4	5.0
2.0	**1.0**	6.2	6.2	6.2	6.0	5.8	5.4	5.0
5.0	**4.0**	6.7	6.7	6.3	6.1	5.9	5.5	5.0
7.0	**6.0**	7.0	6.7	6.3	6.1	5.9	5.5	5.0
9.0	**7.8**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
12.0	**10.6**	7.1	6.7	6.3	6.1	5.9	5.5	5.0
15.0	**13.5**	7.1	6.7	6.3	6.1	5.9	5.5	5.0

■ MODEL : AS∗A24GBCH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	4.2	4.1	4.1	4.1	4.1	4.1	4.1
-15.0	**-16.0**	4.8	4.8	4.8	4.8	4.8	4.7	4.7
-12.0	**-13.0**	5.4	5.3	5.3	5.3	5.3	5.3	5.2
-9.0	**-10.0**	5.9	5.9	5.8	5.8	5.8	5.8	5.7
-7.0	**-8.0**	6.2	6.2	6.2	6.2	6.1	6.1	6.1
-5.0	**-6.0**	6.6	6.6	6.6	6.5	6.5	6.5	6.3
-3.0	**-4.0**	7.0	6.9	6.9	6.9	6.9	6.8	6.3
-1.0	**-2.0**	7.4	7.3	7.3	7.2	7.2	6.9	6.3
0.0	**-1.0**	7.5	7.5	7.4	7.4	7.4	6.9	6.3
2.0	**1.0**	7.9	7.9	7.8	7.7	7.4	6.9	6.3
5.0	**4.0**	8.5	8.5	8.0	7.7	7.5	6.9	6.4
7.0	**6.0**	8.9	8.5	8.0	7.7	7.5	6.9	6.4
9.0	**7.8**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
12.0	**10.6**	9.1	8.5	8.0	7.7	7.5	6.9	6.4
15.0	**13.5**	9.1	8.5	8.0	7.7	7.5	6.9	6.4

TC : Total Capacity kW.

MODEL SELECTION

HEATING CAPACITY

■ MODEL : AS∗A030GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.2	5.2	5.2	5.2	5.1	5.1	5.1
-15.0	**-16.0**	6.0	6.0	6.0	6.0	6.0	5.9	5.9
-12.0	**-13.0**	6.7	6.7	6.6	6.6	6.6	6.6	6.5
-9.0	**-10.0**	7.4	7.3	7.3	7.3	7.2	7.2	7.2
-7.0	**-8.0**	7.8	7.8	7.7	7.7	7.7	7.7	7.6
-5.0	**-6.0**	8.3	8.2	8.2	8.2	8.1	8.1	7.9
-3.0	**-4.0**	8.7	8.7	8.6	8.6	8.6	8.5	7.9
-1.0	**-2.0**	9.2	9.1	9.1	9.0	9.0	8.6	7.9
0.0	**-1.0**	9.4	9.4	9.3	9.3	9.2	8.6	7.9
2.0	**1.0**	9.9	9.8	9.8	9.6	9.3	8.6	7.9
5.0	**4.0**	10.6	10.6	10.0	9.7	9.3	8.7	8.0
7.0	**6.0**	11.1	10.6	10.0	9.7	9.3	8.7	8.0
9.0	**7.8**	11.3	10.6	10.0	9.7	9.3	8.7	8.0
12.0	**10.6**	11.3	10.7	10.0	9.7	9.3	8.7	8.0
15.0	**13.5**	11.3	10.7	10.0	9.7	9.3	8.7	8.0

■ MODEL : AS∗A034GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	5.8	5.8	5.8	5.8	5.8	5.8	5.7
-15.0	**-16.0**	6.8	6.7	6.7	6.7	6.7	6.6	6.6
-12.0	**-13.0**	7.5	7.5	7.4	7.4	7.4	7.4	7.3
-9.0	**-10.0**	8.2	8.2	8.1	8.1	8.1	8.1	8.0
-7.0	**-8.0**	8.7	8.7	8.6	8.6	8.6	8.6	8.5
-5.0	**-6.0**	9.2	9.2	9.2	9.1	9.1	9.1	8.8
-3.0	**-4.0**	9.8	9.7	9.7	9.6	9.6	9.6	8.9
-1.0	**-2.0**	10.3	10.2	10.2	10.1	10.1	9.6	8.9
0.0	**-1.0**	10.6	10.5	10.4	10.4	10.3	9.6	8.9
2.0	**1.0**	11.1	11.0	11.0	10.7	10.4	9.6	8.9
5.0	**4.0**	11.9	11.8	11.2	10.8	10.5	9.7	9.0
7.0	**6.0**	12.4	11.9	11.2	10.8	10.4	9.7	9.0
9.0	**7.8**	12.7	11.9	11.2	10.8	10.5	9.7	9.0
12.0	**10.6**	12.7	11.9	11.2	10.8	10.5	9.7	9.0
15.0	**13.5**	12.7	11.9	11.2	10.8	10.5	9.7	9.0

TC : Total Capacity kW.

8-12. WALL MOUNTED TYPE (EEV external model)

HEATING CAPACITY

■ MODEL : AS∗E004GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	0.7	0.7	0.7	0.7	0.7	0.7	0.7
-15.0	**-16.0**	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-12.0	**-13.0**	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-9.0	**-10.0**	1.0	1.0	0.9	0.9	0.9	0.9	0.9
-7.0	**-8.0**	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-5.0	**-6.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-3.0	**-4.0**	1.1	1.1	1.1	1.1	1.1	1.1	1.0
-1.0	**-2.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
0.0	**-1.0**	1.2	1.2	1.2	1.2	1.2	1.1	1.0
2.0	**1.0**	1.3	1.3	1.3	1.2	1.2	1.1	1.0
5.0	**4.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
7.0	**6.0**	1.4	1.4	1.3	1.3	1.2	1.1	1.0
9.0	**7.8**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
12.0	**10.6**	1.5	1.4	1.3	1.3	1.2	1.1	1.0
15.0	**13.5**	1.5	1.4	1.3	1.3	1.2	1.1	1.0

■ MODEL : AS∗E007GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.5	1.4	1.4	1.4	1.4	1.4	1.4
-15.0	**-16.0**	1.7	1.7	1.7	1.7	1.7	1.7	1.7
-12.0	**-13.0**	1.9	1.9	1.9	1.8	1.8	1.8	1.8
-9.0	**-10.0**	2.1	2.1	2.0	2.0	2.0	2.0	2.0
-7.0	**-8.0**	2.2	2.2	2.2	2.2	2.2	2.1	2.1
-5.0	**-6.0**	2.3	2.3	2.3	2.3	2.3	2.3	2.2
-3.0	**-4.0**	2.4	2.4	2.4	2.4	2.4	2.4	2.2
-1.0	**-2.0**	2.6	2.6	2.5	2.5	2.5	2.4	2.2
0.0	**-1.0**	2.6	2.6	2.6	2.6	2.6	2.4	2.2
2.0	**1.0**	2.8	2.8	2.7	2.7	2.6	2.4	2.2
5.0	**4.0**	3.0	3.0	2.8	2.7	2.6	2.4	2.2
7.0	**6.0**	3.1	3.0	2.8	2.7	2.6	2.4	2.2
9.0	**7.8**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
12.0	**10.6**	3.2	3.0	2.8	2.7	2.6	2.4	2.2
15.0	**13.5**	3.2	3.0	2.8	2.7	2.6	2.4	2.2

■ MODEL : AS∗E009GTAH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	1.7	1.7	1.7	1.7	1.6	1.6	1.6
-15.0	**-16.0**	1.9	1.9	1.9	1.9	1.9	1.9	1.9
-12.0	**-13.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-9.0	**-10.0**	2.4	2.3	2.3	2.3	2.3	2.3	2.3
-7.0	**-8.0**	2.5	2.5	2.5	2.5	2.5	2.4	2.4
-5.0	**-6.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.5
-3.0	**-4.0**	2.8	2.8	2.8	2.8	2.7	2.7	2.5
-1.0	**-2.0**	2.9	2.9	2.9	2.9	2.9	2.7	2.5
0.0	**-1.0**	3.0	3.0	3.0	3.0	3.0	2.7	2.5
2.0	**1.0**	3.2	3.1	3.1	3.1	3.0	2.8	2.5
5.0	**4.0**	3.4	3.4	3.2	3.1	3.0	2.8	2.6
7.0	**6.0**	3.5	3.4	3.2	3.1	3.0	2.8	2.6
9.0	**7.8**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
12.0	**10.6**	3.6	3.4	3.2	3.1	3.0	2.8	2.6
15.0	**13.5**	3.6	3.4	3.2	3.1	3.0	2.8	2.6

TC : Total Capacity kW.

HEATING CAPACITY

■ MODEL : AS∗E12GACH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.1	2.1	2.1	2.1	2.1	2.1	2.1
-15.0	**-16.0**	2.5	2.5	2.5	2.4	2.4	2.4	2.4
-12.0	**-13.0**	2.7	2.7	2.7	2.7	2.7	2.7	2.7
-9.0	**-10.0**	3.0	3.0	3.0	3.0	3.0	3.0	2.9
-7.0	**-8.0**	3.2	3.2	3.2	3.2	3.1	3.1	3.1
-5.0	**-6.0**	3.4	3.4	3.4	3.3	3.3	3.3	3.2
-3.0	**-4.0**	3.6	3.6	3.5	3.5	3.5	3.5	3.2
-1.0	**-2.0**	3.8	3.7	3.7	3.7	3.7	3.5	3.2
0.0	**-1.0**	3.9	3.8	3.8	3.8	3.8	3.5	3.2
2.0	**1.0**	4.1	4.0	4.0	3.9	3.8	3.5	3.3
5.0	**4.0**	4.4	4.3	4.1	4.0	3.8	3.6	3.3
7.0	**6.0**	4.5	4.4	4.1	4.0	3.8	3.6	3.3
9.0	**7.8**	4.6	4.4	4.1	4.0	3.8	3.6	3.3
12.0	**10.6**	4.6	4.4	4.1	4.0	3.8	3.6	3.3
15.0	**13.5**	4.6	4.4	4.1	4.0	3.8	3.6	3.3

■ MODEL : AS∗E14GACH

Outdoor Temperature		Indoor temperature						
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB	26°CDB
(°CDB)	(°CWB)	TC	TC	TC	TC	TC	TC	TC
-19.3	**-20.0**	2.6	2.6	2.6	2.6	2.6	2.6	2.6
-15.0	**-16.0**	3.0	3.0	3.0	3.0	3.0	3.0	3.0
-12.0	**-13.0**	3.3	3.3	3.3	3.3	3.3	3.3	3.3
-9.0	**-10.0**	3.7	3.7	3.6	3.6	3.6	3.6	3.6
-7.0	**-8.0**	3.9	3.9	3.9	3.9	3.8	3.8	3.8
-5.0	**-6.0**	4.1	4.1	4.1	4.1	4.1	4.0	3.9
-3.0	**-4.0**	4.4	4.3	4.3	4.3	4.3	4.3	4.0
-1.0	**-2.0**	4.6	4.6	4.5	4.5	4.5	4.3	4.0
0.0	**-1.0**	4.7	4.7	4.7	4.6	4.6	4.3	4.0
2.0	**1.0**	5.0	4.9	4.9	4.8	4.6	4.3	4.0
5.0	**4.0**	5.3	5.3	5.0	4.8	4.7	4.3	4.0
7.0	**6.0**	5.5	5.3	5.0	4.8	4.7	4.3	4.0
9.0	**7.8**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
12.0	**10.6**	5.7	5.3	5.0	4.8	4.7	4.3	4.0
15.0	**13.5**	5.7	5.3	5.0	4.8	4.7	4.3	4.0

TC : Total Capacity kW.

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

3. OUTDOOR UNITS

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2017.03.31

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1. SPECIFICATIONS

OUTDOOR UNITS

Nominal system capacity			HP	8	10	12
Model name				AJ*072LELAH	AJ*090LELAH	AJ*0108LELAH
Power source				3N ~ 400 V, 50 Hz		
Available voltage range				342 to 456 V		
Capacity	Cooling		kW	22.4	28.0	33.5
	Nominal Heating			22.4	28.0	33.5
	Max Heating			25.0	31.5	37.5
Input power	Cooling		kW	6.30	8.59	10.42
	Nominal Heating			4.65	6.61	8.18
	Max Heating			5.45	8.29	10.25
EER	Cooling		W / W	3.56	3.26	3.22
COP	Nominal Heating			4.82	4.24	4.10
	Max Heating			4.56	3.80	3.66
Fan	Type × Quantity			Propeller Fan×2		
	Airflow rate	High	m^3 / h (l / s)	8400	9000	11000
	Motor	Type × Quantity		DC motor×2		
		Output	W	111 x 2		200 x 2
Sound power level	Cooling		dB(A	66	69	73
	Heating			-	-	-
Sound pressure level	Cooling		dB(A)	52	54	59
	Heating			54	57	61
Heat exchanger	Length		mm	1293		
	Fin pitch			1.45		
	Rows × Stages			2 x 66	2.6 x 66	
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Corrugate (Aluminium)		
		Surface treatment		Corrosion Resistance (Blue Fin)		
Compressor	Type × Quantity			Scroll(inv)×1		
	Motor output		kW	4.70		
	Crankcase heater		W	35		
Refrigerant	Type			R410A		
	Charge		kg	7.0	7.5	7.5
Refrigerant oil	Type			PVE		
Enclosure	Material			Painted galvanized steel		
	Colour			Beige (10YR 7.5/1.0NN)		
Dimensions (H × W × D)	Net		mm	1428 x 1080 x 480		
	Gross			1557 x 1174 x 600		
Weight	Net		kg	170	177	178
	Gross			188	196	197
Connection pipe	Pipe diameter	Liquid	mm	9.52		12.70
		Gas		19.05	22.20	28.58
	Method	Liquid		Brazing		
		Gas		Brazing		
	Max. length		m	120		
	Max. height difference			50 / 40 (Outdoor unit : Upper / Lower)		
Operation temperature range	Cooling		°CDB	-15 to 46		
	Heating			-20 to 21		
Defrost method				Reversed Cycle		
Compressor capacity control (Steps / Range)				106 steps / 12.5 to 100%		
Connectable indoor units			Number	1-20	1-25	1-30

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

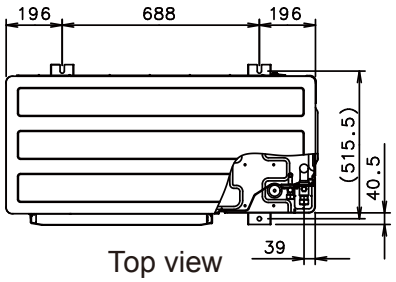
The protective function might work when using it outside the operation range.

OUTDOOR UNITS

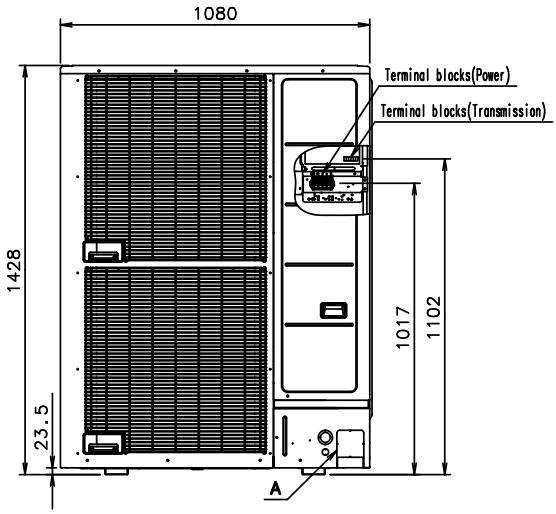
2. DIMENSIONS

■ MODELS: AJ∗072LELAH, AJ∗090LELAH, AJ∗108LELAH

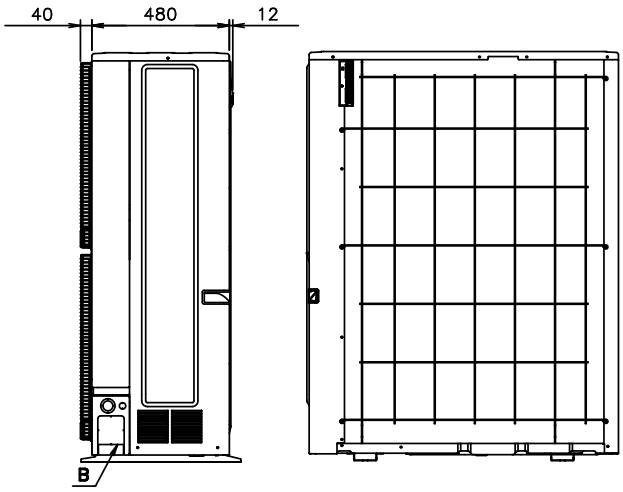
(Unit : mm)



Top view

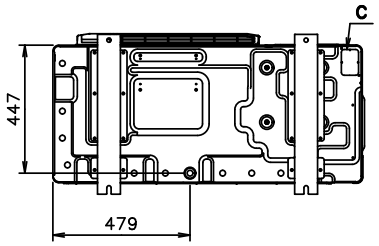


Front view



Side view

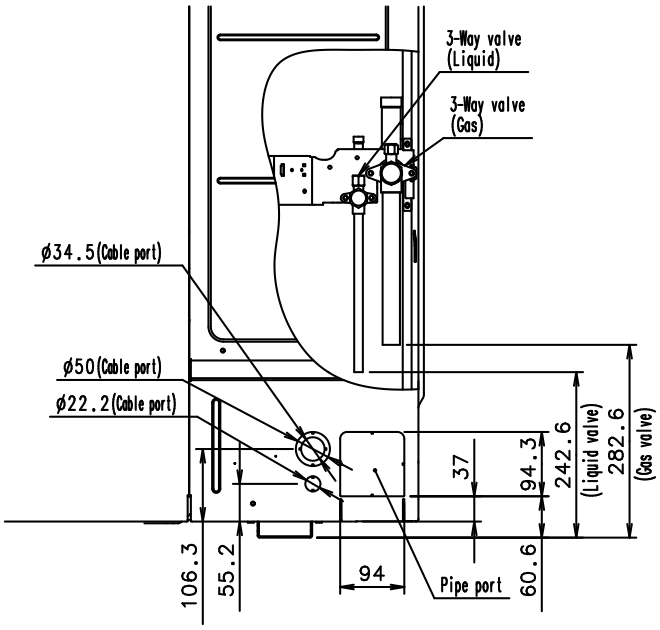
Rear view



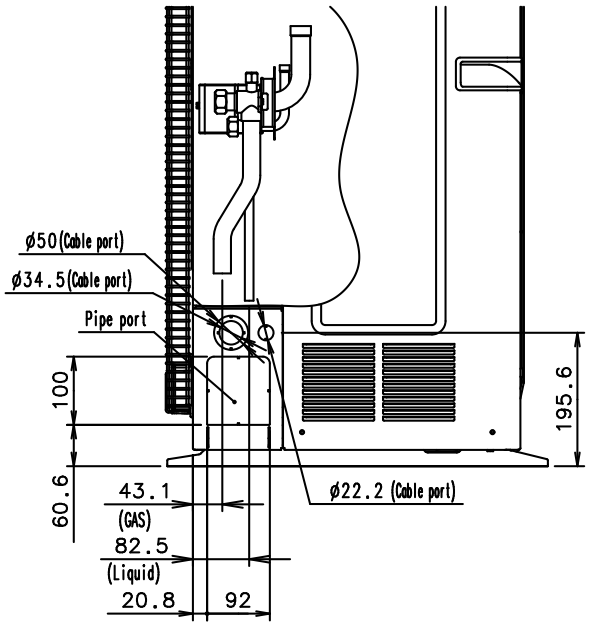
Bottom view

OUTDOOR UNITS

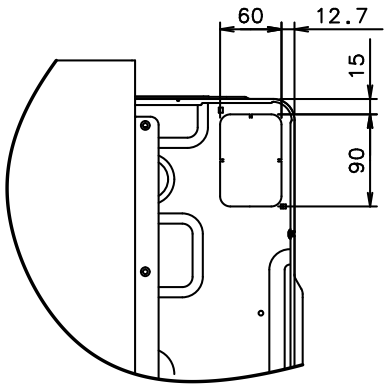
(Unit : mm)



Detail A



Detail B



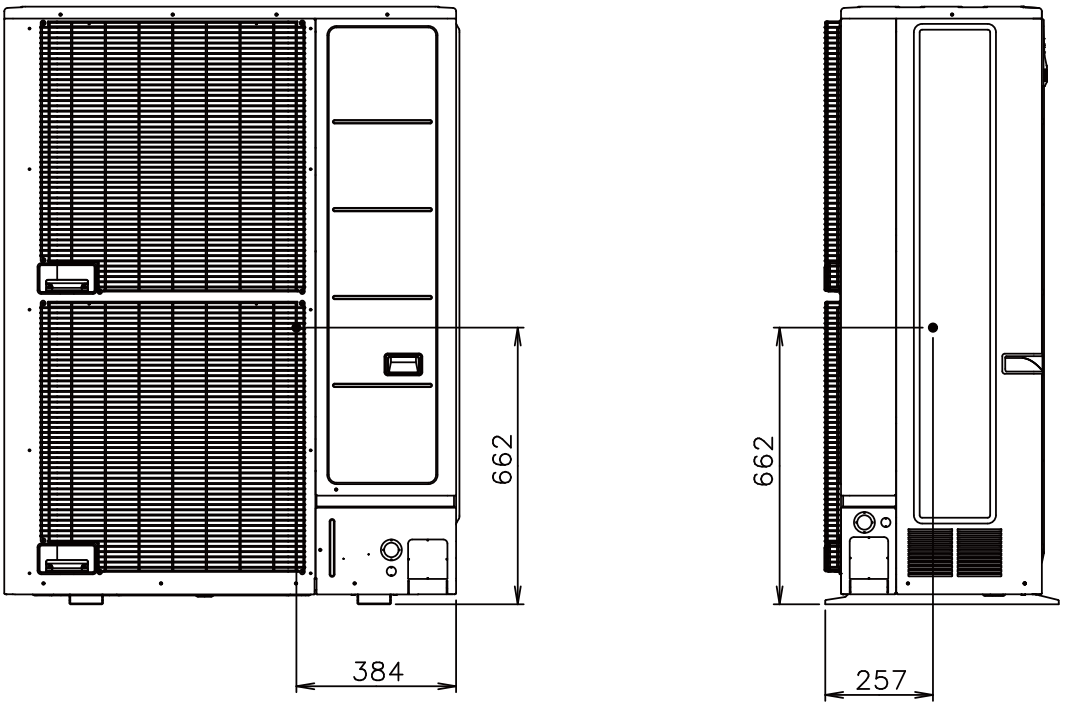
Detail C

OUTDOOR UNITS

■ CENTER OF GRAVITY POSITION

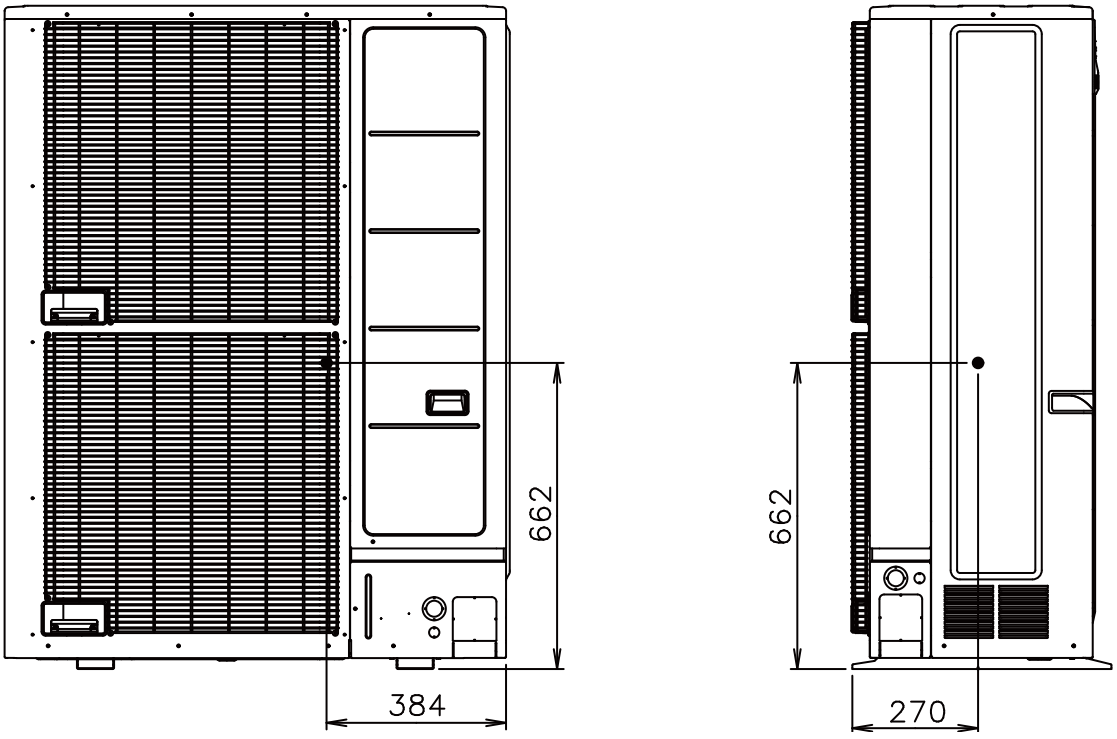
● Model: AJ∗072LELAH

(Unit : mm)



● : Center of gravity

● Models: AJ∗090LELAH, AJ∗108LELAH

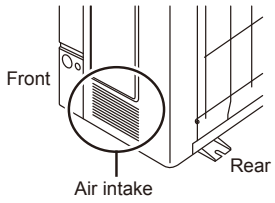


● : Center of gravity

3. INSTALLATION SPACE

⚠Caution

- The installation space shown in the following examples is based on an ambient temperature under cooling operation of 35 °C DB at the air intake of the outdoor unit.
  Provide more space around the air intake than shown in the examples if the ambient temperature exceeds 35 °C DB or if the thermal load of all of the outdoor units exceeds the capacity.
- Consider the transportation route, installation space, maintenance space, and access, and install the unit in a location with sufficient space for the refrigerant piping.
- Observe the installation space specifications that are shown in the figures.
  Provide the same space for the air intake at the rear of the outdoor unit.
  If the installation is not performed according to the specifications, it could cause a short circuit and result in a lack of operating performance.
  As a result, the outdoor unit might easily be stopped by high-pressure protection.
- When there is a wall at the right side of the unit,provide a space of 100mm or more.



- Installation methods not shown in the following examples are not recommended.
  Performance may drop significantly.

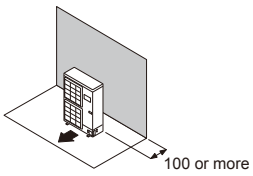
OUTDOOR UNITS

3-1. SINGLE OUTDOOR UNIT INSTALLATION

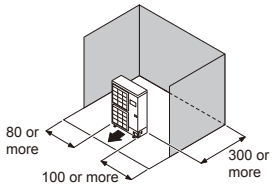
■ WHEN THE UPWARD AREA IS OPEN

Unit : mm

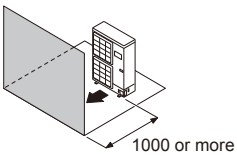
● Obstacles at rear only



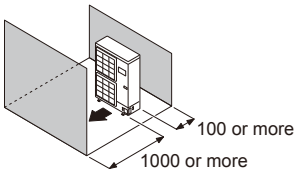
● Obstacles at rear and sides only*



● Obstacles at front only

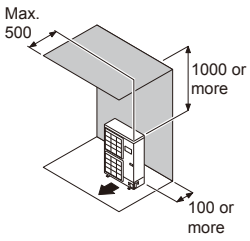


● Obstacles at front and rear only

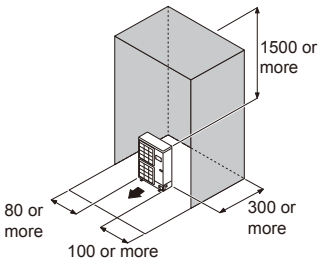


■ WHEN AN OBSTRUCTION IS PRESENT ALSO IN THE UPWARD AREA

● Obstacles at rear and above only



● Obstacles at rear, sides, and above only*



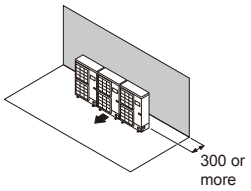
*: When side walls are protruding frontward, refer to "3-4. DUCT INSTALLATION".

3-2. MULTIPLE OUTDOOR UNIT INSTALLATION

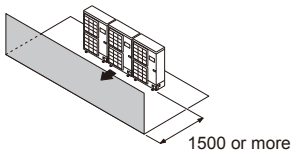
- Provide at least 100mm of space between the outdoor units if multiple units are installed.
- When routing the piping from the side of an outdoor unit, provide space for the piping.
- No more than 3 units must be installed side by side.
  When 3 units or more are arranged in a line, provide the space as shown in the following example when an obstruction is present also in the upward area.

■ WHEN THE UPWARD AREA IS OPEN

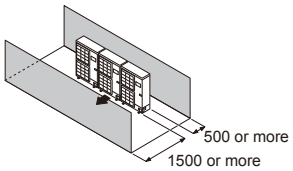
● Obstacles at rear only



●Obstacles at front only

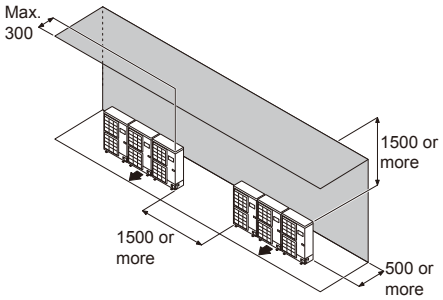


●Obstacles at front and rear only



■ WHEN AN OBSTRUCTION IS PRESENT ALSO IN THE UPWARD AREA

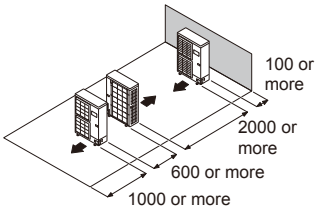
● Obstacles at rear and above only



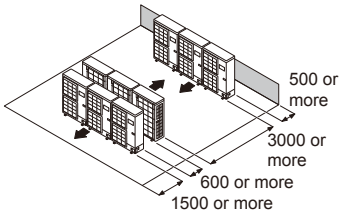
3-3. OUTDOOR UNITS INSTALLATION IN MULTI ROW

- The following settings are not recommended in case of cooling by a low outside temperature.

● Single parallel unit arrangement



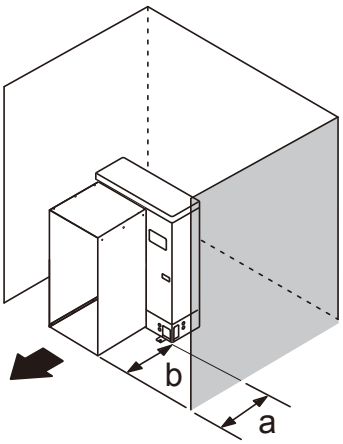
● Multiple parallel unit arrangement



3-4. DUCT INSTALLATION

When there are obstacles at rear, and the side walls are protruding frontward, install a duct as shown in the figure below.

Installation of the unit without duct may lead capacity degradation caused by a short circuit, operation stop by high pressure protection, or other malfunction.



a: Protruding distance of side walls

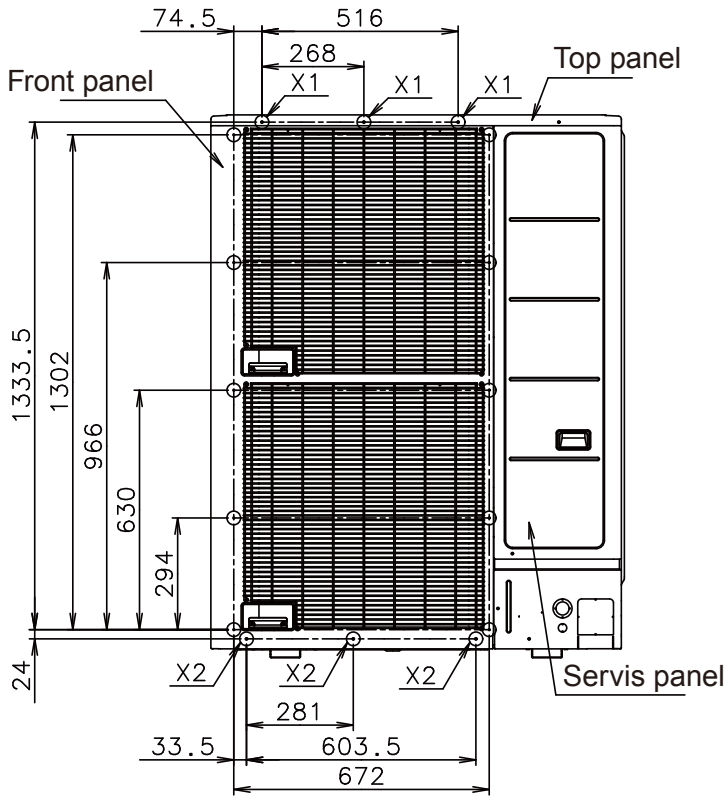
b: Length of the duct

$a \leqq b$

■ ABOUT THE DUCT

The duct needs to be purchased locally. When installing the duct, be careful of the followings;

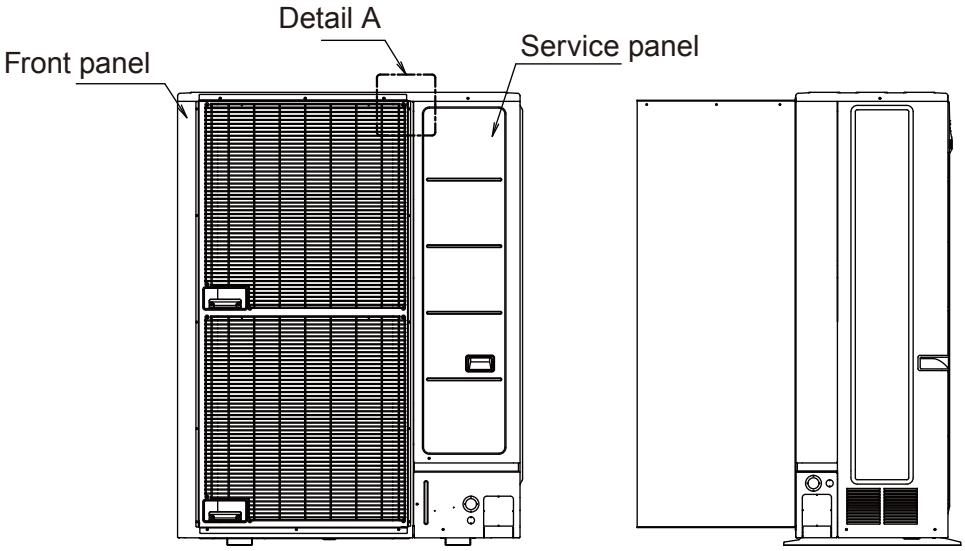
- Do not cover the service panel. If covered, the panel cannot be opened for servicing.
- Screw holes for installing the duct are placed on the front panel. Fix the duct by using a ø5 tapping screw. (See the following diagram for the location.)

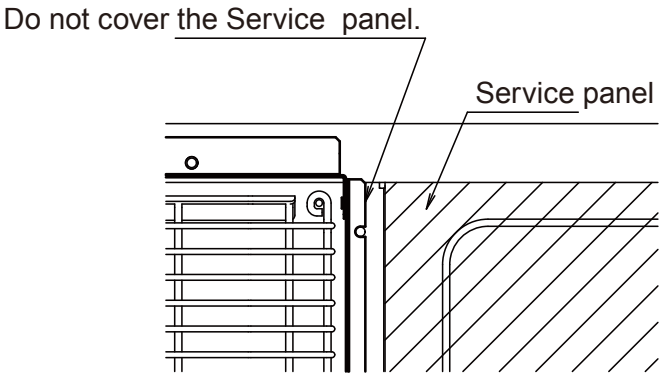


X1: Remove the screw securing the top panel, and reuse it for fixing the duct.

X2: Remove the screw securing the front panel, and reuse it for fixing the duct.

■ DUCT INSTALLATION EXAMPLE

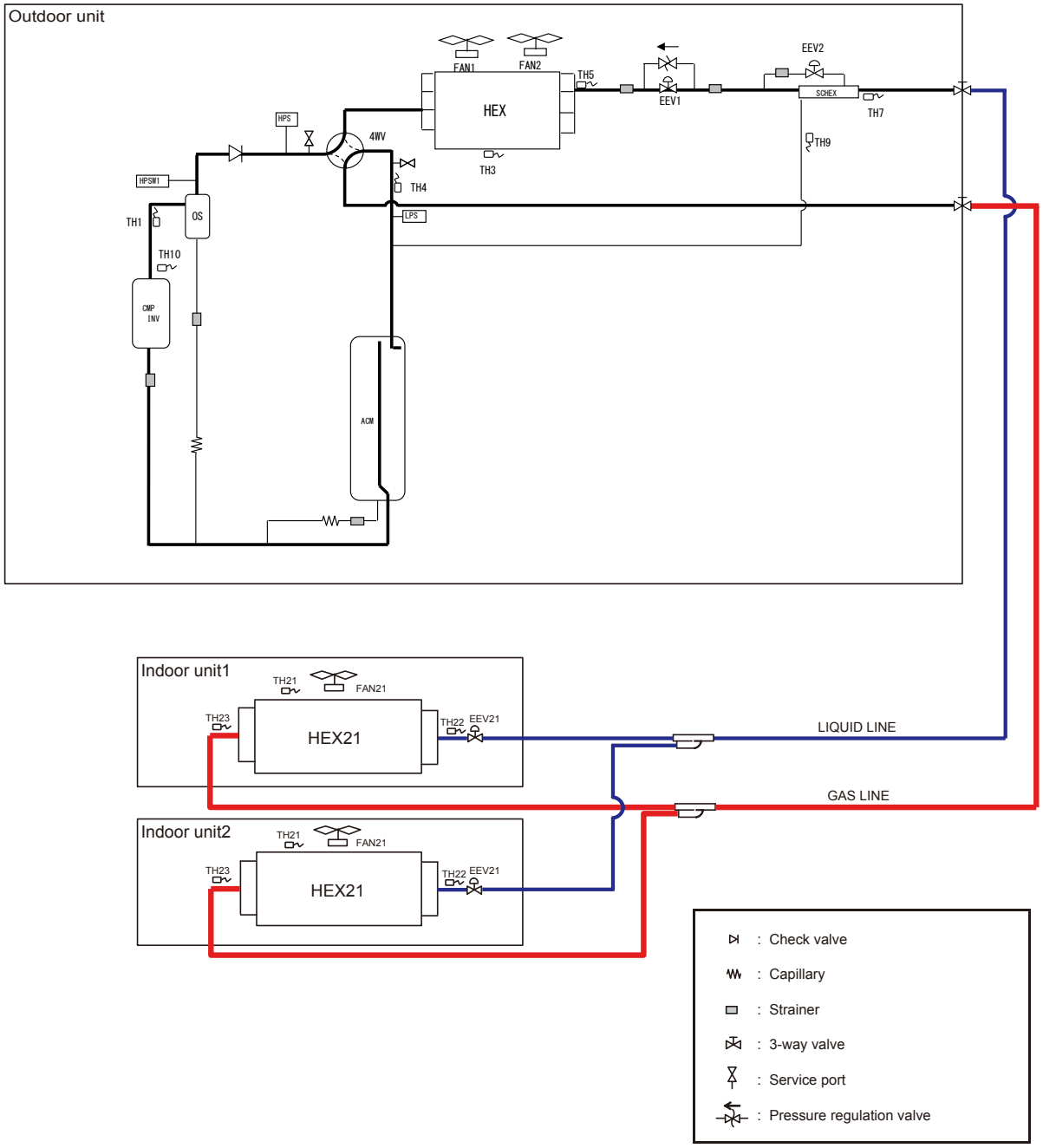




Detail A

4. REFRIGERANT CIRCUIT

■ MODELS: AJ∗072LELAH, AJ∗090LELAH, AJ∗108LELAH



■ SYMBOL DESCRIPTION

● Outdoor unit

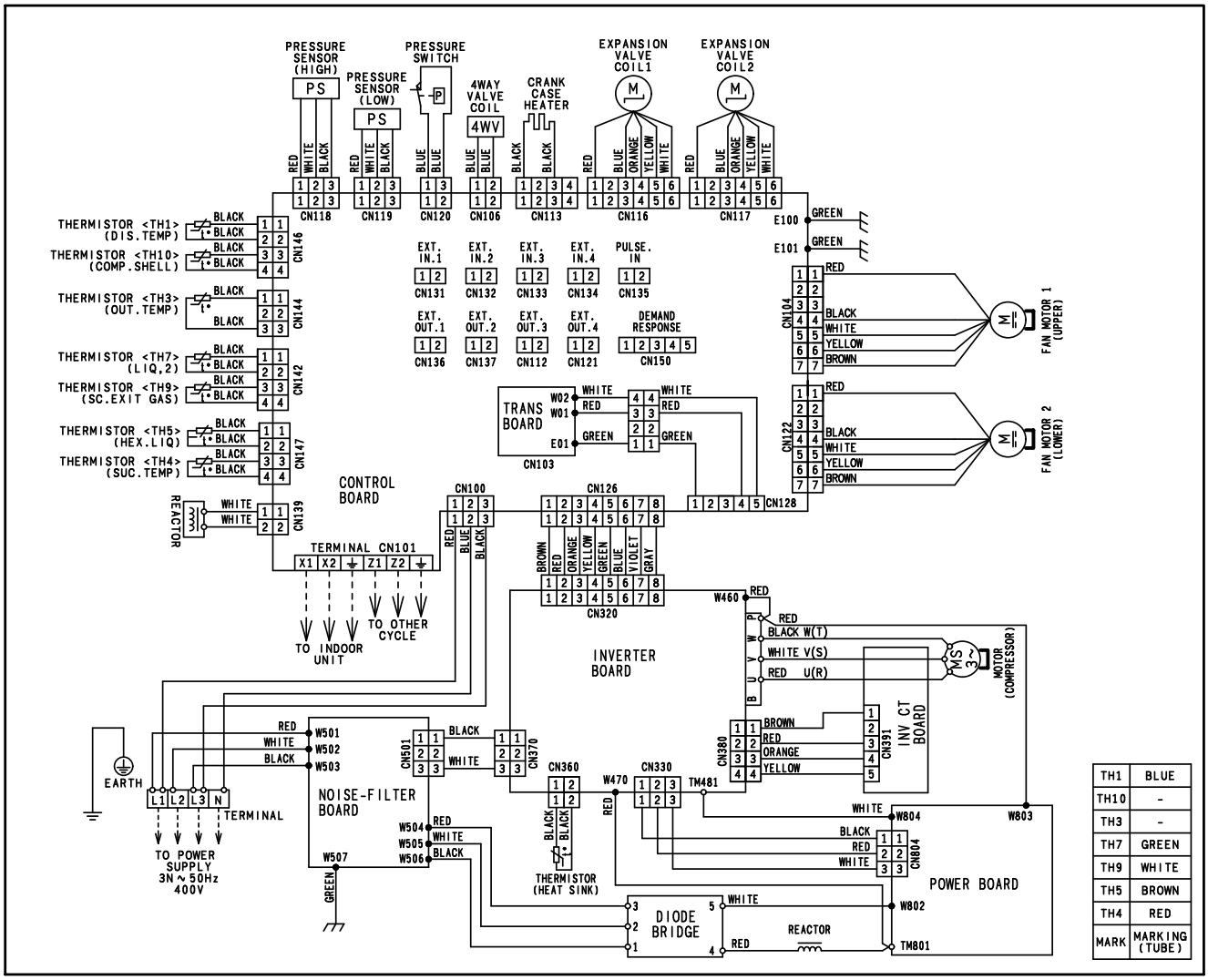
MARK	DESCRIPTION	Marking (Tube)
CMP	Compressor (Inverter type)	
HEX	Heat exchanger	
FAN 1	Fan 1	
FAN 2	Fan 2	
ACM	Accumulator	
OS	Oil separator	
SCHEX	Sub-cool heat exchanger	
HPS	High pressure sensor	
LPS	Low pressure sensor	
HPSW	High pressure sensor switch	
4WV	4-way valve	
EEV 1	Electric expansion valve 1	
EEV 2	Electric expansion valve 2	
TH 1	Discharge temperature thermistor	Blue
TH 3	Outdoor temperature thermistor	–
TH 4	Suction temperature thermistor	Red
TH 5	Heat exchanger (outlet) thermistor	Brown
TH 7	Liquid temperature thermistor	Green
TH 9	Sub-cool heat exchanger (outlet) thermistor	White
TH 10	Compressor temperature thermistor	–

● Indoor unit

MARK	DESCRIPTION
HEX 21	Heat exchanger
FAN 21	Fan
EEV 21	Electric expansion valve
TH 21	Room temperature thermistor
TH 22	Heat exchanger (inlet) thermistor
TH 23	Heat exchanger (outlet) thermistor

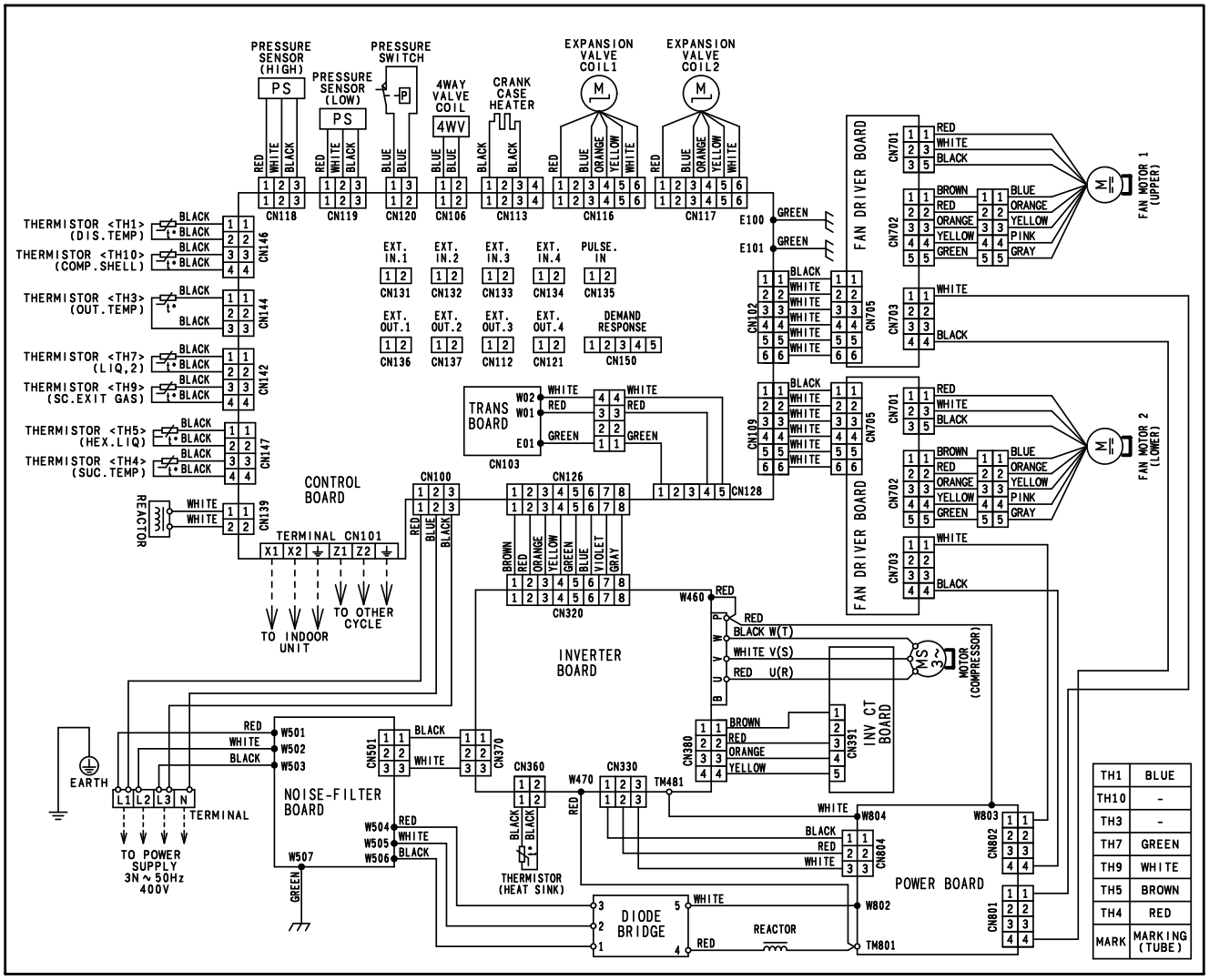
5. WIRING DIAGRAM

■ MODELS: AJ∗072LELAH, AJ∗090LELAH



OUTDOOR UNITS

■ MODEL: AJ∗108LELAH



OUTDOOR UNITS

6. OPERATION RANGE

Operation mode	Operation range	
	Indoor unit	Outdoor unit
Cooling / Dry	18 to 32°C DB R.H. 80% or less	-15 to 46°C DB
Heating	10 to 30°C DB	-20 to 21°C DB

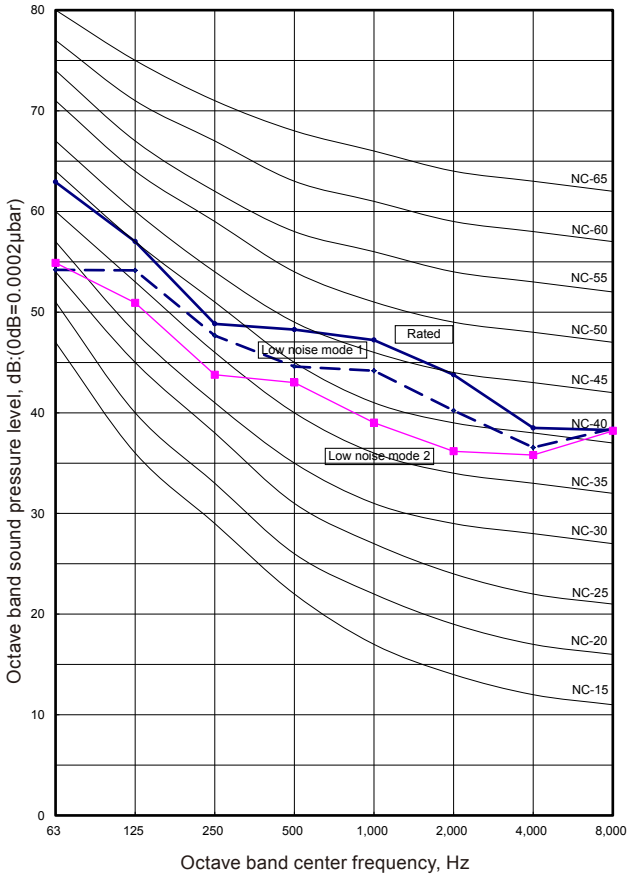
R.H. : Relative Humidity.

OUTDOOR UNITS

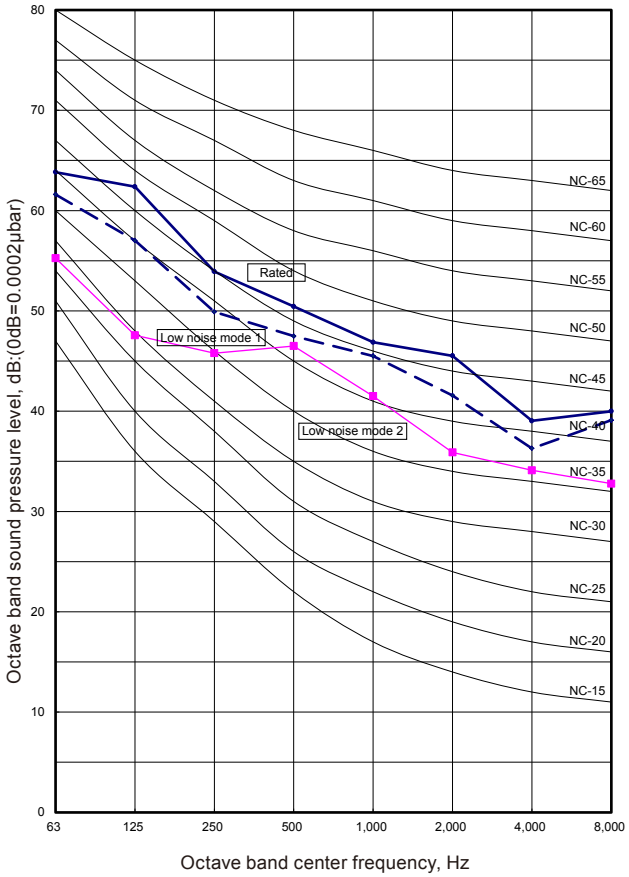
7. NOISE LEVEL CURVE

■ MODELS: AJ∗072LELAH

● Cooling

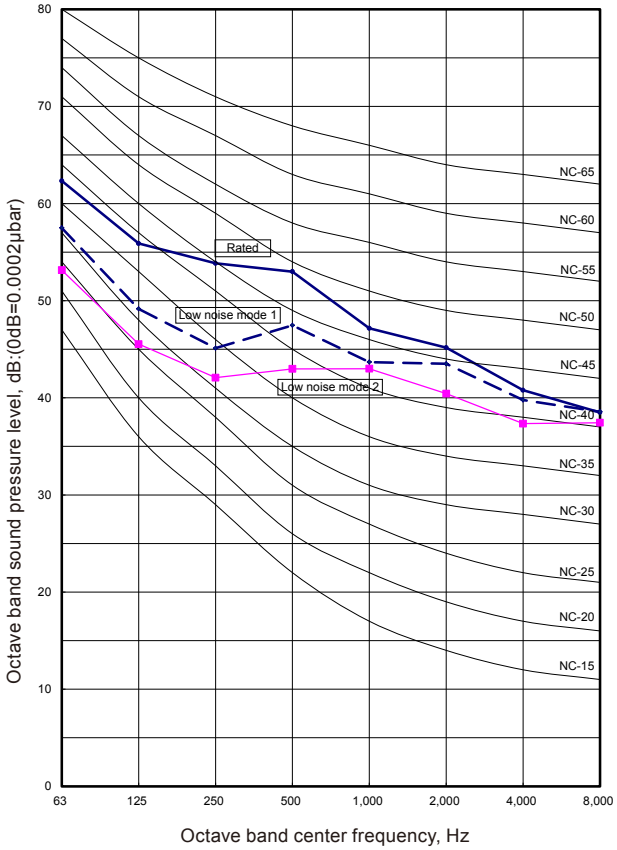


● Heating

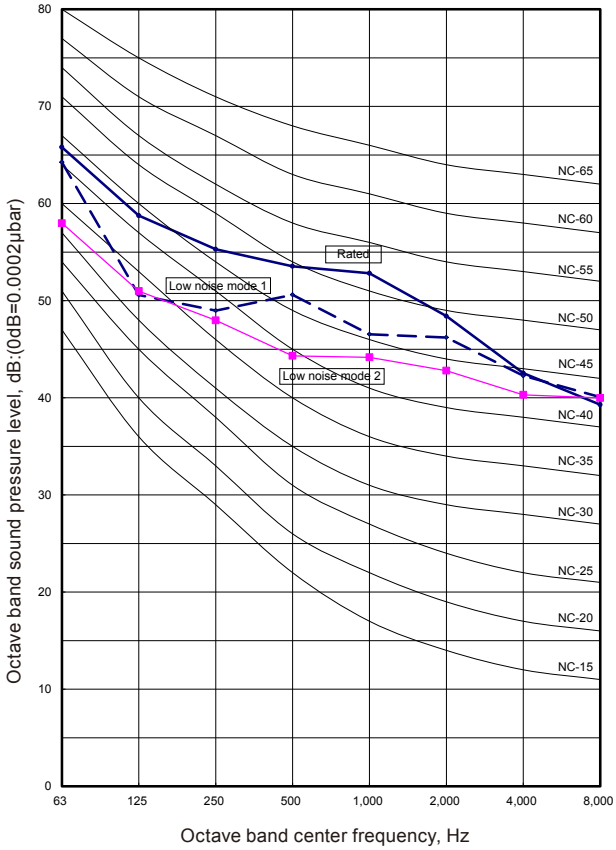


■ MODELS: AJ∗090LELAH

● Cooling



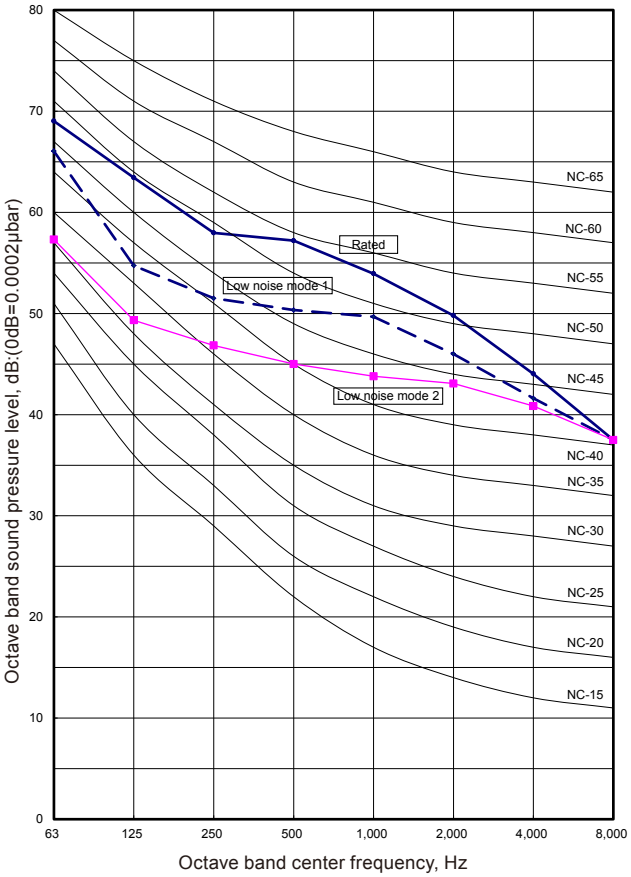
● Heating



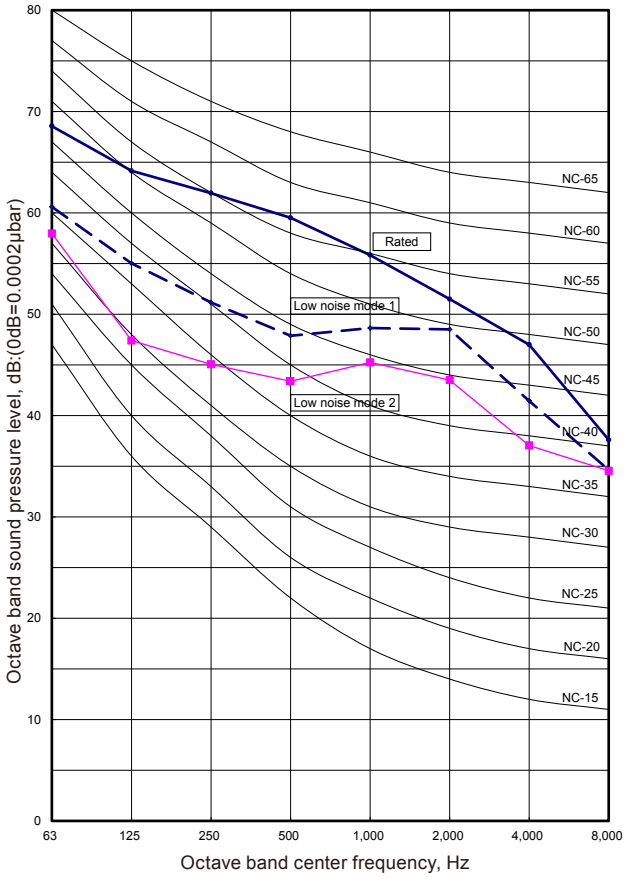
OUTDOOR UNITS

■ MODELS: AJ∗108LELAH

● Cooling

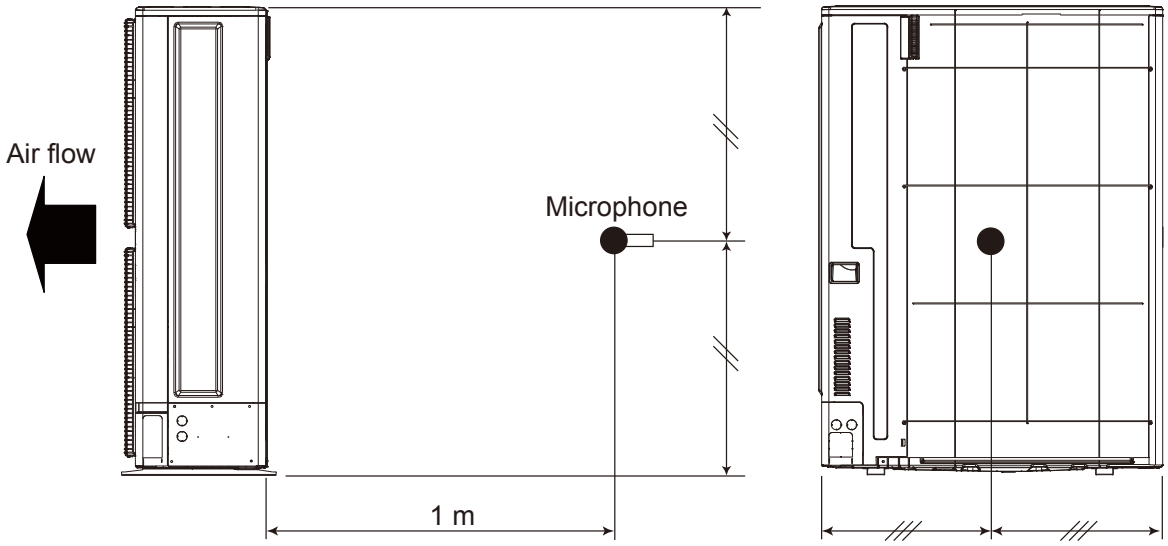


● Heating



OUTDOOR UNITS

■ SOUND LEVEL CHECK POINT



OUTDOOR UNITS

8. ELECTRIC CHARACTERISTICS

		Rated Value		Electric Characteristics									
		Power Supply		Full Load Characteristics			Wiring Specifications *1				Compressor	Outdoor Fan Motor	
HP	Model name	Hz	Voltage (V)	MCA (A)	TOCA (A)	MSC (A)	MFA (A)	Power Cable (mm^2)	Earth Cable (mm^2)	Limited Wiring Length (m) *2	RLA (A)	Output (W)	FLA (A)
8	AJ∗072LELAH	50	400	18.9	15.8	17.3	20	6	6	62	17.8	111	0.47
10	AJ∗090LELAH	50	400	18.9	15.8	17.3	20	6	6	62	17.8	111	0.47
12	AJ∗108LELAH	50	400	22.5	18.7	20.2	25	6	6	62	17.8	200	0.43

OUTDOOR UNITS

- Select the breaker based on MCA of the table above.
- Select the wire diameter based on the larger value of MCA or TOCA of the table above and select a wire diameter which withstands the breaker capacity.

*1 Wiring Spec : These values are recommended data. Please select the wiring spec in accordance with the regional cable standard.

*2 Limited Wiring Length : This wiring length is in case voltage drop less than 2%. When wiring length extend longer, select the wiring size of larger diameter.

RLA : Rated Load Amp of compressor under the standard condition.

MCA : Min Circuit Amp = Max Operating Current (Full Load)

MSC : Max Starting Current

TOCA : Total Value of Each Over Current Set

MFA : Main Fuse (Circuit Breaker) Current

9. SAFETY DEVICES

Safety device	AJ*072LELAH	AJ*090LELAH	AJ*108LELAH
Fuse (Main)	AC 250V 10A		
Protector (INV)	AC500V 45A		
Protector (Fan Motor)	-		DC750V 10A
Compressor Protector	"Overcurrent protection - Discharge Pipe Temperature protection Off : 120°C On : 85°C Compressor Temperature protection Off : 130°C On : 90°C"		
High Pressure Protection	Off : 4.2 MPa On : 3.2 MPa		
Low Pressure Protection	Off : 0.05 MPa		

OUTDOOR UNITS

Refrigerant R410A
INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

4. INDOOR UNITS

DTV_VR2E018E_12--CHAPTER04
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- 1-4. MINI DUCT TYPE 04-14
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1. SPECIFICATIONS

1-1. COMPACT CASSETTE TYPE

Model name				AUXB04GBLH	AUXB04GALH	AUXB07GALH	AUXB09GALH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	1.1		2.2	2.8
	Heating			1.3		2.8	3.2
Input power			W	23		25	25
Fan	Airflow rate	High	m^3 / h (l / s)	530 (147)		540 (150)	550 (153)
		Med		450 / 420*1 (125 / 117)		450 (125)	450 (125)
		Low		350 / 300*1 (97 / 83)		350 (97)	350 (97)
	Type x Quantity			Turbo × 1			
	Motor output		W	54			
Sound pressure level	High		dB(A)	34	34	34	35
	Med			30 / 28*1	30 / 28*1	30	30
	Low			25 / 21*1	25 / 21*1	25	25
Heat exchanger	Length		mm	1,280			
	Fin pitch			1.20			
	Rows x Stages			2 × 10			
	Face Area		m^2	0.27			
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Anti-mold			
	Net material			PP honeycomb			
Enclosure	Material			galvanized sheet iron			
	Colour			-			
Dimensions (H x W x D)	Net	Main body	mm	245 × 570 × 570			
	Gross			265 × 730 × 625			
Weight	Net		kg	14.5	15		
	Gross			18	18		
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35			
	Gas (Flare)			ø 9.52	ø 12.70		
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			
Cassette grille (Option)	Model name			UTG-UFYC-W(FUJITSU brand); UTG-UFGC-W(GENERAL brand)			
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)			
	Dimensions (H x W x D)	Net	mm	50 × 700 × 700			
		Gross		120 × 765 × 755			
	Weight	Net	kg	2.6			
		Gross		4.5			

*1: This value is "cooling operation / heating operation".

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	3.6	4.5	5.6	7.1
	Heating			4.1	5.0	6.3	8.0
Input power			W	29	35	36	84
Fan	Airflow rate	High	m^3 / h (l / s)	600 (167)	680 (189)	710 (197)	1,030 (286)
		Med		530 (147)	590 (164)	580 (161)	830 (231)
		Low		390 (108)	390 (108)	400 (111)	450 (125)
	Type x Quantity			Turbo × 1			
	Motor output		W	54			
Sound pressure level	High		dB(A)	37	38	41	50
	Med			34	34	35	44
	Low			27	27	27	30
Heat exchanger	Length		mm	1,280		1,295	
	Fin pitch			1.20		1.30	
	Rows x Stages			2 × 10		3 × 10	
	Face Area		m^2	0.27		0.28	
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Anti-mold			
	Net material			PP honeycomb			
Enclosure	Material			galvanized sheet iron			
	Colour			-			
Dimensions (H x W x D)	Net	Main body	mm	245 × 570 × 570			
	Gross			265 × 730 × 625			
Weight	Net		kg	15		17	
	Gross			19		20	
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35		ø 9.52	
	Gas (Flare)			ø 12.70		ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			
Cassette grille (Option)	Model name			UTG-UFYC-W(FUJITSU brand); UTG-UFGC-W(GENERAL brand)			
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)			
	Dimensions (H x W x D)	Net	mm	50 × 700 × 700			
		Gross		120 × 765 × 755			
	Weight	Net	kg	2.6			
		Gross		4.5			

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

1-2. CASSETTE TYPE

Model name				AUXD18GALH	AUXD24GALH
Power source				230 V ~, 50 Hz	
Available voltage range				198 to 264 V	
Capacity	Cooling		kW	5.6	7.1
	Heating			6.3	8.0
Input power			W	39	46
Fan	Airflow rate	High	m^3 / h (l / s)	1,150 (319)	1,280 (356)
		Med		940 (261)	1,040 (289)
		Low		870 (242)	870 (242)
	Type x Quantity			Turbo × 1	
	Motor output		W	80	
Sound pressure level	High		dB(A)	36	38
	Med			30	33
	Low			29	29
Heat exchanger	Length		mm	2,054	
	Fin pitch			1.20	
	Rows x Stages			2 × 10	
	Face Area		m^2	0.42	
	Pipe type (Material)			Grooved H-pin (Copper)	
	Fin	Type (Material)		Slit (Aluminium)	
		Surface treatment		Hydrophilic coating	
Air filter	Type			Anti-mold	
	Net material			PP honeycomb	
Enclosure	Material			galvanized sheet iron	
	Colour			-	
Dimensions (H x W x D)	Net	Main body	mm	246 × 840 × 840	
	Gross			318 × 960 × 980	
Weight	Net		kg	22	
	Gross			27	
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52	
	Gas (Flare)			ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]	
Cassette grille (Option)	Model name			UTG-UGYA-W(FUJITSU brand); UTG-UGGA-W(GENERAL brand)	
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)	
	Dimensions (H x W x D)	Net	mm	50 × 950 × 950	
		Gross		115 × 1,020 × 1,000	
	Weight	Net	kg	5.5	
		Gross		8.5	

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				AUXA18GALH	AUXA24GALH	AUXA30GALH	AUXA34GALH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	5.6	7.1	9.0	10.0
	Heating			6.3	8.0	10.0	11.2
Input power			W	51	51	59	77
Fan	Airflow rate	High	m^3 / h (l / s)	1,420 (394)	1,420 (394)	1,600 (444)	1,750 (486)
		Med		1,230 (342)	1,230 (342)	1,300 (361)	1,300 (361)
		Low		1,100 / 1,000 *1 (306 / 278)	1,100 / 1,000 *1 (306 / 278)	1,100 (306)	1,100 (306)
	Type x Quantity			Turbo × 1			
	Motor output		W	80			
Sound pressure level	High		dB(A)	40	40	40	43
	Med			36	36	38	38
	Low			33 / 31 *1	33 / 31 *1	33	33
Heat exchanger	Length		mm	2,087			
	Fin pitch			1.30			
	Rows x Stages			3 × 12			
	Face Area		m^2	0.52			
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Anti-mold			
	Net material			PP honeycomb			
Enclosure	Material			galvanized sheet iron			
	Colour			-			
Dimensions (H x W x D)	Net	Main body	mm	288 × 840 × 840			
	Gross			360 × 960 × 985			
Weight	Net		kg	27			
	Gross			33			
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52			
	Gas (Flare)			ø 15.88			
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			
Cassette grille (Option)	Model name			UTG-UGYA-W(FUJITSU brand); UTG-UGGA-W(GENERAL brand)			
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)			
	Dimensions (H x W x D)	Net	mm	50 × 950 × 950			
		Gross		115 × 1,020 × 1,000			
	Weight	Net	kg	5.5			
		Gross		8.5			

*1: This value is "cooling operation / heating operation".

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Model name				AUXA36GALH	AUXA45GALH	AUXA54GALH
Power source				230 V ~, 50 Hz		
Available voltage range				198 to 264 V		
Capacity	Cooling		kW	11.2	12.5	14.0
	Heating			12.5	14.0	16.0
Input power			W	80	99	119
Fan	Airflow rate	High	m^3 / h (l / s)	1,800 (500)	1,900 (528)	2,000 (556)
		Med		1,300 (361)	1,370 (381)	1,370 (381)
		Low		1,100 (306)	1,100 (306)	1,100 (306)
	Type x Quantity			Turbo × 1		
	Motor output		W	80		
Sound pressure level	High		dB(A)	44	46	47
	Med			38	39	39
	Low			33	33	33
Heat exchanger	Length		mm	2,087		
	Fin pitch			1.30		
	Rows x Stages			3 × 12		
	Face Area		m^2	0.52		
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Slit (Aluminium)		
		Surface treatment		Hydrophilic coating		
Air filter	Type			Anti-mold		
	Net material			PP honeycomb		
Enclosure	Material			galvanized sheet iron		
	Colour			-		
Dimensions (H x W x D)	Net	Main body	mm	288 × 840 × 840		
	Gross			360 × 960 × 985		
Weight	Net		kg	27		
	Gross			33		
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52		
	Gas (Flare)			ø 19.05		
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]		
Cassette grille (Option)	Model name			UTG-UGYA-W(FUJITSU brand); UTG-UGGA-W(GENERAL brand)		
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)		
	Dimensions (H x W x D)	Net	mm	50 × 950 × 950		
		Gross		115 × 1,020 × 1,000		
	Weight	Net	kg	5.5		
		Gross		8.5		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Model name				AUXM018GLAH	AUXM024GLAH	AUXM030GLAH
Power source				230 V ~ 50 Hz		
Available voltage range				198 to 264 V		
Capacity	Cooling		kW	5.6	7.1	9.0
	Heating			6.3	8.0	10.0
Input power			W	20	25	49
Fan	Airflow rate	High	m^3 / h (l / s)	1,050 (292)	1,120 (311)	1,470 (408)
		Me-Hi		930 (258)	1,050 (292)	1,160 (322)
		Med		900 (250)	930 (258)	1,070 (297)
		Lo-Hi		870 (242)	900 (250)	930 (258)
		Low		810 (225)	870 (242)	900 (250)
		Quiet		780 (217)	780 (217)	780 (217)
	Type × Quantity			Turbo × 1		
	Motor output		W	81		
Sound pressure level	High		dB(A)	33	35	40
	Me-Hi			32	33	36
	Med			31	32	34
	Lo-Hi			30	31	32
	Low			29	30	31
	Quiet			28	28	28
Heat exchanger	Dimensions (H x W x D)		mm	210 × 2,127 × 13.3 210 × 2,061 × 13.3		
	Fin pitch			1.2		
	Rows × Stages			2 × 10		
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Slit (Aluminium)		
		Surface treatment		Hydrophilic coating		
Air filter	Type			Anti mold		
	Net material			PP honeycomb		
Enclosure	Material			galvanized sheet iron		
	Colour			-		
Dimensions (H × W × D)	Net		mm	246 × 840 × 840		
	Gross			298 × 960 × 950		
Weight	Net		kg	24	24.5	
	Gross			29	29.5	
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35	ø 9.52	
	Gas (Flare)			ø 12.70	ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]		
Cassette grille (Option)	Model name			UTG-UKYC-W(FUJITSU brand) / UTG-UKGC-W(GENERAL brand)		
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)		
	Dimensions (H x W x D)	Net	mm	53 × 950 × 950		
		Gross		110 × 1,000 × 1,010		
	Weight	Net	kg	6.0		
		Gross		10		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Model name				AUXK018GLAH	AUXK024GLAH
Power source				230 V ~ 50 Hz	
Available voltage range				198 to 264 V	
Capacity	Cooling		kW	5.6	7.1
	Heating			6.3	8.0
Input power			W	40	40
Fan	Airflow rate	High	m^3 / h (l / s)	1,420 (394)	1,420 (394)
		Me-Hi		1,360 (378)	1,360 (378)
		Med		1,300 (361)	1,300 (361)
		Lo-Hi		1,270 (353)	1,270 (353)
		Low		1,200 (333)	1,200 (333)
		Quiet		1,150 (319)	1,150 (319)
	Type × Quantity			Turbo × 1	
	Motor output		W	81	
Sound pressure level	High		dB(A)	38	38
	Me-Hi			37	37
	Med			36	36
	Lo-Hi			35	35
	Low			34	34
	Quiet			33	33
Heat exchanger	Dimensions (H x W x D)		mm	252 × 2,127 × 13.3 252 × 2,061 × 13.3	
	Fin pitch			1.2	
	Rows × Stages			2 × 12	
	Pipe type (Material)			Grooved H-pin (Copper)	
	Fin	Type (Material)		Slit (Aluminium)	
		Surface treatment		Hydrophilic coating	
Air filter	Type			Anti mold	
	Net material			PP honeycomb	
Enclosure	Material			galvanized sheet iron	
	Colour			-	
Dimensions (H × W × D)	Net		mm	288 × 840 × 840	
	Gross			340 × 960 × 950	
Weight	Net		kg	26.5	
	Gross			31.5	
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35	ø 9.52
	Gas (Flare)			ø 12.70	ø 15.88
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]	
Cassette grille (Option)	Model name			UTG-UKYC-W(FUJITSU brand) / UTG-UKGC-W(GENERAL brand)	
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)	
	Dimensions (H x W x D)	Net	mm	53 × 950 × 950	
		Gross		110 × 1,000 × 1,010	
	Weight	Net	kg	6.0	
		Gross		10	

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Model name				AUXK030GLAH	AUXK034GLAH	AUXK036GLAH	AUXK045GLAH	AUXK054GLAH
Power source				230 V ~ 50 Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	9.0	10.0	11.2	12.5	14.0
	Heating			10.0	11.2	12.5	14.0	16.0
Input power			W	47	47	61	89	116
Fan	Airflow rate	High	m^3 / h (l / s)	1,440 (400)	1,440 (400)	1,620 (450)	1,820 (506)	2,040 (567)
		Me-Hi		1,400 (389)	1,400 (389)	1,500 (417)	1,590 (442)	1,800 (500)
		Med		1,340 (372)	1,340 (372)	1,400 (389)	1,500 (417)	1,590 (442)
		Lo-Hi		1,300 (361)	1,300 (361)	1,340 (372)	1,400 (389)	1,440 (400)
		Low		1,280 (356)	1,280 (356)	1,280 (356)	1,300 (361)	1,300 (361)
		Quiet		1,150 (319)	1,150 (319)	1,150 (319)	1,150 (319)	1,150 (319)
	Type × Quantity			Turbo × 1				
	Motor output		W	81				
Sound pressure level	High		dB(A)	39	39	41	44	47
	Me-Hi			38	38	40	42	45
	Med			37	37	38	40	42
	Lo-Hi			36	36	37	38	39
	Low			35	35	35	36	36
	Quiet			33	33	33	33	33
Heat exchanger	Dimensions (H x W x D)		mm	252 × 2,124 × 13.3 252 × 2,062 × 13.3 252 × 1,999 × 13.3				
	Fin pitch			1.3				
	Rows × Stages			3 × 12				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Anti mold				
	Net material			PP honeycomb				
Enclosure	Material			galvanized sheet iron				
	Colour			-				
Dimensions (H × W × D)	Net		mm	288 × 840 × 840				
	Gross			340 × 960 × 950				
Weight	Net		kg	29.5				
	Gross			34				
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52				
	Gas (Flare)			ø 15.88				
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]				
Cassette grille (Option)	Model name			UTG-UKYC-W(FUJITSU brand) / UTG-UKGC-W(GENERAL brand)				
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)				
	Dimensions (H x W x D)	Net	mm	53 × 950 × 950				
		Gross		110 × 1,000 × 1,010				
	Weight	Net	kg	6.0				
		Gross		10				

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

1-3. LOW STATIC PRESSURE DUCT / CONCEALED FLOOR TYPE

Model name				ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH
Power source				230 V ~, 50 Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	2.2	2.8	3.6	4.5	5.6
	Heating			2.8	3.2	4.0	5.0	6.3
Input power			W	46	55	63	90	96
Static pressure range			Pa	0 to 50				
Standard static pressure			Pa	25				
Fan	Airflow rate	High	m^3 / h (l / s)	370 (103)	440 (122)	590 (164)	800 (222)	890 (247)
		Med		310 (86)	370 (103)	500 (139)	750 (208)	810 (225)
		Low		280 (78)	340 (94)	450 (125)	700 (194)	730 (203)
	Type x Quantity			Sirocco × 1		Sirocco × 2		
	Motor output		W	20	18	23	36	42
Sound pressure level	High		dB(A)	29	31	30	33	36
	Med			26	29	28	32	34
	Low			24	27	25	30	30
Heat exchanger	Length		mm	410		700		
	Fin pitch			1.30				
	Rows x Stages			2 × 14				
	Face Area		m^2	0.12		0.21		
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Anti-mold				
	Net material			PP honeycomb				
Enclosure	Material			galvanized sheet iron				
	Colour			-				
Dimensions (H x W x D)	Net		mm	217 × 663 × 595		217 × 953 × 595		
	Gross			324 × 785 × 686		324 × 1,075 × 686		
Weight	Net		kg	15		22		23
	Gross			20		27		28
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				ø 9.52
	Gas (Flare)			ø 12.70				ø 15.88
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]				

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-4. MINI DUCT TYPE

Model name				ARXK04GCLH	ARXK07GCLH	ARXK09GCLH	ARXK12GCLH
Power source				230 V ~ 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	1.1	2.2	2.8	3.6
	Heating			1.3	2.8	3.2	4.0
Input power			W	26	28	28	35
Static pressure range			Pa	0 to 30			
Standard static pressure			Pa	10			
Fan	Airflow rate	High	m^3 / h (l / s)	460 (128)	460 (128)	460 (128)	550 (153)
		Me-Hi		440 (122)	440 (122)	440 (122)	520 (144)
		Med		420 (117)	420 (117)	420 (117)	480 (133)
		Lo-Hi		400 (111)	400 (111)	400 (111)	450 (125)
		Low		370 (103)	370 (103)	370 (103)	410 (114)
		Quiet		340 (94)	340 (94)	340 (94)	340 (94)
	Type x Quantity			Sirocco × 2			
	Motor output		W	80			
Sound pressure level	High		dB(A)	25	26	26	29
	Me-Hi			24	25	25	27
	Med			23	24	24	26
	Lo-Hi			22	23	23	25
	Low			21	22	22	24
	Quiet			20	21	21	22
Heat exchanger	Length		mm	490			
	Fin pitch			1.30			
	Rows x Stages			1 × 16	2 × 16		
	Face Area		m^2	0.16			
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Fungicide type			
	Net material			PP honeycomb			
Enclosure	Material			galvanized sheet iron			
	Colour			-			
Dimensions (H x W x D)	Net		mm	198 × 700 × 450			
	Gross			250 × 930 × 580			
Weight	Net		kg	14.5	15.5		16
	Gross			18	18.5		19
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35			
	Gas (Flare)			ø 9.52	ø 12.70		
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				ARXK14GCLH	ARXK18GCLH	ARXK24GCLH
Power source				230 V ~ 50 Hz		
Available voltage range				198 to 264 V		
Capacity	Cooling		kW	4.5	5.6	7.1
	Heating			5.0	6.3	8.0
Input power			W	66	73	80
Static pressure range			Pa	0 to 50		
Standard static pressure			Pa	15		
Fan	Airflow rate	High	m^3 / h (l / s)	760 (211)	930 (258)	1,160 (322)
		Me-Hi		660 (183)	840 (233)	1,060 (294)
		Med		560 (156)	740 (206)	960 (267)
		Lo-Hi		490 (136)	640 (178)	860 (239)
		Low		410 (114)	540 (150)	750 (208)
		Quiet		340 (94)	470 (131)	610 (169)
	Type × Quantity			Sirocco × 2	Sirocco × 3	Sirocco × 4
	Motor output		W	80	81	
Sound pressure level	High		dB(A)	34	33	32
	Me-Hi			31	30	30
	Med			28	28	28
	Lo-Hi			26	26	27
	Low			24	24	25
	Quiet			22	22	22
Heat exchanger	Length		mm	490	690	890
	Fin pitch			1.30		
	Rows × Stages			2 × 16		
	Face Area		m^2	0.16	0.23	0.30
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Slit (Aluminium)		
		Surface treatment		Hydrophilic coating		
Air filter	Type			Fungicide type		
	Net material			PP honeycomb		
Enclosure	Material			galvanized sheet iron		
	Colour			-		
Dimensions (H × W × D)	Net		mm	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
	Gross			250 × 930 × 580	250 × 1,130 × 580	250 × 1,330 × 580
Weight	Net		kg	16	19	22.5
	Gross			19	22.5	26
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35	ø 9.52	
	Gas (Flare)			ø 12.70	ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

1-5. SLIM DUCT / SLIM CONCEALED FLOOR TYPE

Model name				ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH
Power source				230 V ~, 50 Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	1.1	2.2	2.8	3.6	4.5
	Heating			1.3	2.8	3.2	4.0	5.0
Input power			W	40	44	50	54	92
Static pressure range			Pa	0 to 90				
Standard static pressure			Pa	25				
Fan	Airflow rate	High	m^3 / h (l / s)	510 (142)	550 (153)	600 (167)	600 (167)	800 (222)
		Med		470 / 400 *1 (131 / 111)	490 (136)	550 (153)	510 (142)	710 (197)
		Low		440 / 320 *1 (122 / 89)	440 (122)	480 (133)	450 (125)	610 (169)
	Type x Quantity			Sirocco × 2				
	Motor output		W	80			81	
Sound pressure level	High		dB(A)	26	28	29	30	34
	Med			25 / 21 *1	25	26	27	32
	Low			22 / 20 *1	22	24	24	28
Heat exchanger	Length		mm	500				
	Fin pitch			1.30				
	Rows x Stages			2 × 14			3 × 14	
	Face Area		m^2	0.15				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Fungicide type				
	Net material			PP honeycomb				
Enclosure	Material			galvanized sheet iron				
	Colour			-				
Dimensions (H x W x D)	Net		mm	198 × 700 × 620				
	Gross			270 × 935 × 770				
Weight	Net		kg	17			18	
	Gross			21			23	
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				
	Gas (Flare)			ø 12.70				
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]				

*1: This value is "cooling operation / heating operation".

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				ARXD18GALH	ARXD24GALH
Power source				230 V ~, 50 Hz	
Available voltage range				198 to 264 V	
Capacity	Cooling		kW	5.6	7.1
	Heating			6.3	8.0
Input power			W	83	122
Static pressure range			Pa	0 to 90	0 to 50
Standard static pressure			Pa	25	
Fan	Airflow rate	High	m^3 / h (l / s)	940 (261)	1,330 (369)
		Med		840 (233)	1,240 (344)
		Low		750 (208)	1,100 (306)
	Type x Quantity			Sirocco × 3	Sirocco × 4
	Motor output		W	96	
Sound pressure level	High		dB(A)	34	35
	Med			32	32
	Low			28	29
Heat exchanger	Length		mm	700	900
	Fin pitch			1.30	
	Rows x Stages			3 × 14	
	Face Area		m^2	0.21	0.26
	Pipe type (Material)			Grooved H-pin (Copper)	
	Fin	Type (Material)		Slit (Aluminium)	
		Surface treatment		Hydrophilic coating	
Air filter	Type			Fungicide type	
	Net material			PP honeycomb	
Enclosure	Material			galvanized sheet iron	
	Colour			-	
Dimensions (H x W x D)	Net		mm	198 × 900 × 620	198 × 1,100 × 620
	Gross			270 × 1,135 × 770	270 × 1,335 × 770
Weight	Net		kg	22	26
	Gross			27	31
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52	
	Gas (Flare)			ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]	

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-6. MEDIUM STATIC PRESSURE DUCT TYPE

Model name				ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	7.1	9.0	11.2	12.5
	Heating			8.0	10.0	12.5	14.0
Input power			W	94	108	194	240
Static pressure range			Pa	0 to 150			
Standard static pressure			Pa	40	50	50	60
Fan	Airflow rate	High	m^3 / h (l / s)	1,280 (356)	1,410 (392)	1,840 (511)	1,970 (547)
		Med		990 (275)	1,280 (356)	1,600 (444)	1,860 (517)
		Low		840 (233)	1,150 (319)	1,470 (408)	1,640 (456)
	Type x Quantity			Sirocco × 2			
	Motor output		W	106	197		
Sound pressure level	High		dB(A)	31	34	37	41
	Med			27	32	35	38
	Low			23	29	33	36
Heat exchanger	Length		mm	1,000			
	Fin pitch			1.40			
	Rows x Stages			3 × 14	4 × 14		
	Face Area		m^2	0.29			
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter (Option)	Model name			UTD-LF25NA			
	Type			Fungicide type			
	Net material			PP honeycomb			
Enclosure	Material			galvanized sheet iron			
	Colour			-			
Dimensions (H x W x D)	Net		mm	270 × 1,135 × 700			
	Gross			300 × 1,320 × 790			
Weight	Net		kg	36	40		
	Gross			44	48		
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52			
	Gas (Flare)			ø 15.88		ø 19.05	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-7. HIGH STATIC PRESSURE DUCT TYPE

Model name				ARXC36GBTH	ARXC45GATH	ARXC60GATH	ARXC72GBTH	ARXC90GBTH	ARXC96GATH
Power source				230 V ~, 50 Hz					
Available voltage range				198 to 264 V					
Capacity	Cooling		kW	11.2	12.5	18.0	22.4	25.0	28.0
	Heating			12.5	14.0	20.0	25.0	28.0	31.5
Input power			W	207	715	730	681	819	838
Static pressure range			Pa	0 to 200	100 to 250	100 to 250	0 to 300	0 to 300	0 to 300
Standard static pressure			Pa	100	100	100	150	150	150
Fan	Airflow rate	High	m^3 / h (l / s)	1,990 (553)	3,500 (972)	3,500 (972)	3,900 (1,083)	4,300 (1,195)	4,850 (1,347)
		Med		1,680 (467)	3,000 (833)	3,000 (833)	3,300 (917)	4,000 (1,111)	4,250 (1,181)
		Low		1,330 (369)	2,460 (683)	2,460 (683)	3,000 (833)	3,500 (972)	3,600 (1,000)
	Type x Quantity			Sirocco × 2					
	Motor output		W	197	540		700 × 2		
Sound pressure level	High		dB(A)	42	49	49	47	48	48
	Med			36	45	45	43	46	45
	Low			32	42	42	40	44	42
Heat exchanger	Length		mm	890			1,250		
	Fin pitch			1.30		1.45			1.60
	Rows x Stages			4 × 16			4 × 18		4 × 20
	Face Area		m^2	0.30			0.50		0.64
	Pipe type (Material)			Grooved H-pin (Copper)					
	Fin	Type (Material)		Slit (Aluminium)					Louver (Aluminum)
		Surface treatment		Hydrophilic coating					
Air filter (Option)	Model name			UTD-LF60KA			-		
	Type			Fungicide type					
	Net material			PP honeycomb					
Enclosure	Material			galvanized sheet iron					
	Colour			-					
Dimensions (H x W x D)	Net		mm	400 × 1,050 × 500			450 × 1,587 × 700		550 × 1,587 × 700
	Gross			460 × 1,230 × 640			520 × 1,750 × 825		620 × 1,750 × 825
Weight	Net		kg	40	46		84		105
	Gross			45	51		100		125
Connection pipe diameter	Liquid		mm	ø 9.52 (Flare)			ø 12.70 (Brazing)		
	Gas			ø 19.05 (Flare)			ø 22.22 (Brazing)		
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]					

NOTE: ARXC60, ARXC72, ARXC90 and ARXC96 can not be connected in J-III Series, J-II Series and J-IIS Series.

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-8. LARGE AIRFLOW DUCT TYPE

Model name				ARXN18GATH	ARXN24GATH	ARXN30GATH	ARXN34GATH	ARXN36GATH	ARXN45GATH
Power source				230 V ~, 50 Hz					
Available voltage range				198 to 264 V					
Capacity	Cooling		kW	5.6	7.1	9.0	10.0	11.2	12.5
	Heating			6.3	8.0	10.0	11.2	12.5	14.0
Input power			W	154	205	306	432	572	
Static pressure range			Pa	50 to 100	50 to 150	50 to 250		50 to 300	
Standard static pressure			Pa	50				60	
Fan	Airflow rate		m^3 / h (l / s)	2,280 (633)	2,640 (733)	3,200 (889)	3,720 (1,033)	4,120 (1,145)	
	Type x Quantity			Sirocco × 2					
	Motor output		W	700 × 2					
Sound pressure level			dB(A)	35	37	40	43	45	
Heat exchanger	Length		mm	1,250					
	Fin pitch			1.45					
	Rows x Stages			4 × 18					
	Face Area		m^2	0.50					
	Pipe type (Material)			Grooved H-pin (Copper)					
	Fin	Type (Material)		Slit (Aluminium)					
		Surface treatment		Hydrophilic coating					
Enclosure	Material			galvanized sheet iron					
	Colour			-					
Dimensions (H x W x D)	Net		mm	450 × 1,587 × 700					
	Gross			520 × 1,750 × 825					
Weight	Net		kg	84					
	Gross			100					
Connection pipe diameter	Liquid		mm	ø 9.52 (Flare)					
	Gas			ø 15.88 (Flare)				ø 19.05 (Flare)	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]					

NOTE: Large airflow duct type can be connected to V-III series only.

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-9. FLOOR / CEILING TYPE

Model name				AB∗A12GATH	AB∗A14GATH	AB∗A18GATH	AB∗A24GATH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	3.6	4.5	5.6	7.1
	Heating			4.0	5.0	6.3	8.0
Input power			W	30	42	74	99
Fan	Airflow rate	High	m^3 / h (l / s)	660 (183)	780 (216)	1,000 (277)	1,000 (277)
		Med		570 (158)	640 (177)	720 (199)	820 (227)
		Low		490 (136)	550 (152)	580 (161)	680 (188)
	Type x Quantity			Sirocco × 2			
	Motor output		W	80			
Sound pressure level	High		dB(A)	36	40	46	47
	Med			32	36	39	42
	Low			28	34	35	37
Heat exchanger	Length		mm	800			
	Fin pitch			1.20	1.30		
	Rows x Stages			2 × 12	3 × 12		4 × 12
	Face Area		m^2	0.20			
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Anti-mold			
	Net material			PP monofilament net			
Enclosure	Material			Plastic			
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)			
Dimensions (H x W x D)	Net		mm	199 × 990 × 655			
	Gross			320 × 1,150 × 790			
Weight	Net		kg	25	26		27
	Gross			35	36		38
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35		ø 9.52	
	Gas (Flare)			ø 12.70		ø 15.88	
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-10. CEILING TYPE

Model name				AB∗A30GATH	AB∗A36GATH	AB∗A45GATH	AB∗A54GATH
Power source				230 V ~, 50 Hz			
Available voltage range				198 to 264 V			
Capacity	Cooling		kW	9.0	11.2	12.5	14.0
	Heating			10.0	12.5	14.0	16.0
Input power			W	66	85	131	180
Fan	Airflow rate	High	m^3 / h (l / s)	1,630 (452)	1,690 (469)	2,010 (558)	2,270 (629)
		Med		1,370 (379)	1,400 (389)	1,600 (444)	1,780 (493)
		Low		1,140 (316)	1,170 (325)	1,230 (342)	1,280 (355)
	Type x Quantity			Sirocco × 4			
	Motor output		W	130			
Sound pressure level	High		dB(A)	42	45	48	51
	Med			38	38	42	45
	Low			33	34	35	36
Heat exchanger	Length		mm	1,350			
	Fin pitch			1.45			
	Rows x Stages			3 × 12	3 × 12 1 × 8		
	Face Area		m^2	0.34	0.34		
	Pipe type (Material)			Grooved H-pin (Copper)			
	Fin	Type (Material)		Slit (Aluminium)			
		Surface treatment		Hydrophilic coating			
Air filter	Type			Anti-mold			
	Net material			PP monofilament net			
Enclosure	Material			Plastic			
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)			
Dimensions (H x W x D)	Net		mm	240 × 1,660 × 700			
	Gross			318 × 1,800 × 790			
Weight	Net		kg	46	48		
	Gross			59	61		
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52			
	Gas (Flare)			ø 15.88	ø 19.05		
	Drain hose			VP25 [ø 25(I.D.) ; ø 32(O.D.)]			

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-11. COMPACT FLOOR TYPE

Model name				AG∗A004GCAH	AG∗A007GCAH	AG∗A009GCAH	AG∗A012GCAH	AG∗A014GCAH
Power source				230 V ~ 50 Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	1.1	2.2	2.8	3.6	4.0
	Heating			1.3	2.8	3.2	4.0	4.5
Input power			W	12 / 14	16	17	22	29
Fan	Airflow rate	High	m^3 / h (l / s)	380 / 430 (106 / 119)	470 (131)	500 (139)	590 (164)	670 (186)
		Me-Hi		350 (97)	420 (117)	450 (125)	520 (144)	590 (164)
		Med		320 (89)	390 (108)	400 (111)	470 (131)	520 (144)
		Lo-Hi		310 (86)	360 (100)	360 (100)	420 (117)	450 (125)
		Low		280 (78)	330 (92)	330 (92)	390 (108)	390 (108)
		Quiet		210 (58)	270 (75)	270 (75)	340 (94)	340 (94)
	Type x Quantity			Cross flow × 2				
	Motor output		W	16 × 2				
Sound pressure level	High		dB(A)	35 / 36	37	38	42	46
	Me-Hi			33	35	36	39	42
	Med			31	33	34	37	39
	Lo-Hi			30	31	31	35	36
	Low			28	29	29	33	33
	Quiet			22	22	22	30	30
Heat exchanger	Length		mm	550				
	Fin pitch			1.2				
	Rows x Stages			2 × 18				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Anti mold				
	Net material			PP plain weave				
Enclosure	Material			Plastic				
	Colour			White (Approximate colour of MUNSELL 5Y 9/0.5NN)				
Dimensions (H x W x D)	Net		mm	600 × 740 × 200				
	Gross			700 × 820 × 310				
Weight	Net		kg	15				
	Gross			18.5	19			
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				
	Gas (Flare)			ø 9.52			ø 12.70	
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)				

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-12. COMPACT FLOOR TYPE (EEV external model)

Model name				AG∗E004GCAH	AG∗E007GCAH	AG∗E009GCAH	AG∗E012GCAH	AG∗E014GCAH
Power source				230 V ~ 50 Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	1.1	2.2	2.8	3.6	4.0
	Heating			1.3	2.8	3.2	4.0	4.5
Input power			W	12 / 14	16	17	22	29
Fan	Airflow rate	High	m^3 / h (l / s)	380 / 430 (106 / 119)	470 (131)	500 (139)	590 (164)	670 (186)
		Me-Hi		350 (97)	420 (117)	450 (125)	520 (144)	590 (164)
		Med		320 (89)	390 (108)	400 (111)	470 (131)	520 (144)
		Lo-Hi		310 (86)	360 (100)	360 (100)	420 (117)	450 (125)
		Low		280 (78)	330 (92)	330 (92)	390 (108)	390 (108)
		Quiet		210 (58)	270 (75)	270 (75)	340 (94)	340 (94)
	Type x Quantity			Cross flow × 2				
	Motor output		W	16 × 2				
Sound pressure level	High		dB(A)	35 / 36	37	38	42	46
	Me-Hi			33	35	36	39	42
	Med			31	33	34	37	39
	Lo-Hi			30	31	31	35	36
	Low			28	29	29	33	33
	Quiet			22	22	22	30	30
Heat exchanger	Length		mm	550				
	Fin pitch			1.2				
	Rows x Stages			2 × 18				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Anti mold				
	Net material			PP plain weave				
Enclosure	Material			Plastic				
	Colour			White (Approximate colour of MUNSELL 5Y 9/0.5NN)				
Dimensions (H x W x D)	Net		mm	600 × 740 × 200				
	Gross			700 × 820 × 310				
Weight	Net		kg	14.5				
	Gross			18	18.5			
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				
	Gas (Flare)			ø 9.52			ø 12.70	
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)				
EV Kit (Option)				UTR - EV09XB			UTR - EV14XB	

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

1-13. WALL MOUNTED TYPE

Model name				AS∗A004GTAH	AS∗A007GTAH	AS∗A009GTAH
Power source				230 V ~ 50 Hz		
Available voltage range				198 to 264 V		
Capacity	Cooling		kW	1.1	2.2	2.8
	Heating			1.3	2.8	3.2
Input power			W	13	19	34
Fan	Airflow rate	High	m^3 / h (l / s)	430 (119)	550 (153)	720 (200)
		Me-Hi		420 (117)	460 (128)	570 (158)
		Med		390 (108)	420 (117)	500 (139)
		Lo-Hi		380 (106)	390 (108)	410 (114)
		Low		360 (100)	360 (100)	360 (100)
		Quiet		330 (92)	330 (92)	330 (92)
	Type x Quantity			Cross flow × 1		
	Motor output		W	30		
Sound pressure level	High		dB(A)	31	35	43
	Me-Hi			30	32	38
	Med			28	30	34
	Lo-Hi			26	27	29
	Low			24	24	24
	Quiet			22	22	22
Heat exchanger	Dimensions (H x W x D)		mm	256 × 630 × 20		
	Fin pitch			1.1		
	Rows x Stages			2 × 16		
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Slit (Aluminium)		
		Surface treatment		Hydrophilic coating		
Air filter	Type			Anti mold		
	Net material			PP honeycomb		
Enclosure	Material			Plastic		
	Colour			White (Approximate colour of MUNSELL N 9.25/)		
Dimensions (H x W x D)	Net		mm	262 × 820 × 206		
	Gross			263 × 870 × 328		
Weight	Net		kg	7.5		
	Gross			10		
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35		
	Gas (Flare)			ø 9.52		
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				AS∗A04GACH	AS∗A07GACH	AS∗A09GACH	AS∗A12GACH	AS∗A14GACH
Power source				230V ~, 50Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	1.1	2.2	2.8	3.6	4.5
	Heating			1.3	2.8	3.2	4.1	5.0
Input power			W	13	17	18	22	34
Fan	Airflow rate	High	m^3 / h (l / s)	450 (125)	490 (136)	500 (139)	560 (156)	670 (186)
		Med		440 / 370* 1 (122 / 103)	450 (125)	450 (125)	480 (133)	490 (136)
		Low		420 / 320 *1 (117 / 89)	420 / 370 *1 (117 / 103)	420 / 370 *1 (117 / 103)	420 (117)	420 (117)
	Type x Quantity			Cross flow × 1				
	Motor output		W	42				
Sound pressure level	High		dB(A)	33	35	36	39	44
	Med			32 / 27 *1	33	33	35	37
	Low			31 / 22 *1	31 / 27 *1	31 / 27 *1	31	32
Heat exchanger	Length		mm	600				
	Fin pitch			1.20				
	Rows x Stages			2 × 16				
	Face Area		m^2	0.20				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Antibacterial and Mold proofing, Ion deodorization				
	Net material			PP honeycomb				
Enclosure	Material			Plastic				
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)				
Dimensions (H x W x D)	Net		mm	275 × 790 × 215				
	Gross			290 × 835 × 345				
Weight	Net		kg	9				
	Gross			12				
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				
	Gas (Flare)			ø 12.70				
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)				

*1: This value is "cooling operation / heating operation".

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				AS∗A18GACH	AS∗A24GACH	AS∗A30GACH	AS∗A18GBCH	AS∗A24GBCH
Power source				230V ~, 50Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	5.6	7.1	8.0	5.6	7.1
	Heating			6.3	8.0	9.0	6.3	8.0
Input power			W	32	60	91	32	60
Fan	Airflow rate	High	m^3 / h (l / s)	840 (233)	1100 (305)	1240 (343)	840 (233)	1,100 (306)
		Med		770 (213)	910 (252)	980 (271)	770 (214)	910 (253)
		Low		690 (191)	730 (202)	770 (213)	690 (192)	730 (203)
	Type x Quantity			Cross flow × 1				
	Motor output		W	42		65	42	
Sound pressure level	High		dB(A)	41	48	52	41	48
	Med			39	43	45	39	43
	Low			35	35	35	35	35
Heat exchanger	Length		mm	817				
	Fin pitch			1.20 1.40				
	Rows x Stages			2 × 18 1 × 4 (2 pieces)				
	Face Area		m^2	0.31				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Deodorization / Anti-mold				
	Net material			PP monofilament net				
Enclosure	Material			Plastic				
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)				
Dimensions (H x W x D)	Net		mm	320 × 998 × 228			320 × 998 × 328	
	Gross			319 × 1,090 × 429			329 × 1,090 × 429	
Weight	Net		kg	15				
	Gross			19				
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52			ø 6.35	ø 9.52
	Gas (Flare)			ø 15.88			ø 12.70	ø 15.88
	Drain hose			ø 12(I.D.) ; ø 16(O.D.)				

INDOOR UNITS

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Model name				AS∗A030GTAH	AS∗A034GTAH
Power source				230 V ~ 50 Hz	
Available voltage range				198 to 264 V	
Capacity	Cooling		kW	9.0	10.0
	Heating			10.0	11.2
Input power			W	74	103
Fan	Airflow rate	High	m^3 / h (l / s)	1,440 (400)	1,620 / 1,520 (450 / 422)
		Me-Hi		1,200 (333)	1,300 (361)
		Med		1,050 (292)	1,120 (311)
		Lo-Hi		940 (261)	980 (272)
		Low		890 (247)	890 (247)
		Quiet		700 (194)	700 (194)
	Type x Quantity			Cross flow x 1	
	Motor output		W	61	
Sound pressure level	High		dB(A)	53	55 / 54
	Me-Hi			49	51
	Med			45	47
	Lo-Hi			42	43
	Low			39	39
	Quiet			33	33
Heat exchanger	Dimensions (H x W x D)		mm	Main : 462 × 900 × 26.6 Sub1 : 126 × 900 × 13.3 Sub2 : 84 × 900 × 13.3	
	Fin pitch			Main : 1.2 / Sub1,2 1.4	
	Rows x Stages			main : 2 x 22 / sub 1 : 1 × 6 / sub2 : 1 × 4	
	Pipe type (Material)			Grooved H-pin (Copper)	
	Fin	Type (Material)		Slit (Aluminium)	
		Surface treatment		Hydrophilic coating	
Air filter	Type			Anti mold	
	Net material			PP plain weave	
Enclosure	Material			Plastic	
	Colour			White (Approximate colour of MUNSELL N 9.25/)	
Dimensions (H x W x D)	Net		mm	340 × 1,150 × 280	
	Gross			405 × 1,270 × 450	
Weight	Net		kg	18	
	Gross			24	
Connection pipe diameter	Liquid (Flare)		mm	ø 9.52	
	Gas (Flare)			ø 15.88	
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)	

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

1-14. WALL MOUNTED TYPE (EEV external model)

Model name				AS∗E004GTAH	AS∗E007GTAH	AS∗E009GTAH
Power source				230 V ~ 50 Hz		
Available voltage range				198 to 264 V		
Capacity	Cooling		kW	1.1	2.2	2.8
	Heating			1.3	2.8	3.2
Input power			W	13	19	34
Fan	Airflow rate	High	m^3 / h (l / s)	430 (119)	550 (153)	720 (200)
		Me-Hi		420 (117)	460 (128)	570 (158)
		Med		390 (108)	420 (117)	500 (139)
		Lo-Hi		380 (106)	390 (108)	410 (114)
		Low		360 (100)	360 (100)	360 (100)
		Quiet		330 (92)	330 (92)	330 (92)
	Type x Quantity			Cross flow × 1		
	Motor output		W	30		
Sound pressure level	High		dB(A)	31	35	43
	Me-Hi			30	32	38
	Med			28	30	34
	Lo-Hi			26	27	29
	Low			24	24	24
	Quiet			22	22	22
Heat exchanger	Dimensions (H x W x D)		mm	256 × 630 × 20		
	Fin pitch			1.1		
	Rows x Stages			2 × 16		
	Pipe type (Material)			Grooved H-pin (Copper)		
	Fin	Type (Material)		Slit (Aluminium)		
		Surface treatment		Hydrophilic coating		
Air filter	Type			Anti mold		
	Net material			PP honeycomb		
Enclosure	Material			Plastic		
	Colour			White (Approximate colour of MUNSELL N 9.25/)		
Dimensions (H x W x D)	Net		mm	262 × 820 × 206		
	Gross			263 × 870 × 328		
Weight	Net		kg	7		
	Gross			9.5		
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35		
	Gas (Flare)			ø 9.52		
	Drain hose			ø 13.8(I.D.) ; ø 15.8 - ø 16.7(O.D.)		
EV Kit (Option)				UTR - EV09XB		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

INDOOR UNITS

Model name				AS∗E04GACH	AS∗E07GACH	AS∗E09GACH	AS∗E12GACH	AS∗E14GACH
Power source				230V ~, 50Hz				
Available voltage range				198 to 264 V				
Capacity	Cooling		kW	1.1	2.2	2.8	3.6	4.5
	Heating			1.3	2.8	3.2	4.1	5.0
Input power			W	12	15	16	21	34
Fan	Airflow rate	High	m^3 / h (l / s)	450 (125)	490 (136)	500 (139)	560 (156)	680 (189)
		Med		440 / 370 *1 (122 / 103)	450 (125)	450 (125)	480 (133)	490 (136)
		Low		420 / 300 *1 (117 / 83)	420 / 370 *1 (117 / 103)	420 / 370 *1 (117 / 103)	420 (117)	420 (117)
	Type x Quantity			Cross flow × 1				
	Motor output		W	42				
Sound pressure level	High		dB(A)	32	34	35	38	43
	Med			31 / 26 *1	32	32	34	35
	Low			30 / 19 *1	30 / 26 *1	30 / 26 *1	30	30
Heat exchanger	Length		mm	635				
	Fin pitch			1.20				
	Rows x Stages			2 × 16				
	Face Area		m^2	0.21				
	Pipe type (Material)			Grooved H-pin (Copper)				
	Fin	Type (Material)		Slit (Aluminium)				
		Surface treatment		Hydrophilic coating				
Air filter	Type			Antibacterial and Mold proofing, Ion deodorization				
	Net material			PP honeycomb				
Enclosure	Material			Plastic				
	Colour			WHITE (Approximate colour of MUNSELL N9.25/)				
Dimensions (H x W x D)	Net		mm	275 × 790 × 215				
	Gross			290 × 835 × 345				
Weight	Net		kg	9				
	Gross			12				
Connection pipe diameter	Liquid (Flare)		mm	ø 6.35				
	Gas (Flare)			ø 12.70				
	Drain hose			ø 13.8 (I.D.) ; ø 15.8 - ø 16.7 (O.D.)				
EV Kit (Option)				UTR - EV09XB			UTR - EV14XB	

*1: This value is "cooling operation / heating operation".

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

2. ELECTRIC CHARACTERISTICS

Indoor Unit		Power Supply				Indoor Rated	
Type	Model	Voltage (V)	Frequency (Hz)	MCA (A)	MFA (A)	Input Power (kW)	Current (A)
Compact cassette	AUXB04GBLH	230~	50	0.20	20	0.023	0.17
	AUXB07GALH			0.20		0.025	0.17
	AUXB09GALH			0.20		0.025	0.17
	AUXB12GALH			0.24		0.029	0.20
	AUXB14GALH			0.29		0.035	0.24
	AUXB18GALH			0.30		0.036	0.25
	AUXB24GALH			0.75		0.084	0.62
	AUXB04GBLH			0.20		0.023	0.17
Cassette	AUXM018GLAH	230~	50	0.24	20	0.020	0.20
	AUXM024GLAH			0.29		0.025	0.24
	AUXM030GLAH			0.50		0.049	0.41
	AUXK018GLAH			0.41		0.040	0.34
	AUXK024GLAH			0.41		0.040	0.34
	AUXK030GLAH			0.46		0.047	0.38
	AUXK034GLAH			0.46		0.047	0.38
	AUXK036GLAH			0.57		0.061	0.47
	AUXK045GLAH			0.81		0.089	0.67
	AUXK054GLAH			1.04		0.116	0.86
	AUXD18GALH			0.32		0.039	0.27
	AUXD24GALH			0.38		0.046	0.32
	AUXA18GALH			0.46		0.051	0.38
	AUXA24GALH			0.46		0.051	0.38
	AUXA30GALH			0.51		0.059	0.42
	AUXA34GALH			0.61		0.077	0.51
	AUXA36GALH			0.64		0.080	0.53
	AUXA45GALH			0.83		0.099	0.69
	AUXA54GALH			0.94		0.119	0.78
	AUXM018GLAH			0.24		0.020	0.20
	AUXM024GLAH			0.29		0.025	0.24
	AUXM030GLAH			0.50		0.049	0.41
	AUXK018GLAH			0.41		0.040	0.34
	AUXK024GLAH			0.41		0.040	0.34
	AUXK030GLAH			0.46		0.047	0.38
	AUXK034GLAH			0.46		0.047	0.38
	AUXK036GLAH			0.57		0.061	0.47
	AUXK045GLAH			0.81		0.089	0.67
	AUXK054GLAH			1.04		0.116	0.86
Low static pressure duct / Concealed floor	ARXB07GALH	230~	50	0.29	20	0.046	0.24
	ARXB09GALH			0.30		0.055	0.25
	ARXB12GALH			0.36		0.063	0.30
	ARXB14GALH			0.48		0.090	0.40
	ARXB18GALH			0.51		0.096	0.42
Mini duct	ARXK04GCLH	230 ~	50	0.32	20	0.026	0.21
	ARXK07GCLH			0.34		0.028	0.23
	ARXK09GCLH			0.34		0.028	0.23
	ARXK12GCLH			0.44		0.035	0.30
	ARXK14GCLH			0.81		0.066	0.54
	ARXK18GCLH			0.94		0.073	0.55
	ARXK24GCLH			1.04		0.080	0.61
	ARXK04GCLH			0.32		0.026	0.21

INDOOR UNITS

MCA : Min Circuit Amps = Max Operating Current (Full Load).

MFA : Main Fuse (Circuit breaker) Amps.

Indoor Unit		Power Supply				Indoor Rated	
Type	Model	Voltage (V)	Frequency (Hz)	MCA (A)	MFA (A)	Input Power (kW)	Current (A)
Slim duct / Slim concealed floor	ARXD07GALH	230~	50	0.38	20	0.044	0.31
	ARXD09GALH			0.42		0.050	0.35
	ARXD12GALH			0.46		0.054	0.38
	ARXD14GALH			0.74		0.092	0.61
	ARXD18GALH			0.66		0.083	0.55
	ARXD24GALH			0.94		0.122	0.78
Medium static pressure duct	ARXA24GBLH	230~	50	1.00	20	0.094	0.60
	ARXA30GBLH			1.12		0.108	0.69
	ARXA36GBLH			1.68		0.194	1.18
	ARXA45GBLH			2.12		0.240	1.43
High static pressure duct	ARXC36GBTH	230~	50	1.50	20	0.207	1.25
	ARXC45GATH			3.77		0.715	3.14
	ARXC60GATH			3.78		0.730	3.15
	ARXC72GBTH			6.59		0.681	4.10
	ARXC90GBTH			6.97		0.819	4.86
	ARXC96GATH			9.40		0.840	4.89
Large airflow duct	ARXN18GATH	230~	50	1.86	20	0.154	1.09
	ARXN24GATH			2.76		0.205	1.39
	ARXN30GATH			4.91		0.306	1.99
	ARXN34GATH			6.14		0.432	2.71
	ARXN36GATH			6.83		0.572	3.50
	ARXN45GATH			6.83		0.572	3.50
Floor / Ceiling	AB∗A12GATH	230~	50	0.30	20	0.030	0.25
	AB∗A14GATH			0.41		0.042	0.34
	AB∗A18GATH			0.69		0.074	0.57
	AB∗A24GATH			0.84		0.099	0.70
Ceiling	AB∗A30GATH	230~	50	0.52	20	0.066	0.43
	AB∗A36GATH			0.66		0.085	0.55
	AB∗A45GATH			0.98		0.131	0.81
	AB∗A54GATH			1.32		0.180	1.10
Compact floor	AG∗A004GCAH	230~	50	0.16	—	0.014	0.13
	AG∗A007GCAH			0.17		0.016	0.14
	AG∗A009GCAH			0.18		0.017	0.15
	AG∗A012GCAH			0.22		0.022	0.18
	AG∗A014GCAH			0.28		0.029	0.23
Compact floor (EEV external model)	AG∗E004GCAH	230~	50	0.16	—	0.014	0.13
	AG∗E007GCAH			0.17		0.016	0.14
	AG∗E009GCAH			0.18		0.017	0.15
	AG∗E012GCAH			0.22		0.022	0.18
	AG∗E014GCAH			0.28		0.029	0.23

MCA ： Min Circuit Amps = Max Operating Current (Full Load).

MFA ： Main Fuse (Circuit breaker) Amps.

INDOOR UNITS

Indoor Unit		Power Supply				Indoor Rated	
Type	Model	Voltage (V)	Frequency (Hz)	MCA (A)	MFA (A)	Input Power (kW)	Current (A)
Wall mounted	AS∗A004GTAH	230~	50	0.16	20	0.013	0.13
	AS∗A007GTAH			0.23		0.019	0.19
	AS∗A009GTAH			0.38		0.034	0.31
	AS∗A04GACH			0.19		0.013	0.16
	AS∗A07GACH			0.21		0.017	0.17
	AS∗A09GACH			0.22		0.018	0.18
	AS∗A12GACH			0.24		0.022	0.20
	AS∗A14GACH			0.36		0.034	0.30
	AS∗A18GACH			0.40		0.032	0.33
	AS∗A24GACH			0.63		0.060	0.52
	AS∗A30GACH			0.82		0.091	0.69
	AS∗A18GBCH			0.40		0.032	0.33
	AS∗A24GBCH			0.63		0.060	0.52
	AS∗A030GTAH			0.66		0.074	0.55
	AS∗A034GTAH			0.87		0.103	0.72
Wall mounted (EEV external model)	AS∗E004GTAH	230~	50	0.16	20	0.013	0.13
	AS∗E007GTAH			0.23		0.019	0.19
	AS∗E009GTAH			0.38		0.034	0.31
	AS∗E04GACH			0.20		0.012	0.17
	AS∗E07GACH			0.22		0.015	0.18
	AS∗E09GACH			0.23		0.016	0.19
	AS∗E12GACH			0.28		0.021	0.23
	AS∗E14GACH			0.42		0.034	0.35

INDOOR UNITS

MCA ： Min Circuit Amps = Max Operating Current (Full Load).

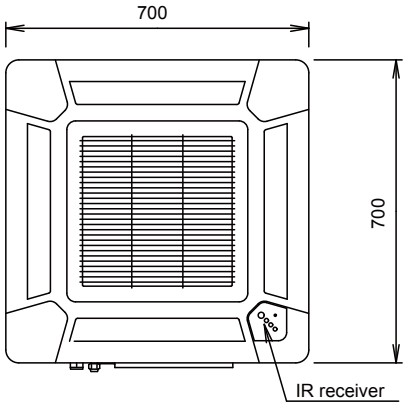
MFA ： Main Fuse (Circuit breaker) Amps.

3. DIMENSIONS

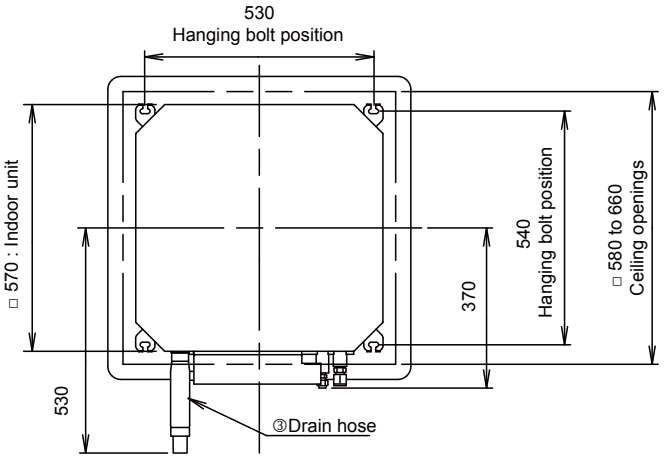
3-1. COMPACT CASSETTE TYPE

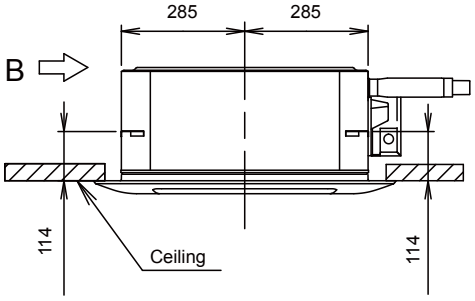
■ MODELS: AUXB04GBLH, AUXB04GALH, AUXB07GALH, AUXB09GALH, AUXB12GALH, AUXB14GALH, AUXB18GALH, AUXB24GALH

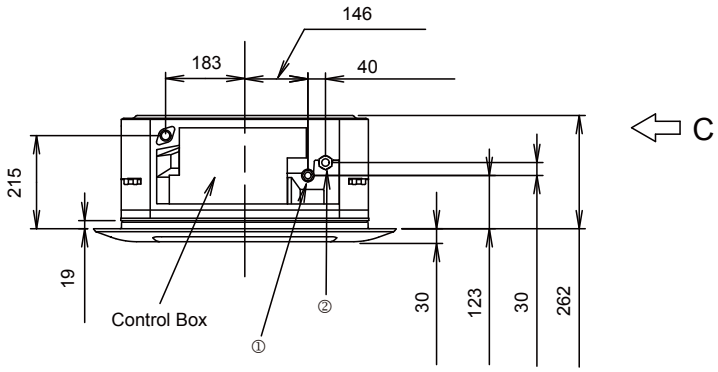
(Unit : mm)

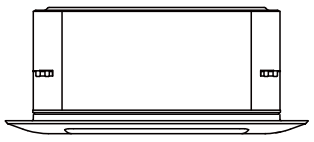


View A









A

View B



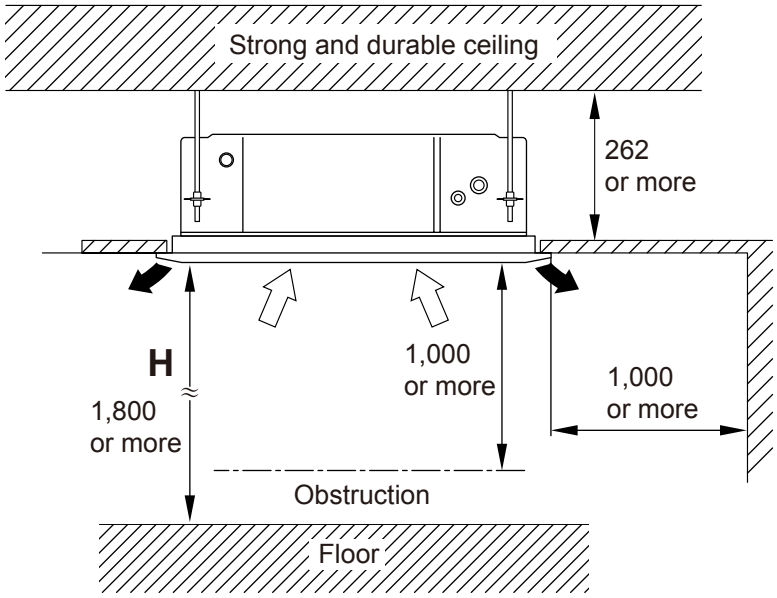
View C

			AUXB04GBLH	AUXB04GALH	AUXB07, AUXB09, AUXB12, AUXB14	AUXB18, AUXB24
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm			ø 9.52 mm
②		Gas	ø 9.52 mm	ø 12.70 mm		ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]			

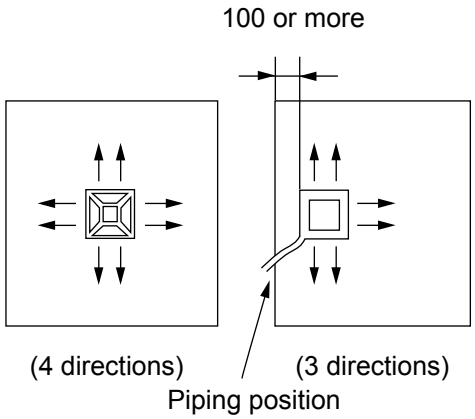
INDOOR UNITS

■ INSTALLATION PLACE

(Unit : mm)



	H (The maximum height from floor to ceiling) (mm)	
Model name	AUXB04/07/09	AUXB12/14/18/24
Standard mode	2,700	2,700
High Ceiling mode	-	3,000

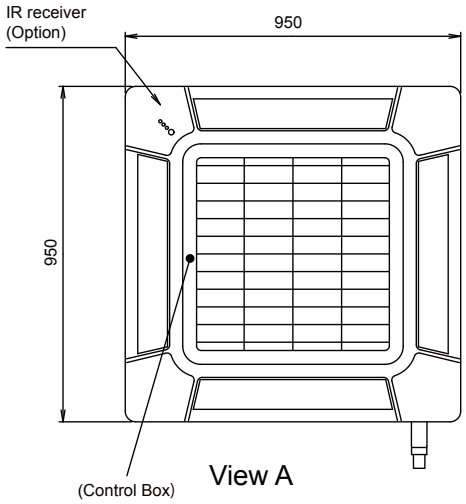


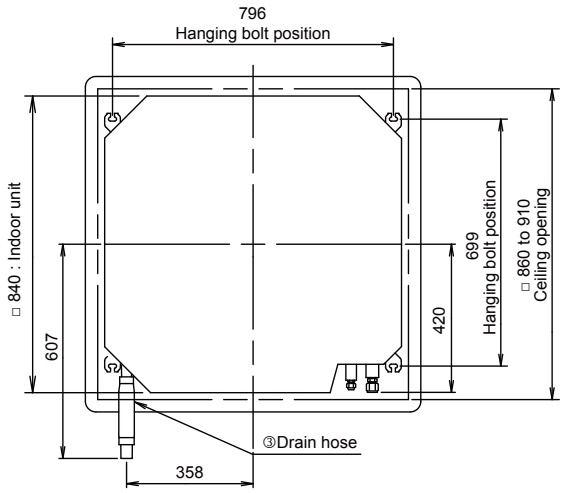
NOTE: Use the “Insulation kit for high humidity” (option), when the condition under the roof is over 80% in humidity and over 30°C in temperature. Otherwise, there is a risk of condensation on the ceiling.

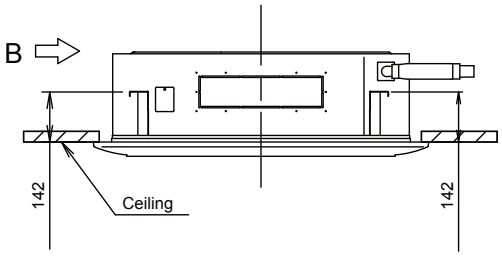
3-2. CASSETTE TYPE

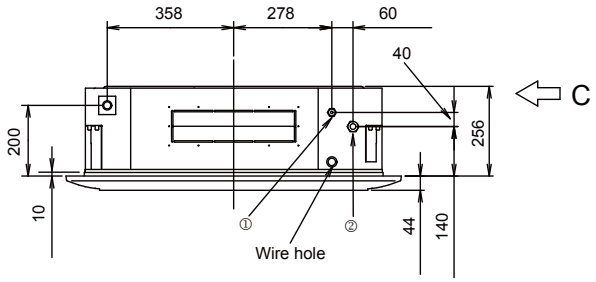
■ MODELS: AUXD18GALH, AUXD24GALH

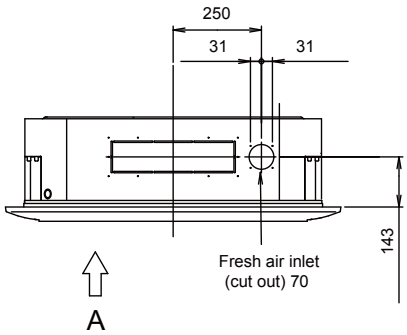
(Unit : mm)



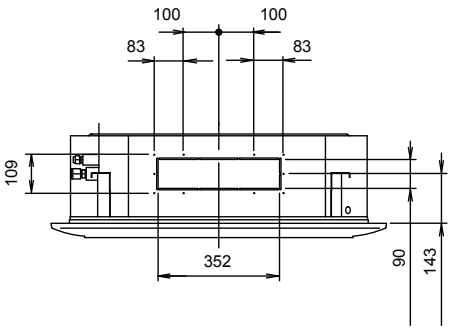








View B



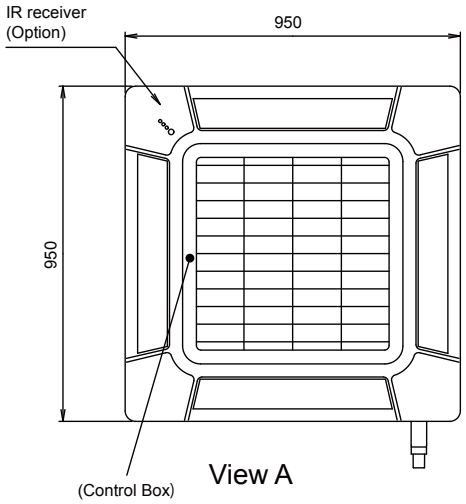
View C

			AUXD18, AUXD24
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

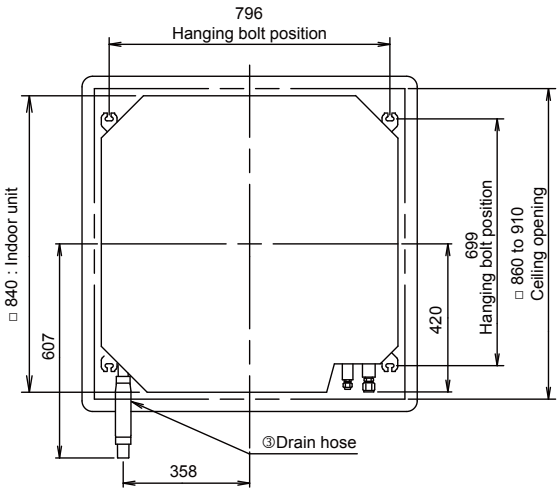
INDOOR UNITS

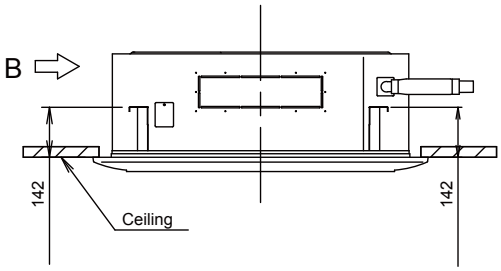
■ MODELS: AUXA18GALH, AUXA24GALH, AUXA30GALH, AUXA34GALH, AUXA36GALH, AUXA45GALH, AUXA54GALH

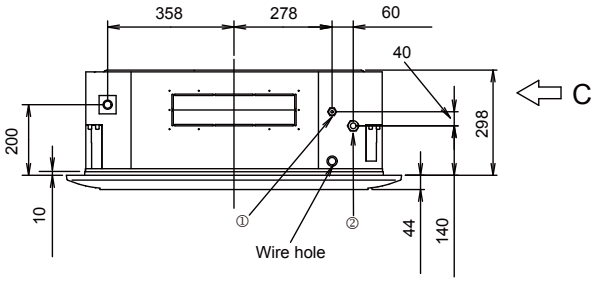
(Unit : mm)

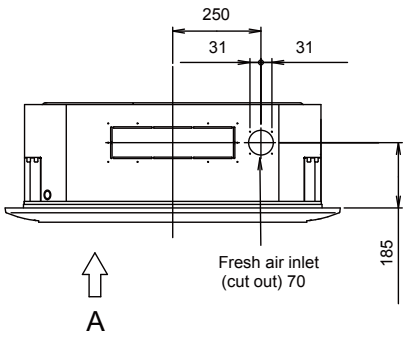


View A

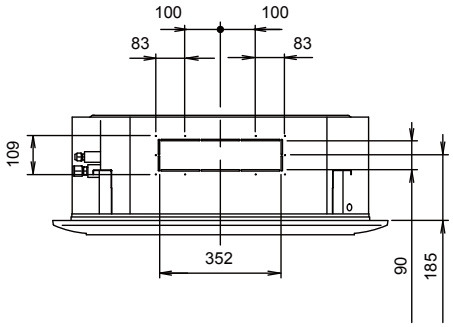








View B

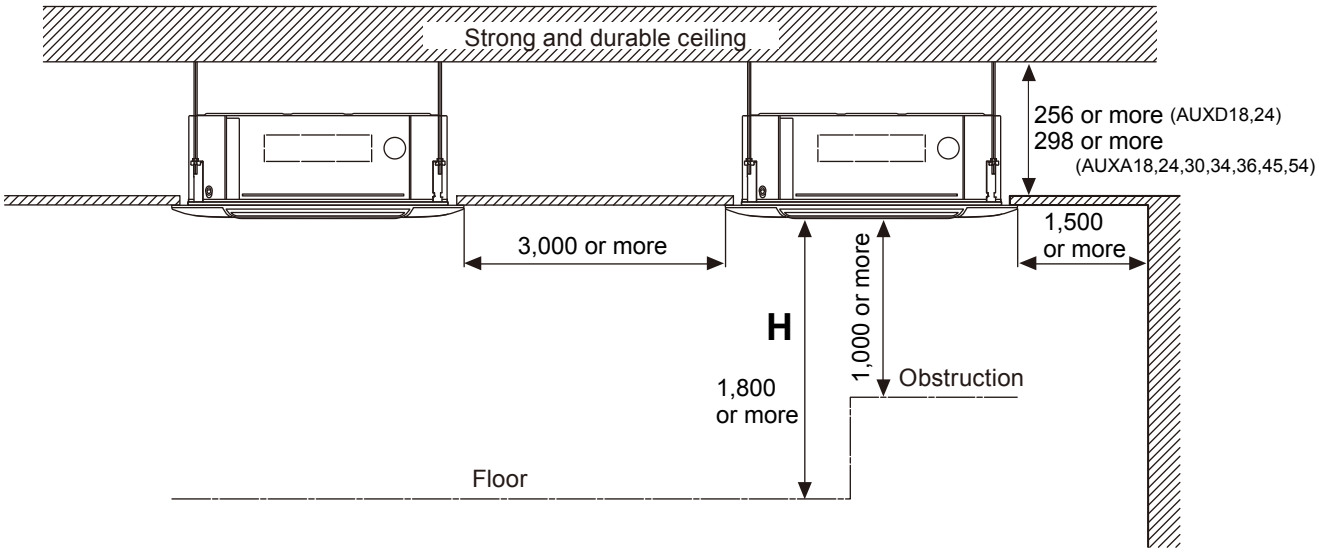


View C

			AUXA18, AUXA24, AUXA30, AUXA34	AUXA36, AUXA45, AUXA54
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm	
②		Gas	ø 15.88 mm	ø 19.05 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	

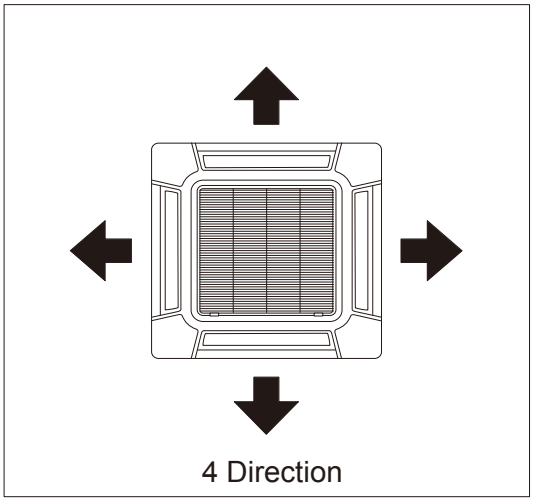
(Unit : mm)

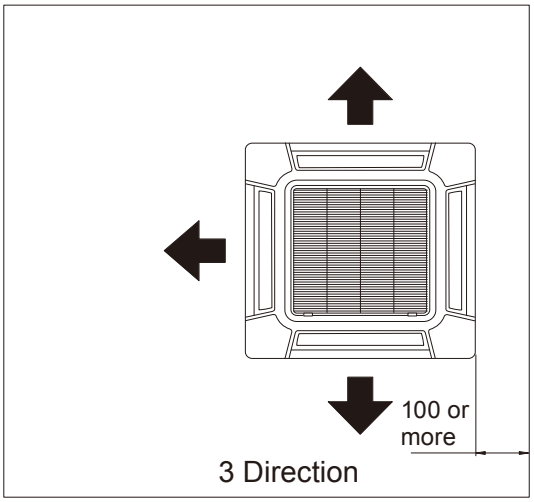
■ INSTALLATION PLACE



INDOOR UNITS

	H (The maximum height from floor to ceiling) (mm)								
Model name	AUXD18	AUXD24	AUXA18	AUXA24	AUXA30	AUXA34	AUXA36	AUXA45	AUXA54
Standard mode	3,000	3,000	3,200	3,200	3,200	3,200	3,200	3,200	3,200
High Ceiling mode	3,500	3,500	3,600	3,600	3,600	3,600	4,200	4,200	4,200

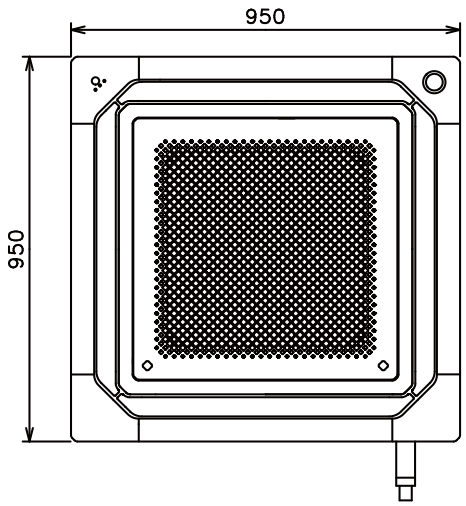




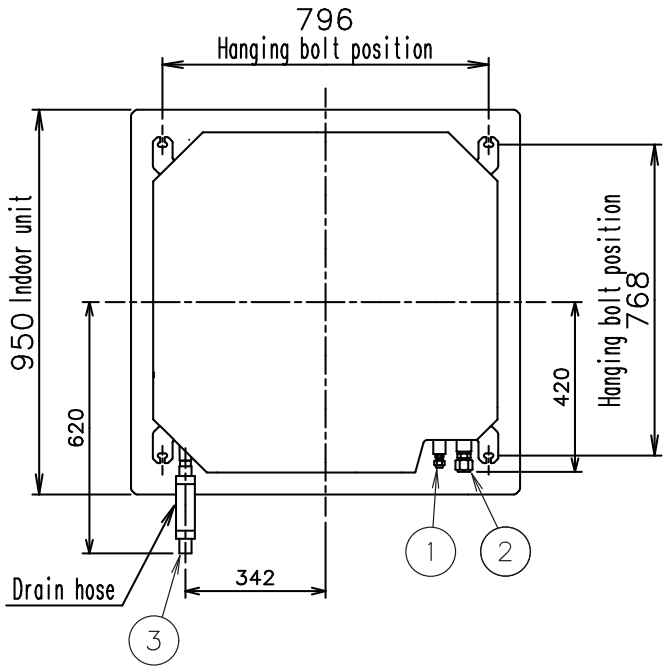
NOTE: Use the “Insulation kit for high humidity” (option), when the condition under the roof is over 80% in humidity and over 30°C in temperature. Otherwise, there is a risk of condensation on the ceiling.

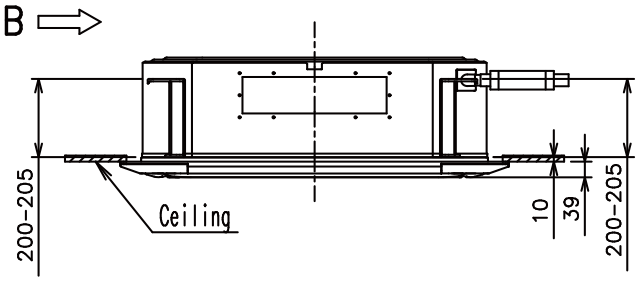
■ MODELS: AUXM018GLAH, AUXM024GLAH, AUXM030GLAH

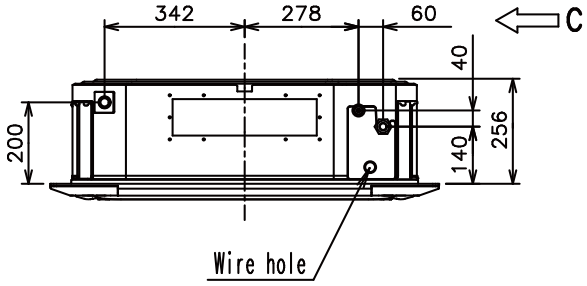
(Unit : mm)

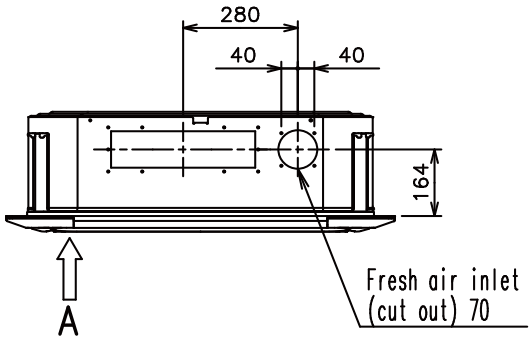


VIEW A

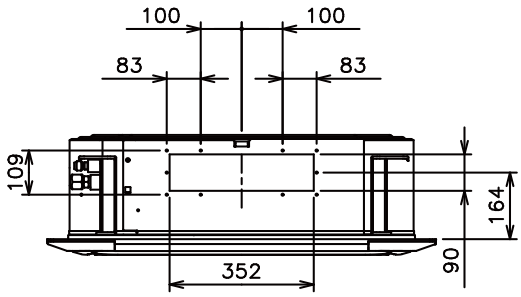








VIEW B

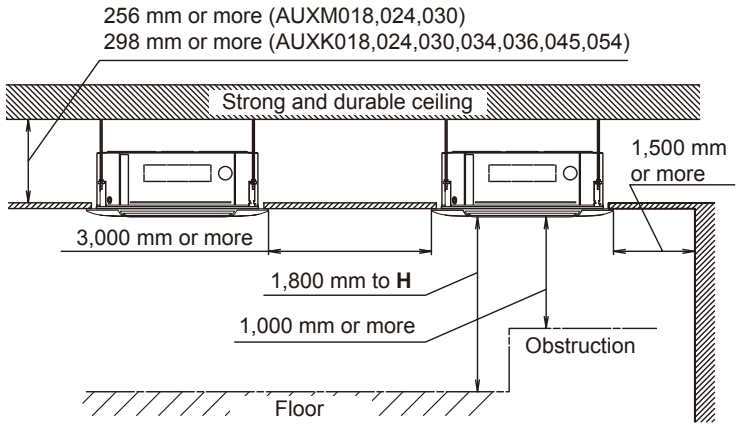


VIEW C

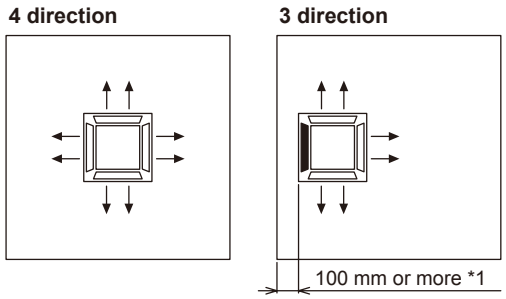
			AUXM018	AUXM024, AUXM030
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 9.52 mm
②		Gas	ø 12.70 mm	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	

■ INSTALLATION PLACE

(Unit : mm)



	H (The maximum height from floor to ceiling) (mm)
Model name	AUXM018/024/030
Standard mode	3,000
High Ceiling mode	3,500



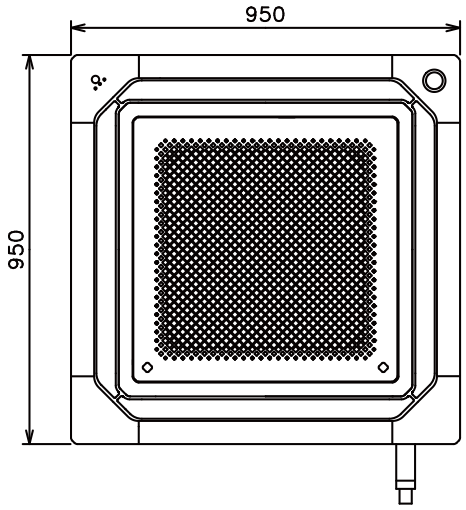
*1: Please ensure sufficient service access during installation.

NOTE: Use the “Insulation kit for high humidity” (option), when the condition under the roof is over 80% in humidity and over 30°C in temperature. Otherwise, there is a risk of condensation on the ceiling.

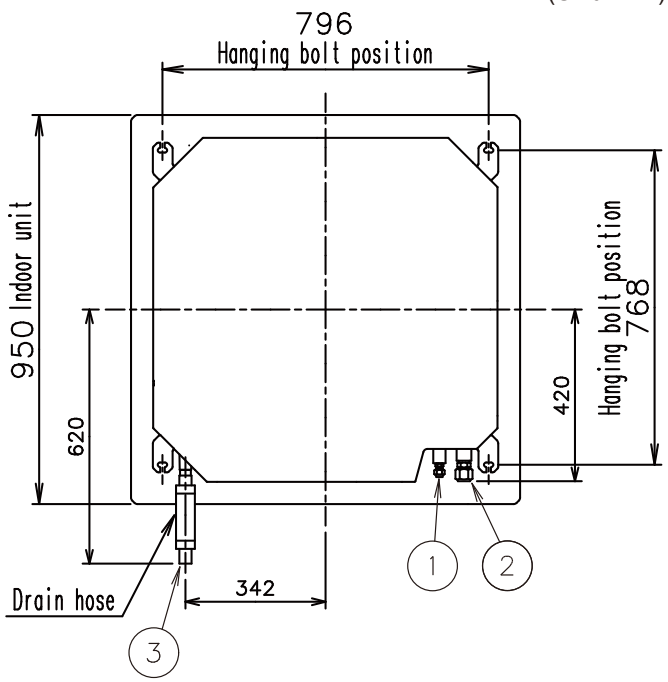
INDOOR UNITS

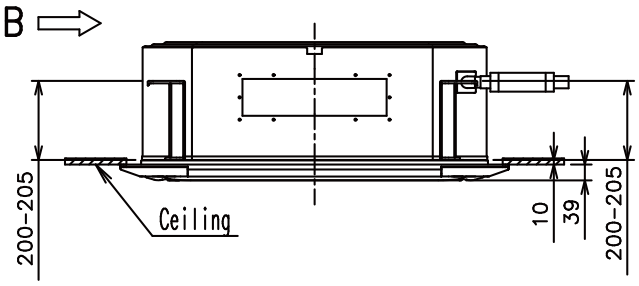
■ MODELS:AUXK018GLAH, AUXK024GLAH, AUXK030GLAH, AUXK034GLAH, AUXK036GLAH, AUXK045GLAH, AUXK054GLAH

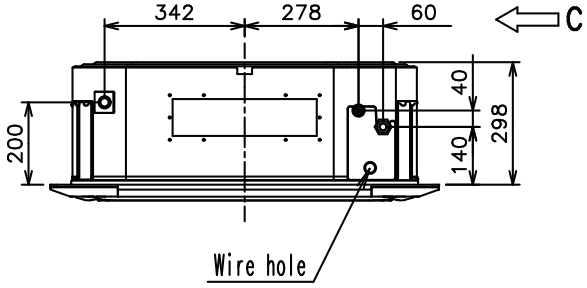
(Unit : mm)

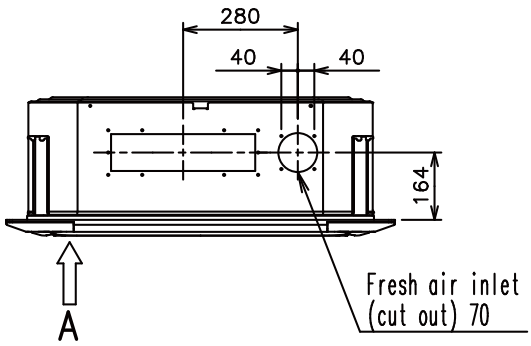


VIEW A

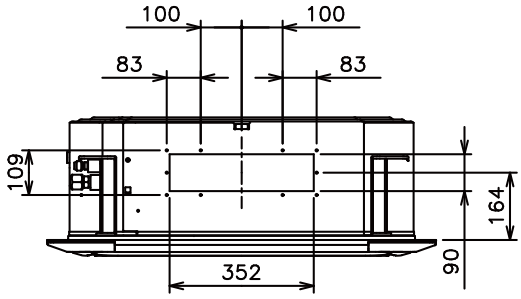








VIEW B

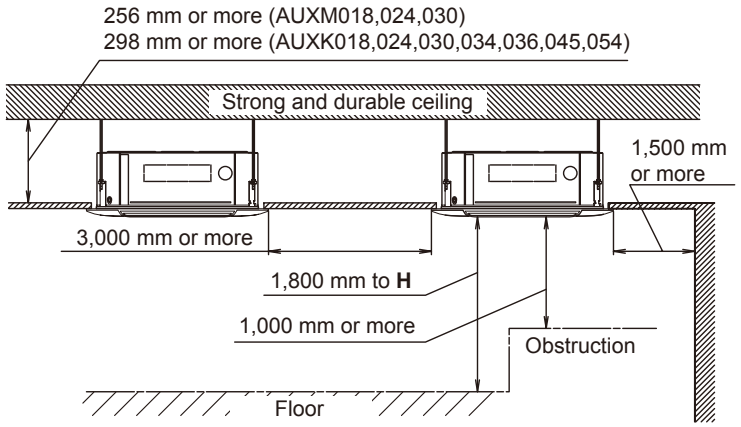


VIEW C

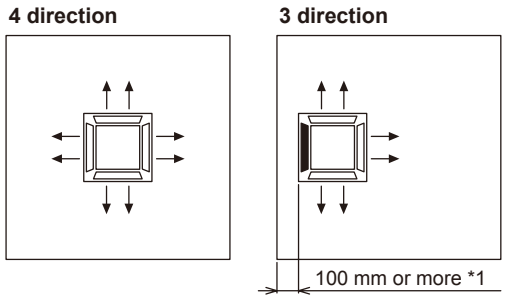
			AUXK018	AUXK024, AUXK030, AUXK034, AUXK036, AUXK045, AUXK054
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 9.52 mm
②		Gas	ø 12.70 mm	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	

■ INSTALLATION PLACE

(Unit : mm)



	H (The maximum height from floor to ceiling) (mm)	
Model name	AUXK018/024/030/034	AUXK036/045/054
Standard mode	3,200	3,200
High Ceiling mode	3,600	4,200



*1: Please ensure sufficient service access during installation.

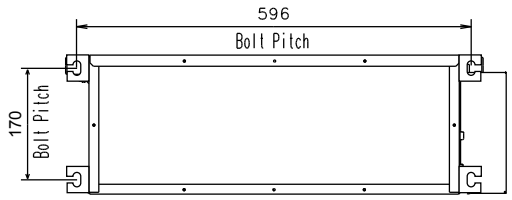
NOTE: Use the “Insulation kit for high humidity” (option), when the condition under the roof is over 80% in humidity and over 30°C in temperature. Otherwise, there is a risk of condensation on the ceiling.

INDOOR UNITS

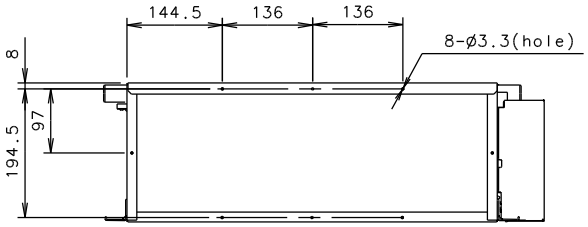
3-3. LOW STATIC PRESSURE DUCT / CONCEALED FLOOR TYPE

■ MODELS: ARXB07GALH, ARXB09GALH

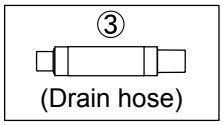
(Unit : mm)

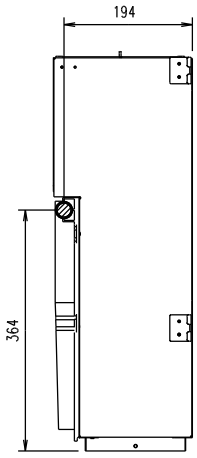


Rear view (Floor concealed)

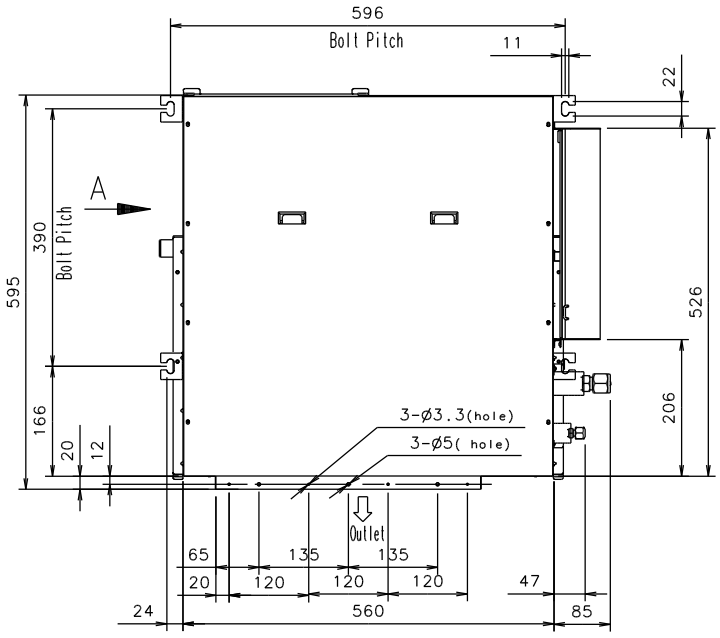


Rear view (Ceiling concealed)

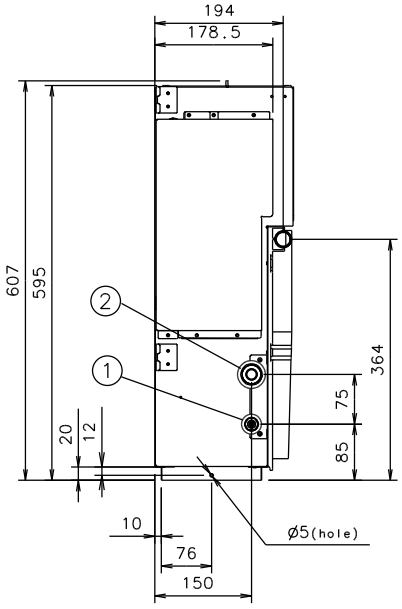




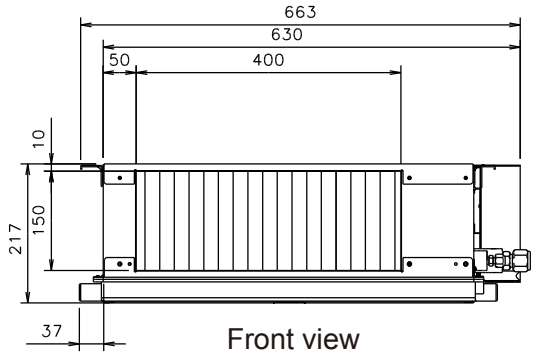
View A



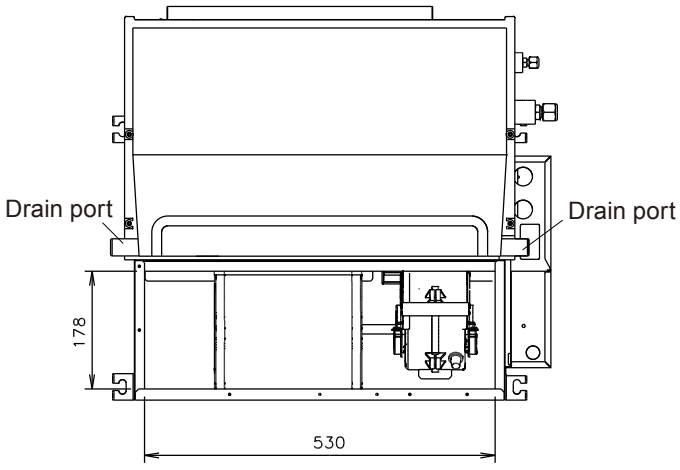
Top view



Side view



Front view

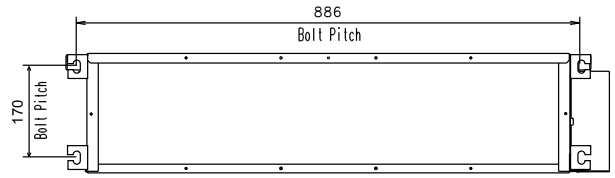


Bottom view

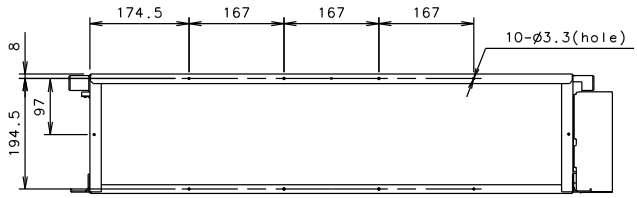
			ARXB07, ARXB09
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm
②		Gas	ø 12.70 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

■ MODELS: ARXB12GALH, ARXB14GALH, ARXB18GALH

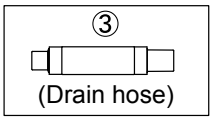
(Unit : mm)

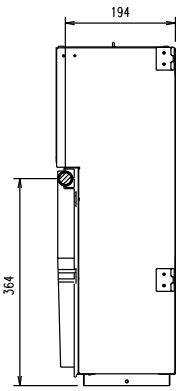


Rear view (Floor concealed)

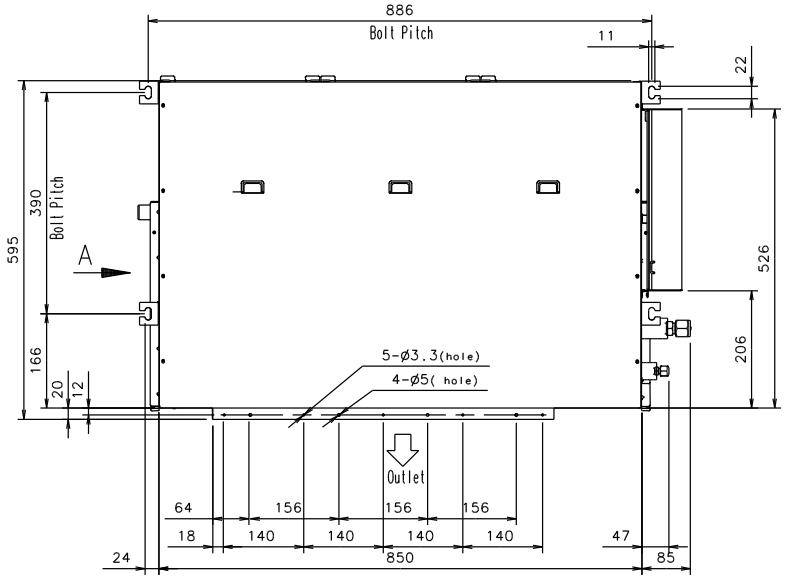


Rear view (Ceiling concealed)

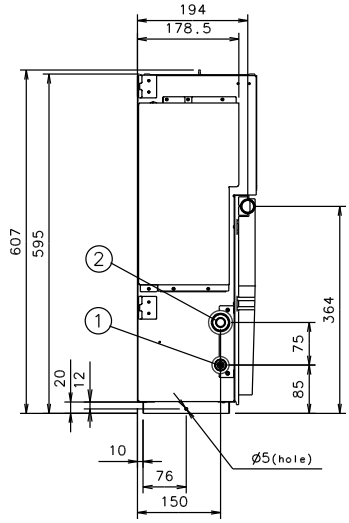




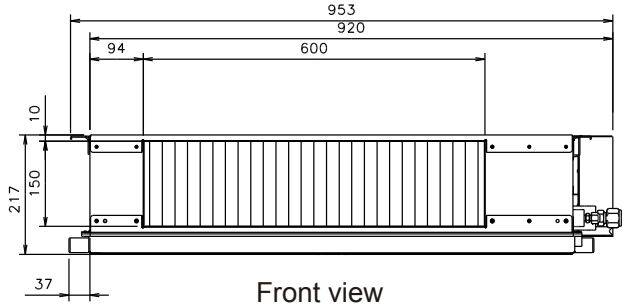
View A



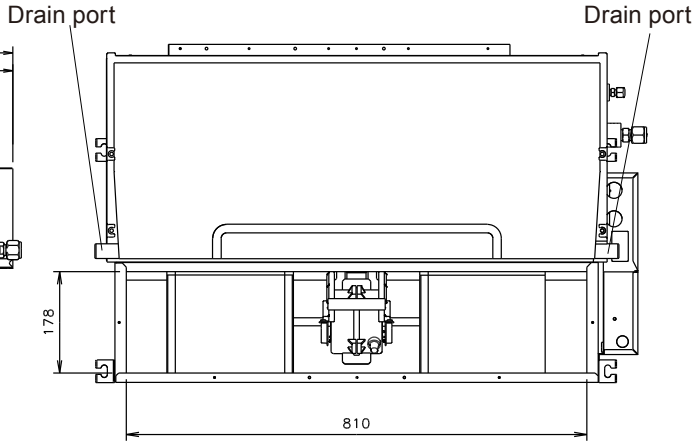
Top view



Side view



Front view



Bottom view

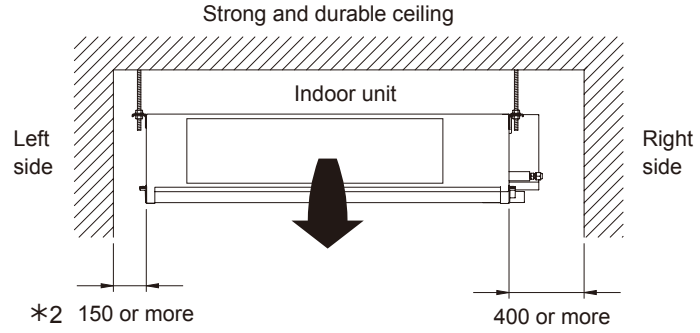
			ARXB12, ARXB14	ARXB18
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 9.52 mm
②		Gas	ø 12.70 mm	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	

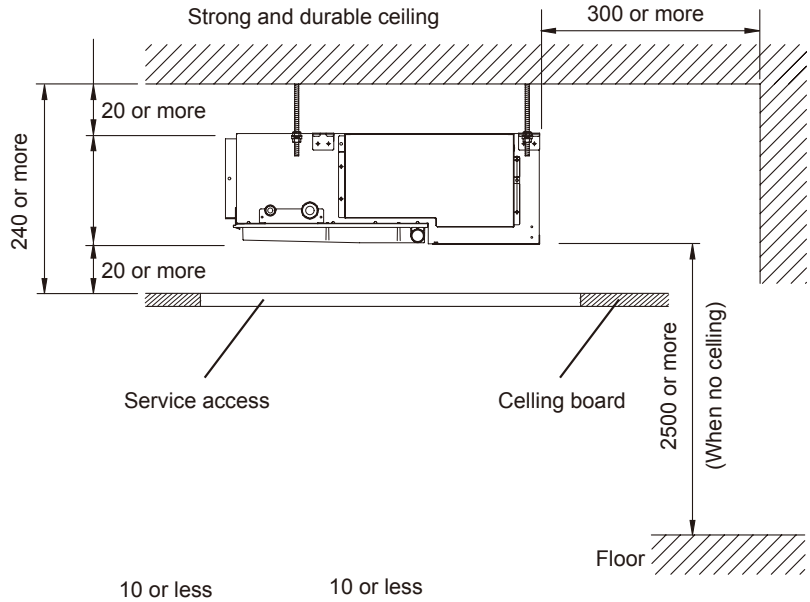
■ INSTALLATION PLACE ∗1

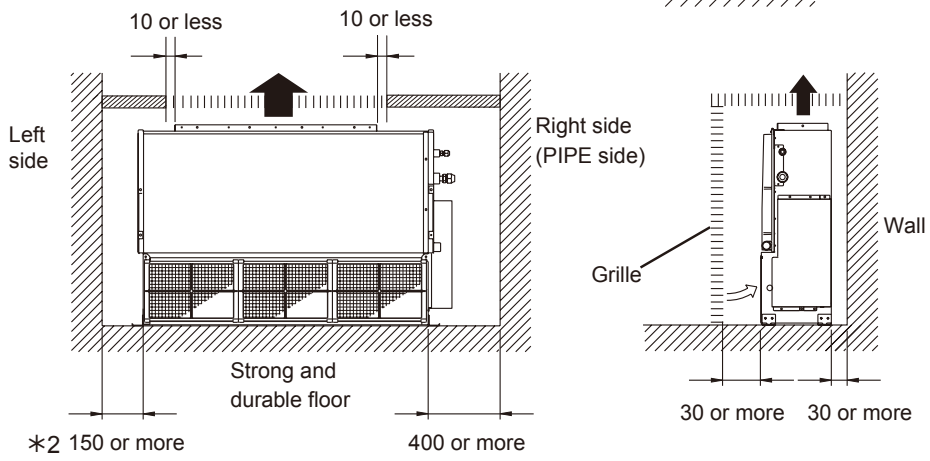
(Unit : mm)

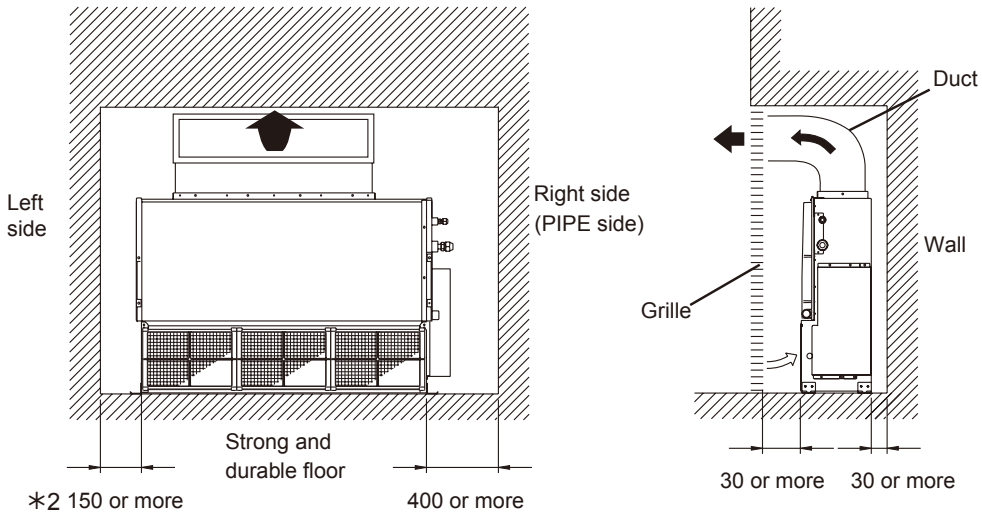
∗1 When drain pump is used, leave the space required for service and maintenance (Refer to 6-10-1. DRAIN PUMP UNIT)

∗2 When drain hose is connected, the required dimension is 400mm or more.



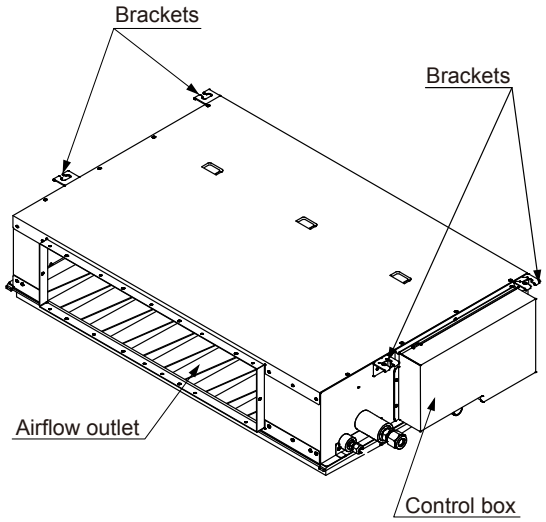






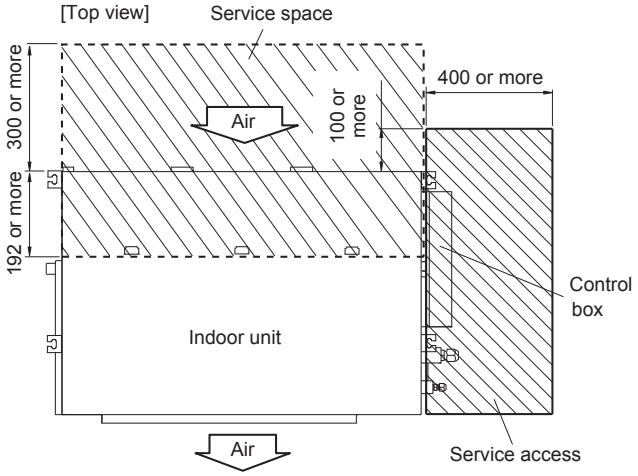
INDOOR UNITS

■ BIRD'S-EYE VIEW



■ MAINTENANCE SPACE (Unit : mm)

Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

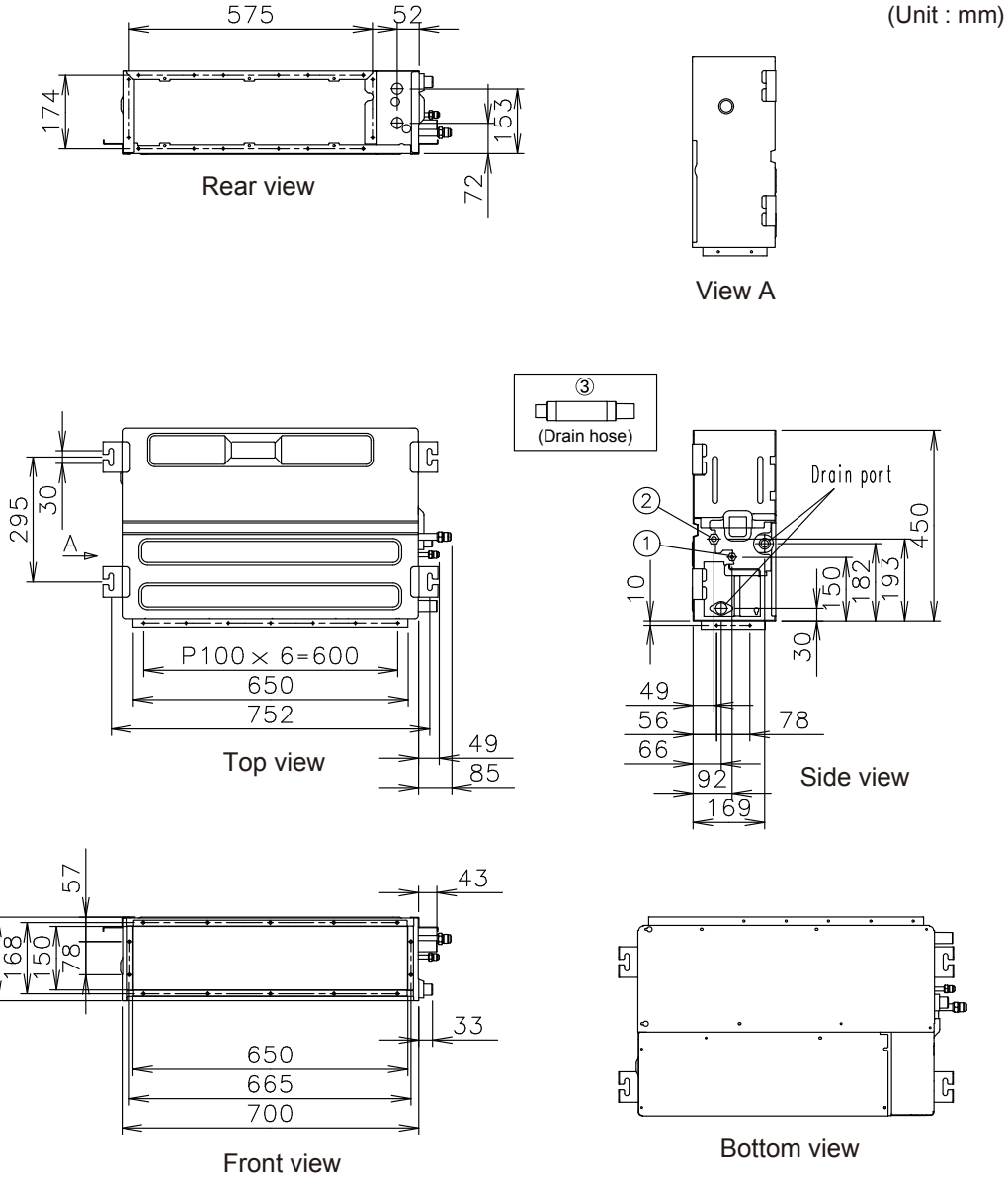


INDOOR UNITS

3-4. MINI DUCT TYPE

■ MODELS: ARXK04GCLH, ARXK07GCLH, ARXK09GCLH, ARXK12GCLH, ARXK14GCLH

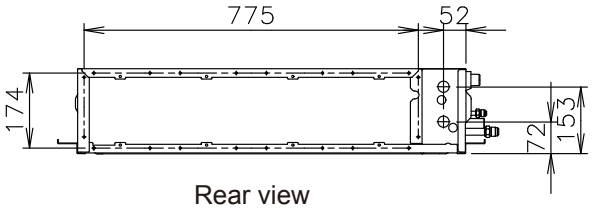
(Unit : mm)



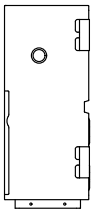
			ARXK04	ARXK07, ARXK09, ARXK12, ARXK14
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	
②		Gas	ø 9.52 mm	ø 12.70 mm
③	Drain hose connection	Drain hose	I.D. 25 mm , O.D. 32 mm	

■ MODEL: ARXK18GCLH

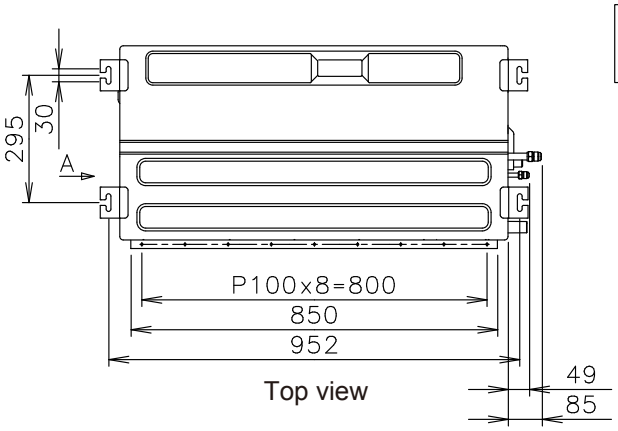
(Unit : mm)



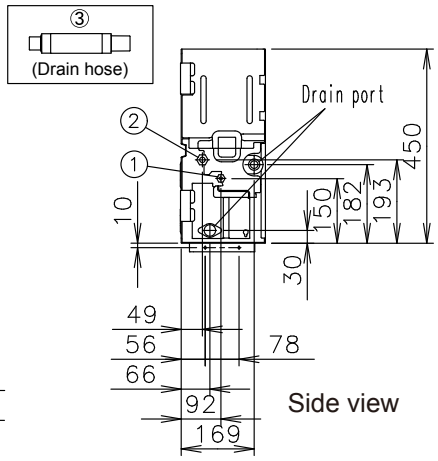
Rear view



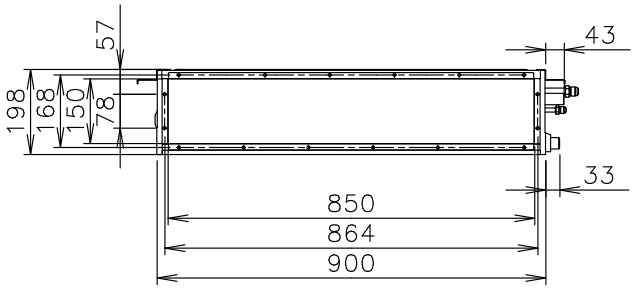
View A



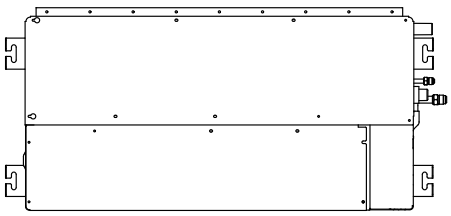
Top view



Side view



Front view

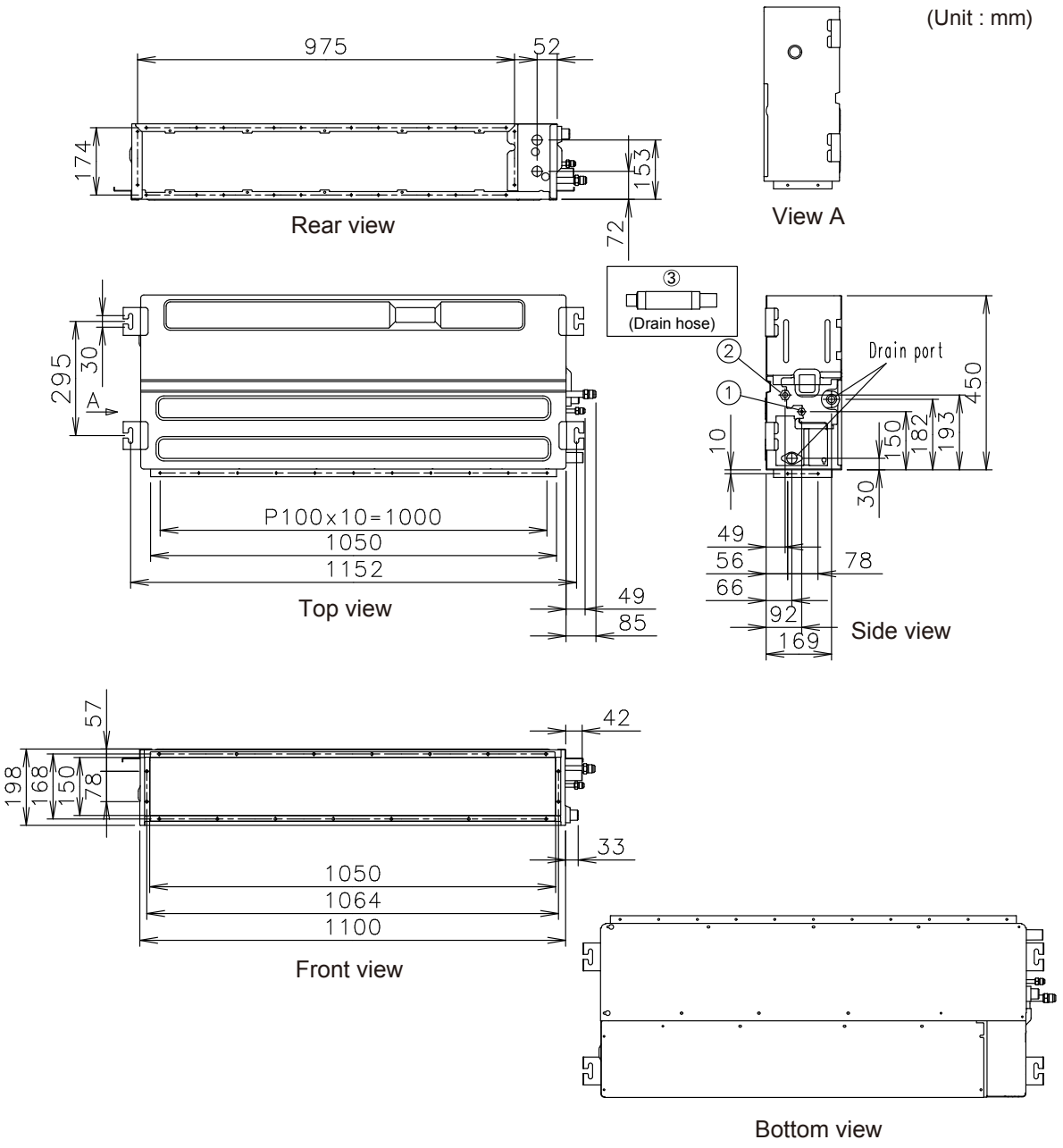


Bottom view

			ARXK18
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose connection	Drain hose	I.D. 25 mm , O.D. 32 mm

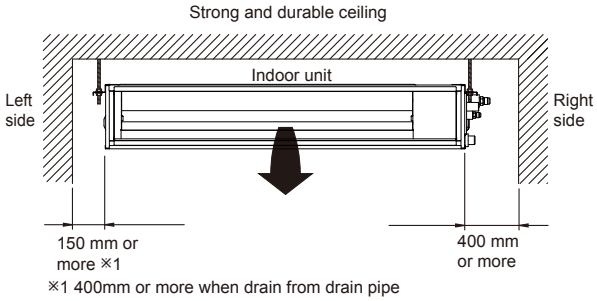
■ MODEL: ARXK24GCLH

(Unit : mm)

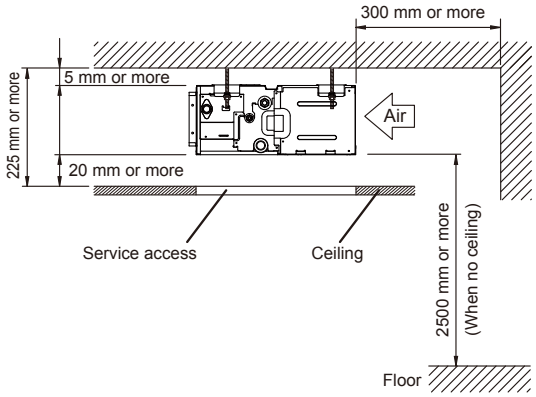


			ARXK24
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose connection	Drain hose	I.D. 25 mm , O.D. 32 mm

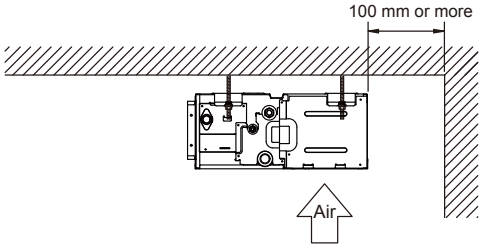
■ INSTALLATION PLACE



• When intaking air from back

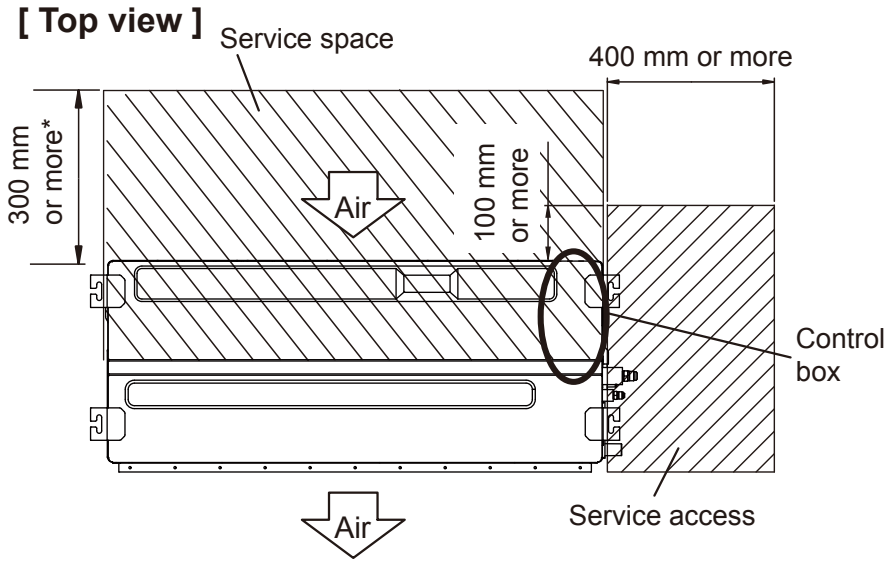


• When intaking air from bottom



■ MAINTENANCE SPACE

Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

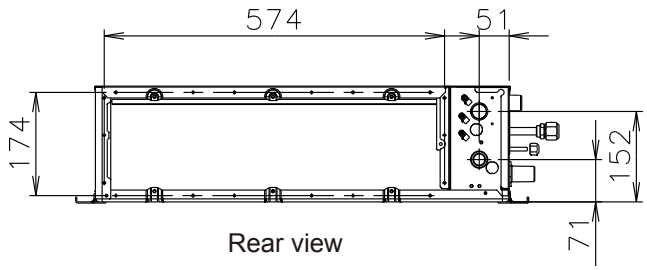


*: Above 100mm when intaking air from bottom

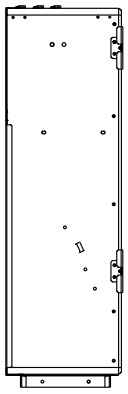
3-5. SLIM DUCT / SLIM CONCEALED FLOOR TYPE

■ MODELS: ARXD04GALH, ARXD07GALH, ARXD09GALH, ARXD12GALH, ARXD14GALH

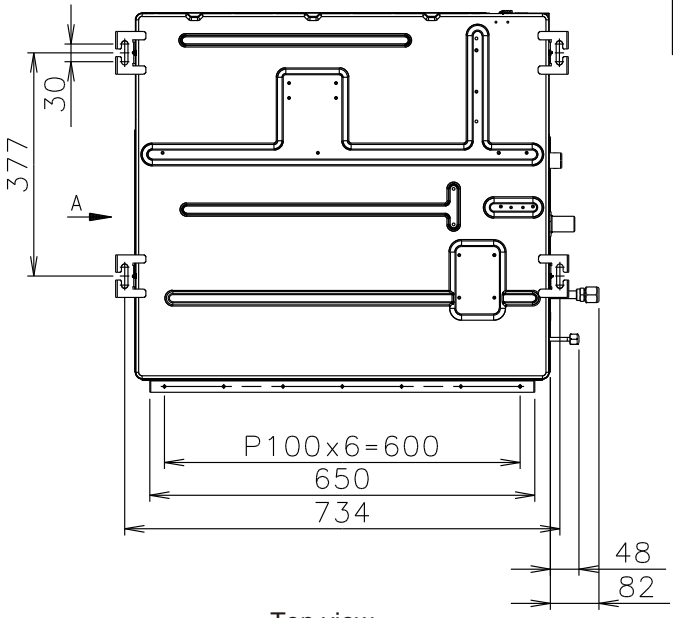
(Unit : mm)



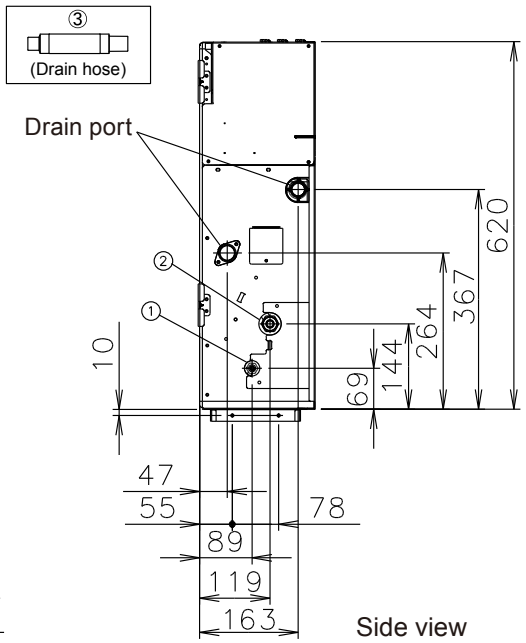
Rear view



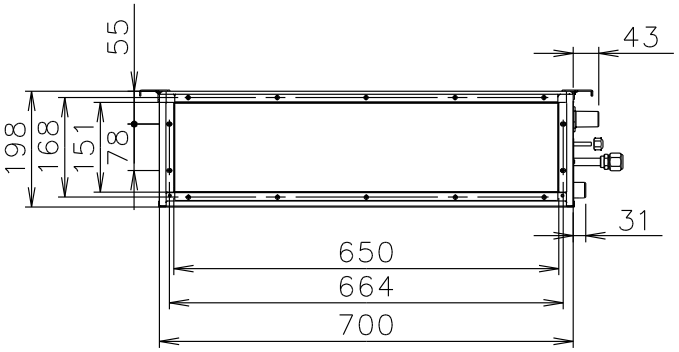
View A



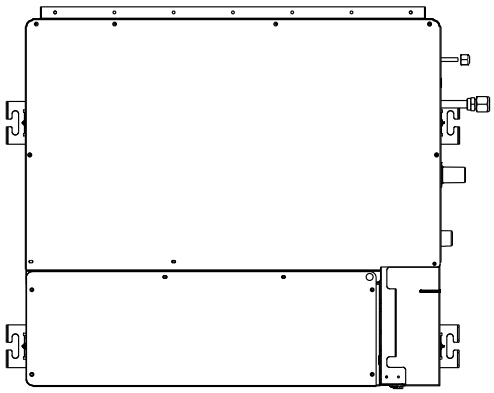
Top view



Side view



Front view

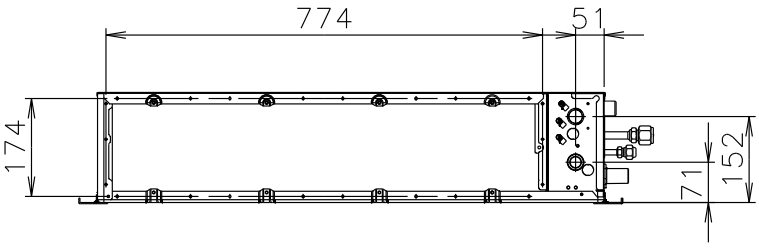


Bottom view

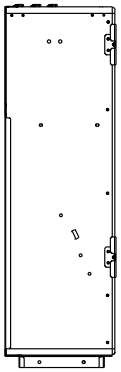
			ARXD04, ARXD07, ARXD09, ARXD12, ARXD14
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm
②		Gas	ø 12.70 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

■ MODELS: ARXD18GALH

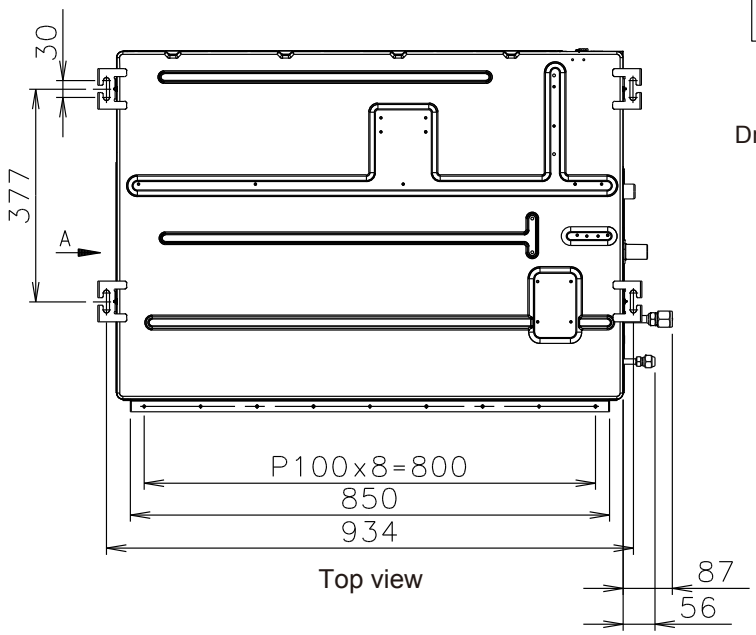
(Unit : mm)



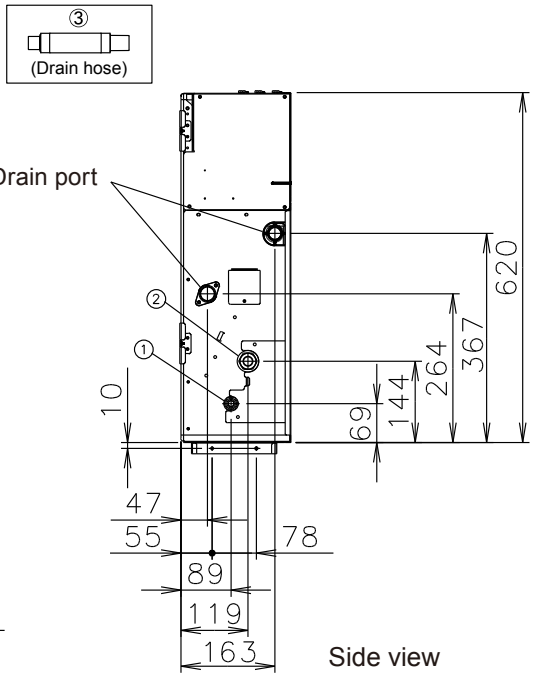
Rear view



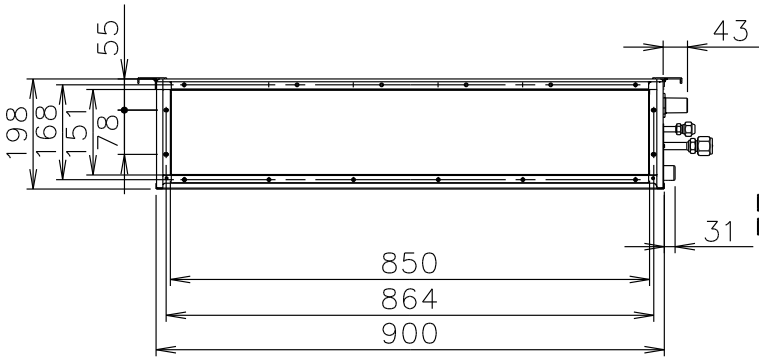
View A



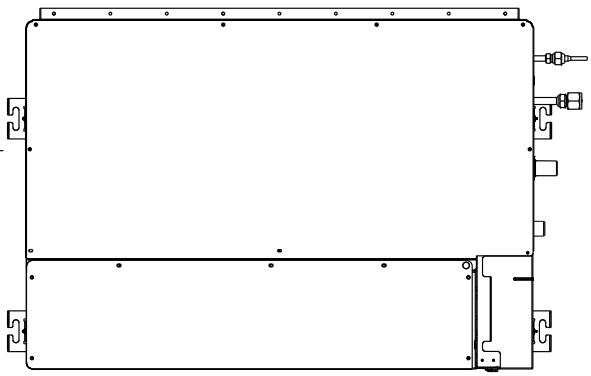
Top view



Side view



Front view

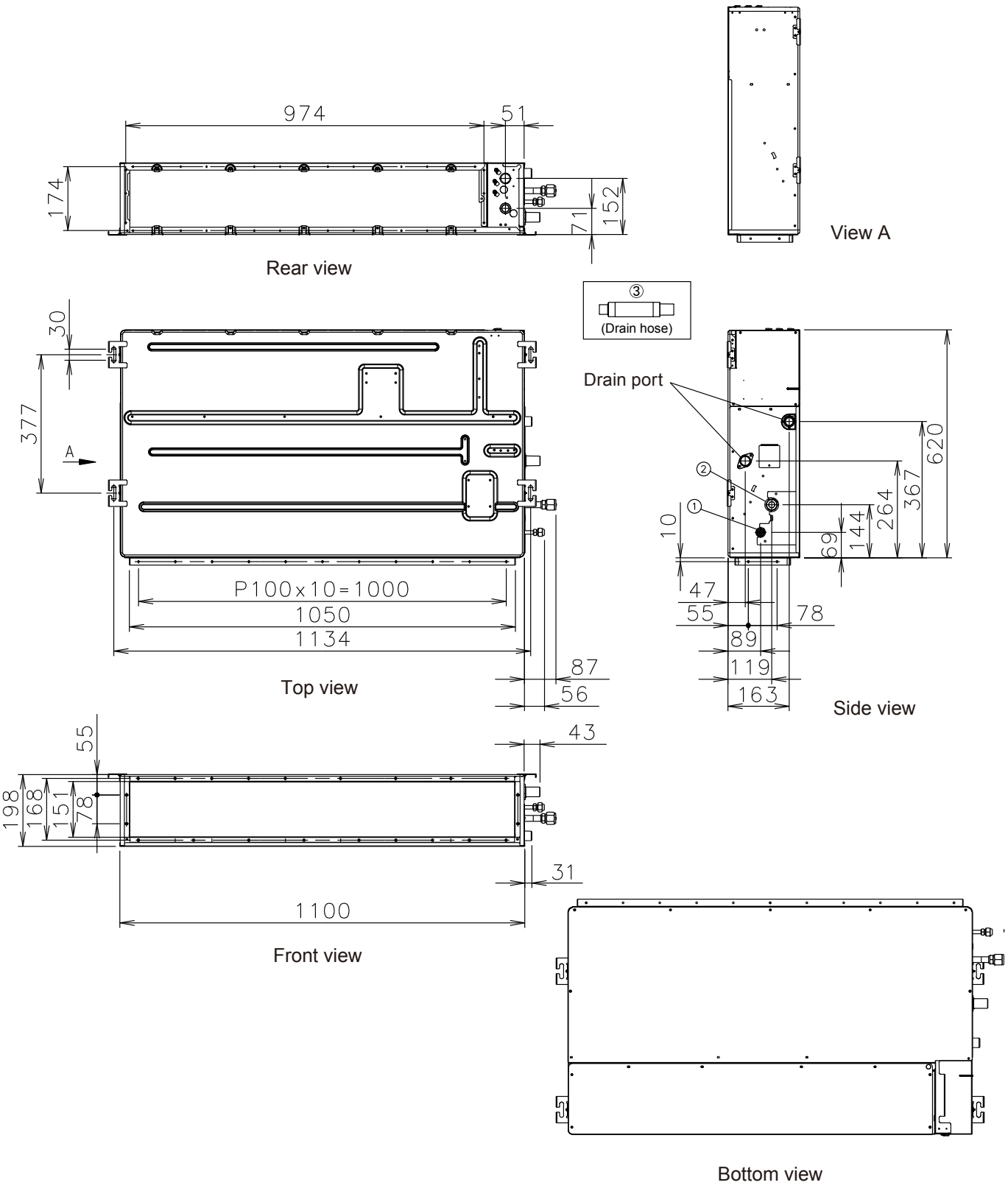


Bottom view

			ARXD18
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

■ MODELS: ARXD24GALH

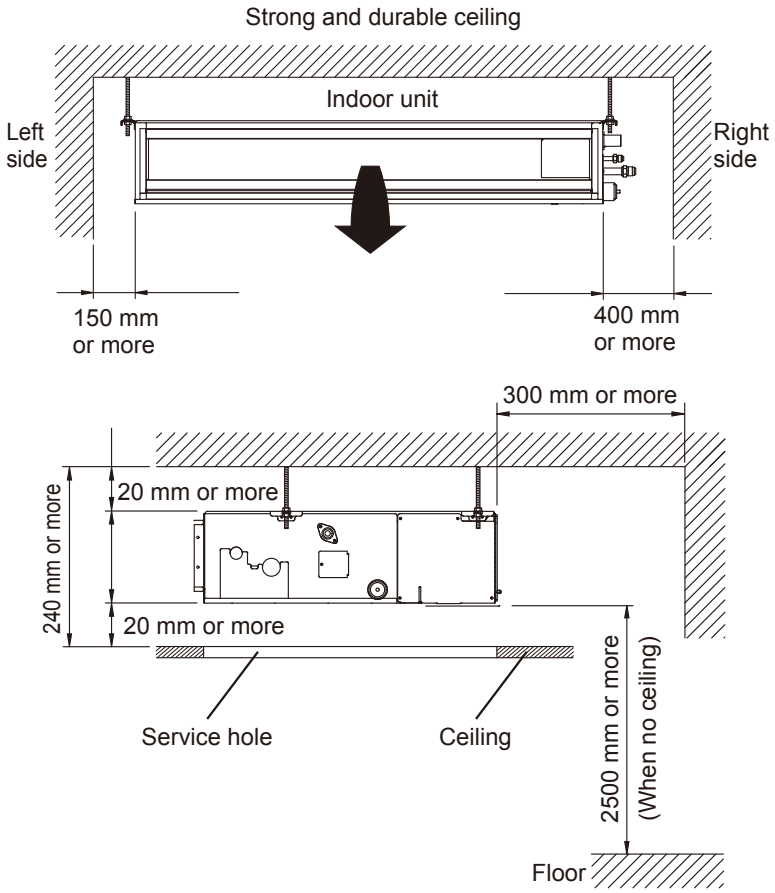
(Unit : mm)

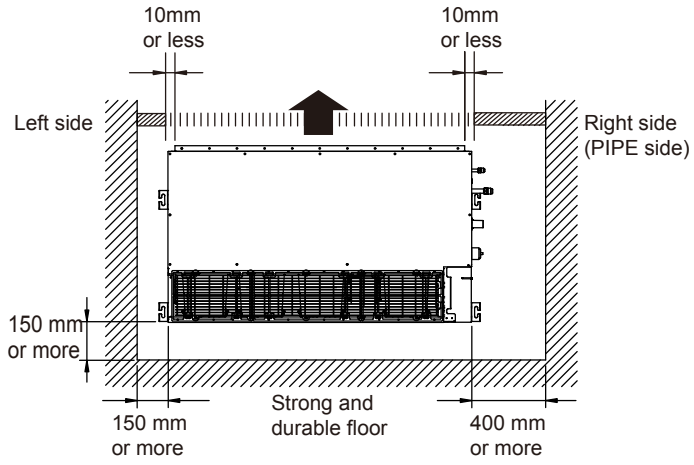


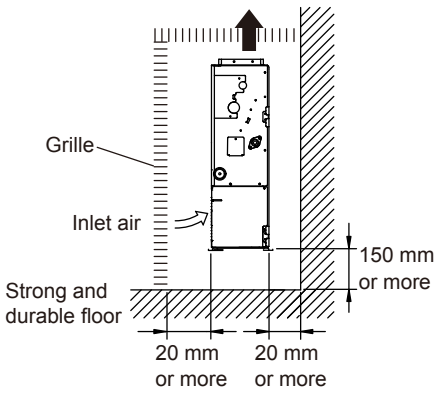
			ARXD24
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

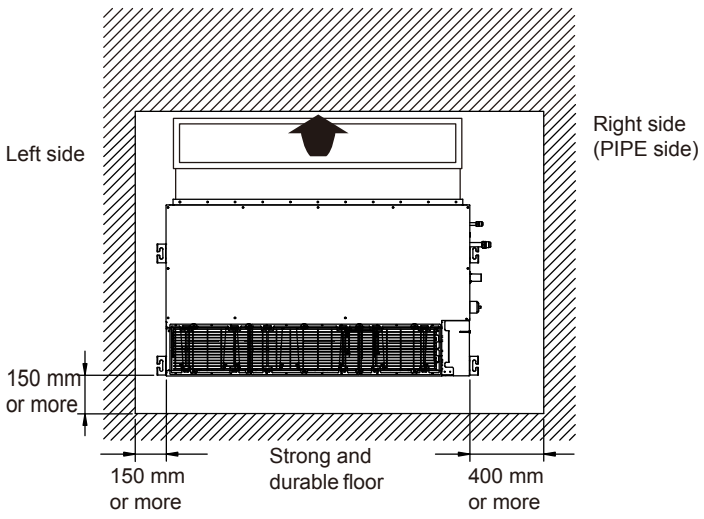
■ INSTALLATION PLACE

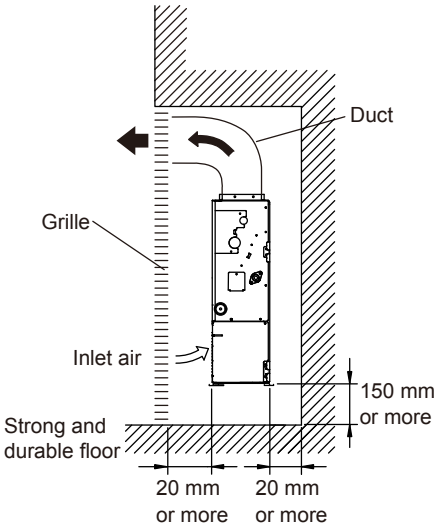
(Unit : mm)







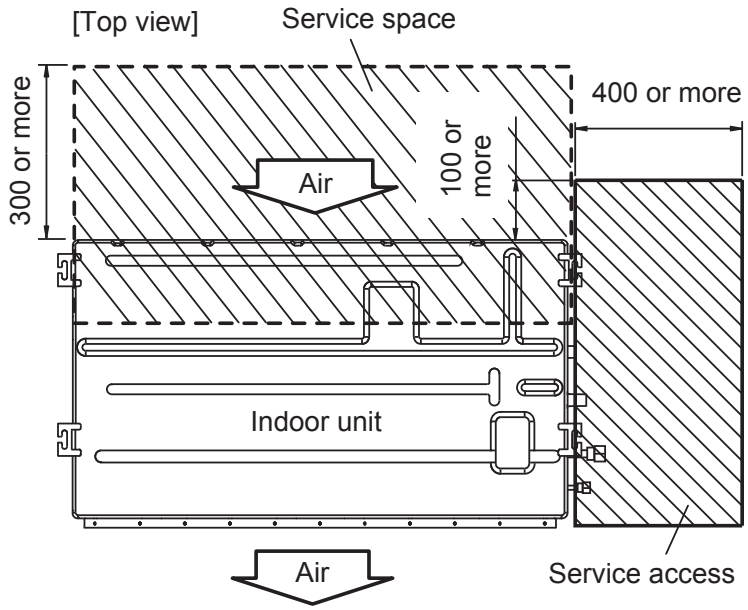




■ MAINTENANCE SPACE

(Unit : mm)

Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

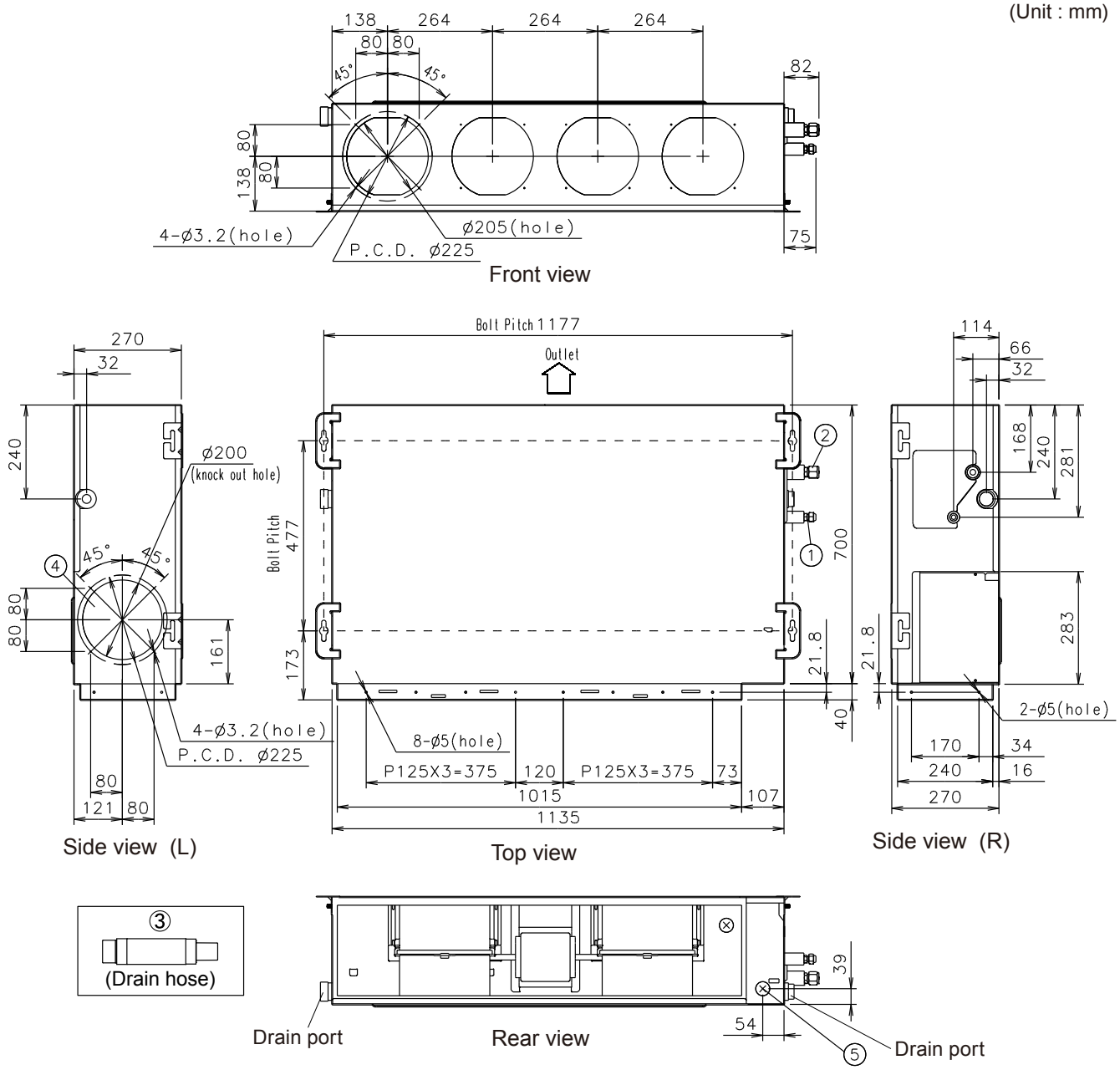


INDOOR UNITS

3-6. MEDIUM STATIC PRESSURE DUCT TYPE

■ MODELS: ARXA24GBLH, ARXA30GBLH, ARXA36GBLH, ARXA45GBLH

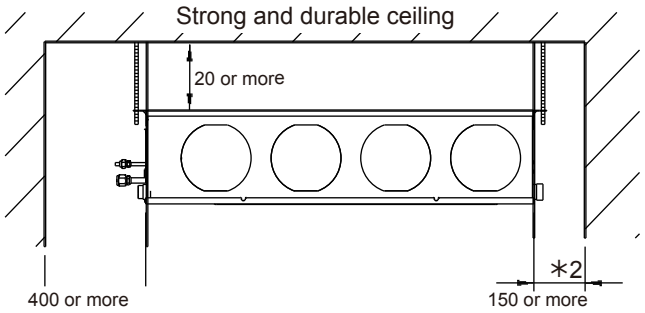
(Unit : mm)



			ARXA24, ARXA30	ARXA36, ARXA45
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm	ø 9.52 mm
②		Gas	ø 15.88 mm	ø 19.05 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	
④	Knock out hole (fresh air)		200 mm	
⑤	Hole for power cable		23 mm	

■ INSTALLATION PLACE ∗1

(Unit : mm)

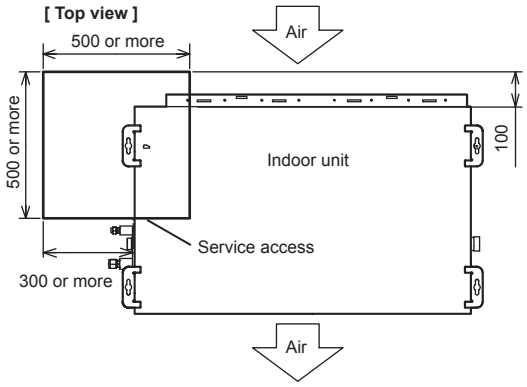


∗1 When drain pump is used, leave the space required for service and maintenance

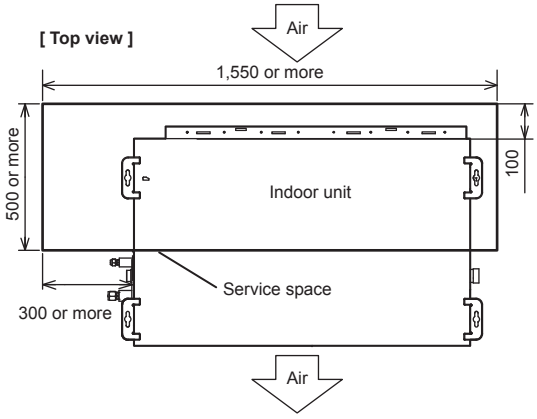
∗2 When drain hose is connected, the required dimension is 400mm or more.

■ MAINTENANCE SPACE

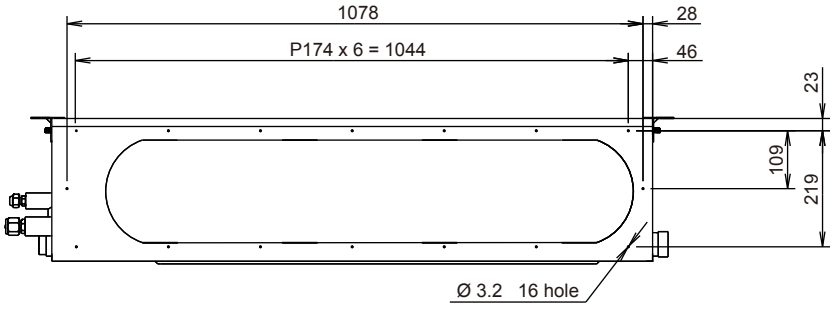
For accessibility to install and remove the control box.



For accessibility to install and remove the control box, fan units and filter.



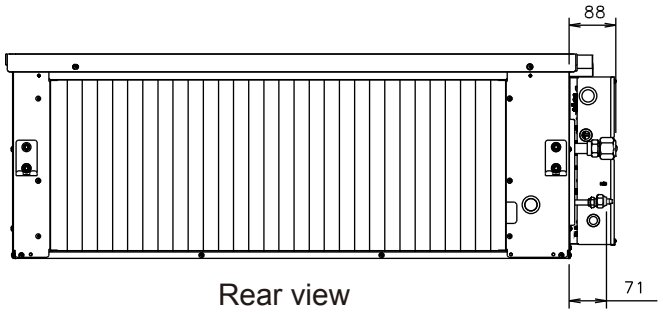
■ WHEN USING A SQUARE DUCT



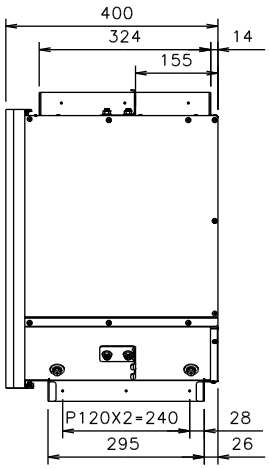
3-7. HIGH STATIC PRESSURE DUCT TYPE

■ MODELS: ARXC36GBTH, ARXC45GATH, ARXC60GATH

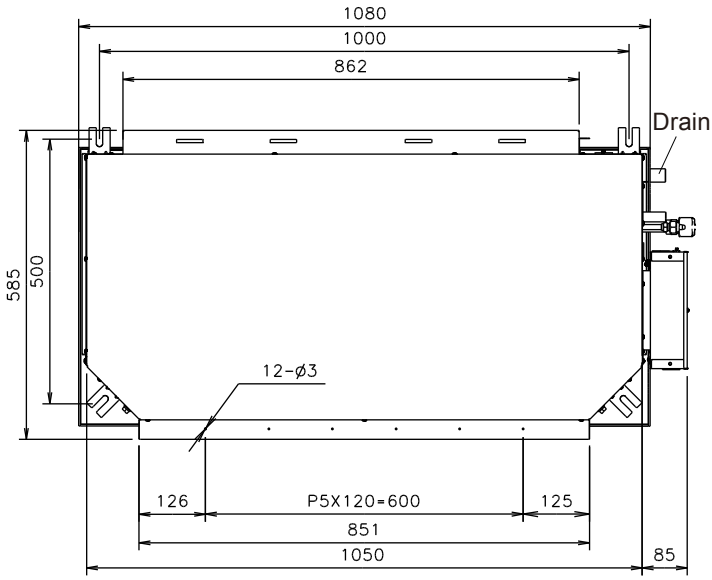
(Unit : mm)



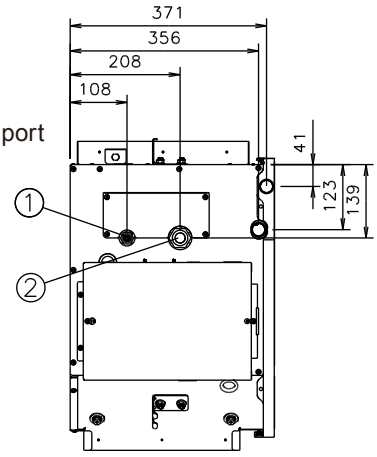
Rear view



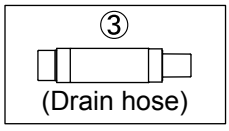
Side view (L)

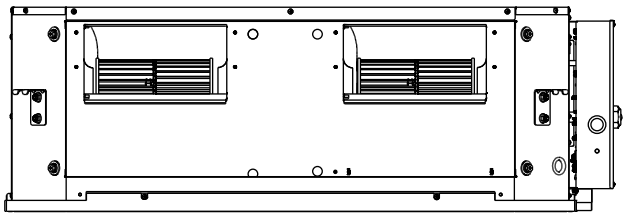


Top view



Side view (R)



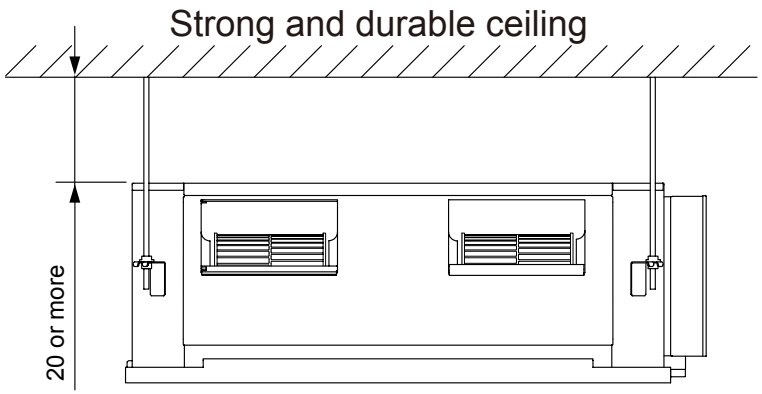


Front view

			ARXC36, ARXC45, ARXC60
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 19.05 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

■ INSTALLATION PLACE

(Unit : mm)

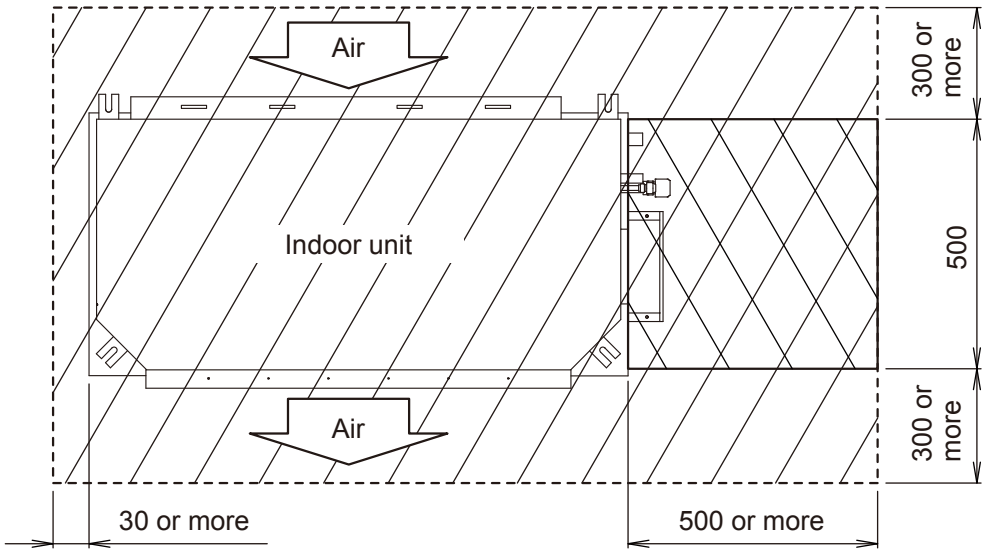


INDOOR UNITS

■ MAINTENANCE SPACE

Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

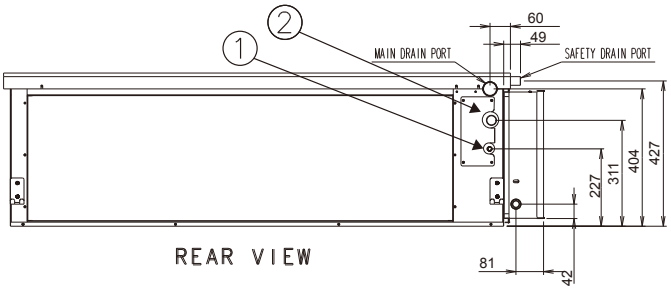
[Top view]



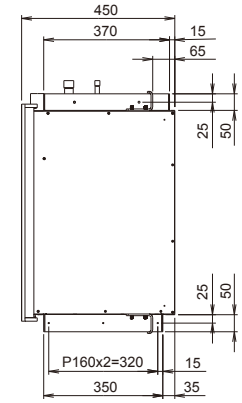
: Service access : Service space

■ MODELS: ARXC72GBTH, ARXC90GBTH

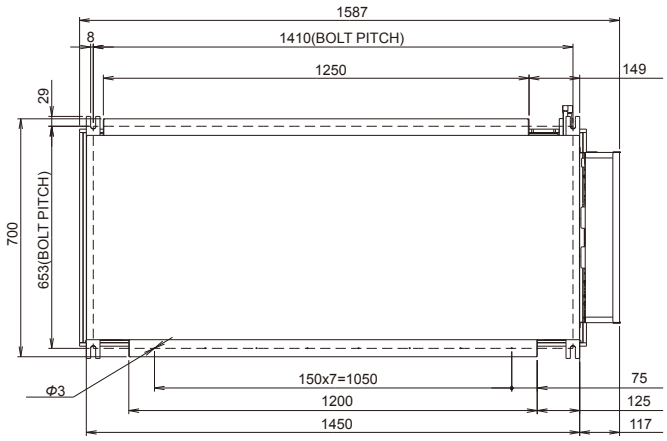
(Unit : mm)



REAR VIEW

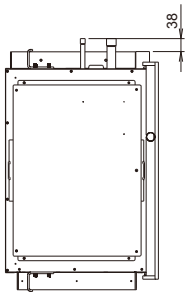


SIDE VIEW (L)

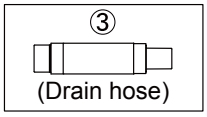


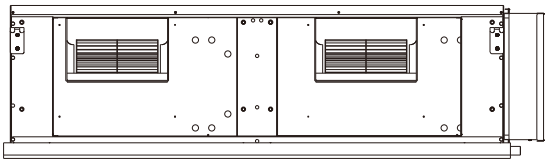
AIR FLOW

TOP VIEW



SIDE VIEW (R)

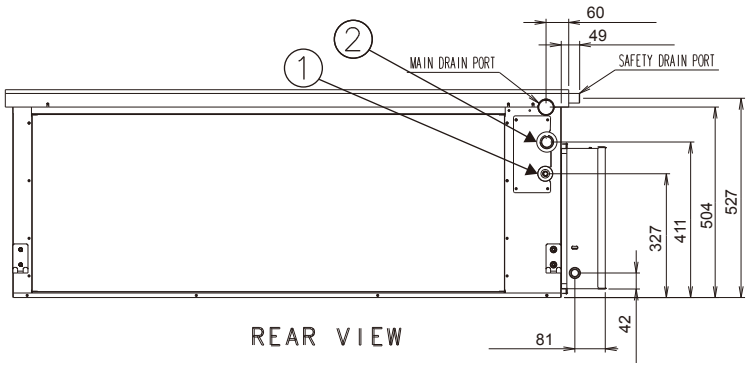




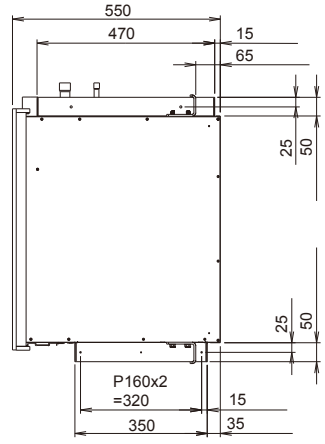
FRONT VIEW

			ARXC72, ARXC90
①	Refrigerant pipe flare connection	Liquid	ø 12.70 mm
②		Gas	ø 22.22 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

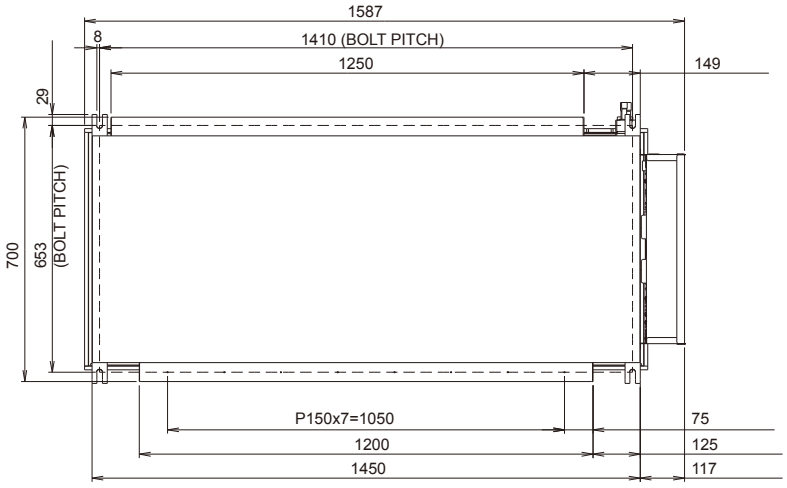
■ MODEL: ARXC96GATH

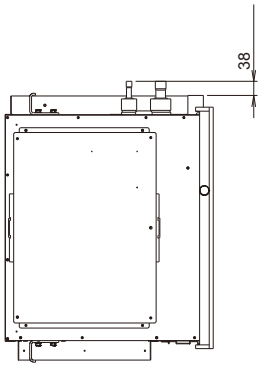


REAR VIEW



SIDE VIEW (L)

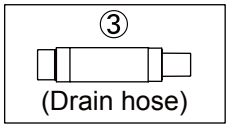


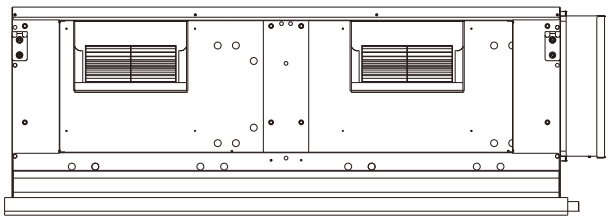


SIDE VIEW (R)

AIR FLOW

TOP VIEW





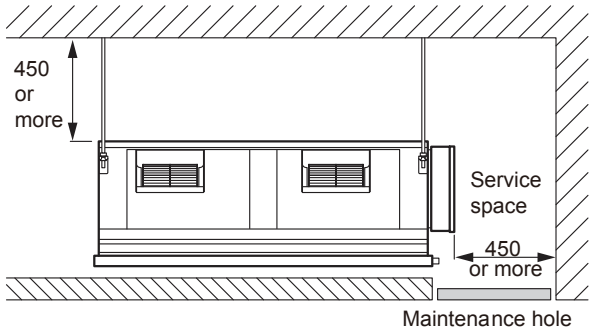
FRONT VIEW

			ARXC96
①	Refrigerant pipe flare connection	Liquid	ø 12.70 mm
②		Gas	ø 22.22 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]

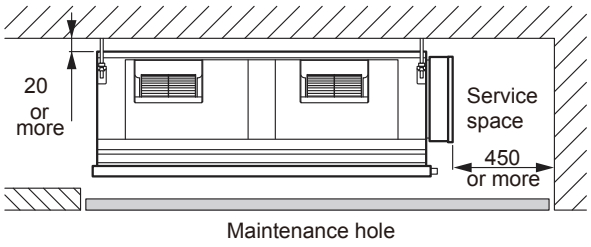
■ INSTALLATION PLACE

(a) When service access will be carried out above the indoor unit a recommended installation space of 450mm is required.

(Unit : mm)



(b) Installation by which service is carried out from the bottom of the unit

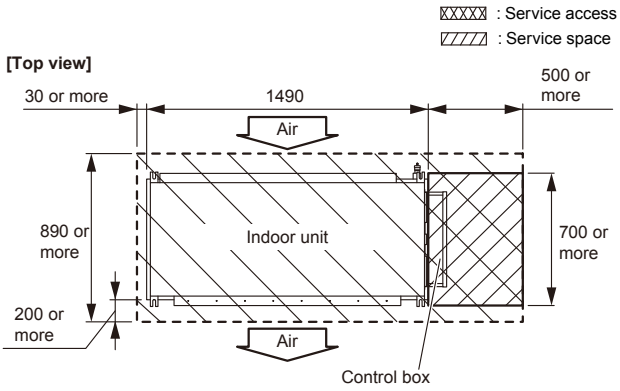


INDOOR UNITS

■ MAINTENANCE SPACE

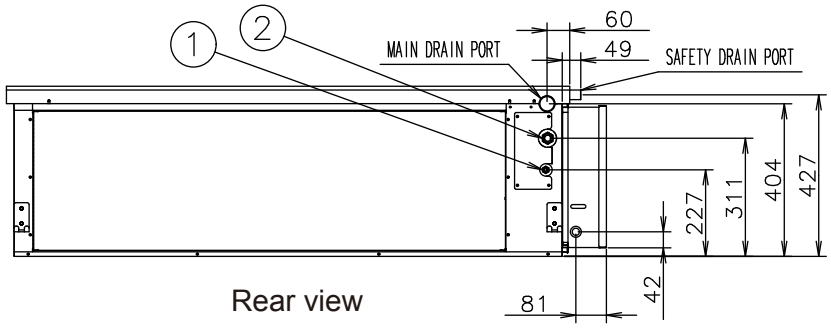
(Unit : mm)

Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

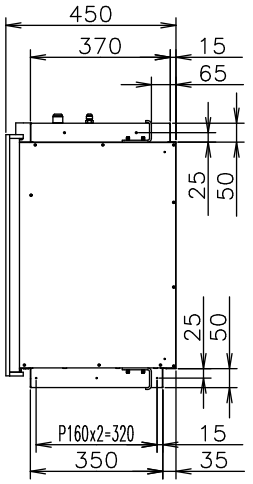


3-8. LARGE AIRFLOW DUCT TYPE

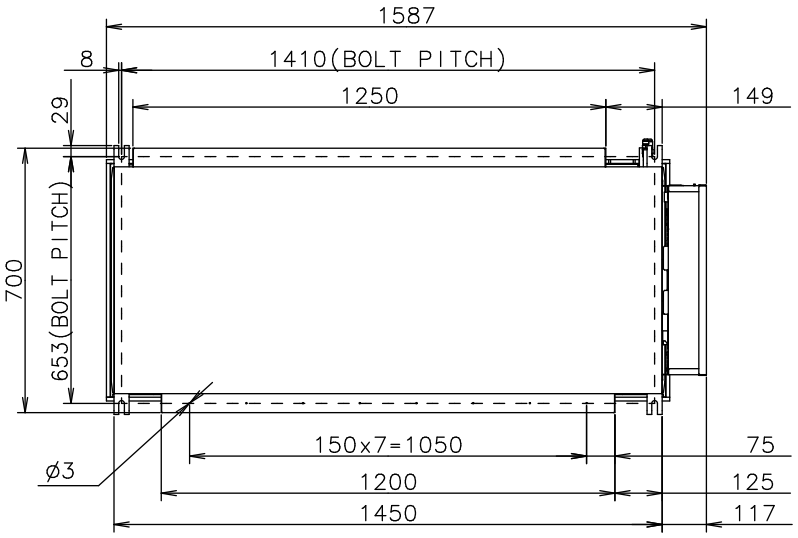
■ MODELS: ARXN18GATH, ARXN24GATH, ARXN30GATH, ARXN34GATH, ARXN36GATH, ARXN45GATH



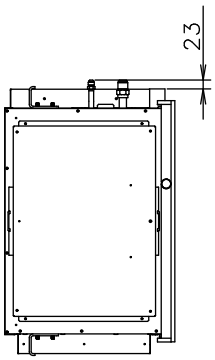
Rear view



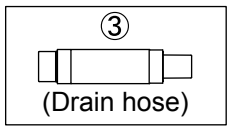
Side view (L)

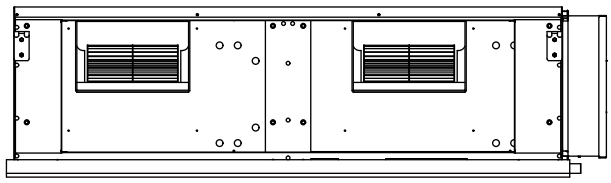


Top view



Side view (R)





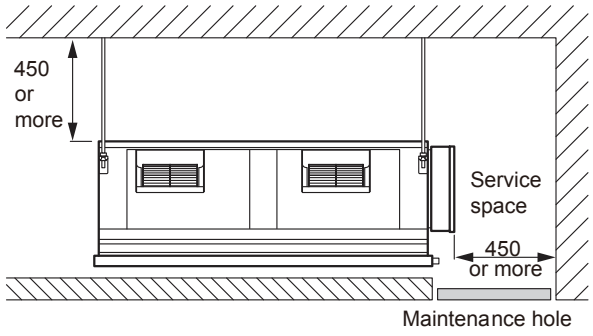
Front view

			ARXN18, ARXN24, ARXN30, ARXN34	ARXN36, ARXN45
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm	ø 9.52 mm
②		Gas	ø 15.88 mm	ø 19.05 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	

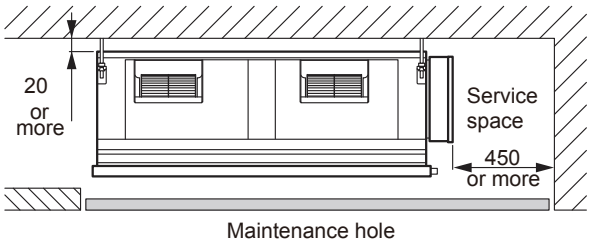
■ INSTALLATION PLACE

(a) When service access will be carried out above the indoor unit a recommended installation space of 450mm is required.

(Unit : mm)



(b) Installation by which service is carried out from the bottom of the unit

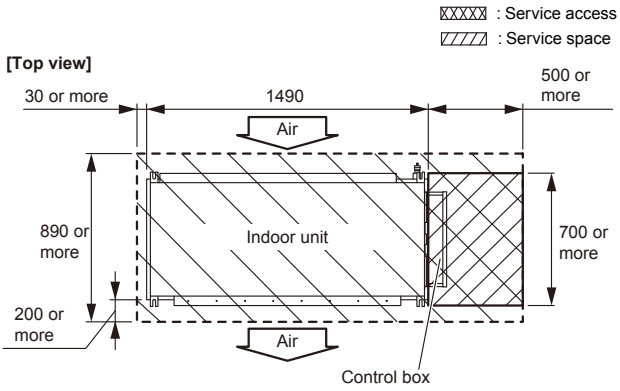


INDOOR UNITS

■ MAINTENANCE SPACE

(Unit : mm)

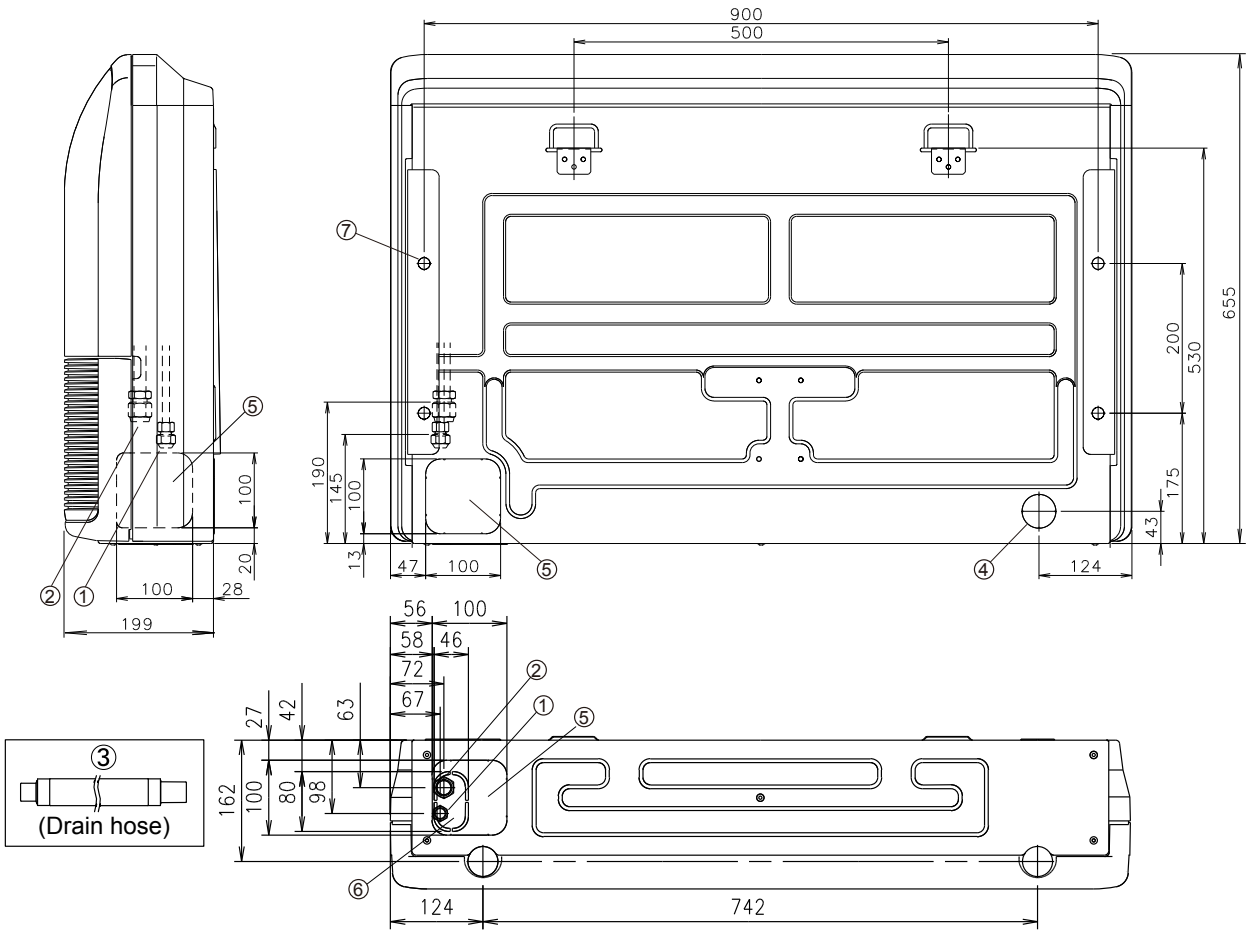
Provide a service access for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.



3-9. FLOOR / CEILING TYPE

■ MODELS: AB∗A12GATH, AB∗A14GATH, AB∗A18GATH, AB∗A24GATH

(Unit : mm)

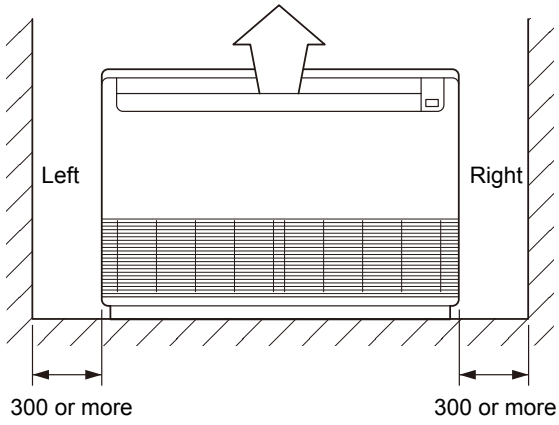


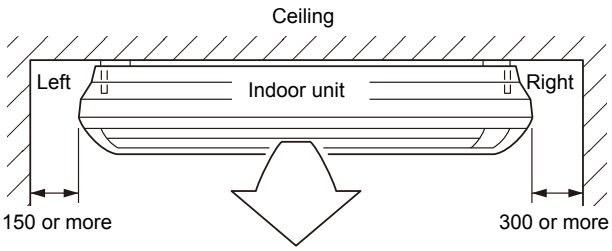
			AB∗A12, AB∗A14	AB∗A18, AB∗A24
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 9.52 mm
②		Gas	ø 12.70 mm	ø 15.88 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	
④	Knock out hole	Drain outlet	ø 45 mm	
⑤⑥		-	-	
⑦	Hole for lifting bolt		Use M10 screw bolt	

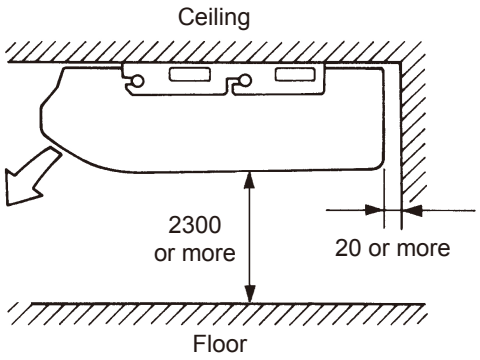
INDOOR UNITS

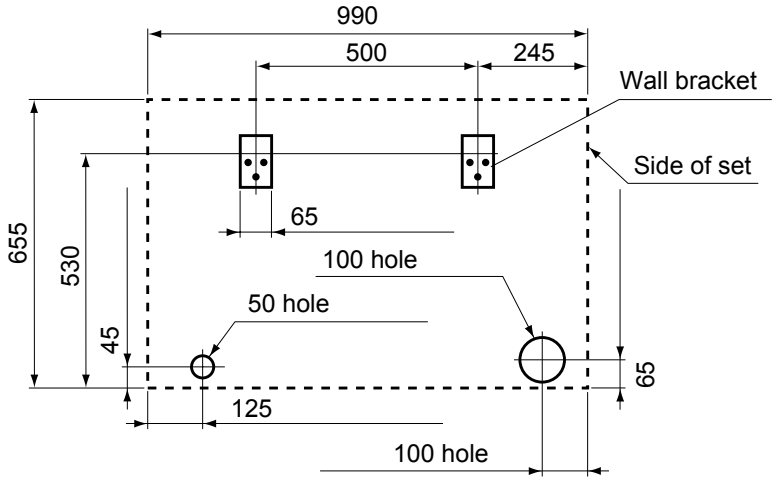
■ INSTALLATION PLACE

(Unit : mm)





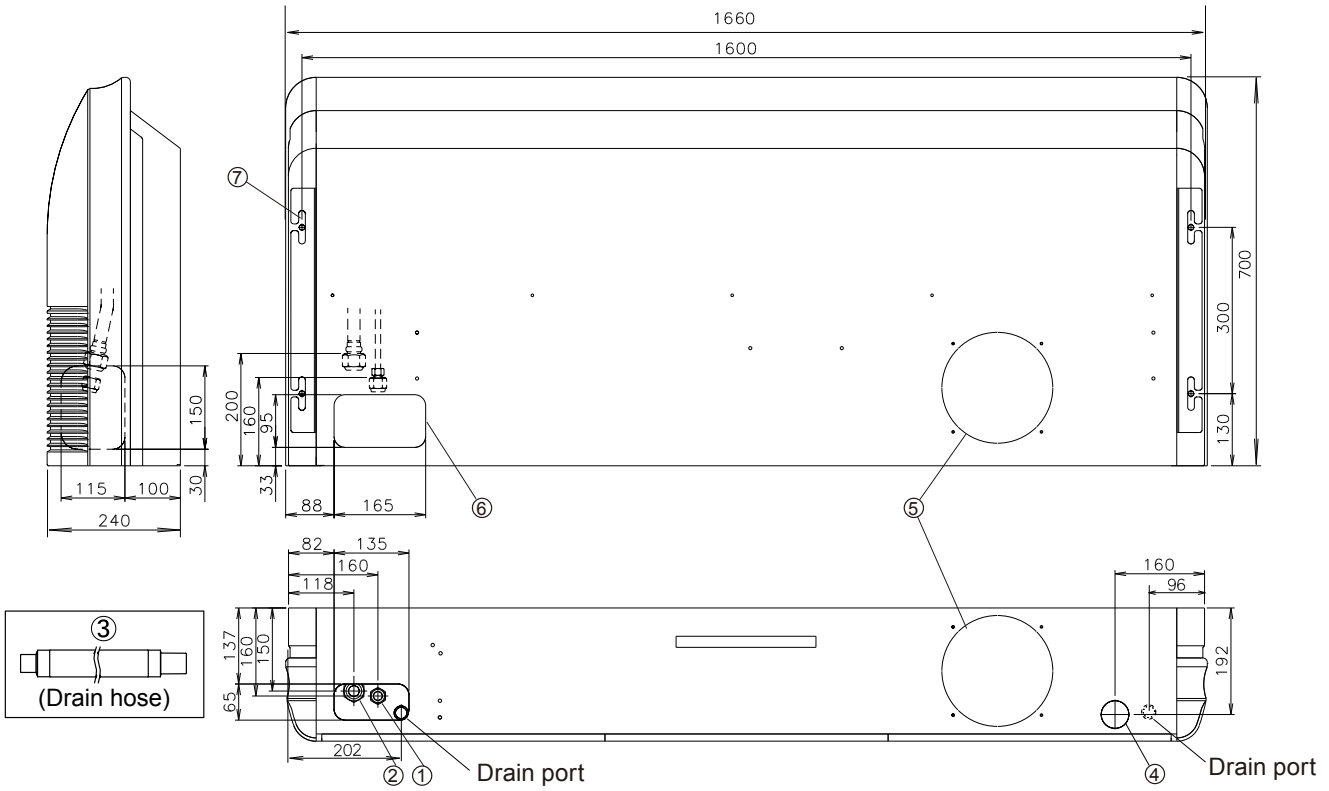




3-10. CEILING TYPE

■ MODELS: AB∗A30GATH, AB∗A36GATH, AB∗A45GATH, AB∗A54GATH

(Unit : mm)

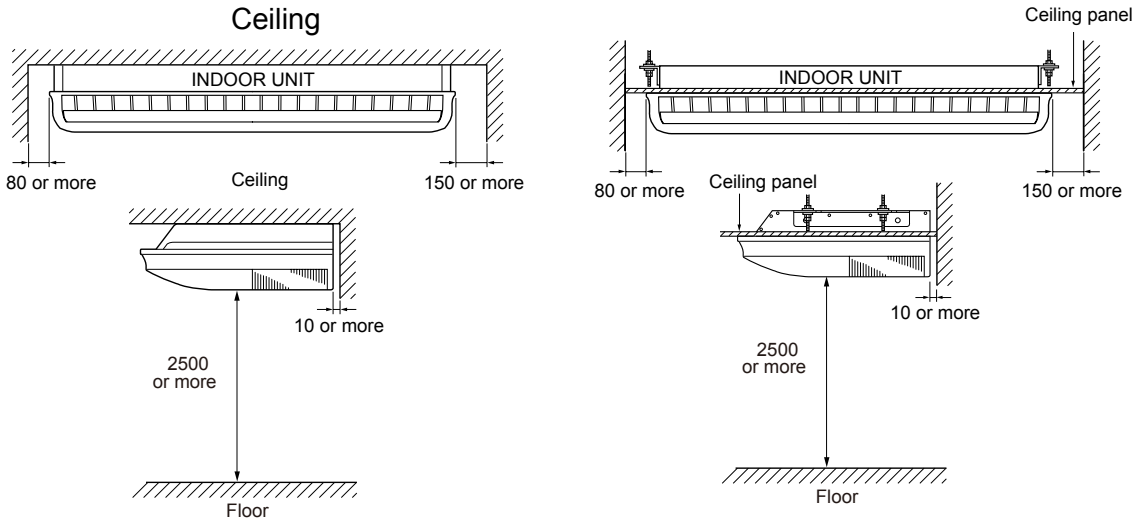


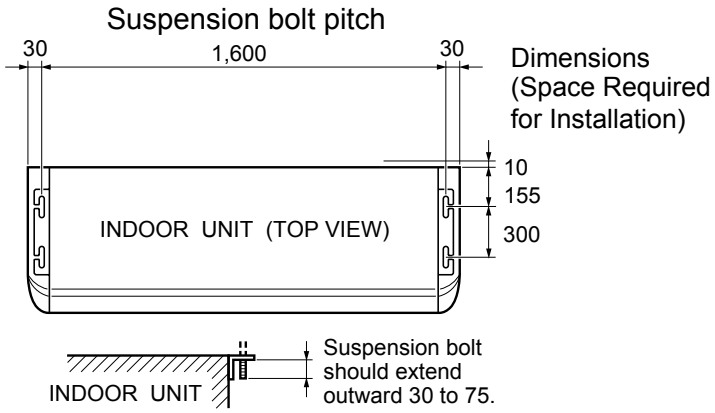
			AB∗A30	AB∗A36, AB∗A45, AB∗A54
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm	ø 9.52 mm
②		Gas	ø 15.88 mm	ø 19.05 mm
③	Drain hose		VP25 [ø 25mm(I.D.) ; ø 32mm(O.D.)]	
④	Knock out hole	Drain outlet	ø 50 mm	
⑤		Fresh air	ø 200 mm	
⑥		Refrigerant pipe	-	
⑦	Hole for lifting bolt		Use M10 screw bolt	

INDOOR UNITS

■ INSTALLATION PLACE

(Unit : mm)





INDOOR UNITS

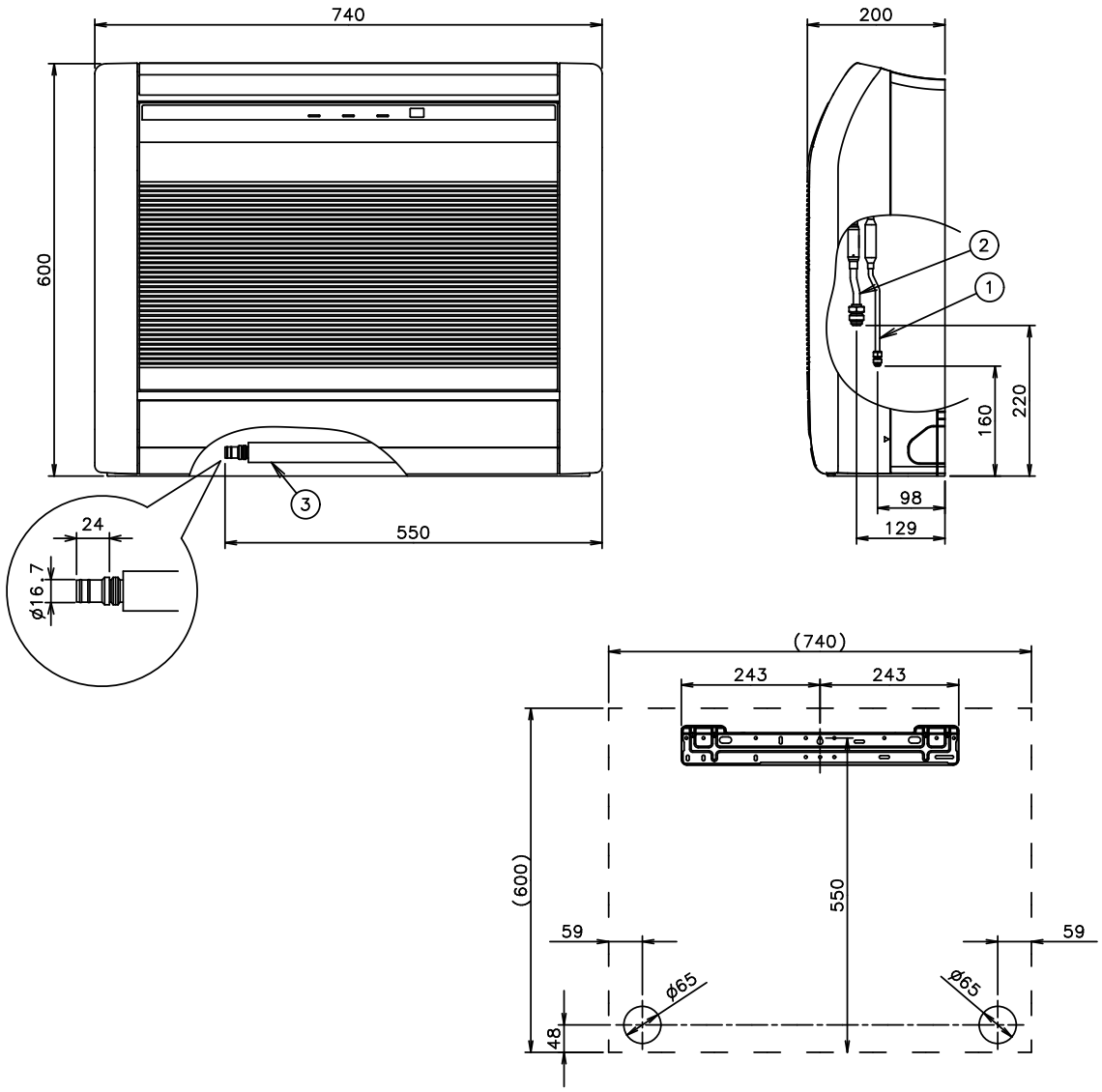
3-11. COMPACT FLOOR TYPE

■ MODELS: AG∗A004GCAH, AG∗A007GCAH, AG∗A009GCAH, AG∗A012GCAH, AG∗A014GCAH

3-12. COMPACT FLOOR TYPE (EEV external model)

■ MODELS: AG∗E004GCAH, AG∗E007GCAH, AG∗E009GCAH, AG∗E012GCAH, AG∗E014GCAH

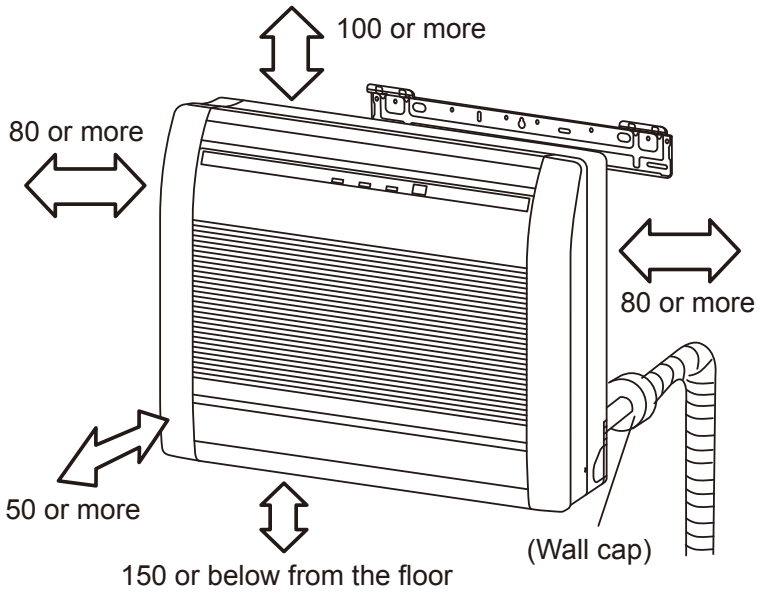
(Unit : mm)

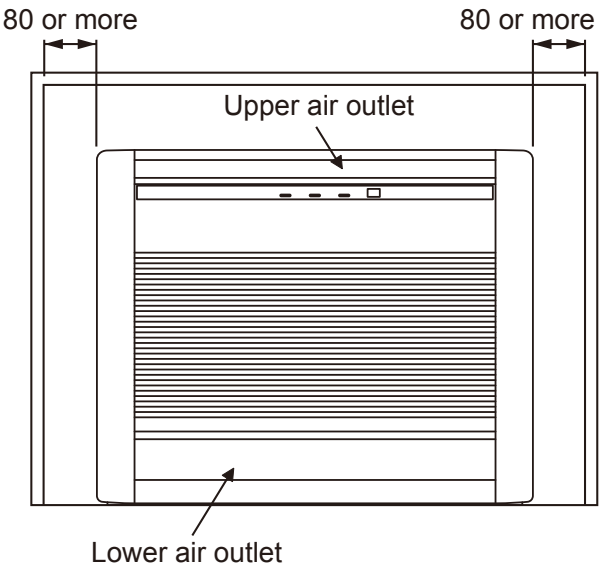


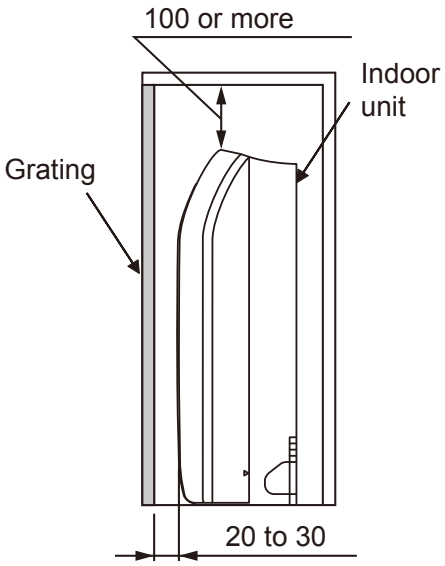
			AG∗A004, AG∗A007, AG∗A009 AG∗E004, AG∗E007, AG∗E009	AG∗A0012, AG∗A0014 AG∗E0012, AG∗E0014
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 6.35 mm
②		Gas	ø 9.52 mm	ø 12.7 mm
③	Drain hose		I.D. 13.8 mm , O.D. 16.7 mm Drain hose : L=600mm	

■ INSTALLATION PLACE

(Unit : mm)







INDOOR UNITS

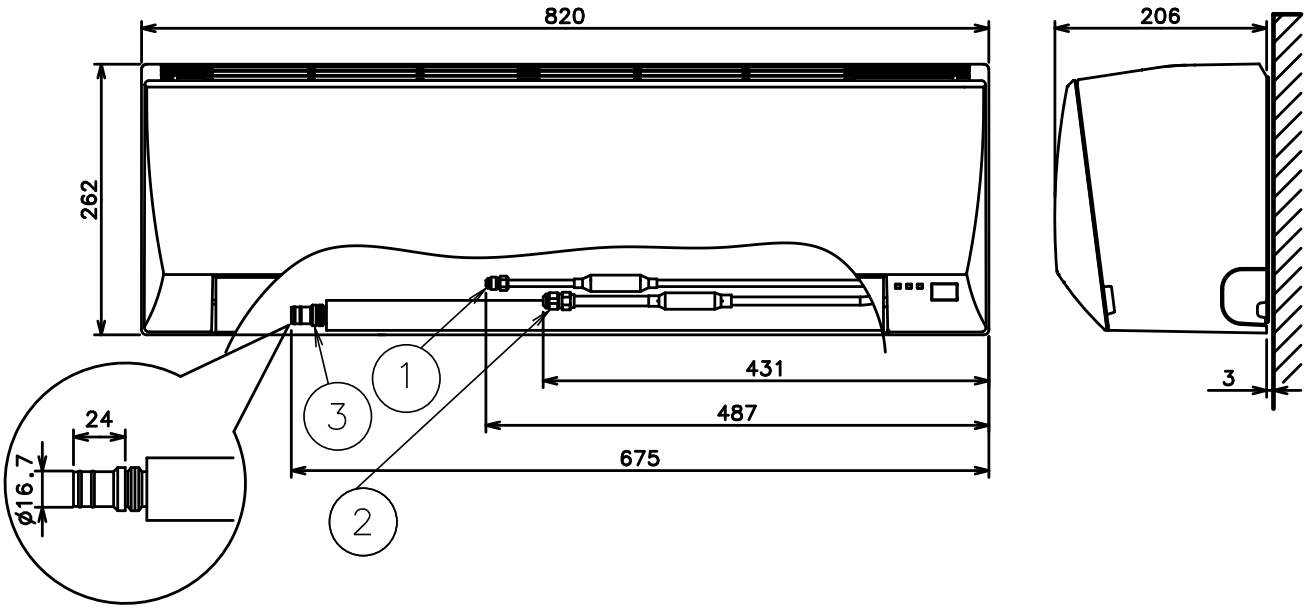
3-13. WALL MOUNTED TYPE

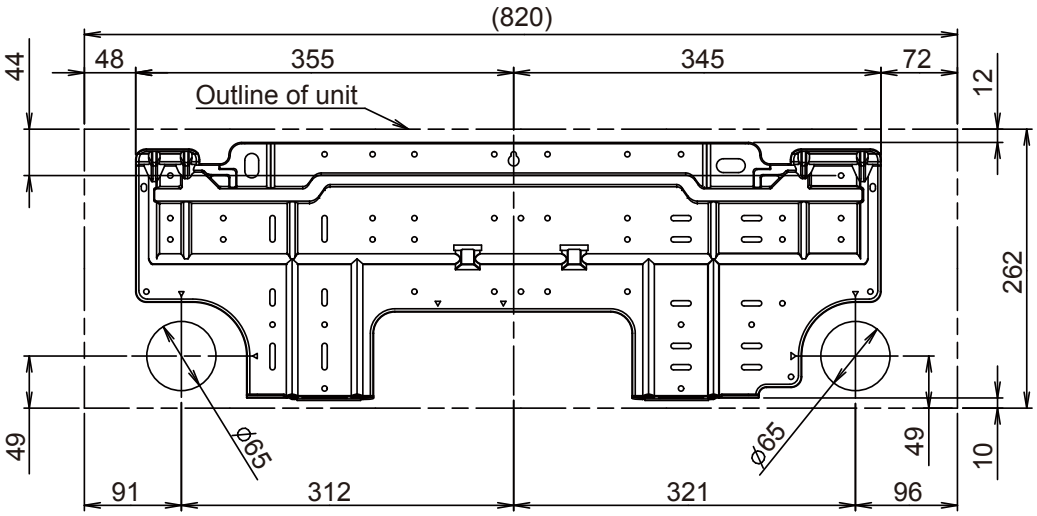
■ MODELS: AS∗A004GTAH, AS∗A007GTAH, AS∗A009GTAH

3-14. WALL MOUNTED TYPE (EEV external model)

■ MODELS: AS∗E004GTAH, AS∗E007GTAH, AS∗E009GTAH

(Unit : mm)

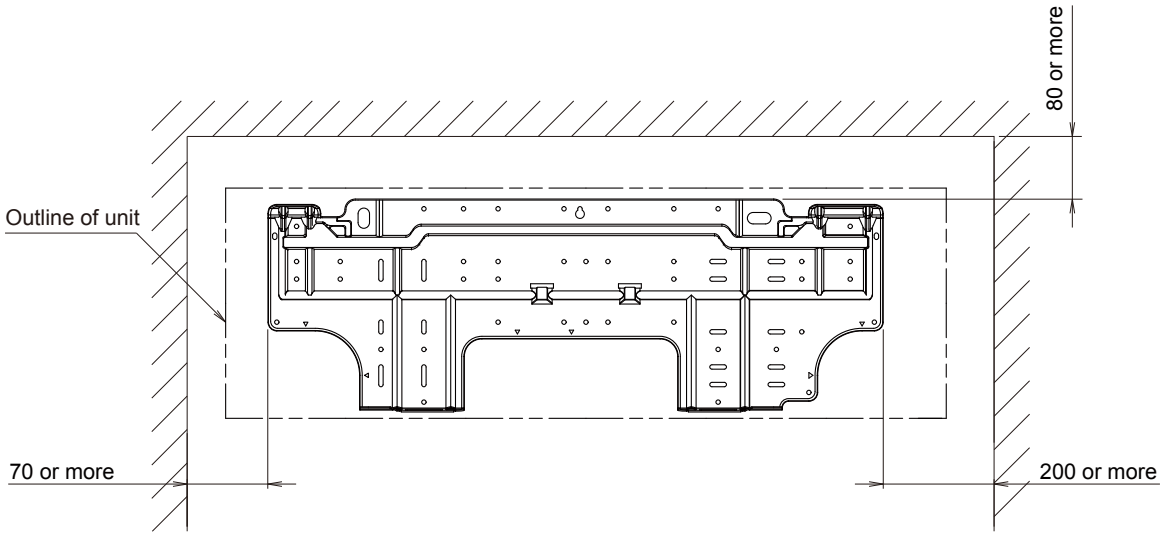


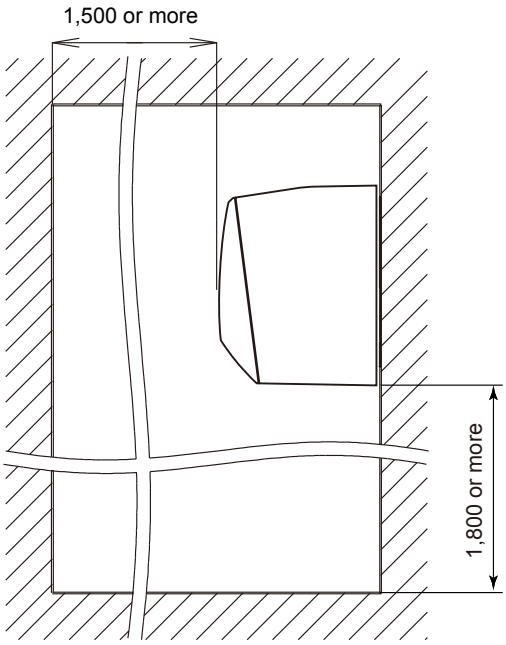


			AS∗A004, AS∗A007, AS∗A009 AS∗E004, AS∗E007, AS∗E009
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm
②		Gas	ø 9.52 mm
③	Drain hose		I.D. 13.8 mm , O.D. 15.8-16.7 mm Drain hose : L=600mm

■ INSTALLATION PLACE

(Unit : mm)





INDOOR UNITS

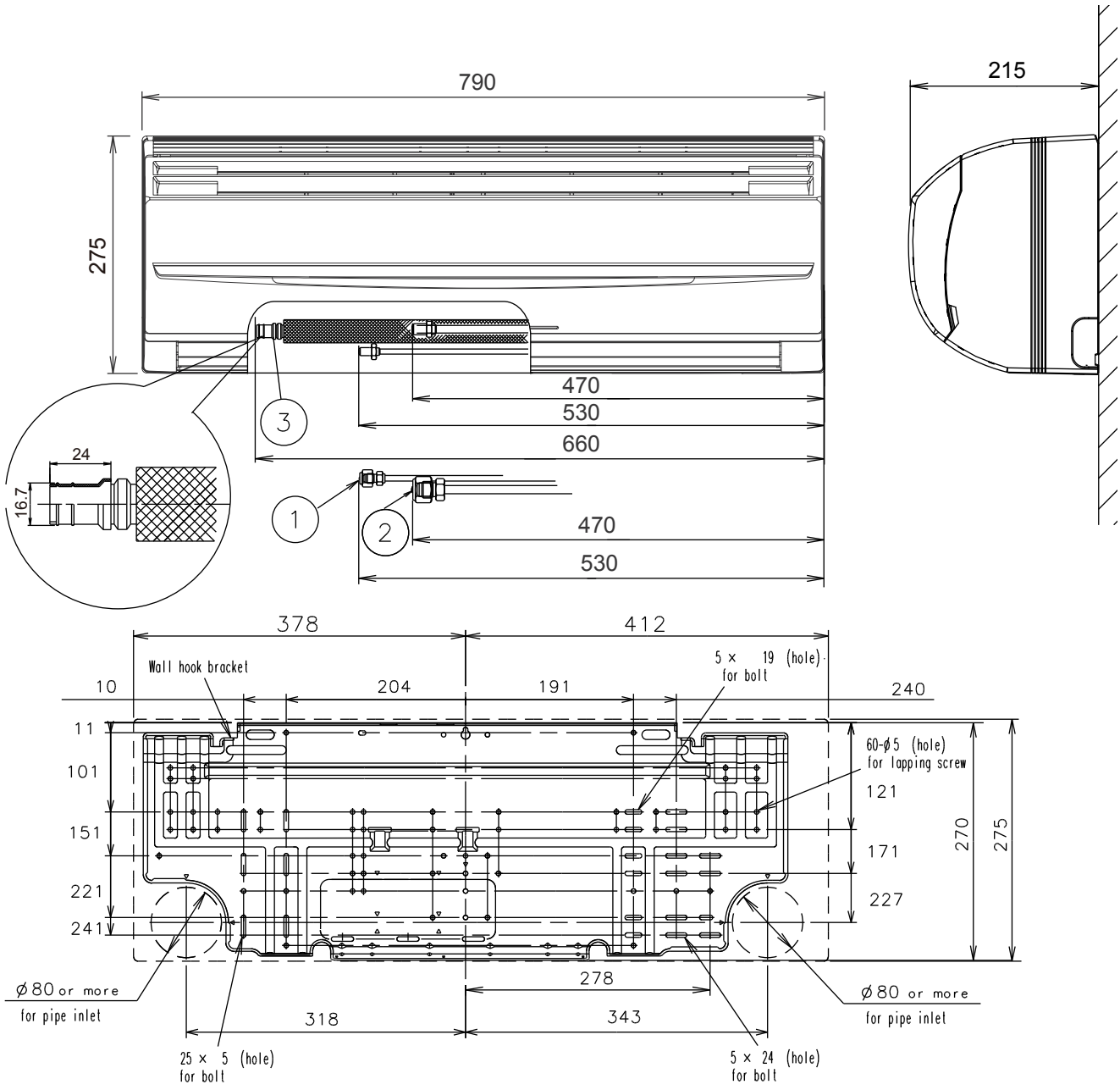
3-15. WALL MOUNTED TYPE

■ MODELS: AS∗A04GACH, AS∗A07GACH, AS∗A09GACH, AS∗A12GACH, AS∗A14GACH

3-16. WALL MOUNTED TYPE (EEV external model)

■ MODELS: AS∗E04GACH, AS∗E07GACH, AS∗E09GACH, AS∗E12GACH, AS∗E14GACH

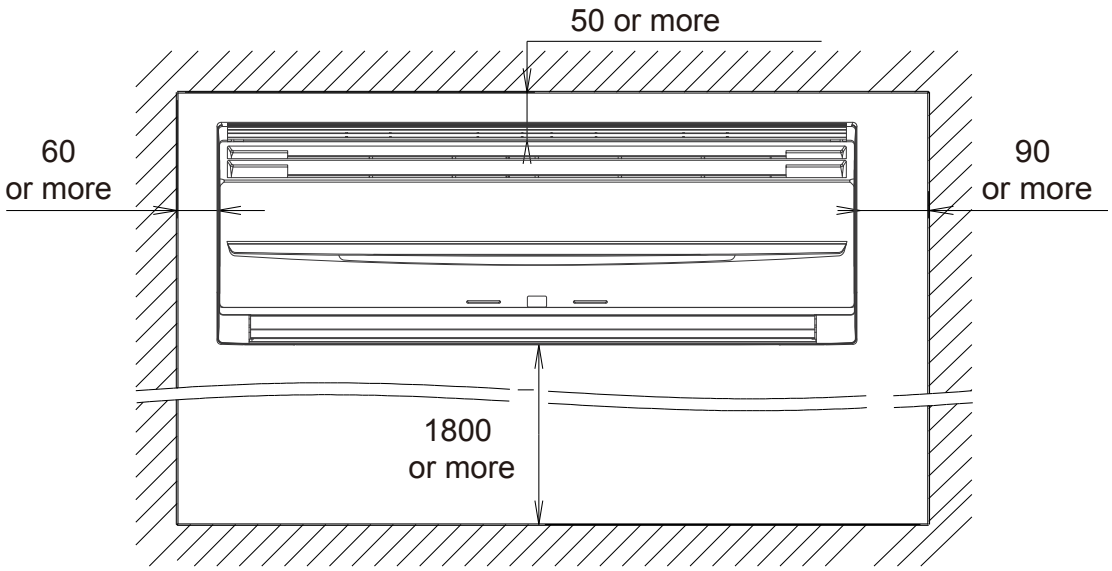
(Unit : mm)

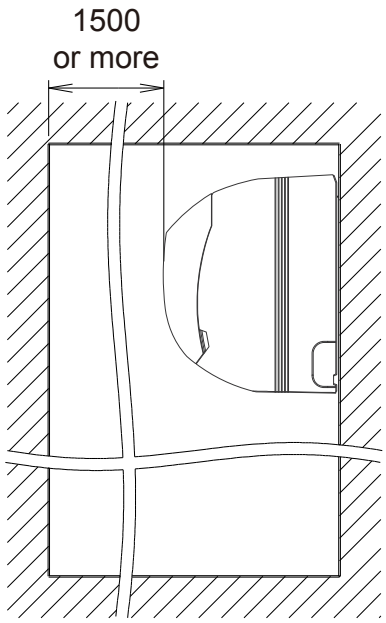


			AS∗A04, AS∗A07, AS∗A09, AS∗A12, AS∗A14 AS∗E04, AS∗E07, AS∗E09, AS∗E12, AS∗E14
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm
②		Gas	ø 12.70 mm
③	Drain hose		I.D. 13.8 mm , O.D. 15.8-16.7 mm Drain hose : L=600mm

■ INSTALLATION PLACE

(Unit : mm)



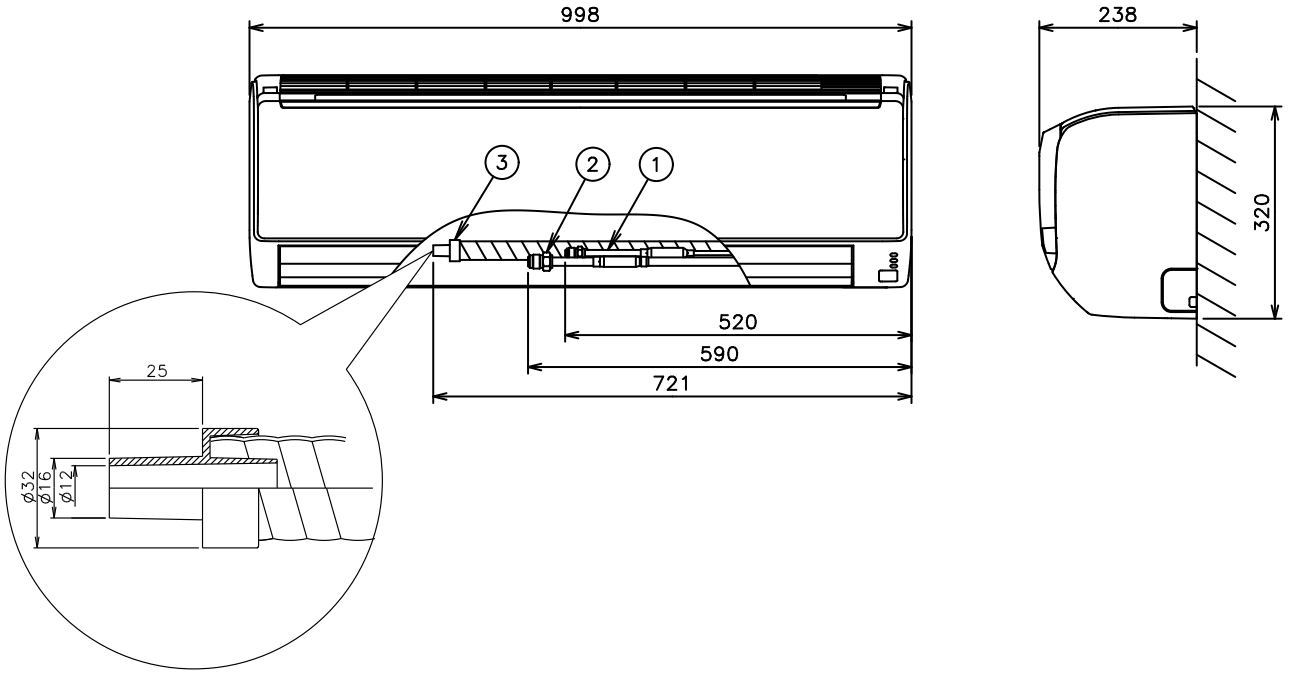


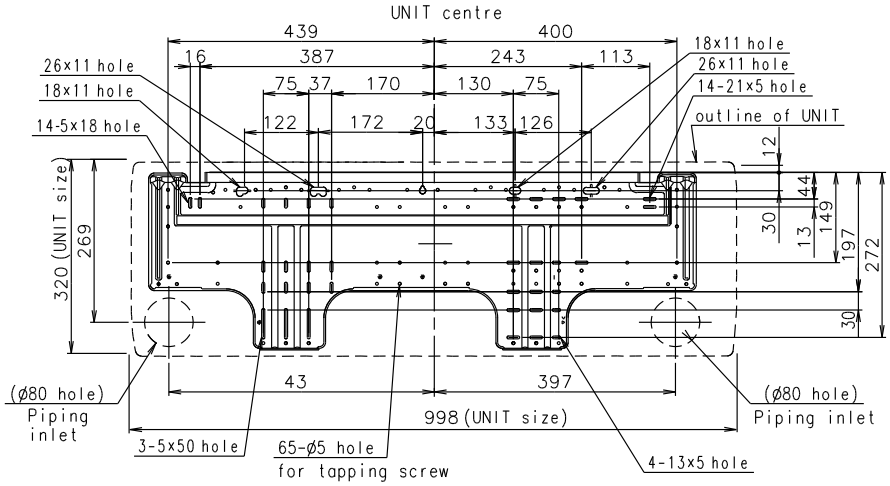
INDOOR UNITS

3-17. WALL MOUNTED TYPE

■ MODELS: AS∗A18GBCH, AS∗A24GBCH

(Unit : mm)

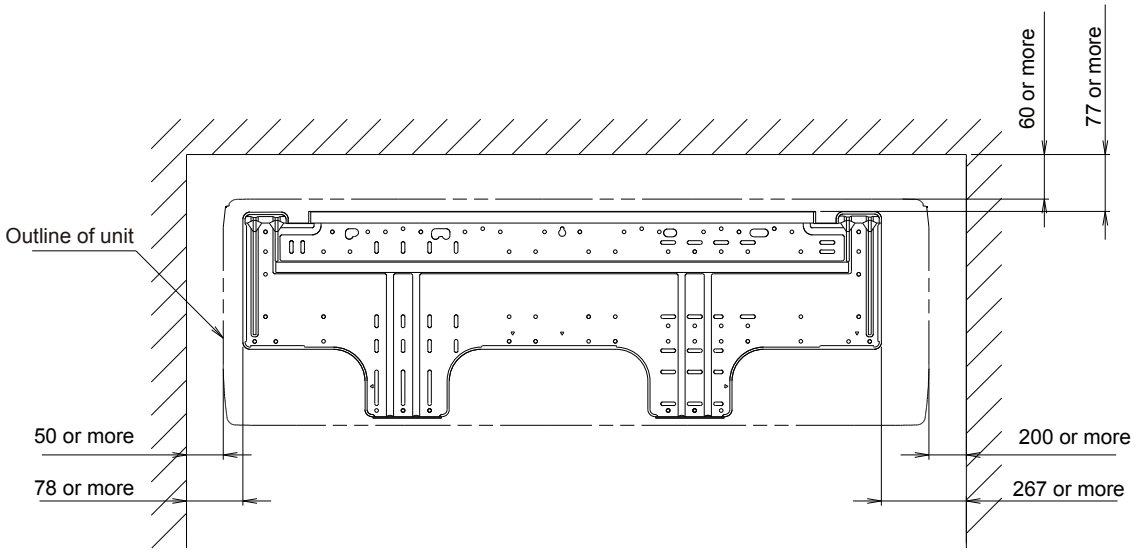


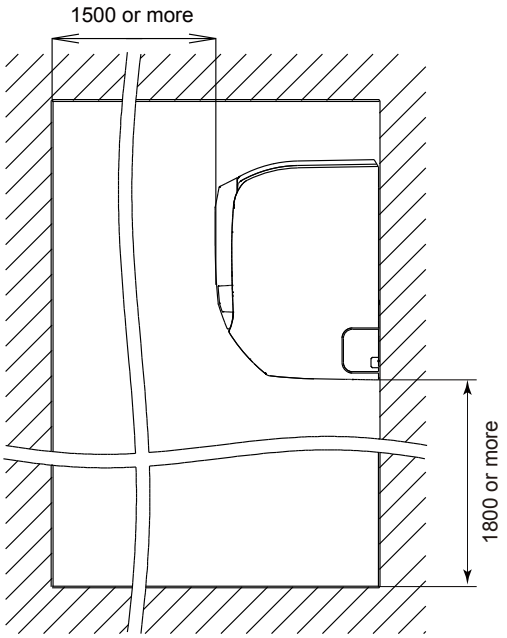


			AS∗A18	AS∗A24
①	Refrigerant pipe flare connection	Liquid	ø 6.35 mm	ø 9.52 mm
②		Gas	ø 12.70 mm	ø 15.88 mm
③	Drain hose		I.D. 12 mm , O.D. 16 mm Drain hose : L=670mm	

■ INSTALLATION PLACE

(Unit : mm)



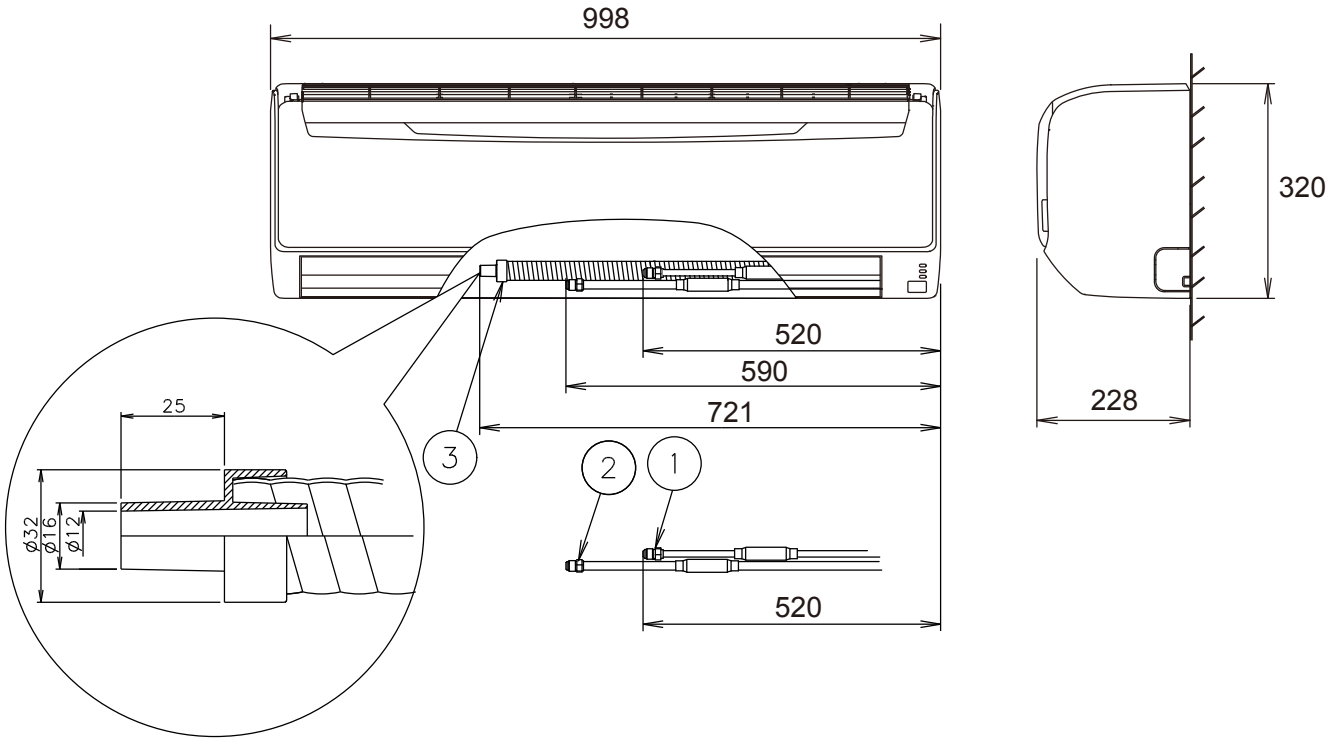


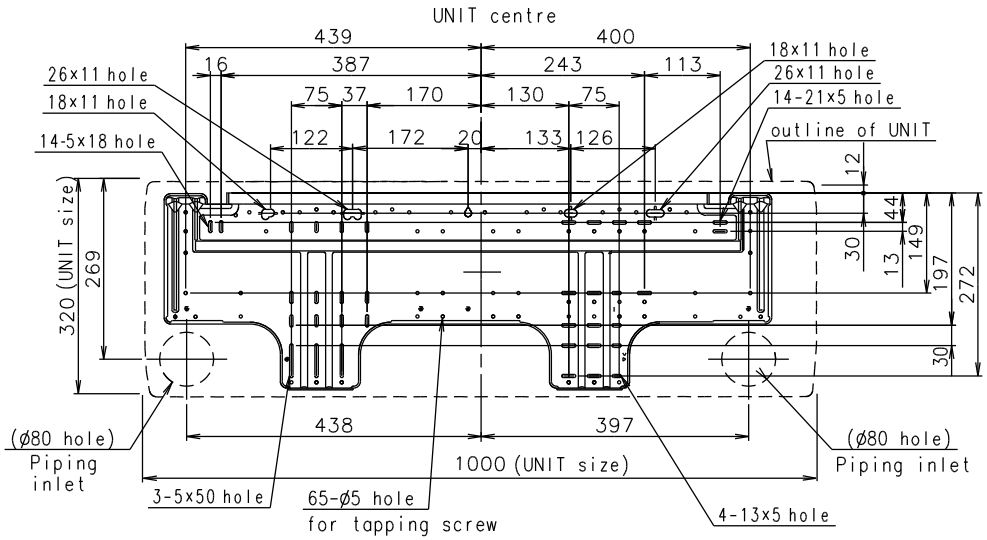
INDOOR UNITS

3-18. WALL MOUNTED TYPE

■ MODELS: AS∗A18GACH, AS∗A24GACH, AS∗A30GACH

(Unit : mm)

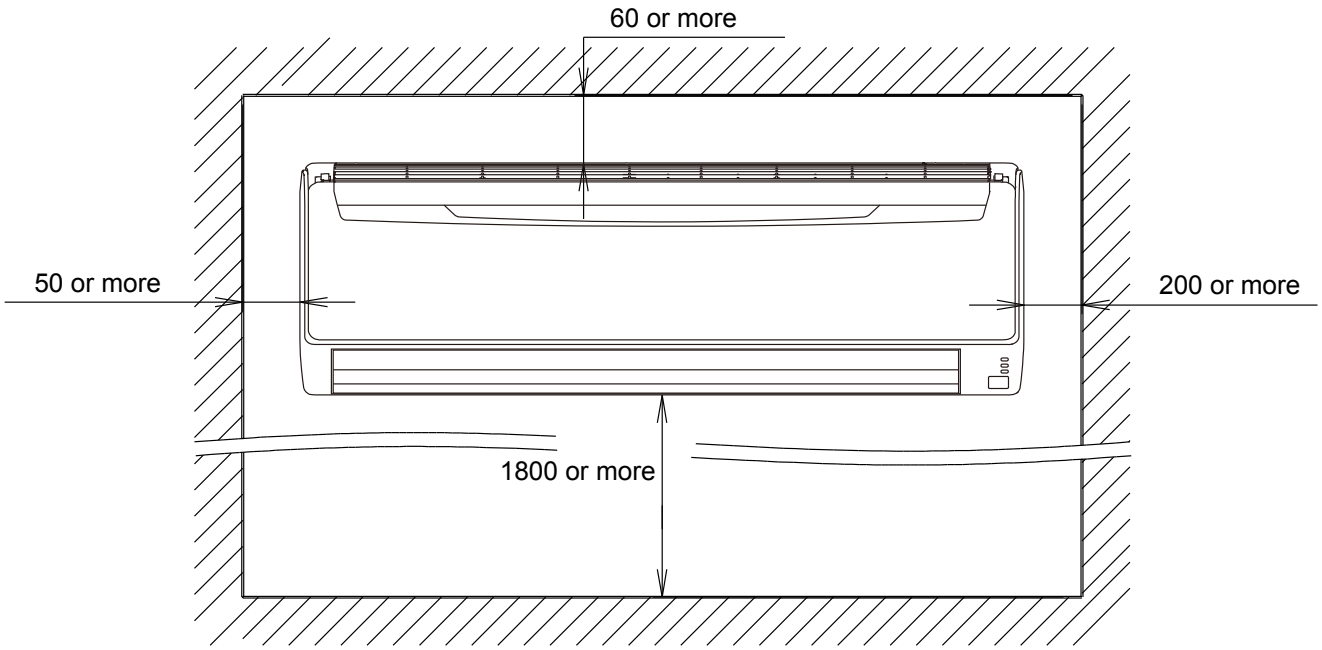


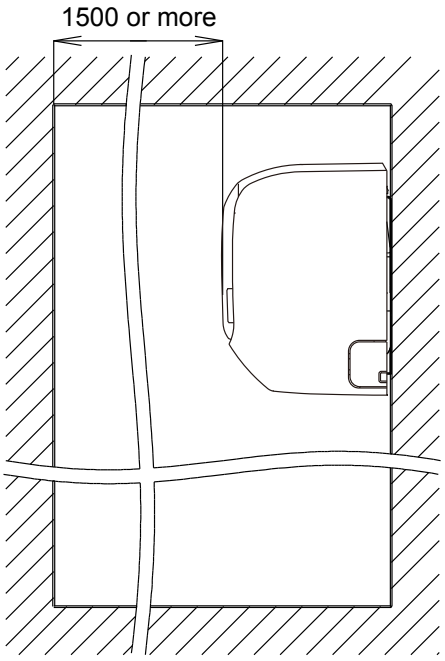


			AS∗A18, AS∗A24, AS∗A30
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose		I.D. 12 mm , O.D. 16 mm Drain hose : L=670mm

■ INSTALLATION PLACE

(Unit : mm)



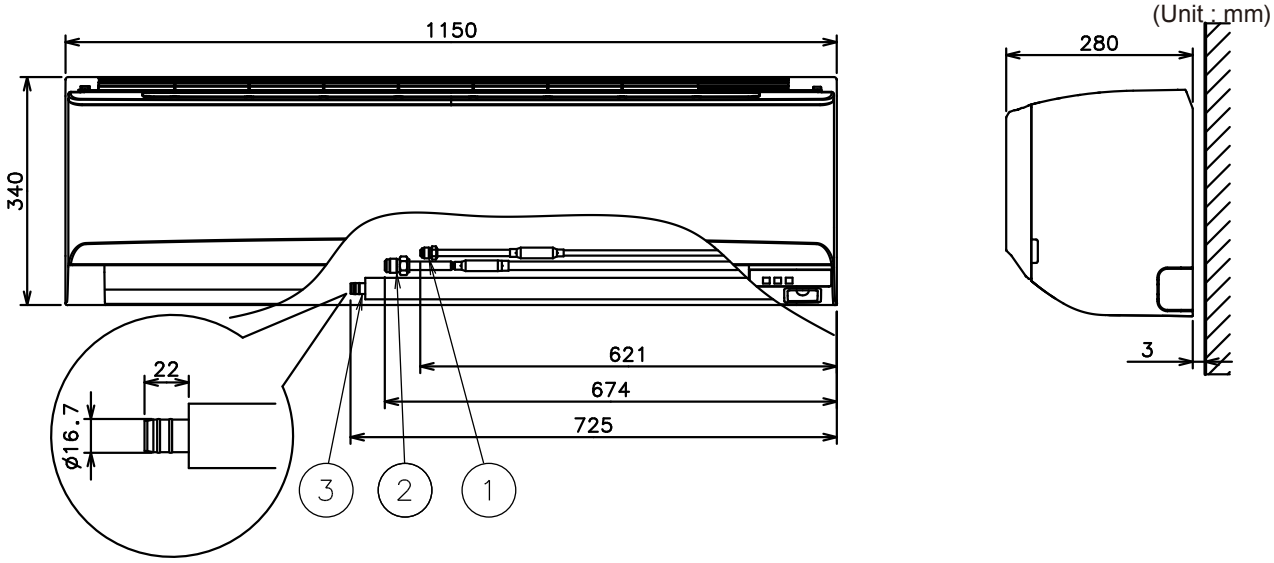


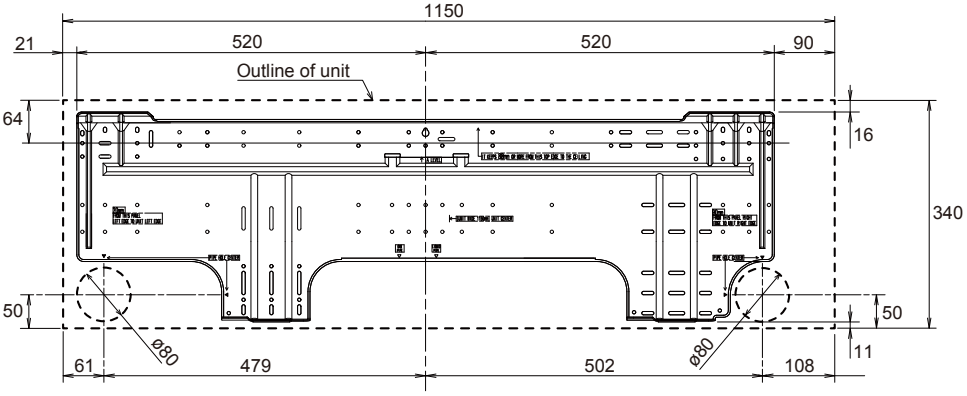
INDOOR UNITS

3-19. WALL MOUNTED TYPE

■ MODELS: AS∗A030GTAH, AS∗A034GTAH

(Unit : mm)

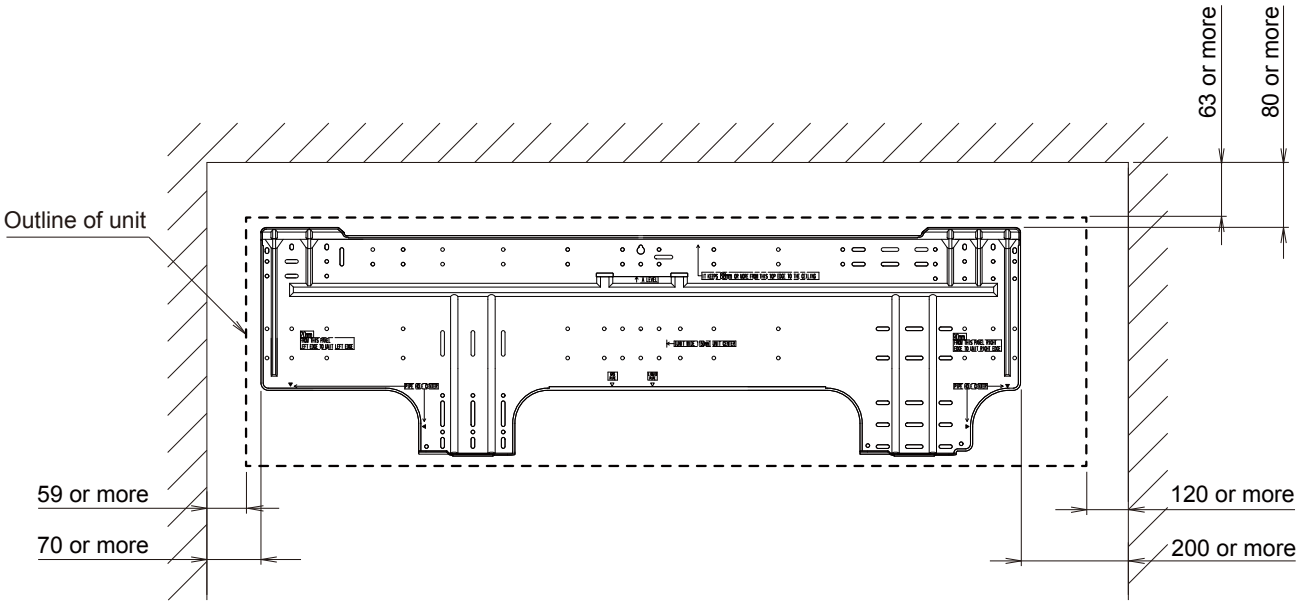


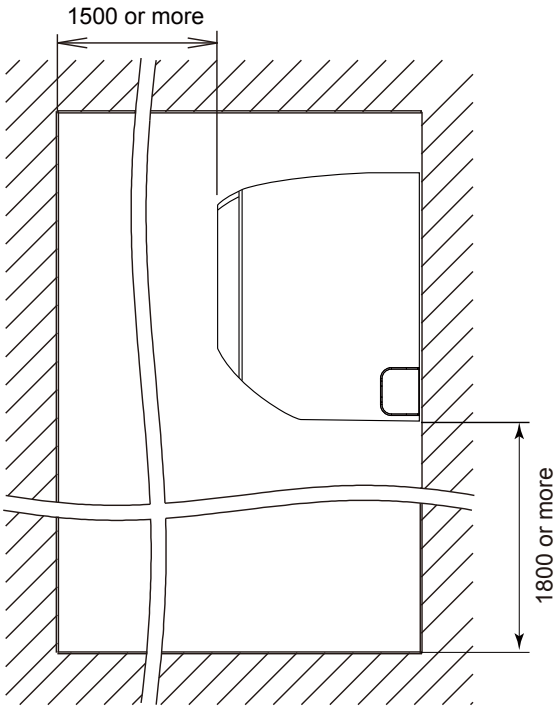


			AS∗A030, AS∗A034
①	Refrigerant pipe flare connection	Liquid	ø 9.52 mm
②		Gas	ø 15.88 mm
③	Drain hose		I.D. 13.8 mm , O.D. 15.8-16.7 mm Drain hose : L=600mm

■ INSTALLATION PLACE

(Unit : mm)



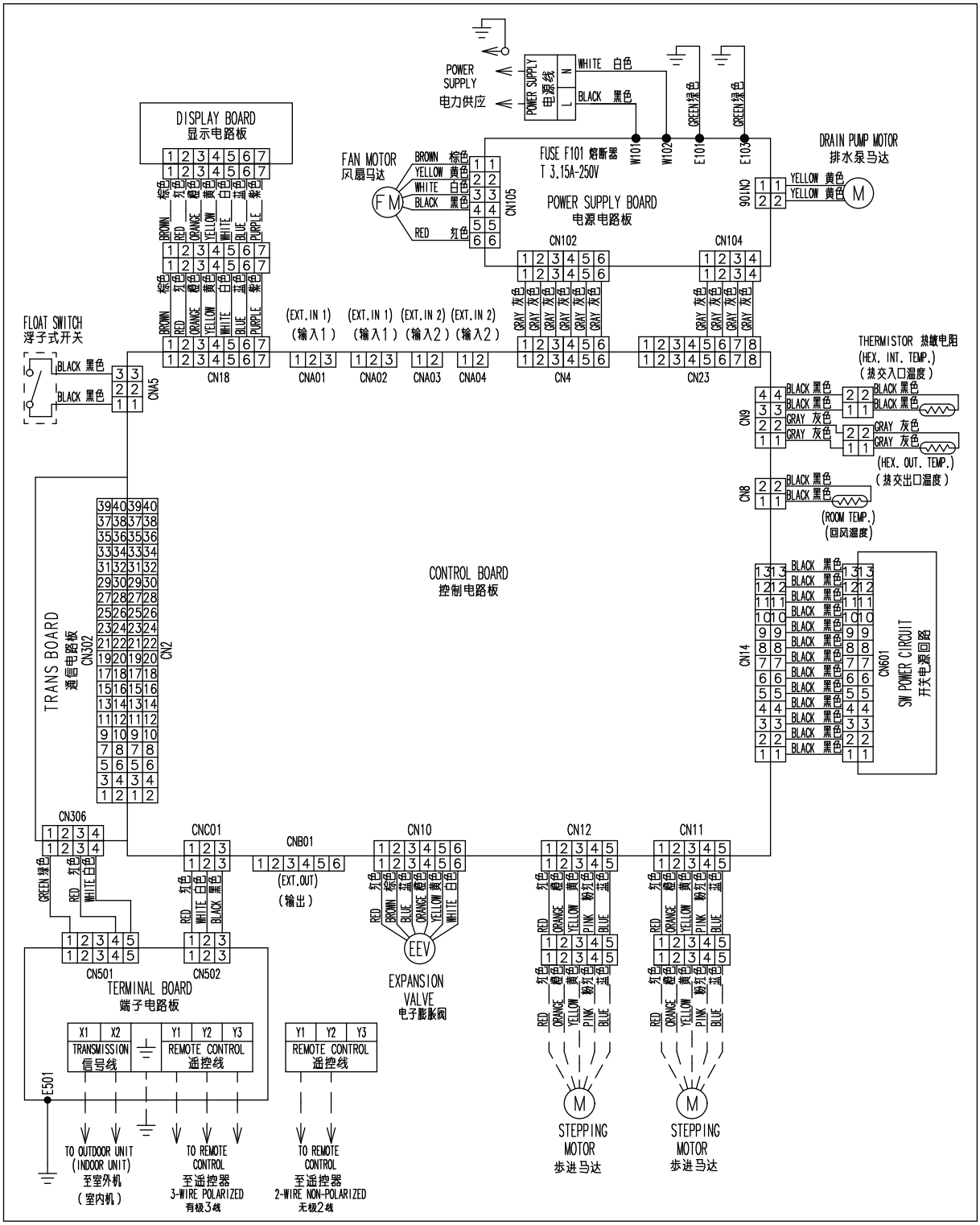


INDOOR UNITS

4. WIRING DIAGRAMS

4-1. COMPACT CASSETTE TYPE

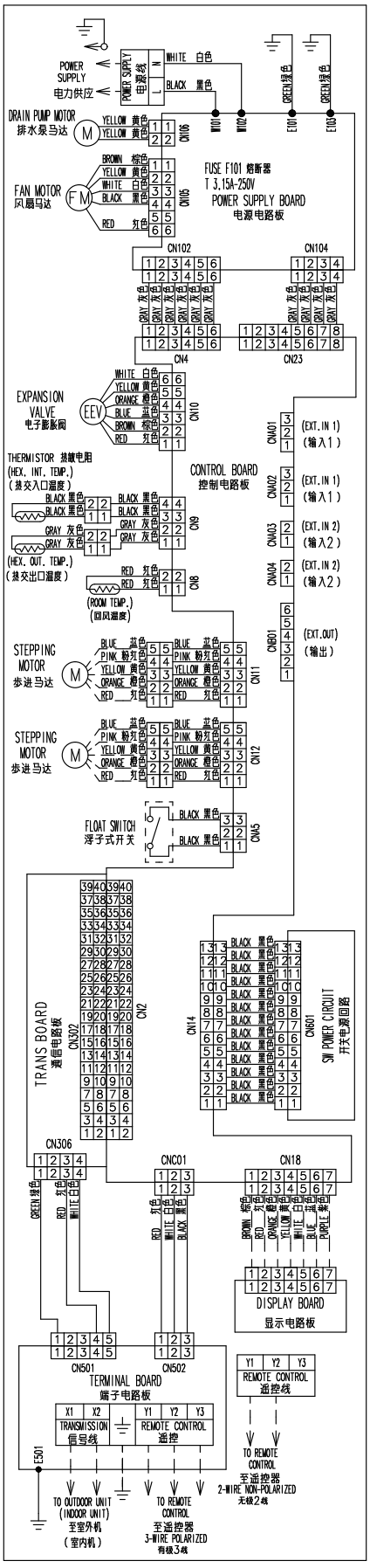
■ MODELS: AUXB04GBLH, AUXB04GALH, AUXB07GALH, AUXB09GALH, AUXB12GALH, AUXB14GALH, AUXB18GALH, AUXB24GALH



INDOOR UNITS

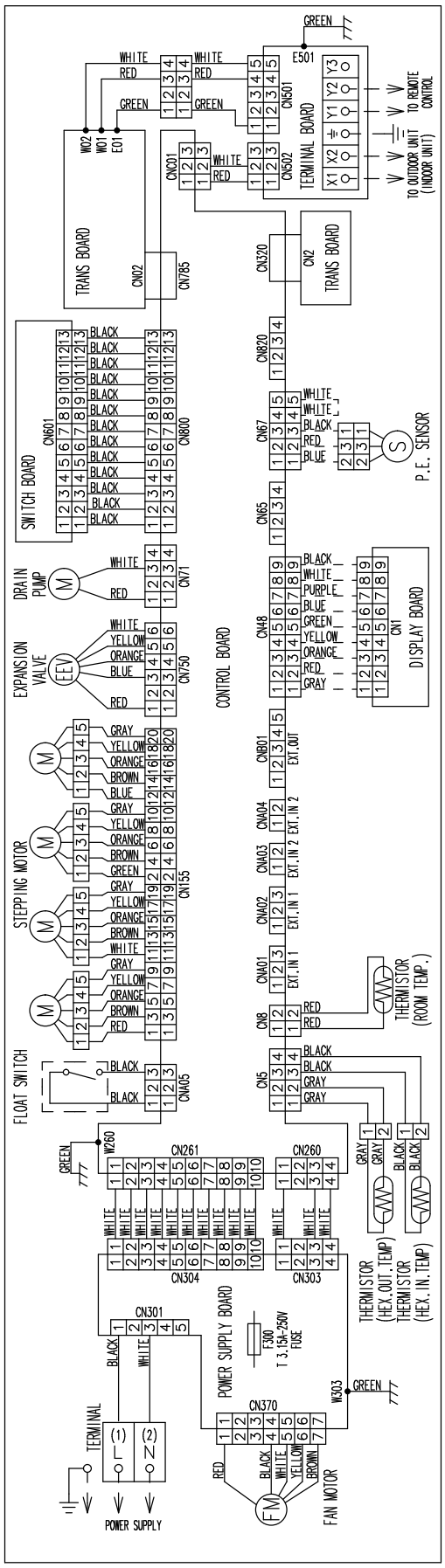
4-2. CASSETTE TYPE

■ MODELS: AUXD18GALH, AUXD24GALH, AUXA18GALH, AUXA24GALH, AUXA30GALH, AUXA34GALH, AUXA36GALH, AUXA45GALH, AUXA54GALH



INDOOR UNITS

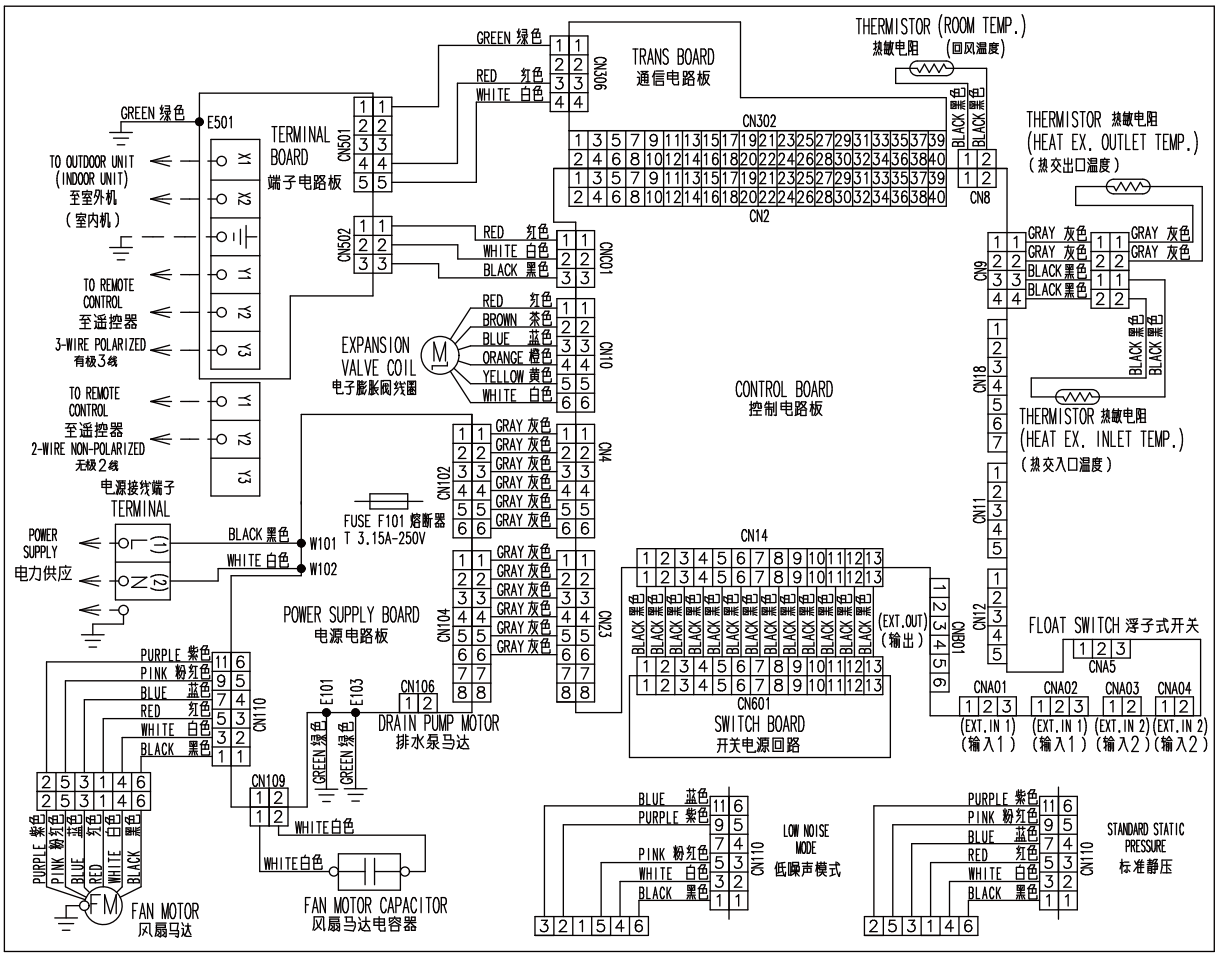
■ MODELS: AUXM018GLAH, AUXM024GLAH, AUXM030GLAH, AUXK018GLAH, AUXK024GLAH, AUXK030GLAH, AUXK034GLAH, AUXK036GLAH, AUXK045GLAH, AUXK054GLAH



INDOOR UNITS

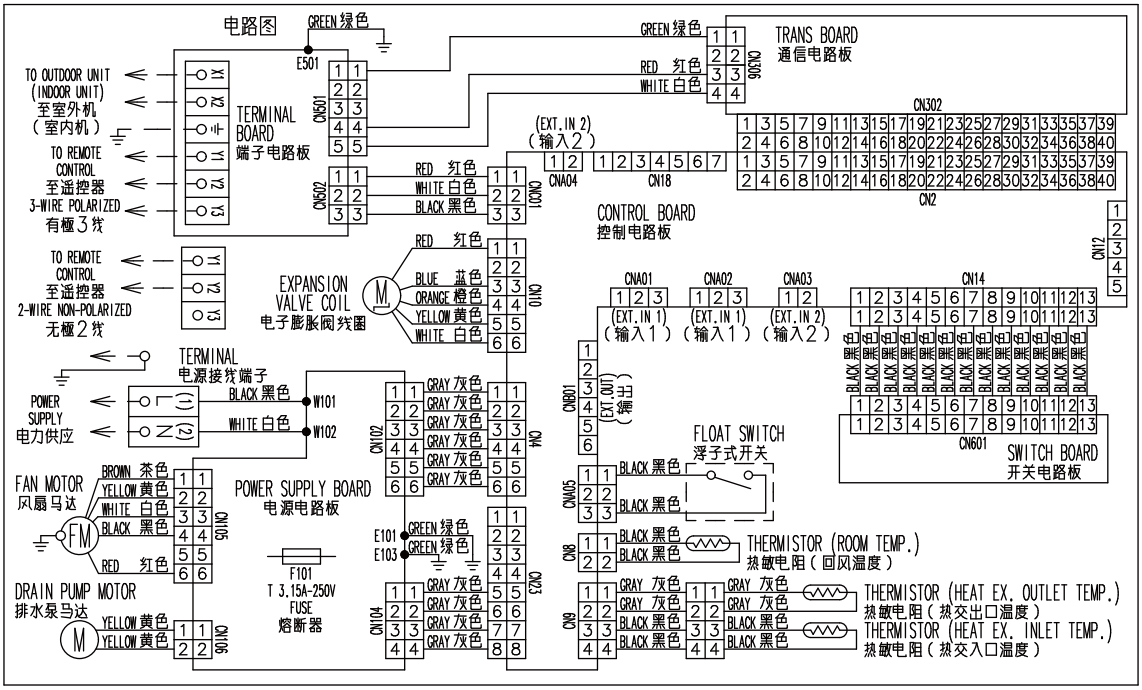
4-3. LOW STATIC PRESSURE DUCT / CONCEALED FLOOR TYPE

■ MODELS: ARXB07GALH, ARXB09GALH, ARXB12GALH, ARXB14GALH, ARXB18GALH



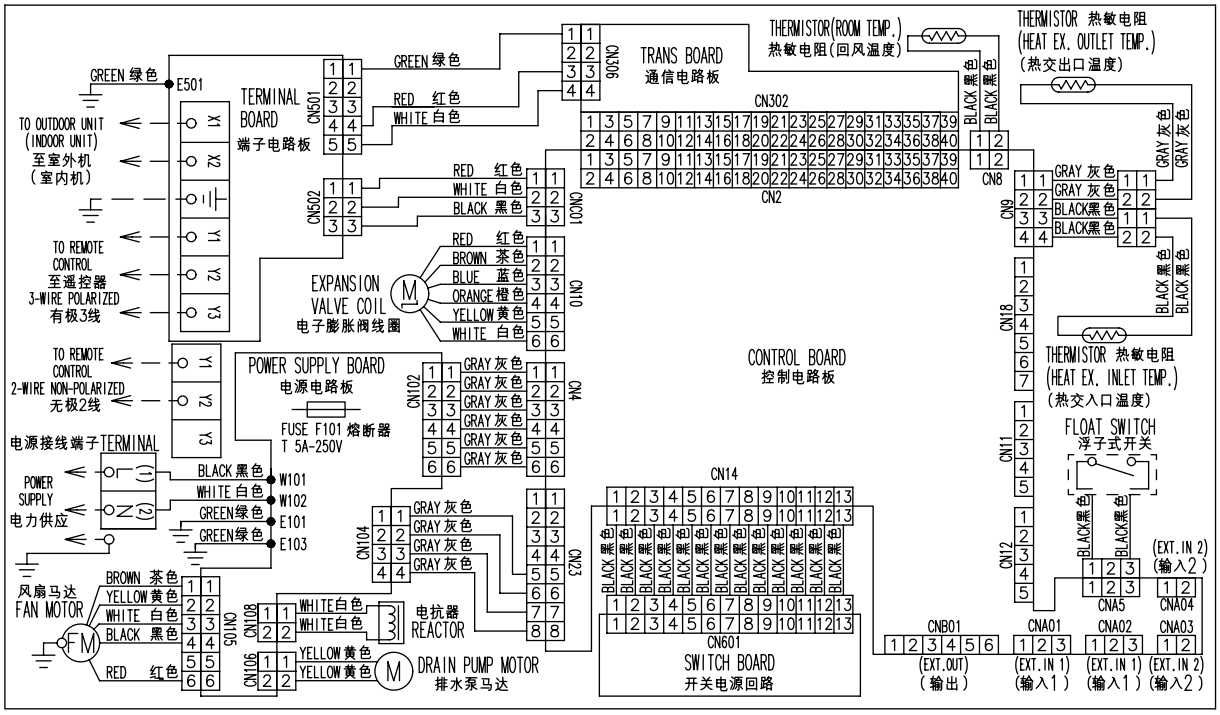
4-4. MINI DUCT TYPE

■ MODELS: ARXK04GCLH, ARXK07GCLH, ARXK09GCLH, ARXK12GCLH, ARXK14GCLH, ARXK18GCLH, ARXK24GCLH



4-5. SLIM DUCT / SLIM CONCEALED FLOOR TYPE

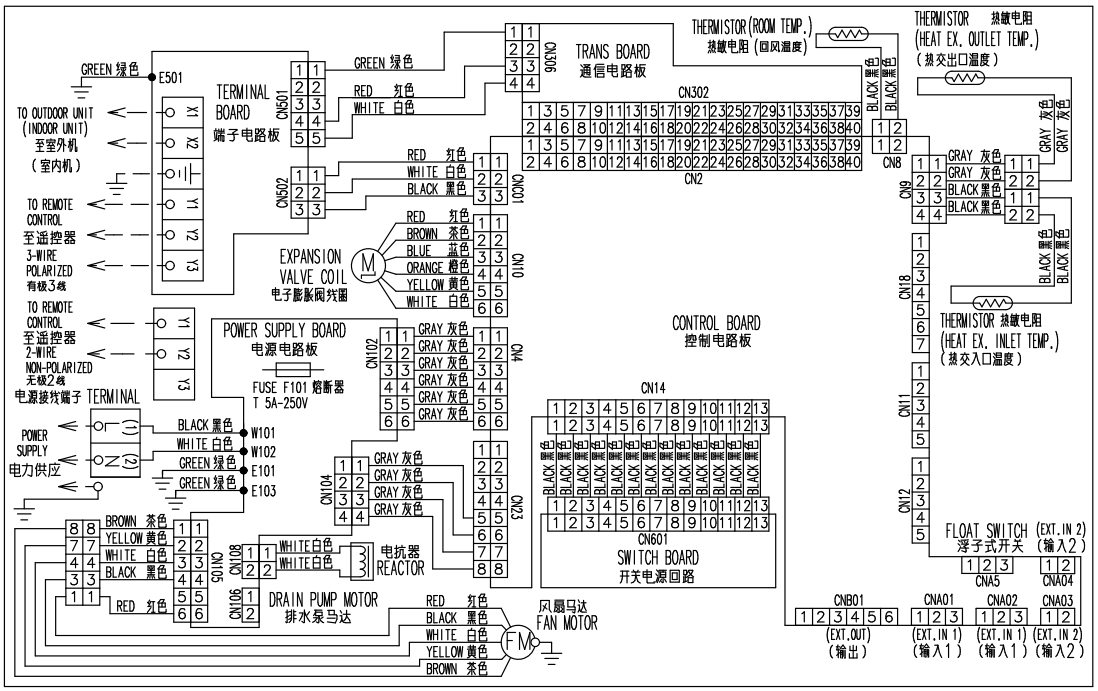
■ MODELS: ARXD04GALH, ARXD07GALH, ARXD09GALH, ARXD12GALH, ARXD14GALH, ARXD18GALH, ARXD24GALH



INDOOR UNITS

4-6. MEDIUM STATIC PRESSURE DUCT TYPE

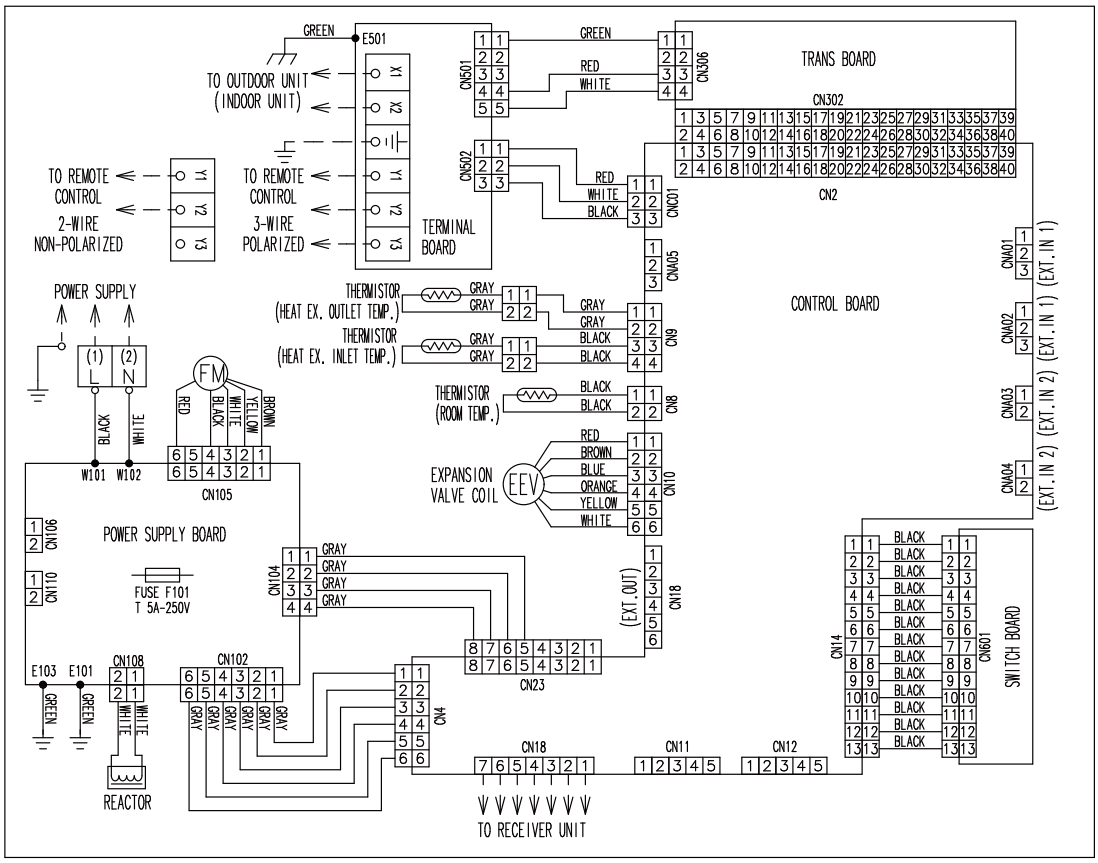
■ MODELS: ARXA24GBLH, ARXA30GBLH, ARXA36GBLH, ARXA45GBLH



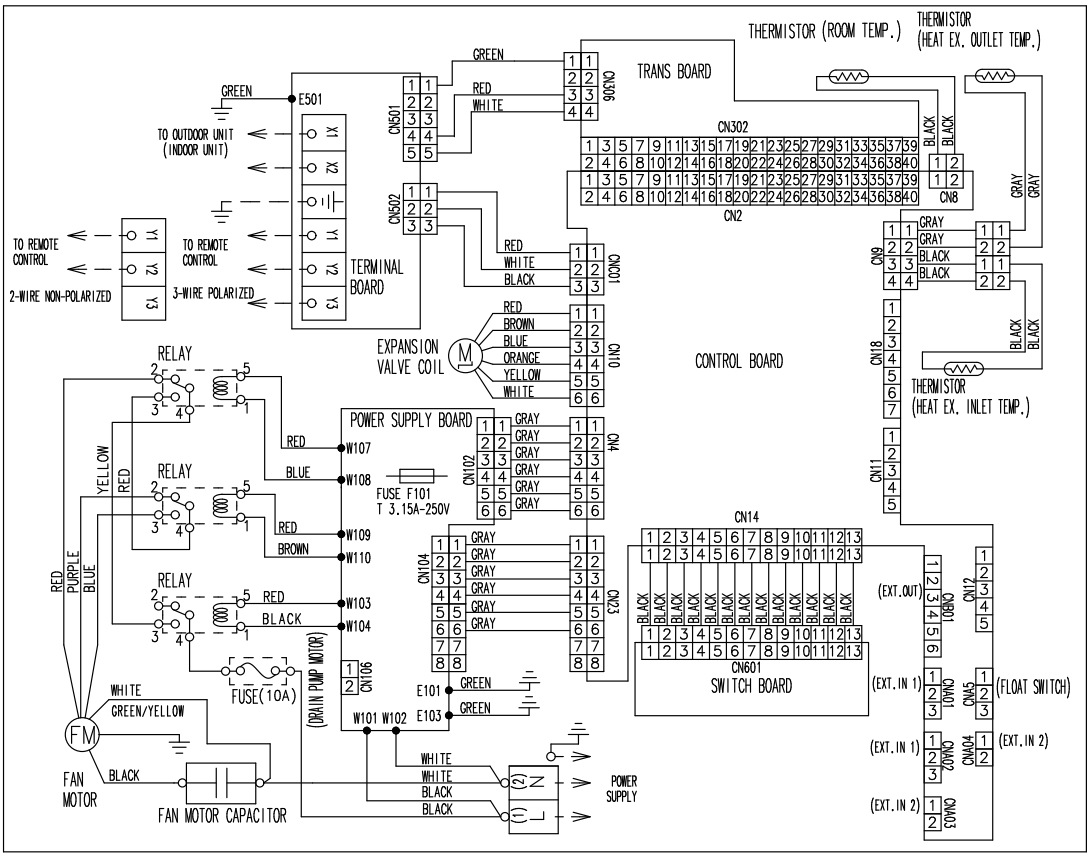
INDOOR UNITS

4-7. HIGH STATIC PRESSURE DUCT TYPE

■ MODEL: ARXC36GBTH

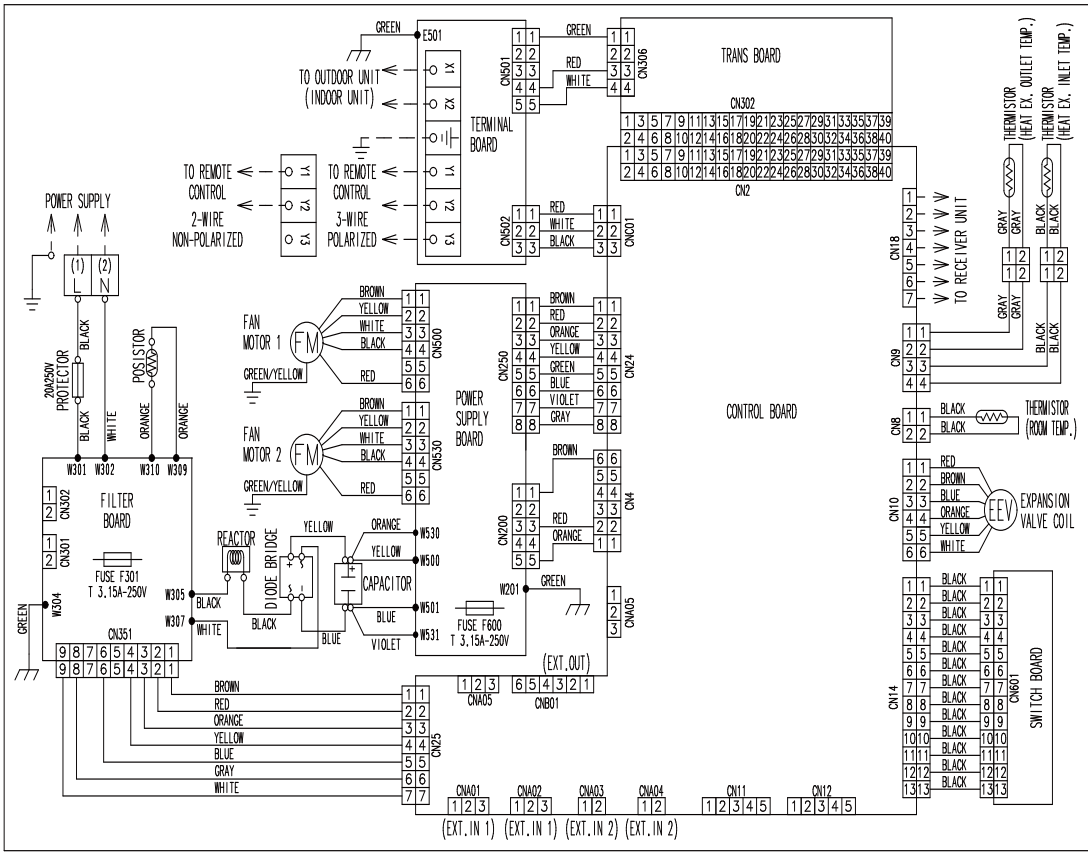


■ MODELS: ARXC45GATH, ARXC60GATH



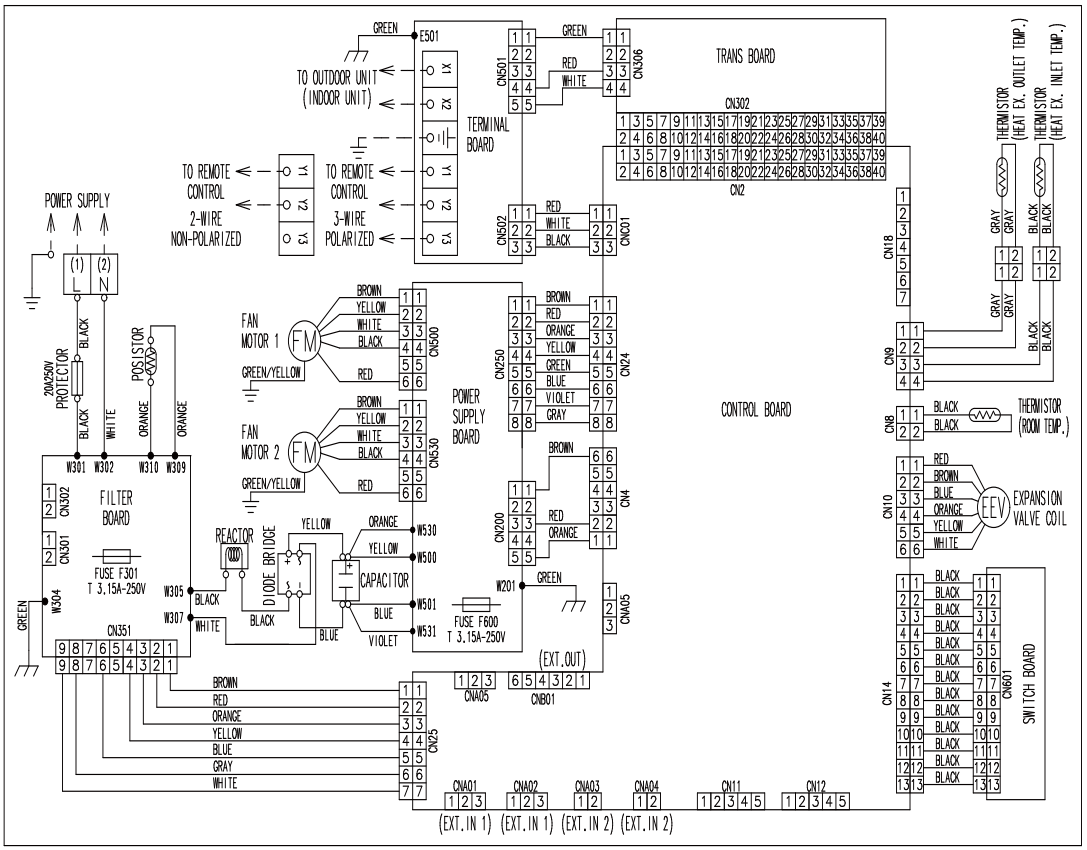
INDOOR UNITS

■ MODELS: ARXC72GBTH, ARXC90GBTH, ARXC96GATH



4-8. LARGE AIRFLOW DUCT TYPE

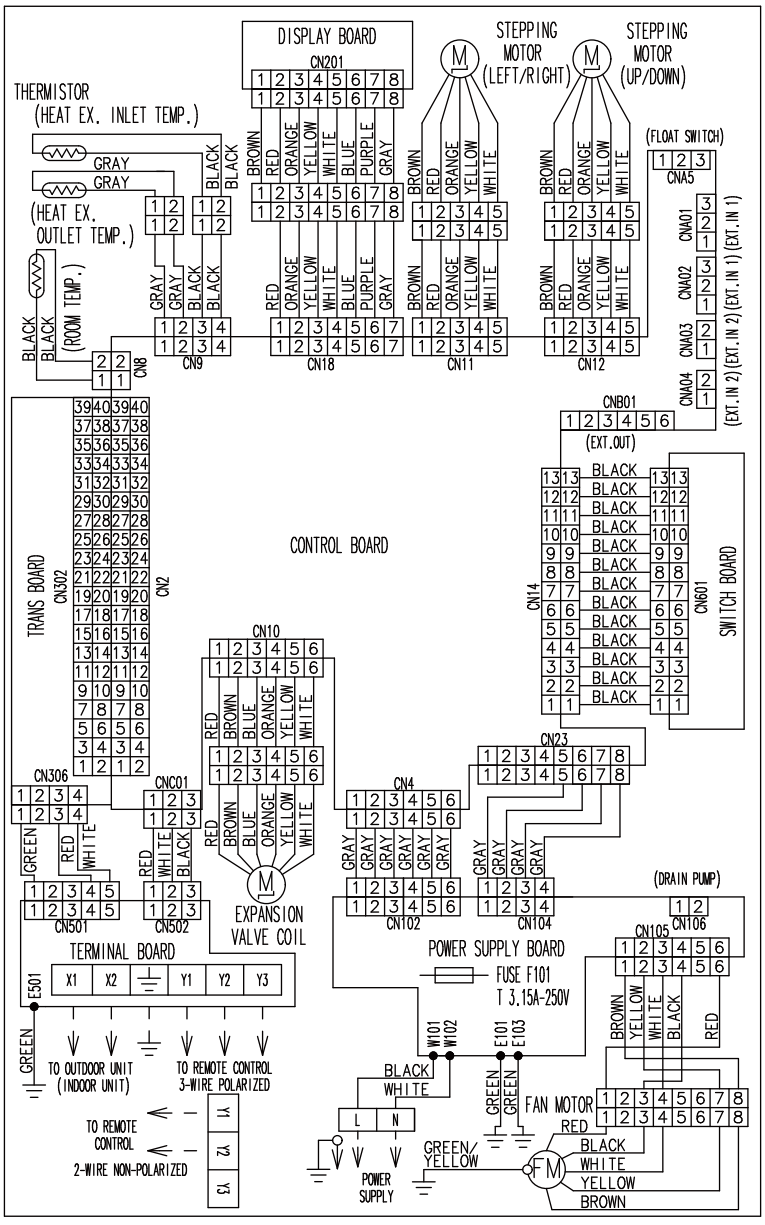
■ MODELS: ARXN18GATH, ARXN24GATH, ARXN30GATH, ARXN34GATH, ARXN36GATH, ARXN45GATH



INDOOR UNITS

4-9. FLOOR / CEILING TYPE

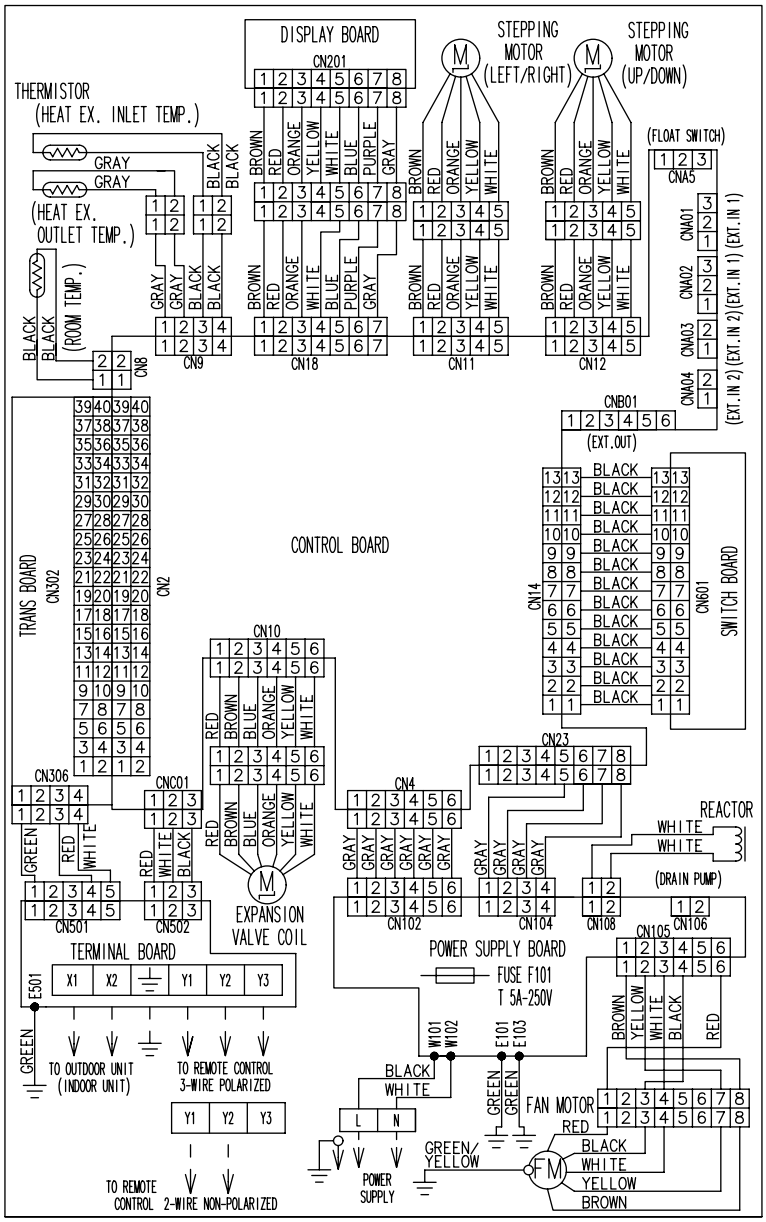
■ MODELS: AB∗A12GATH, AB∗A14GATH, AB∗A18GATH, AB∗A24GATH



INDOOR UNITS

4-10. CEILING TYPE

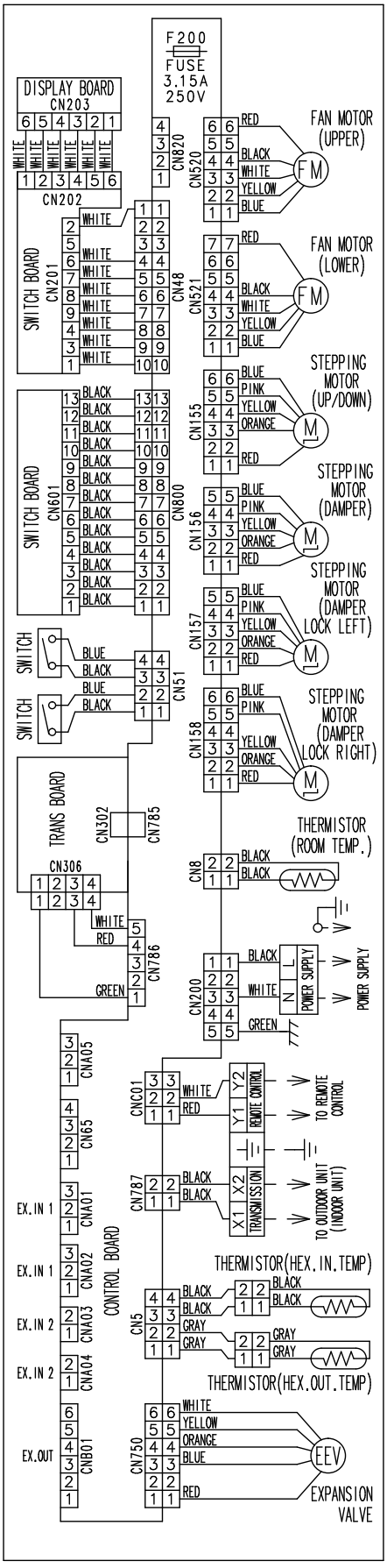
■ MODELS: AB∗A30GATH, AB∗A36GATH, AB∗A45GATH, AB∗A54GATH



INDOOR UNITS

4-11. COMPACT FLOOR TYPE

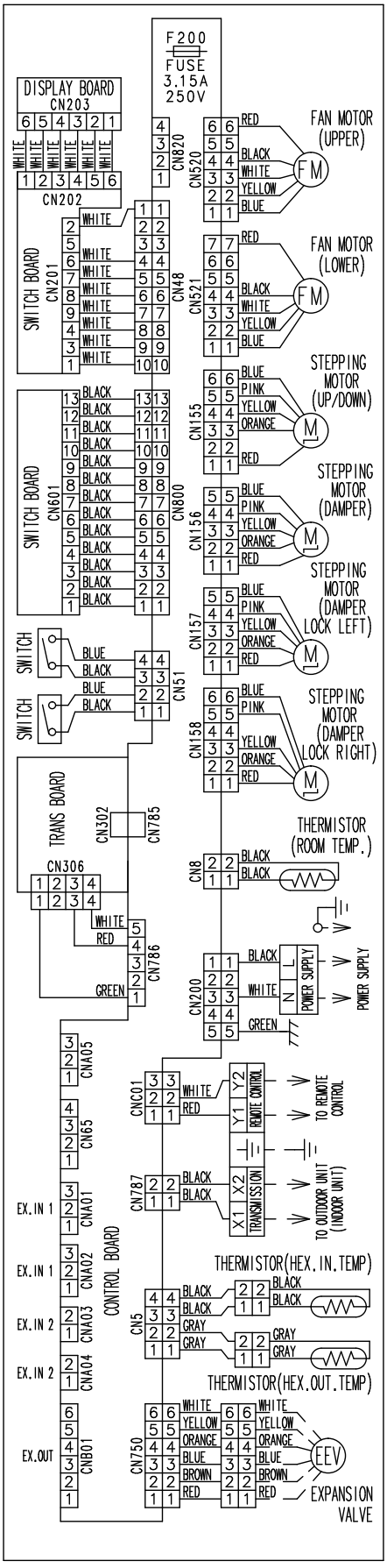
■ MODELS: AG∗A004GCAH, AG∗A007GCAH, AG∗A009GCAH, AG∗A012GCAH, AG∗A014GCAH



INDOOR UNITS

4-12. COMPACT FLOOR TYPE (EEV external model)

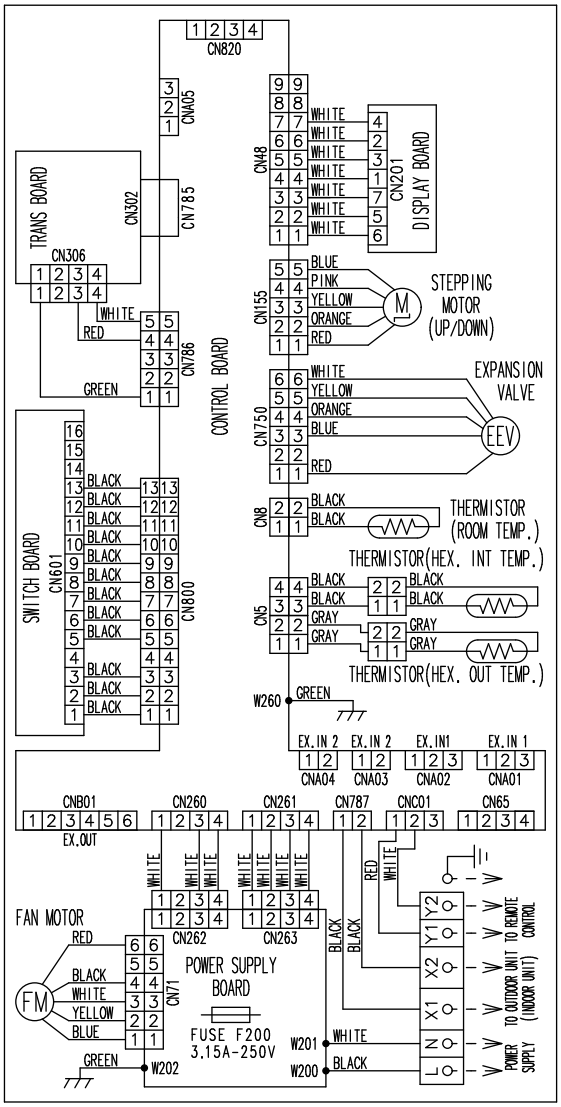
■ MODELS: AG∗E004GCAH, AG∗E007GCAH, AG∗E009GCAH, AG∗E012GCAH, AG∗E014GCAH,



INDOOR UNITS

4-13. WALL MOUNTED TYPE

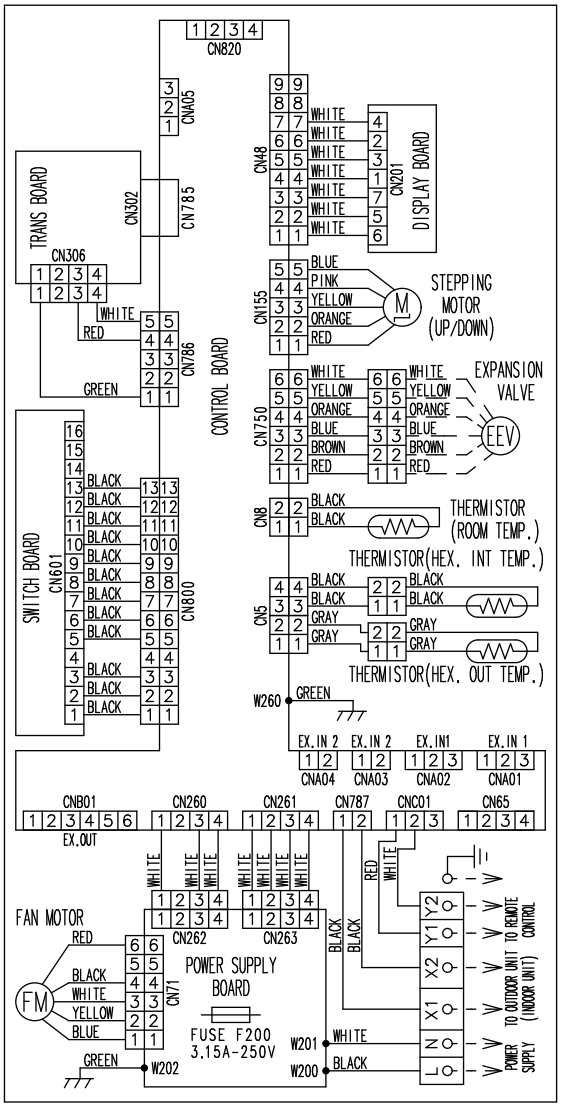
■ MODELS: AS∗A004GTAH, AS∗A007GTAH, AS∗A009GTAH



INDOOR UNITS

4-14. WALL MOUNTED TYPE (EEV external model)

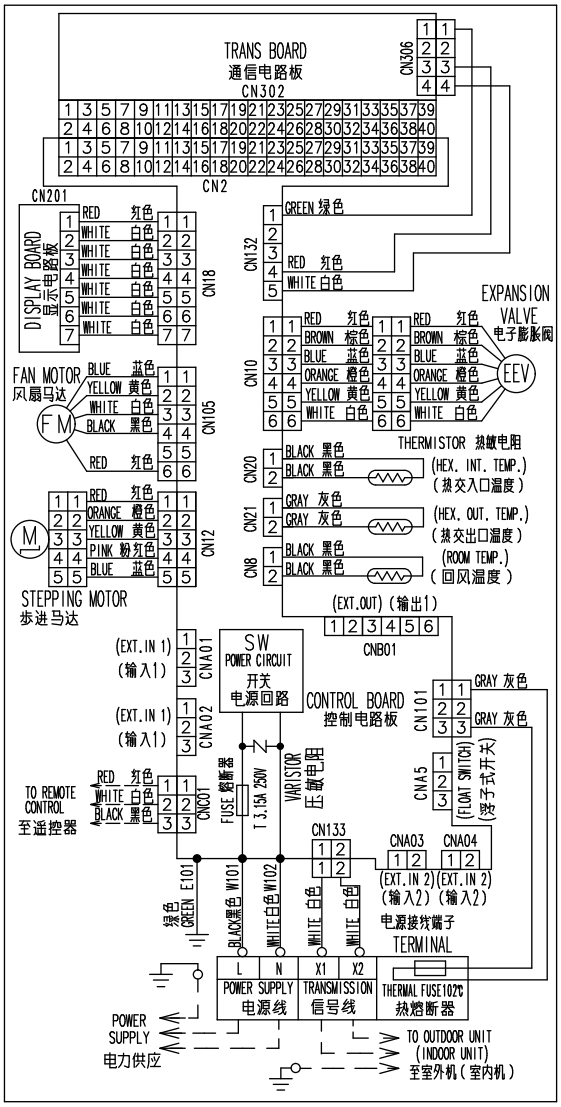
■ MODELS: AS∗E004GTAH, AS∗E007GTAH, AS∗E009GTAH



INDOOR UNITS

4-15. WALL MOUNTED TYPE

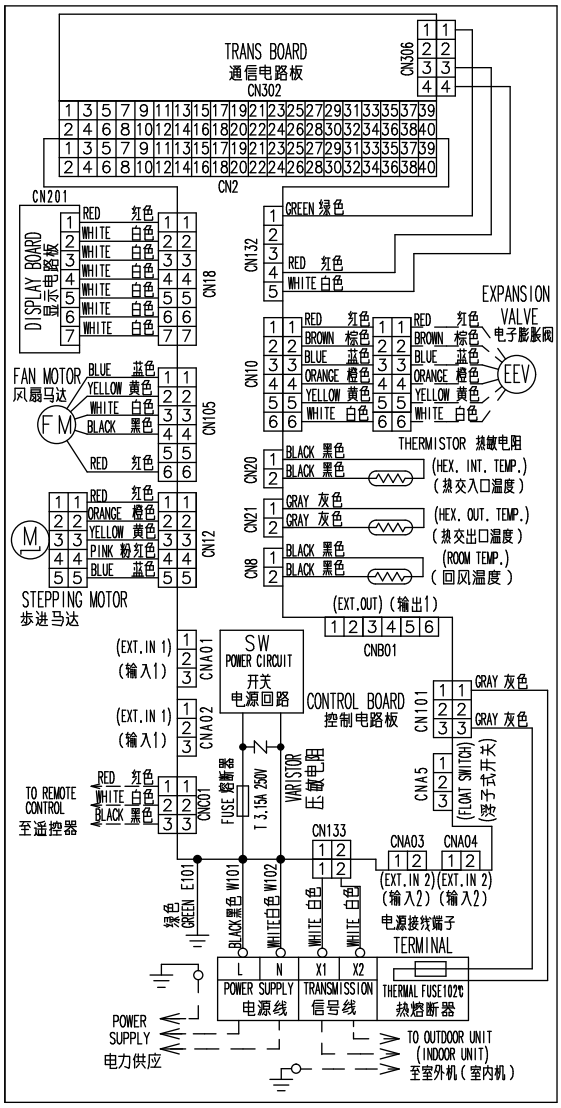
■ MODELS: AS∗A04GACH, AS∗A07GACH, AS∗A09GACH, AS∗A12GACH, AS∗A14GACH



INDOOR UNITS

4-16. WALL MOUNTED TYPE (EEV external model)

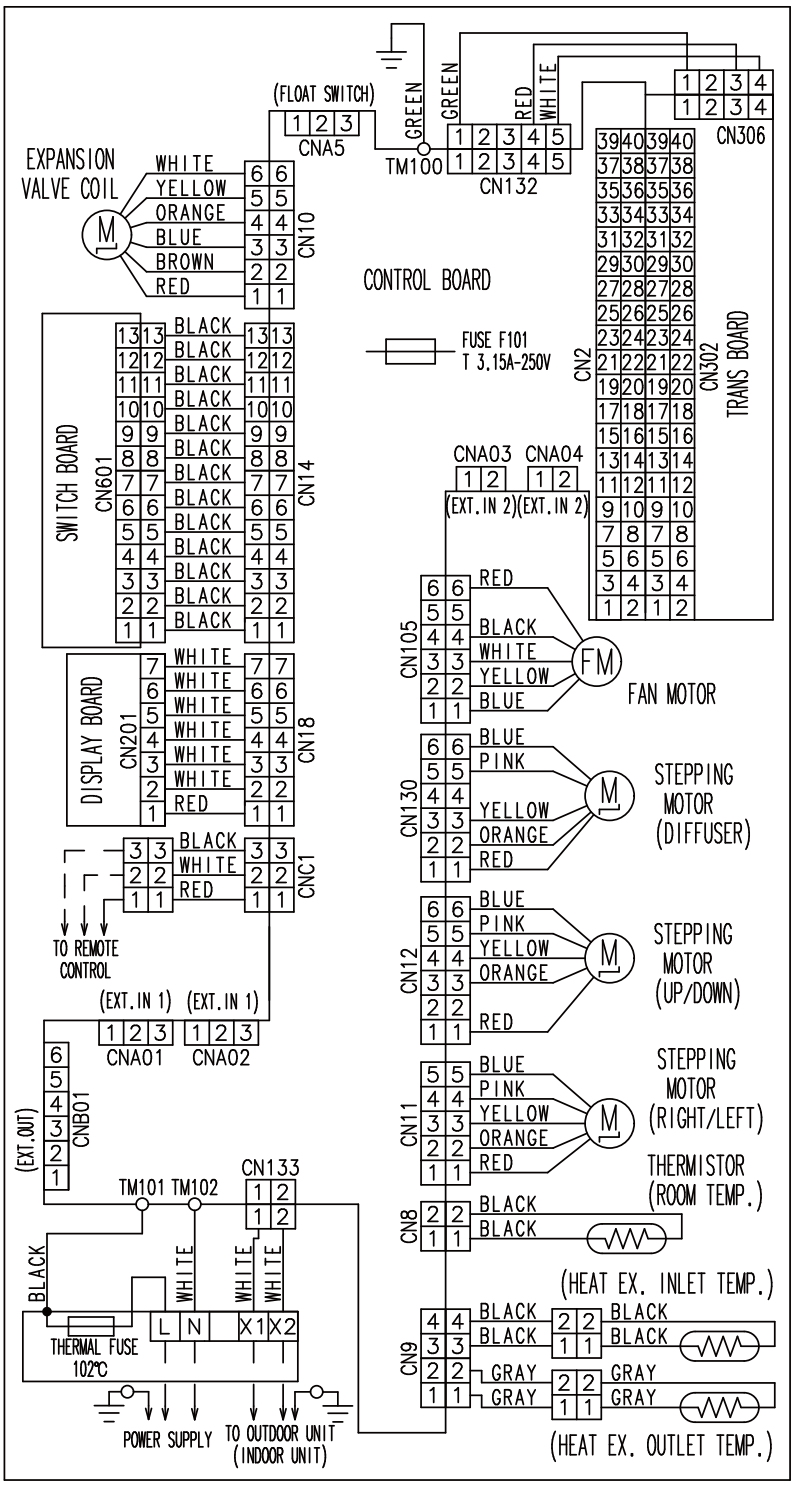
■ MODELS: AS∗E04GACH, AS∗E07GACH, AS∗E09GACH, AS∗E12GACH, AS∗E14GACH



INDOOR UNITS

4-17. WALL MOUNTED TYPE

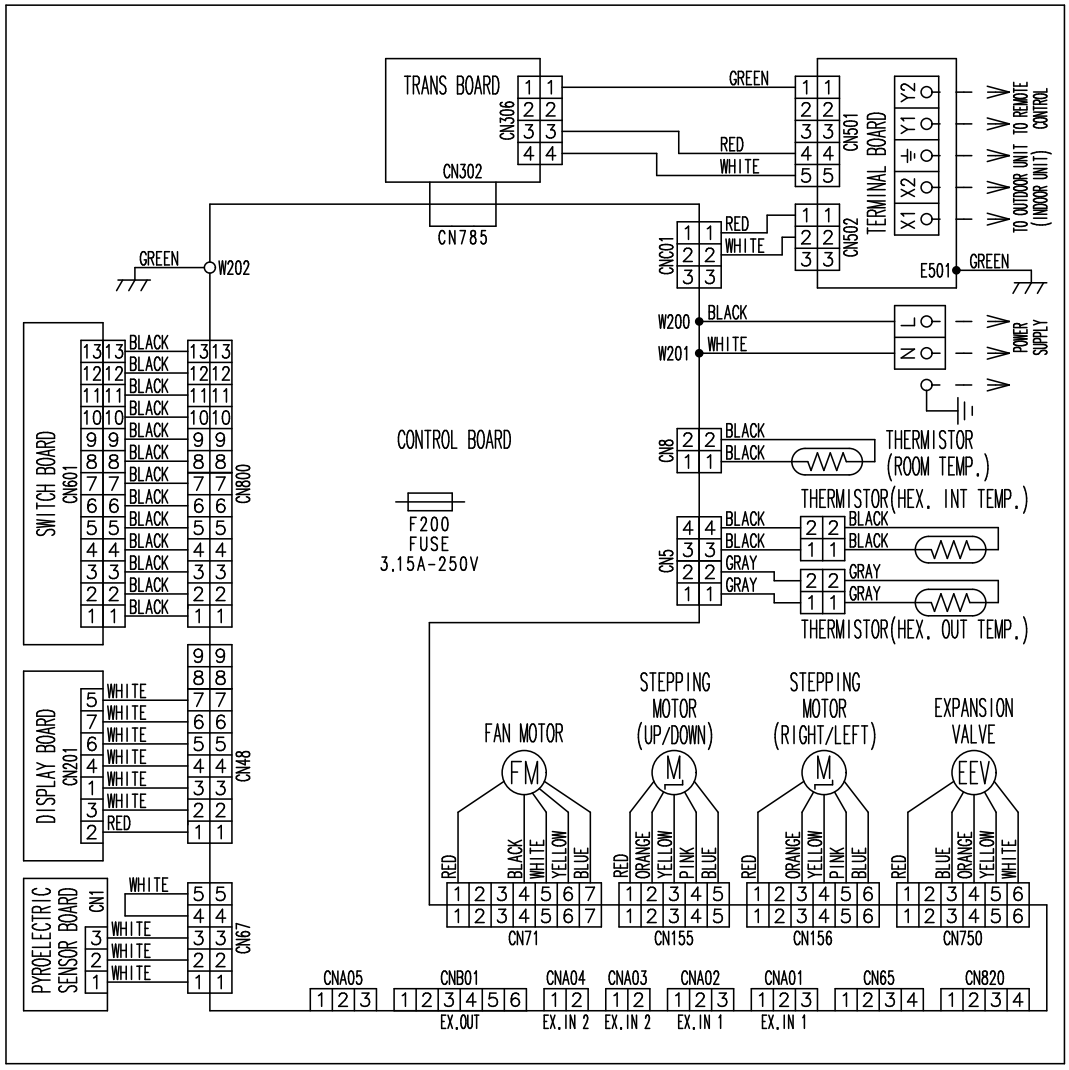
■ MODELS: AS∗A18GBCH, AS∗A24GBCH, AS∗A18GACH, AS∗A24GACH, AS∗A30GACH



INDOOR UNITS

4-18. WALL MOUNTED TYPE

■ MODELS: AS∗A030GTAH, AS∗A034GTAH



5. AIR VELOCITY AND TEMPERATURE DISTRIBUTIONS

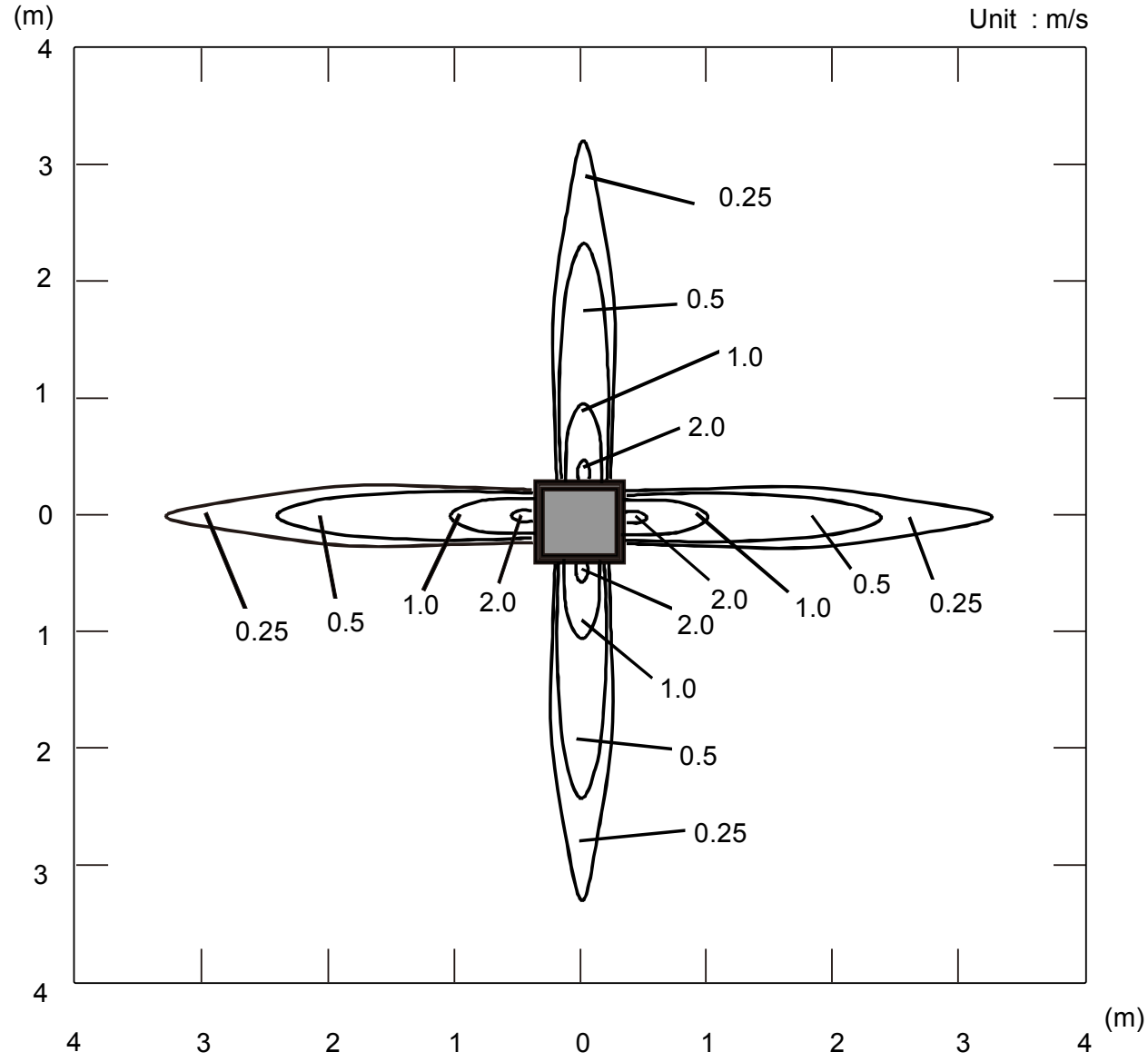
5-1. COMPACT CASSETTE TYPE

■ MODEL: AUXB04GALH, AUXB04GBLH

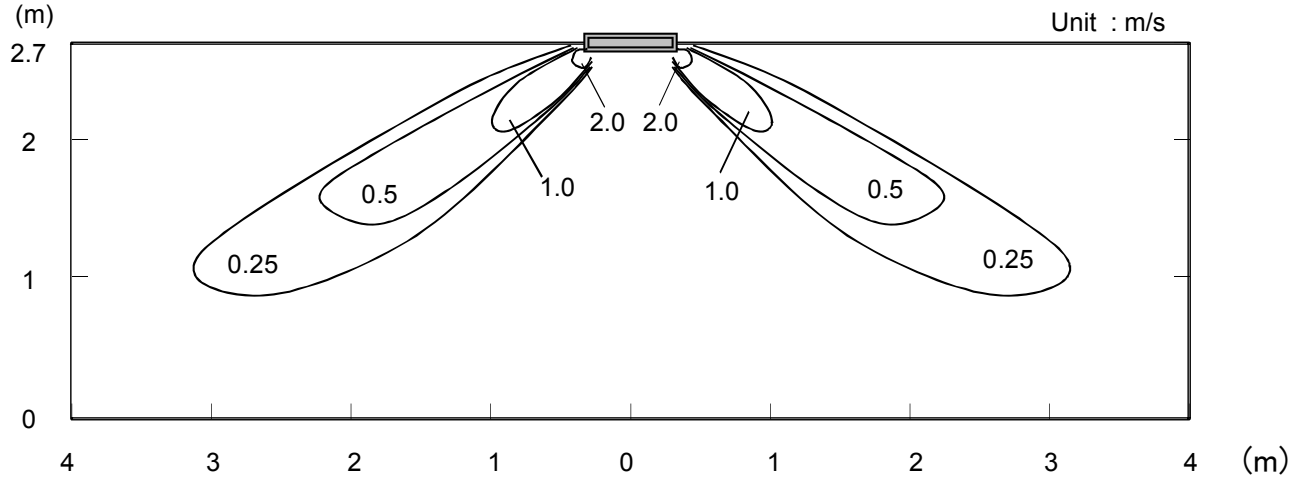
Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



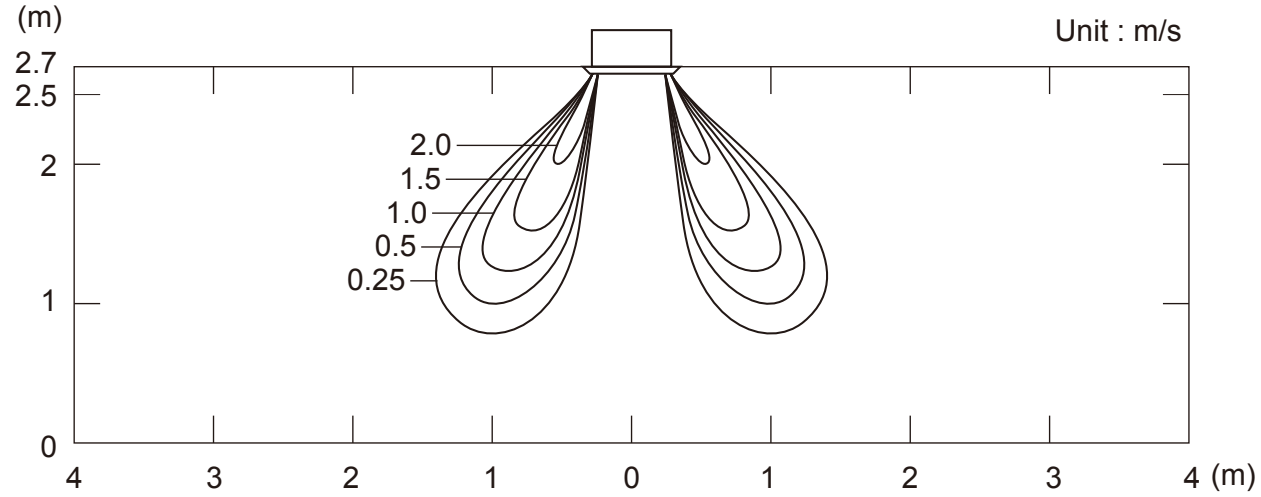
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

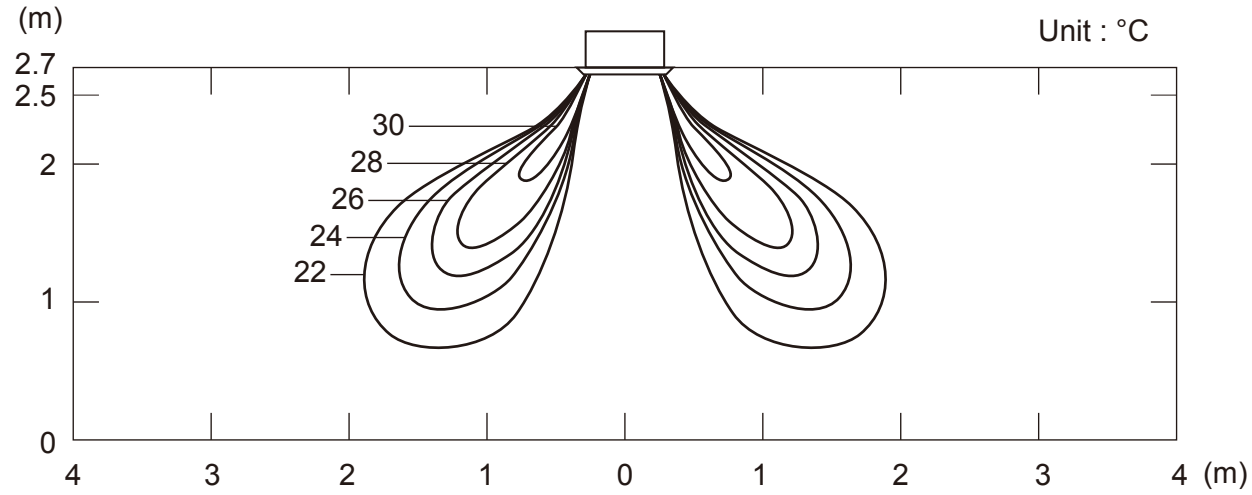
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

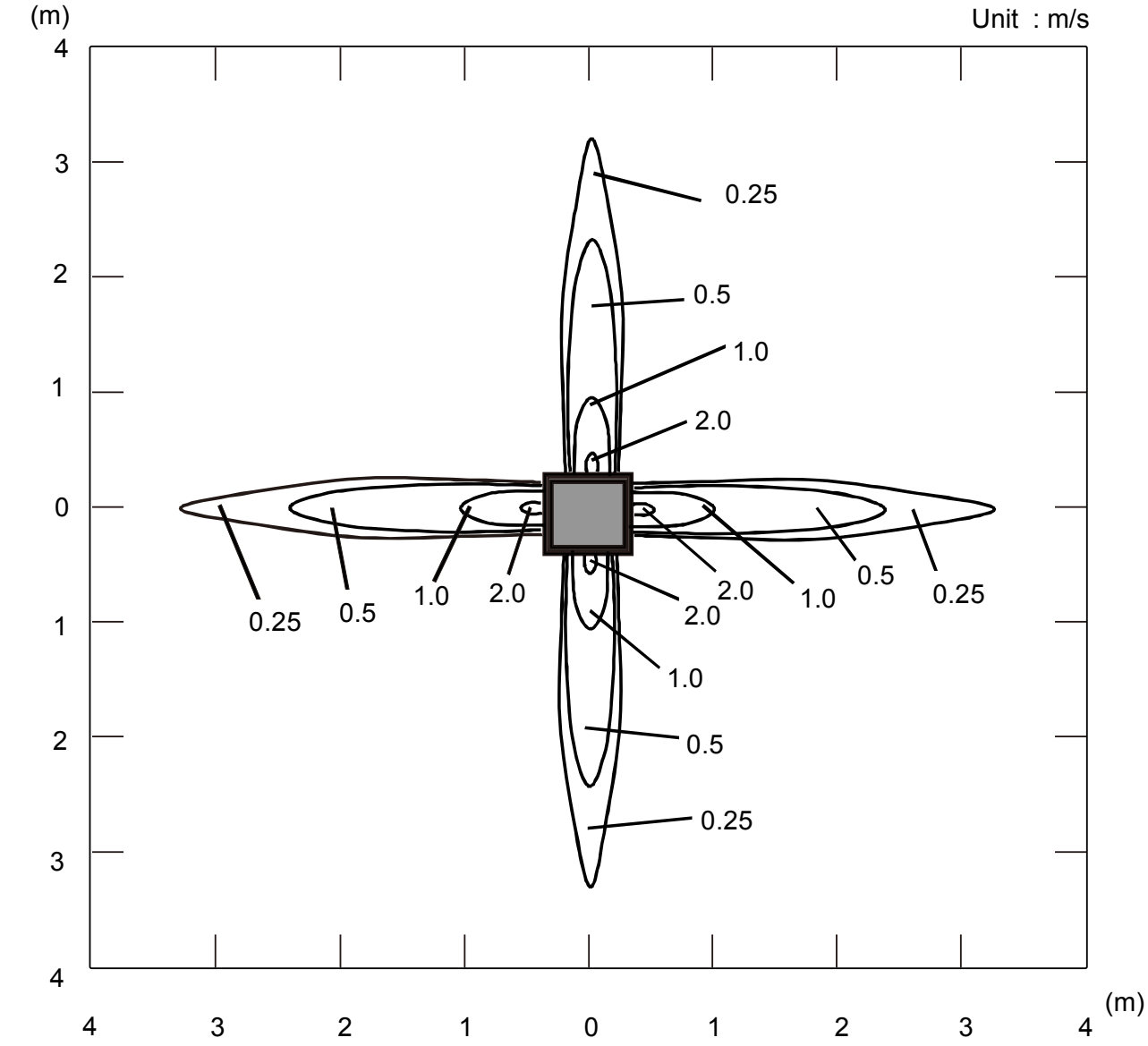
■ MODEL: AUXB07GALH

● Air velocity distribution

Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

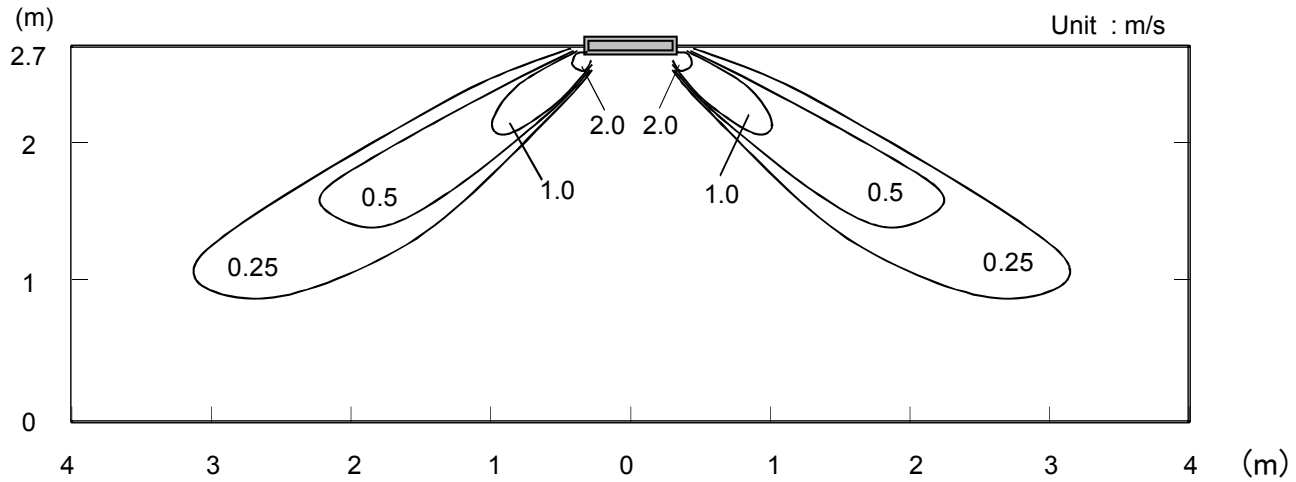
Top view

Vertical airflow direction louver : Up



Side view

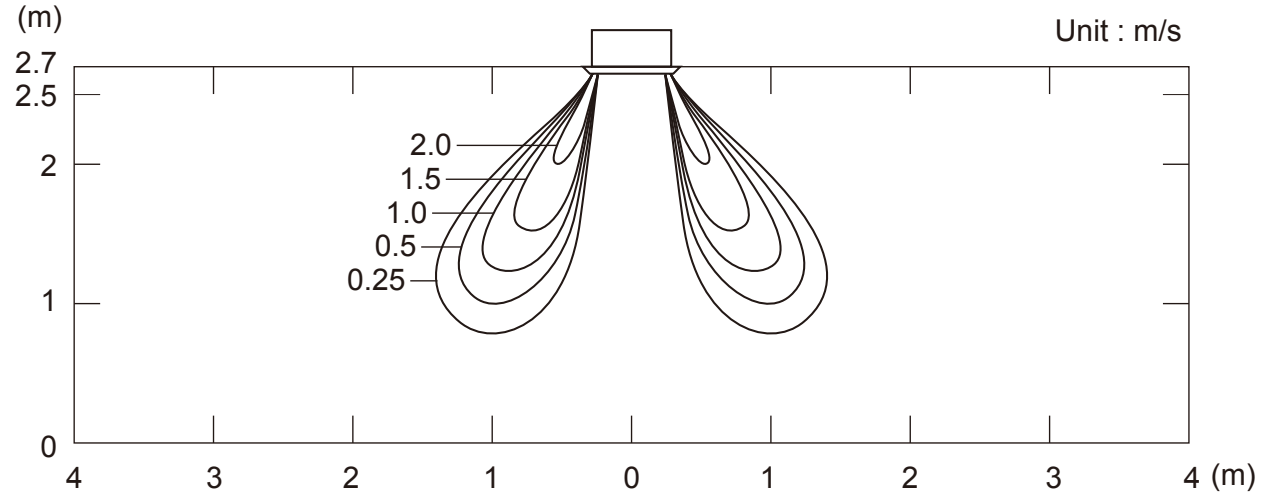
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

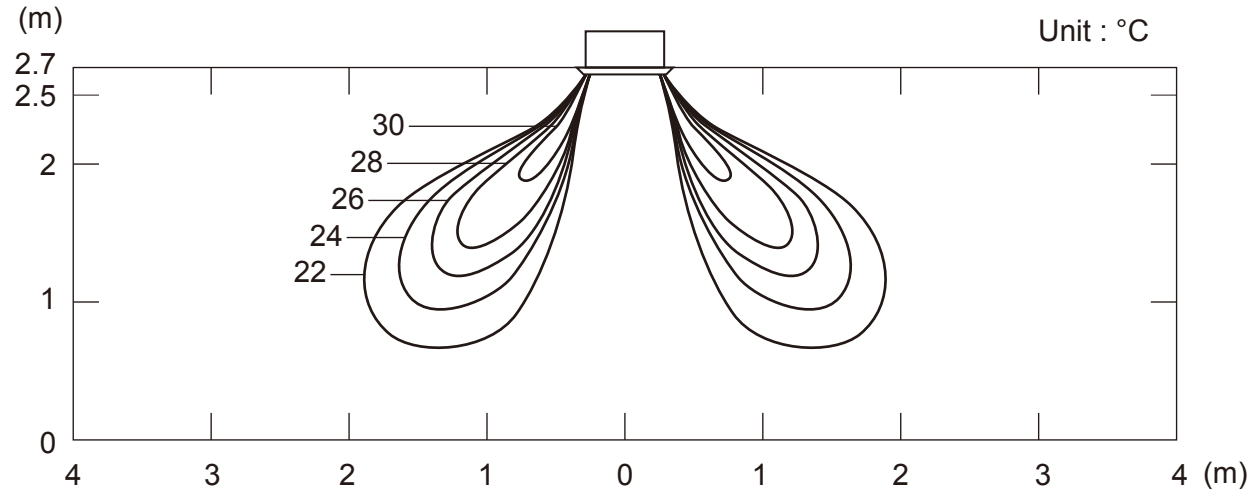
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

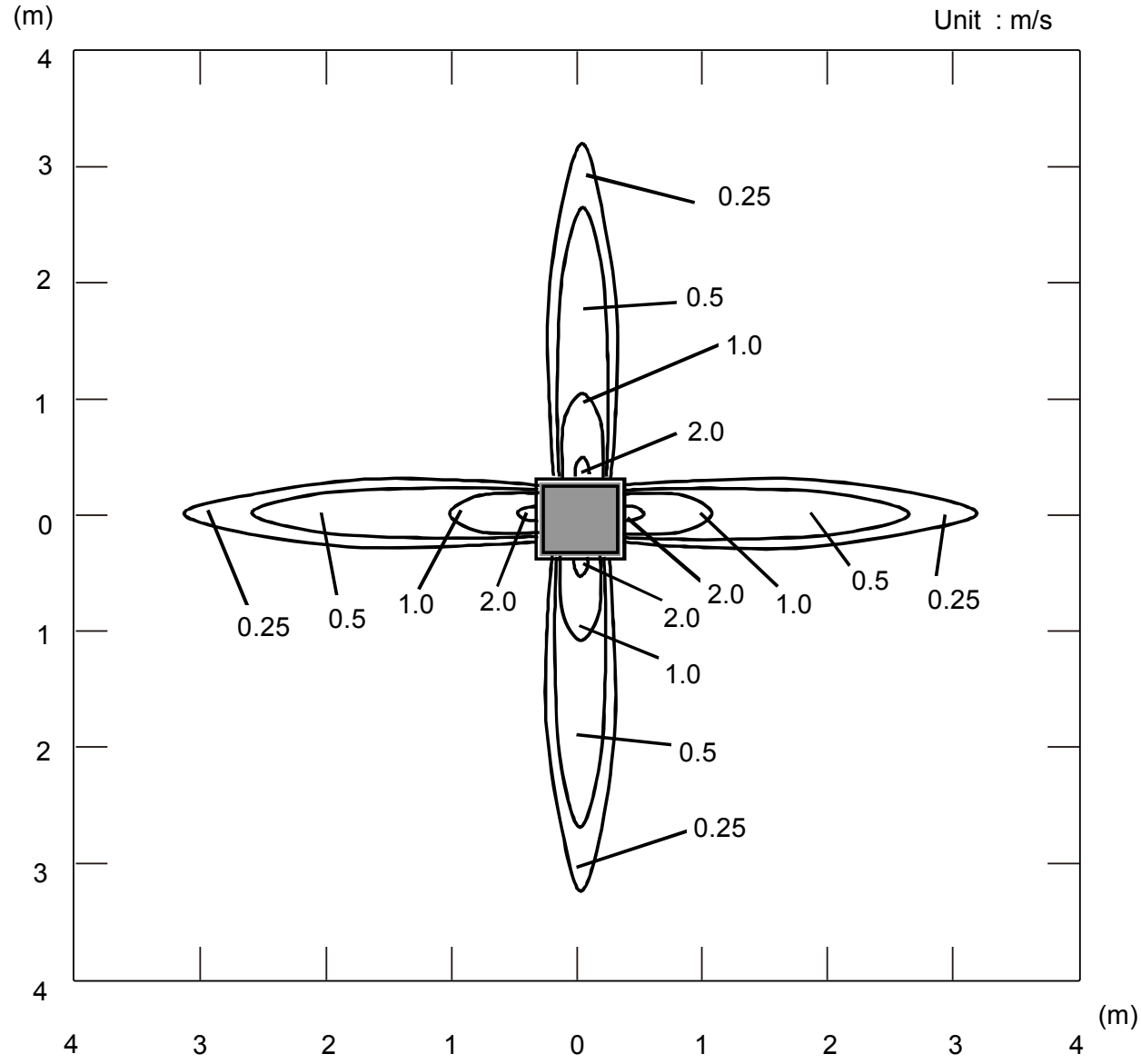
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

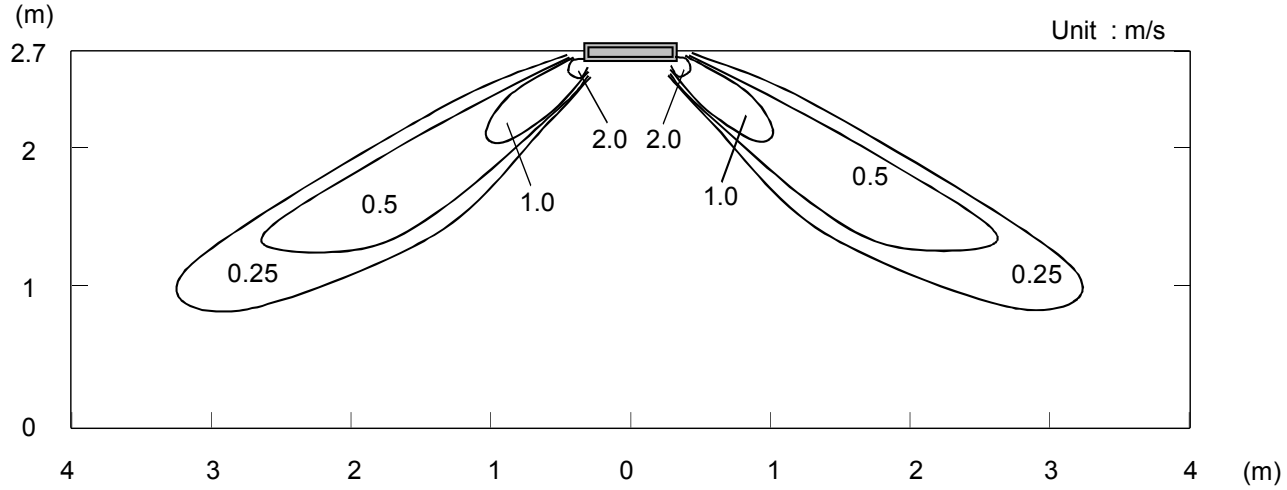
■ MODEL: AUXB09GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



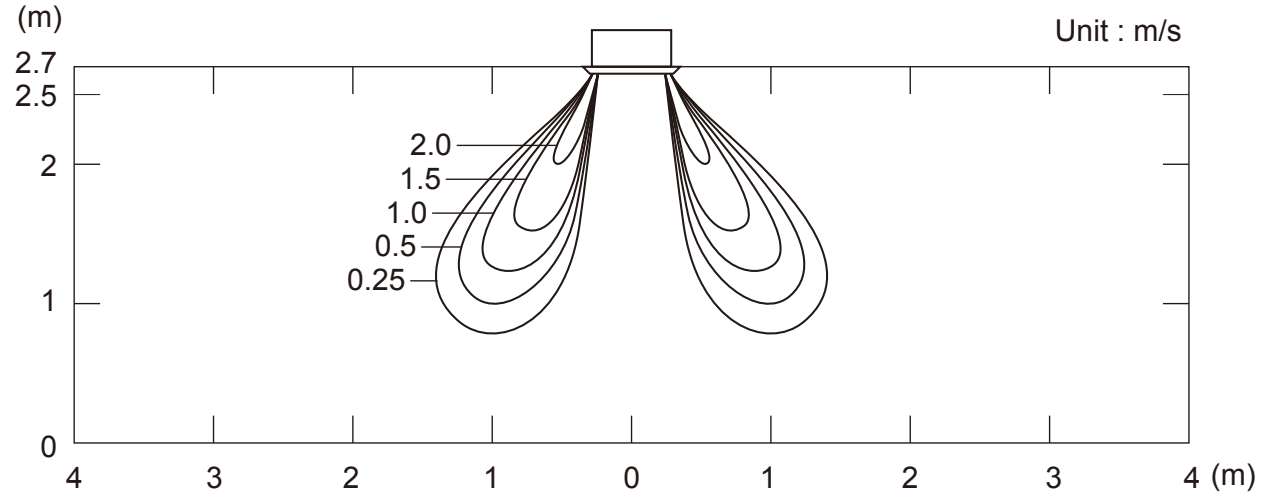
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

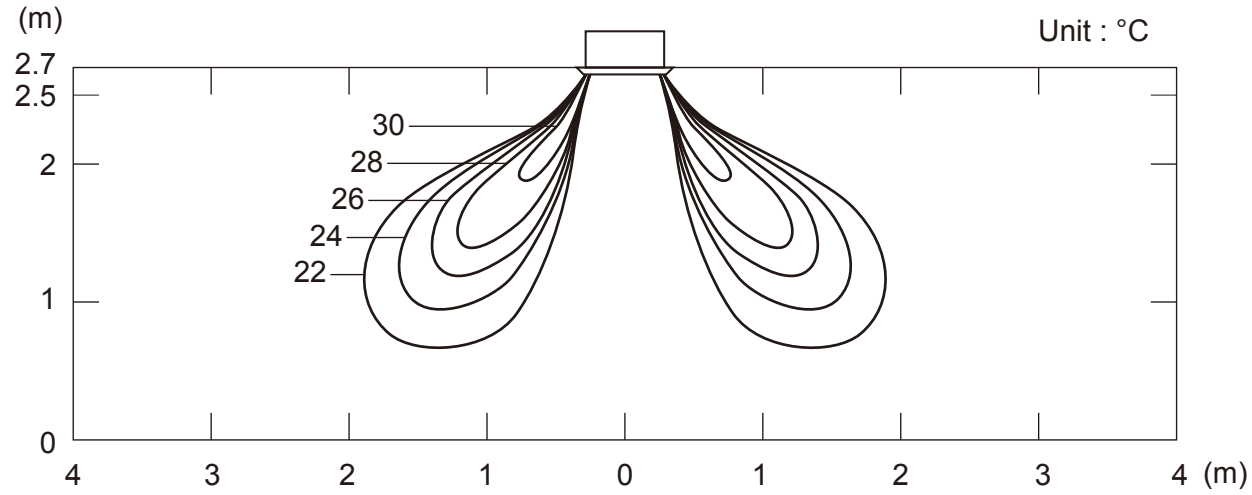
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

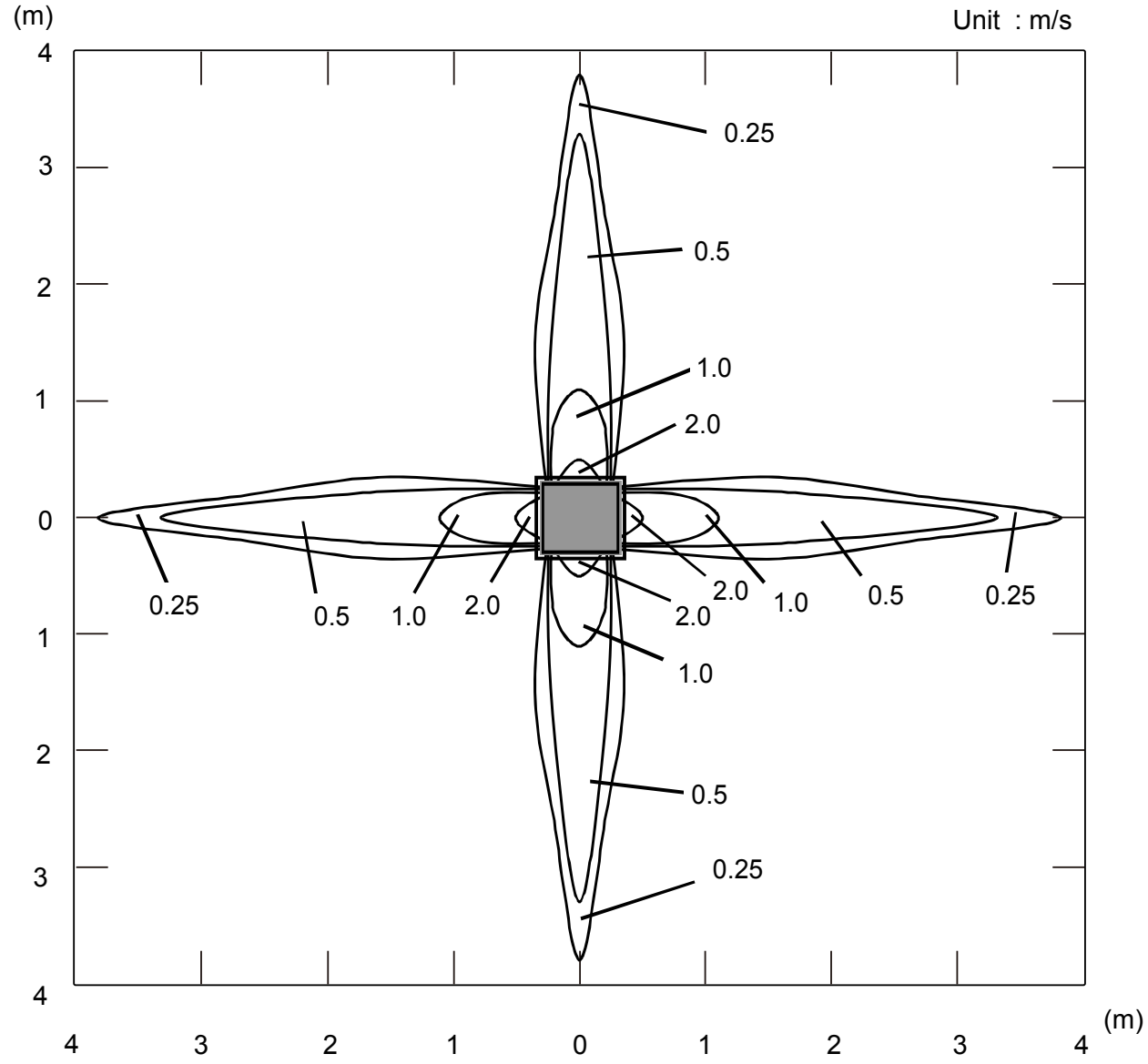
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

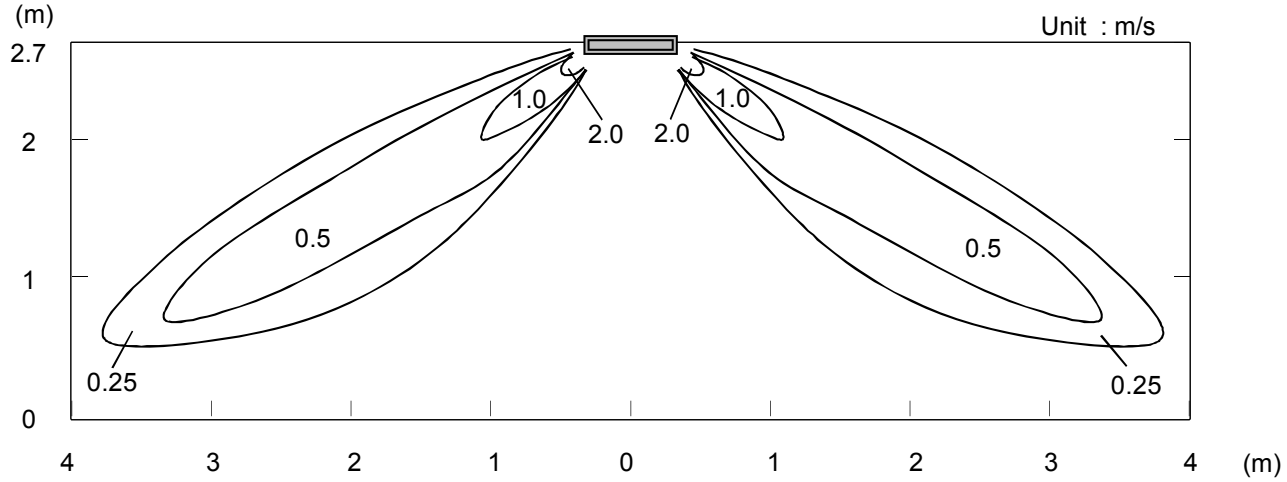
■ MODEL: AUXB12GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



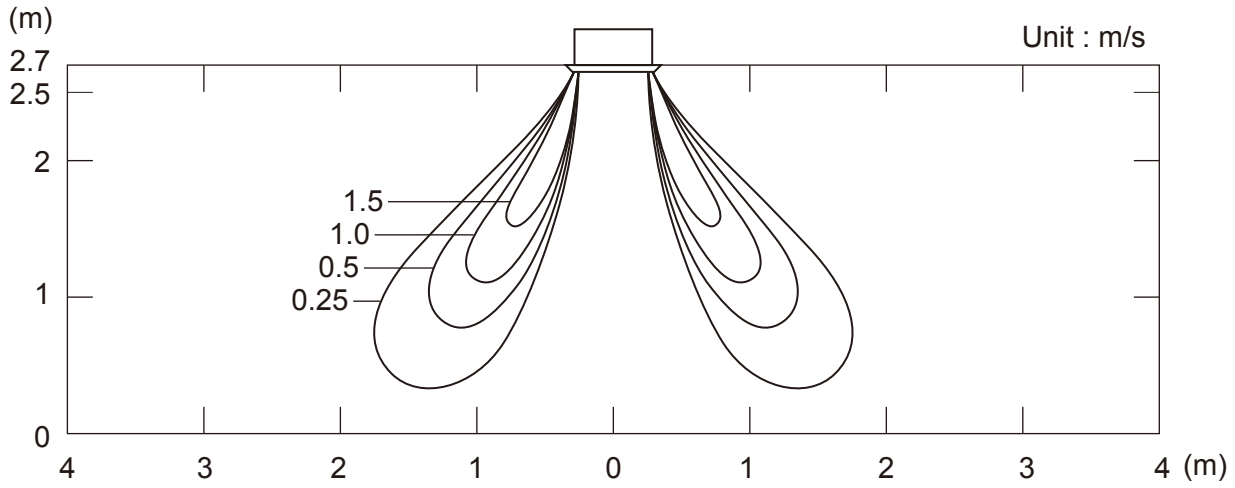
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

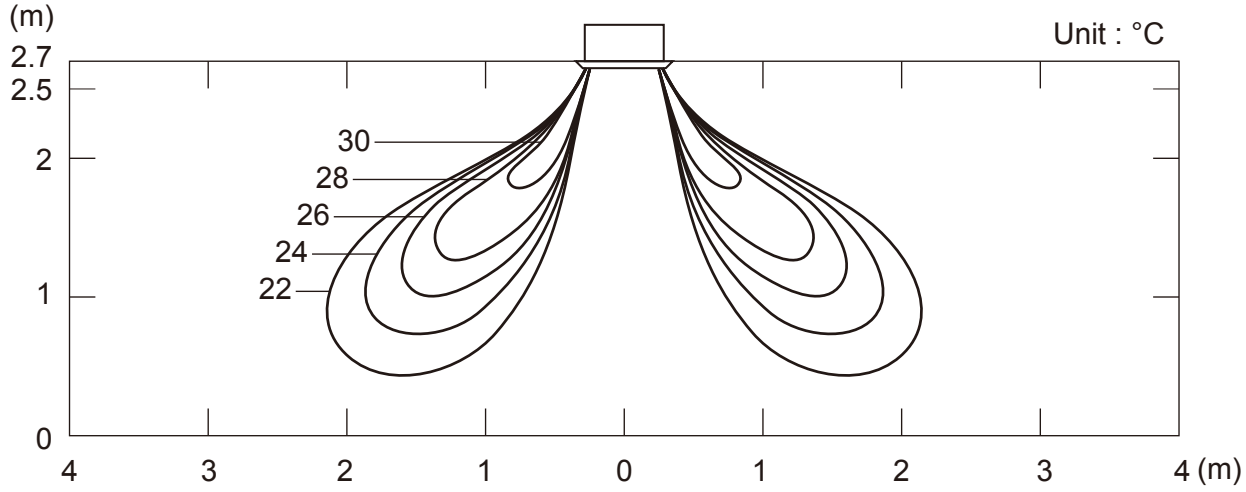
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

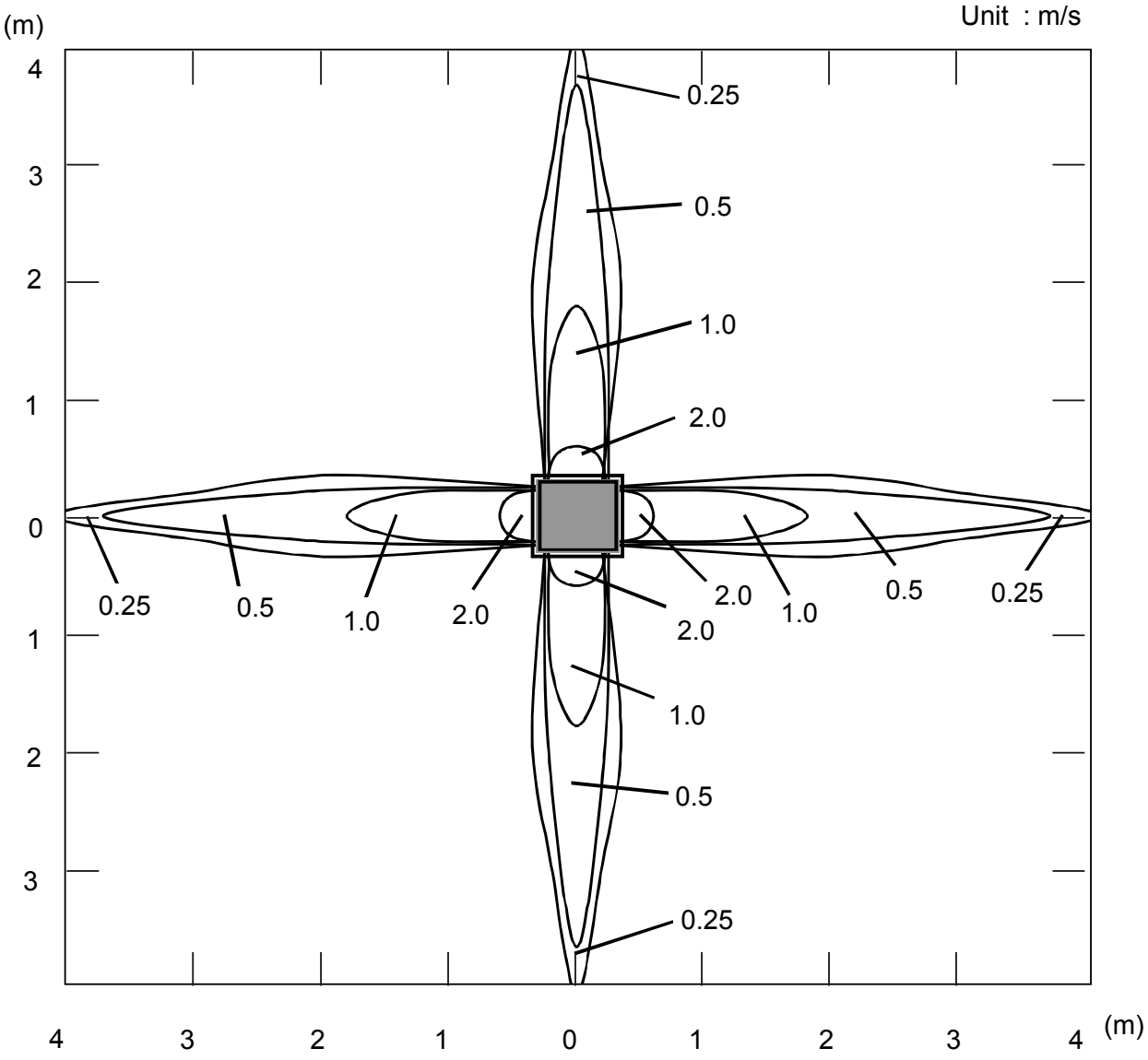
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

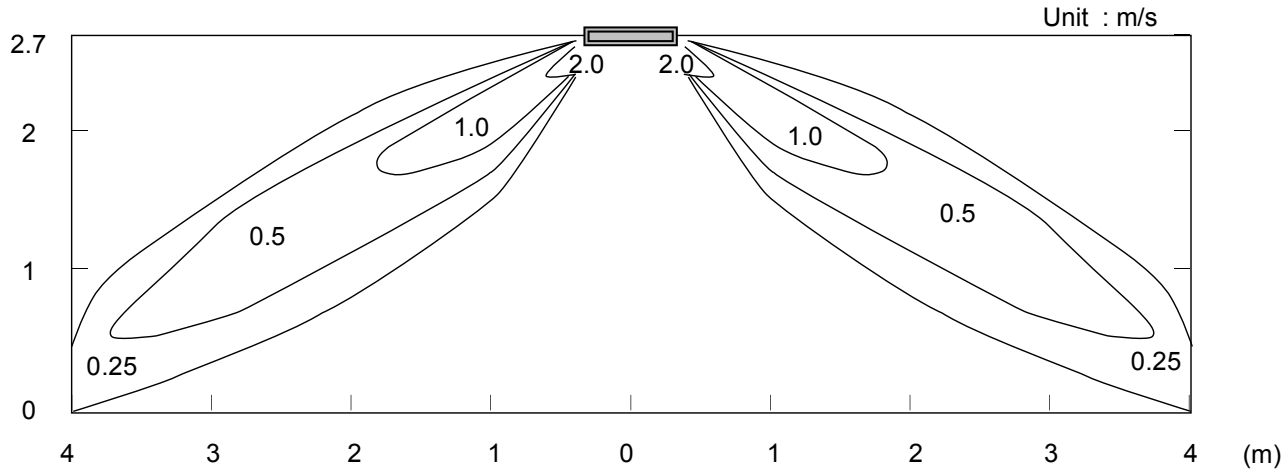
■ MODEL: AUXB14GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



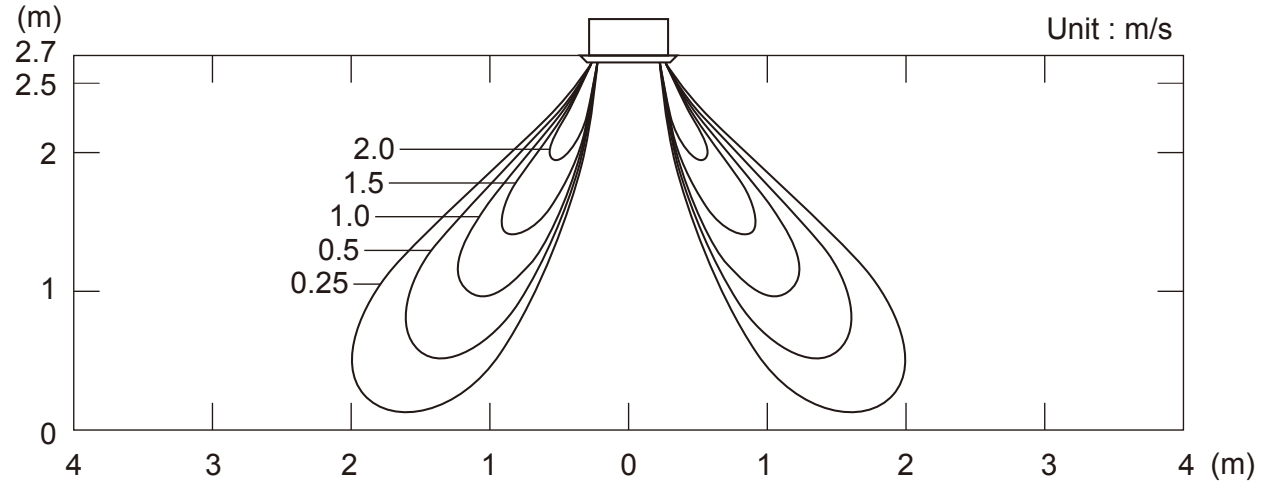
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

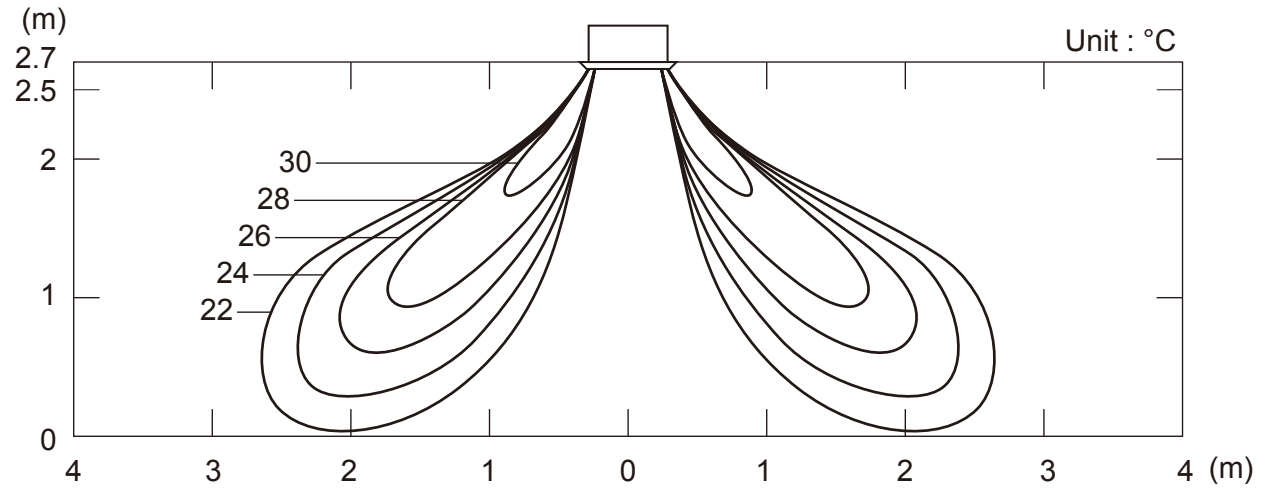
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

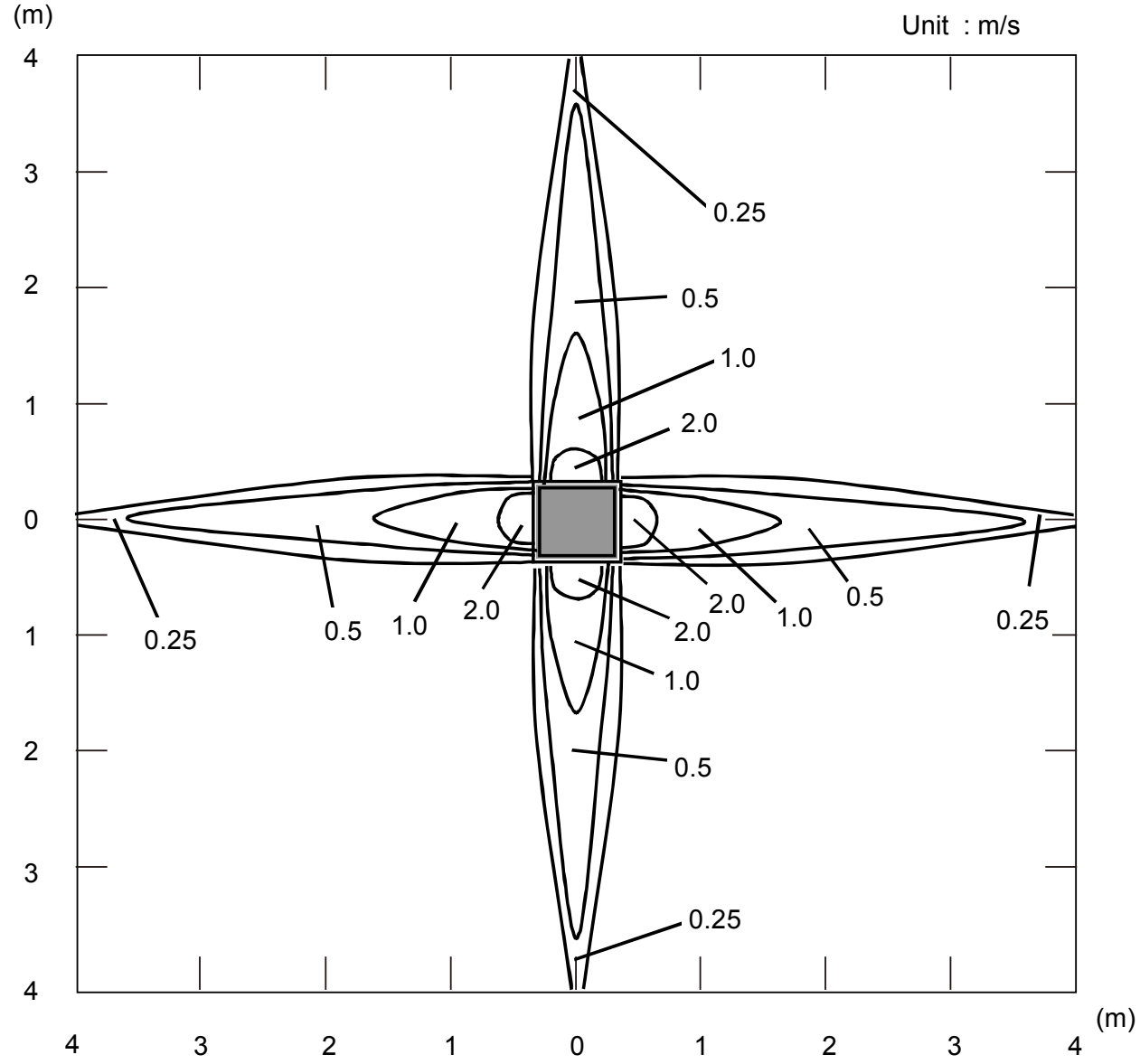
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

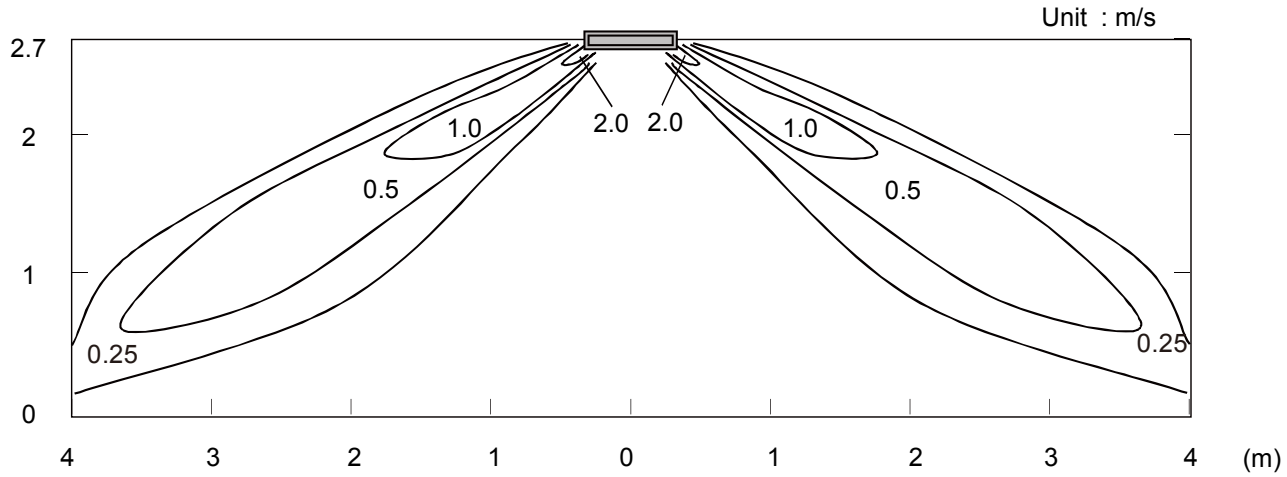
■ MODEL: AUXB18GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



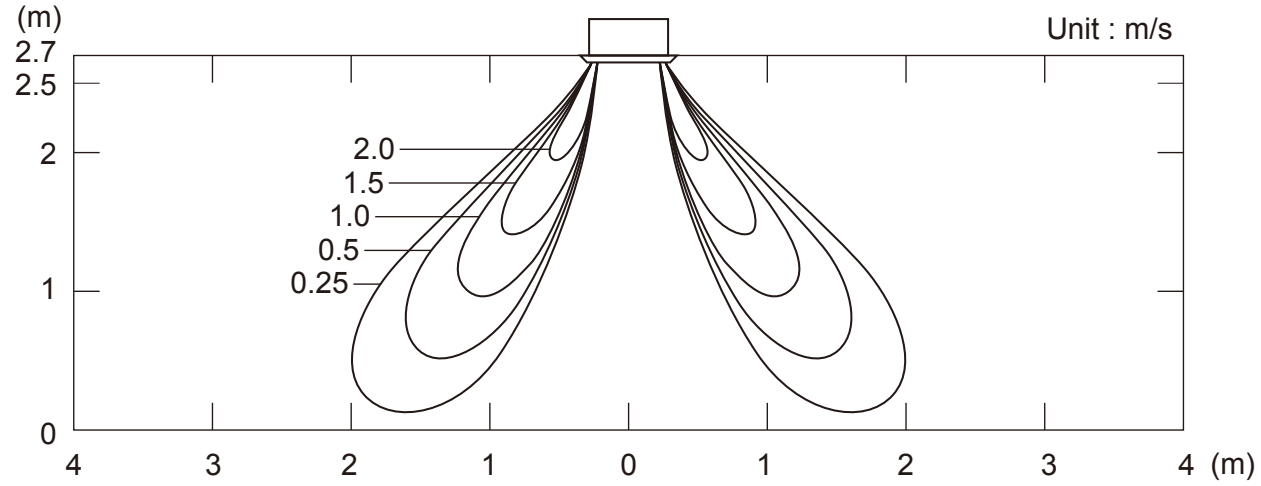
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

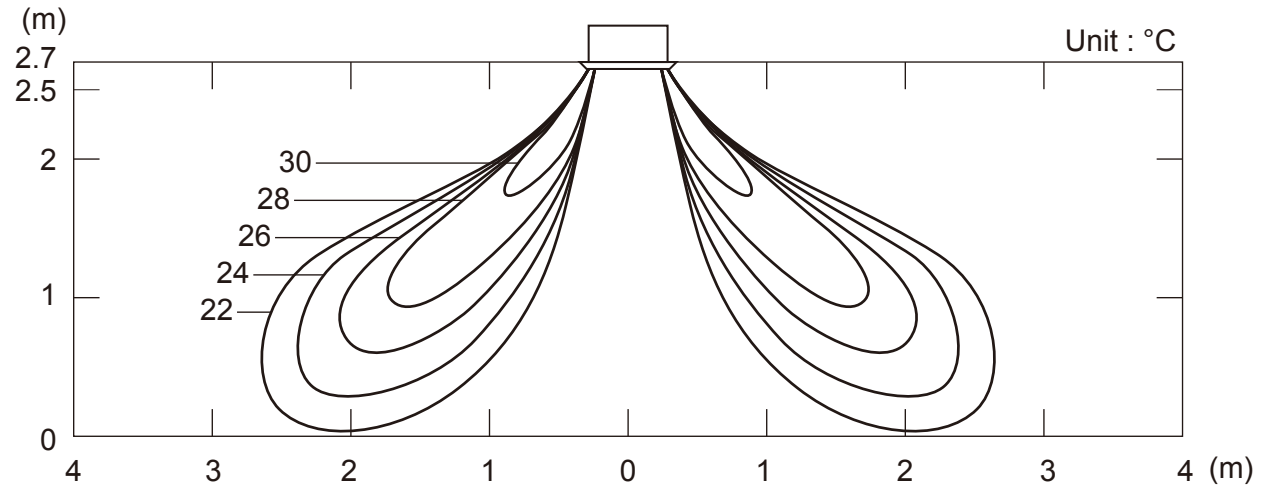
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

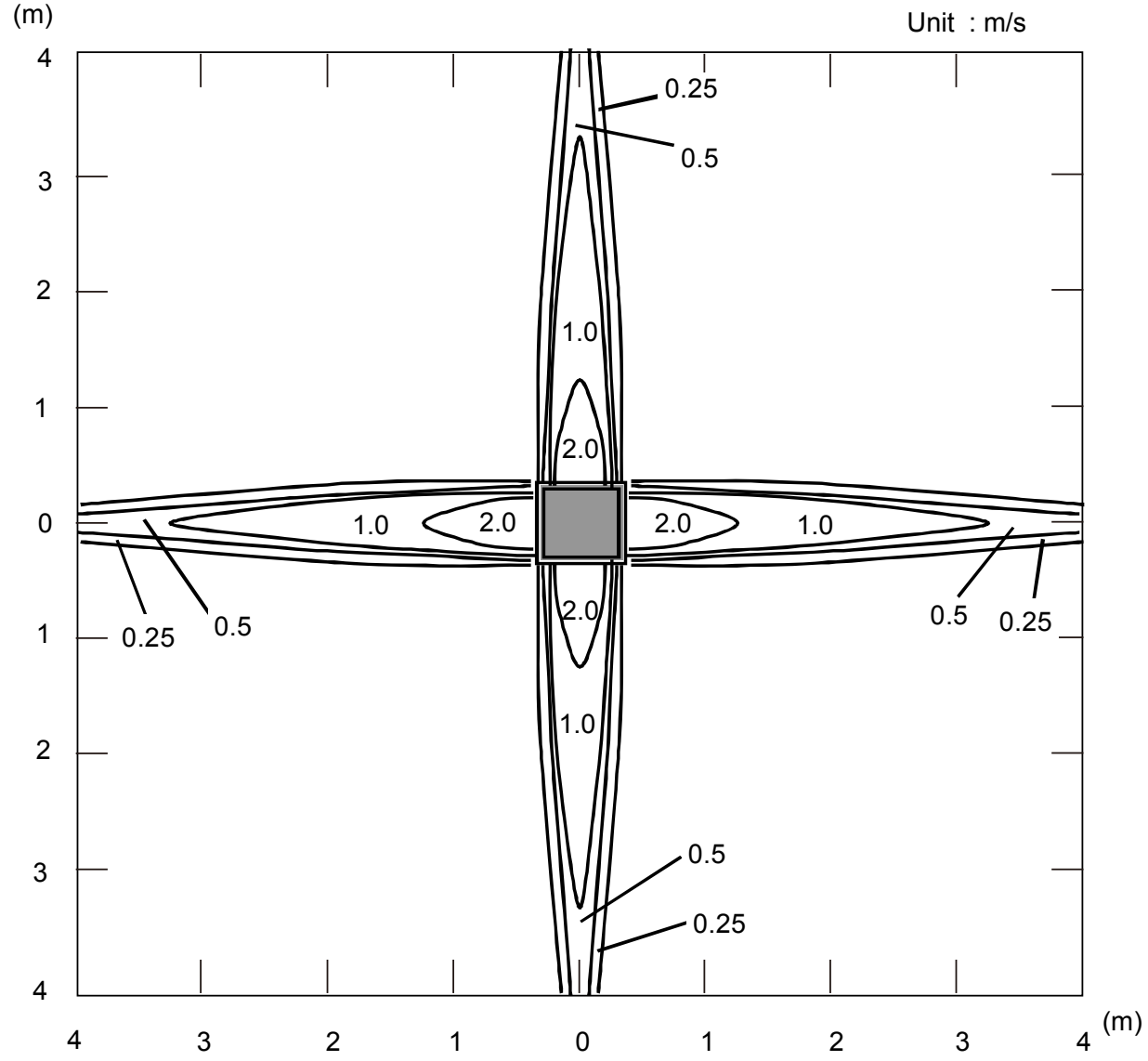
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

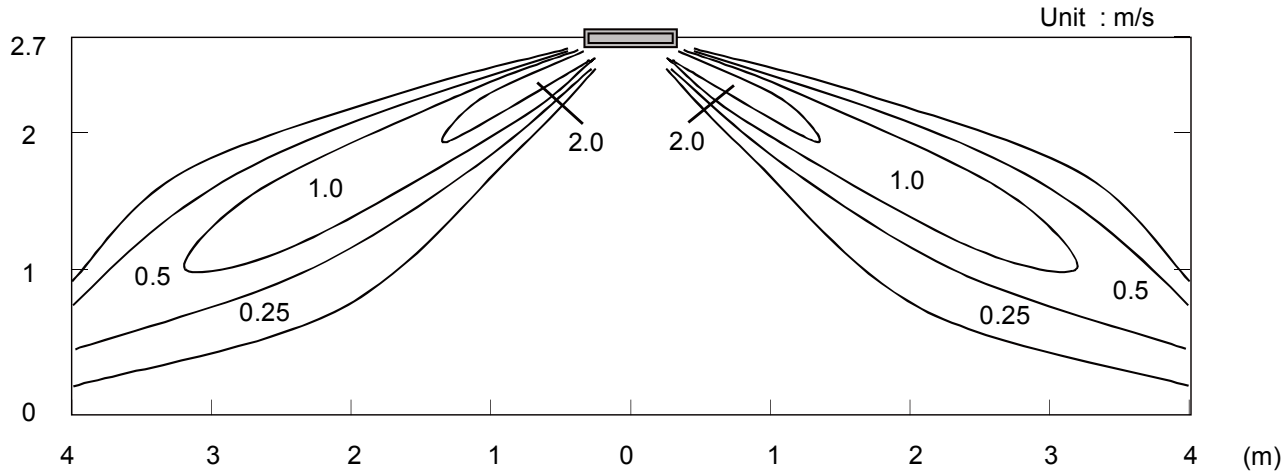
■ MODEL: AUXB24GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



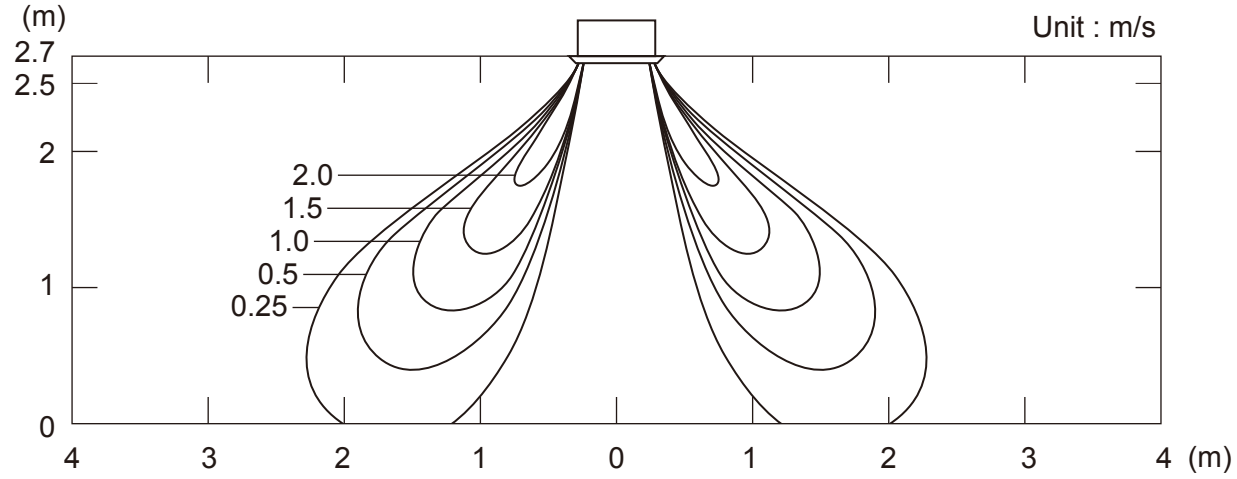
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

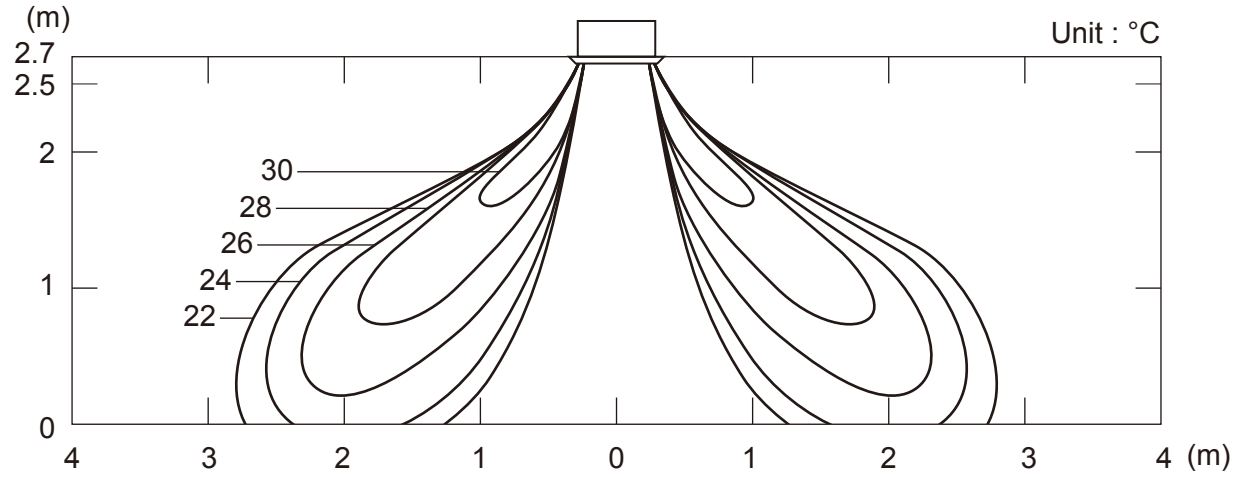
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

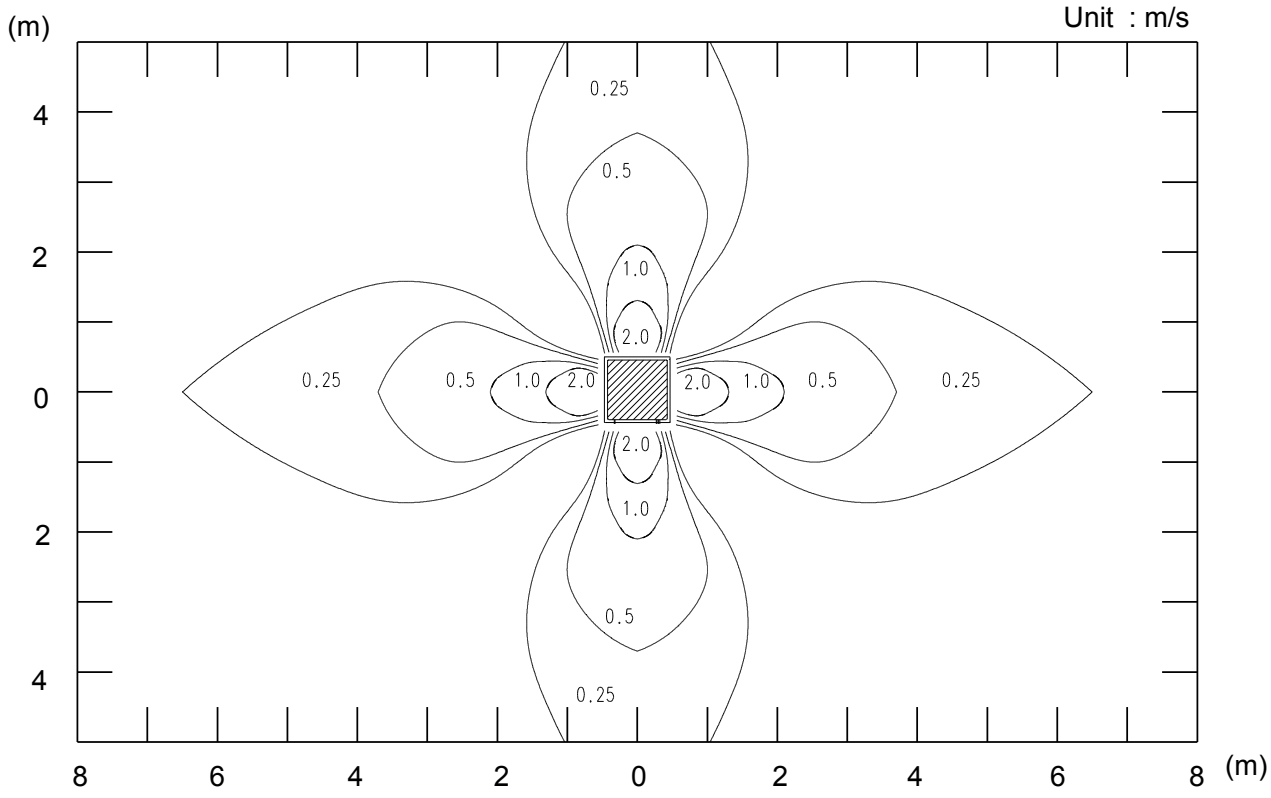
5-2. CASSETTE TYPE

■ MODEL: AUXD18GALH

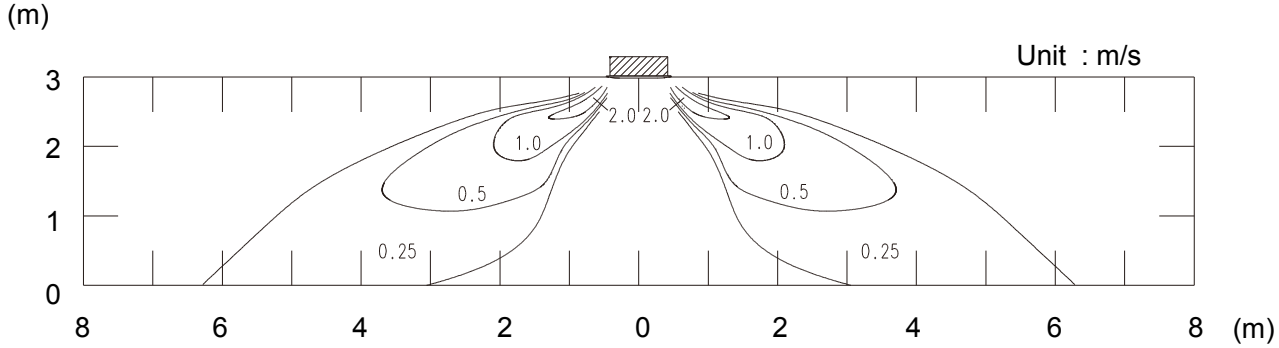
● Air velocity distribution

Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

Top view
Vertical airflow direction louver : Up



Side view
Vertical airflow direction louver : Up

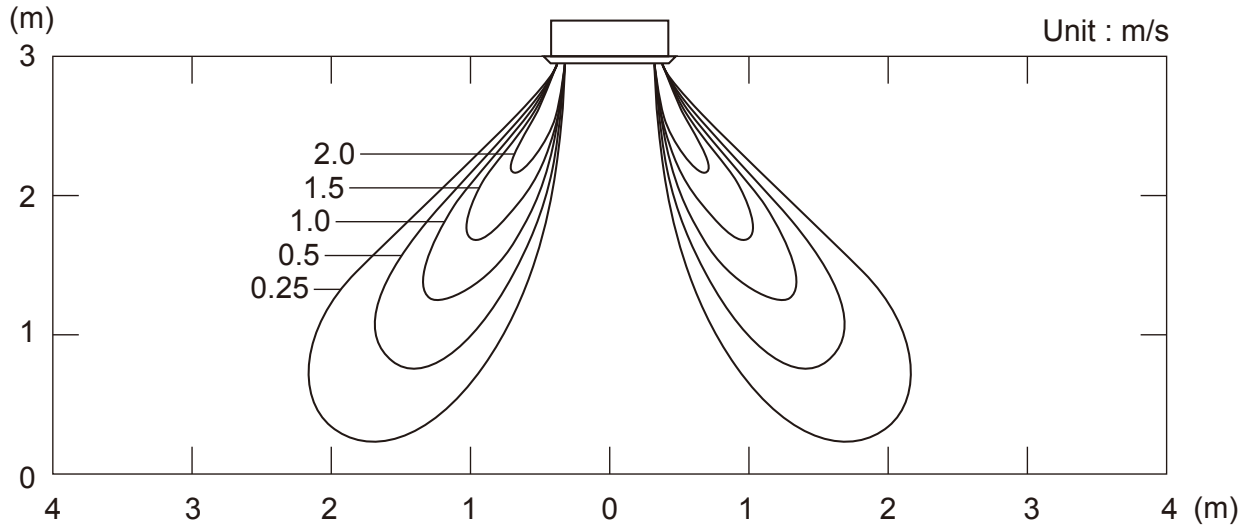


INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

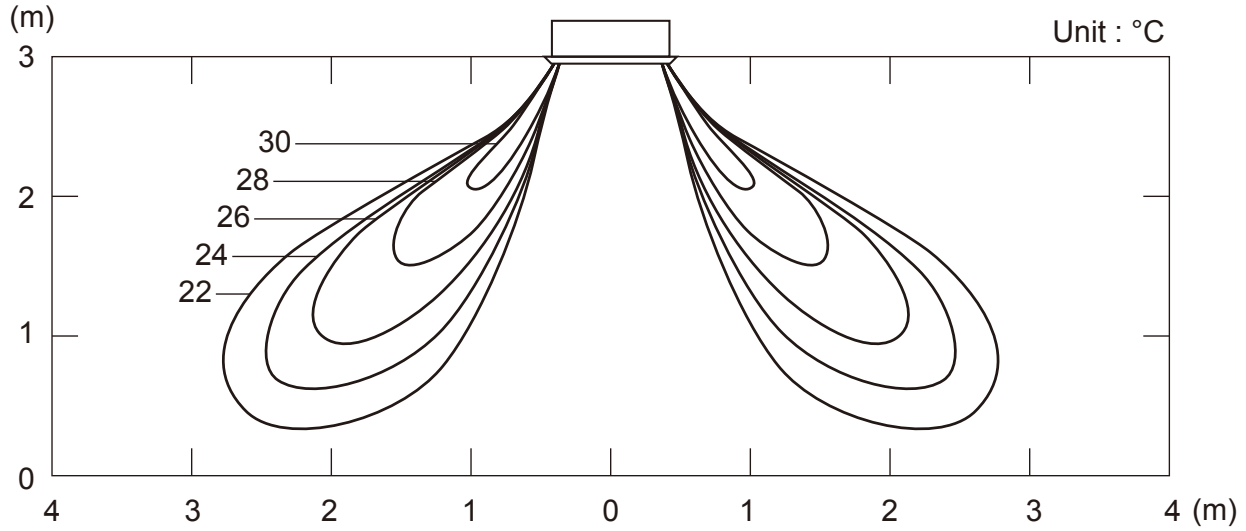
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

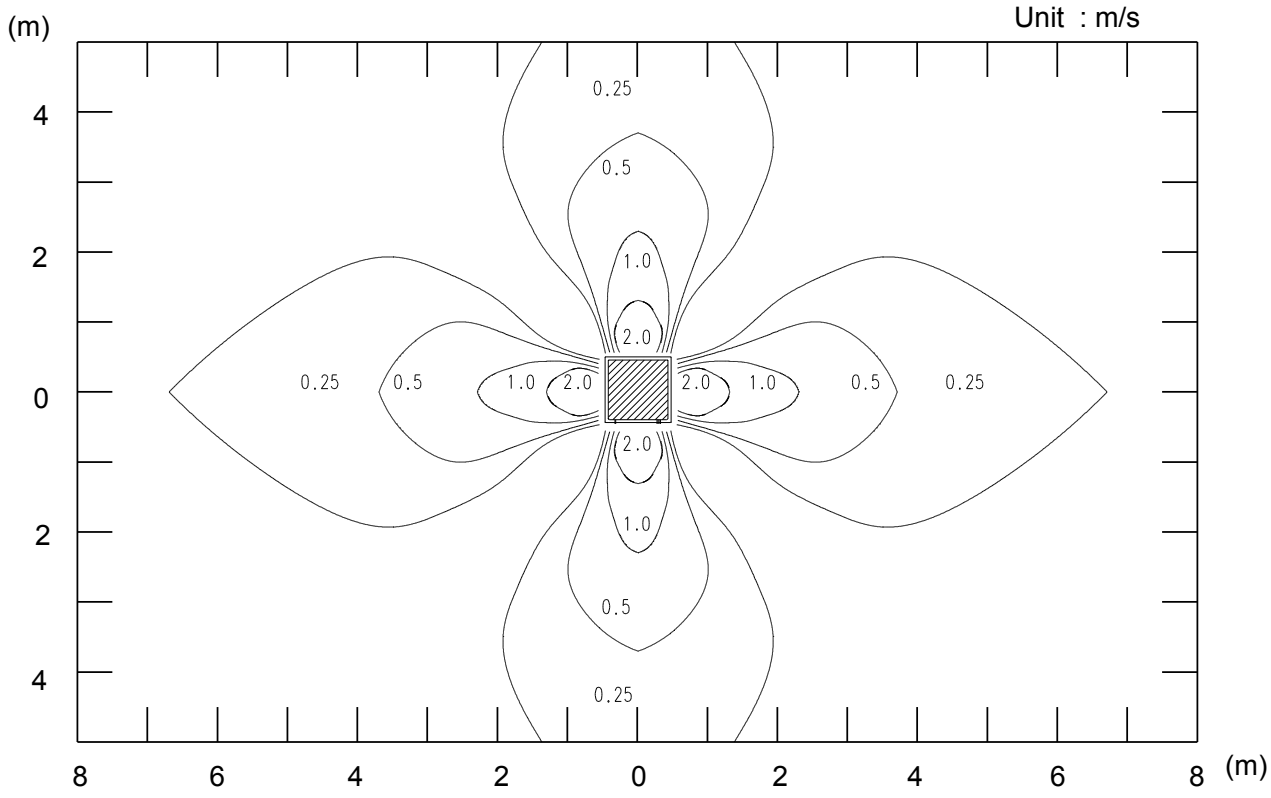
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

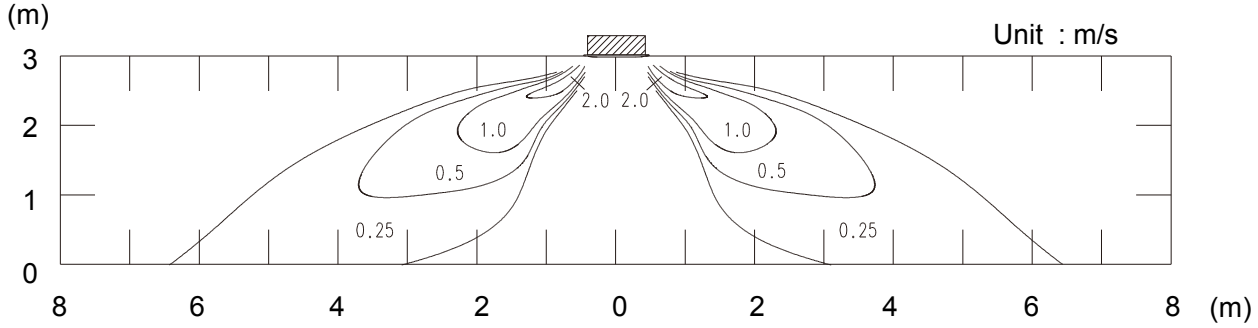
■ MODEL: AUXD24GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



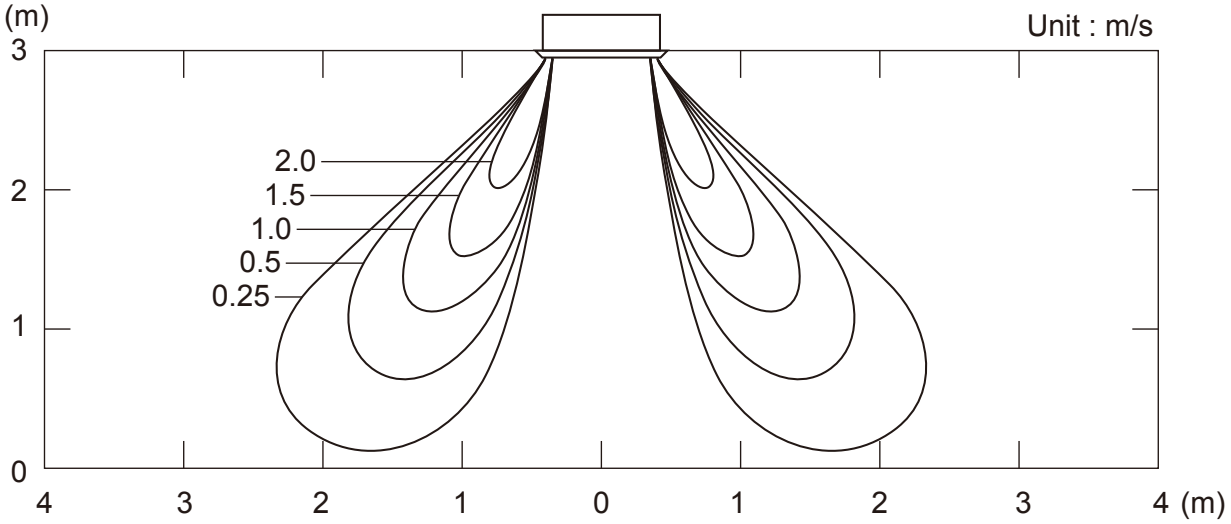
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

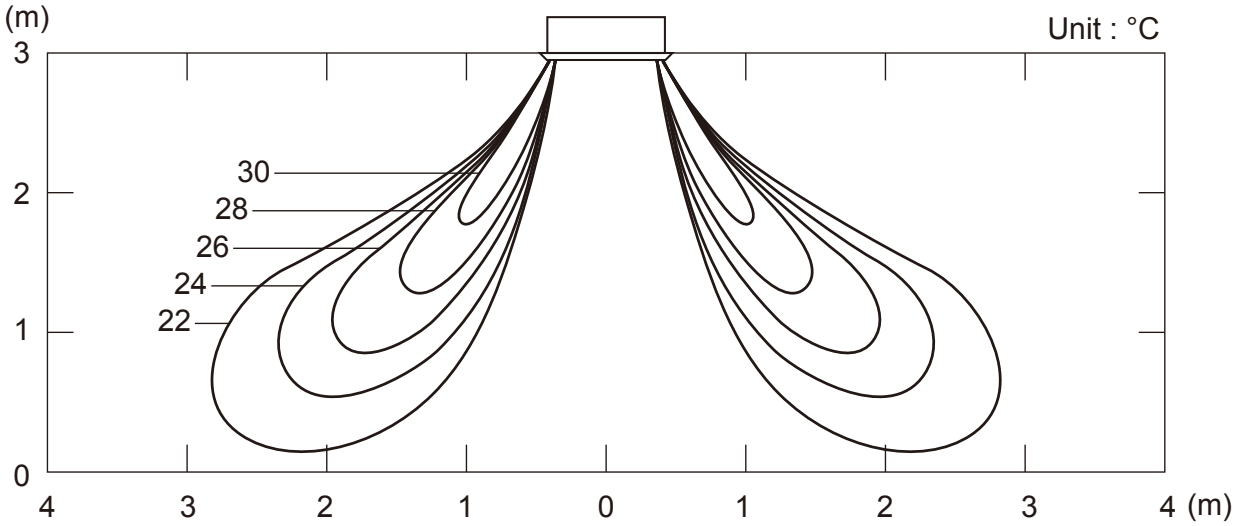
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



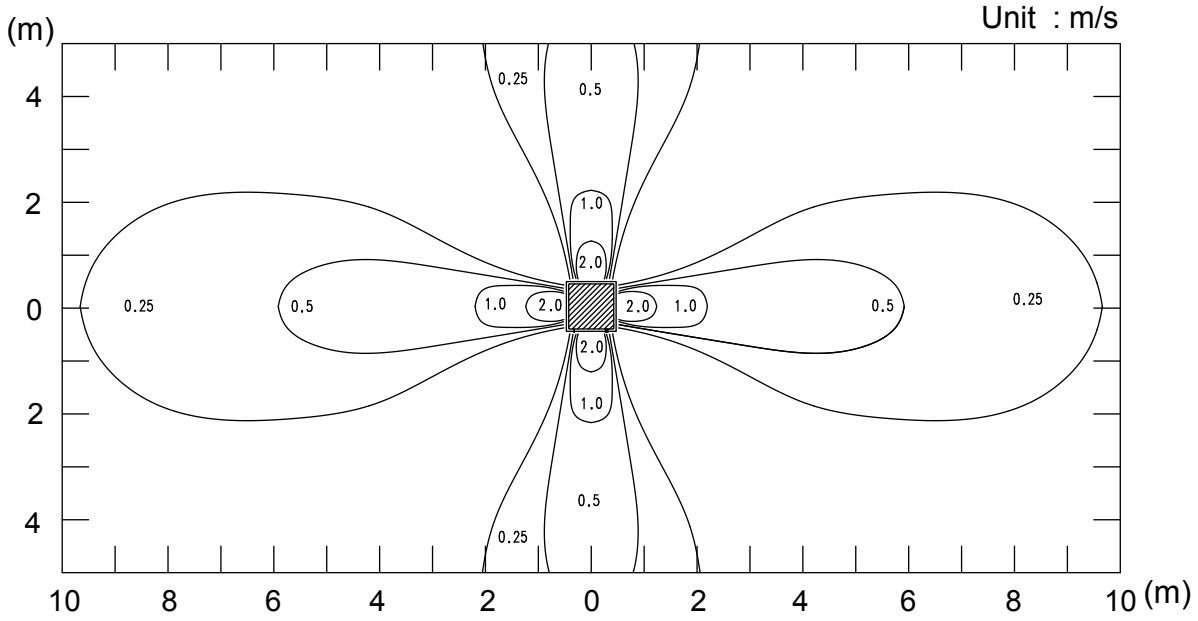
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

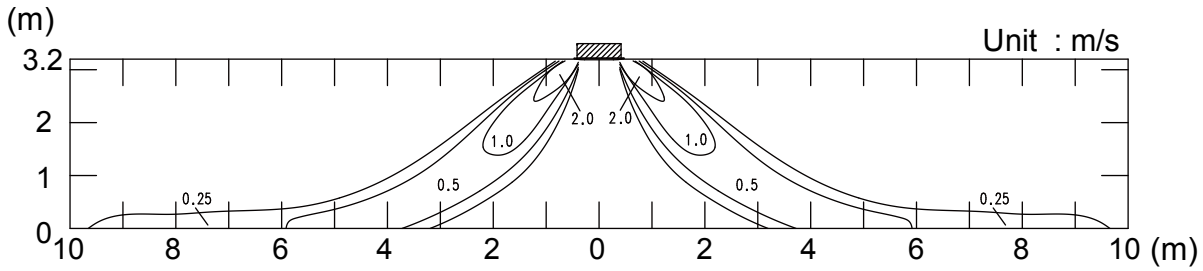
■ MODELS: AUXA18GALH, AUXA24GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



Side view
Vertical airflow direction louver : Up

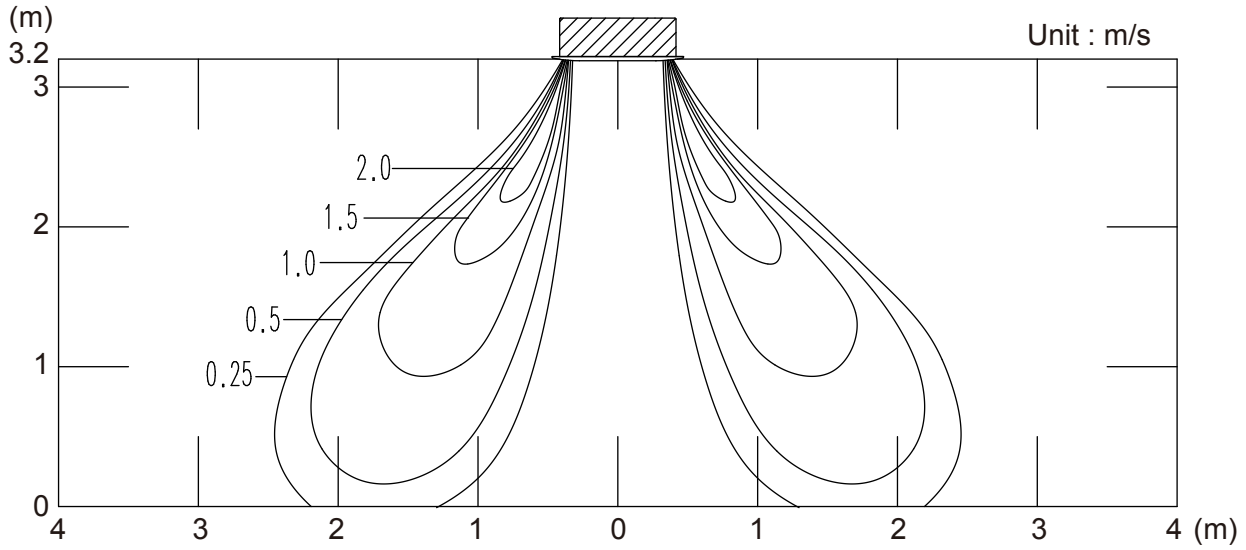


INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

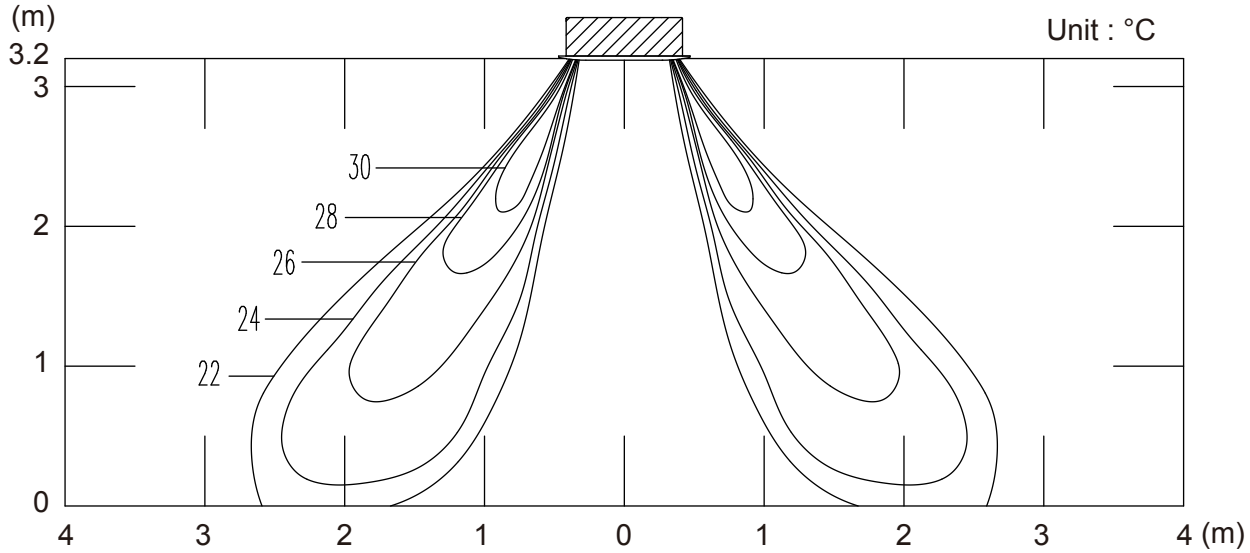
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

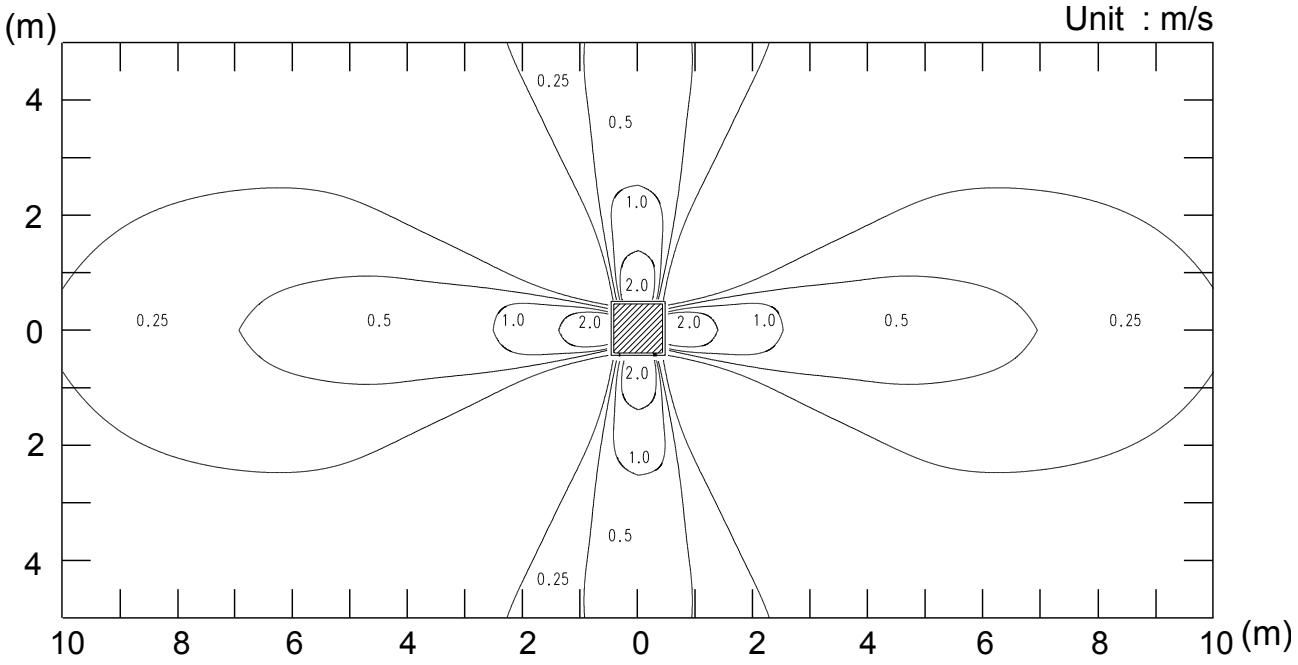
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

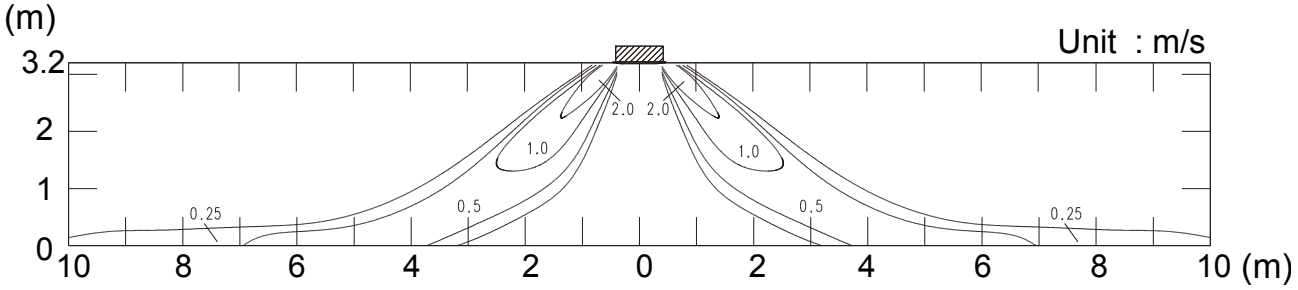
■ MODEL: AUXA30GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



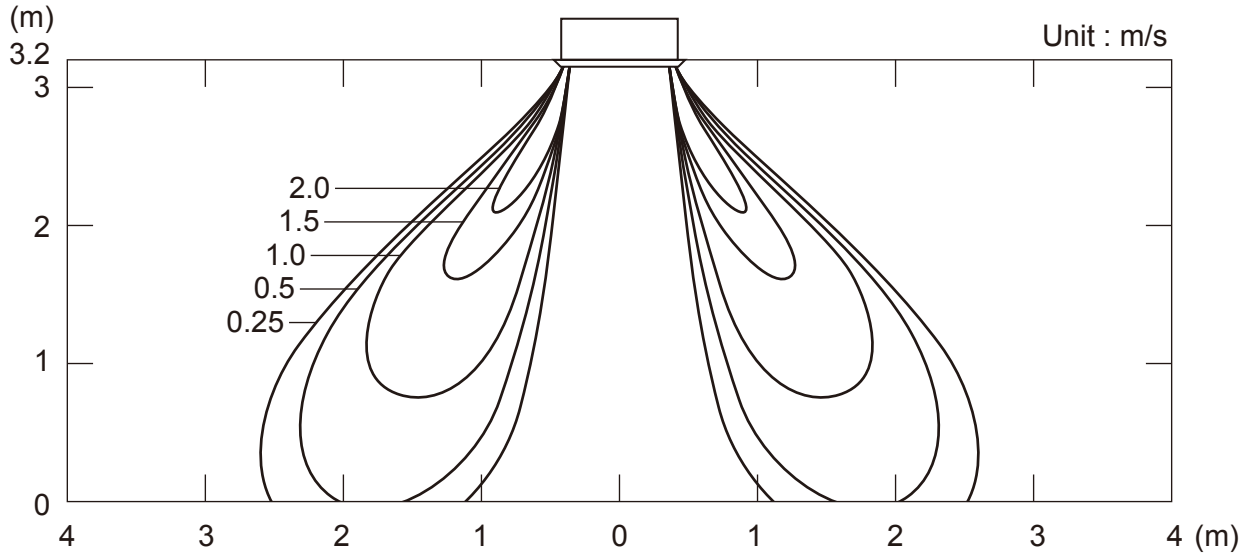
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

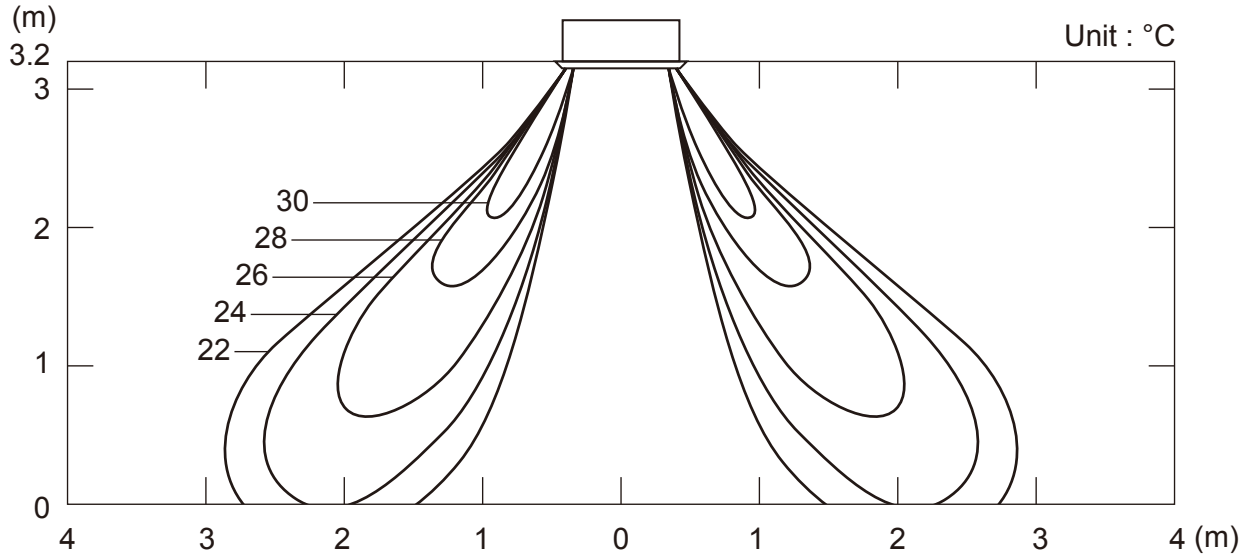
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



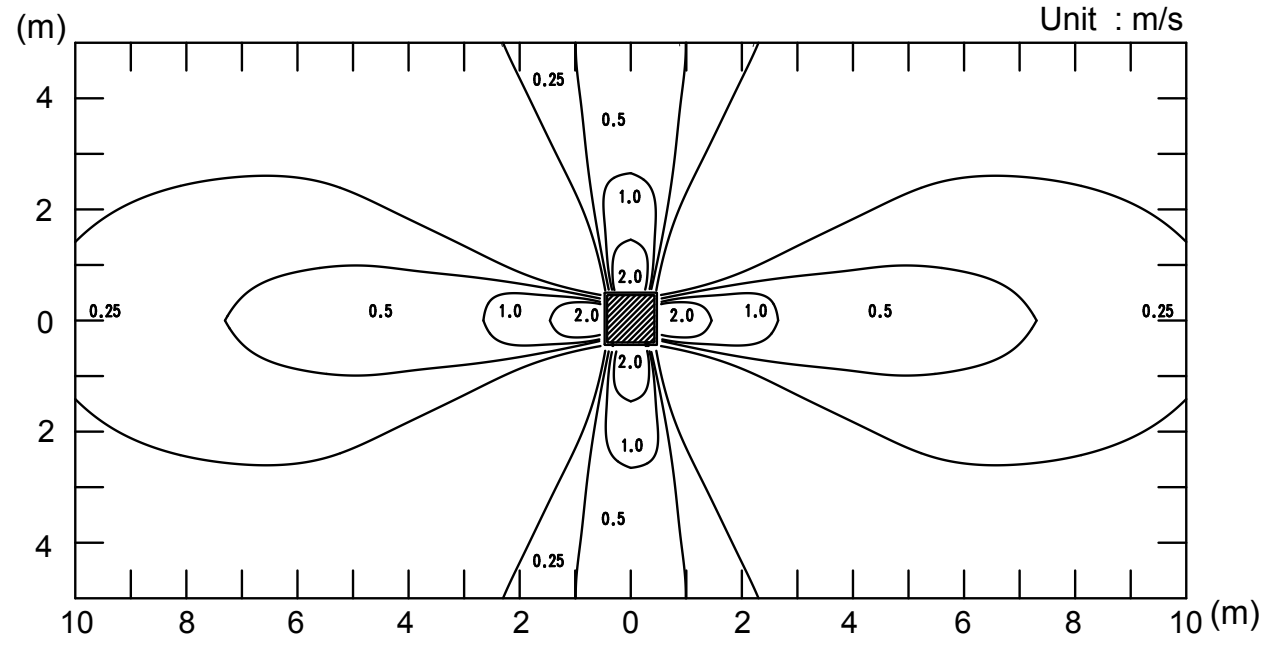
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

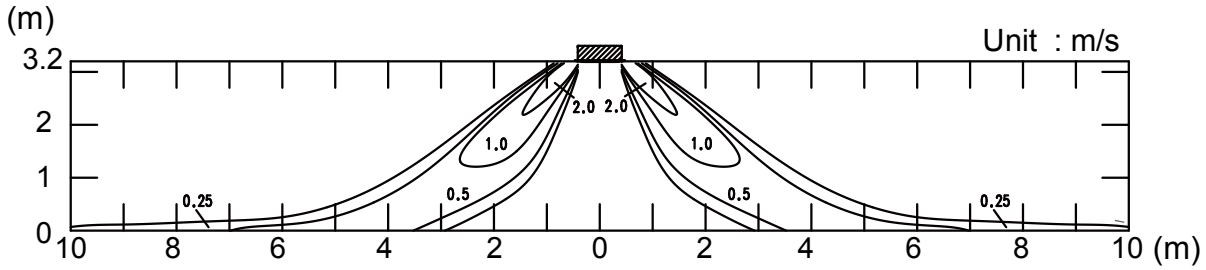
■ MODEL: AUXA34GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



Side view
Vertical airflow direction louver : Up

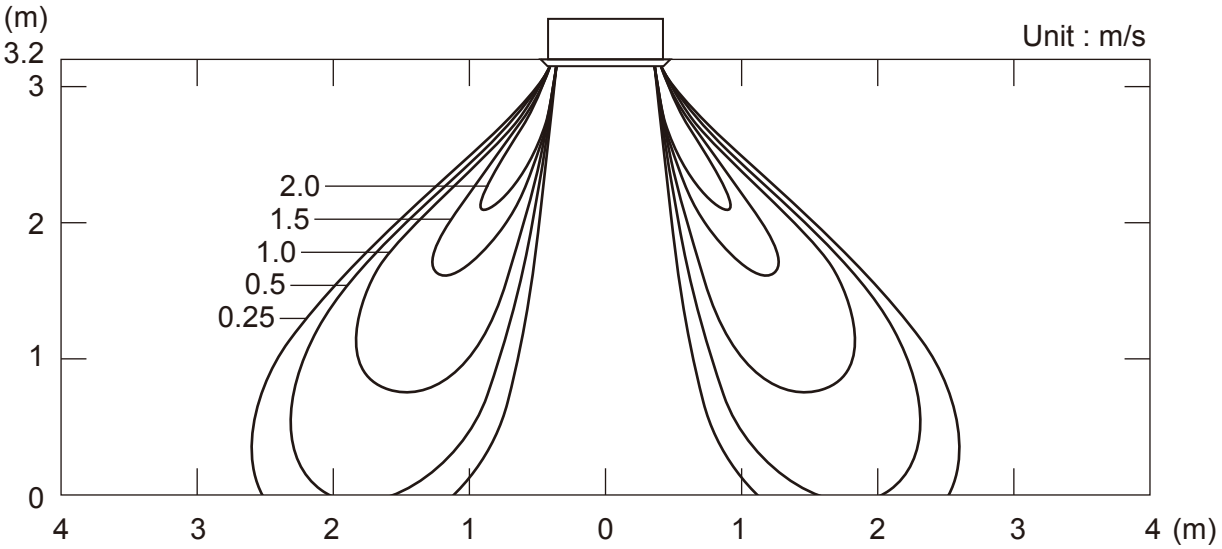


INDOOR UNITS

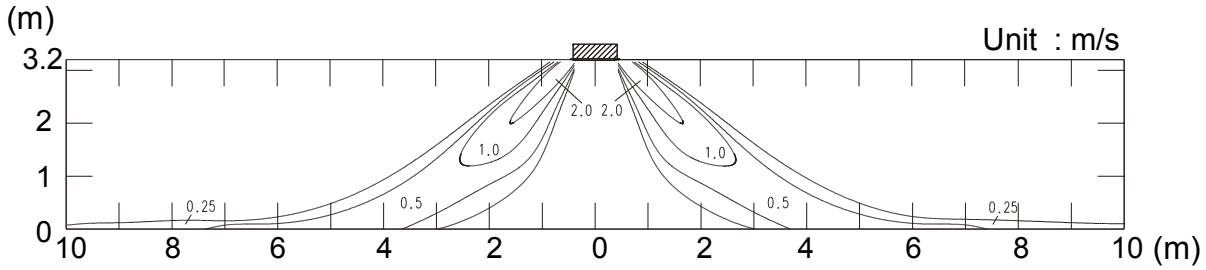
Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

● Air velocity distribution

Side view
Vertical airflow direction louver : Down



Side view
Vertical airflow direction louver : Down



INDOOR UNITS

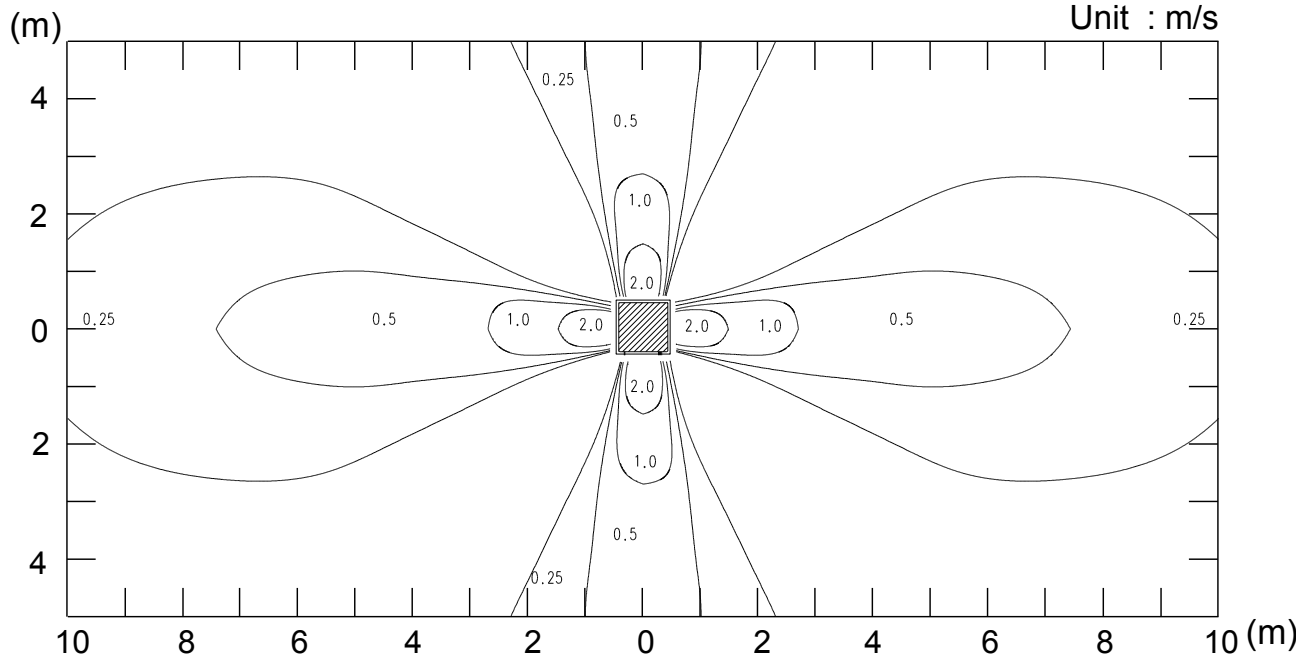
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

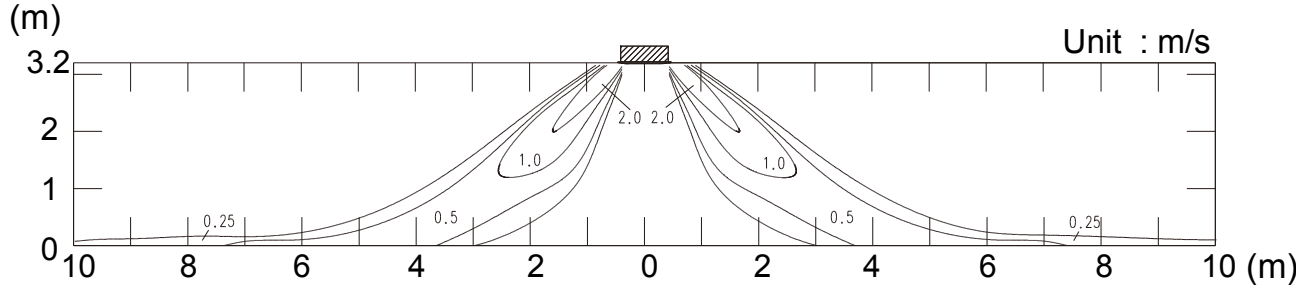
■ MODEL: AUXA36GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



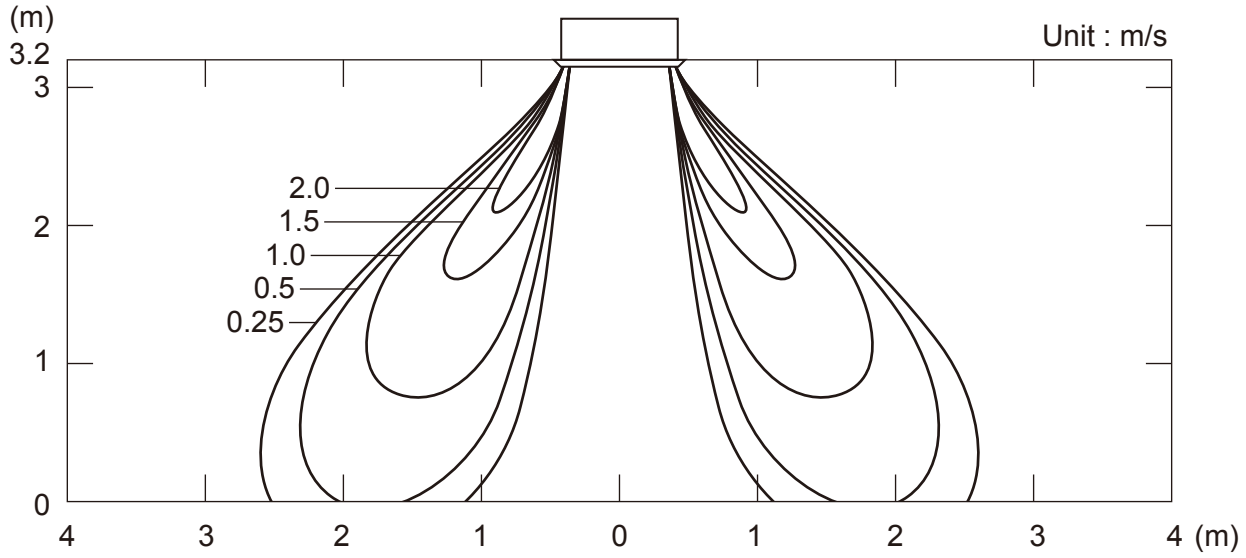
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

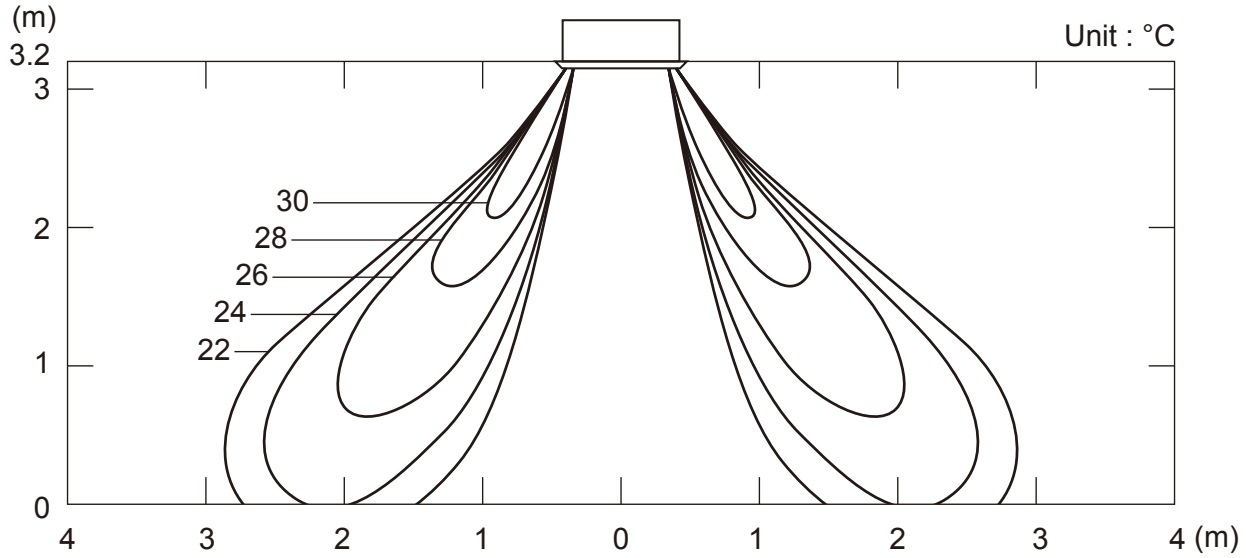
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



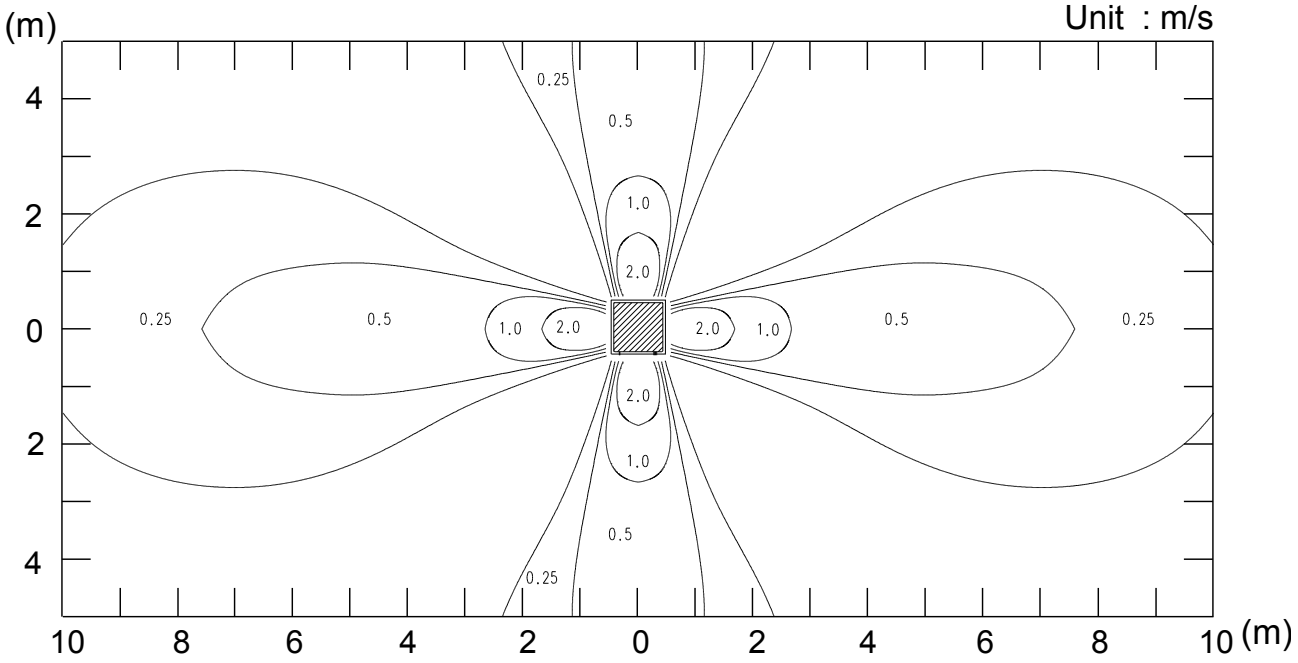
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

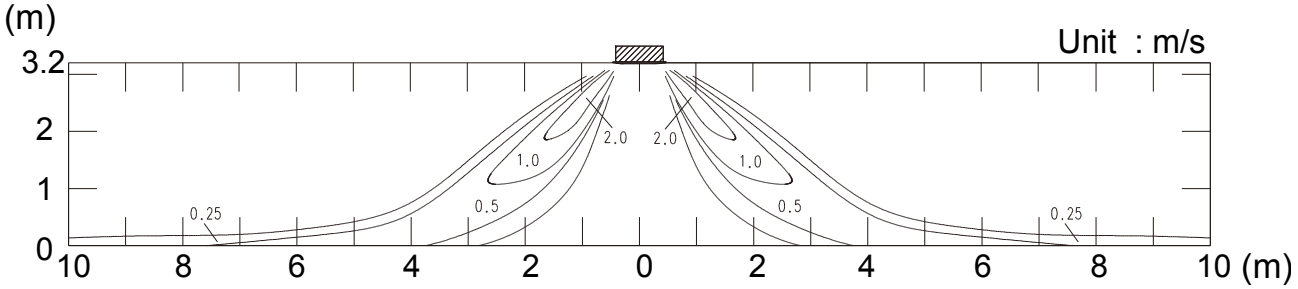
■ MODEL: AUXA45GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



Side view
Vertical airflow direction louver : Up

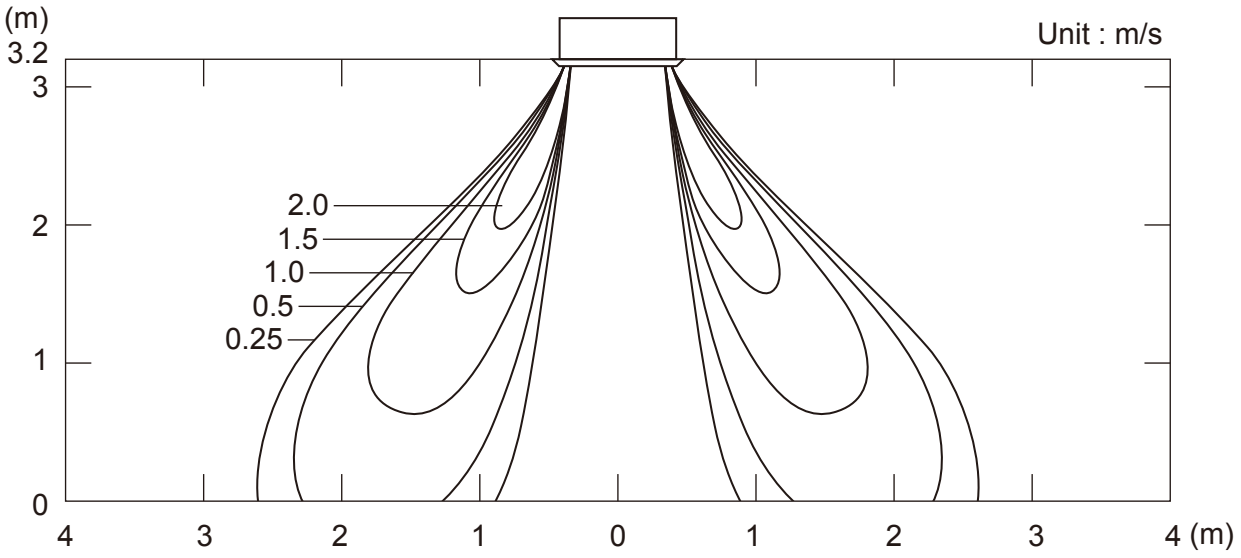


INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

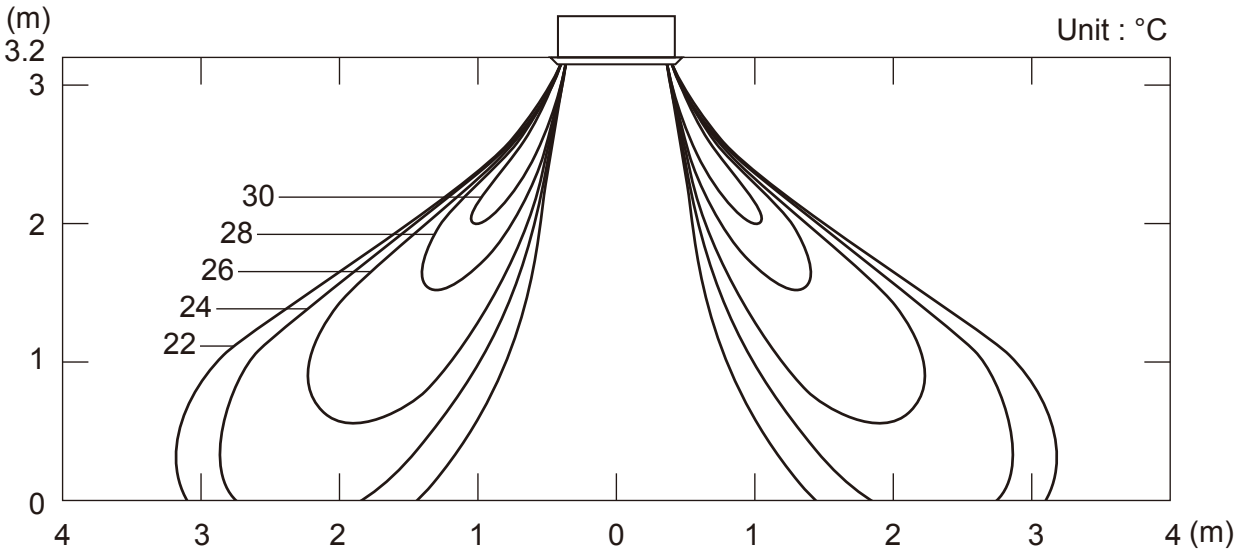
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

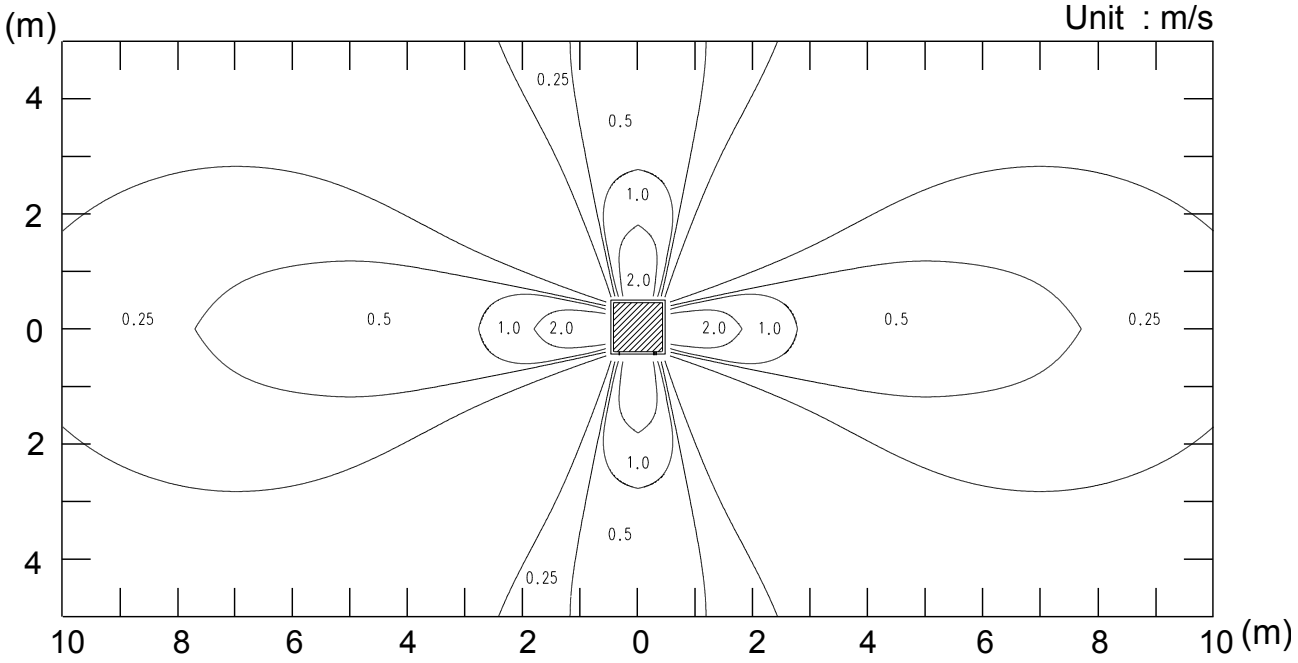
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

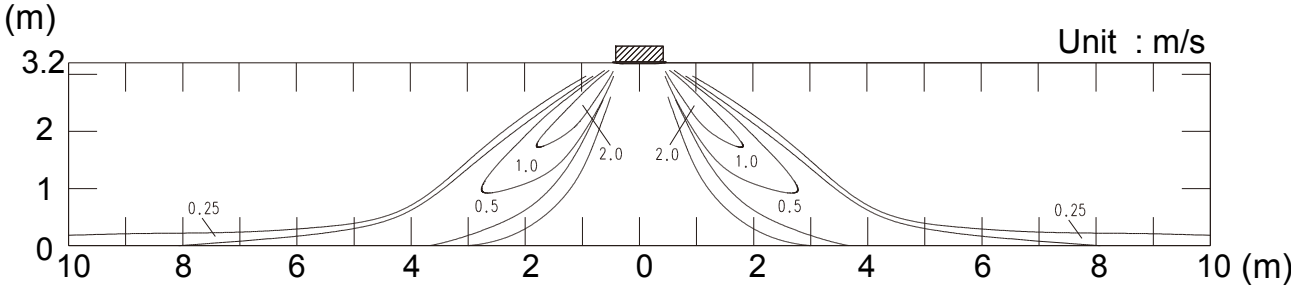
■ MODEL: AUXA54GALH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



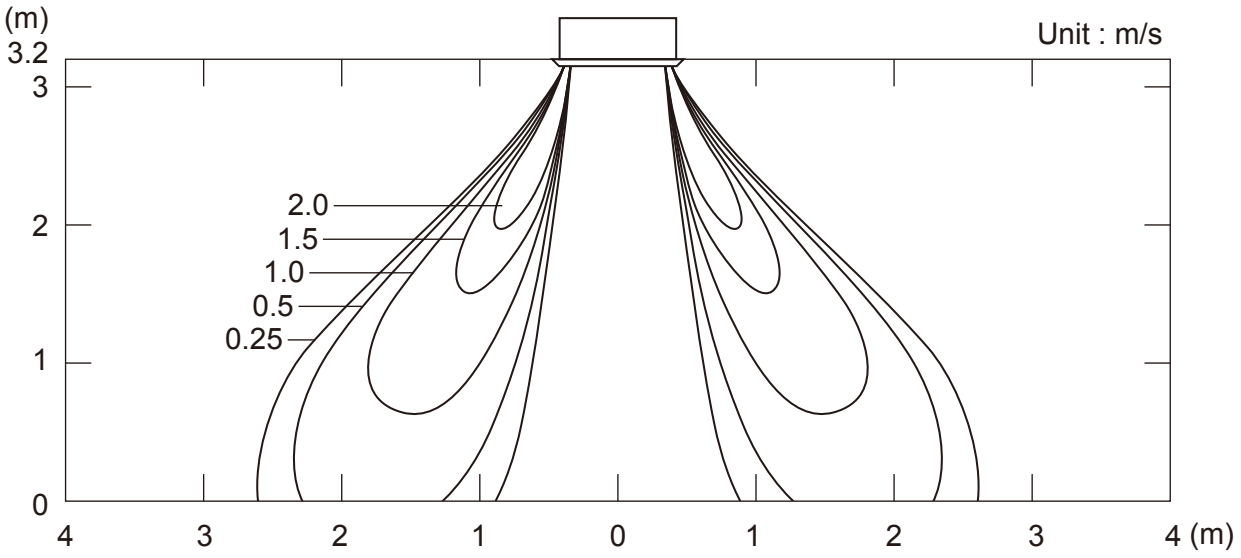
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

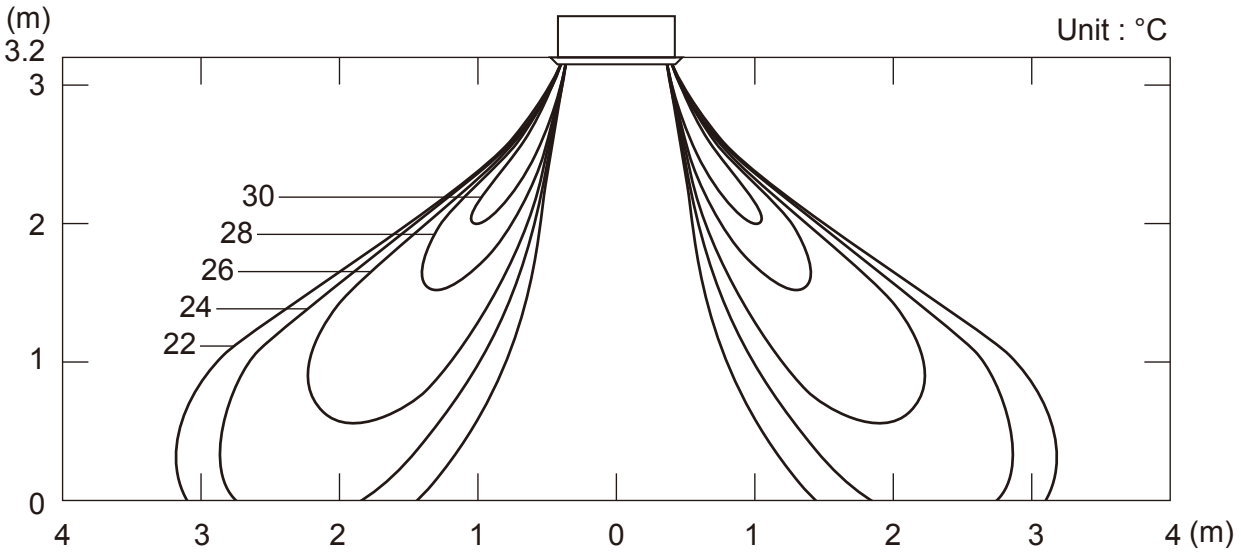
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

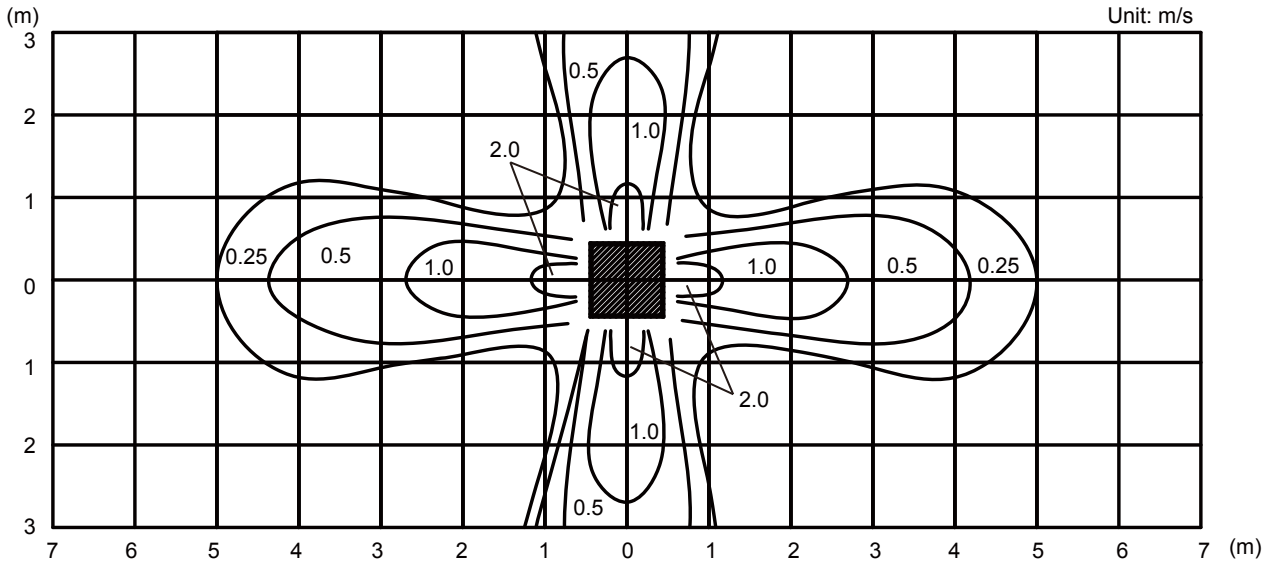
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

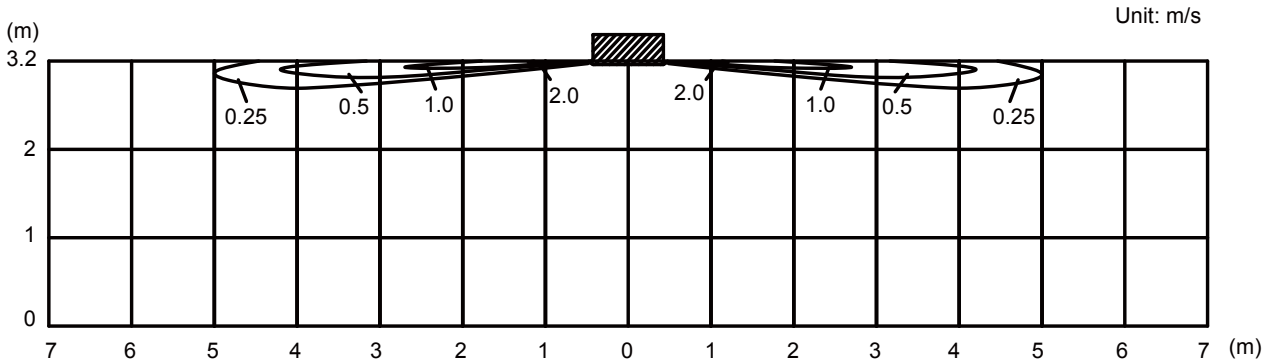
■ MODEL: AUXM018GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



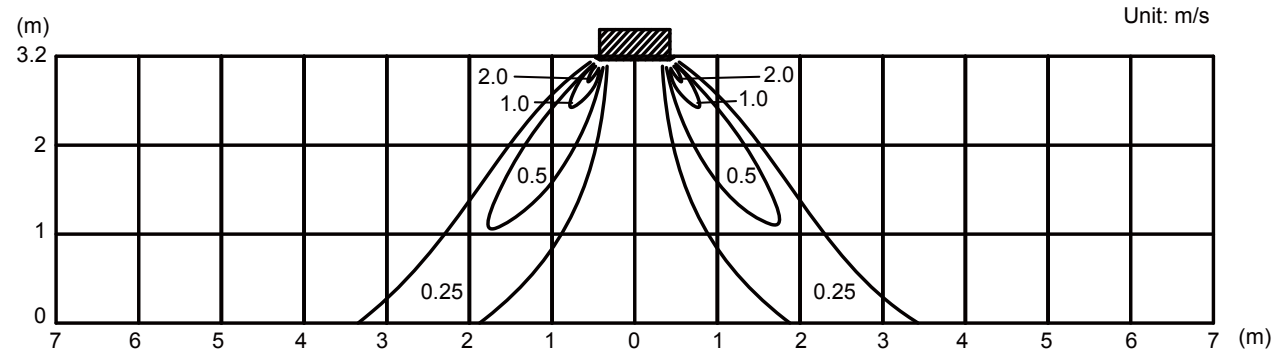
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

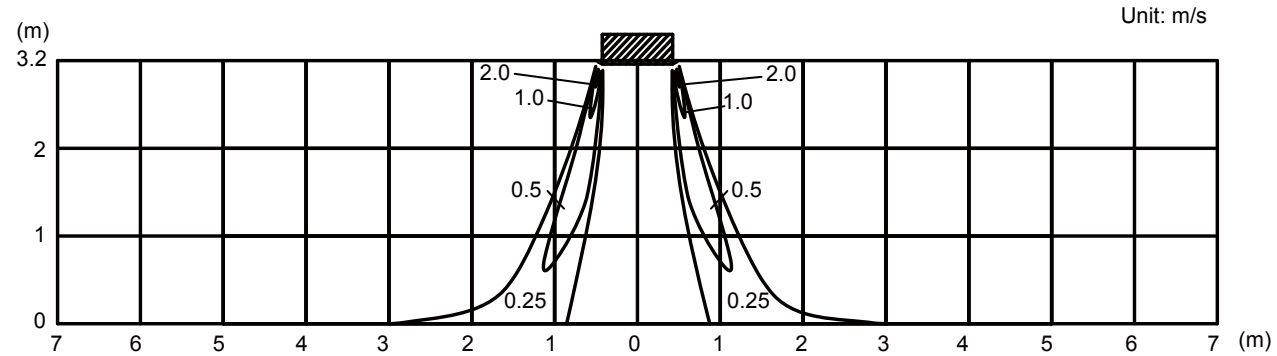
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

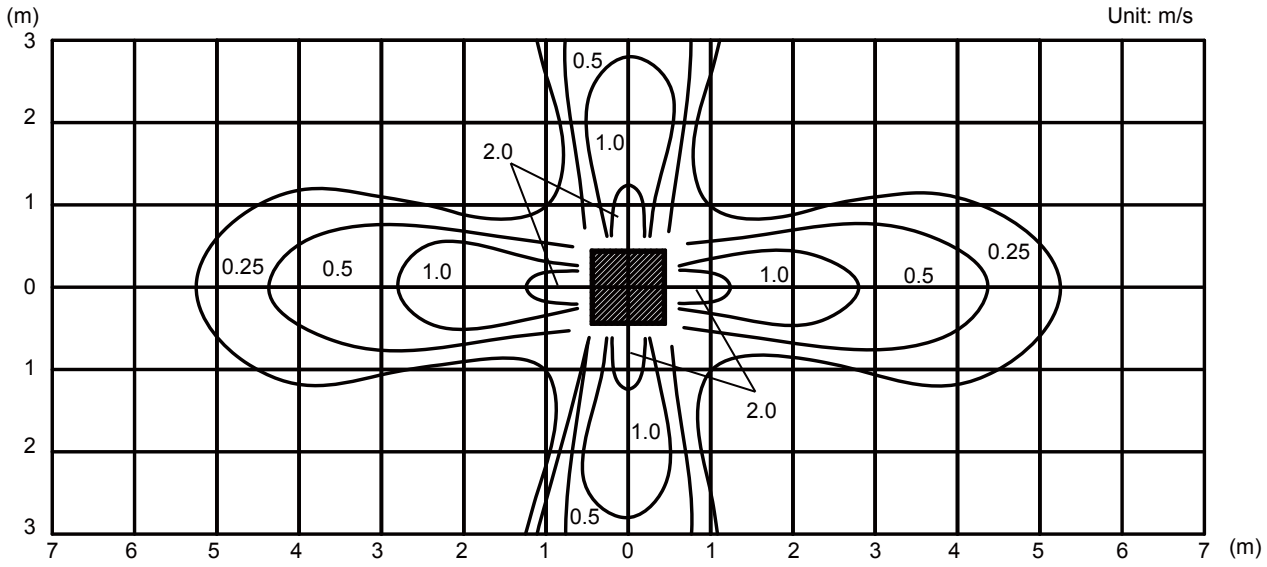
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

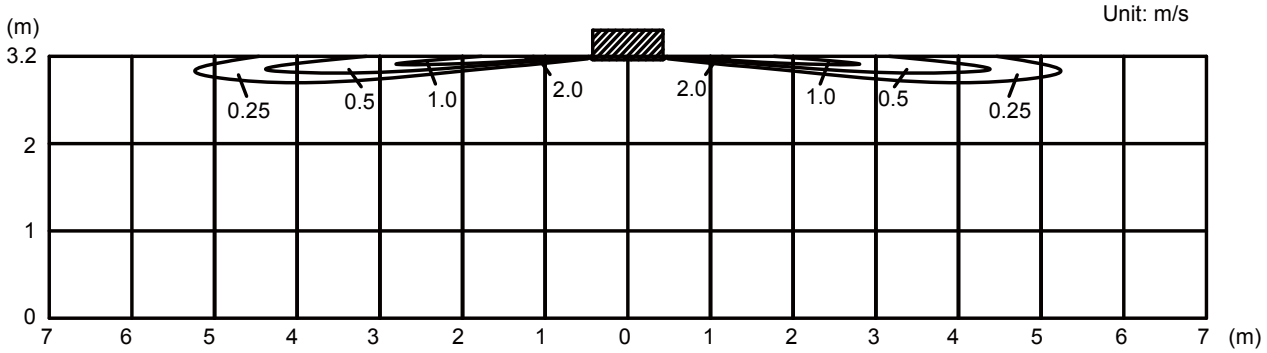
■ MODEL: AUXM024GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



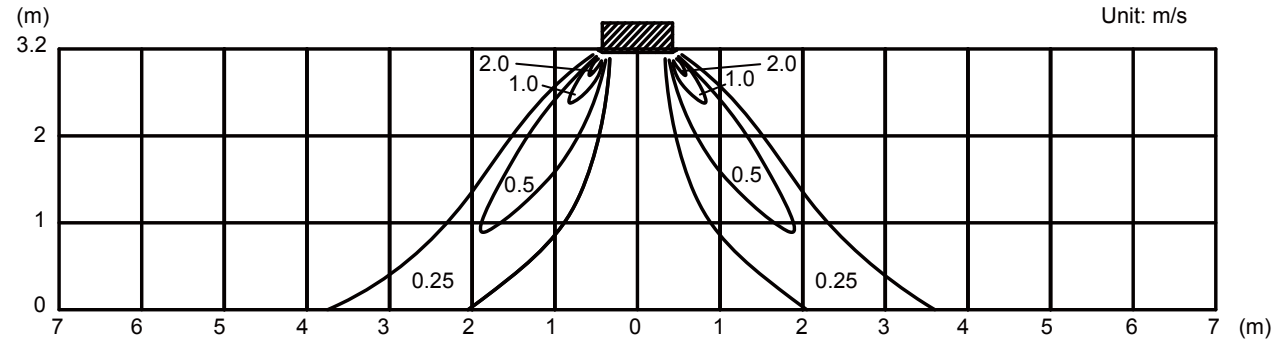
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

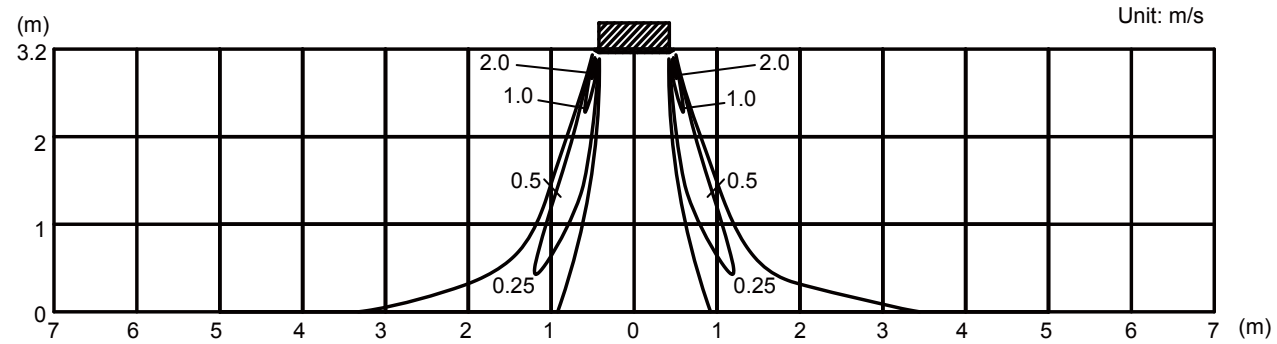
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

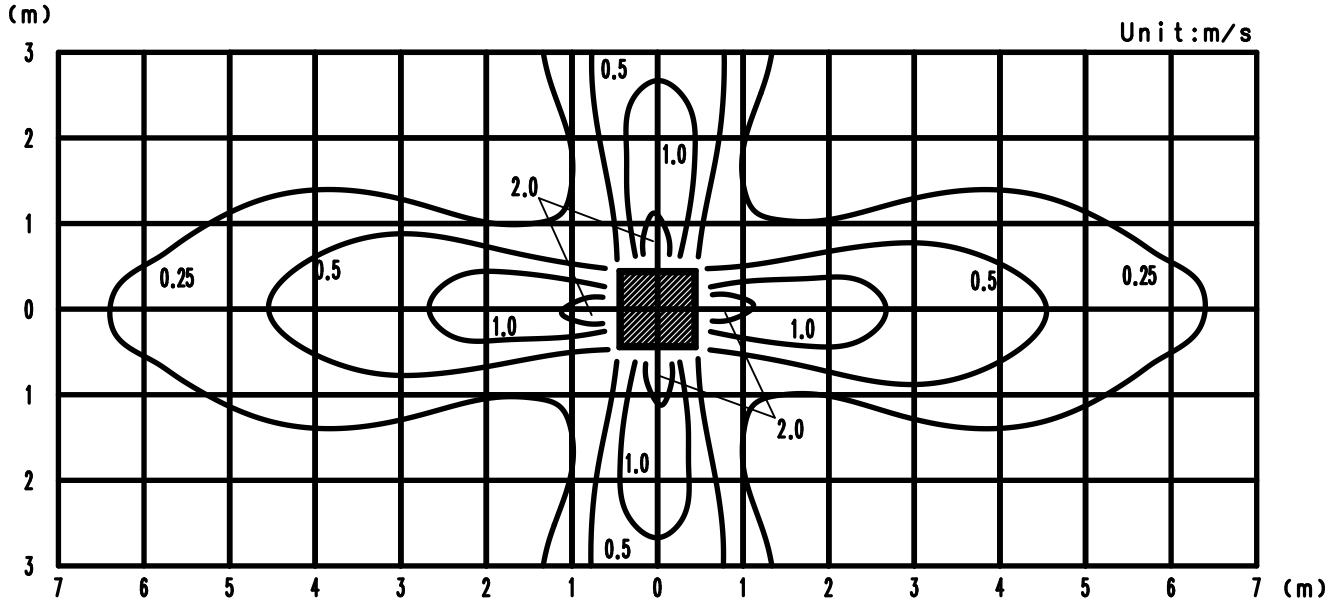
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

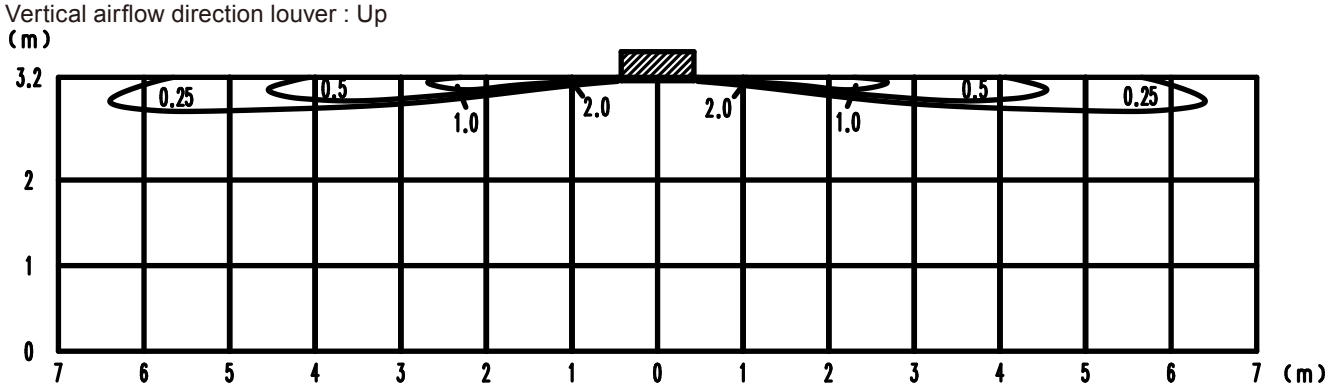
■ MODEL: AUXM030GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



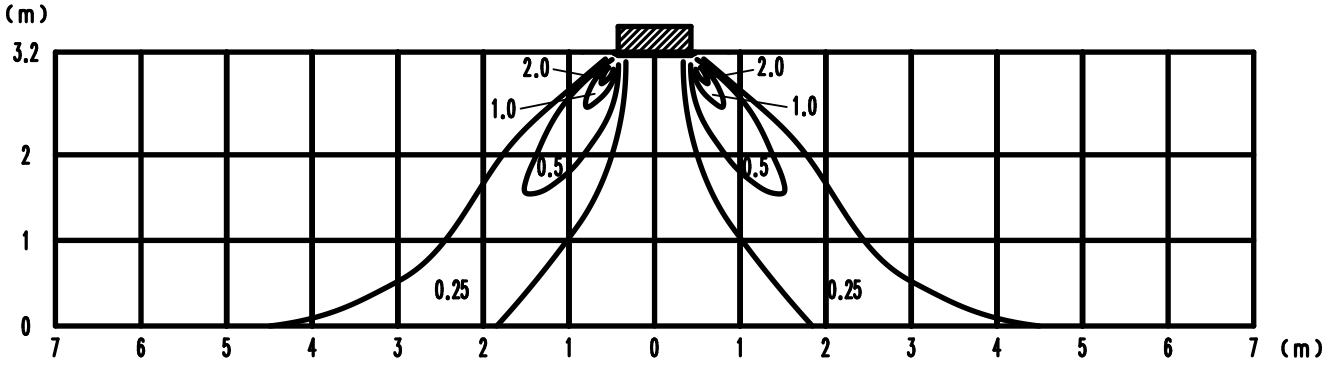
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

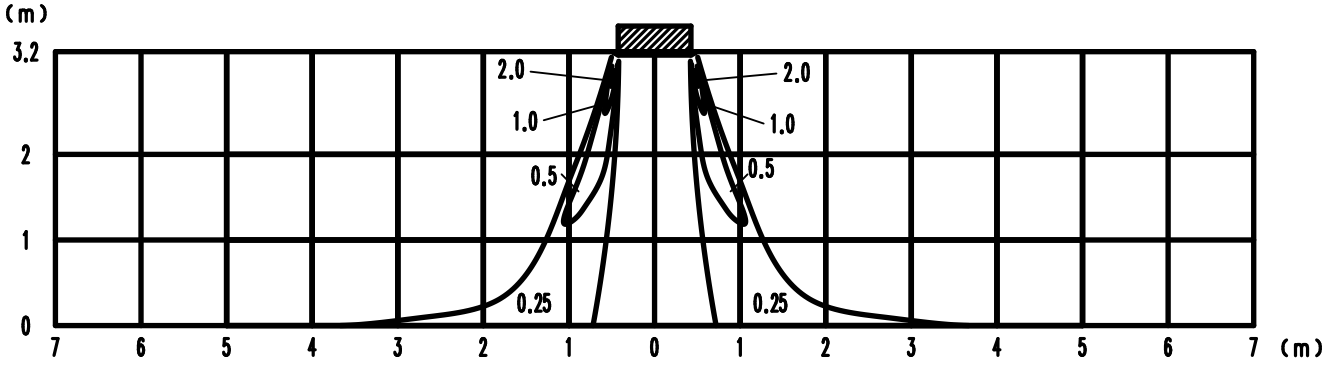
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

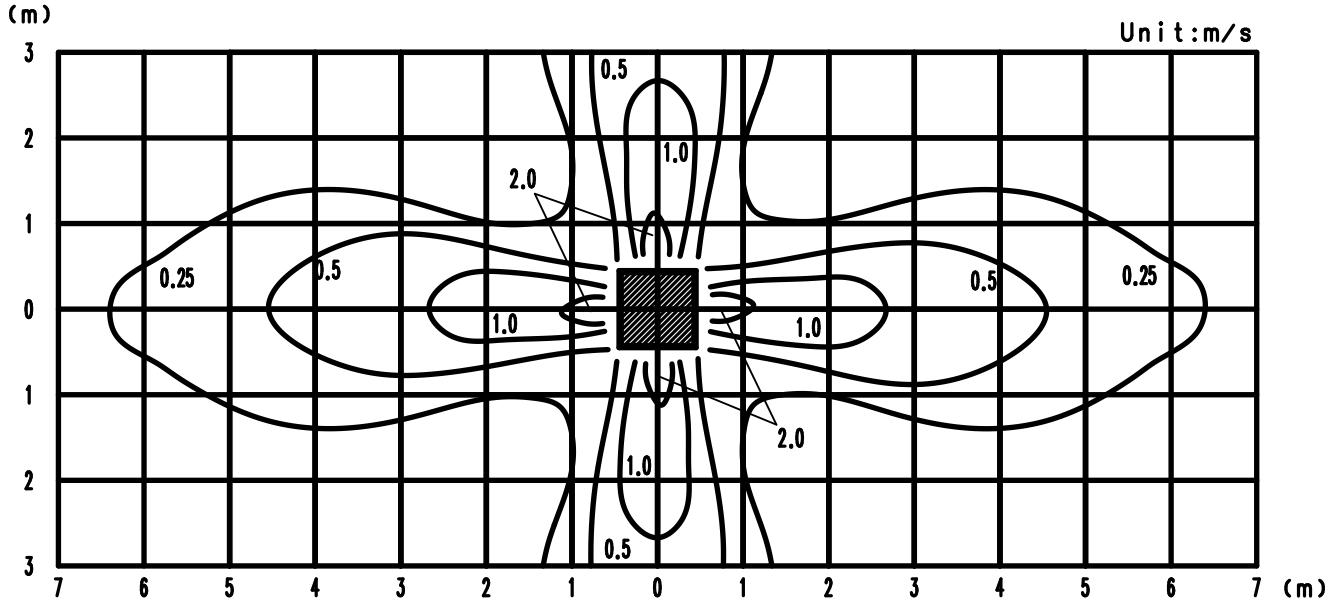
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

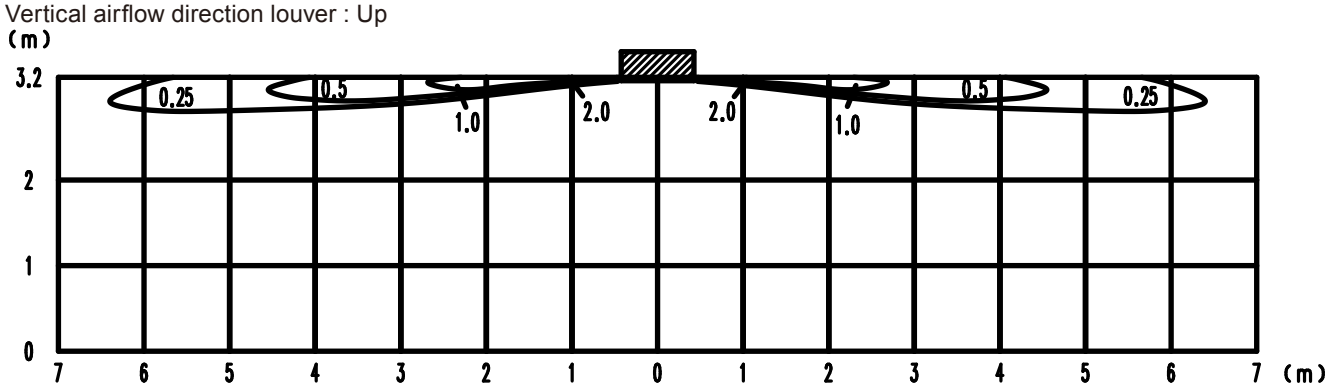
■ MODEL: AUXK018GLAH, AUXK024GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



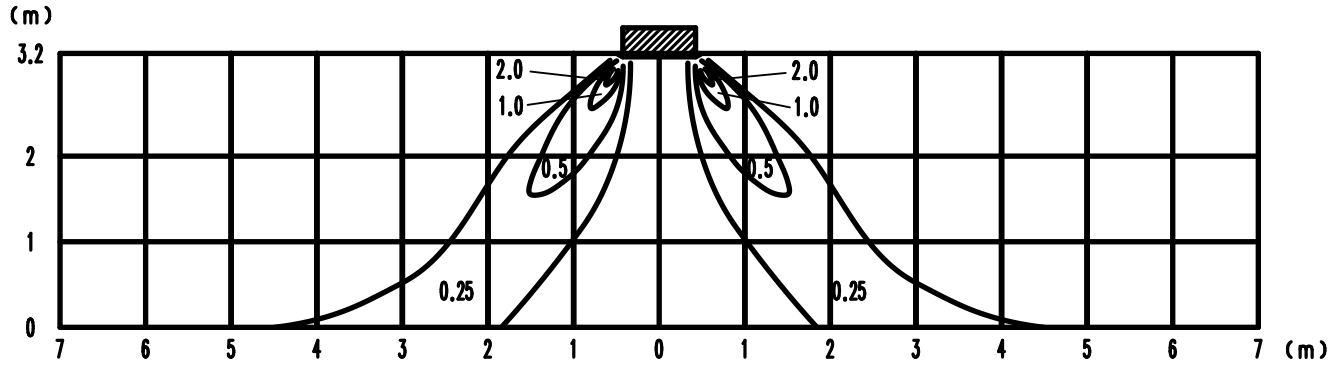
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

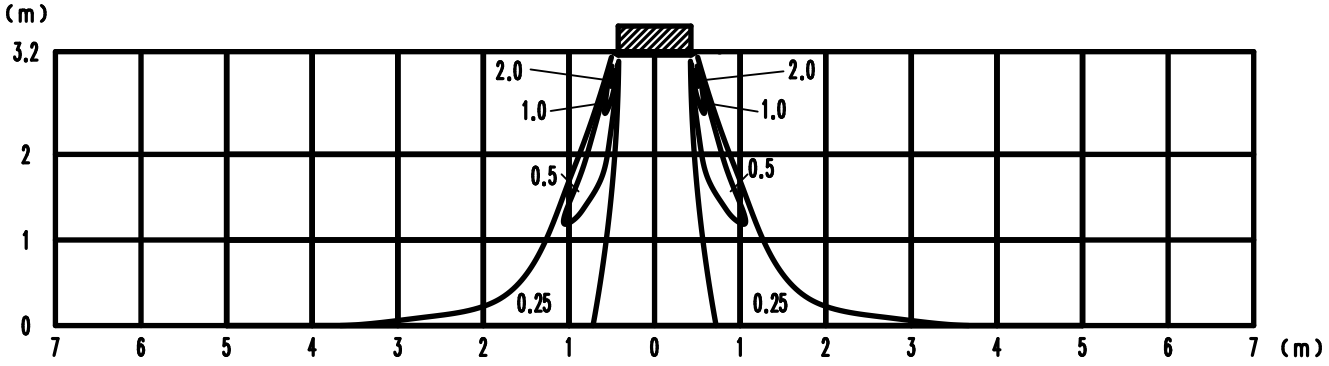
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

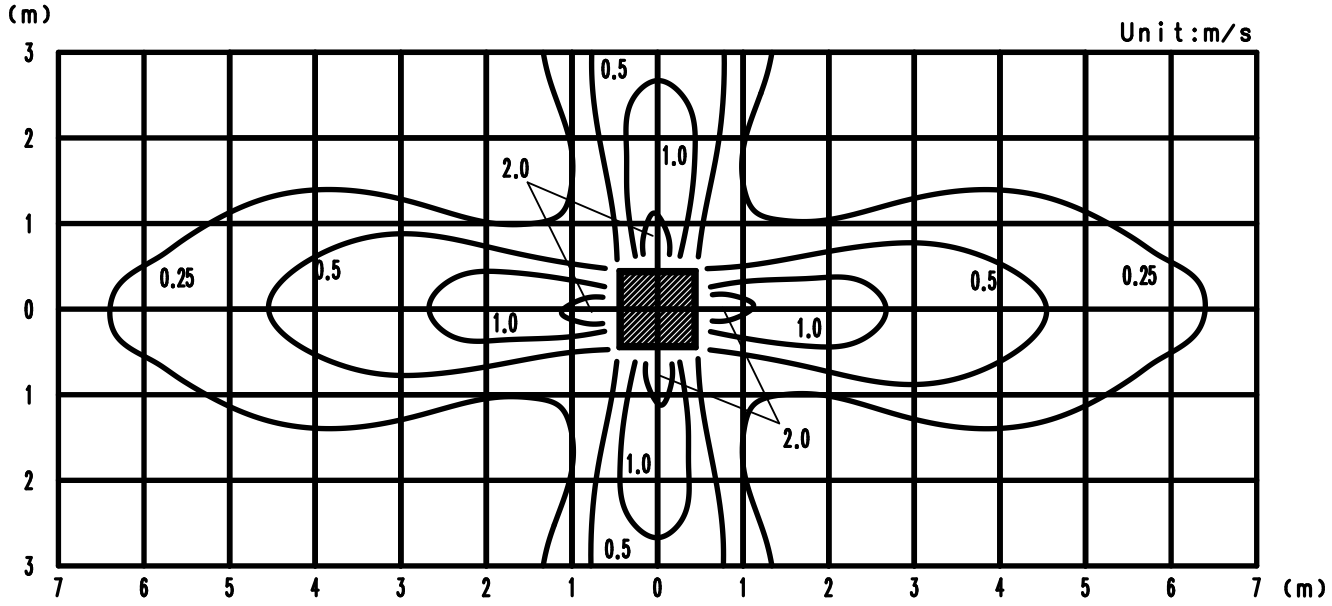
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

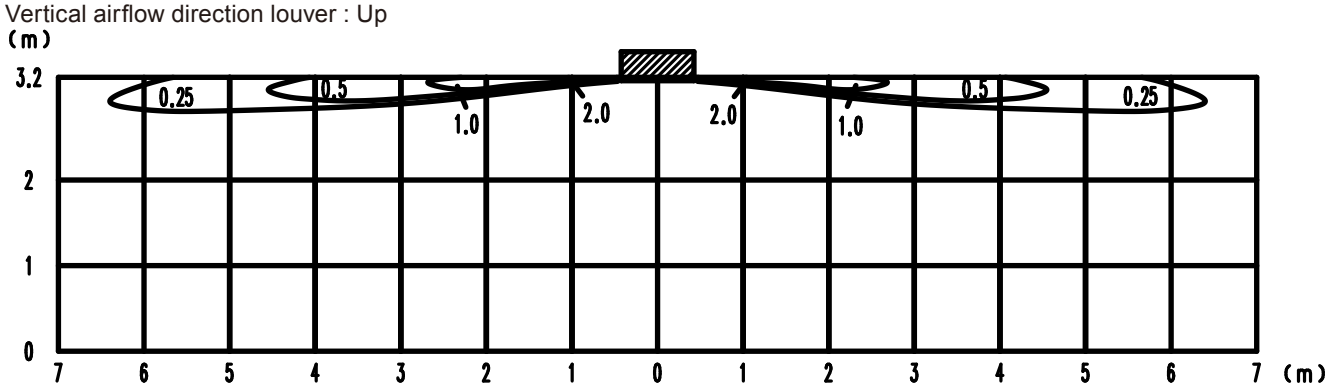
■ MODEL: AUXK030GLAH, AUXK034GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



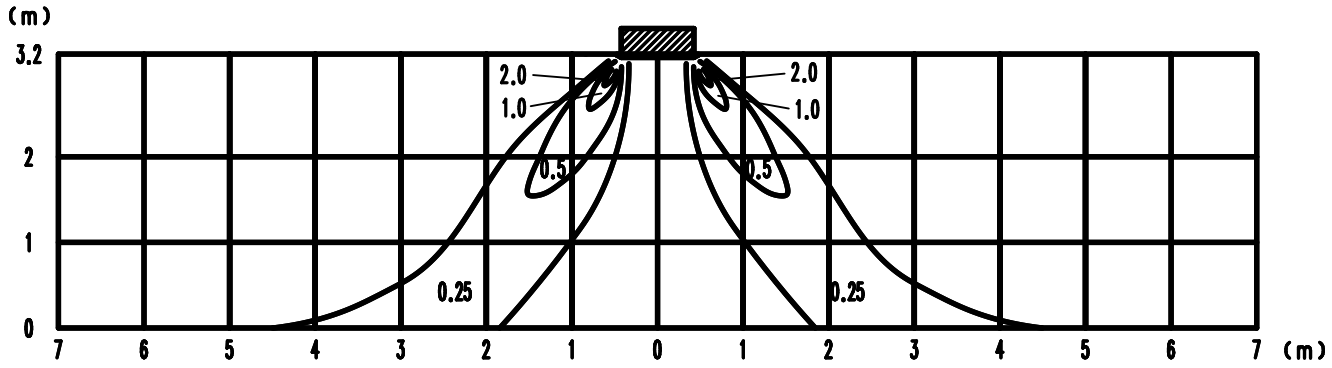
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

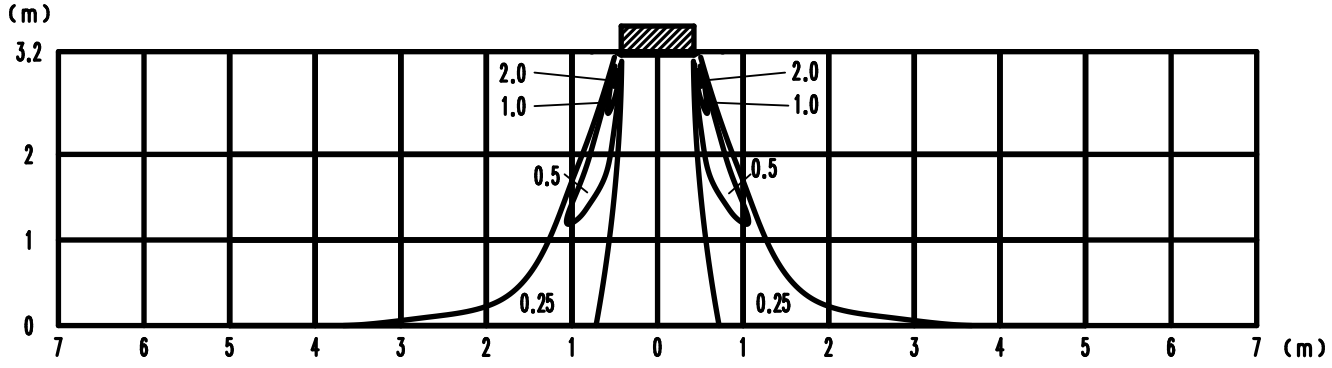
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

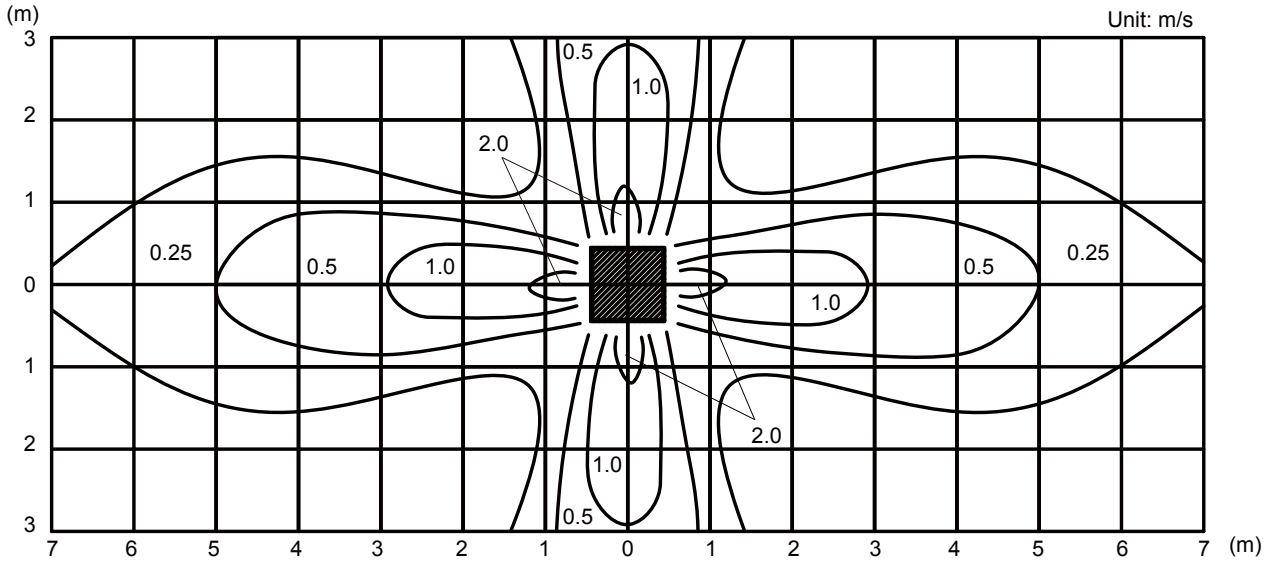
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

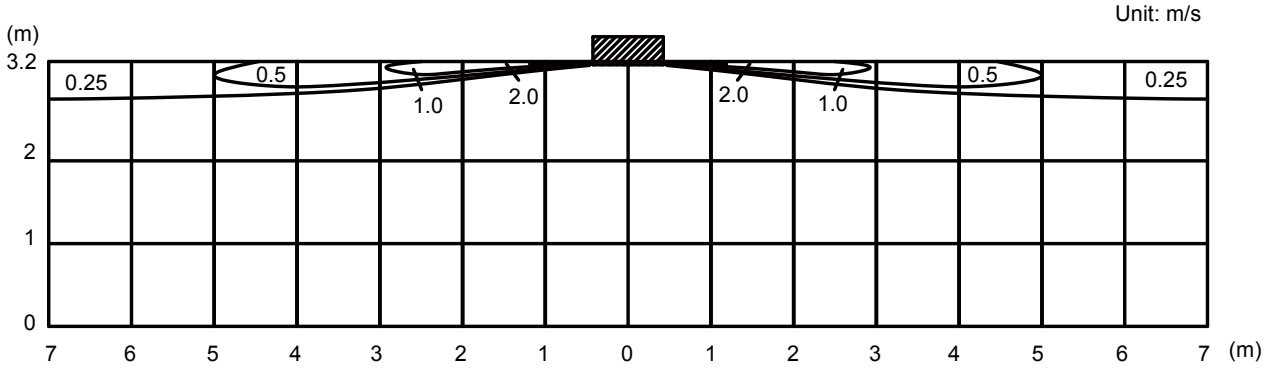
■ MODEL: AUXK036GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



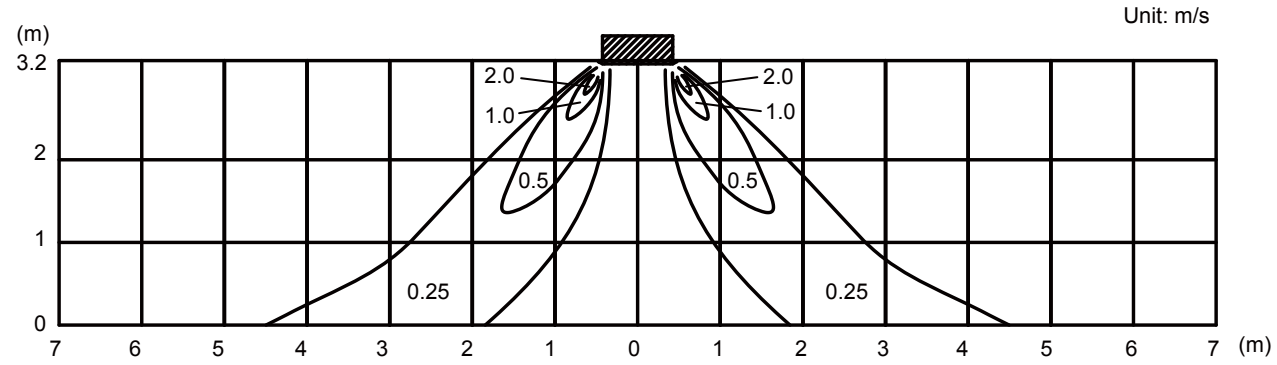
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

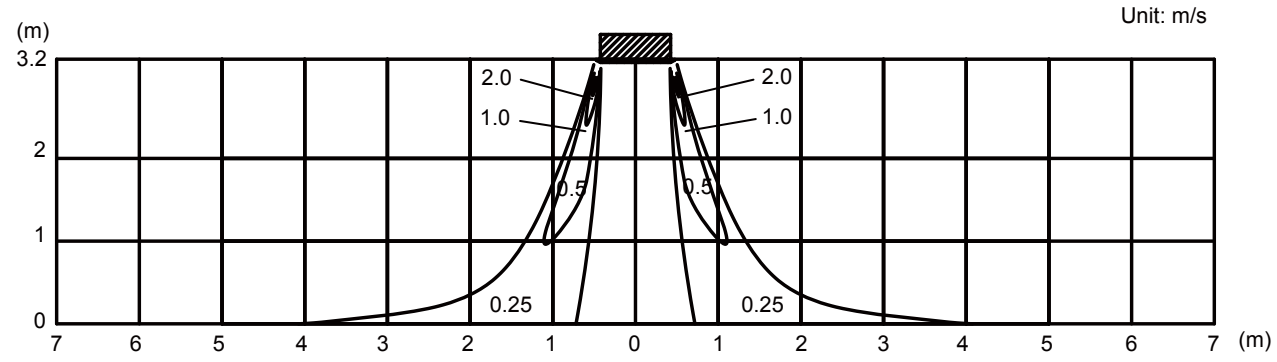
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

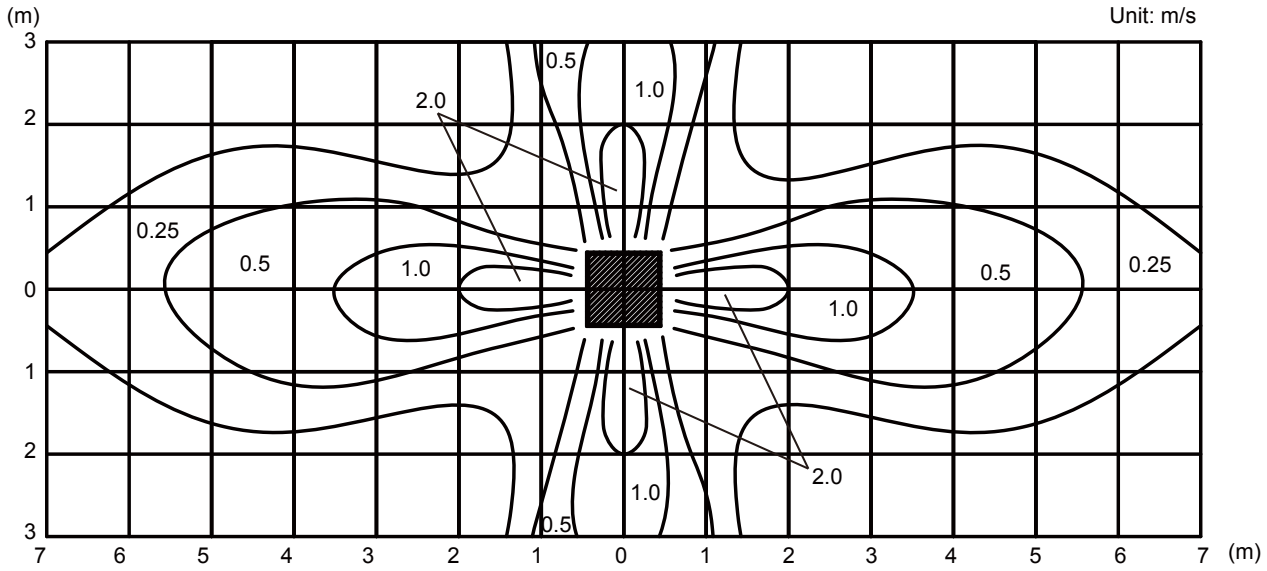
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

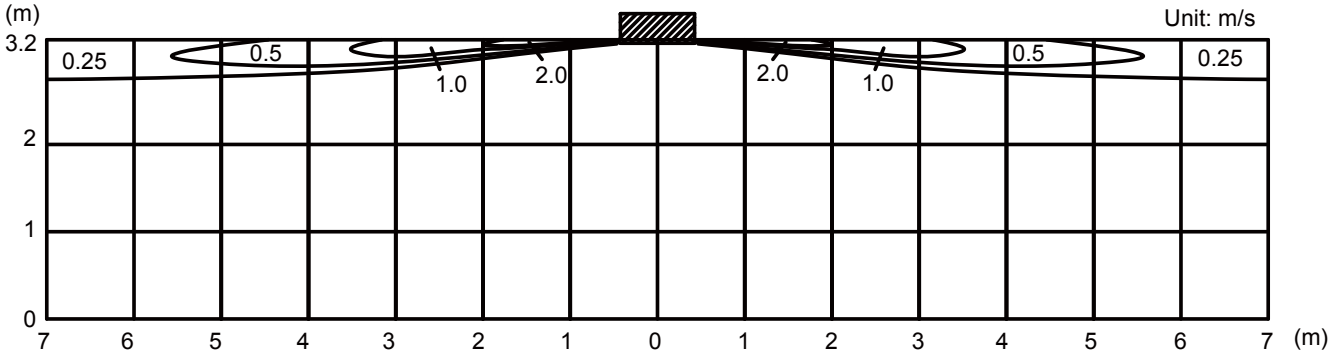
■ MODEL: AUXK045GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



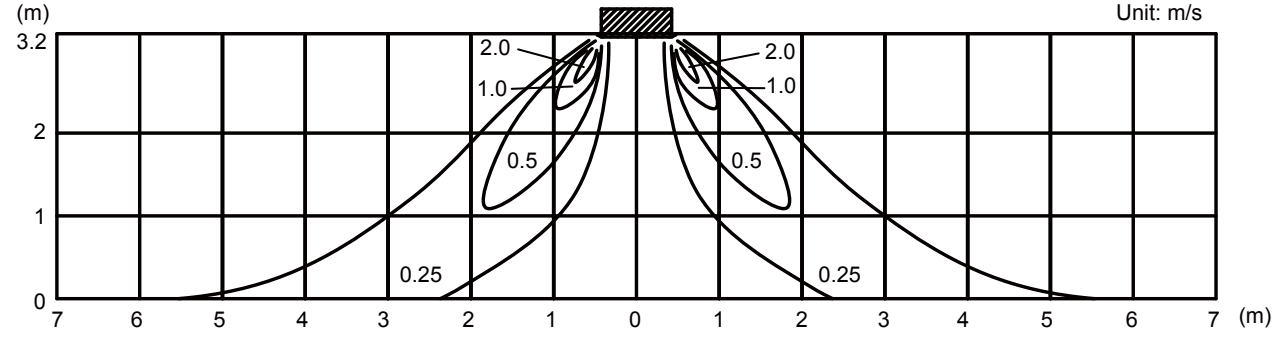
Side view
Vertical airflow direction louver : Up



Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

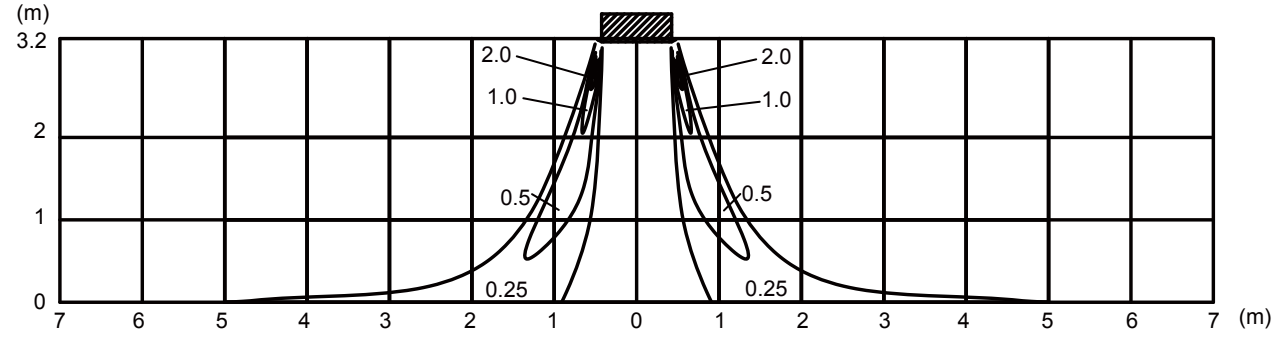
● Air velocity distribution

Side view
Vertical airflow direction louver : Down



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

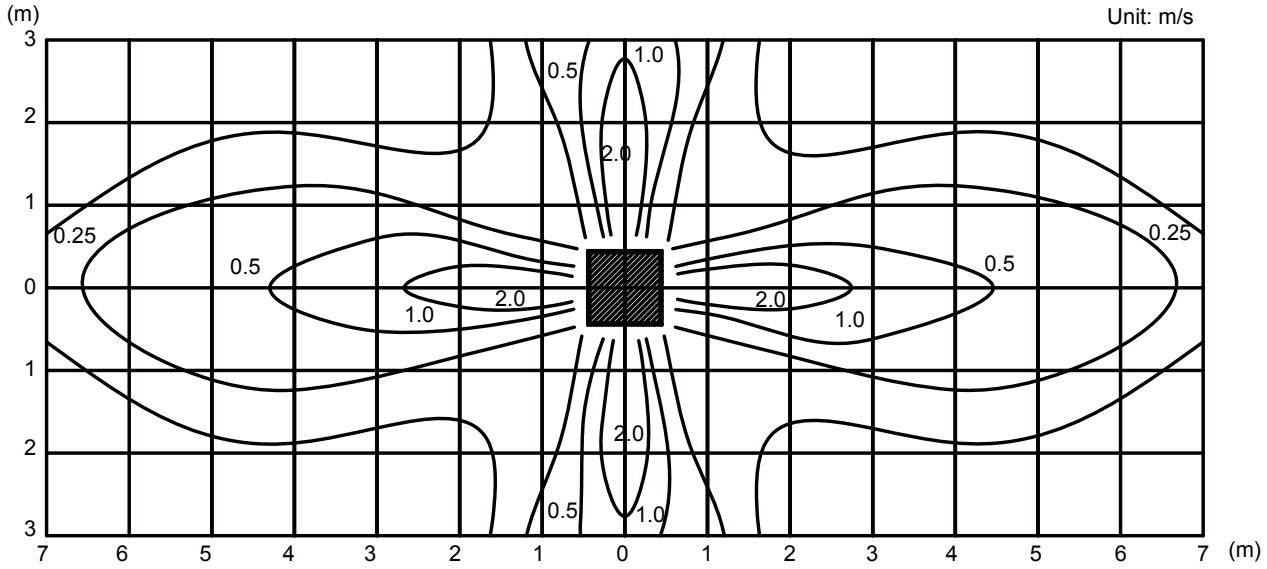
INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

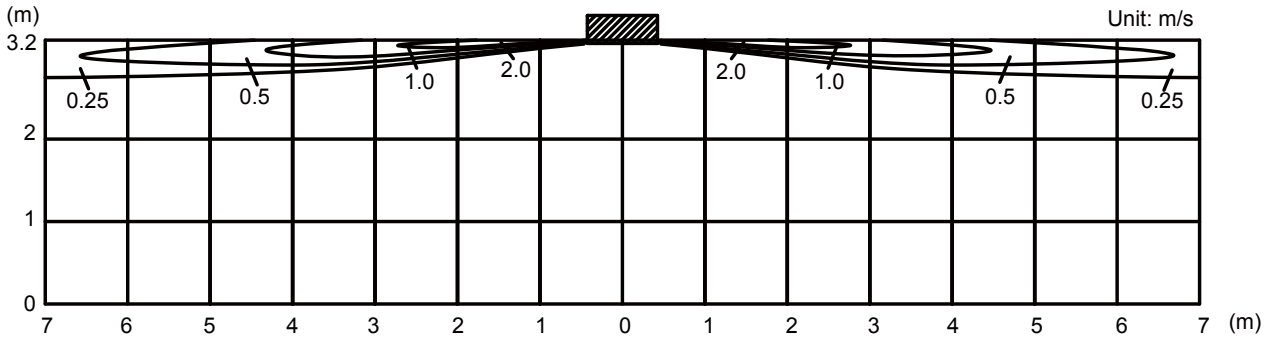
■ MODEL: AUXK054GLAH

● Air velocity distribution

Top view
Vertical airflow direction louver : Up



Side view
Vertical airflow direction louver : Up

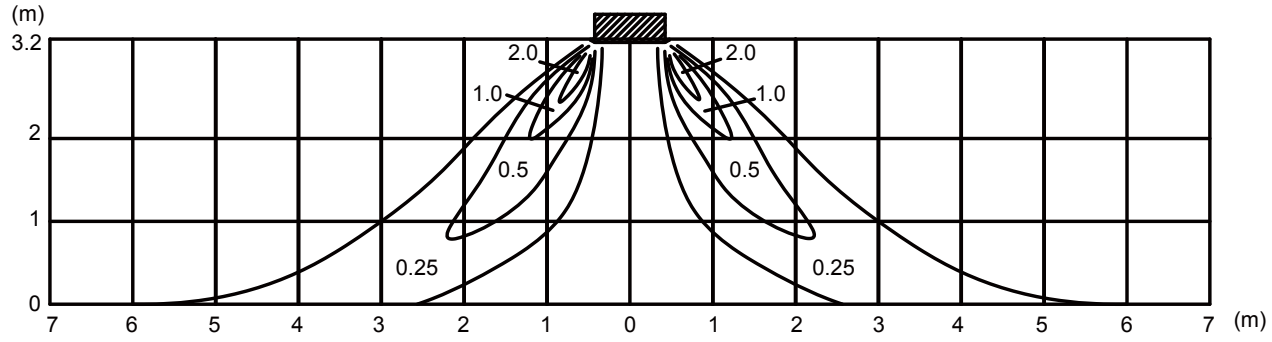


Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

● Air velocity distribution

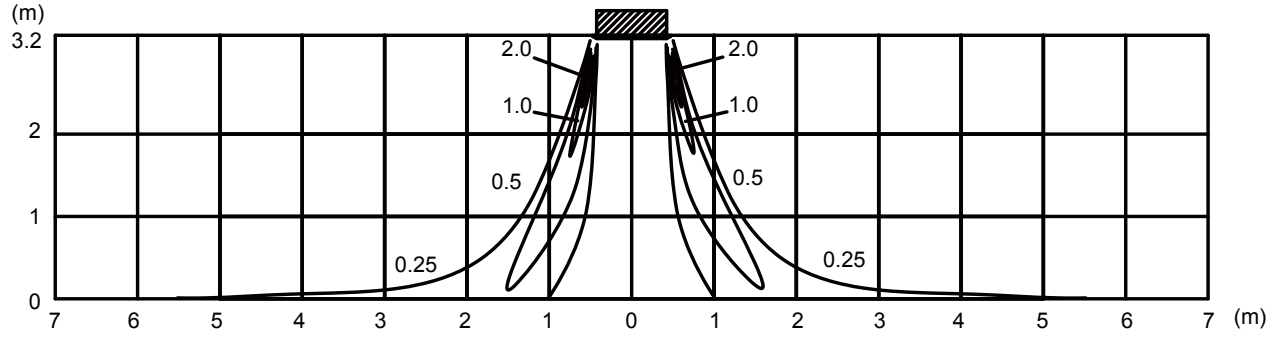
Side view
Vertical airflow direction louver : Down

Unit: m/s



● Air temperature distribution

Side view
Vertical airflow direction louver : Down



INDOOR UNITS

5-3. MINI DUCT TYPE with Auto louver grille kit

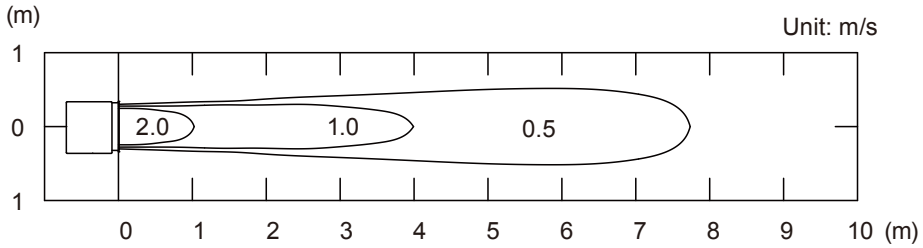
■ MODELS: ARXK04GCLH, ARXK07GCLH, ARXK09GCLH

Note: This data is measured with the Auto louver grille kit(option) installed.

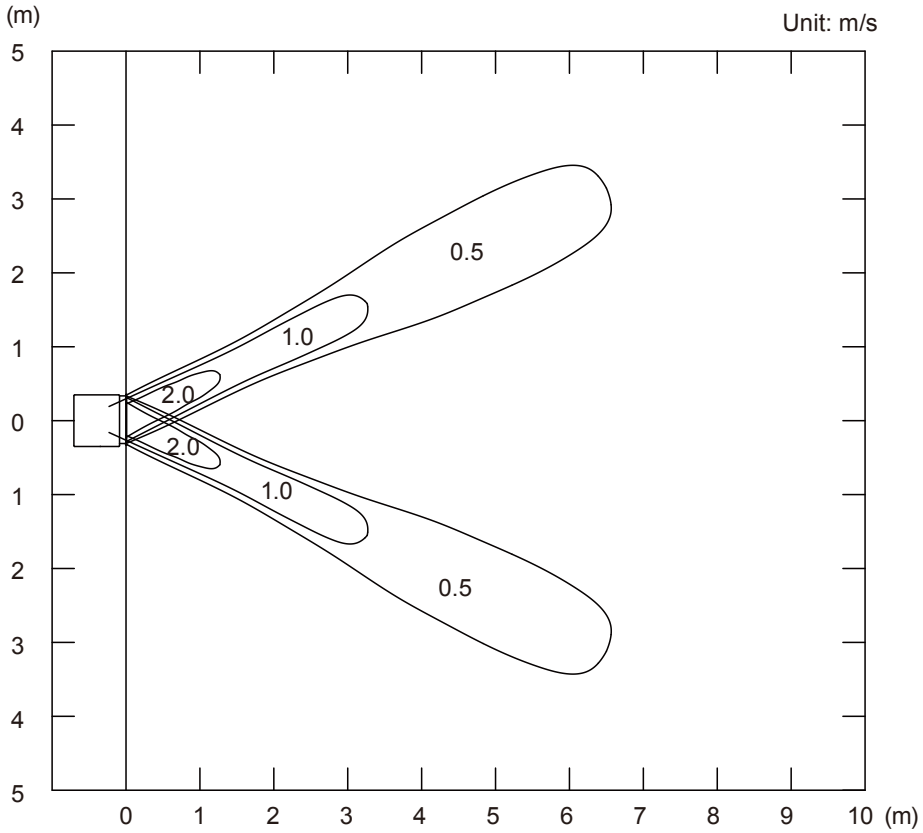
● Air velocity distribution

Conditions
Fan speed : High
Operation mode : Fan

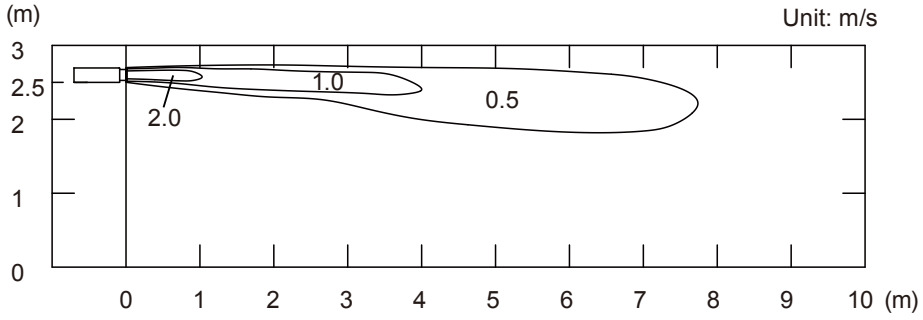
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



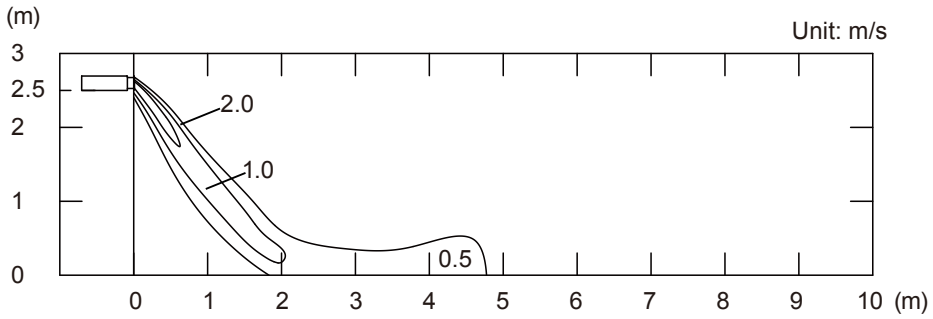
INDOOR UNITS

Note: This data is measured with the Auto louver grille kit(option) installed.

Conditions
Fan speed : High
Operation mode : Heat
Reference Data

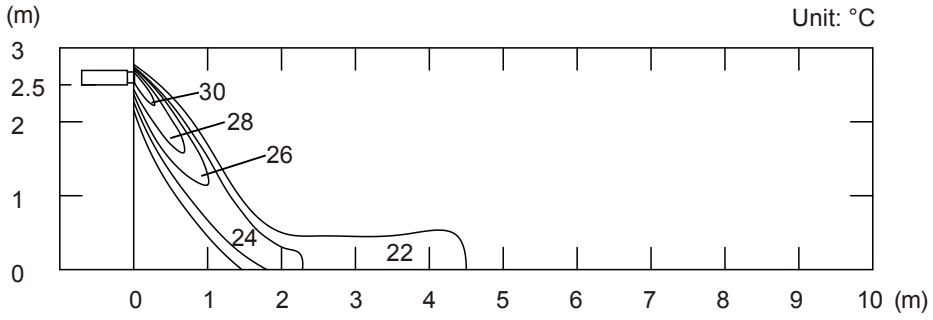
● Air velocity distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

INDOOR UNITS

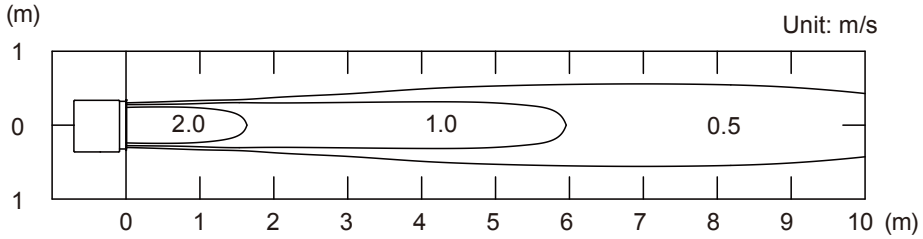
Conditions
Fan speed : High
Operation mode : Fan

■ MODEL: ARXK12GCLH

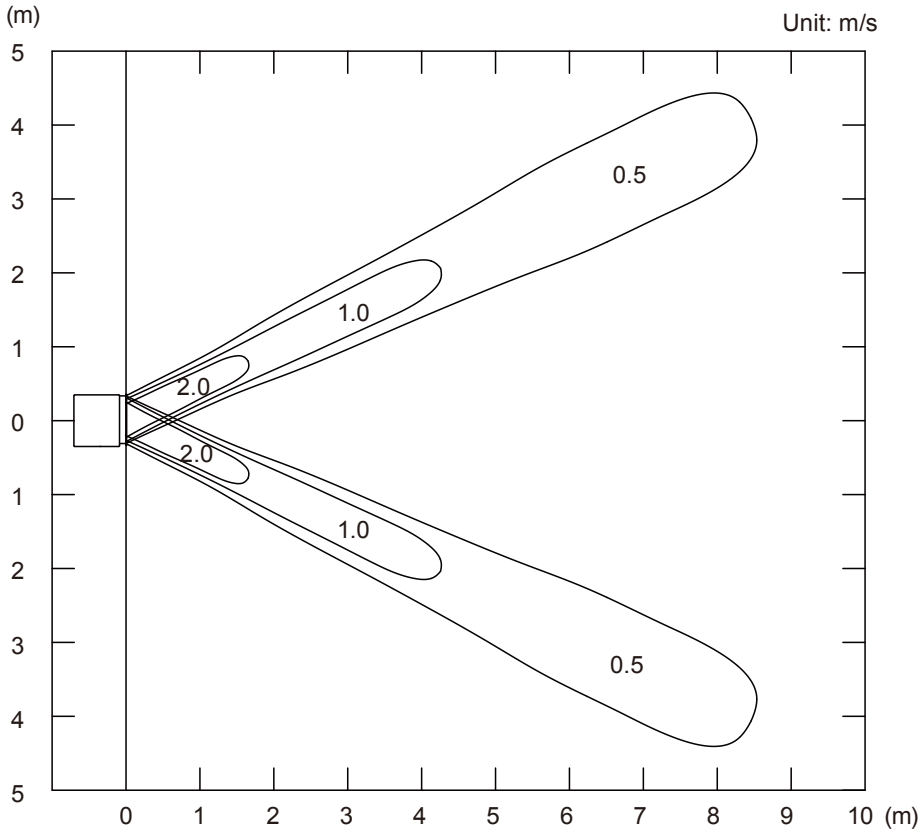
Note: This data is measured with the Auto louver grille kit(option) installed.

● Air velocity distribution

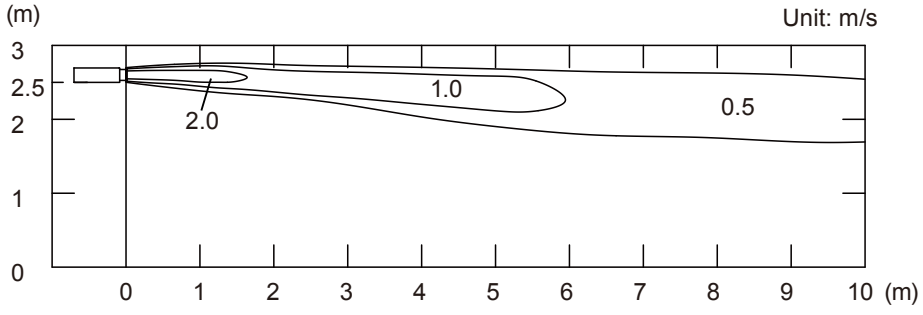
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

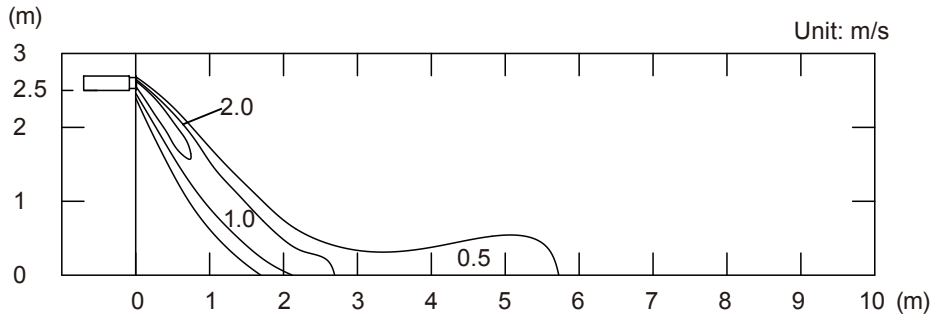


Note: This data is measured with the Auto louver grille kit(option) installed.

Conditions
Fan speed : High
Operation mode : Heat
Reference Data

● Air velocity distribution

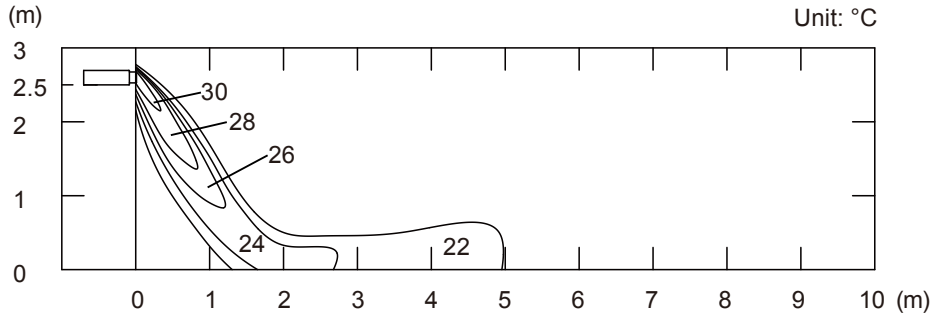
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

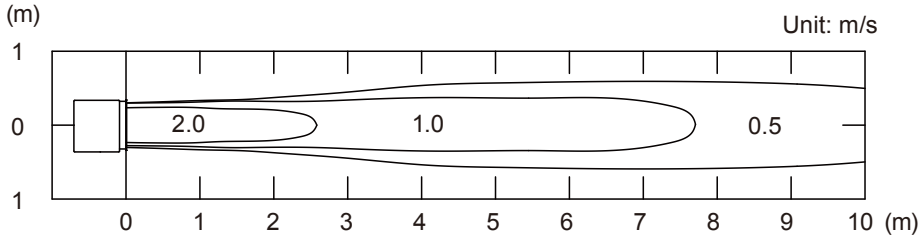
■ MODEL: ARXK14GCLH

Note: This data is measured with the Auto louver grille kit(option) installed.

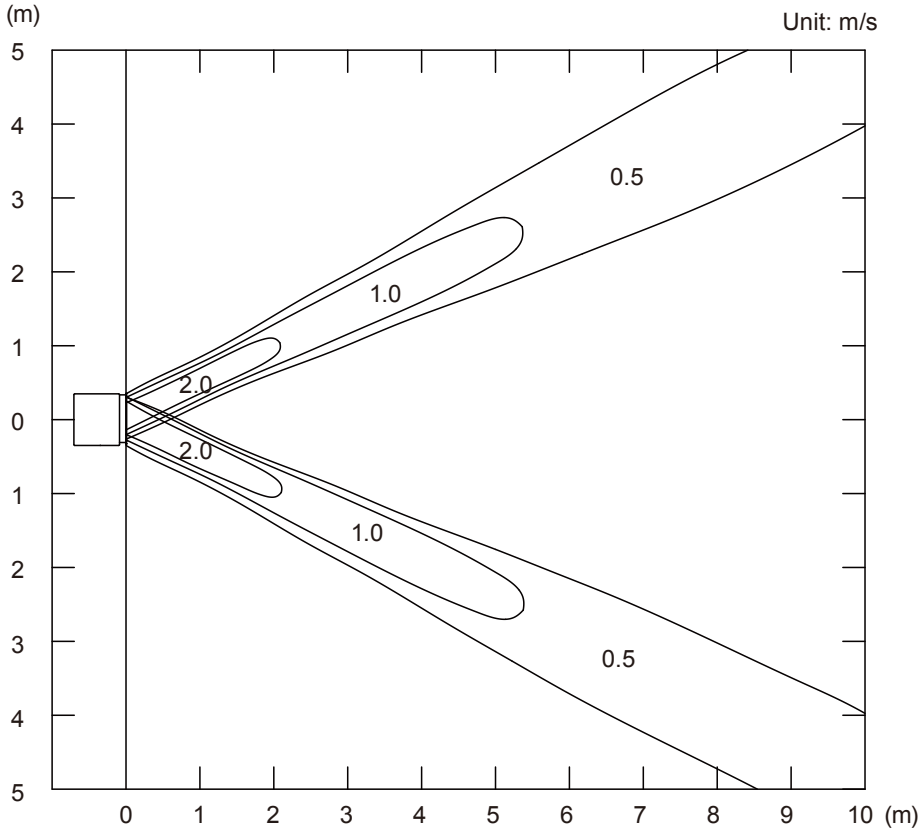
Conditions
Fan speed : High
Operation mode : Fan

● Air velocity distribution

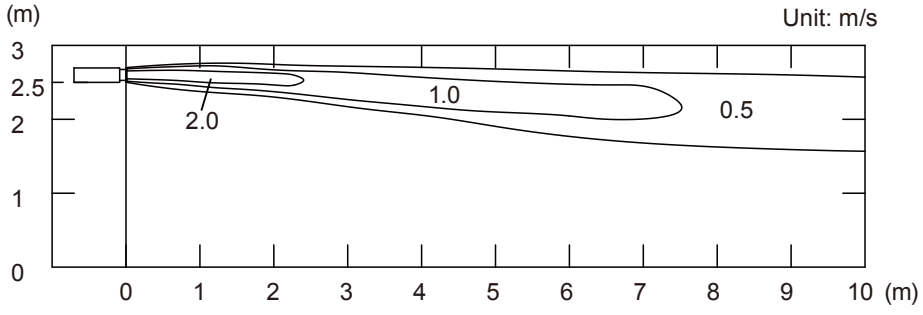
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

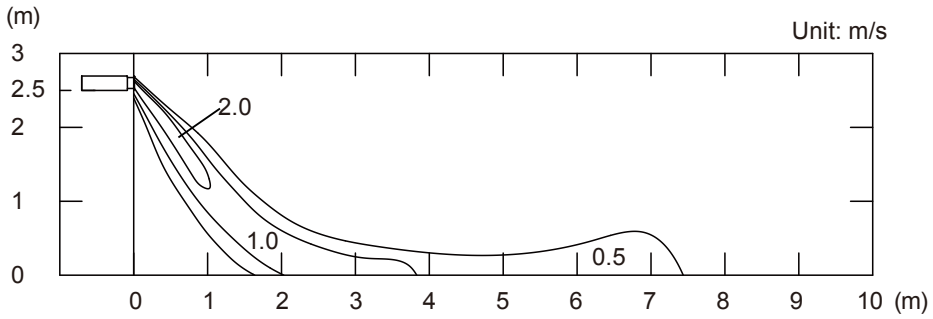


Conditions
Fan speed : High
Operation mode : Heat
Reference Data

Note: This data is measured with the Auto louver grille kit(option) installed.

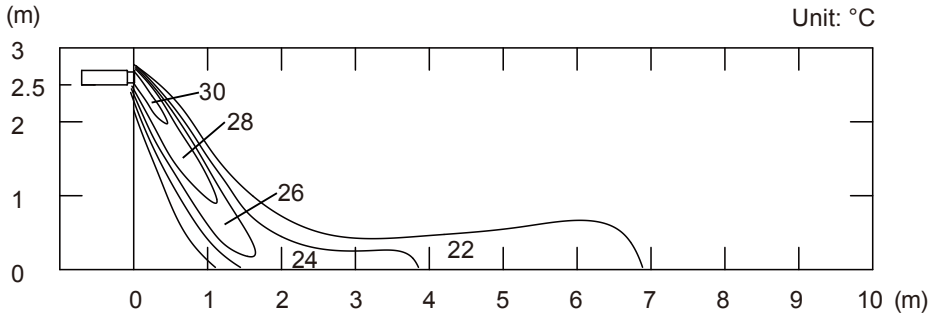
● Air velocity distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

INDOOR UNITS

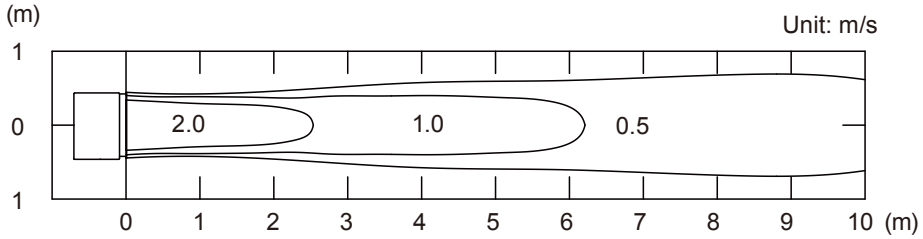
■ MODEL: ARXK18GCLH

Note: This data is measured with the Auto louver grille kit(option) installed.

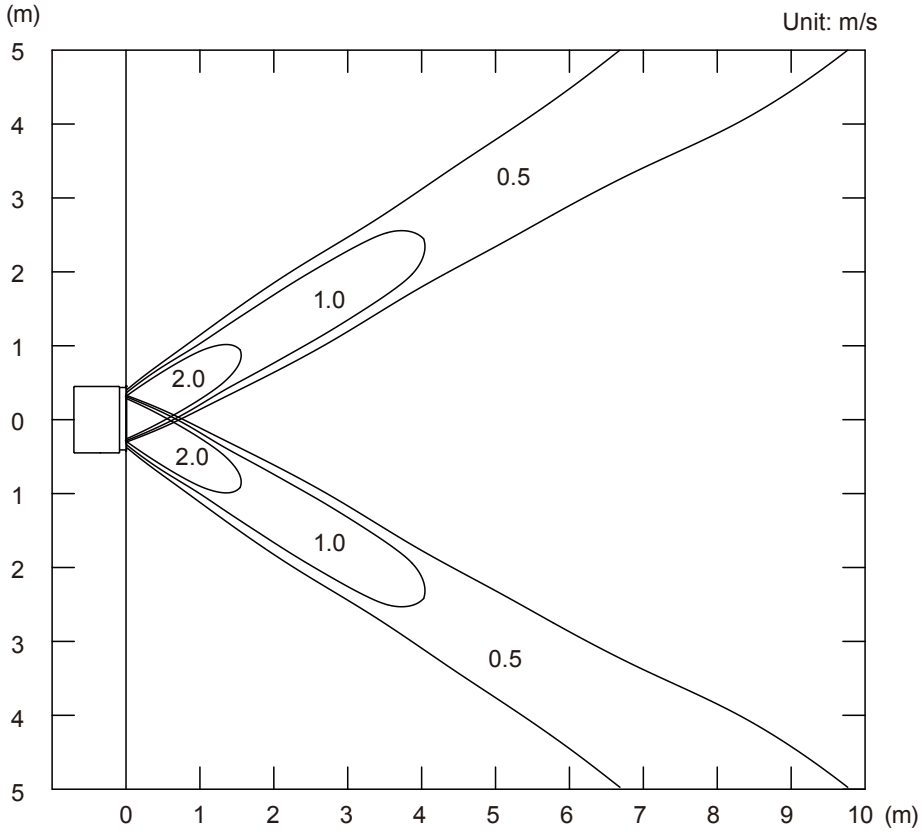
Conditions
Fan speed : High
Operation mode : Fan

● Air velocity distribution

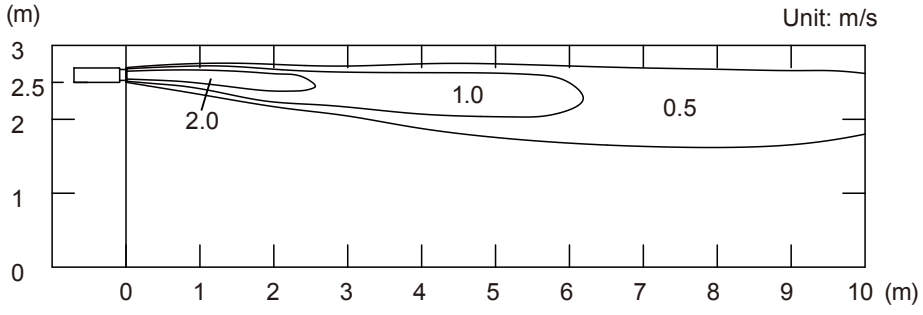
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

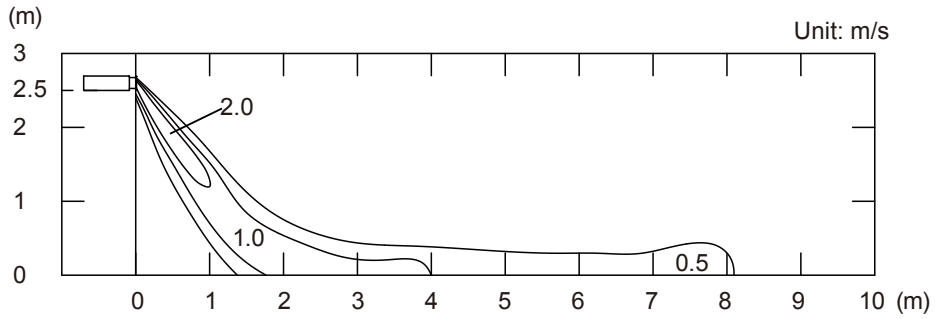


Note: This data is measured with the Auto louver grille kit(option) installed.

Conditions
Fan speed : High
Operation mode : Heat
Reference Data

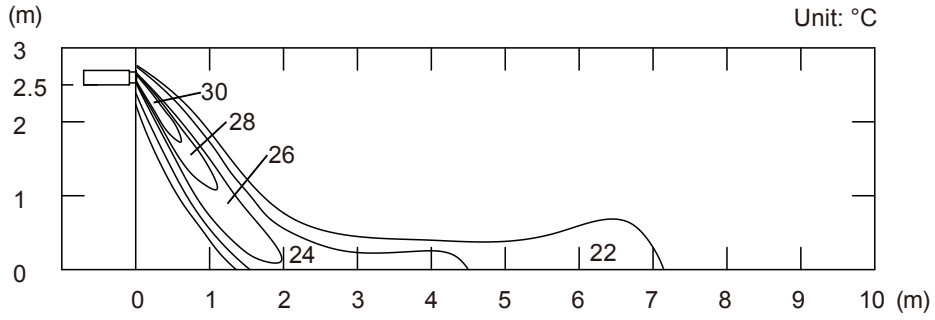
● Air velocity distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

INDOOR UNITS

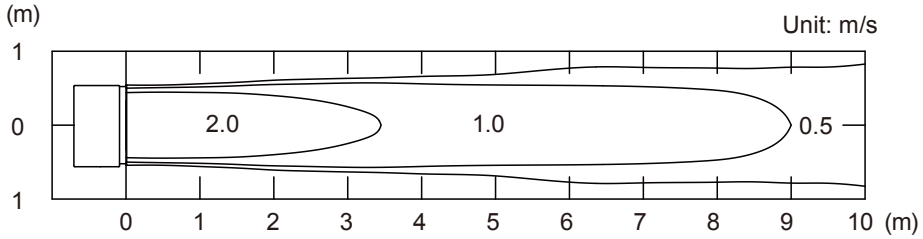
■ MODEL: ARXK24GCLH

Note: This data is measured with the Auto louver grille kit(option) installed.

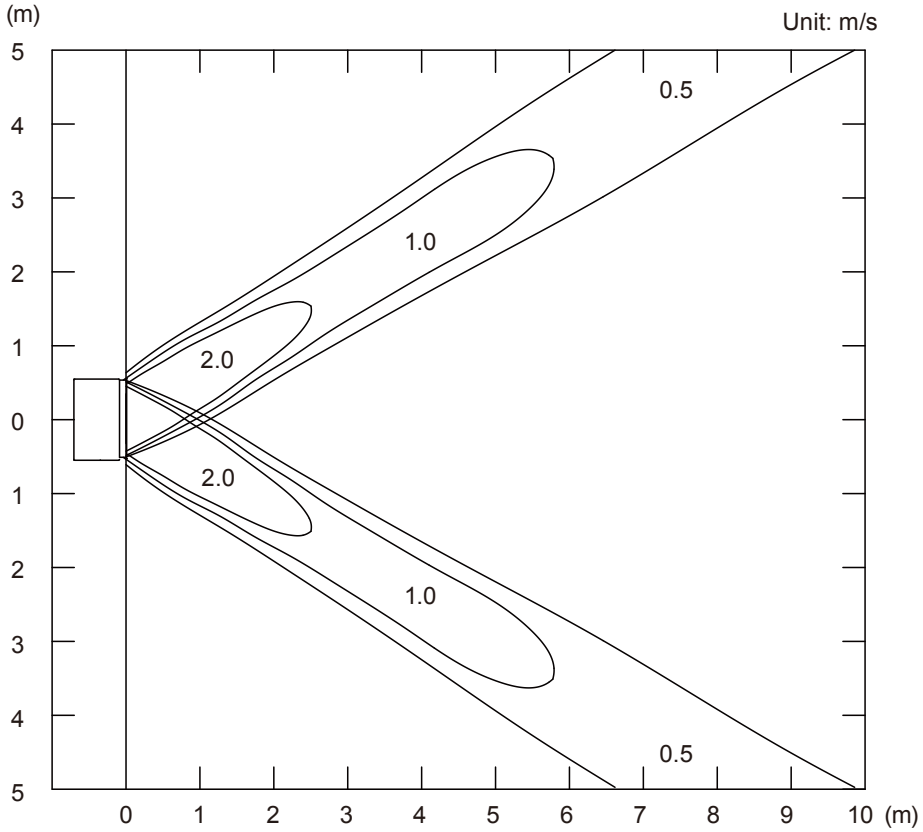
Conditions
Fan speed : High
Operation mode : Fan

● Air velocity distribution

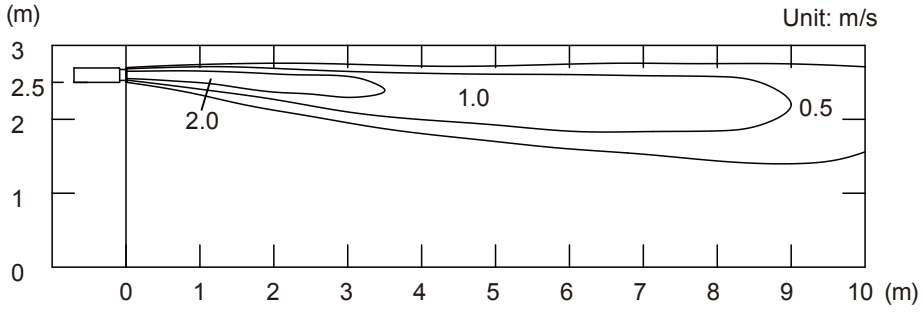
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

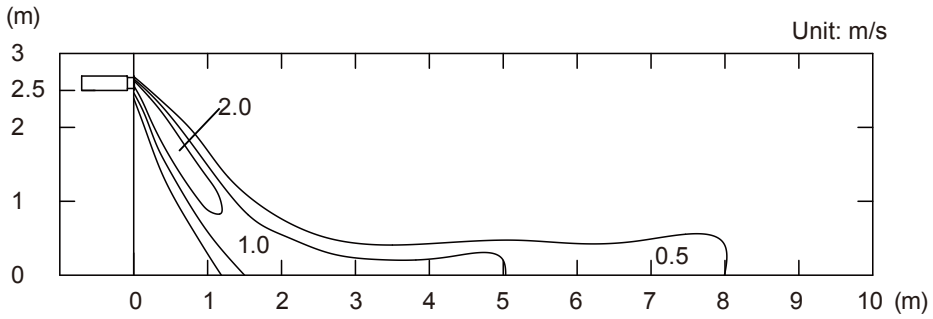


Note: This data is measured with the Auto louver grille kit(option) installed.

Conditions
Fan speed : High
Operation mode : Heat
Reference Data

● Air velocity distribution

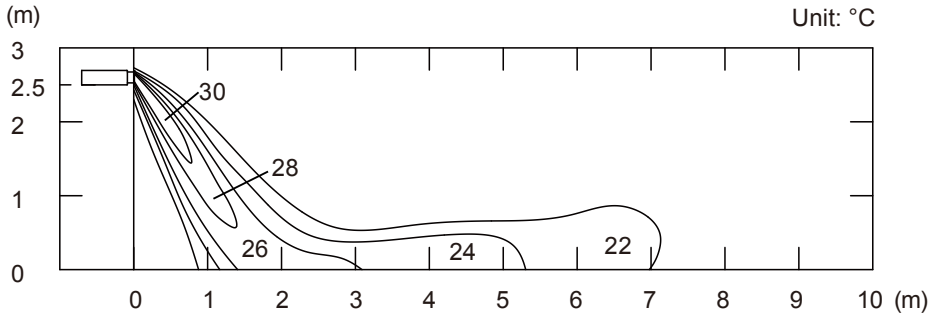
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



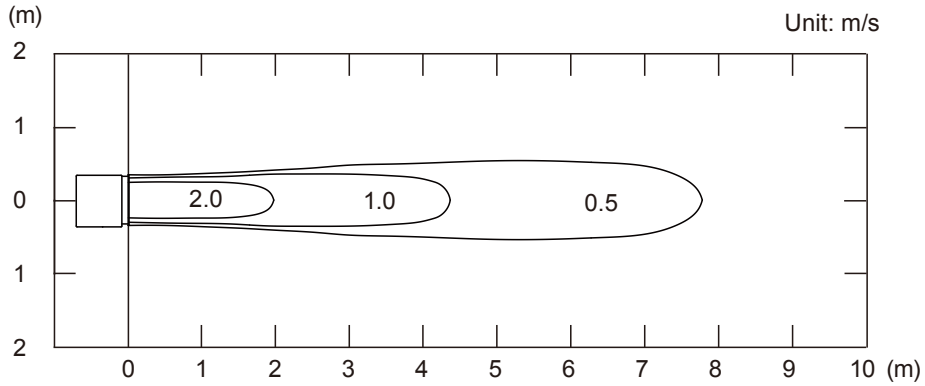
5-4. SLIM DUCT TYPE with Auto louver grille kit

■ MODEL: ARXD04GALH (UTD-GXSA-W)

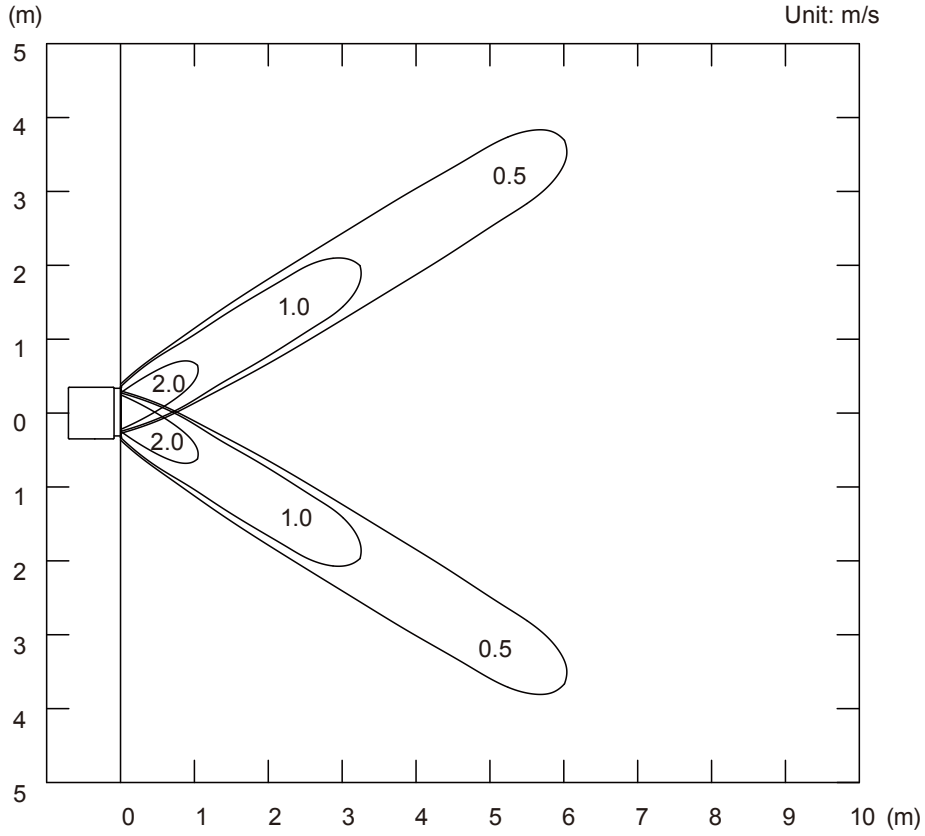
Note: This data is measured with Auto louver grille kit (Optional parts).

● Air velocity distribution

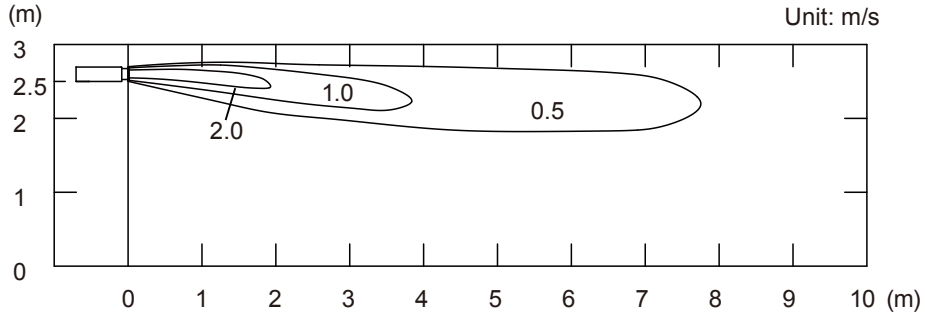
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



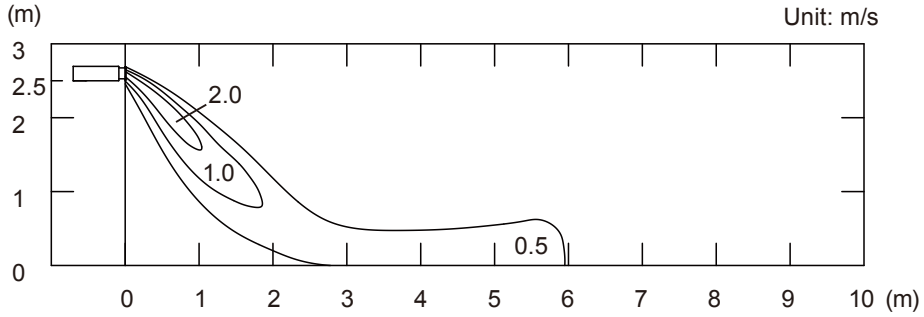
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

● Air velocity distribution

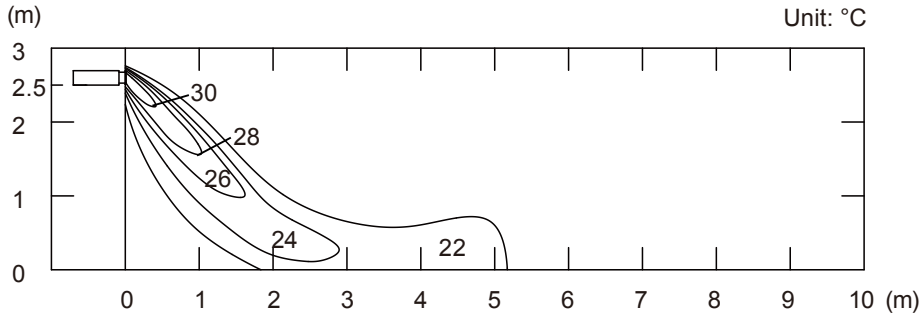
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



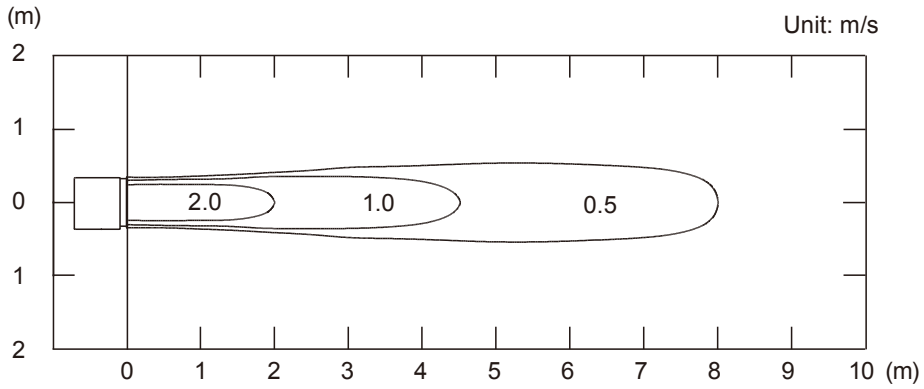
■ MODEL: ARXD07GALH (UTD-GXSA-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

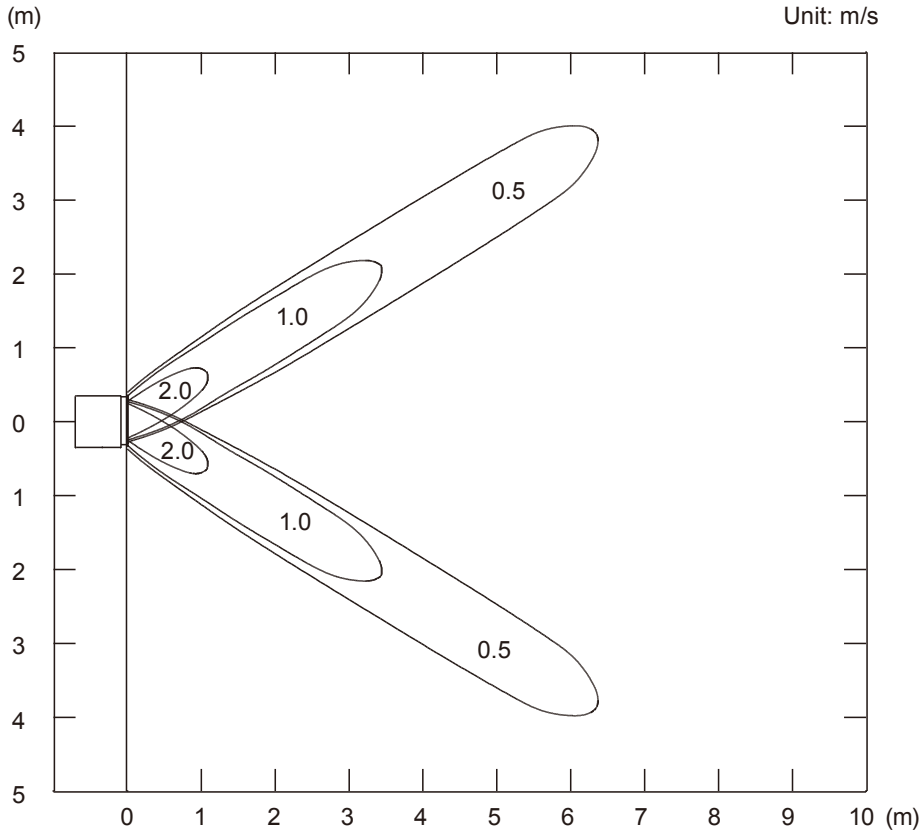
Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

● Air velocity distribution

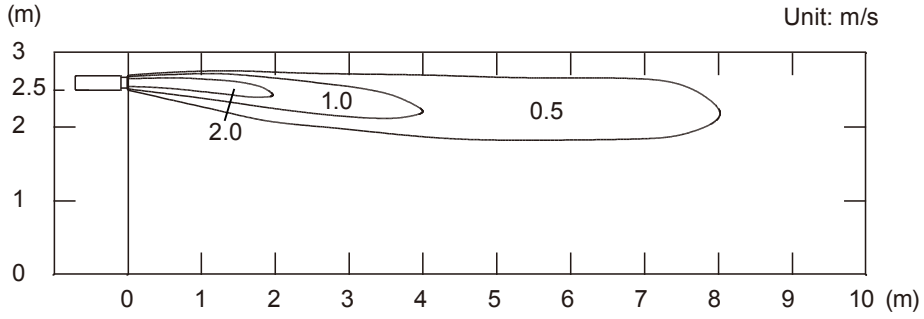
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



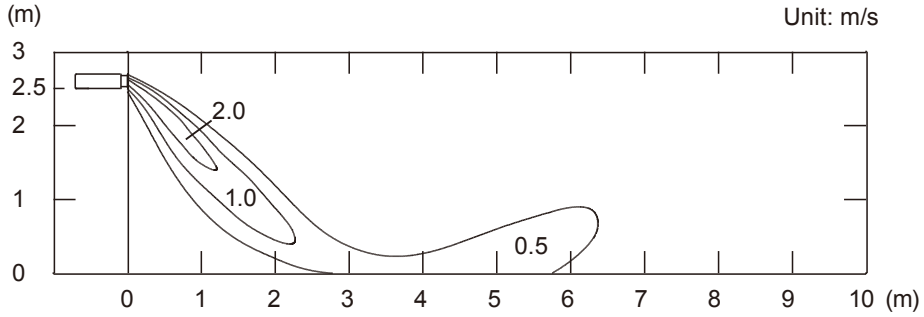
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

● Air velocity distribution

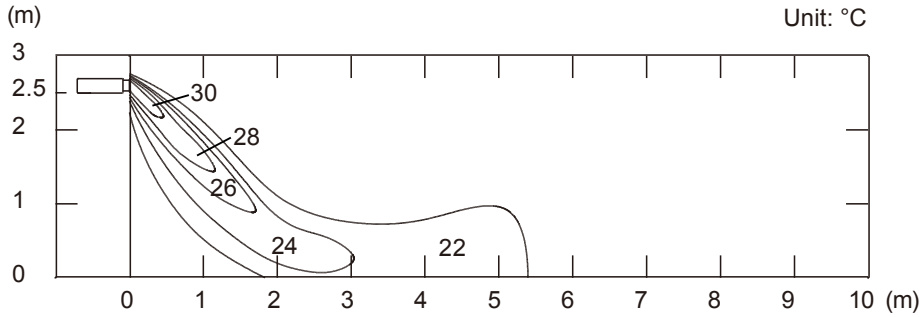
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



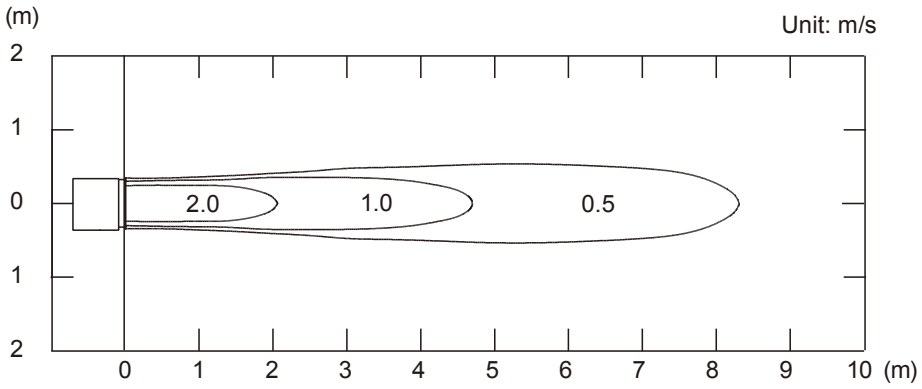
■ MODEL: ARXD09GALH (UTD-GXSA-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

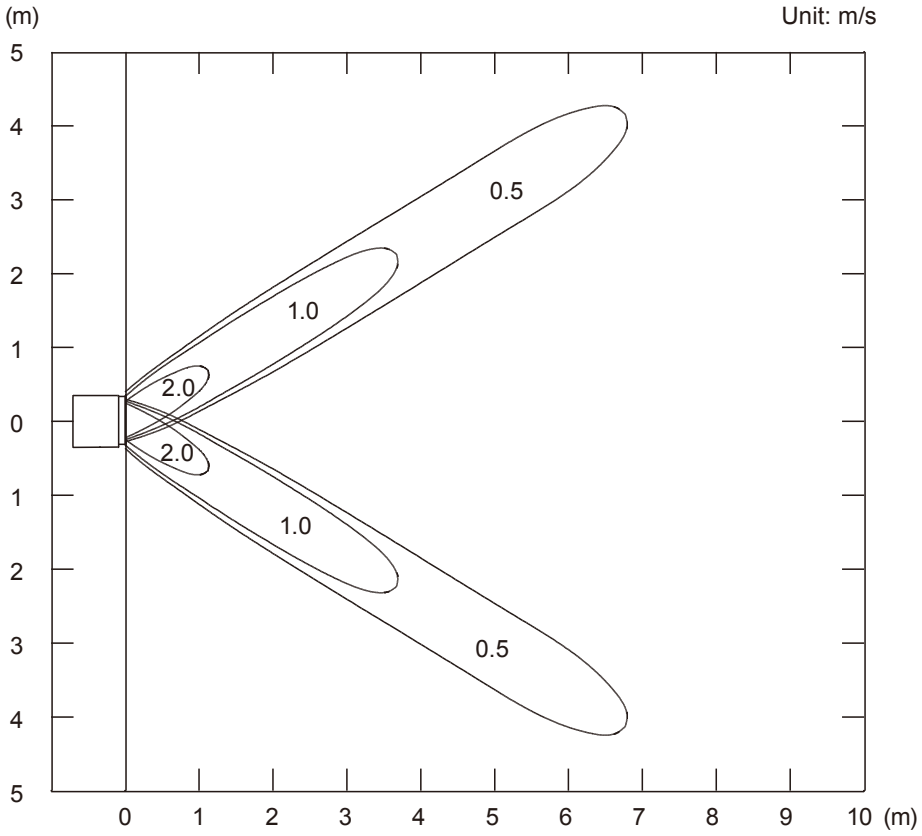
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

● Air velocity distribution

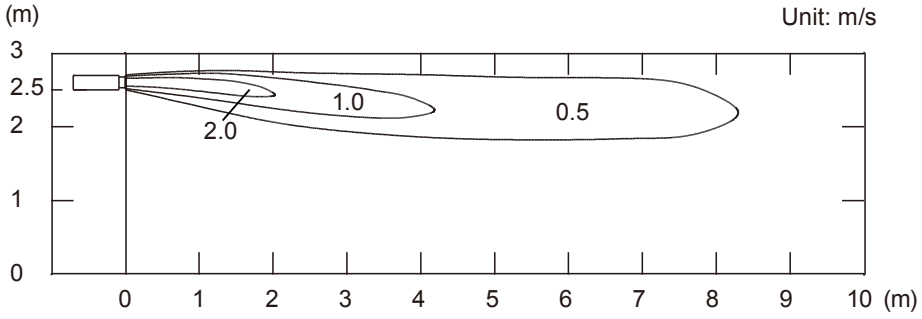
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

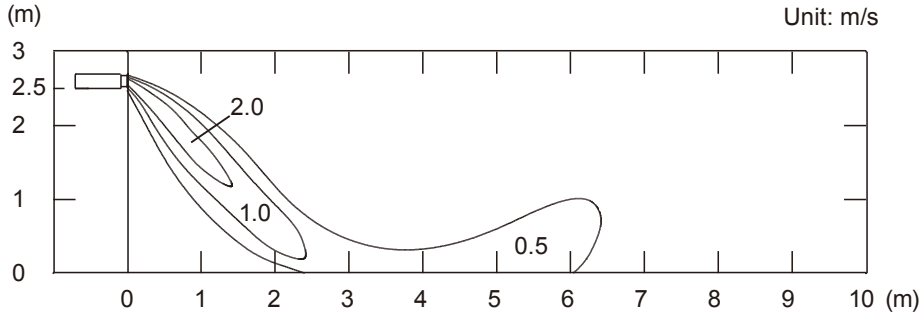


Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

● Air velocity distribution

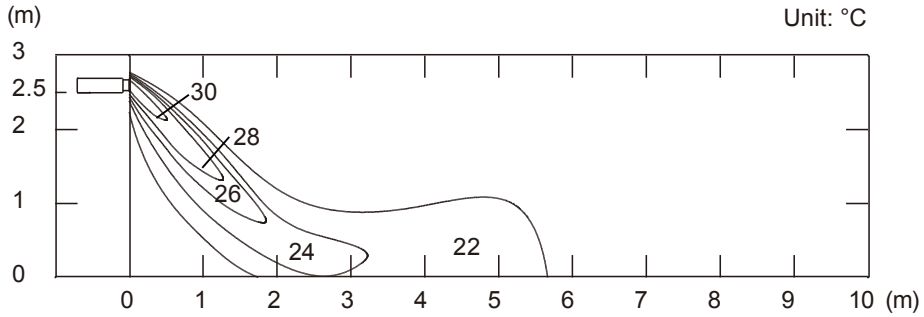
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



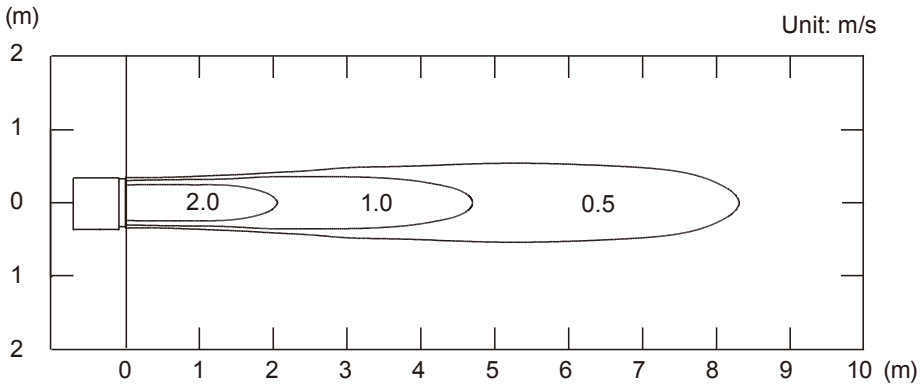
■ MODEL: ARXD12GALH (UTD-GXSA-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

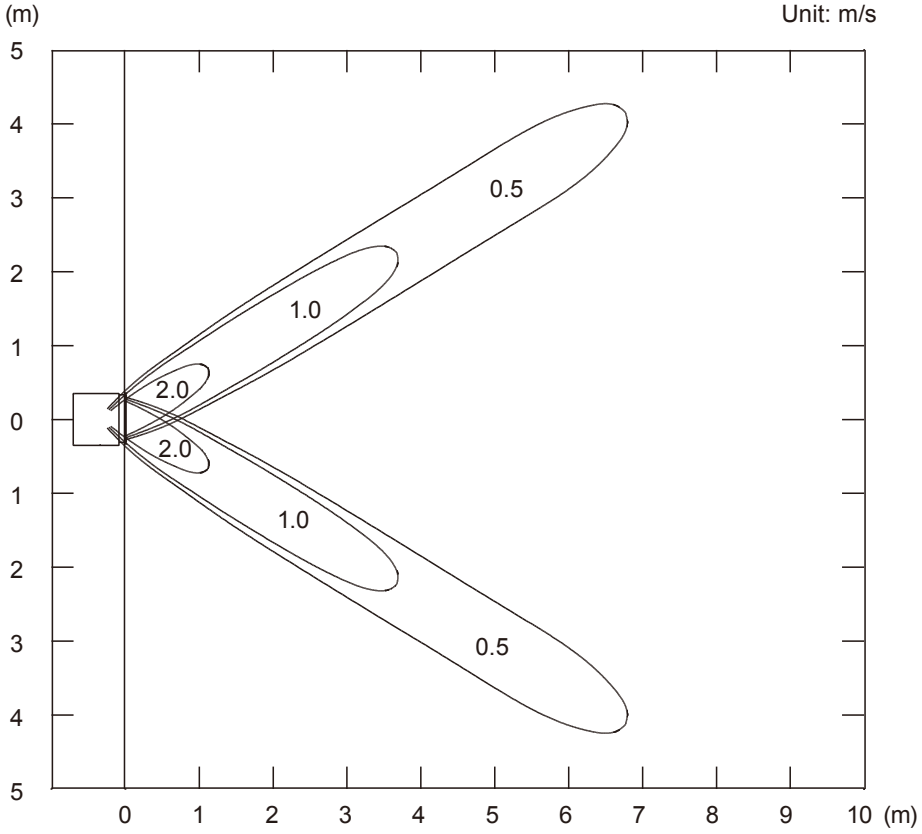
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

● Air velocity distribution

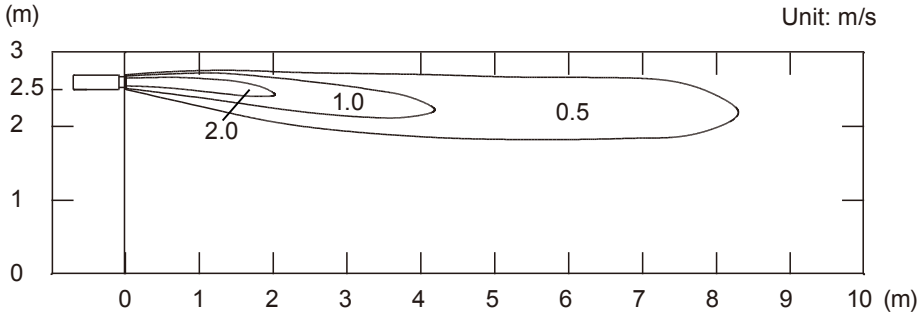
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



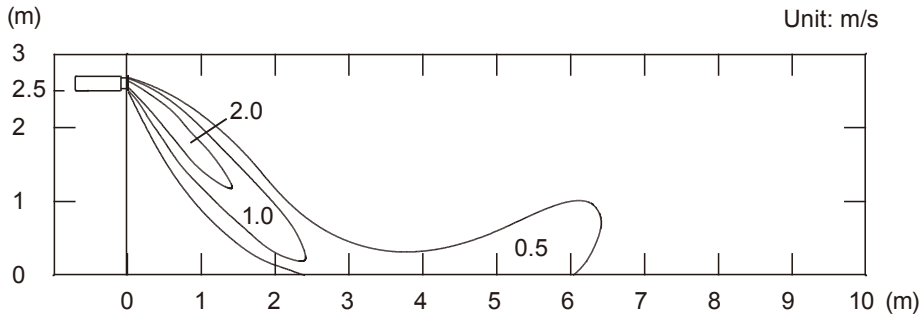
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

● Air velocity distribution

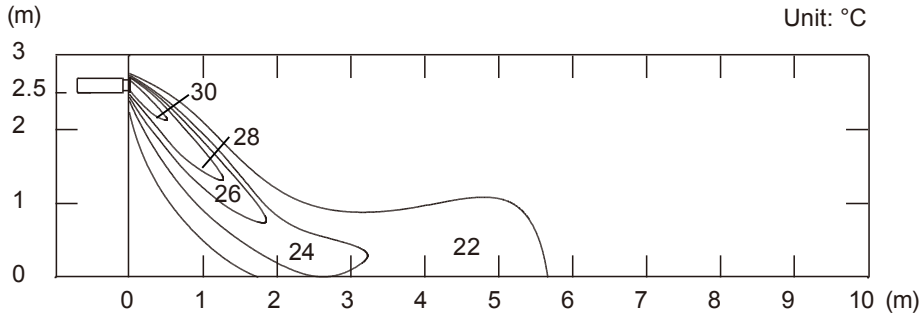
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



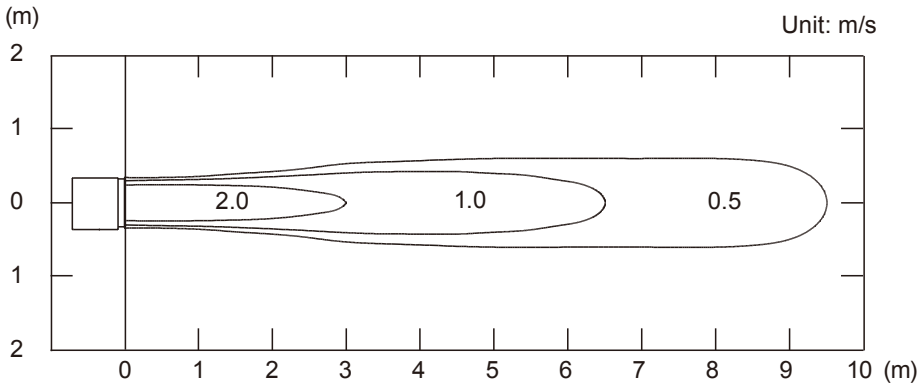
■ MODEL: ARXD14GALH (UTD-GXSA-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

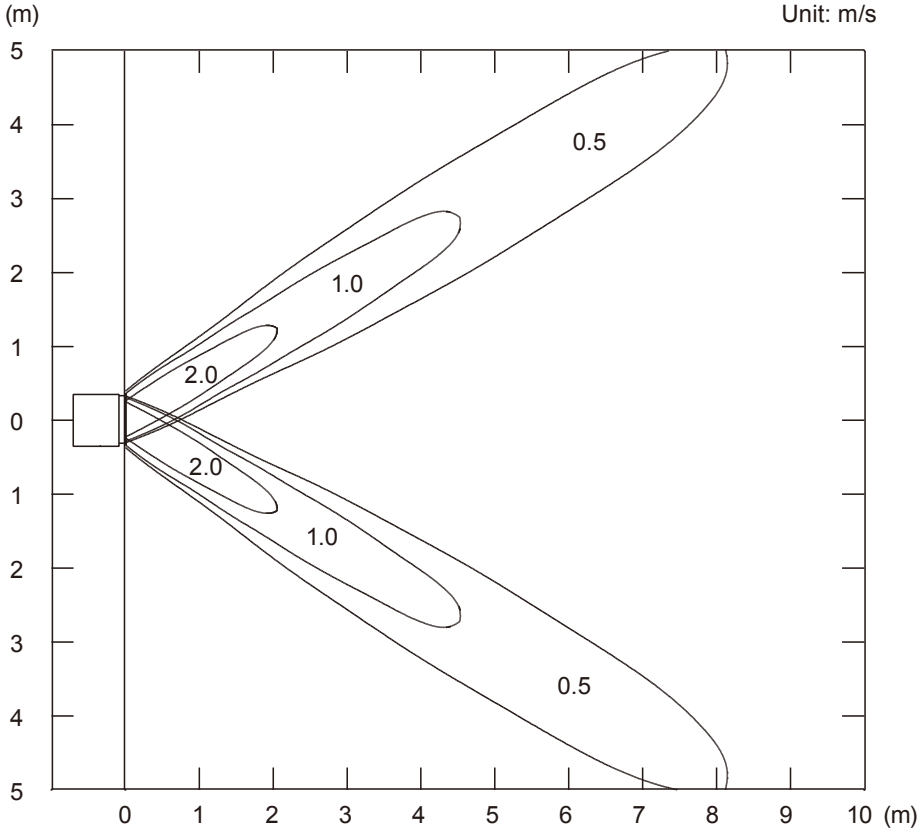
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

● Air velocity distribution

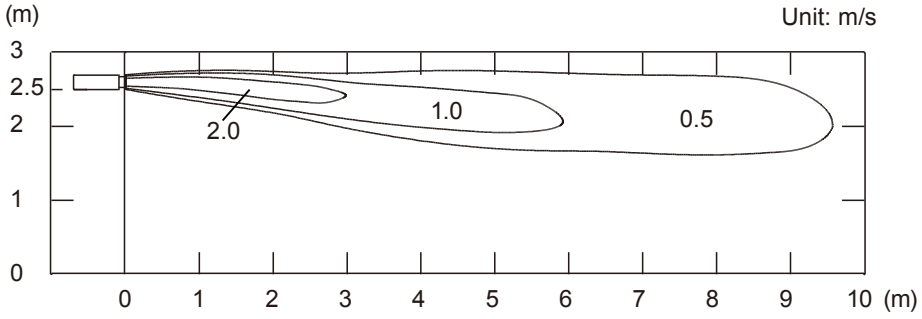
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



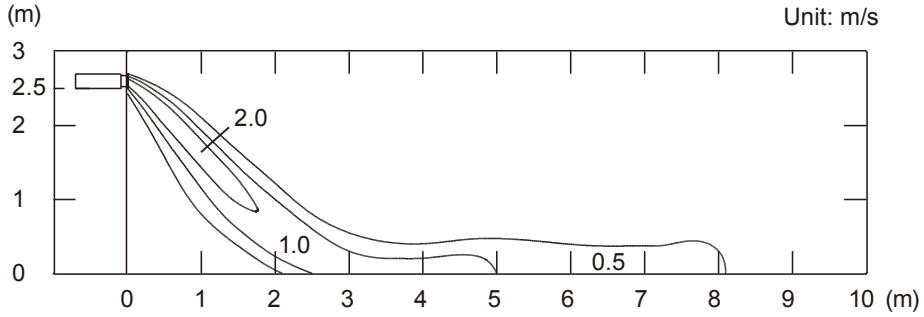
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

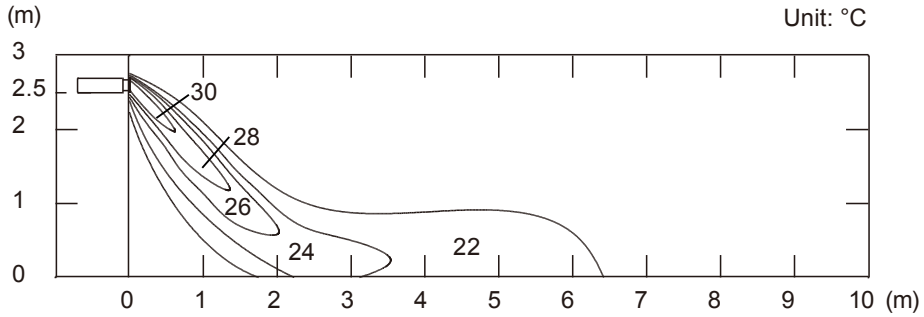
● Air velocity distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

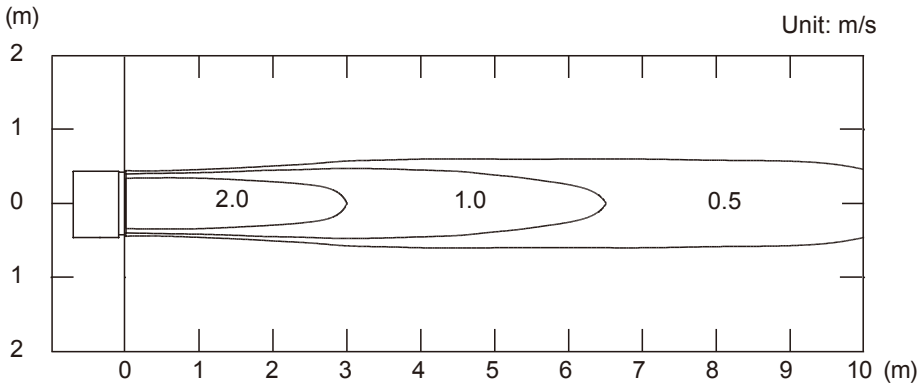
■ MODEL: ARXD18GALH (UTD-GXSB-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

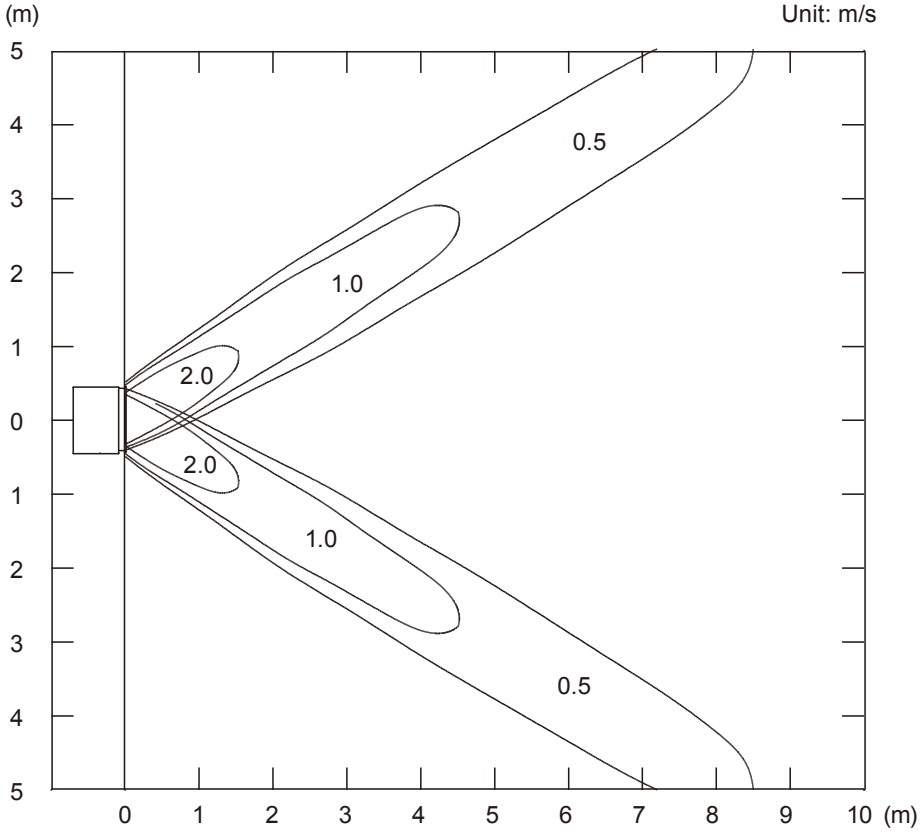
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

● Air velocity distribution

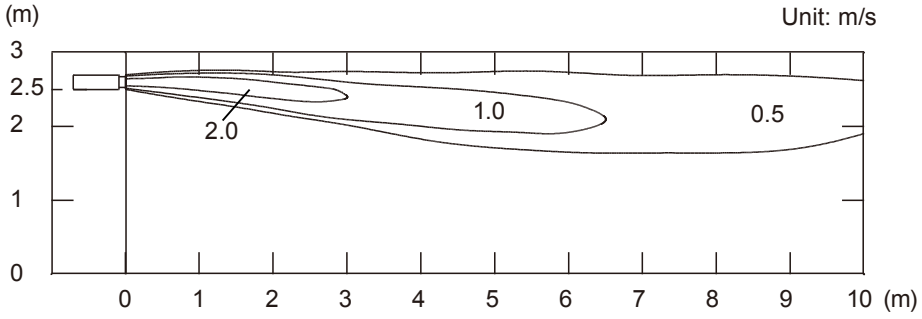
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



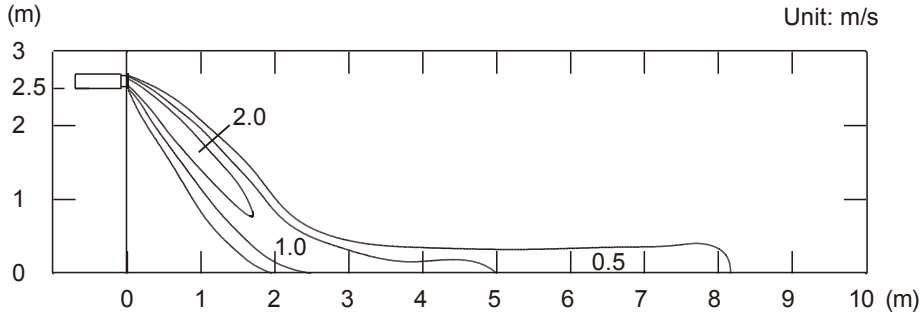
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

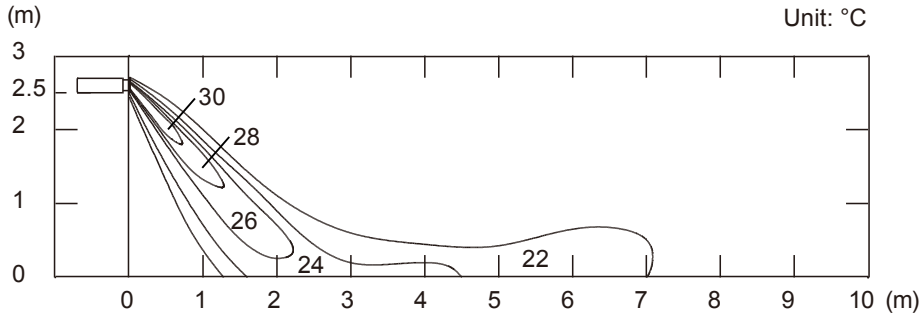
● Air velocity distribution

Side view
Vertical airflow direction louver : Down
Horizontal airflow direction louver : Center



● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

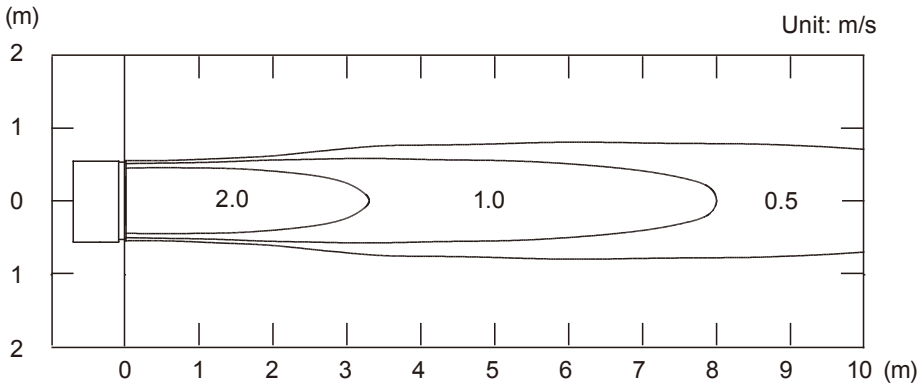
■ MODEL: ARXD24GALH (UTD-GXSC-W)

Note: This data is measured with Auto louver grille kit (Optional parts).

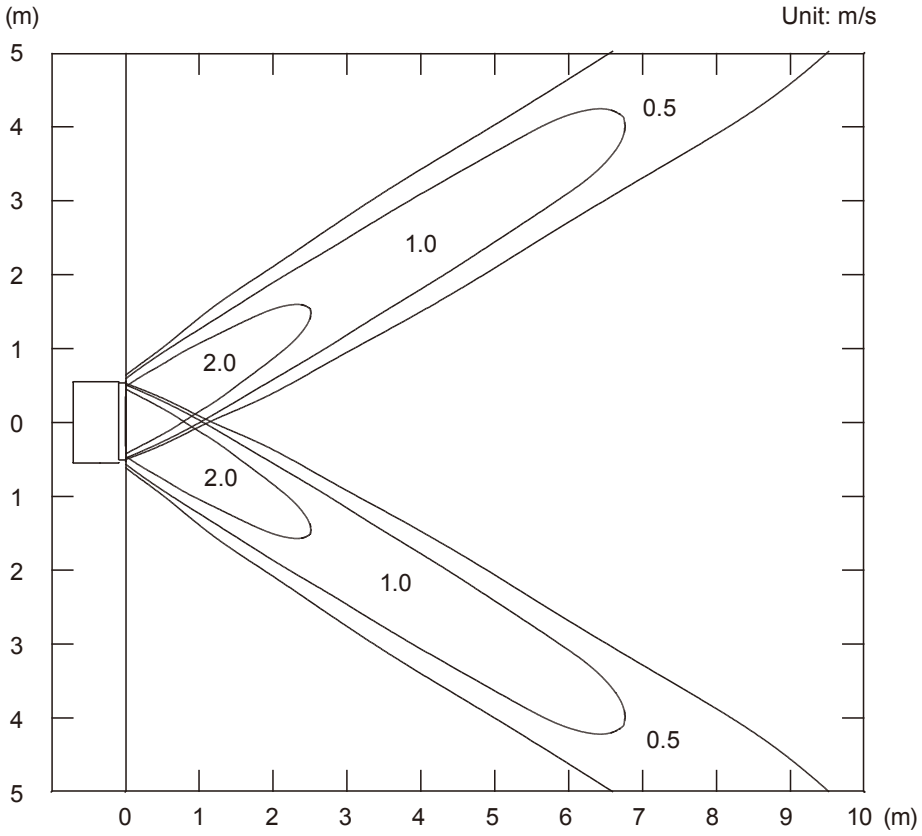
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

● Air velocity distribution

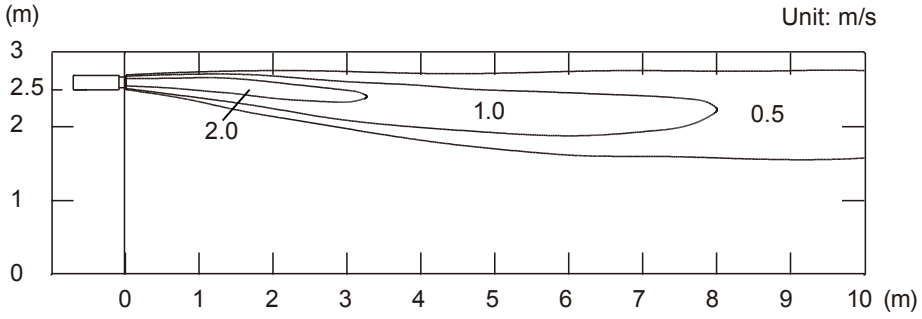
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



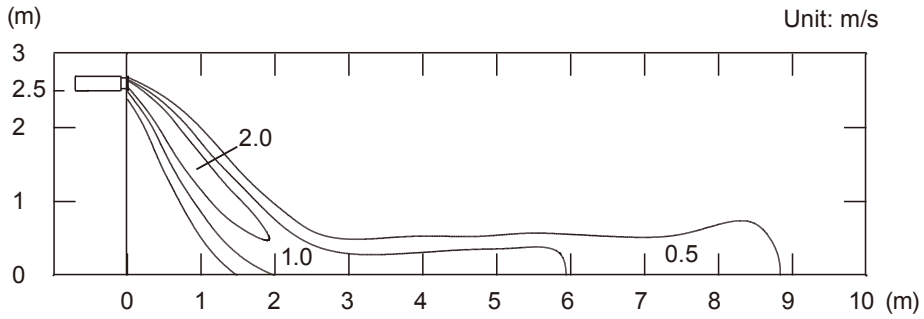
INDOOR UNITS

Note: This data is measured with Auto louver grille kit (Optional parts).

Conditions	
Fan speed	: High
Operation mode	: Heat
Voltage	: 230V
Reference Data	

● Air velocity distribution

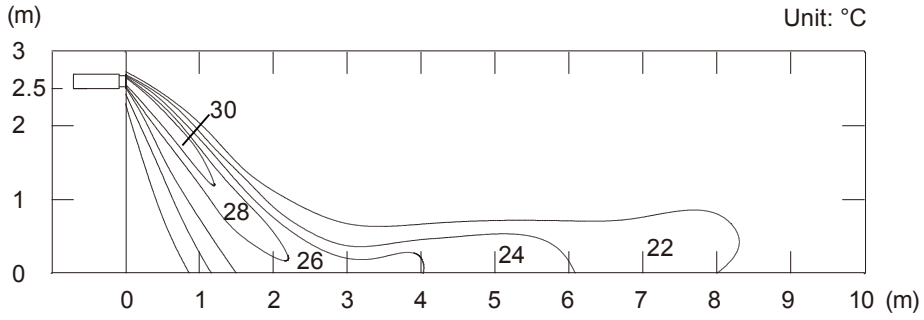
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

● Air temperature distribution

Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

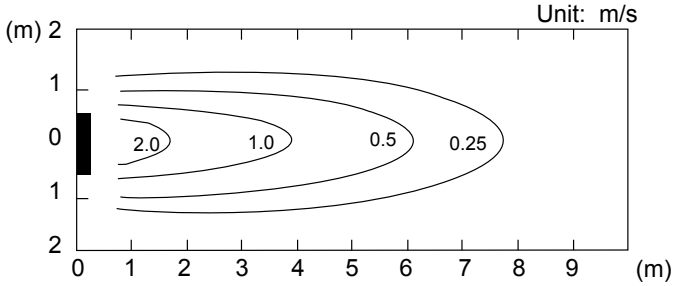


5-5. FLOOR / CEILING TYPE

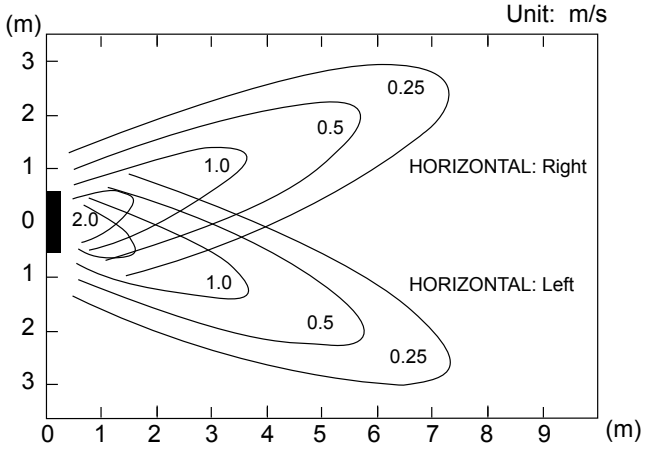
■ MODELS: AB∗A12GATH, AB∗A14GATH (FLOOR CONSOLE)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

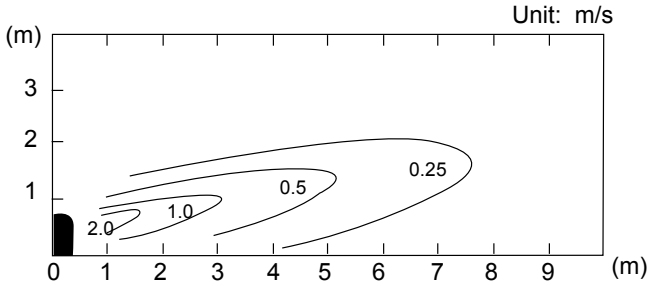
Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

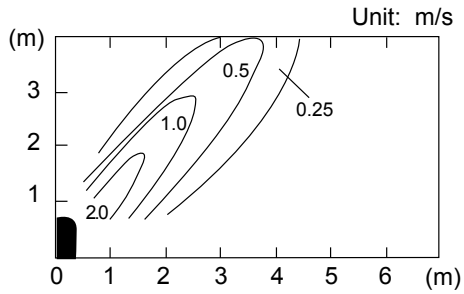


Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Right & Left

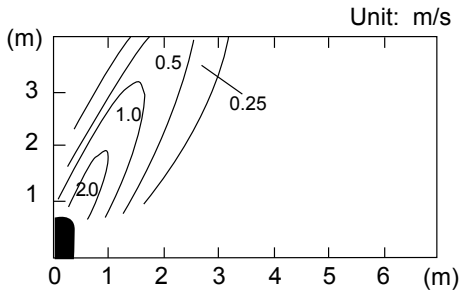


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver : Center

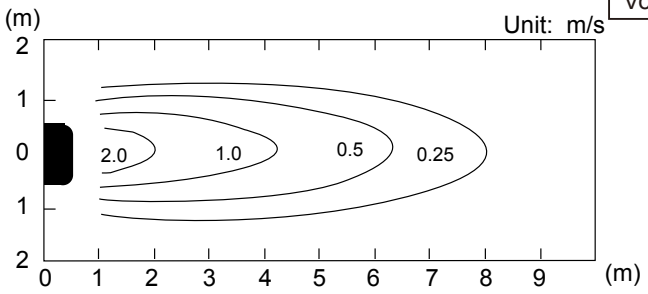


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

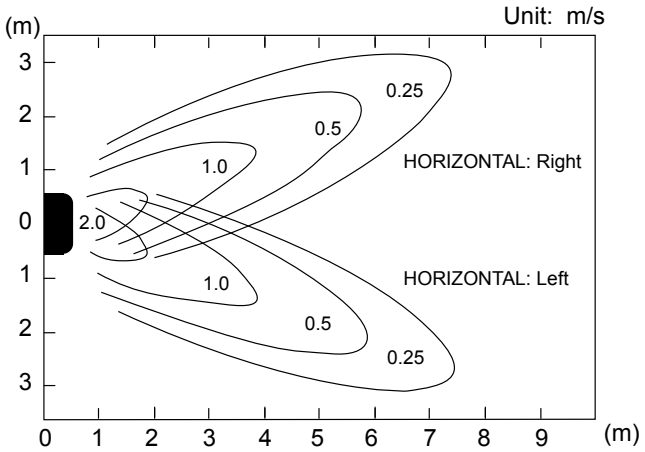
■ MODELS: AB∗A12GATH, AB∗A14GATH (UNDER CEILING)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

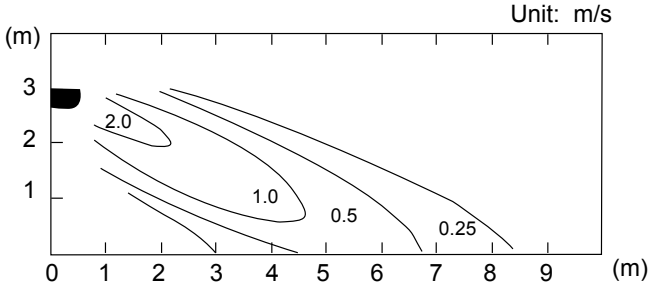
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

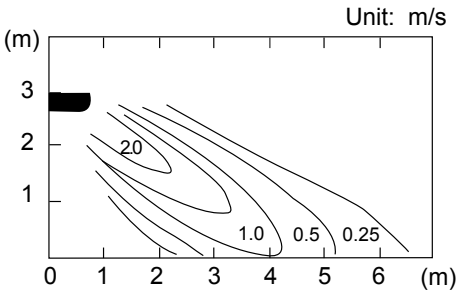


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

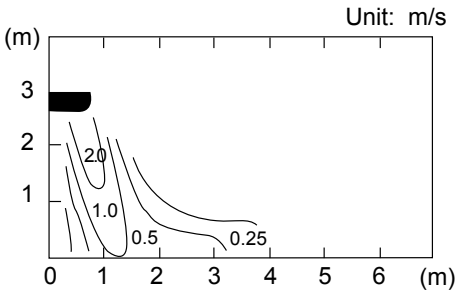


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

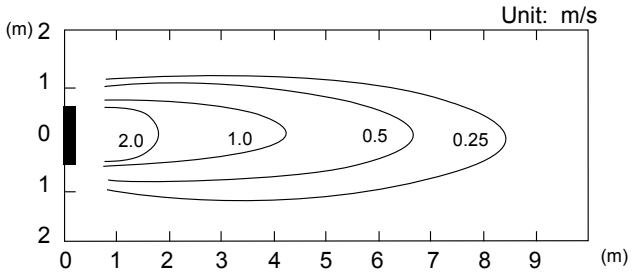


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

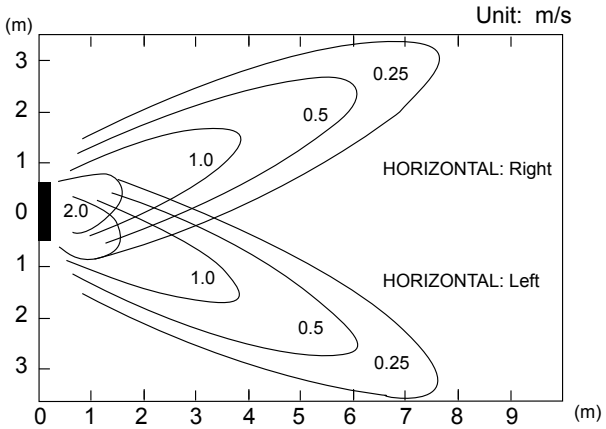
■ MODEL: AB∗A18GATH (FLOOR CONSOLE)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

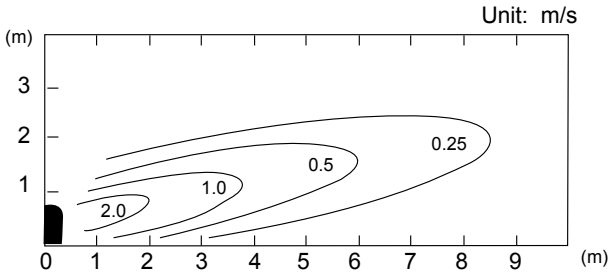
Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

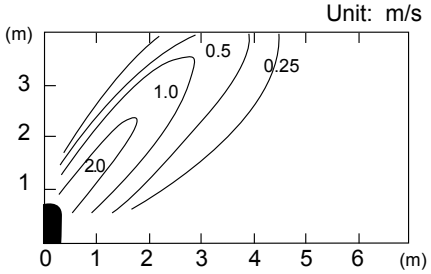


Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Right & Left

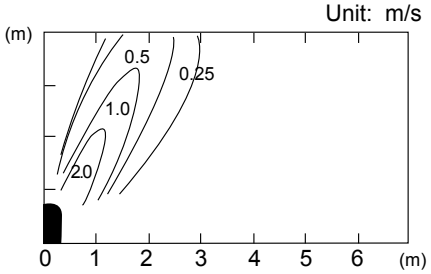


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center



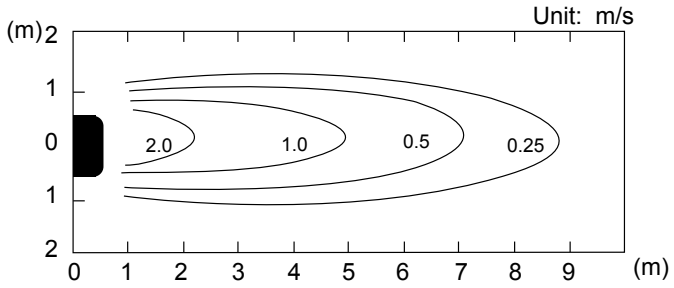
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

INDOOR UNITS

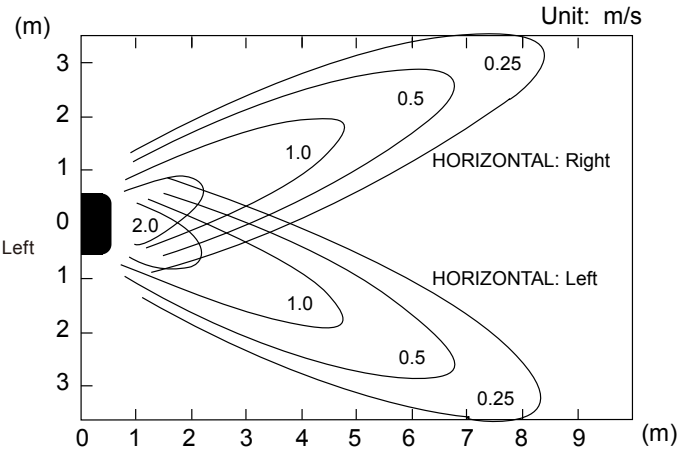
■ MODEL: AB∗A18GATH (UNDER CEILING)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

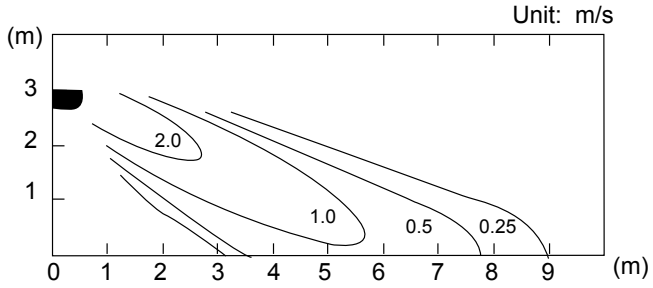
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

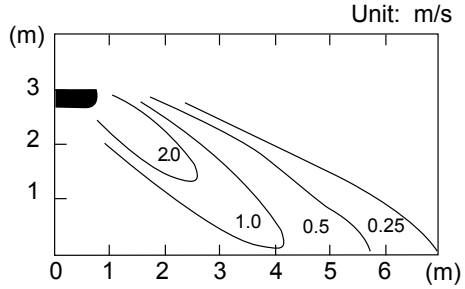


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

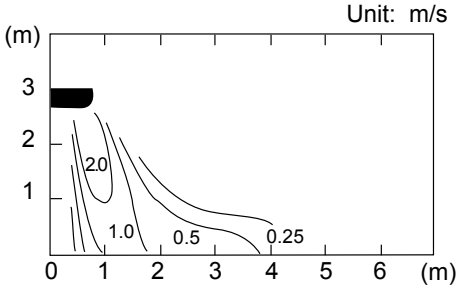


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center



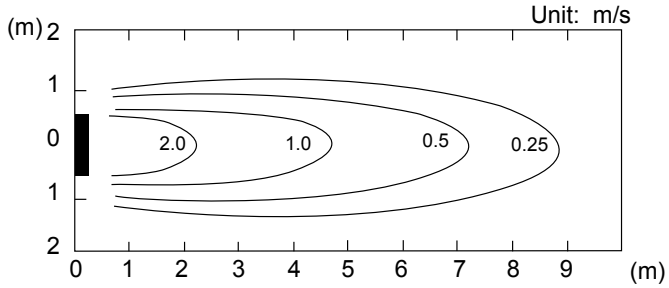
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

INDOOR UNITS

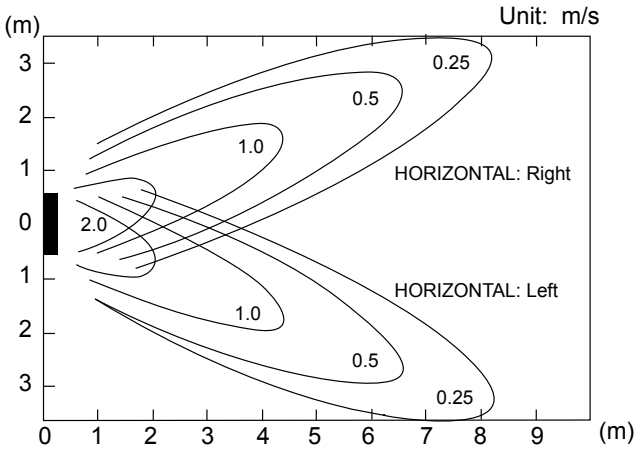
■ MODEL: AB∗A24GATH (FLOOR CONSOLE)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

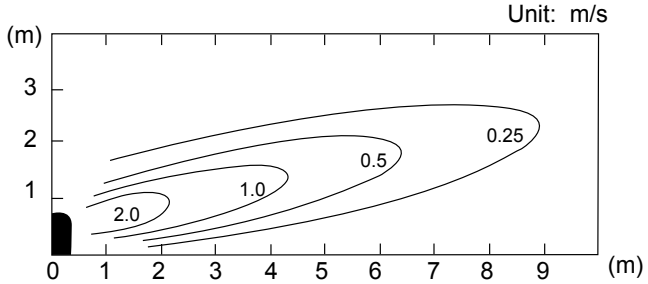
Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

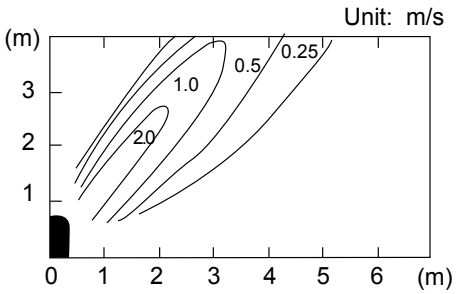


Top view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Right & Left

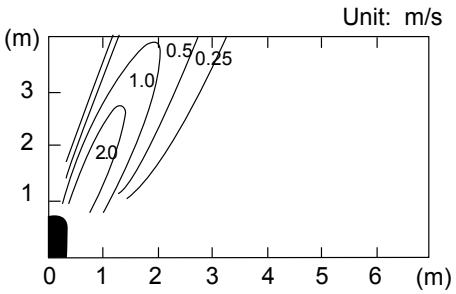


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center



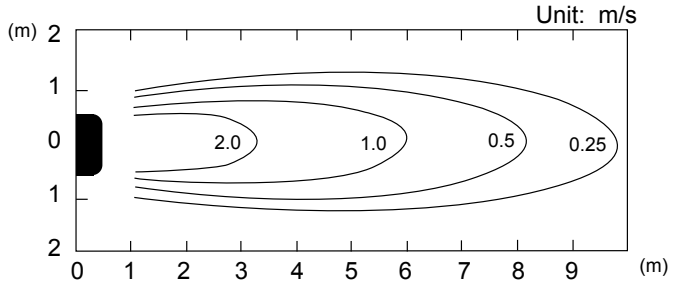
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

INDOOR UNITS

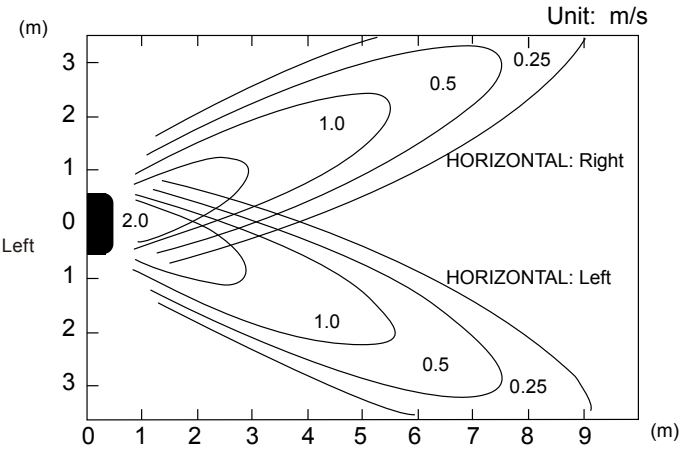
■ MODEL: AB∗A24GATH (UNDER CEILING)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

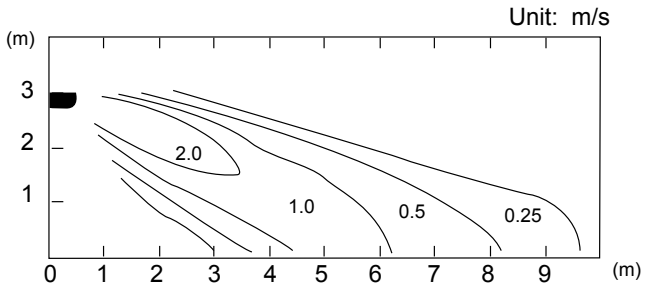
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

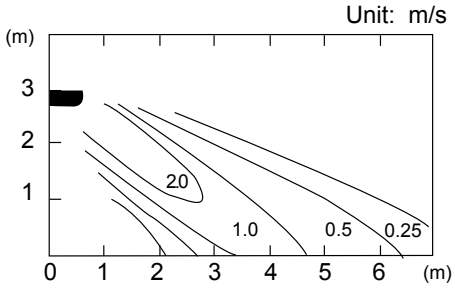


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

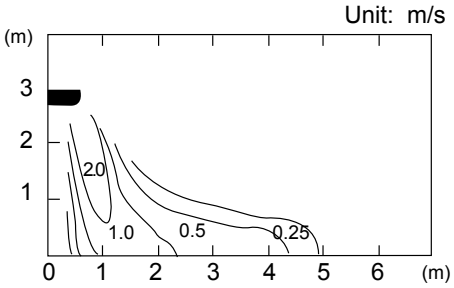


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

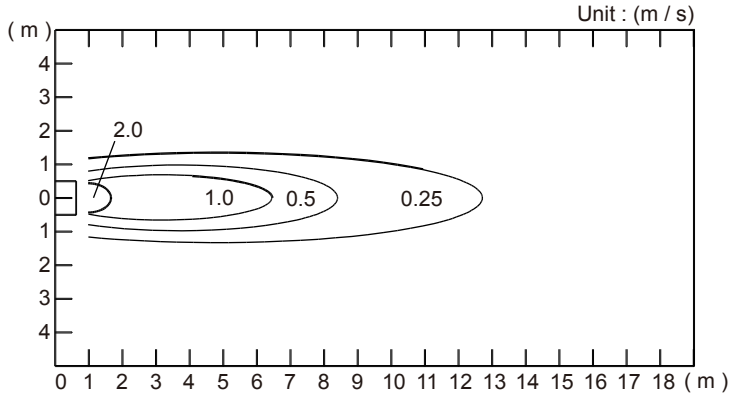
INDOOR UNITS

5-6. CEILING TYPE

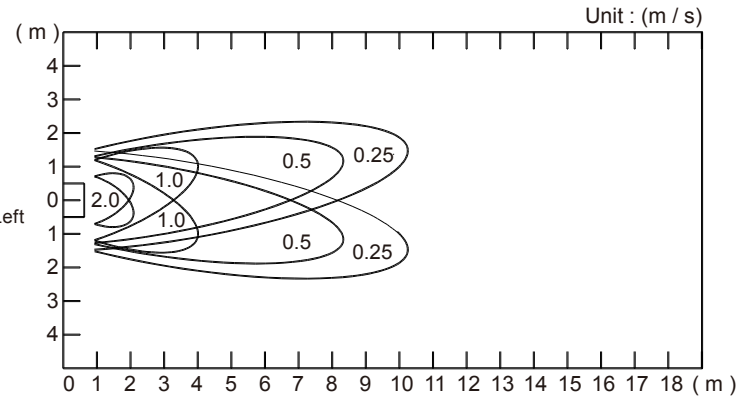
■ MODEL: AB∗A30GATH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

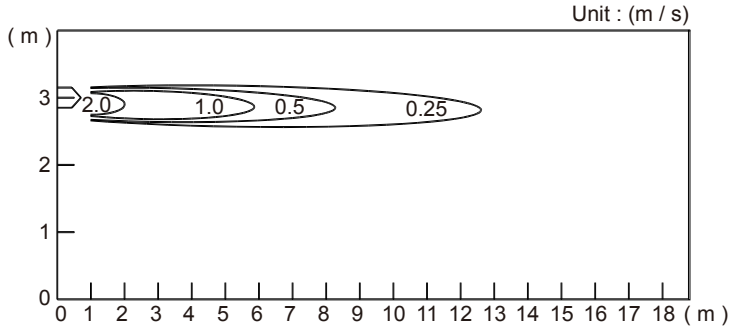
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

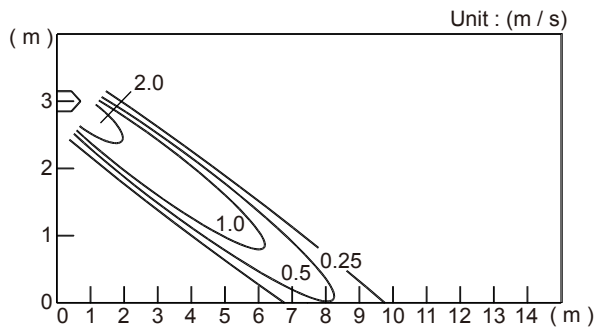


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

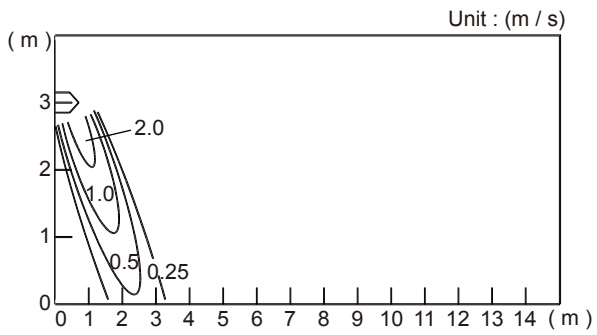


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

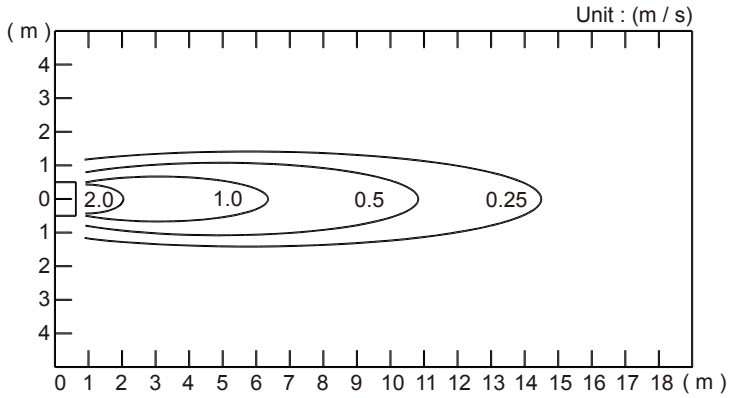


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

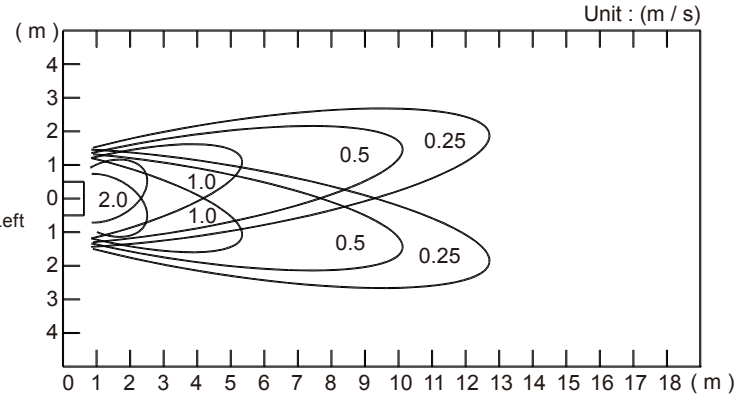
■ MODEL: AB∗A36GATH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

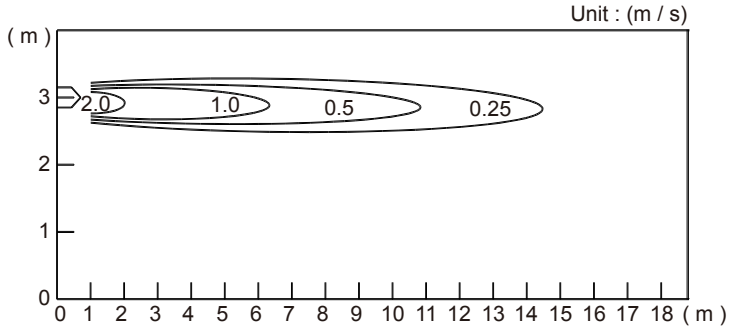
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

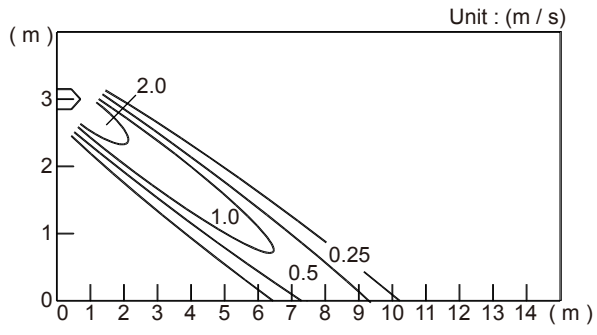


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

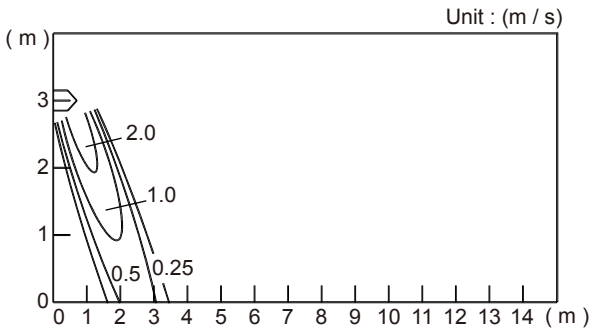


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

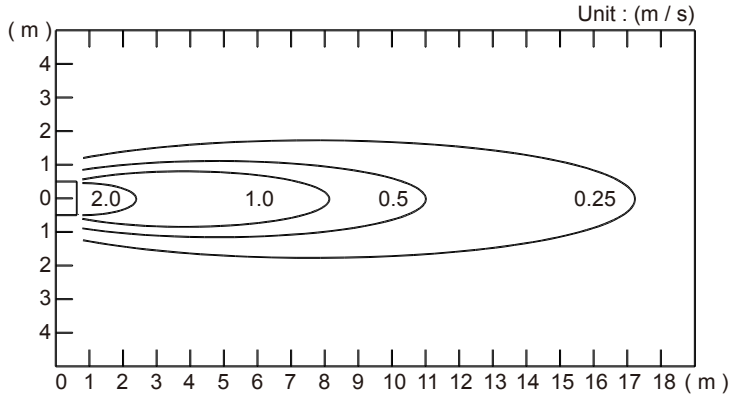


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

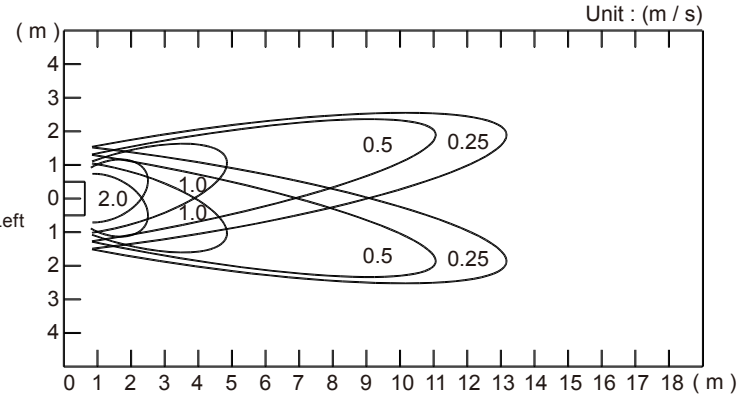
■ MODEL: AB∗A45GATH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

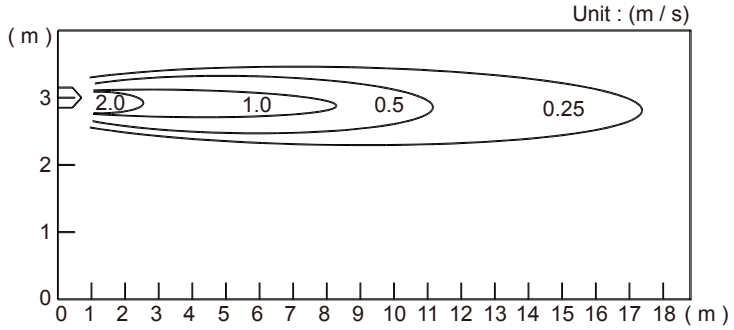
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

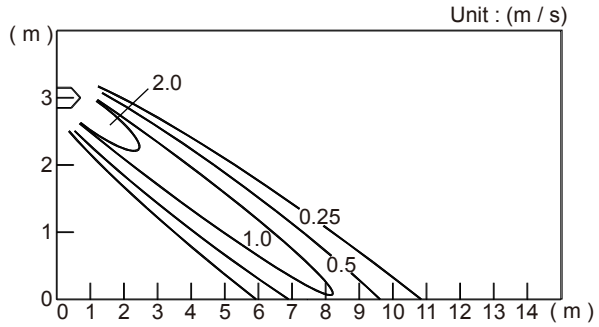


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

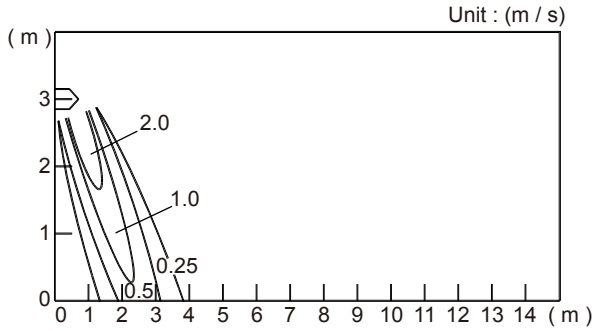


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

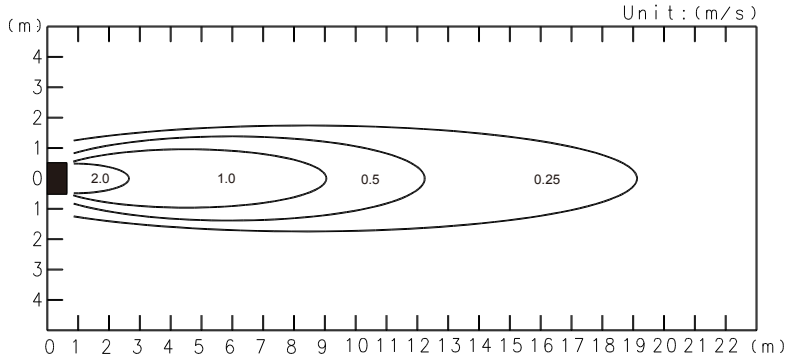


Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

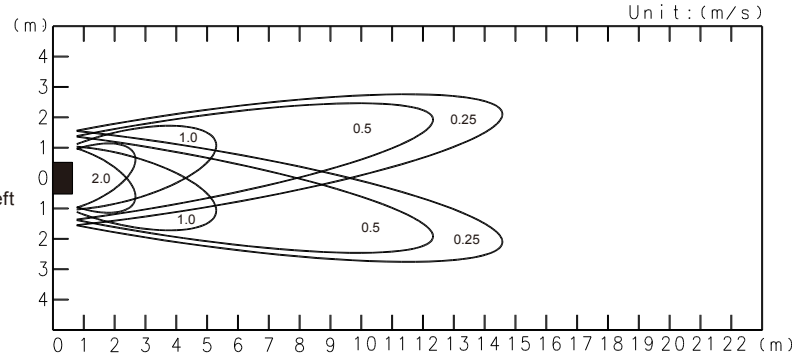
■ MODEL: AB∗A54GATH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

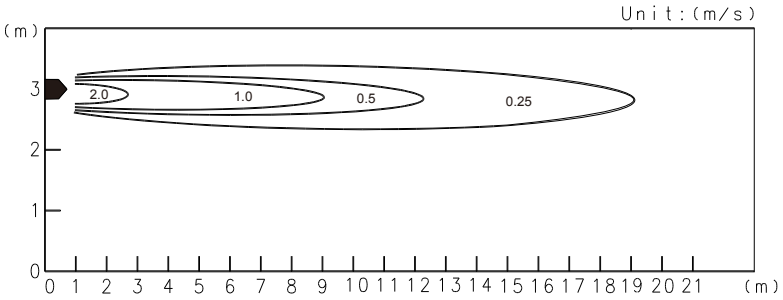
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

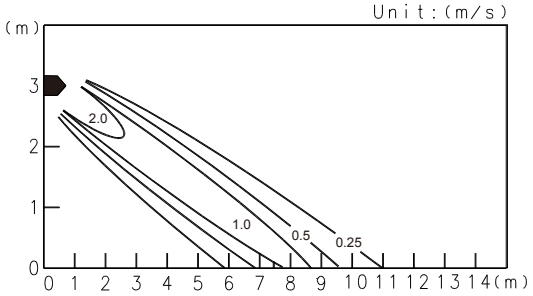


Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left

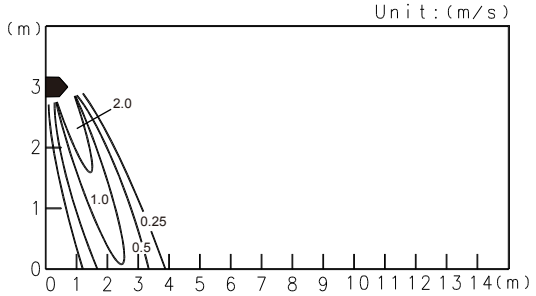


Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center





Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

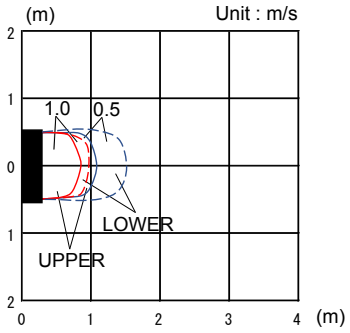
INDOOR UNITS

5-7. COMPACT FLOOR TYPE

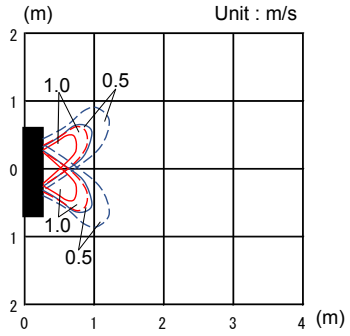
■ MODELS: AG∗A004GCAH
AG∗E004GCAH (EEV external model)

Conditions:
Fan speed : HI
Operation mode : FAN
Fan select : UPPER&LOWER
———— : UPPER FAN
- - - - - - : LOWER FAN

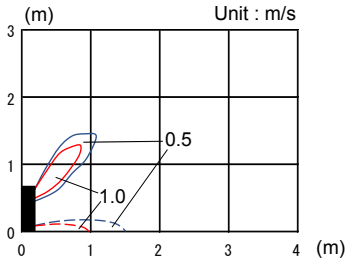
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



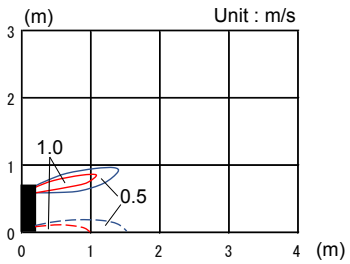
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

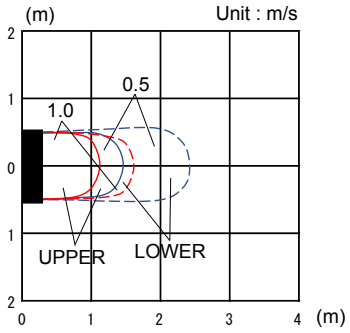


INDOOR UNITS

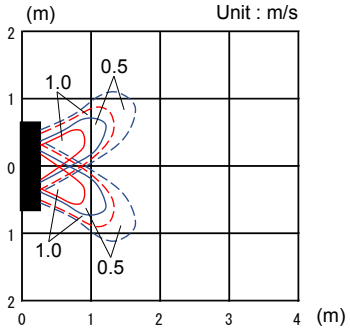
■ MODELS: AG∗A007GCAH, AG∗A009GCAH
AG∗E007GCAH, AG∗E009GCAH (EEV external model)

Conditions:
Fan speed : HI
Operation mode : FAN
Fan select : UPPER&LOWER
———— : UPPER FAN
- - - - - - : LOWER FAN

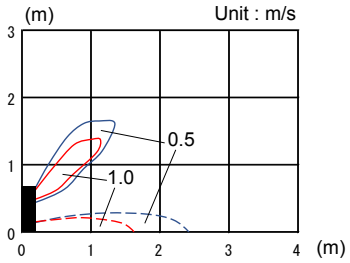
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



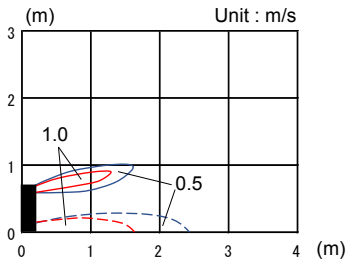
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

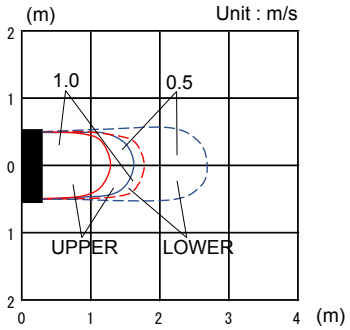


INDOOR UNITS

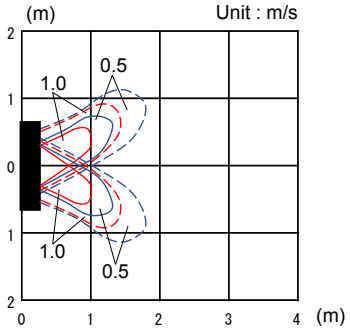
■ MODELS: AG∗A012GCAH
AG∗E012GCAH (EEV external model)

Conditions:
Fan speed : HI
Operation mode : FAN
Fan select : UPPER&LOWER
———— : UPPER FAN
- - - - - - : LOWER FAN

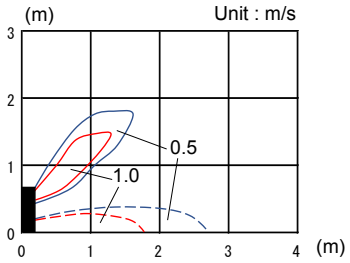
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



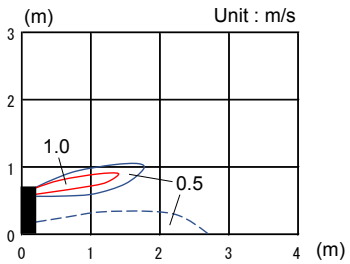
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

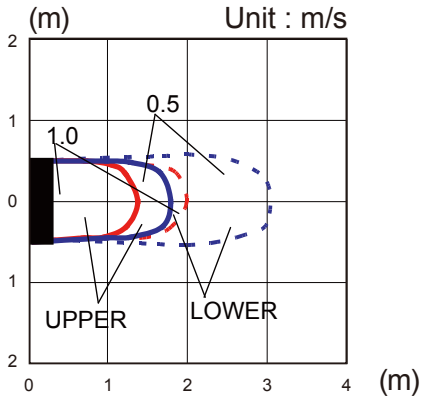


INDOOR UNITS

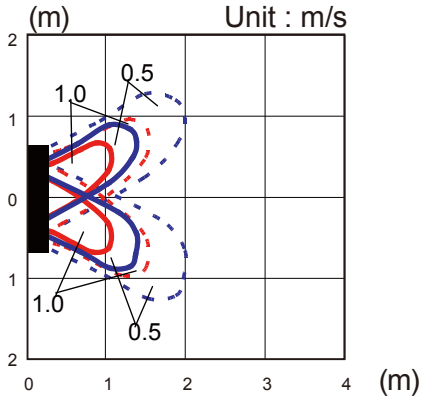
■ MODELS: AG∗A014GCAH
AG∗E014GCAH (EEV external model)

Conditions:
- Fan speed : HI
- Operation mode : FAN
- Fan select : UPPER&LOWER
- ———— : UPPER FAN
- - - - - - : LOWER FAN

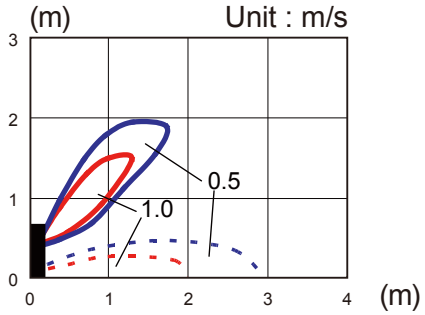
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



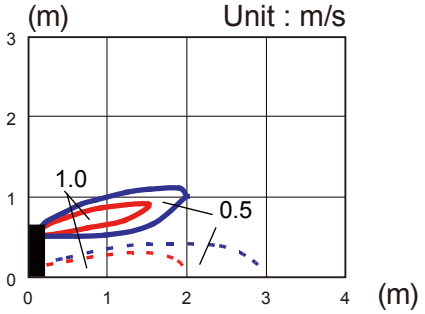
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Center
Horizontal airflow direction louver: Center

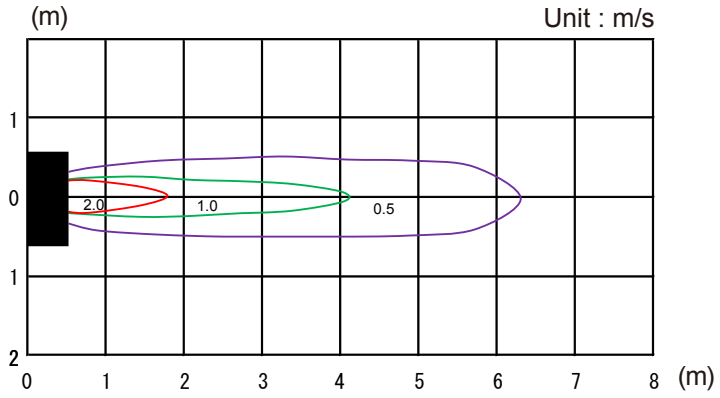


5-8. WALL MOUNTED TYPE

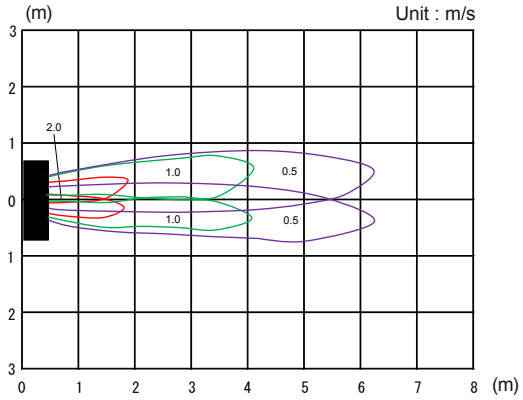
■ MODELS: AS∗A004GTAH
AS∗E004GTAH (EEV external model)

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

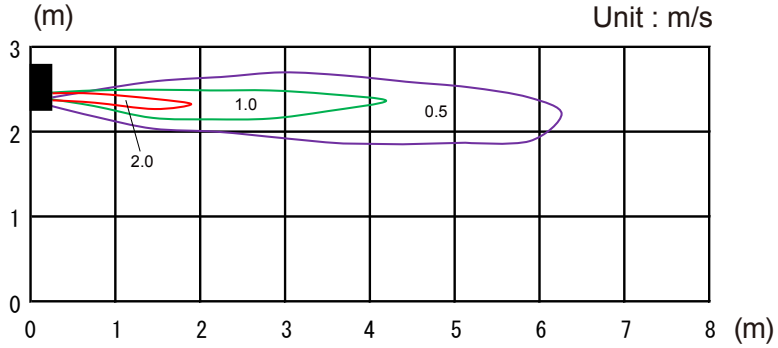
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



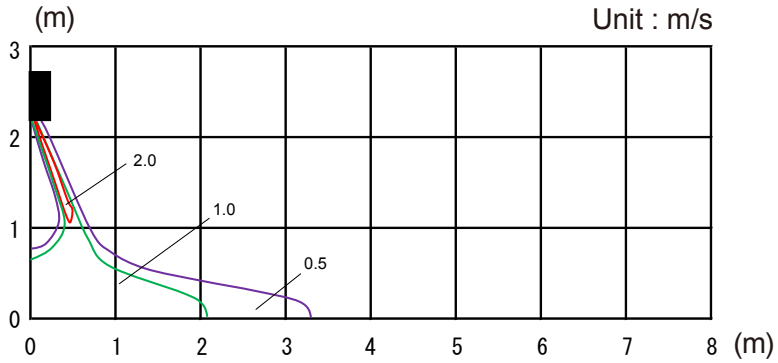
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

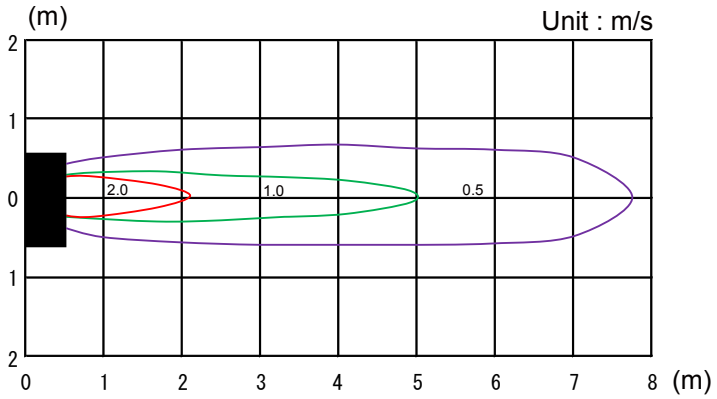


■ MODELS: AS∗A007GTAH
AS∗E007GTAH (EEV external model)

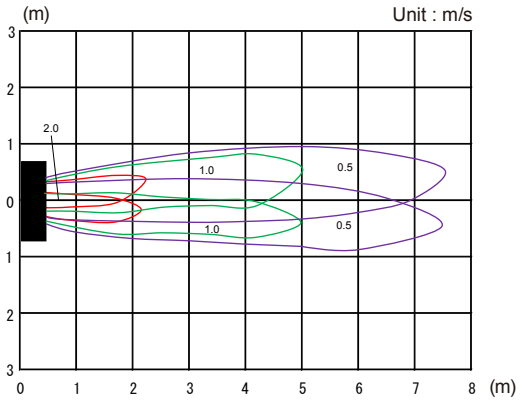
Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

INDOOR UNITS

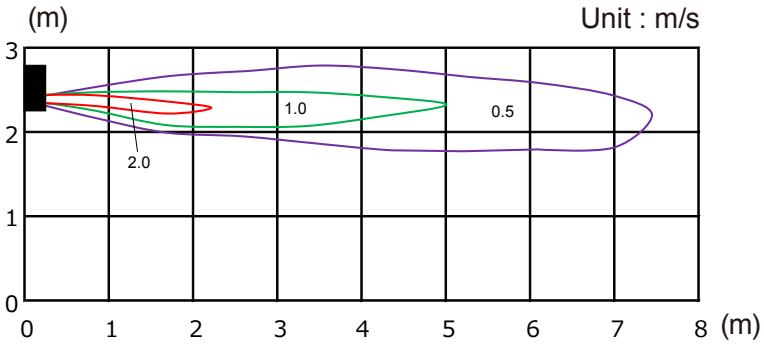
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



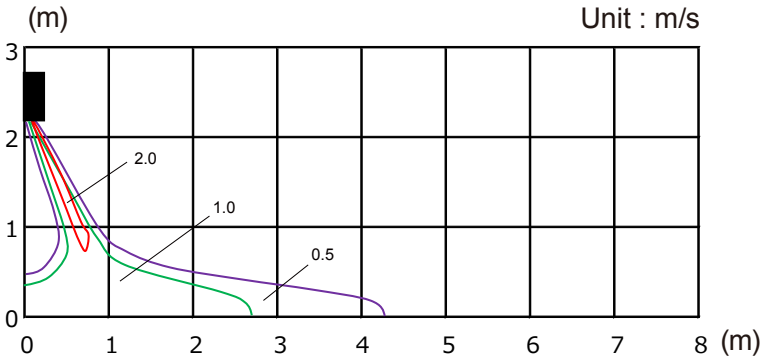
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



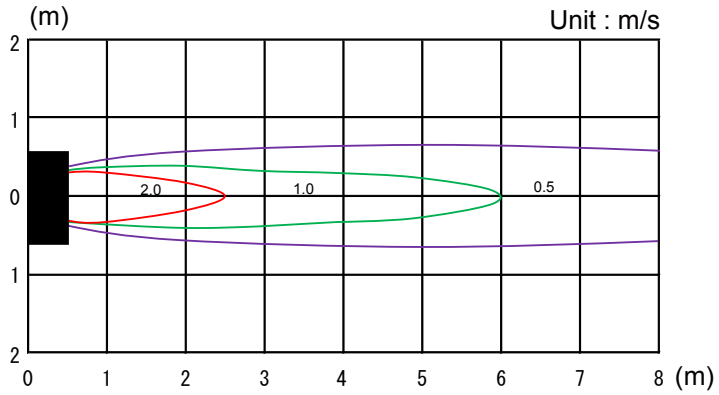
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



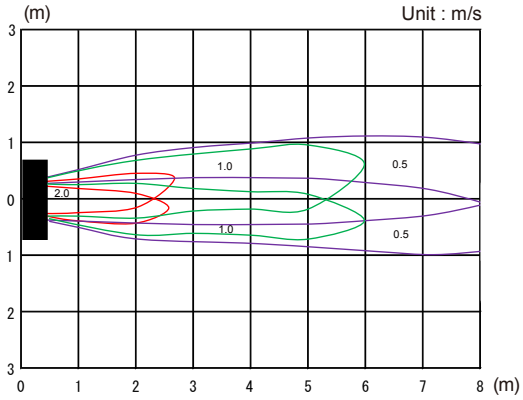
■ MODELS: AS∗A009GTAH
AS∗E009GTAH (EEV external model)

Conditions	
Fan speed	: High
Operation mode	: Fan
Voltage	: 230V

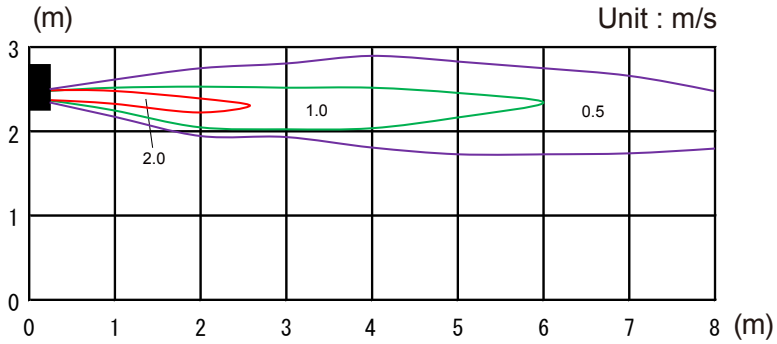
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



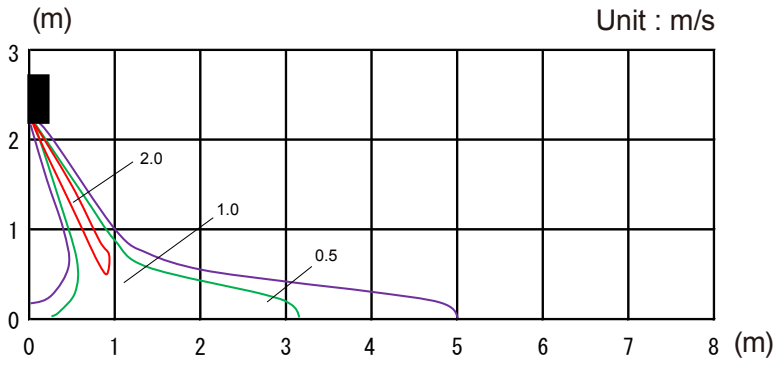
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



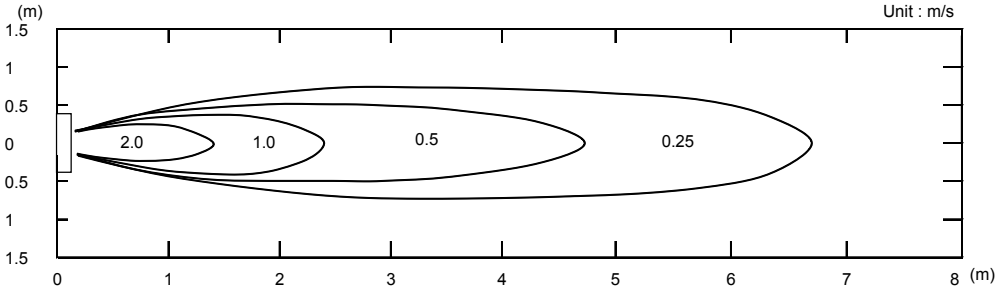
INDOOR UNITS

5-9. WALL MOUNTED TYPE

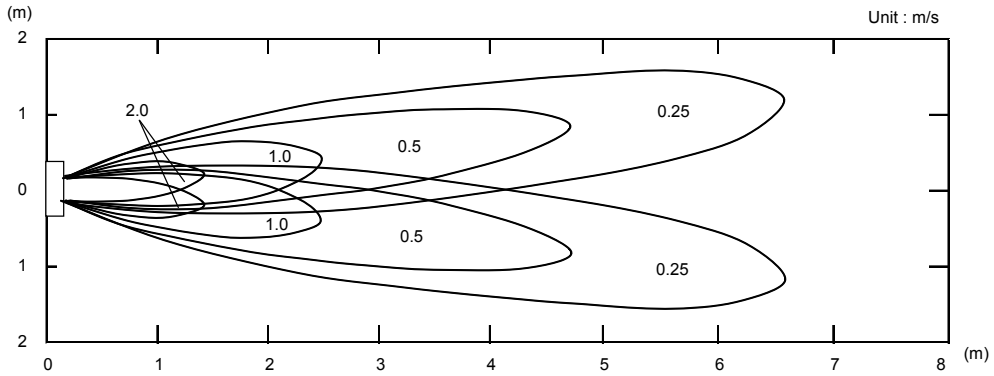
■ MODEL: AS∗A04GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

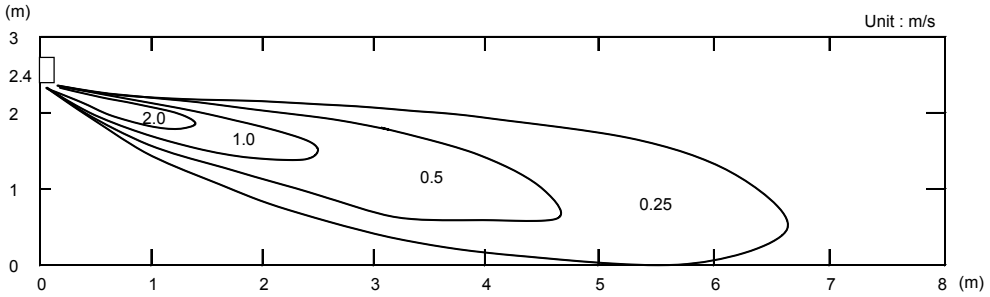
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



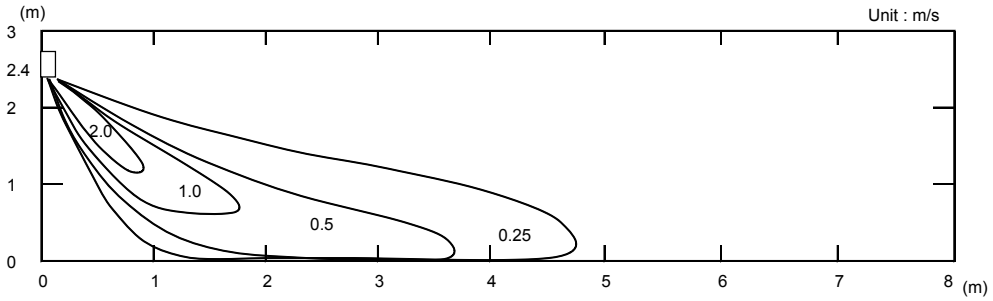
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

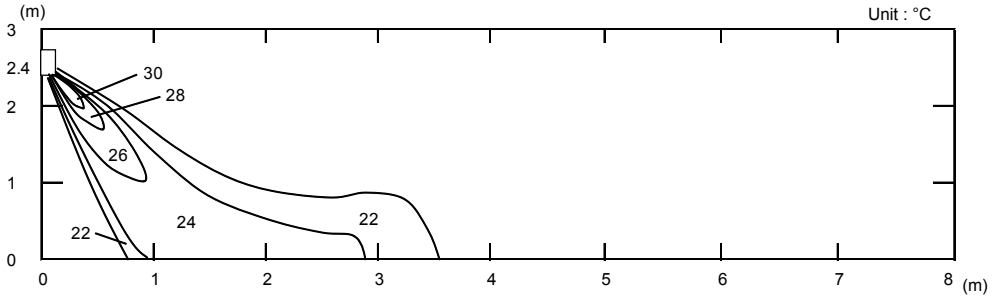
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

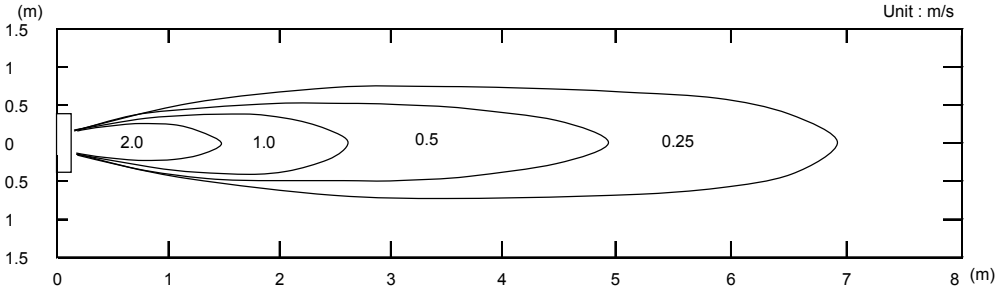
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



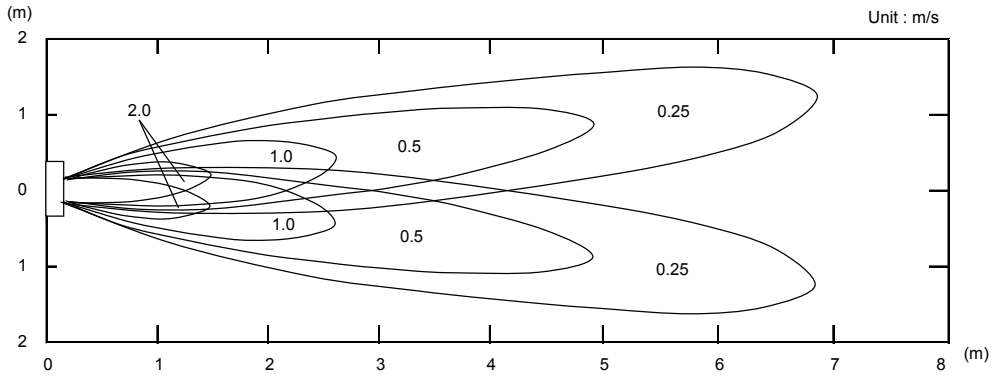
■ MODELS: AS∗A07GACH, AS∗A09GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

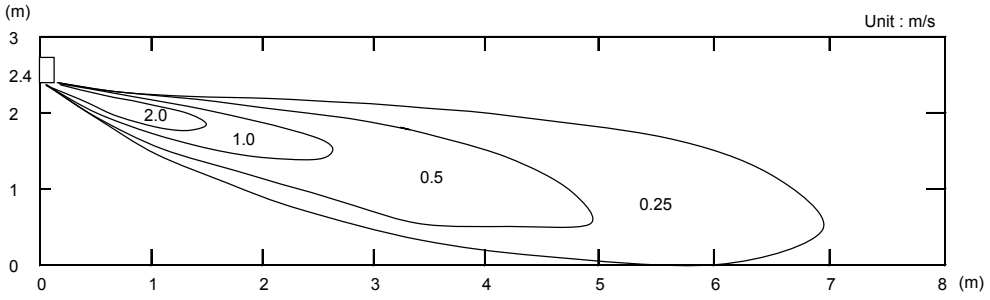
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



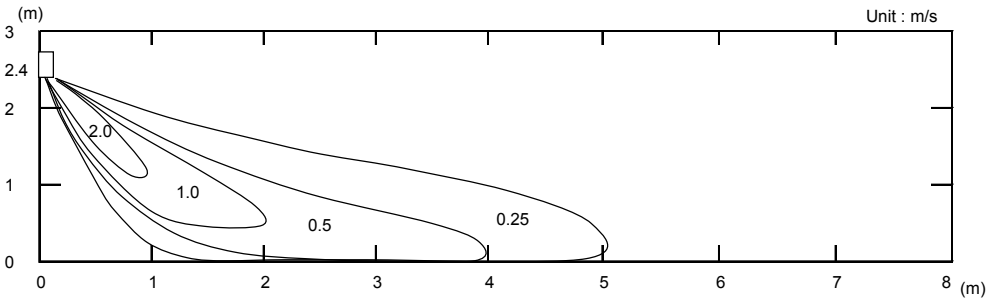
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

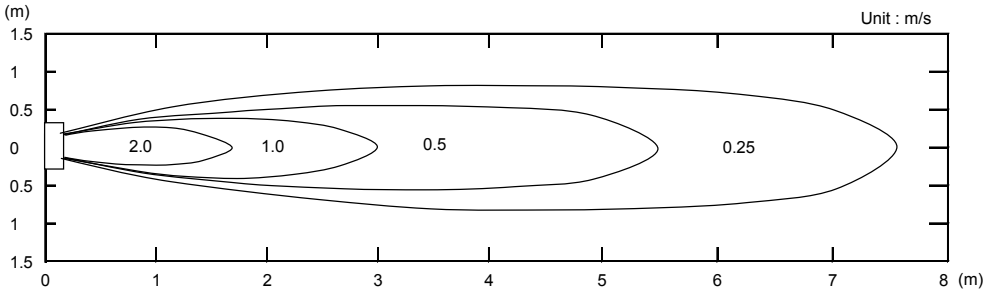


INDOOR UNITS

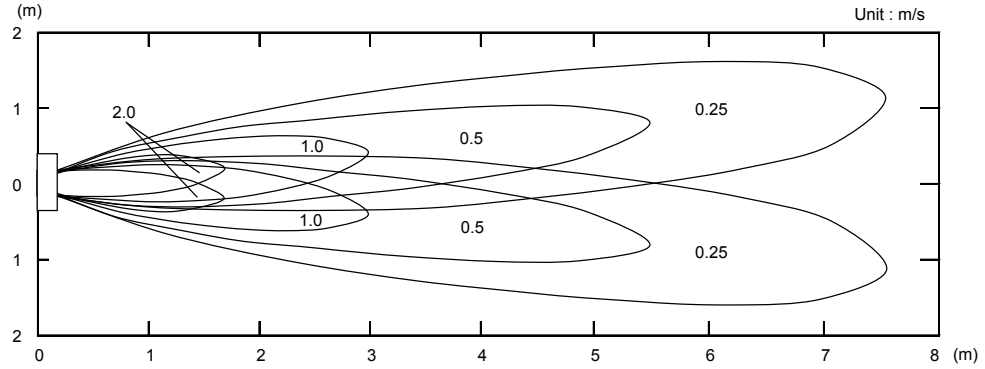
■ MODEL: AS∗A12GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

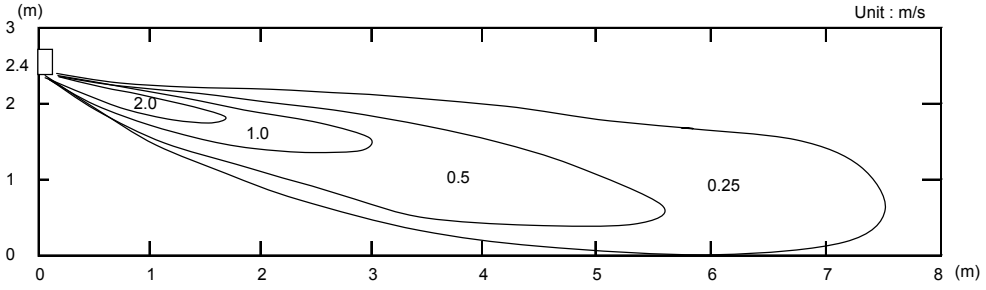
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



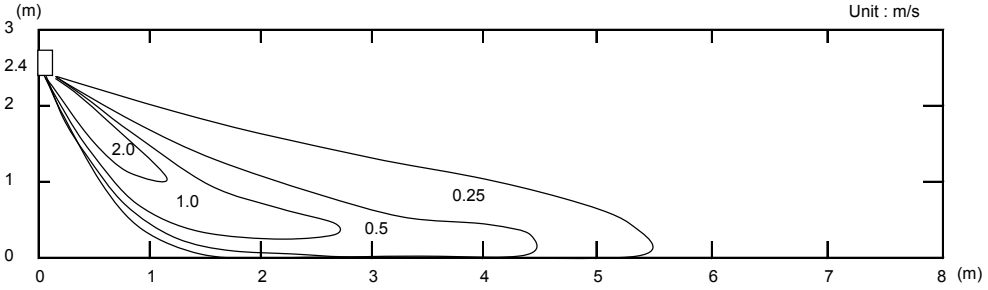
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



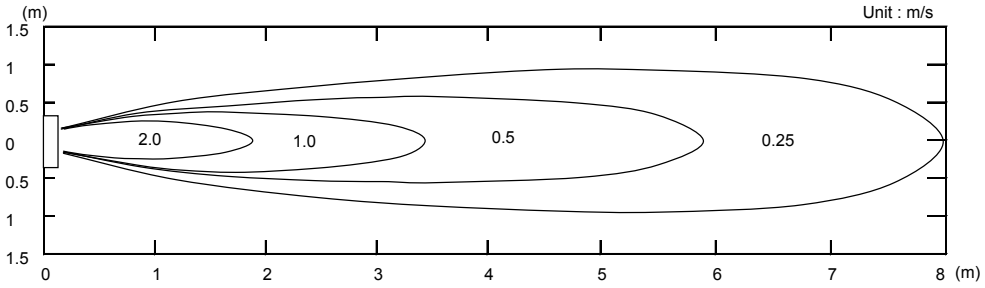
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



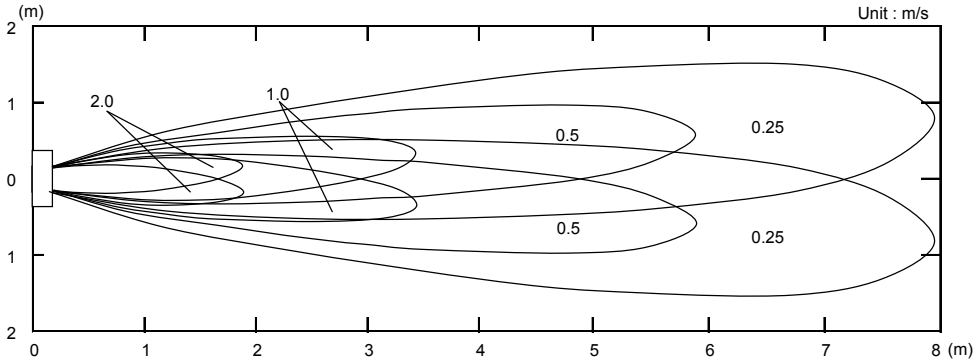
■ MODEL: AS∗A14GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

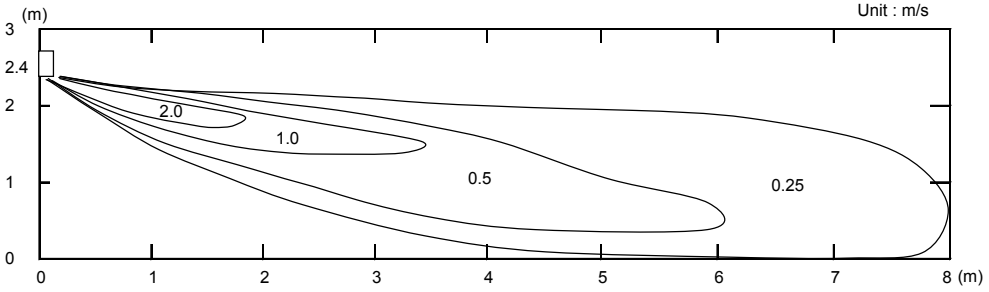
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



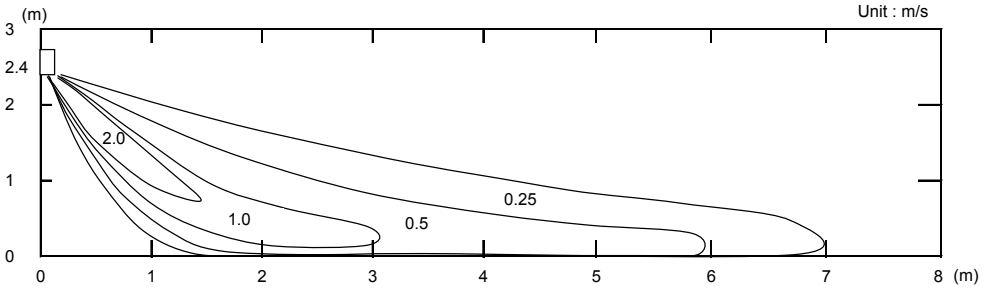
Top view
Vertical airflow direction louver : Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



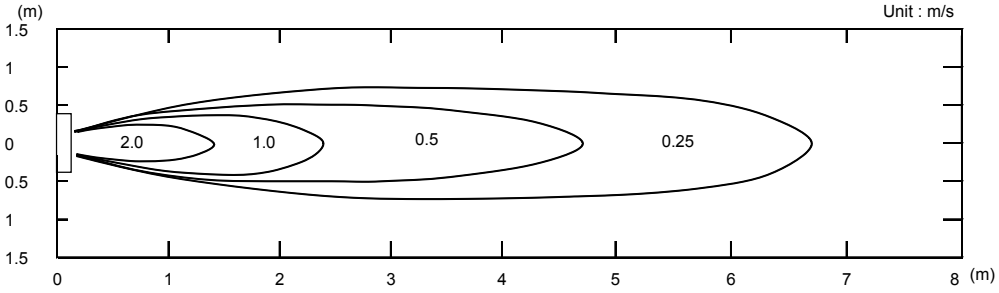
INDOOR UNITS

5-10. WALL MOUNTED TYPE (EEV external model)

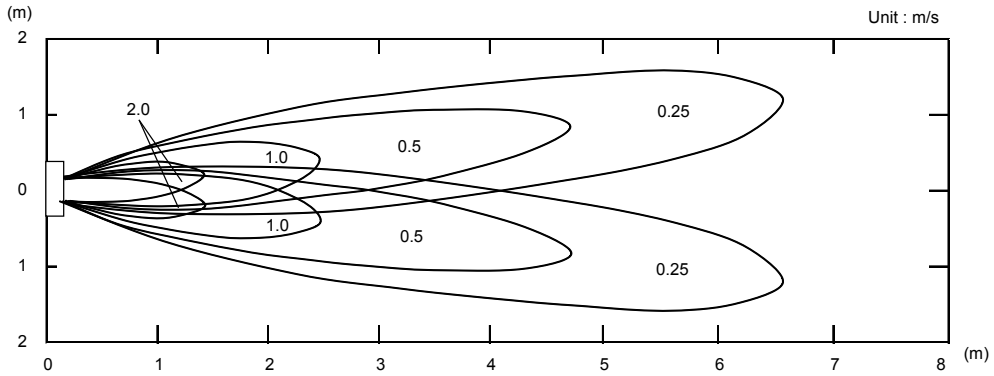
■ MODEL: AS∗E04GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

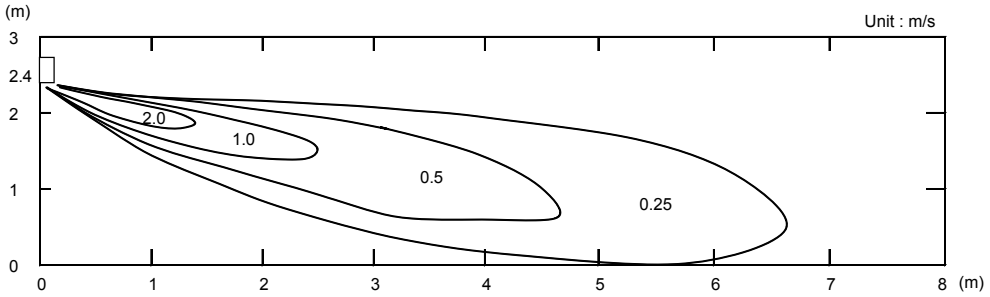
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



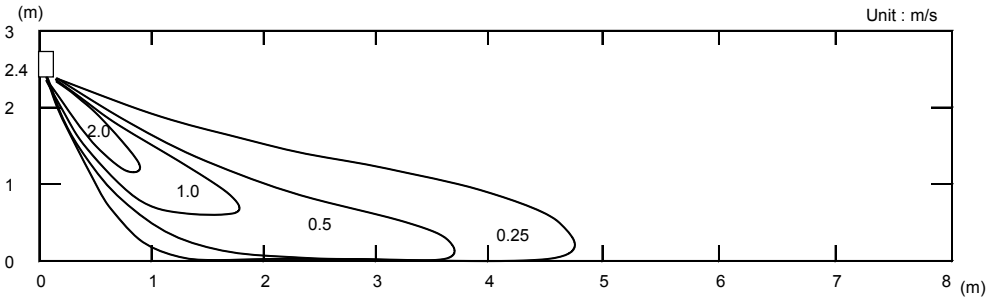
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

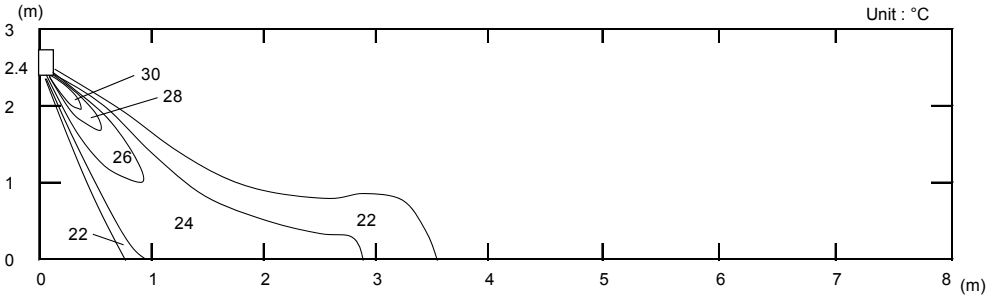
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



INDOOR UNITS

Conditions
Fan speed : High
Operation mode : Heat
Voltage : 230V
Reference Data

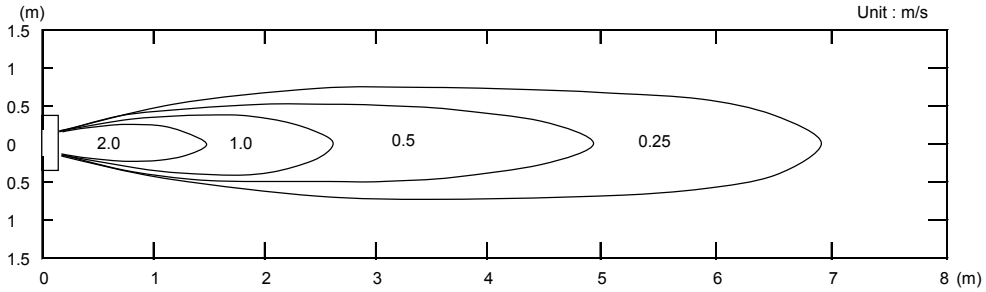
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



■ MODELS: AS∗E07GACH, AS∗E09GACH

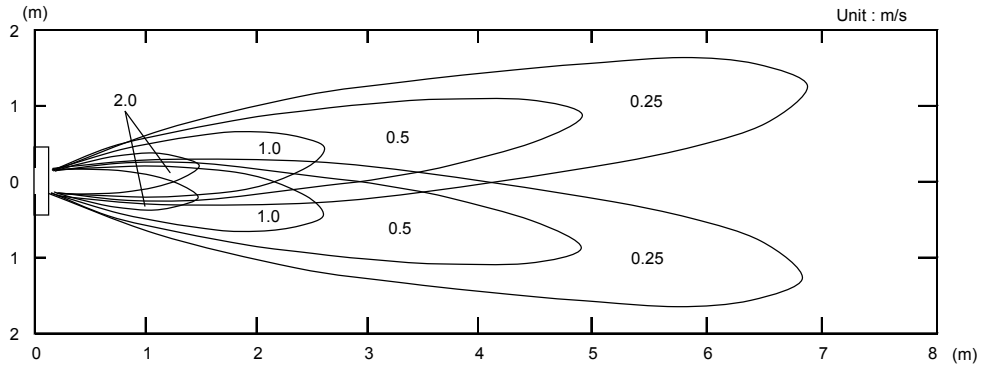
Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center

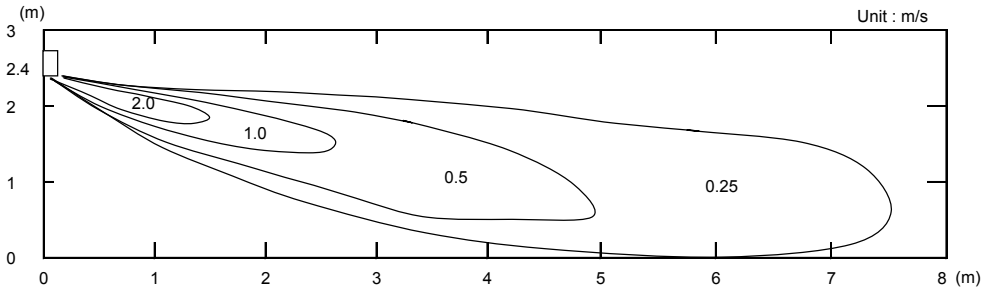


INDOOR UNITS

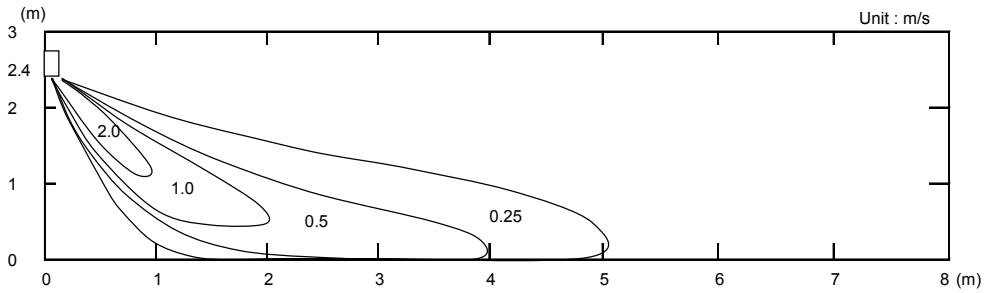
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



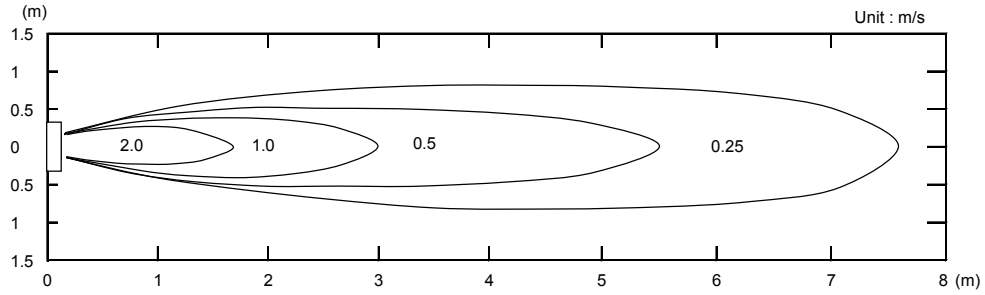
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



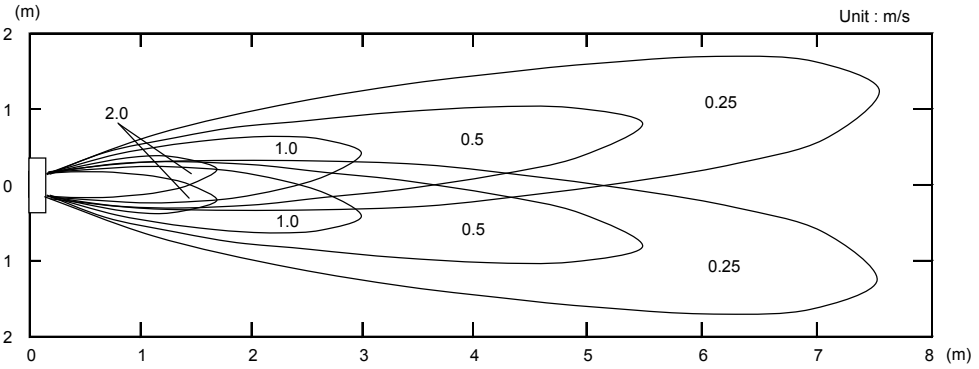
■ MODEL: AS∗E12GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

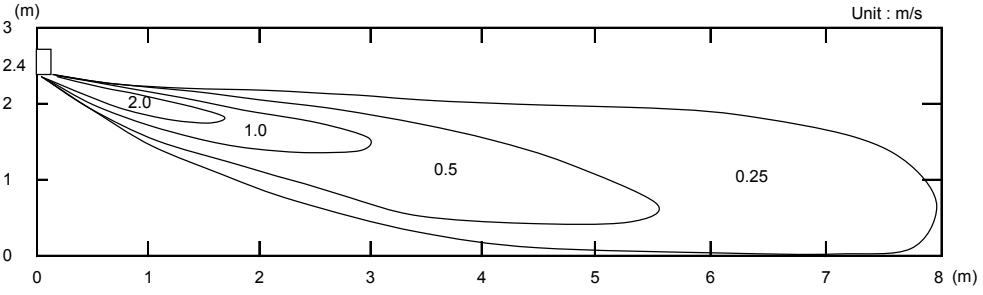
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



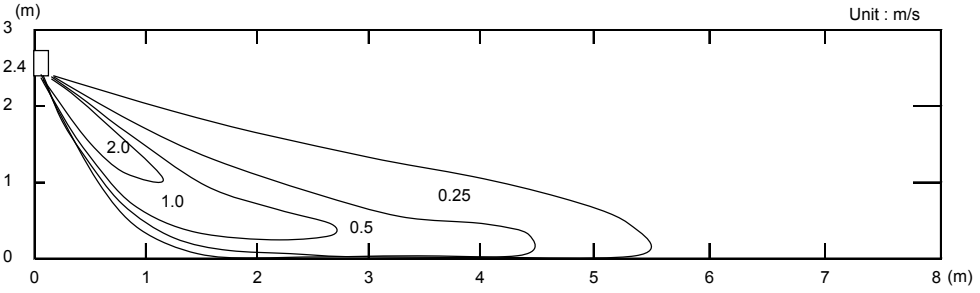
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

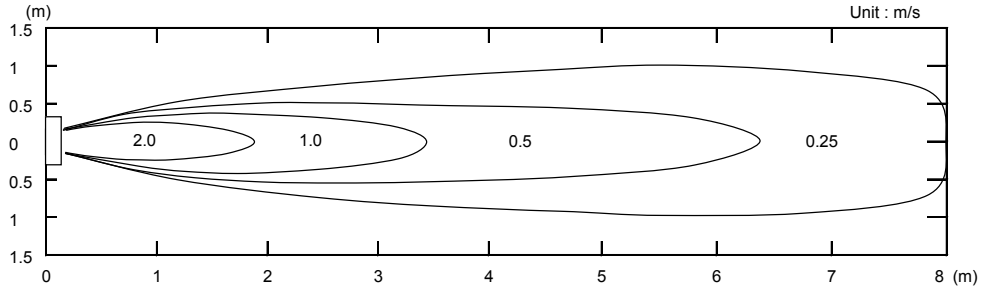


INDOOR UNITS

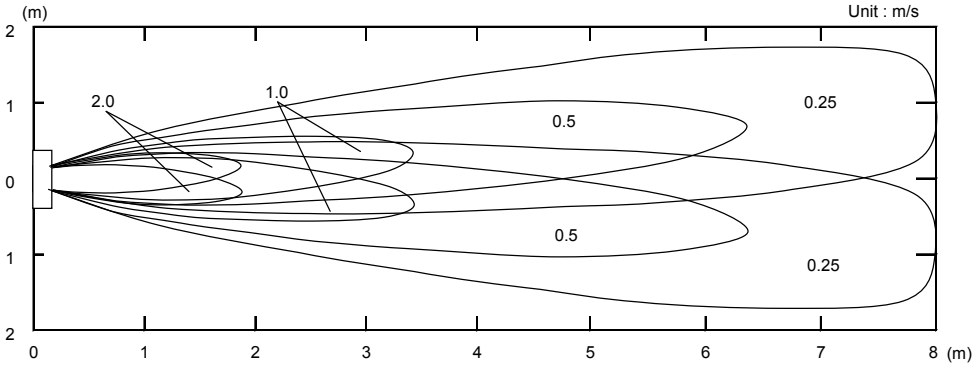
■ MODEL: AS∗E14GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

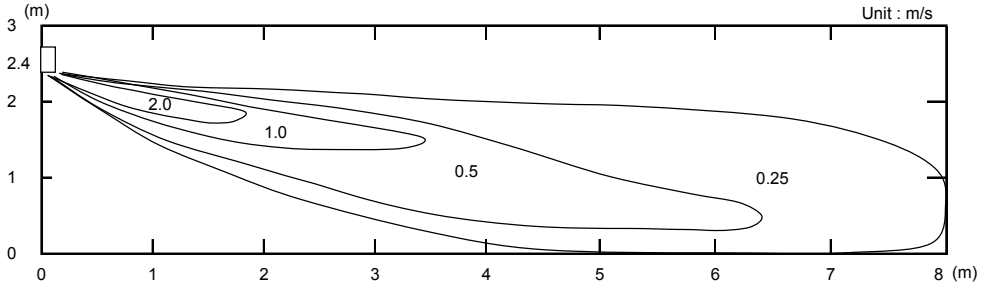
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



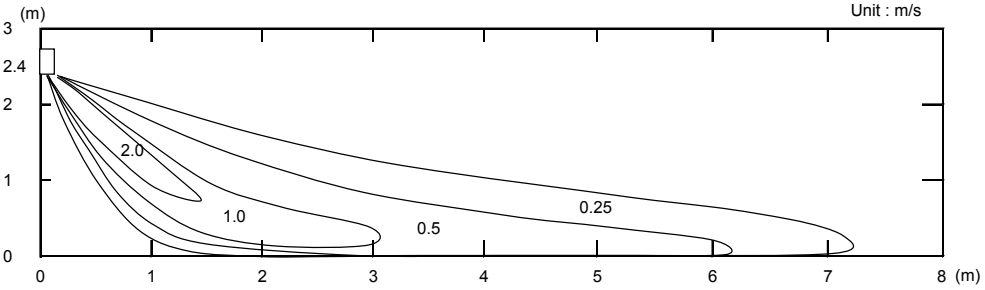
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



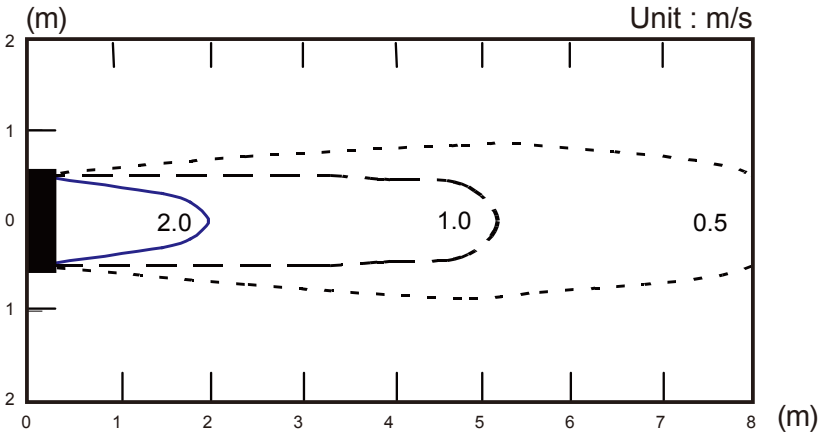
INDOOR UNITS

5-11. WALL MOUNTED TYPE

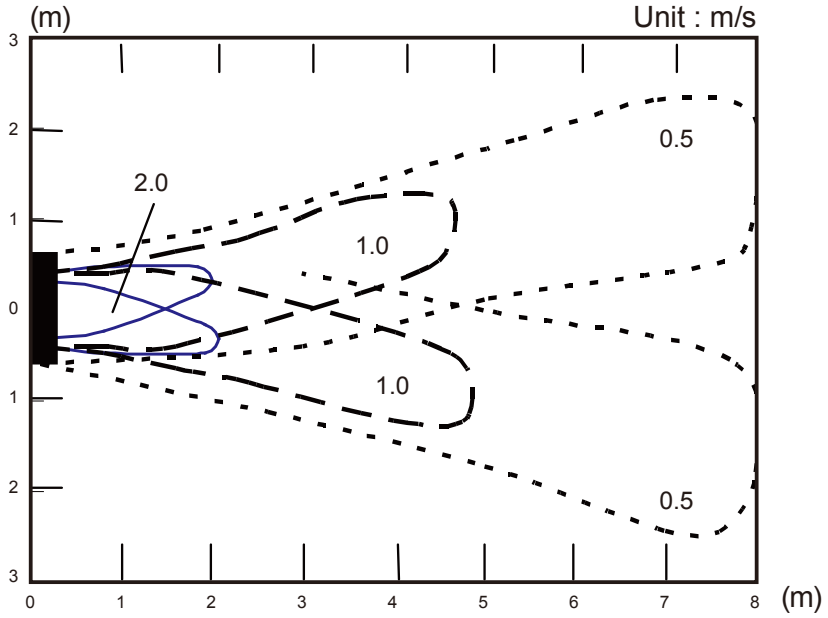
■ MODEL: AS∗A18GBCH, AS∗A18GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

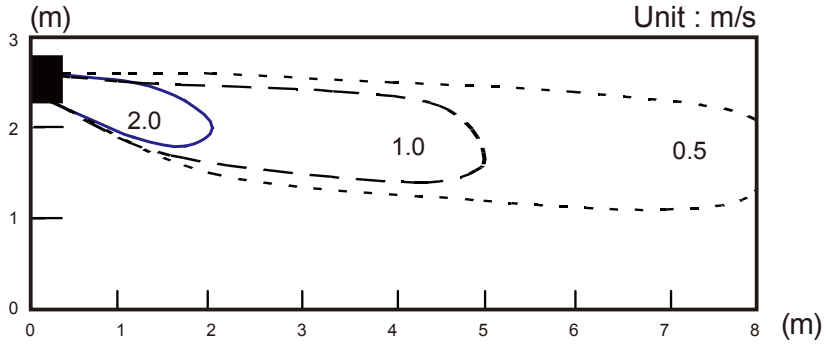
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



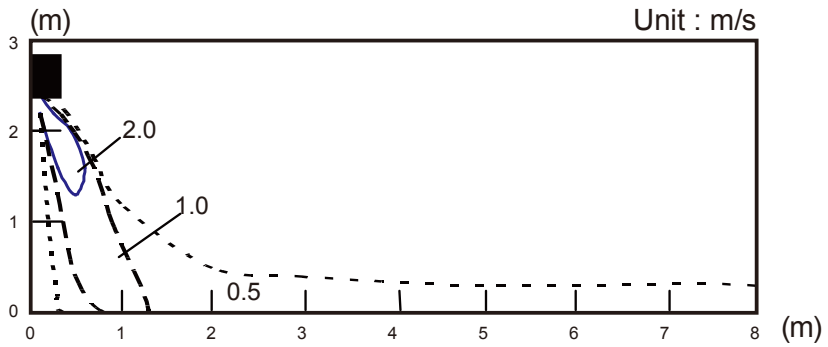
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



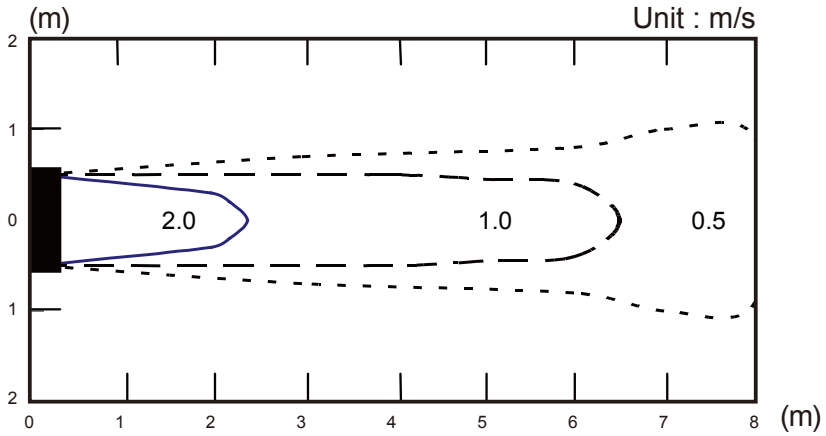
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



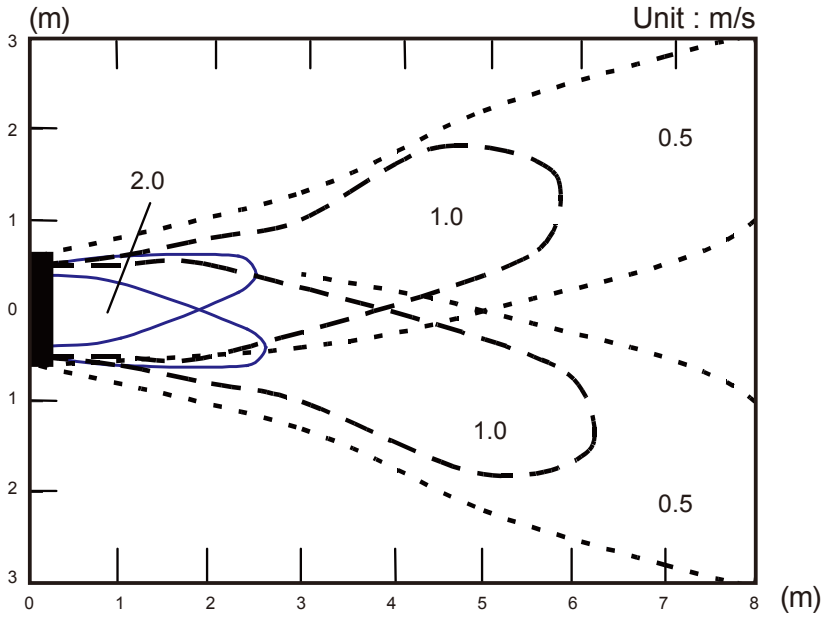
■ MODEL: AS∗A24GBCH, AS∗A24GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

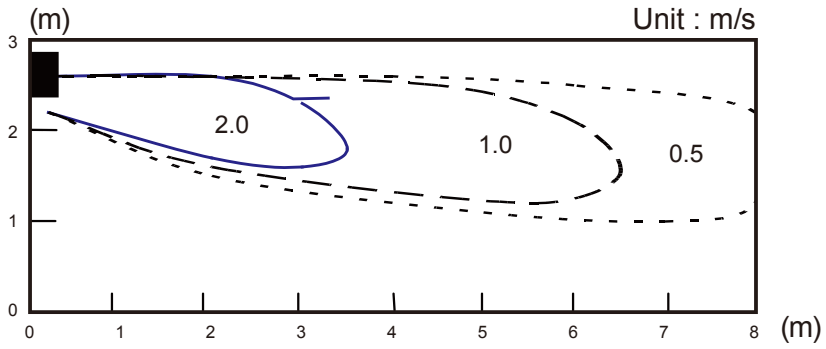
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



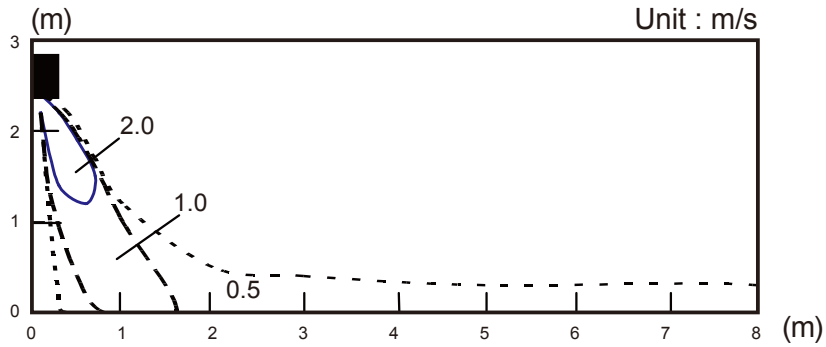
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



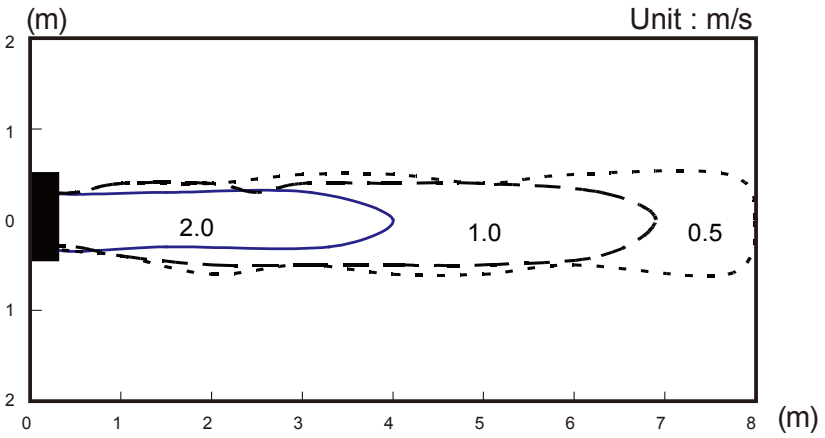
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



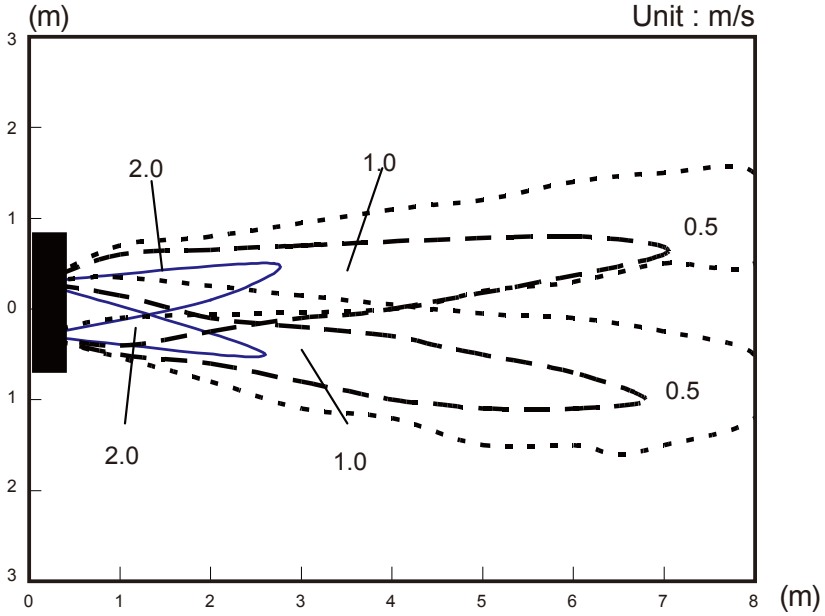
■ MODEL: AS∗A30GACH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

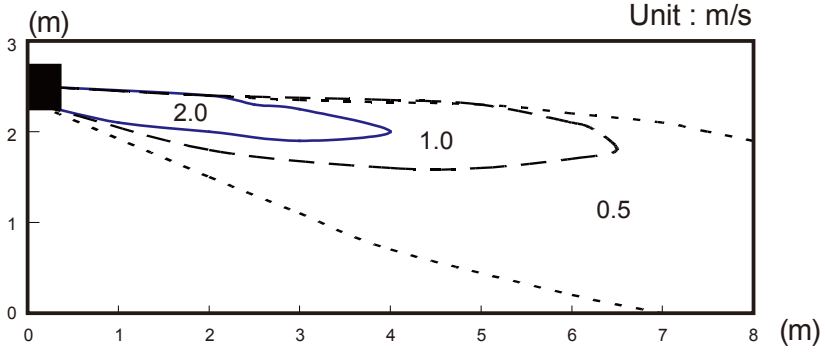
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



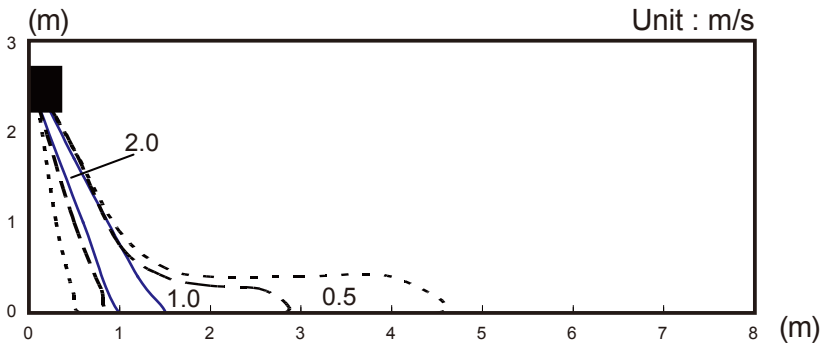
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center

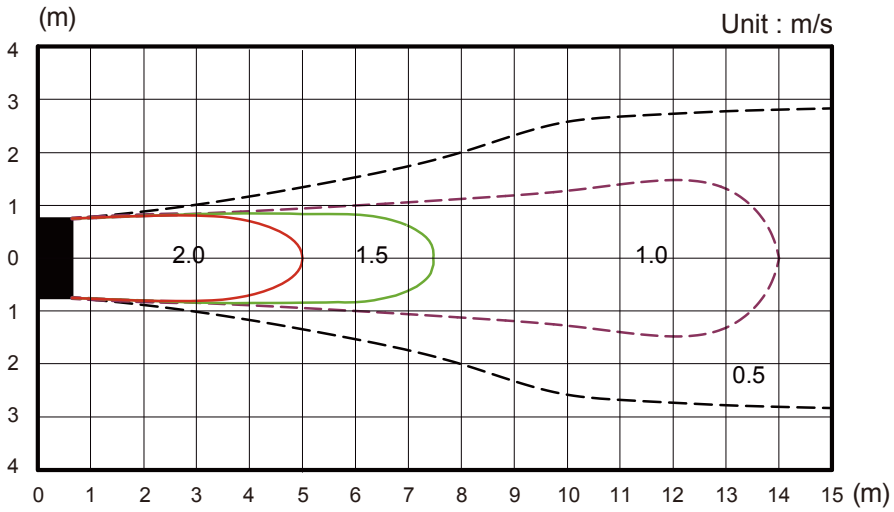


5-12. WALL MOUNTED TYPE

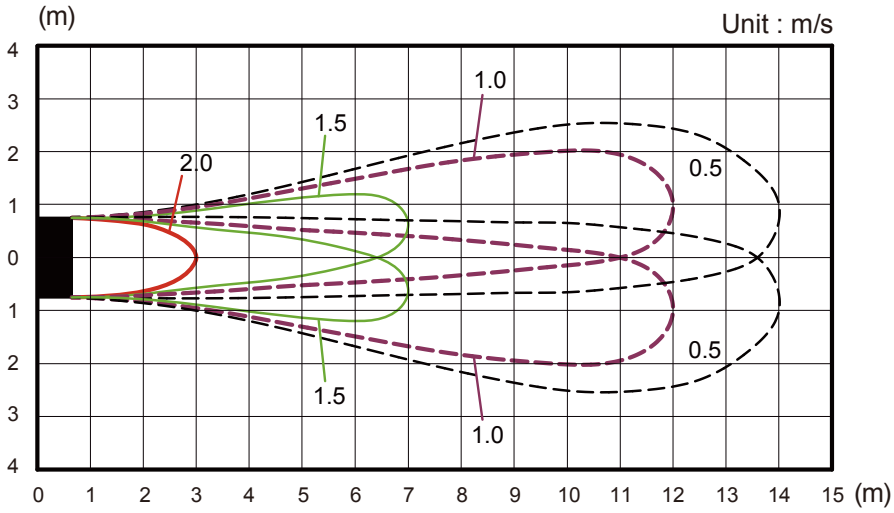
■ MODEL: AS∗A030GTAH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

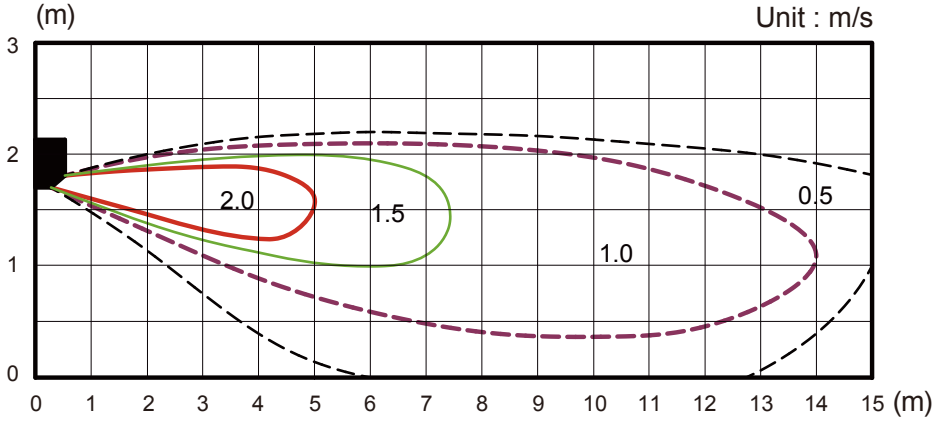
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



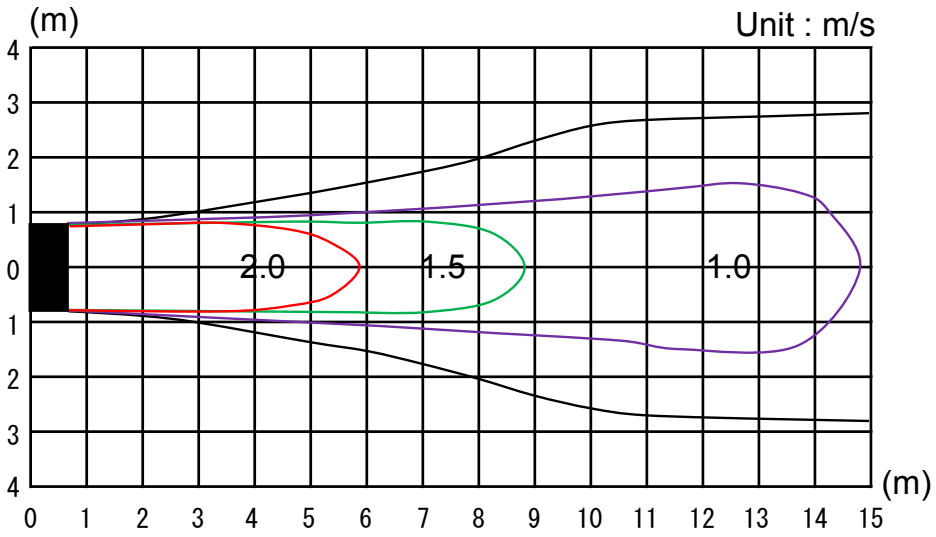
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



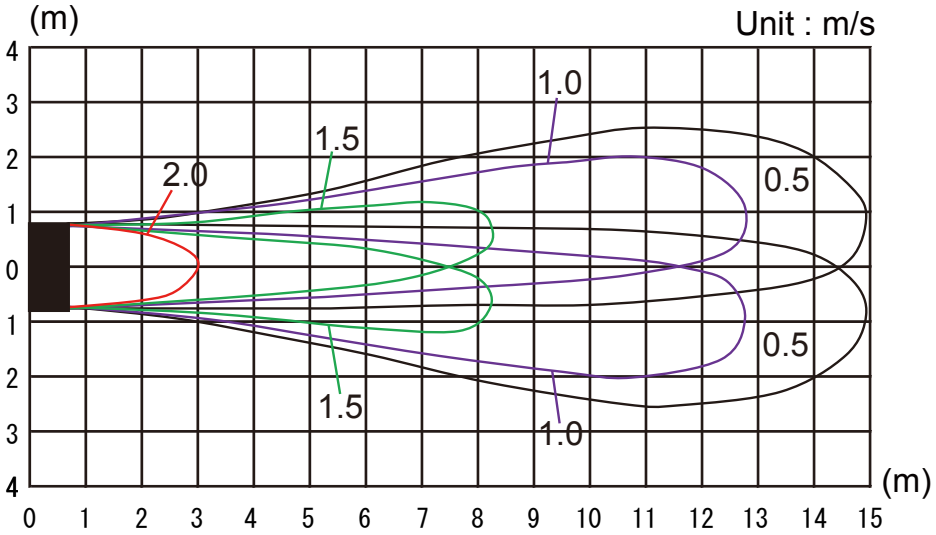
■ MODEL: AS∗A034GTAH

Conditions
Fan speed : High
Operation mode : Fan
Voltage : 230V

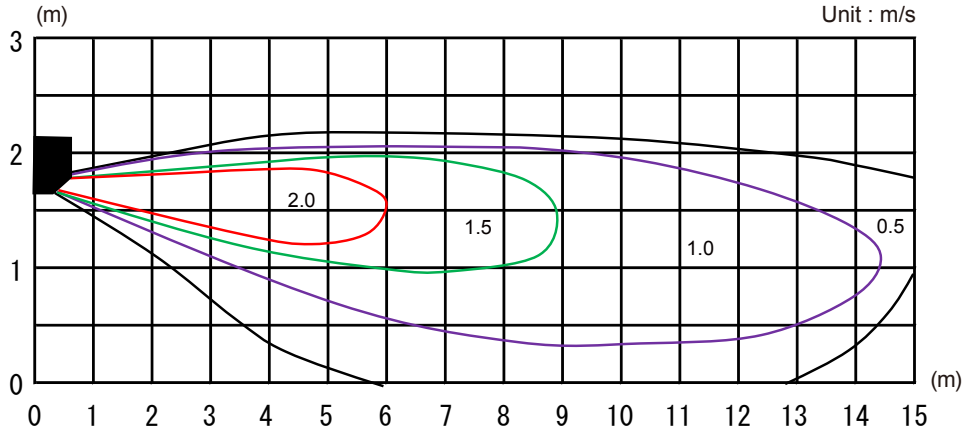
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Right & Left



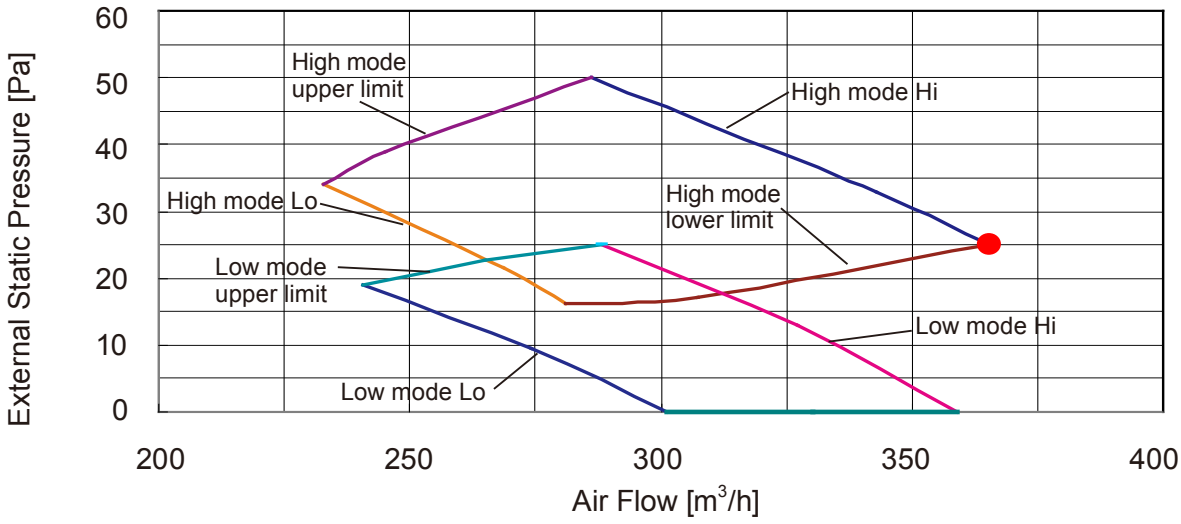
Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



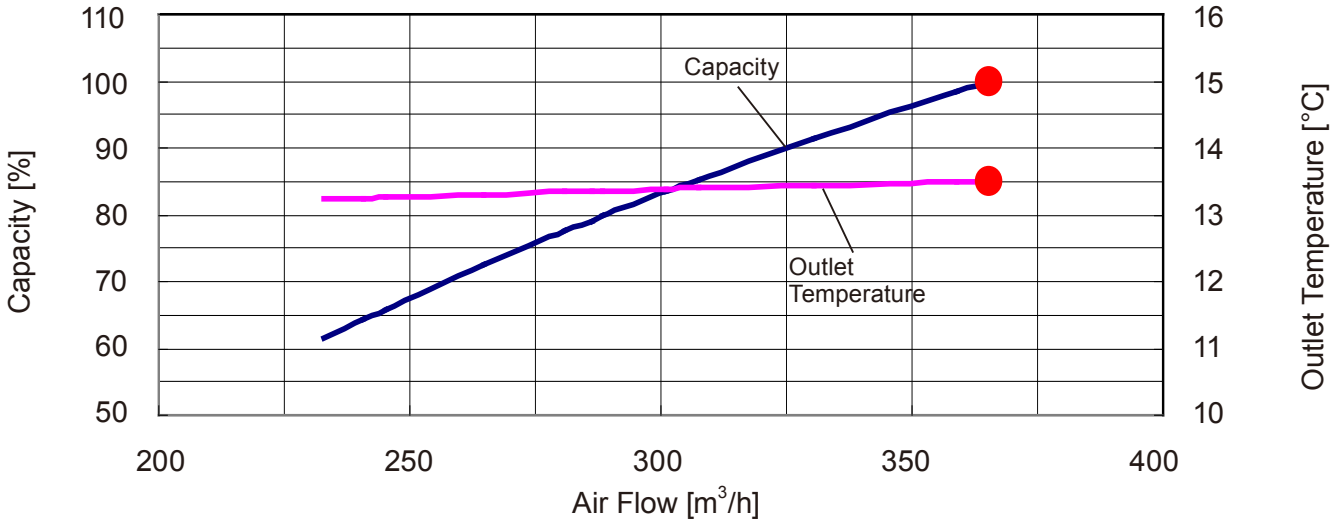
6. FAN PERFORMANCE CURVE

6-1. LOW STATIC PRESSURE DUCT / CONCEALED FLOOR TYPE

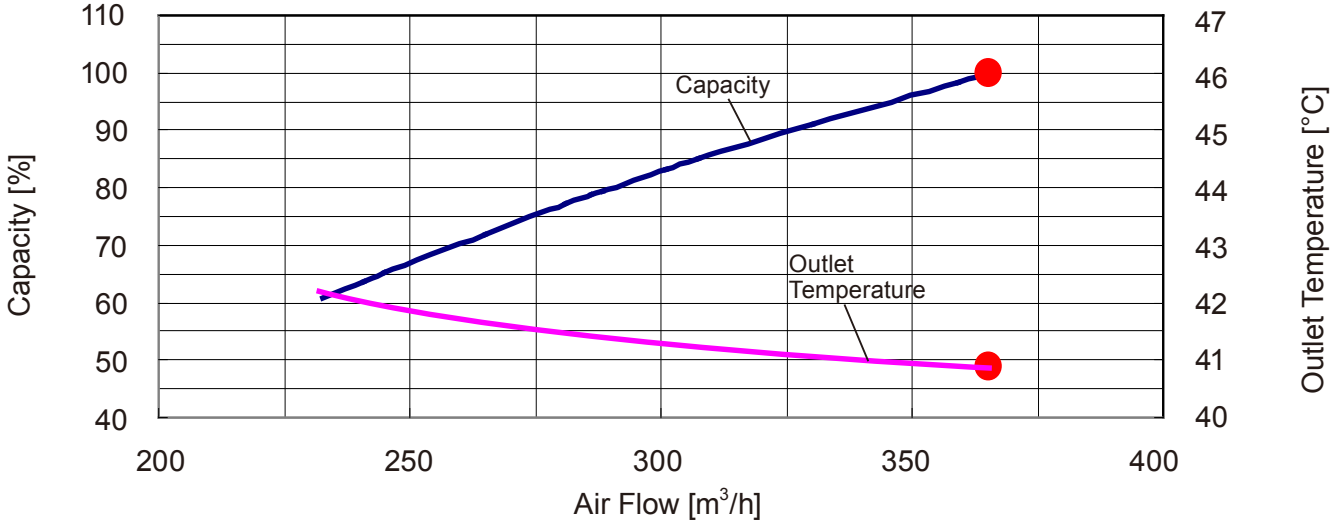
■ MODEL: ARXB07GALH



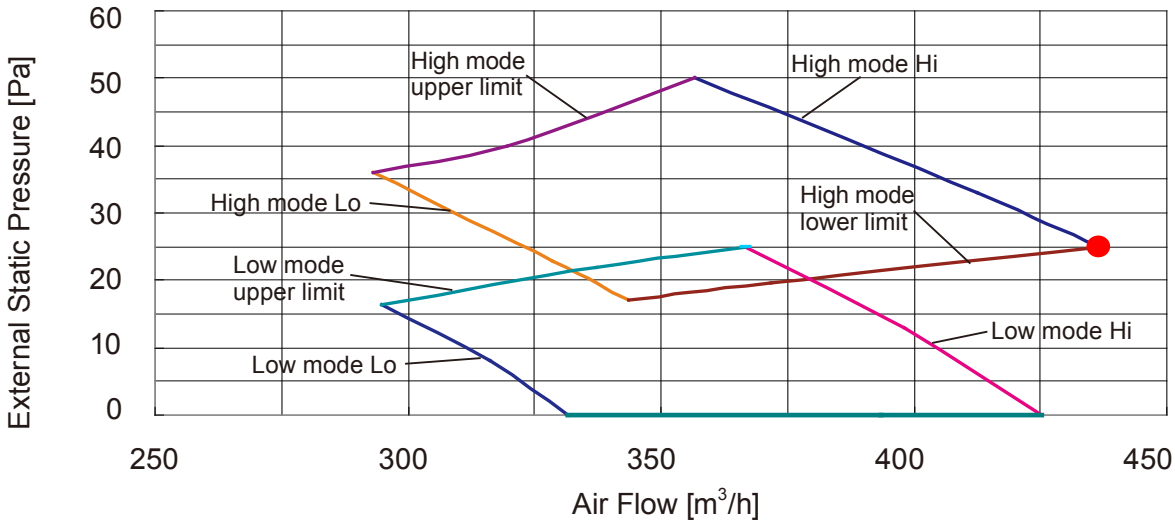
Cooling



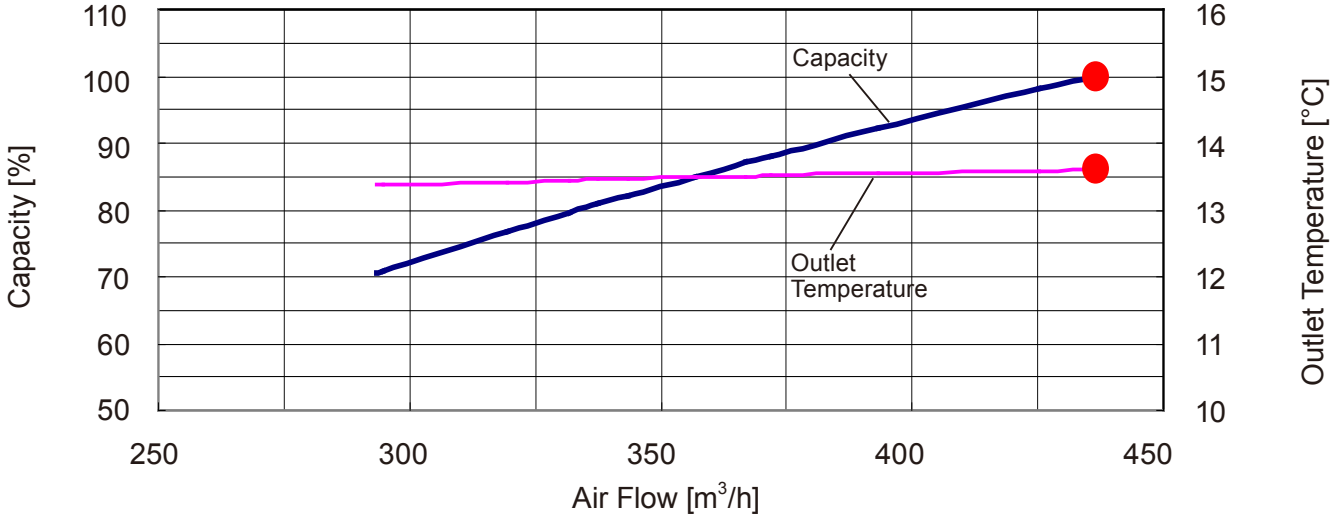
Heating



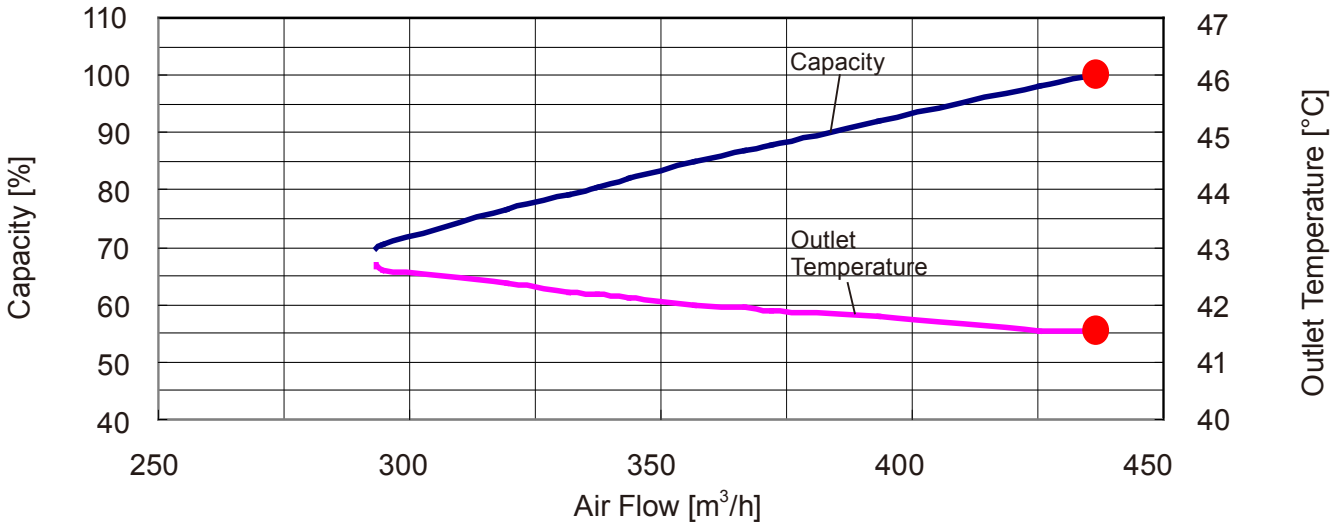
■ MODEL: ARXB09GALH



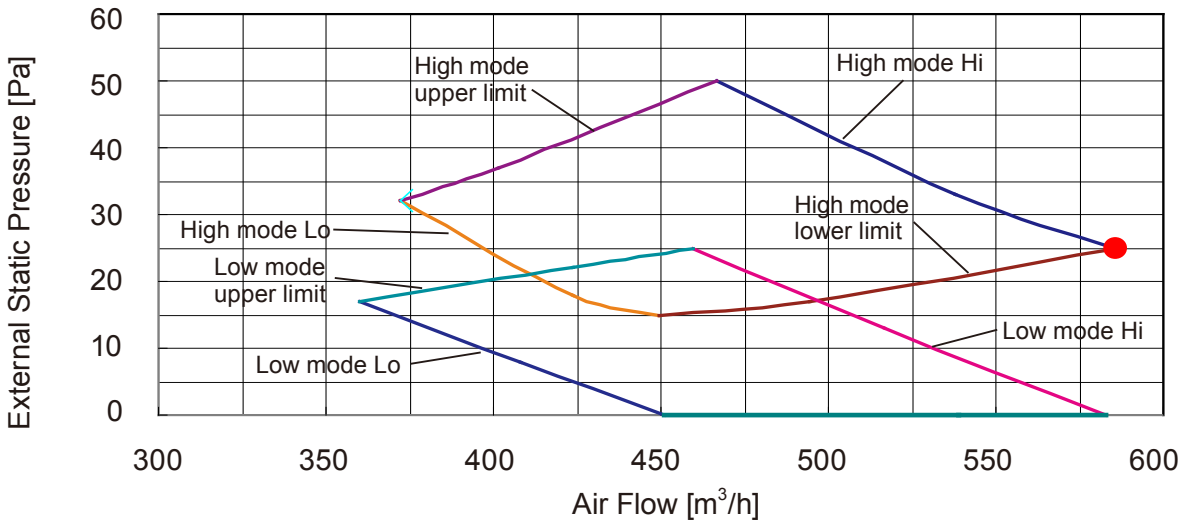
Cooling



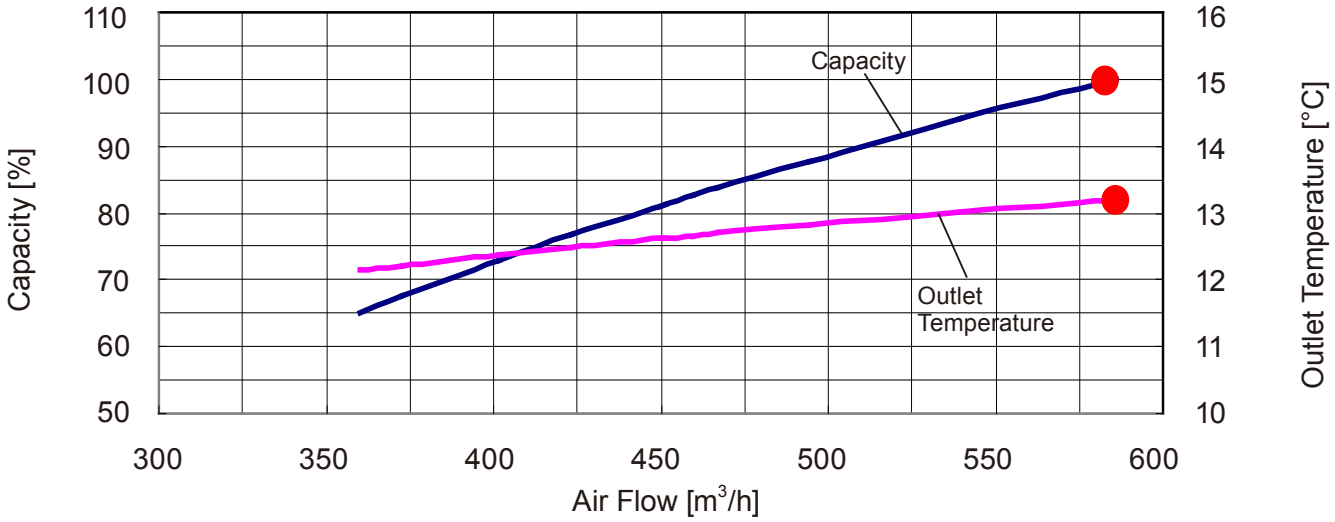
Heating



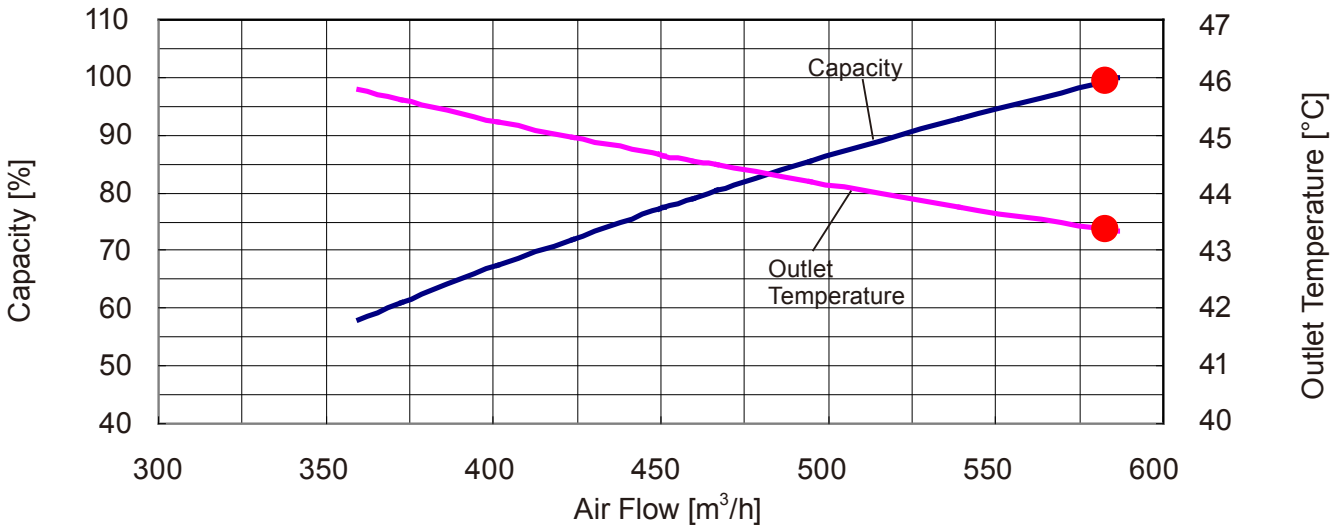
■ MODEL: ARXB12GALH



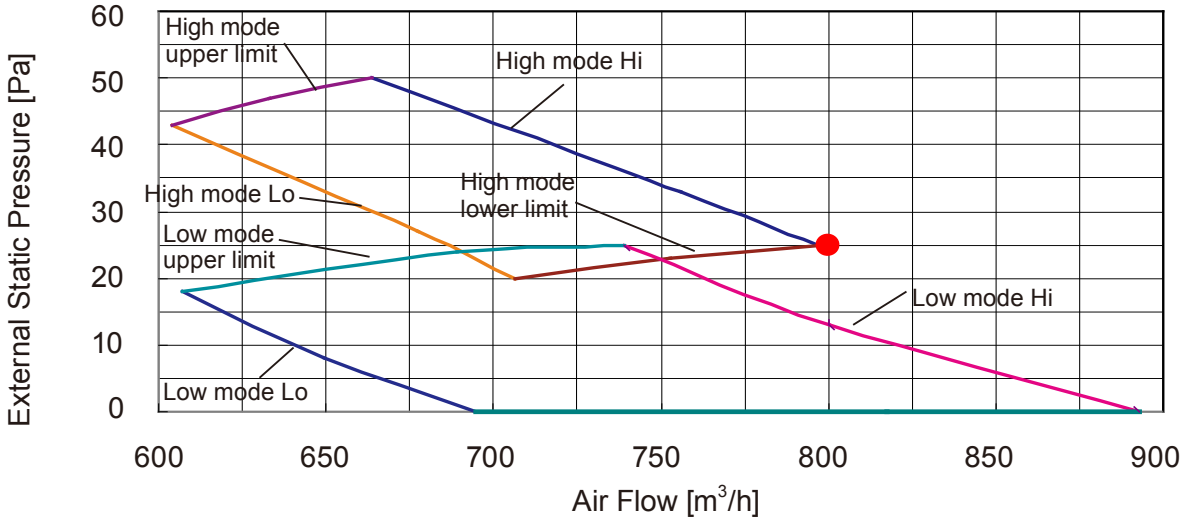
Cooling



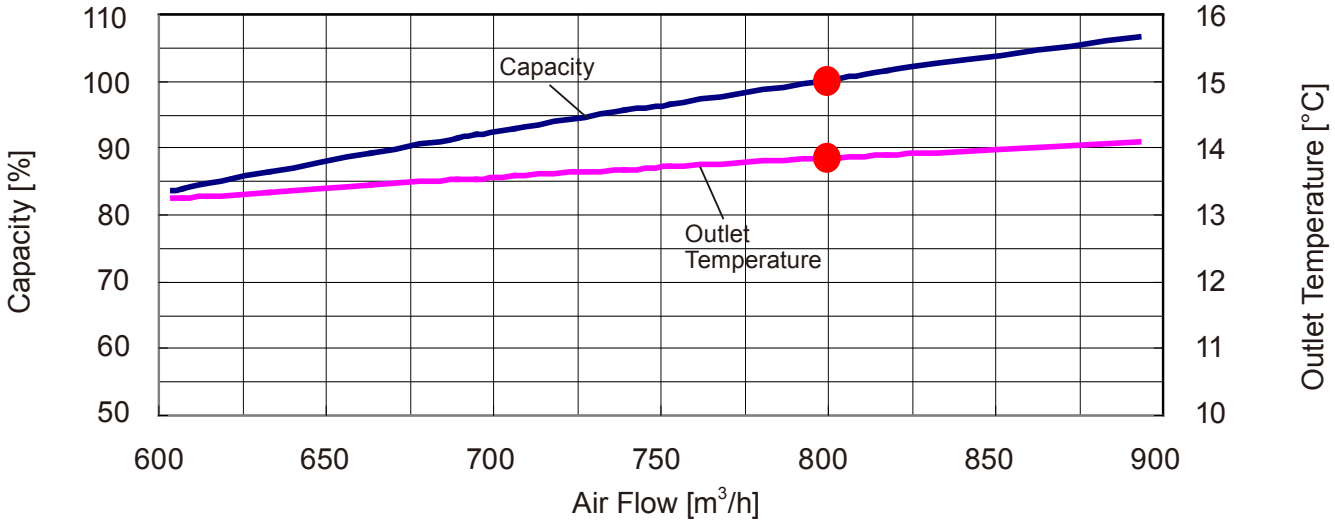
Heating



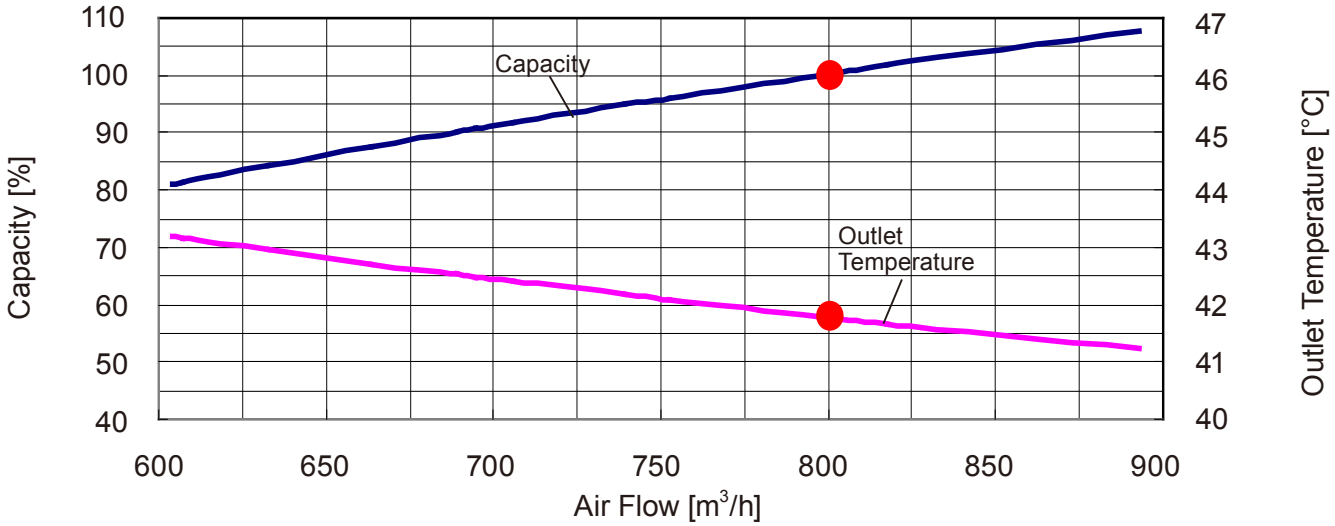
■ MODEL: ARXB14GALH



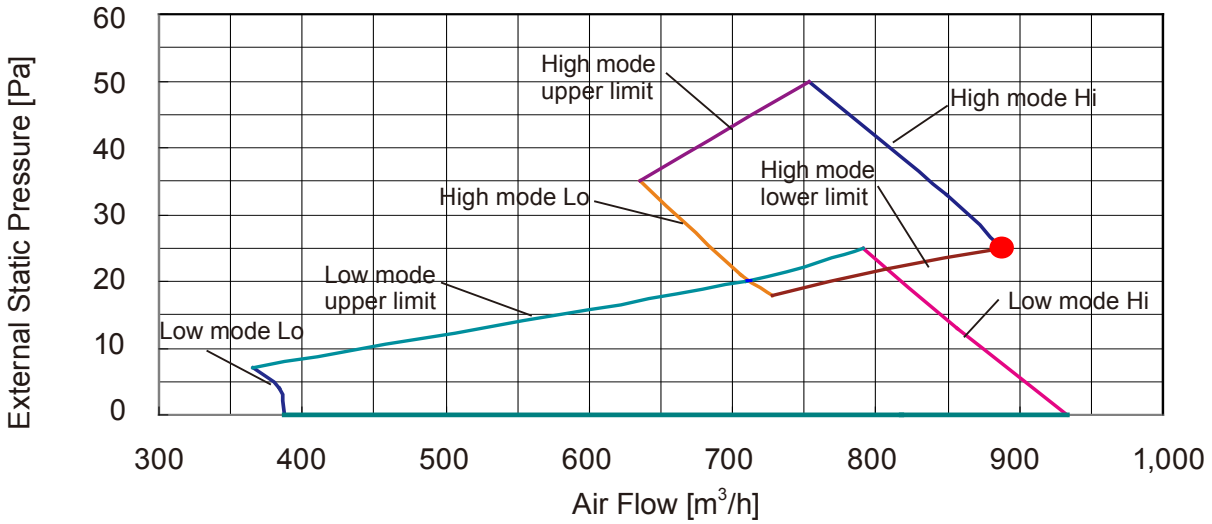
Cooling



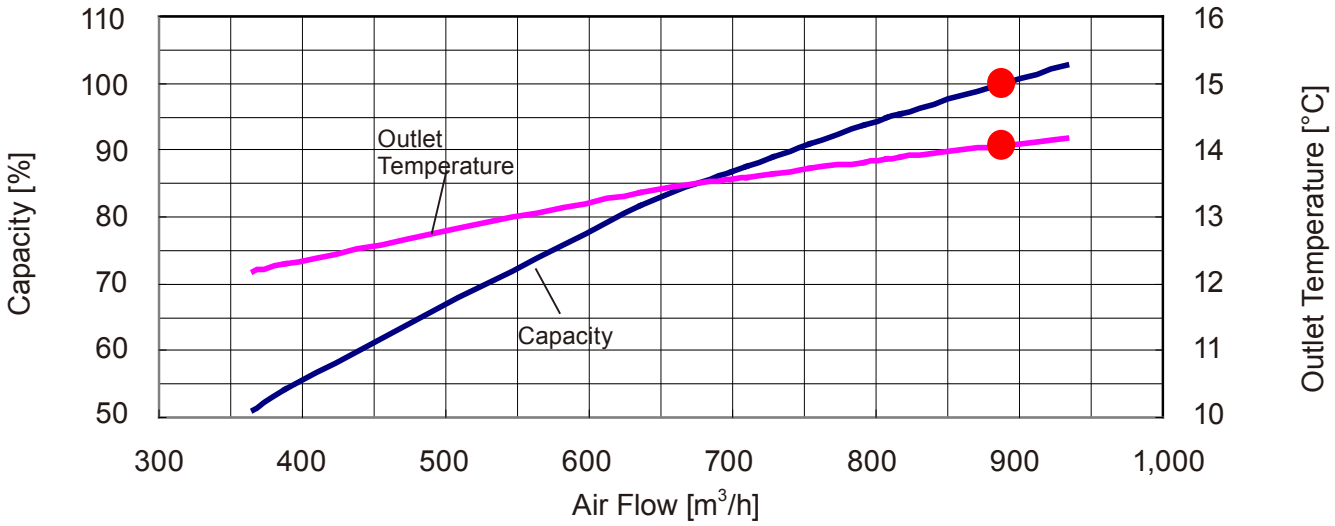
Heating



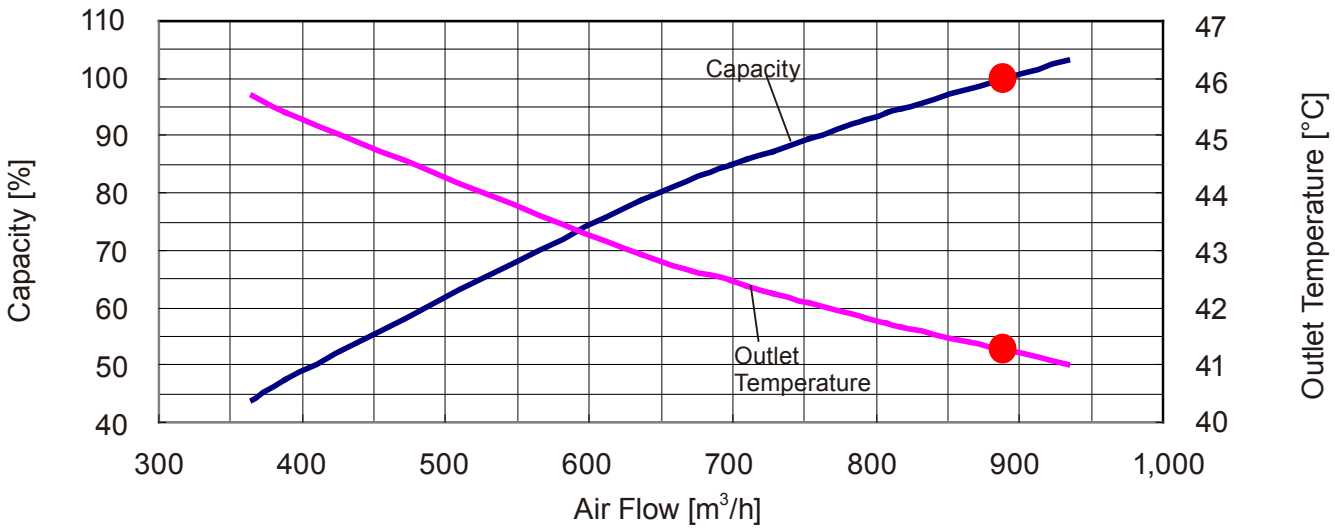
■ MODEL: ARXB18GALH



Cooling

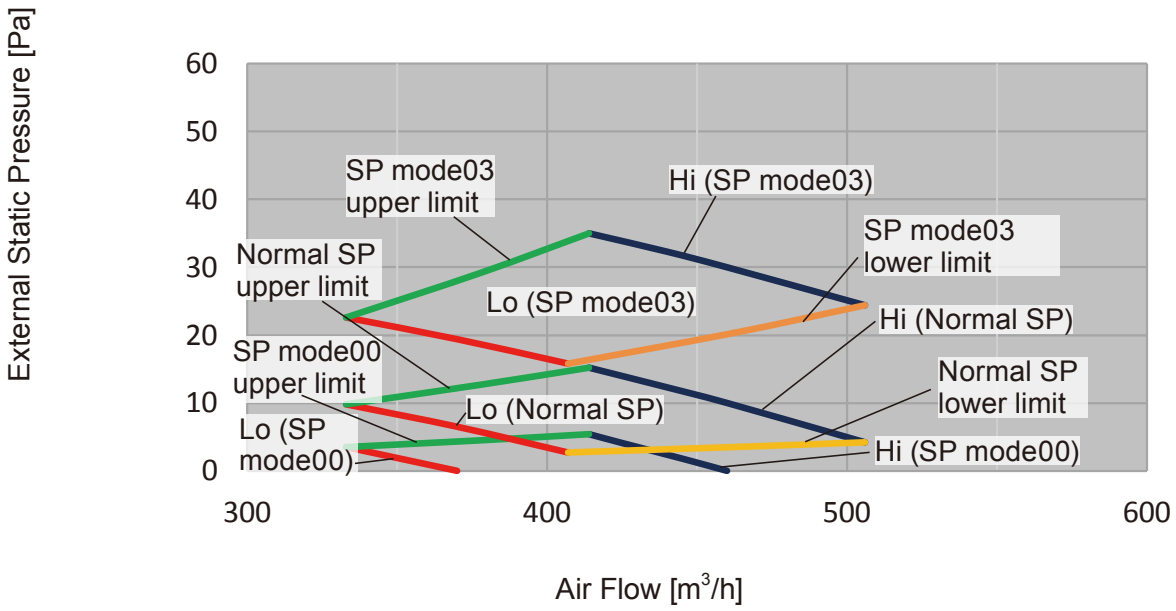


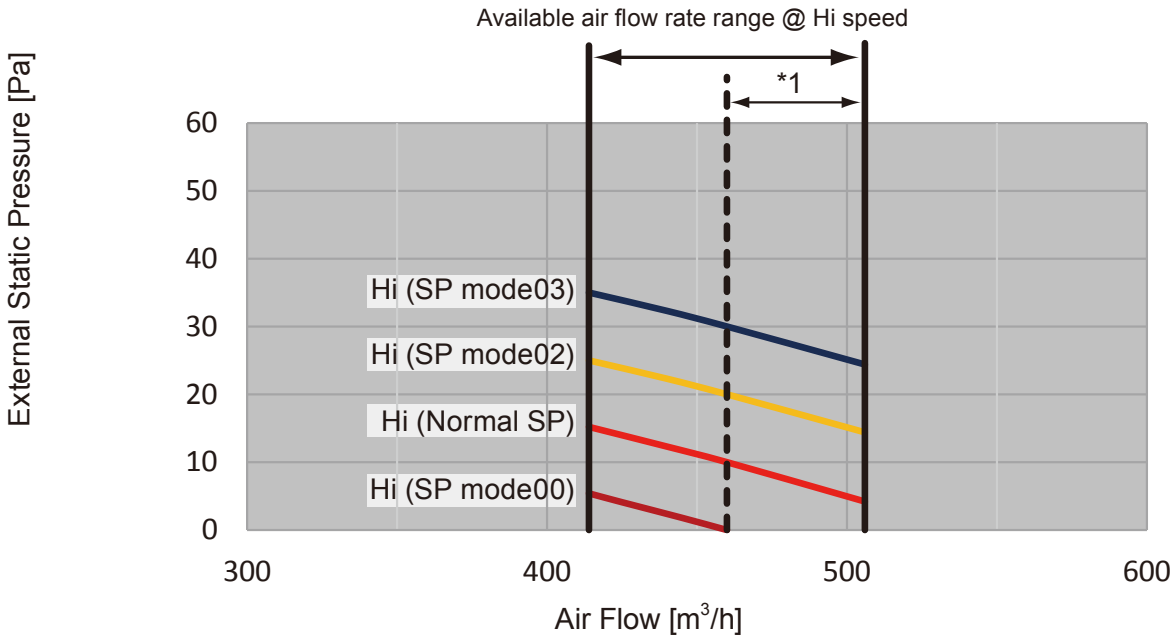
Heating



6-2. MINI DUCT TYPE

■ MODEL: ARXK04GCLH

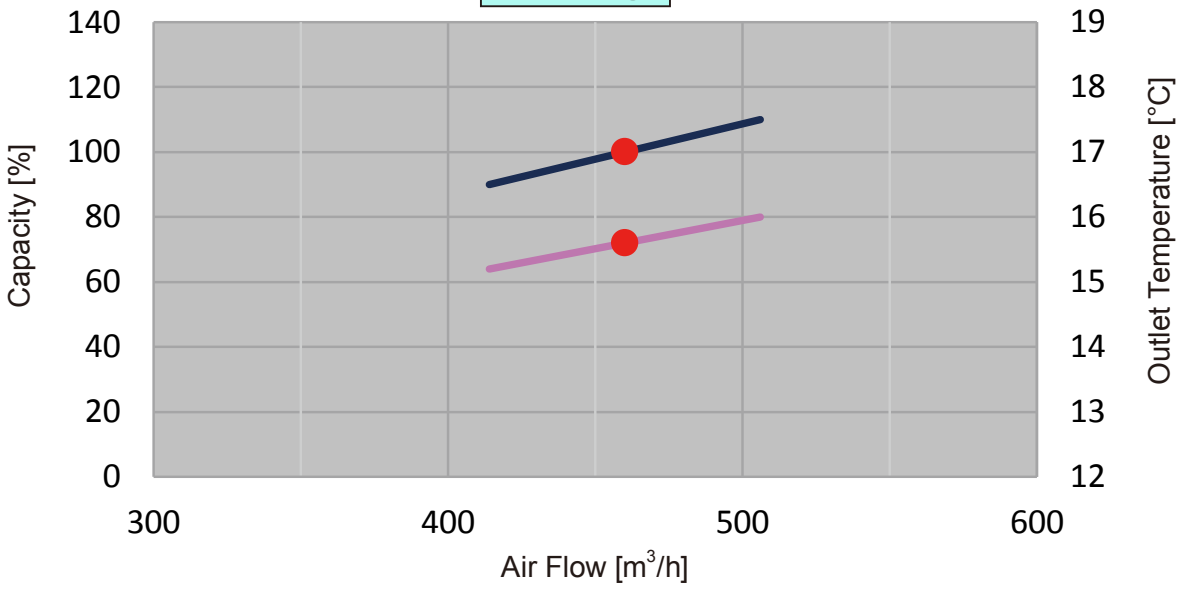




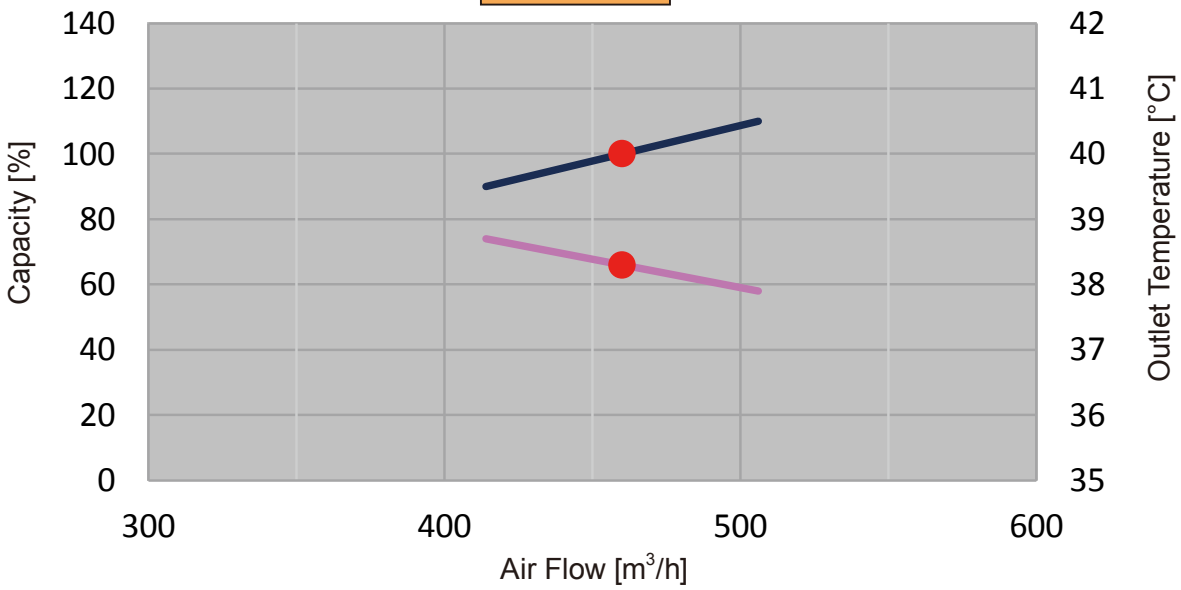
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

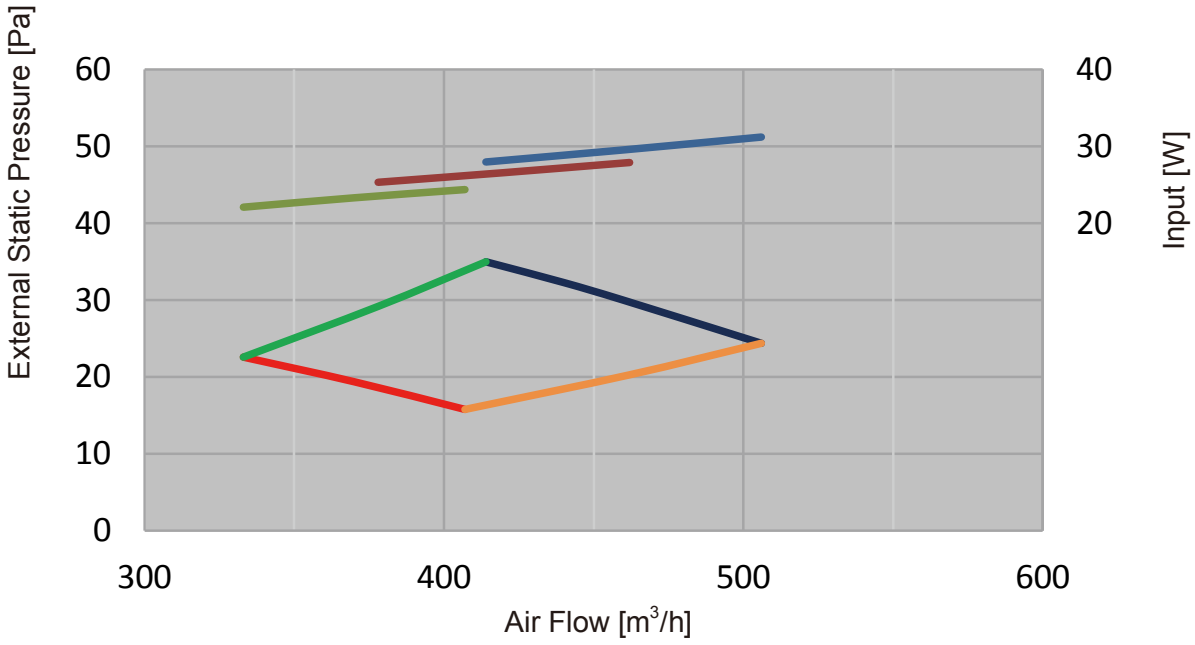
INDOOR UNITS

Cooling

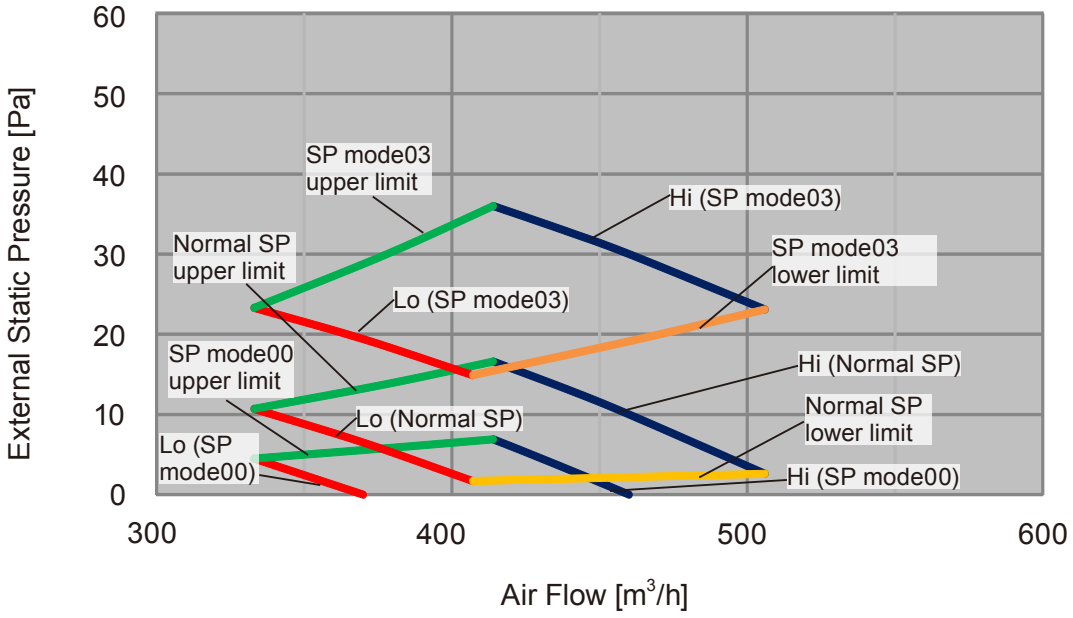


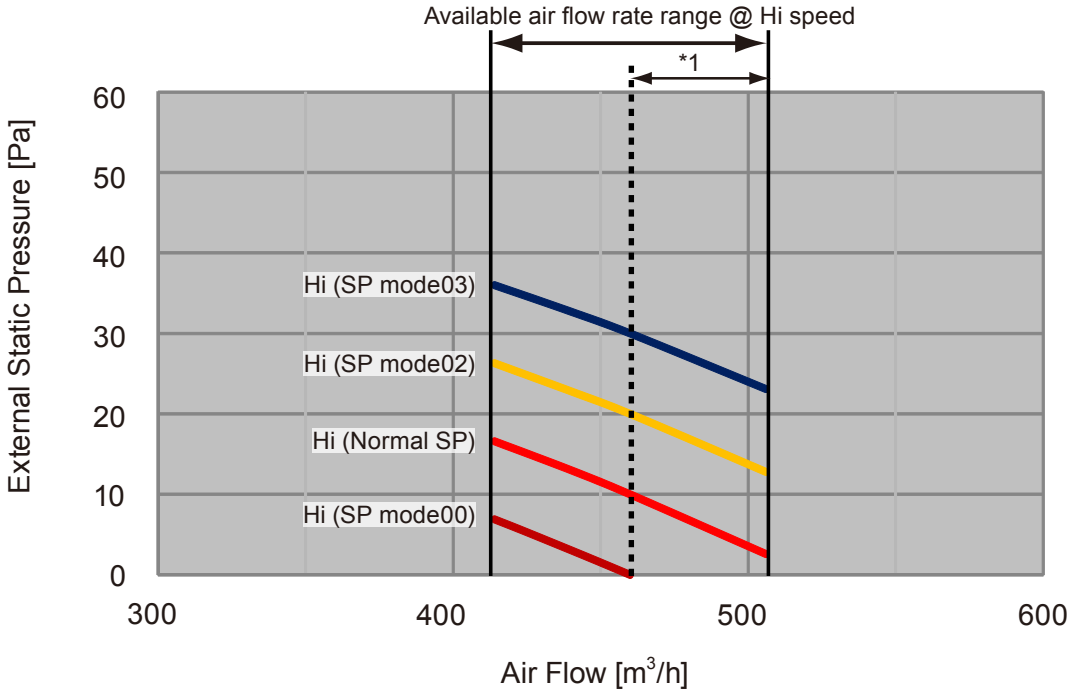
Heating





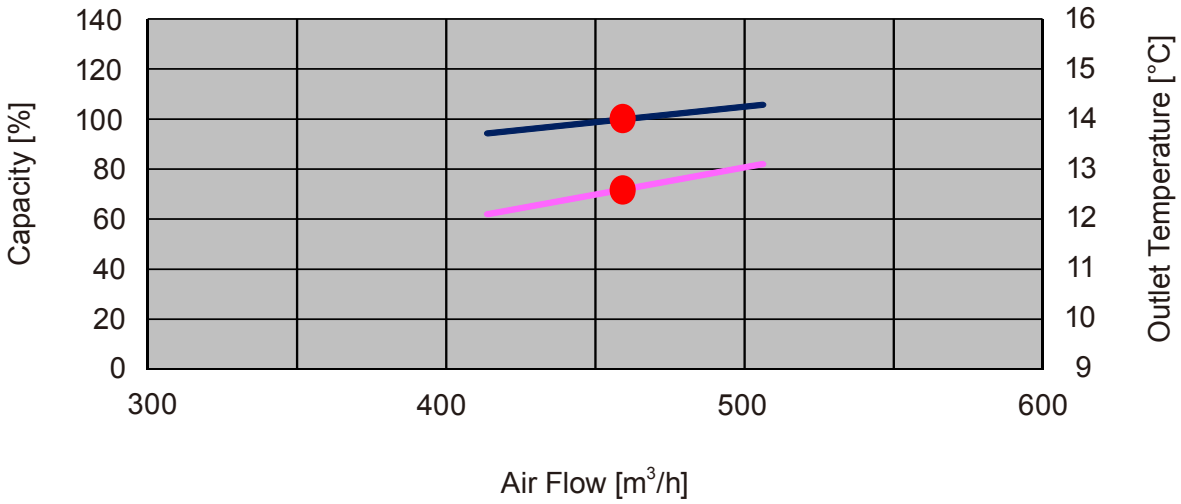
■ MODEL: ARXK07GCLH



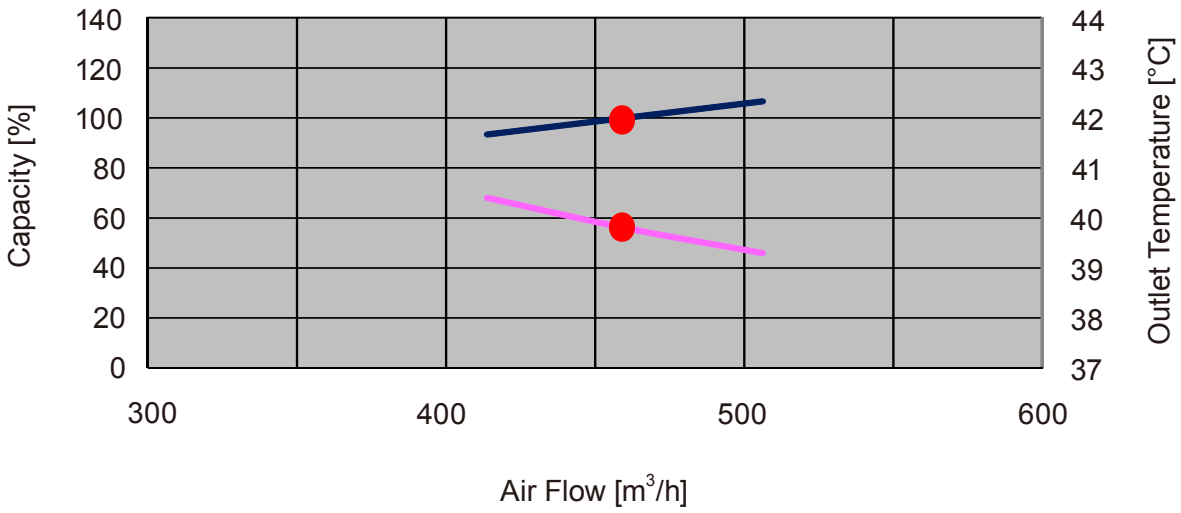


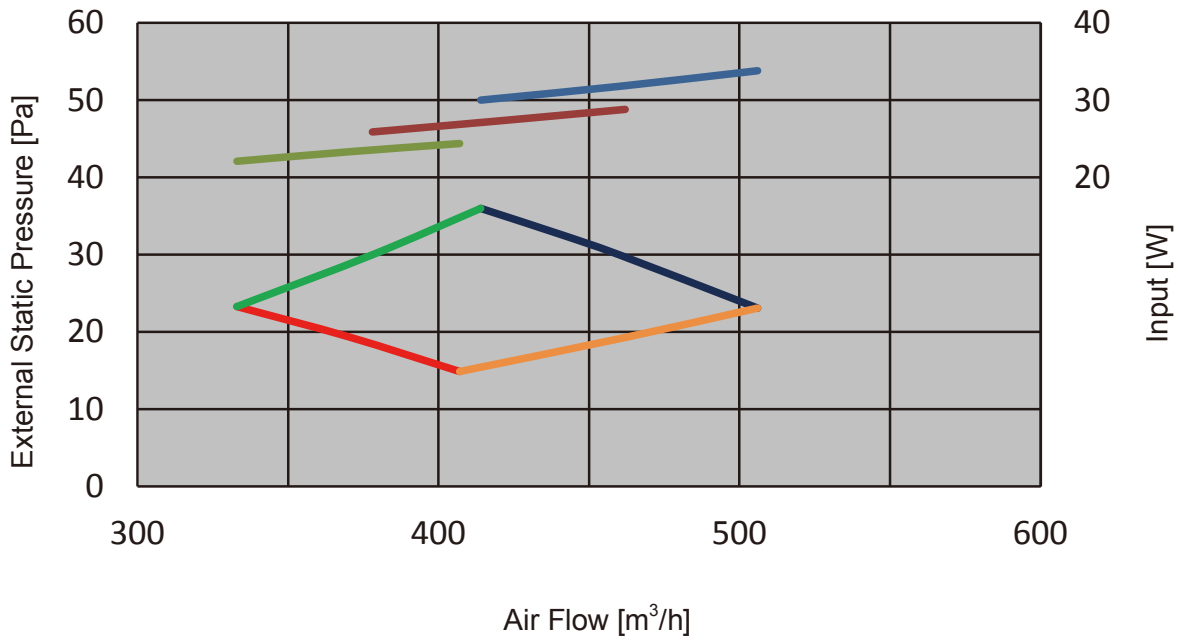
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

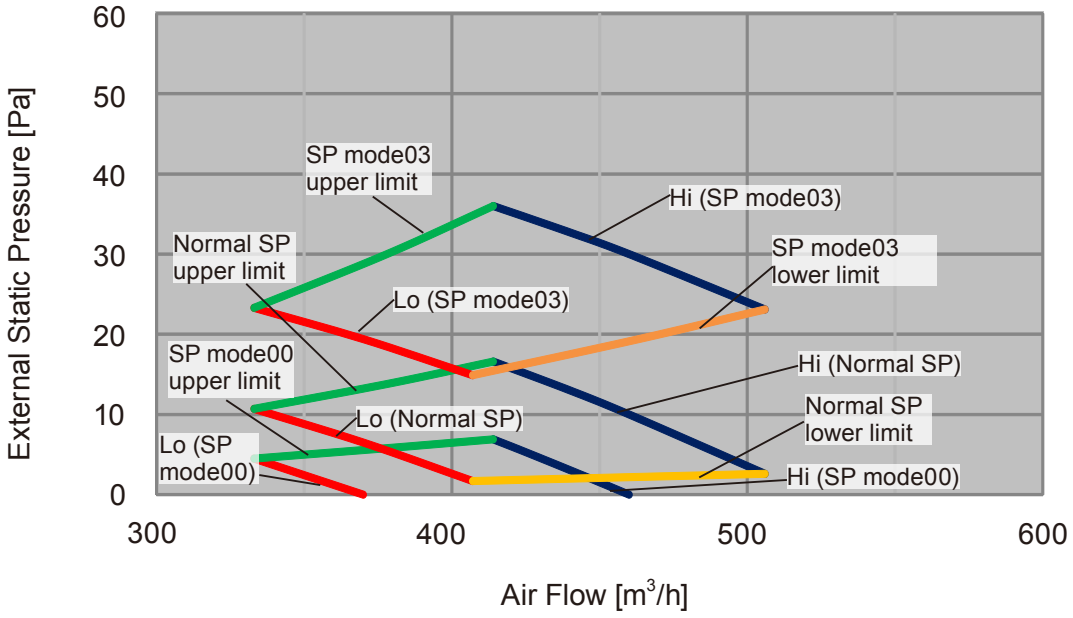


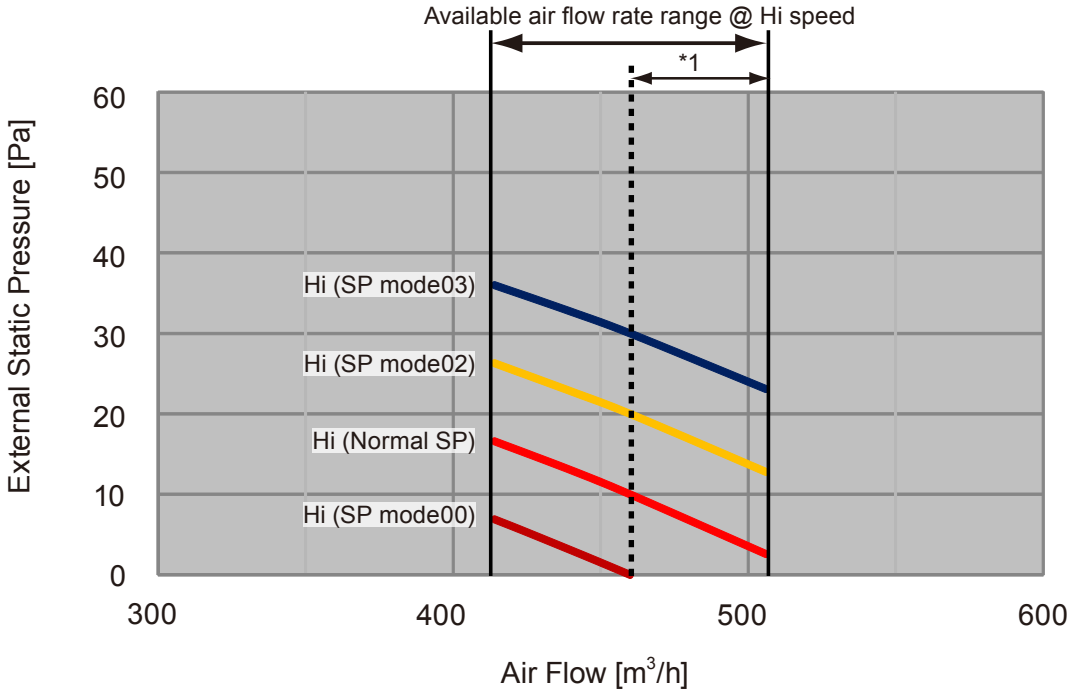
Heating





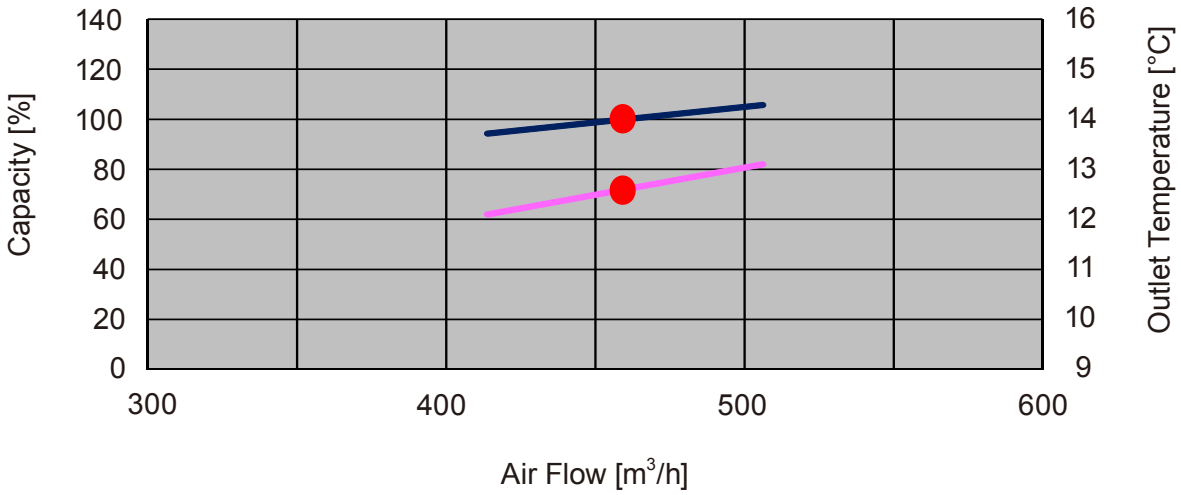
■ MODEL: ARXK09GCLH



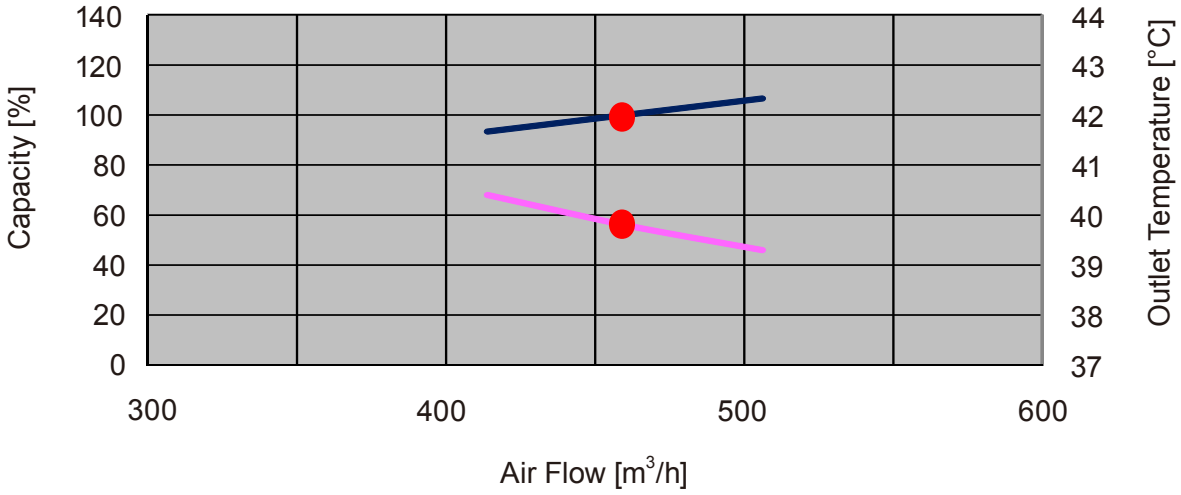


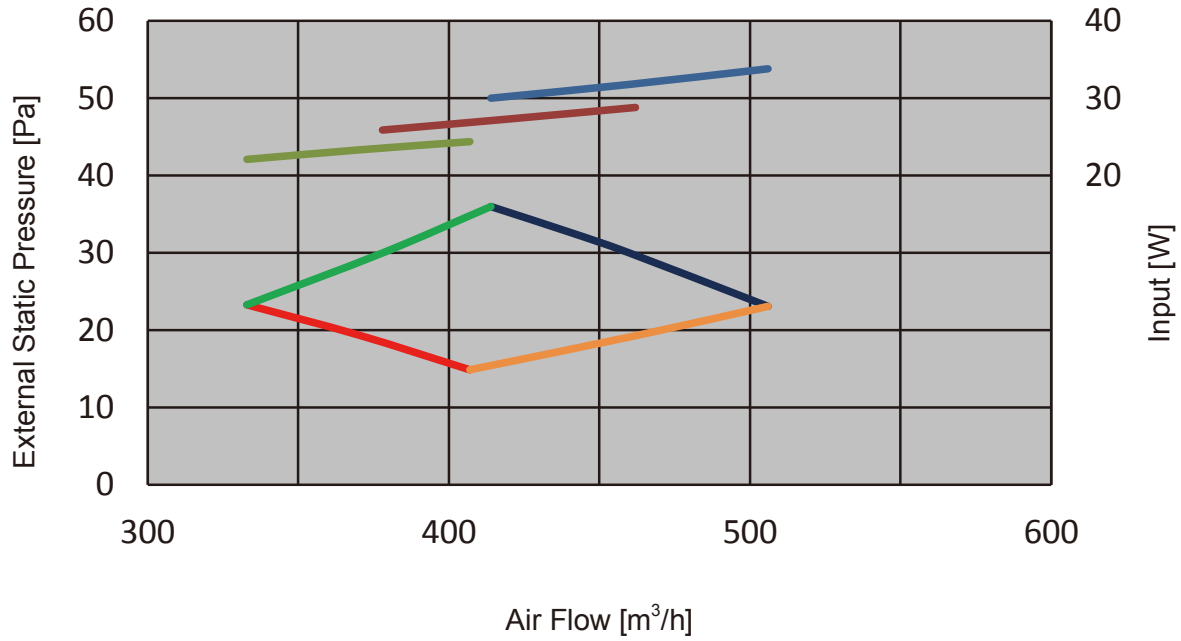
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

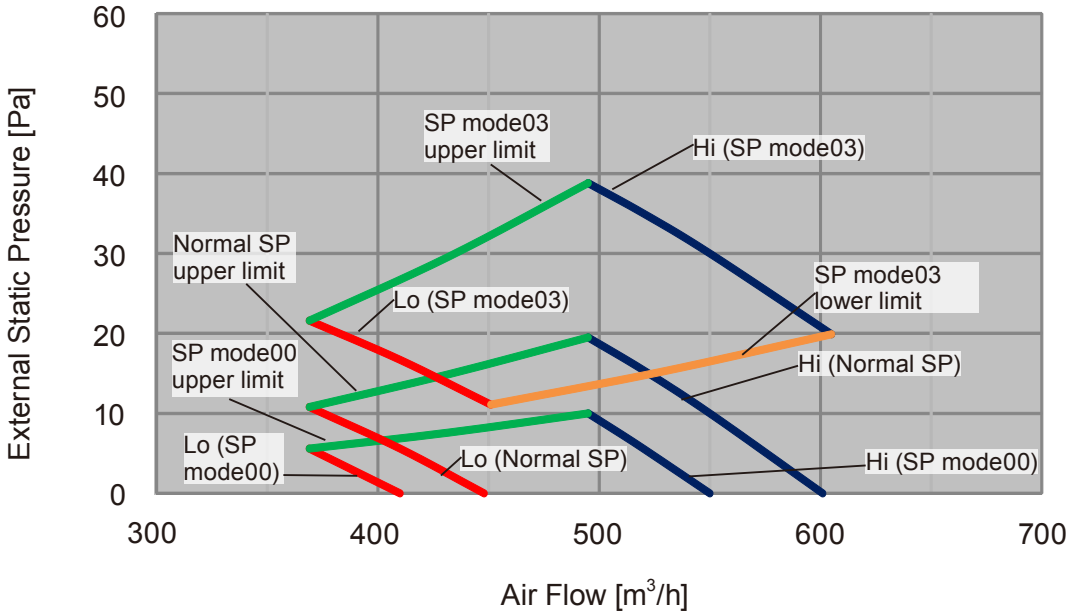


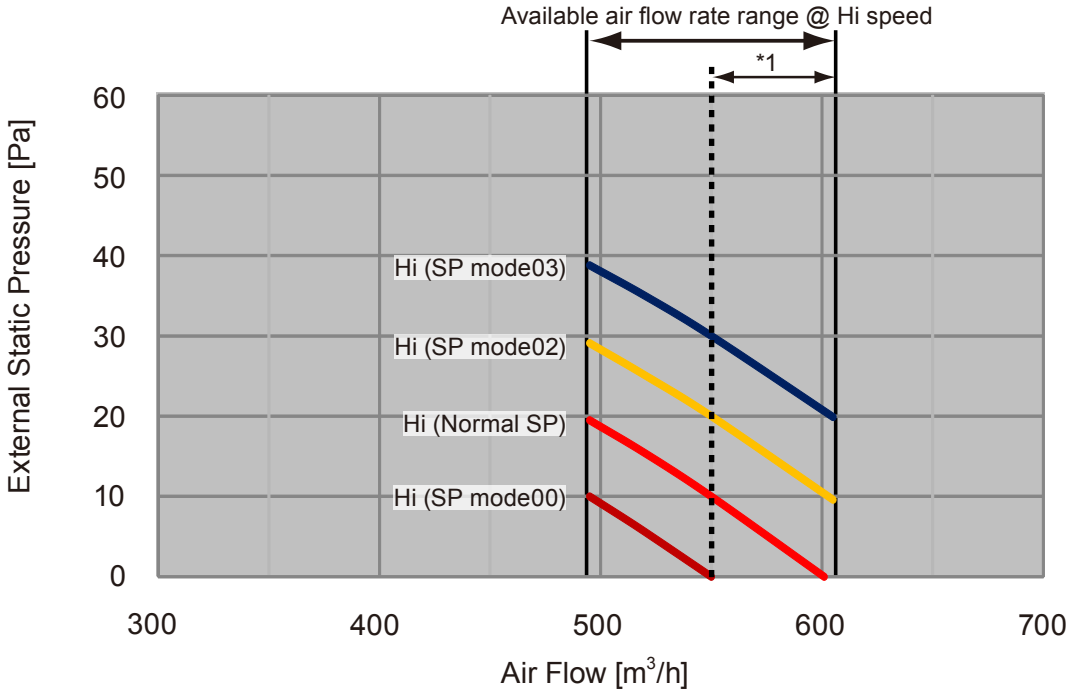
Heating





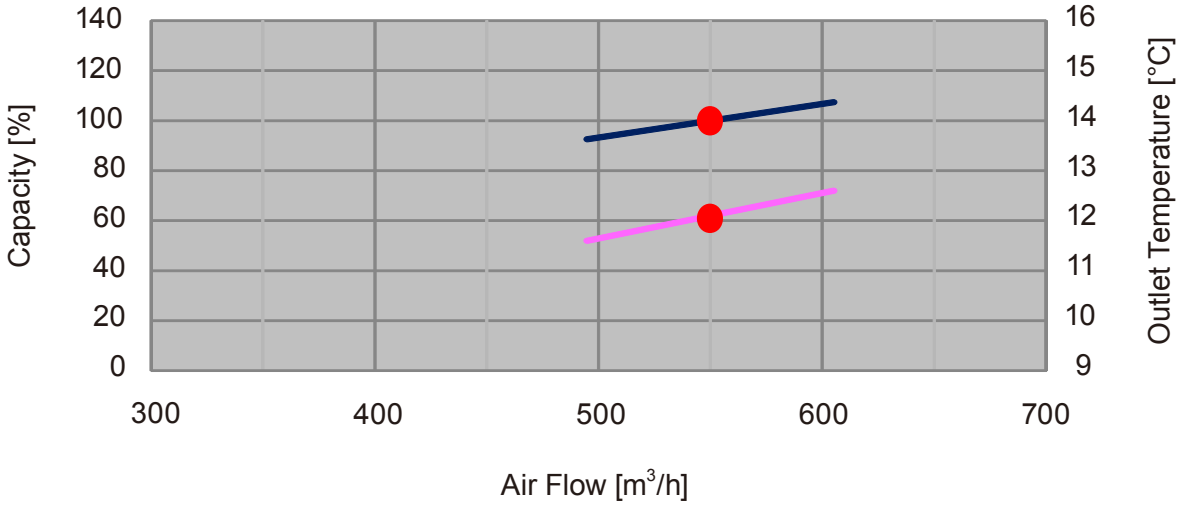
■ MODEL: ARXK12GCLH



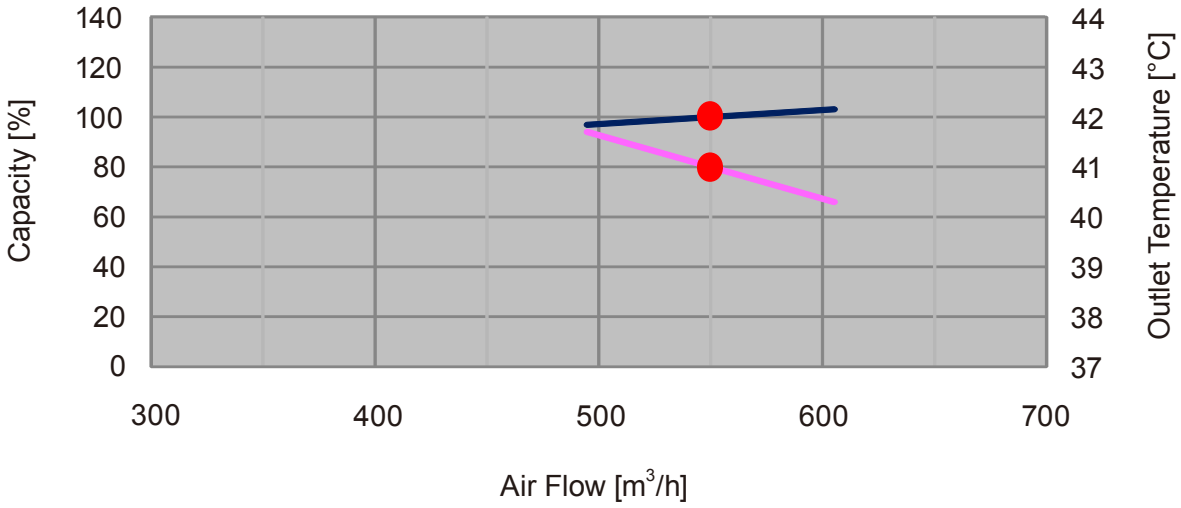


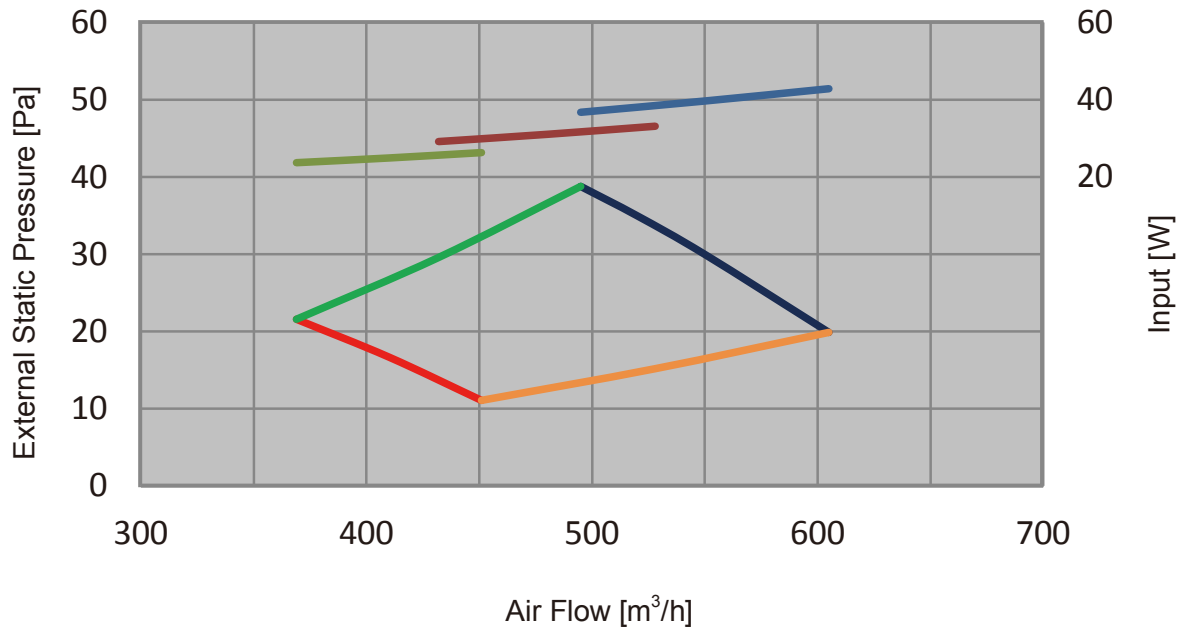
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

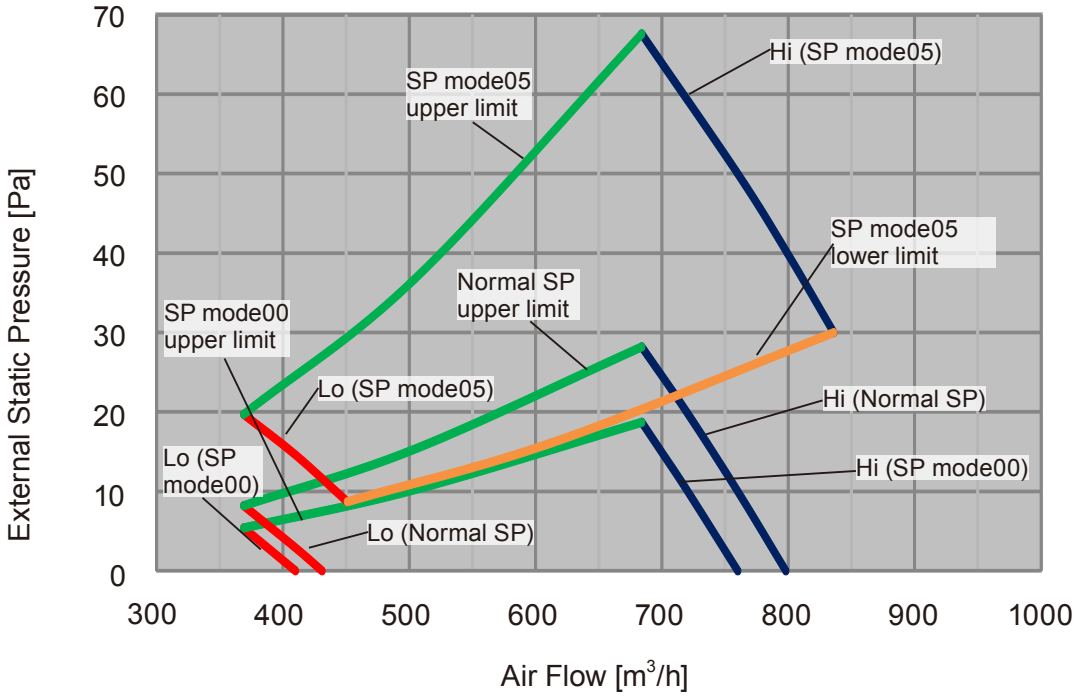


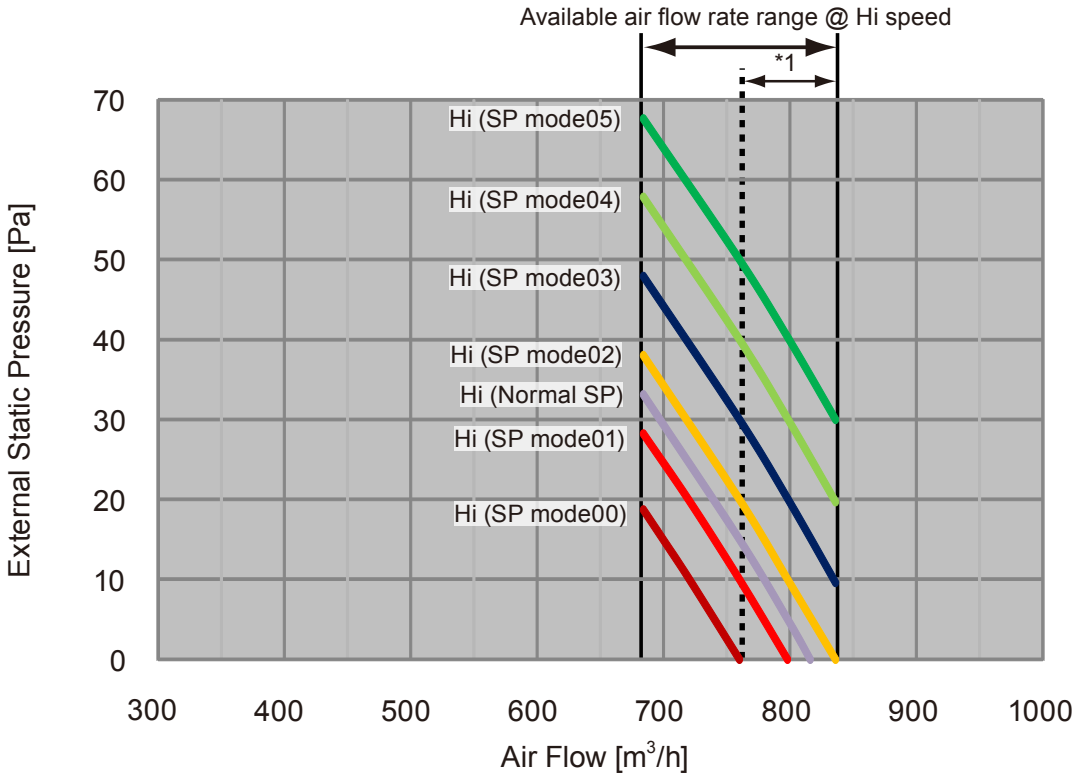
Heating





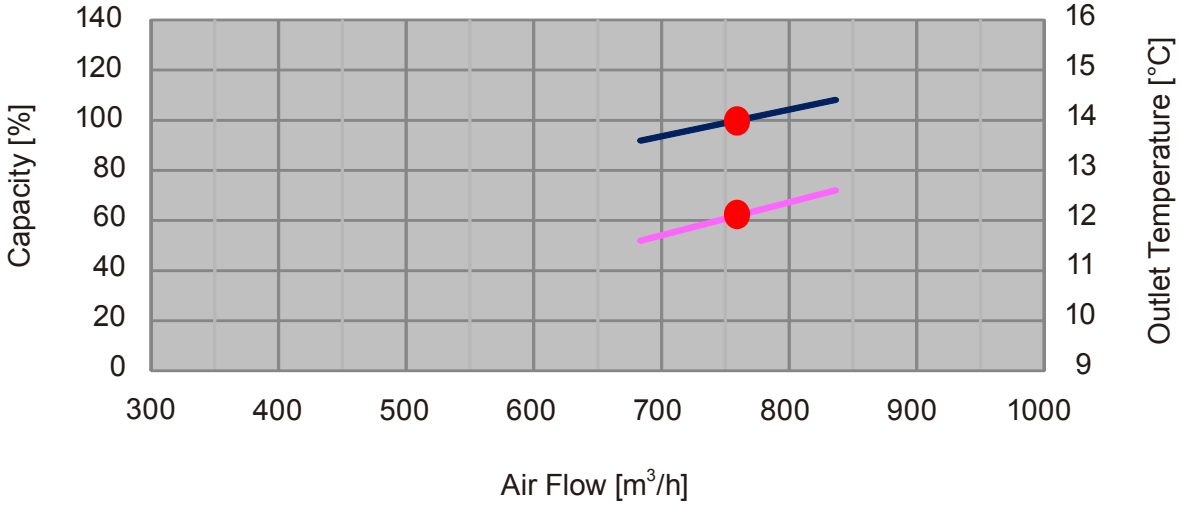
■ MODEL: ARXK14GCLH



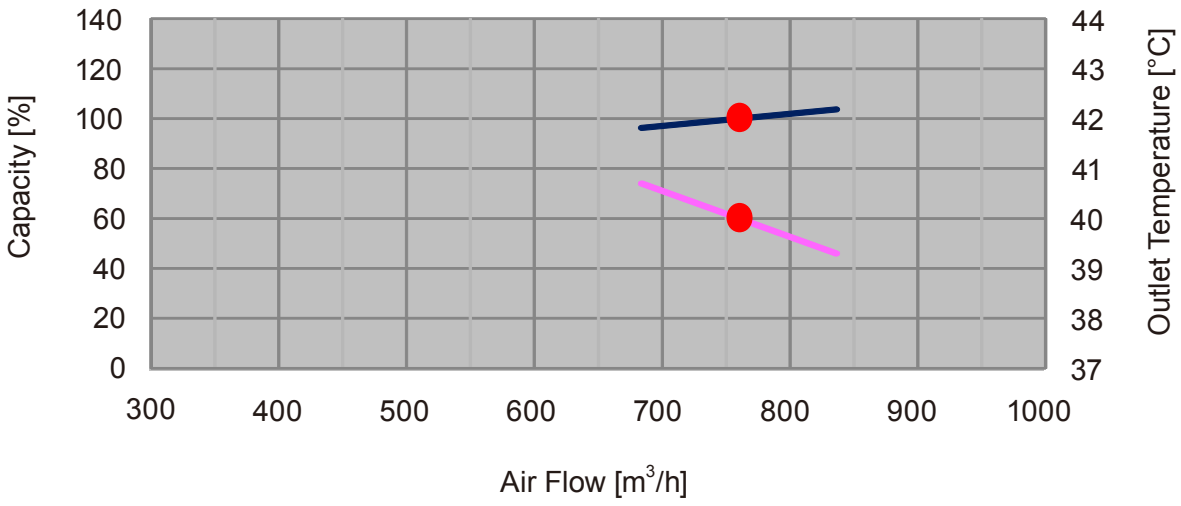


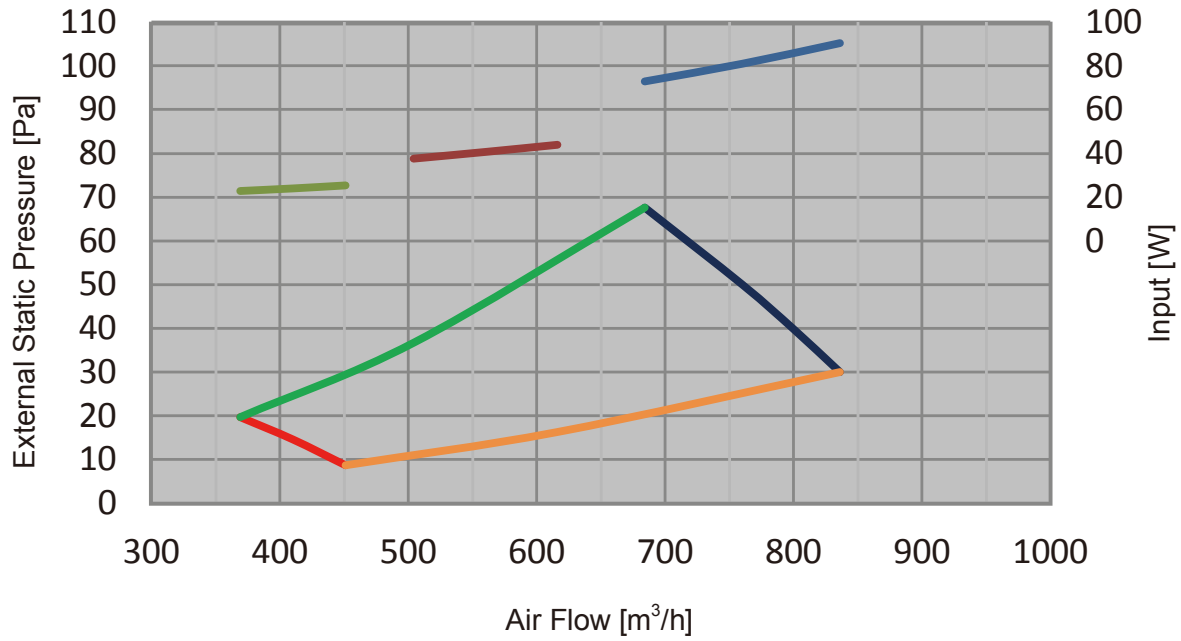
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

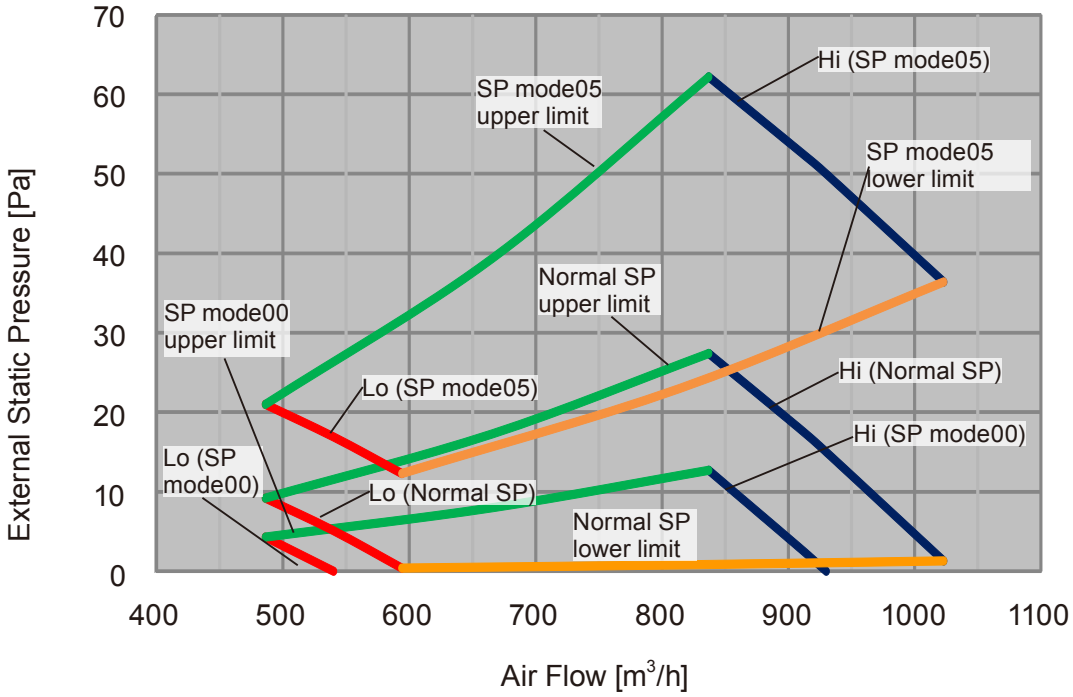


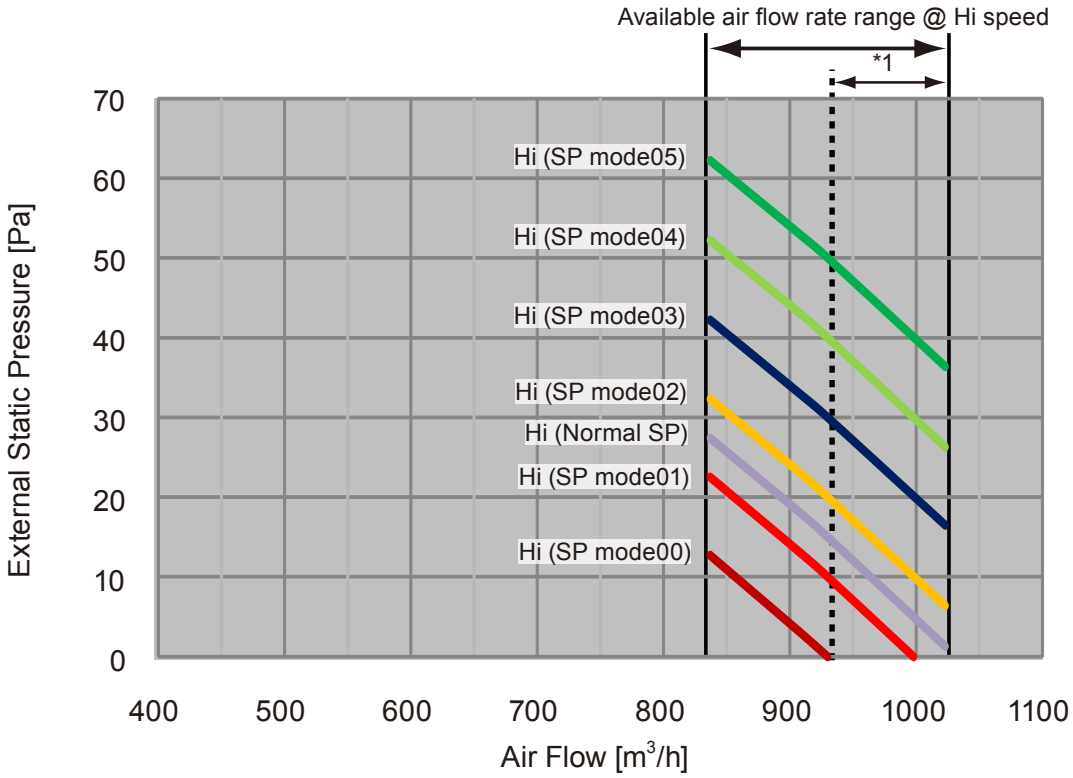
Heating





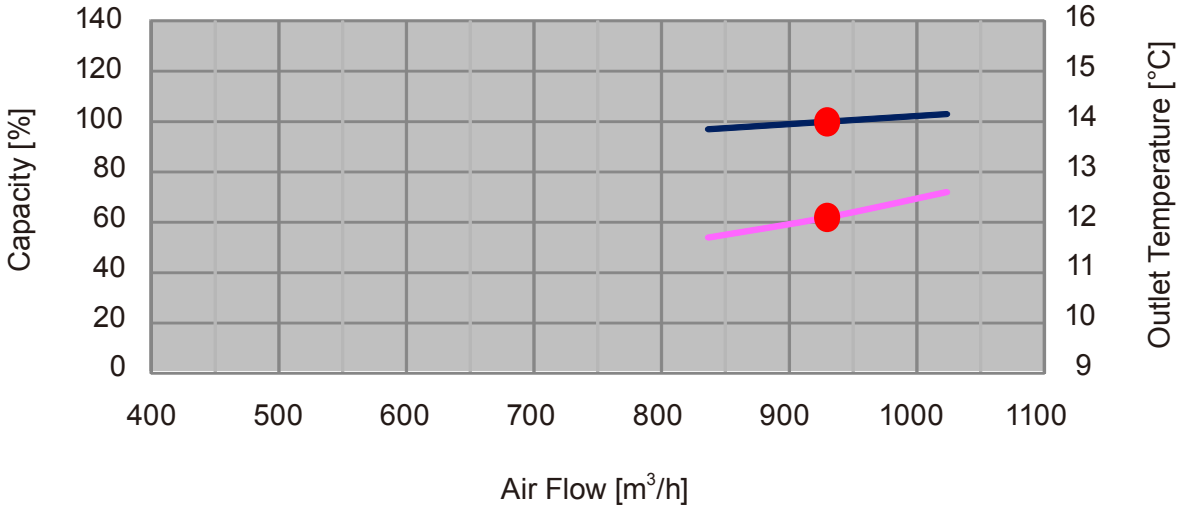
■ MODEL: ARXK18GCLH



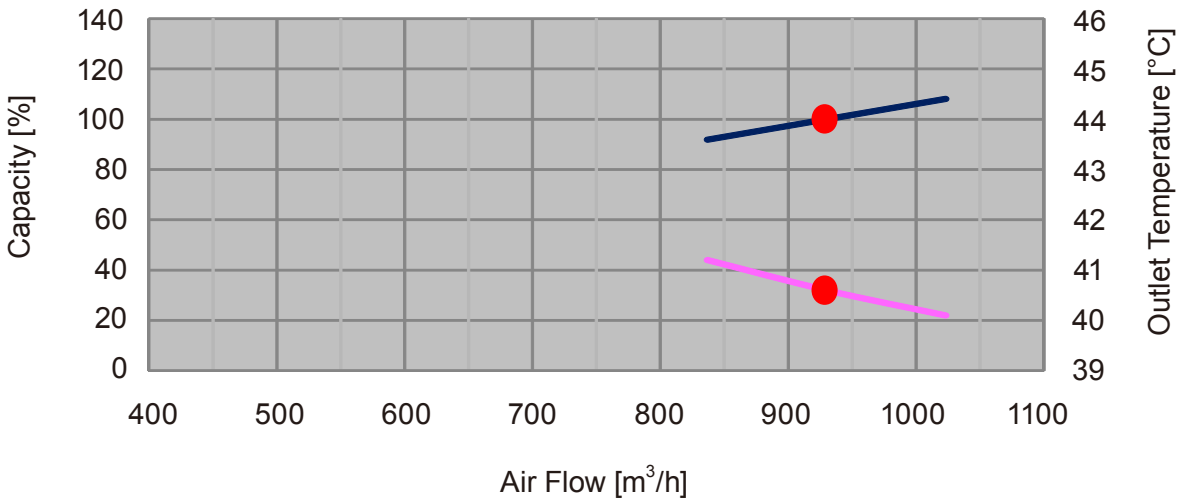


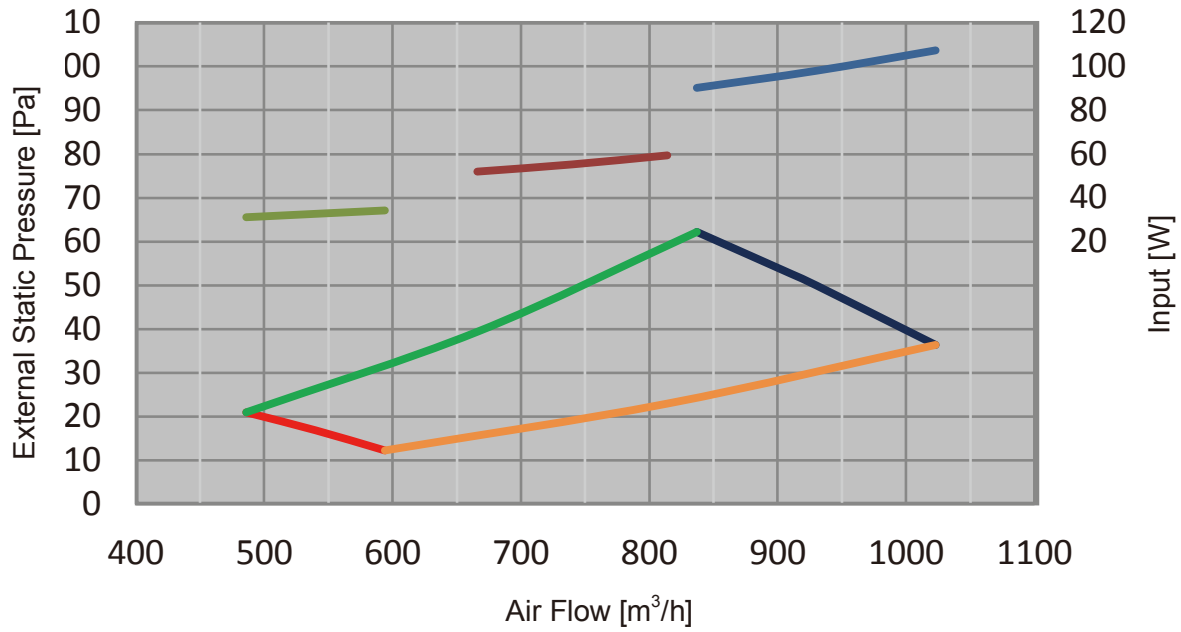
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

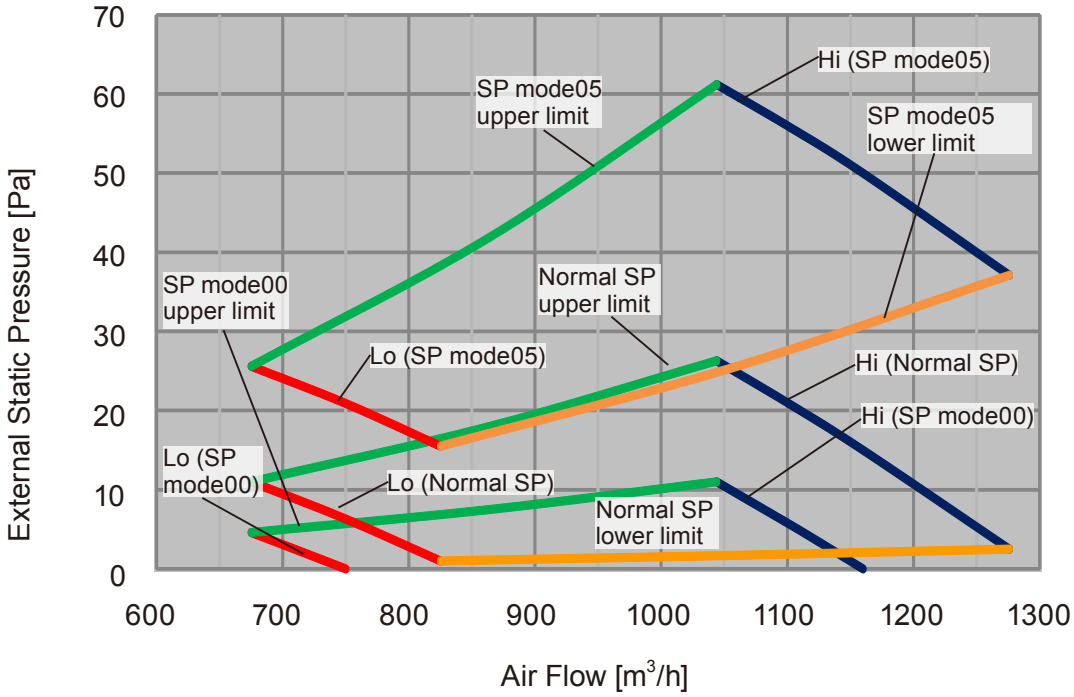


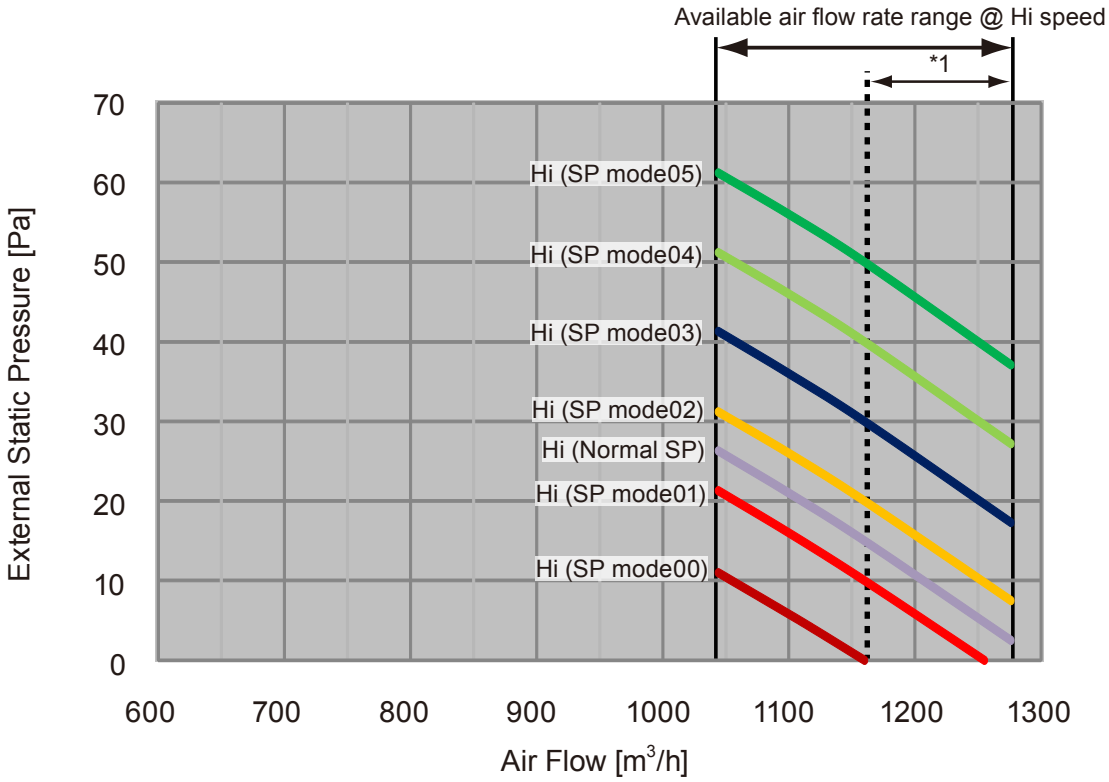
Heating





■ MODEL: ARXK24GCLH

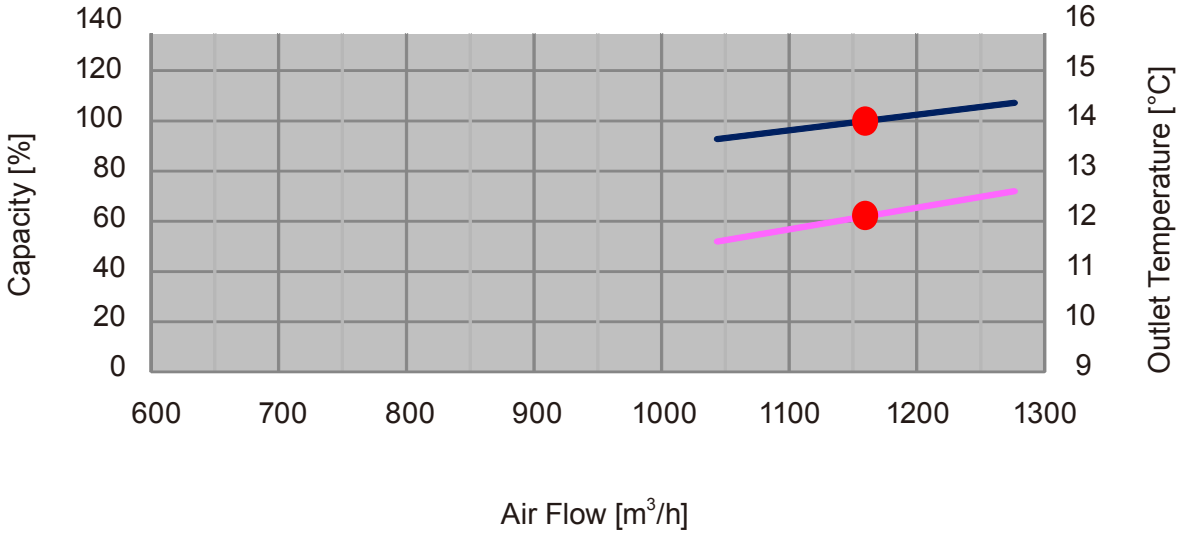




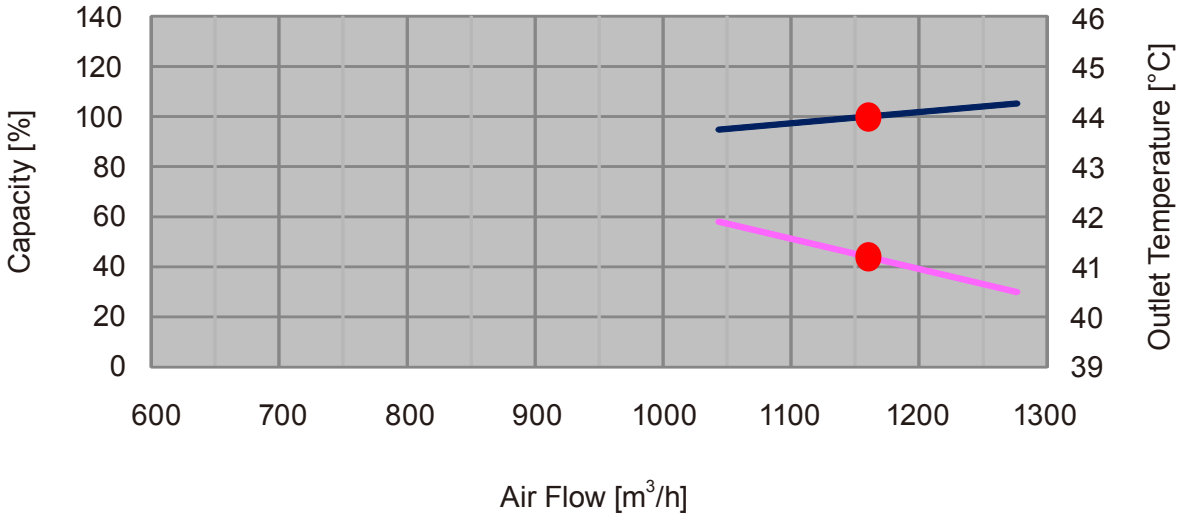
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

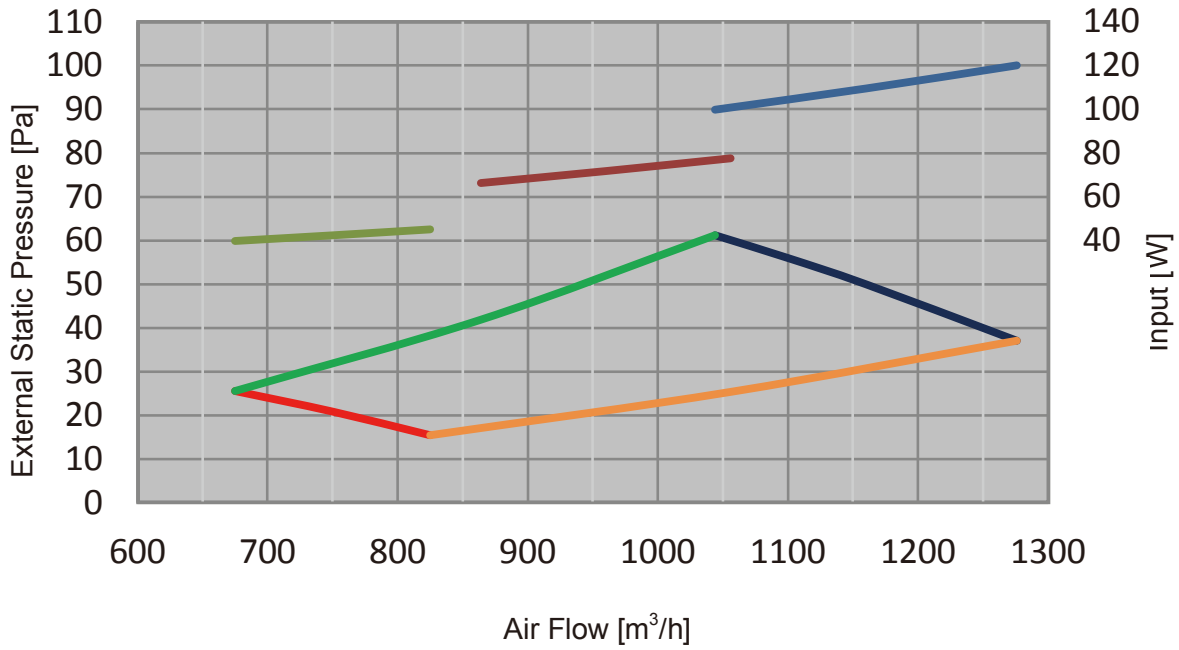
INDOOR UNITS

Cooling



Heating

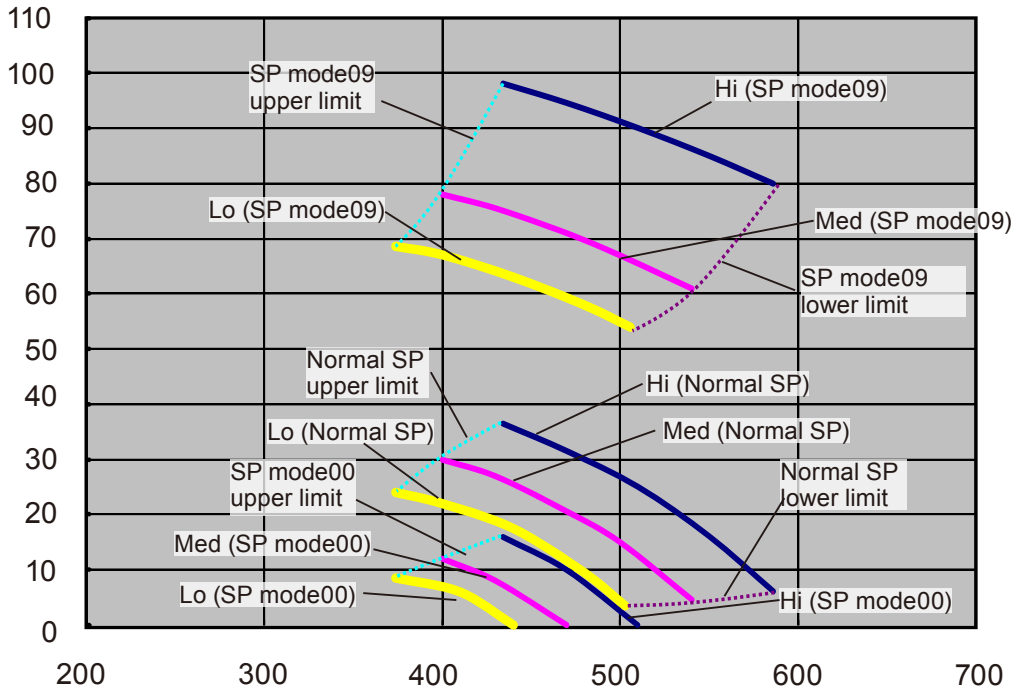




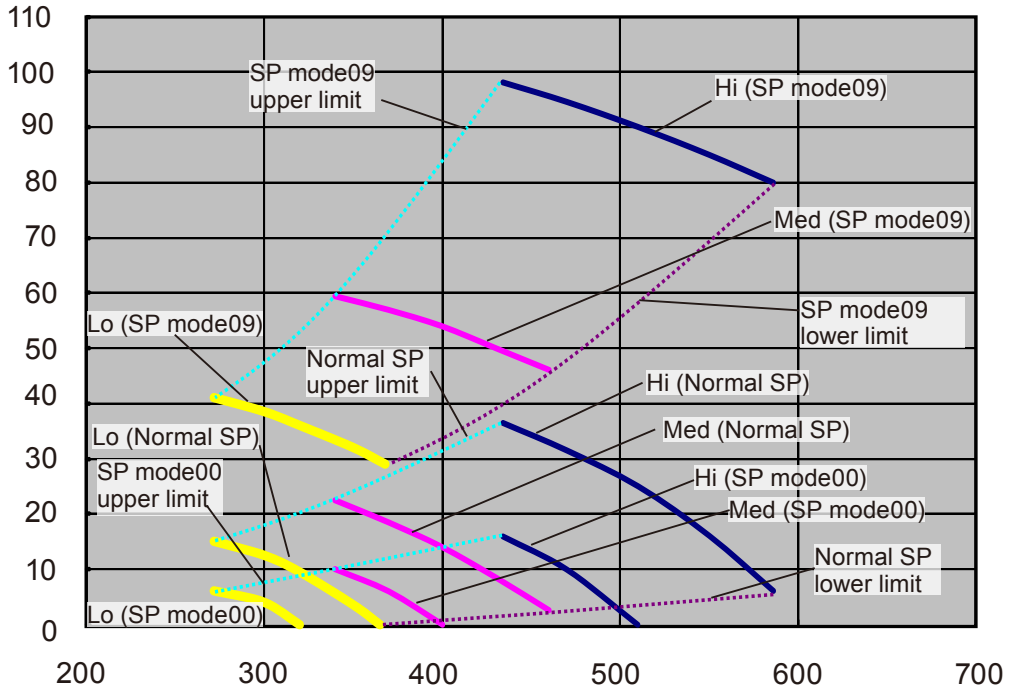
6-3. SLIM DUCT / SLIM CONCEALED FLOOR TYPE

■ MODEL: ARXD04GALH

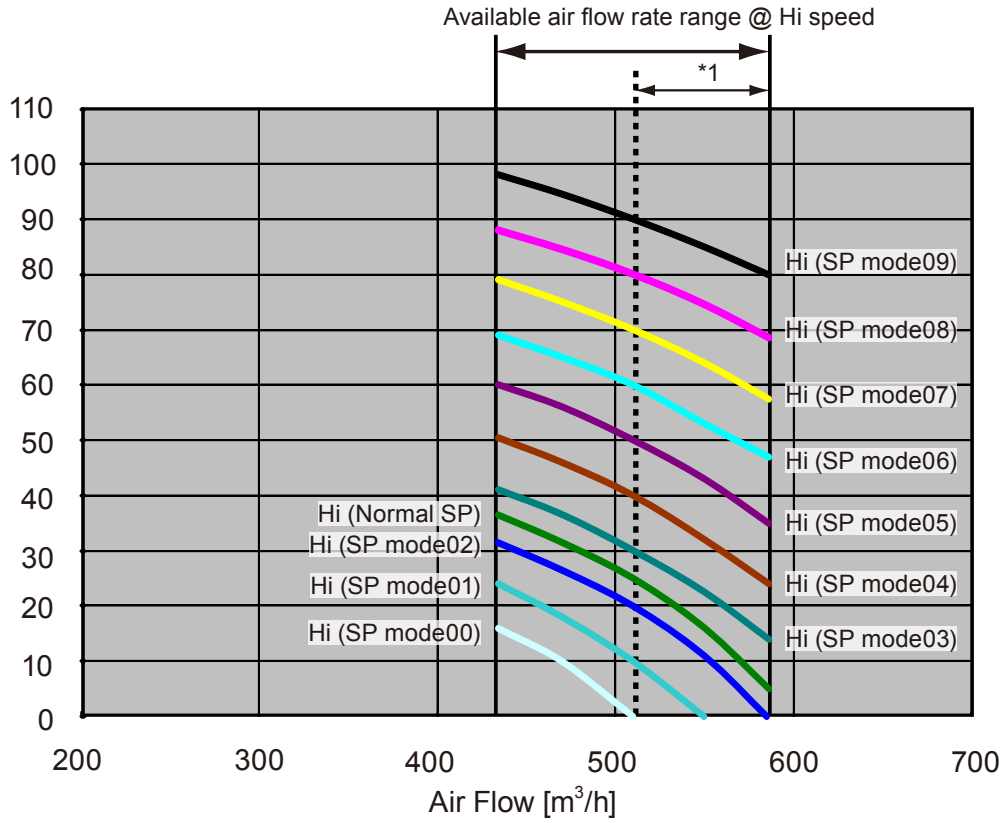
● Cooling



● Heating

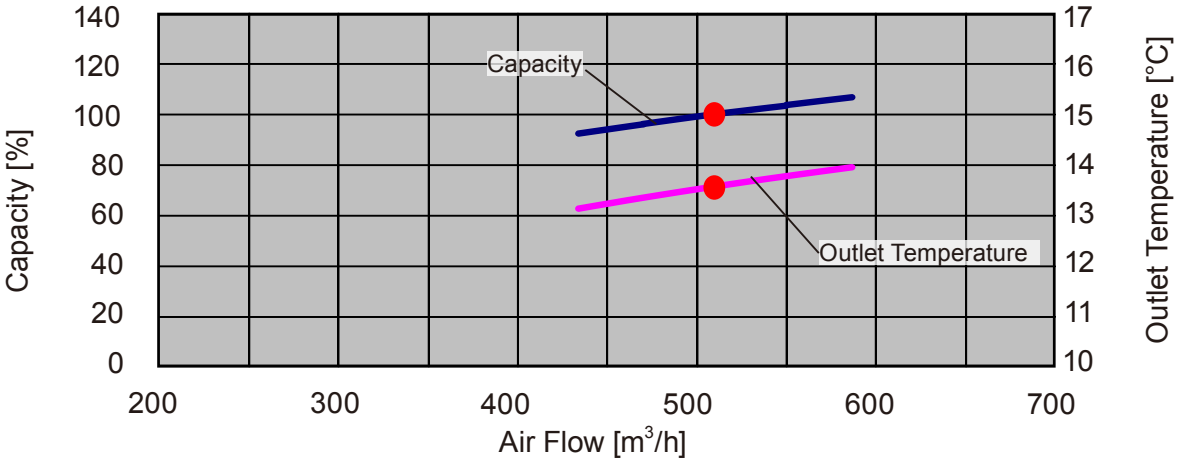


INDOOR UNITS

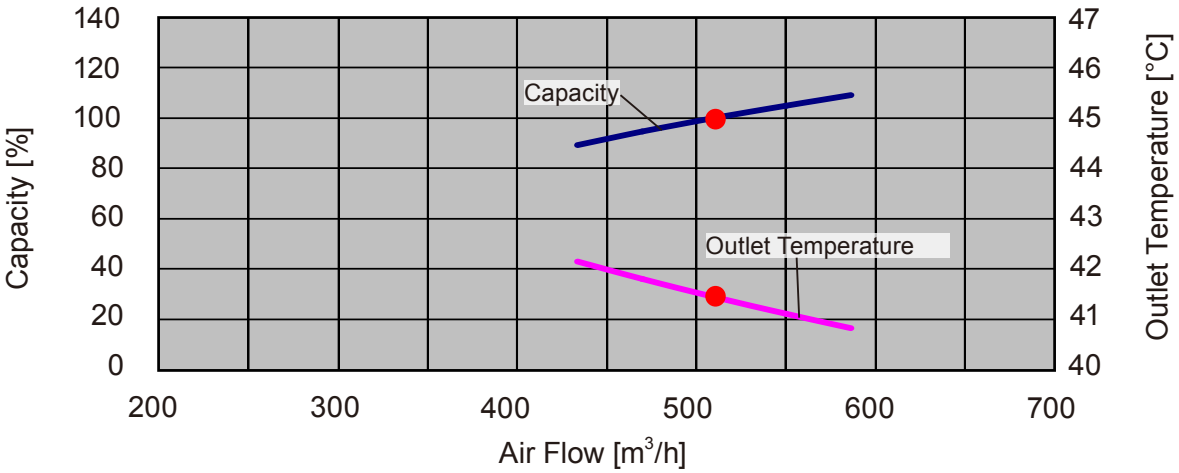


*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

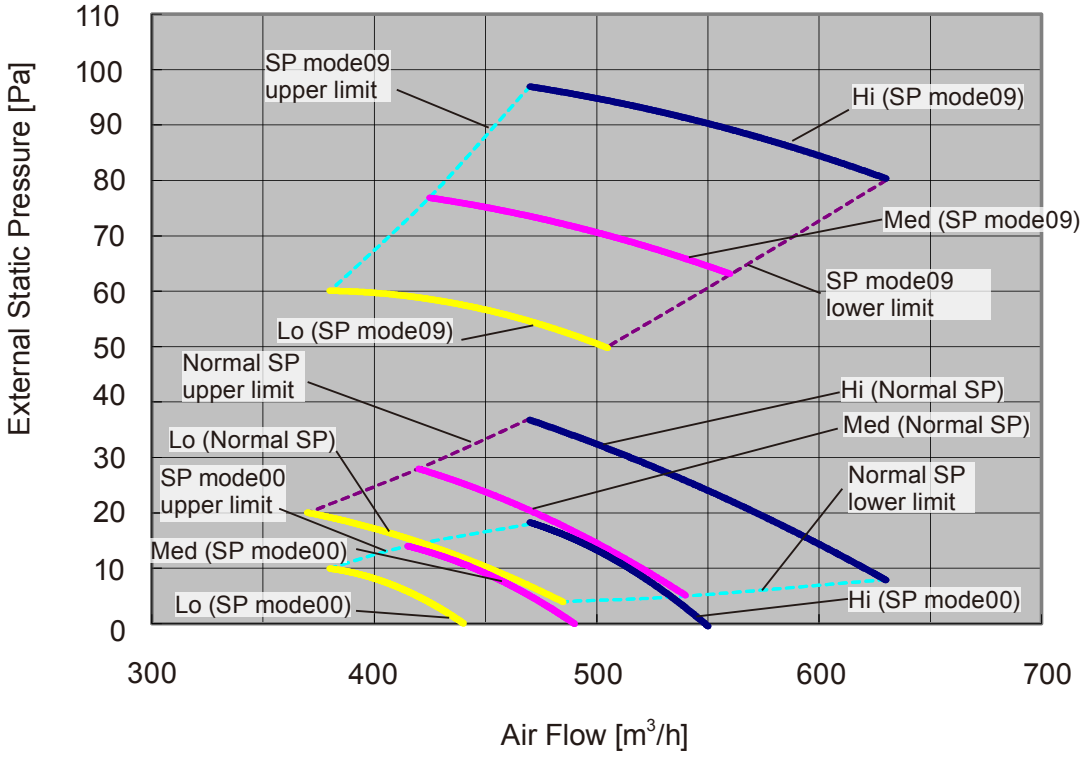


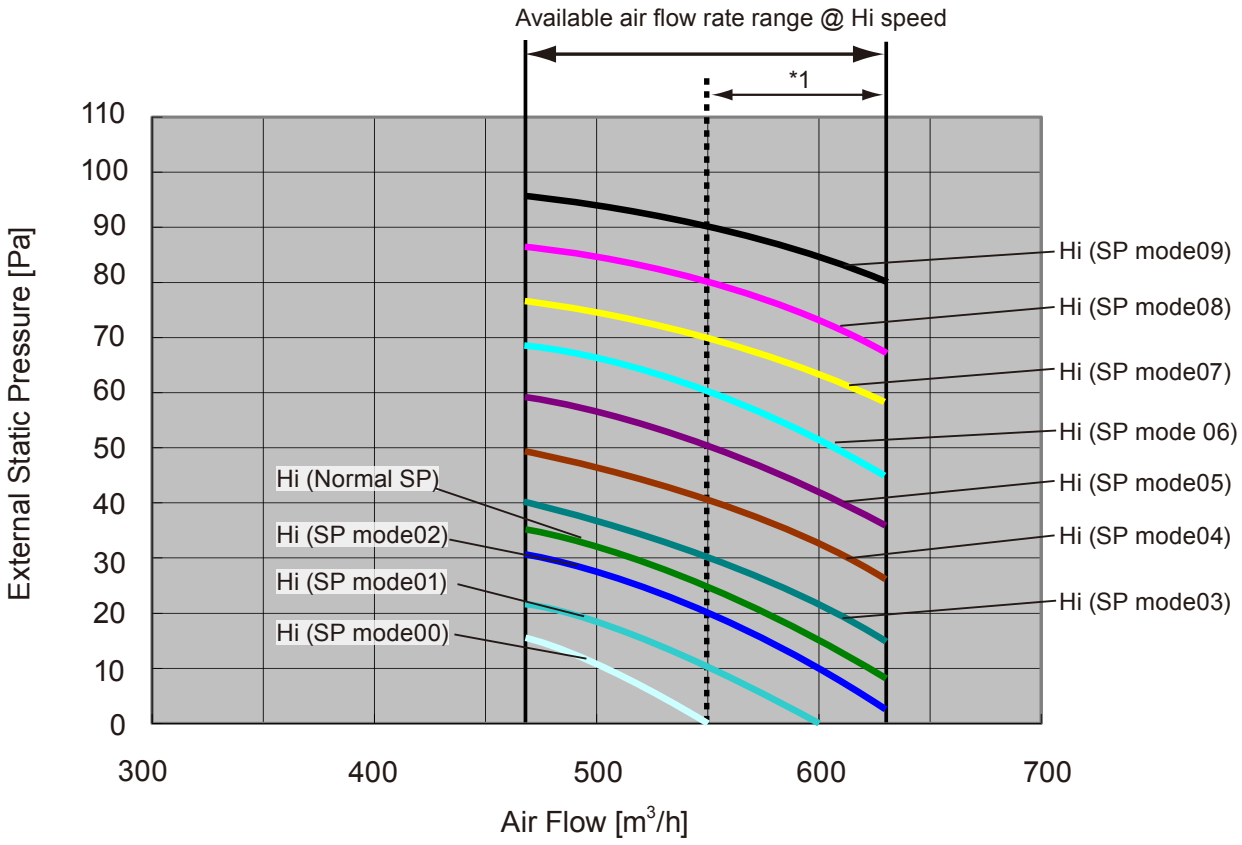
Heating



INDOOR UNITS

■ MODEL: ARXD07GALH

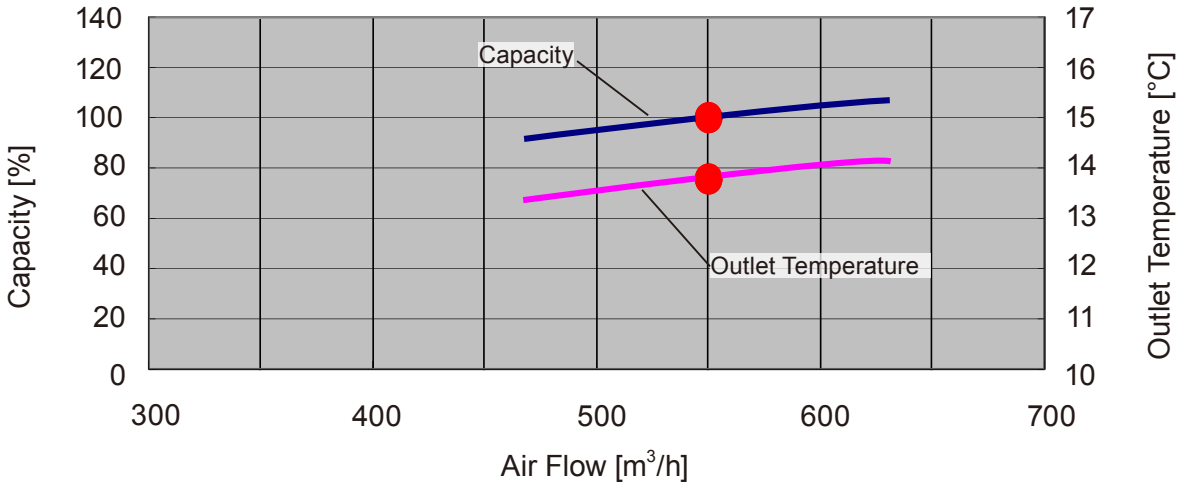




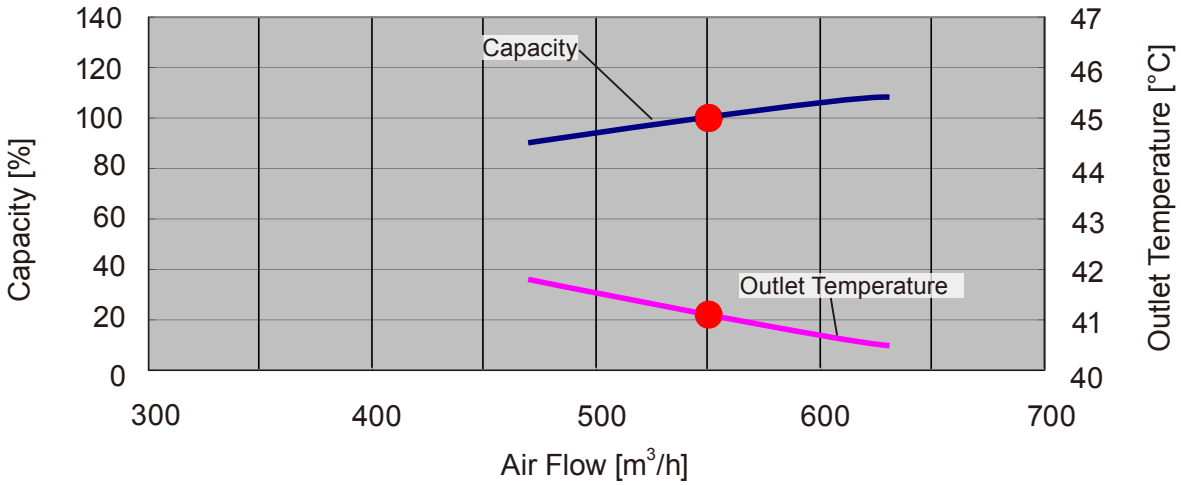
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

INDOOR UNITS

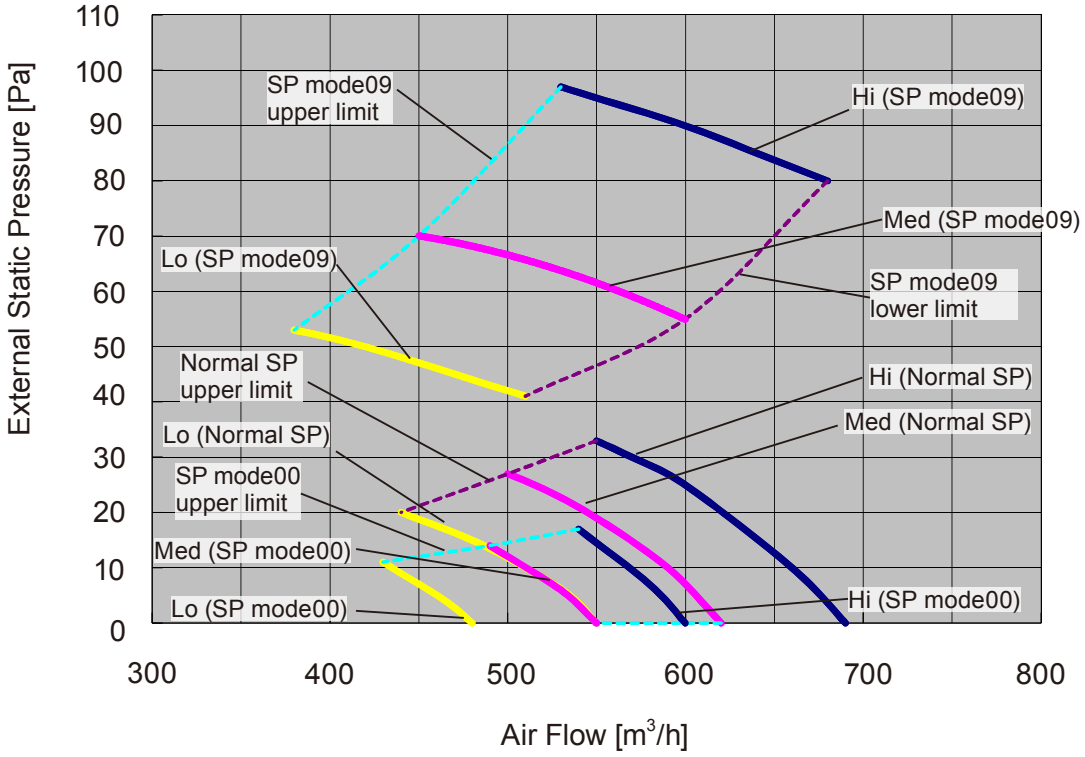
Cooling

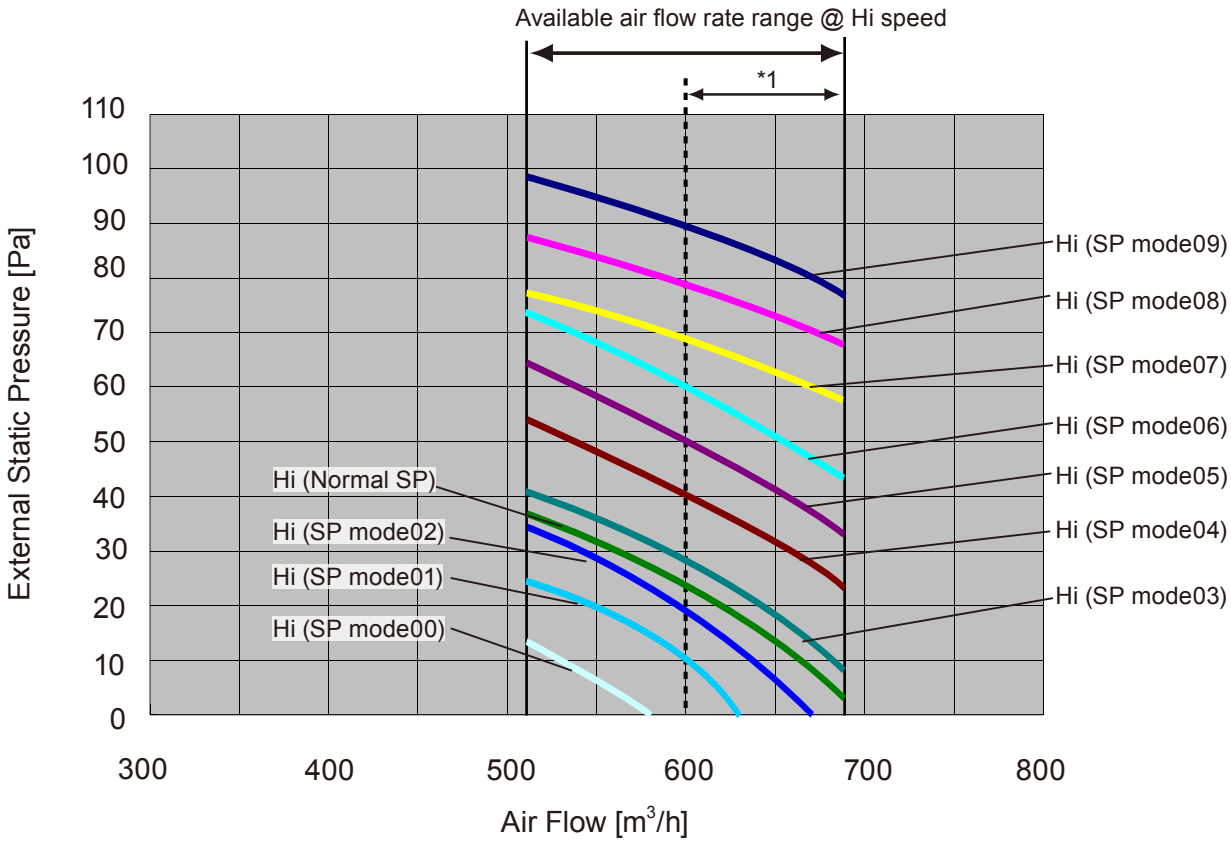


Heating



■ MODEL: ARXD09GALH

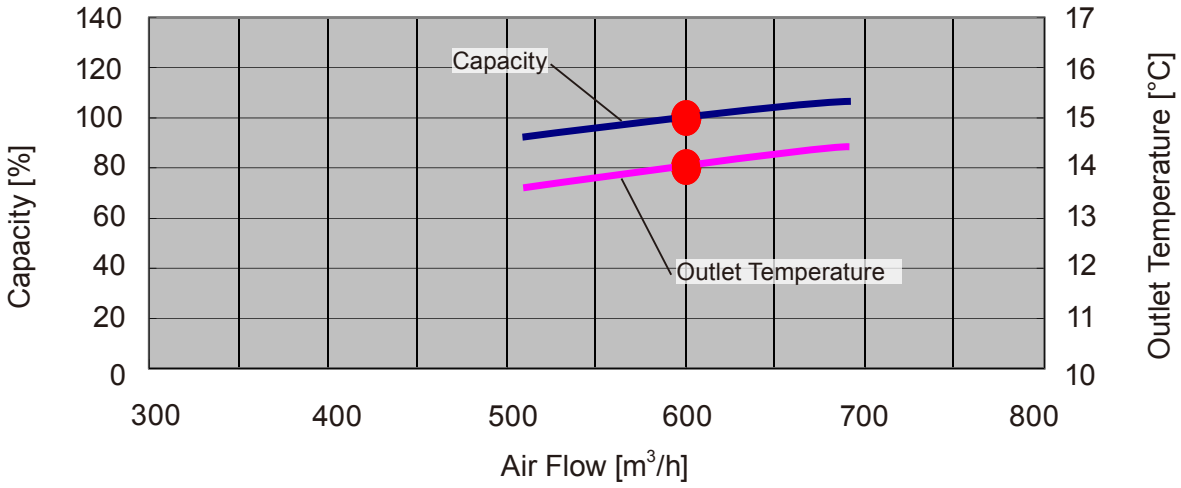




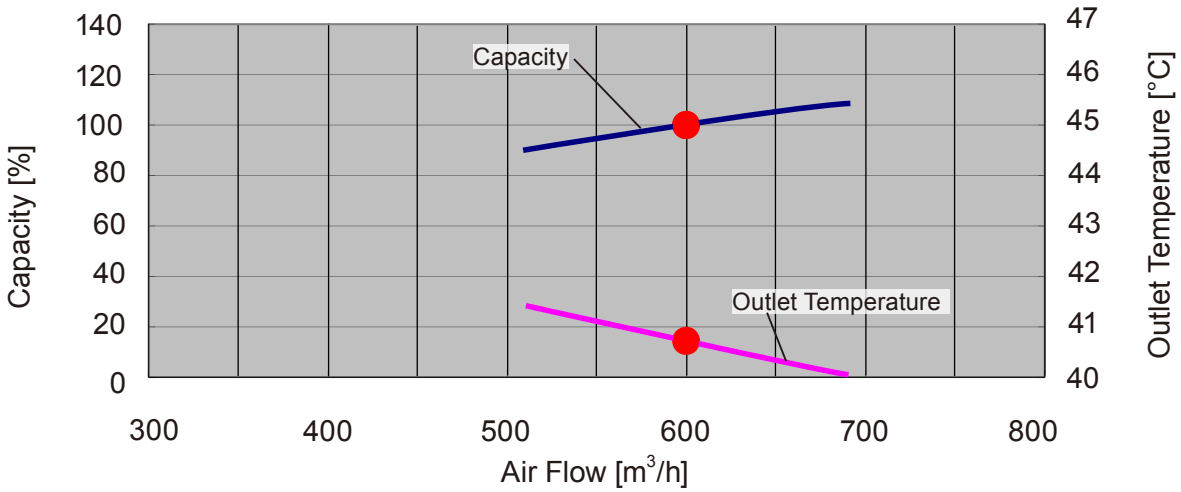
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

INDOOR UNITS

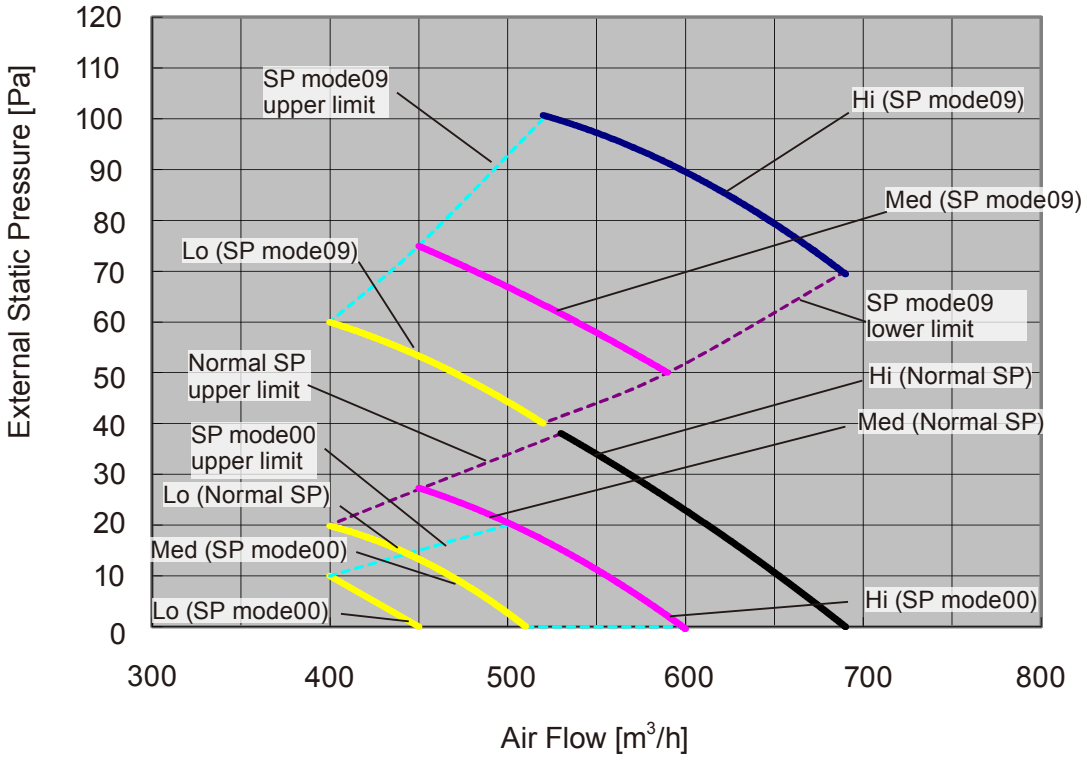
Cooling

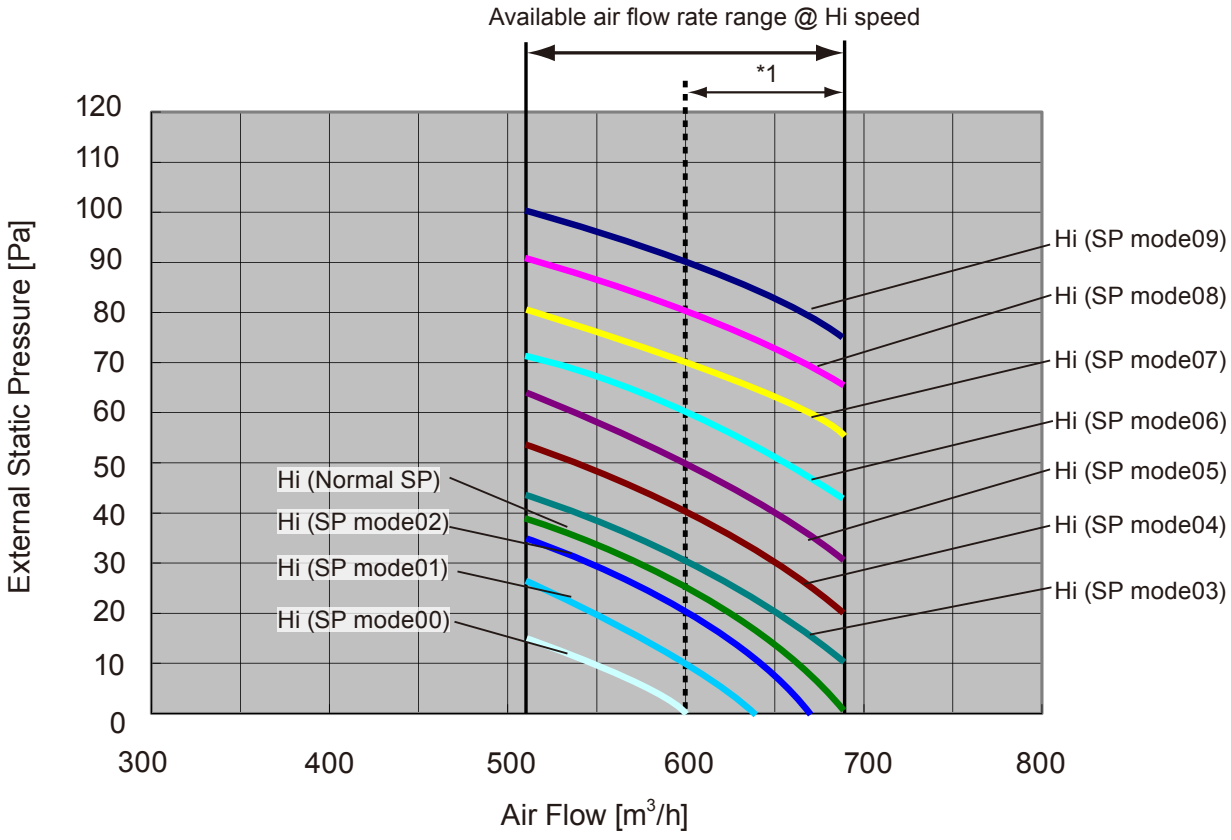


Heating



■ MODEL: ARXD12GALH

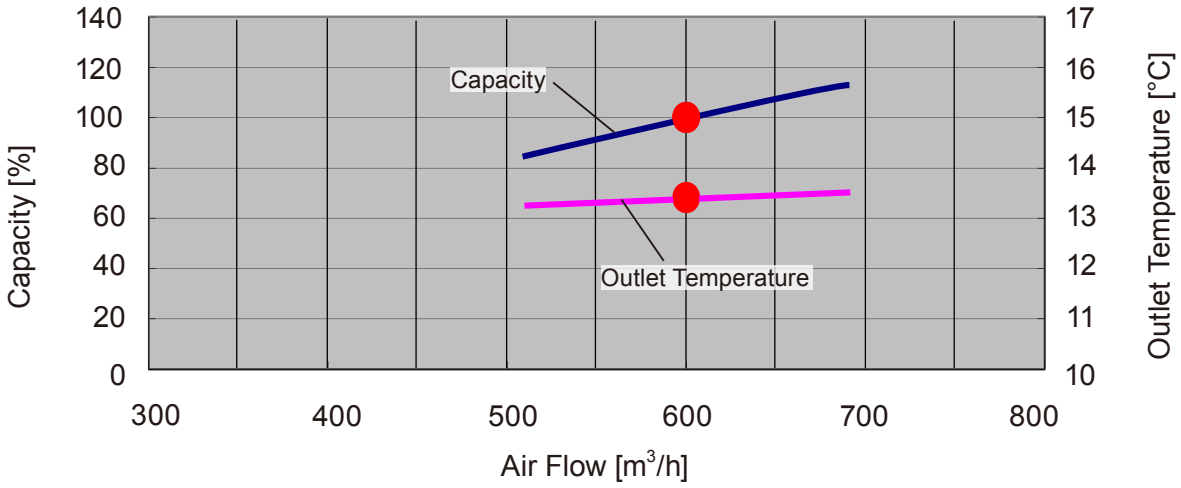




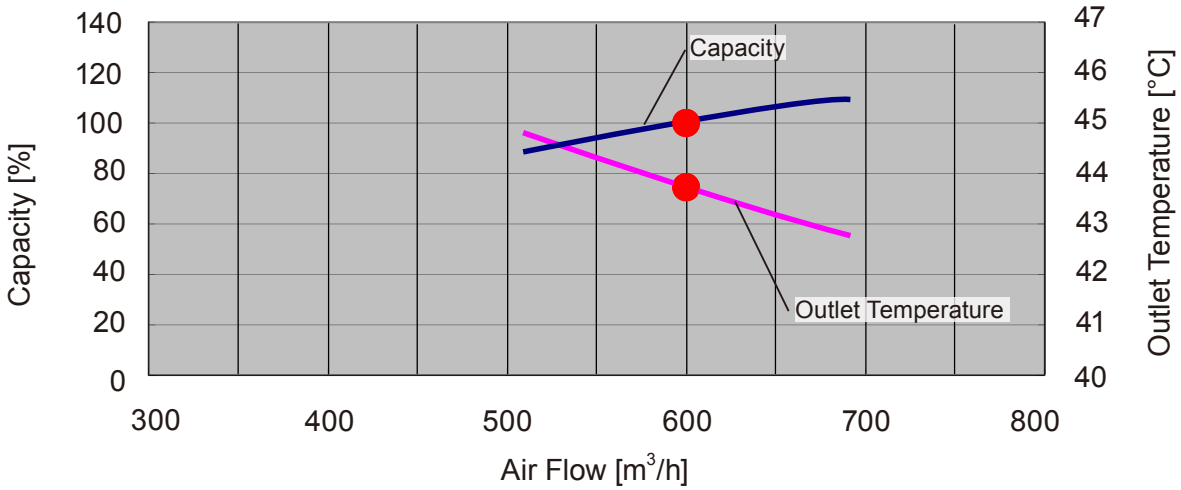
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

INDOOR UNITS

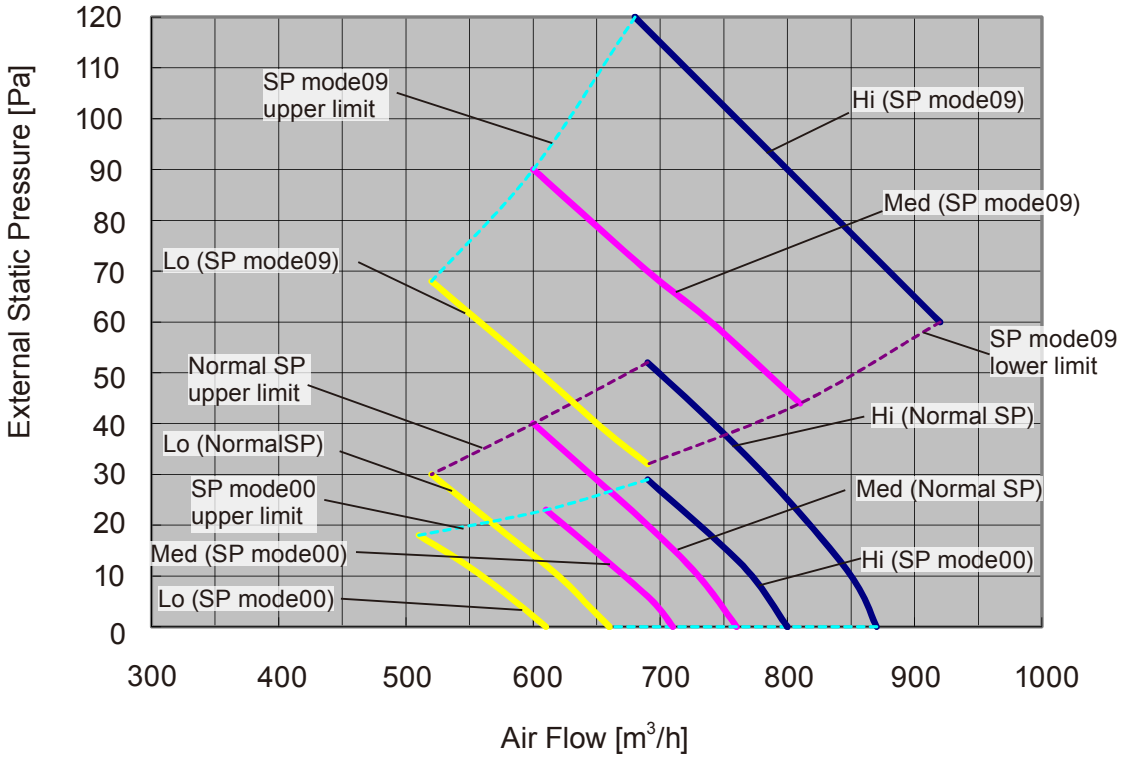
Cooling

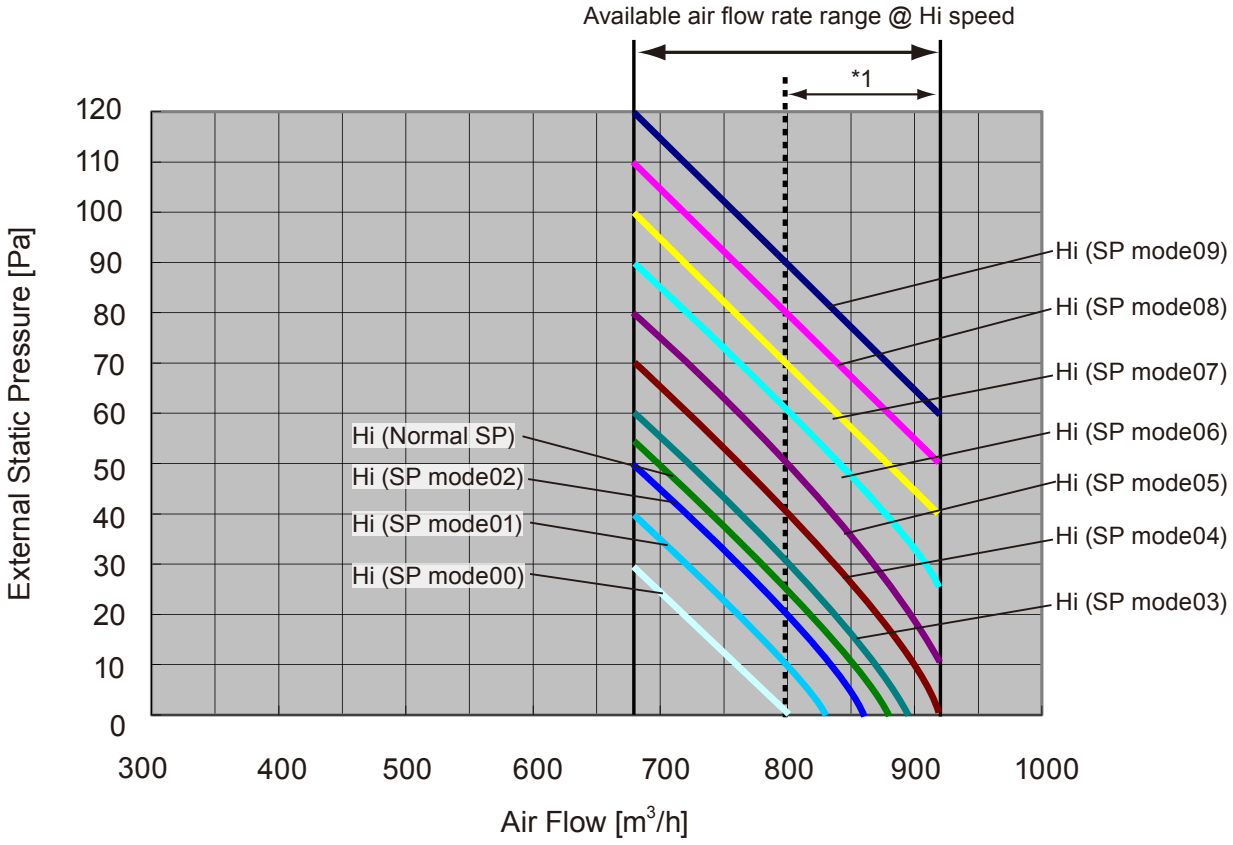


Heating



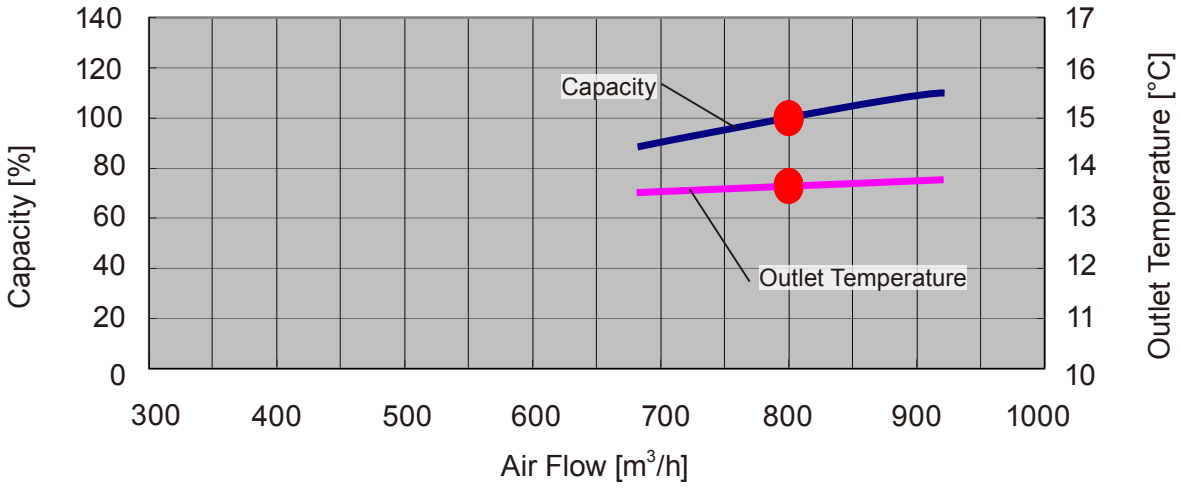
■ MODEL: ARXD14GALH



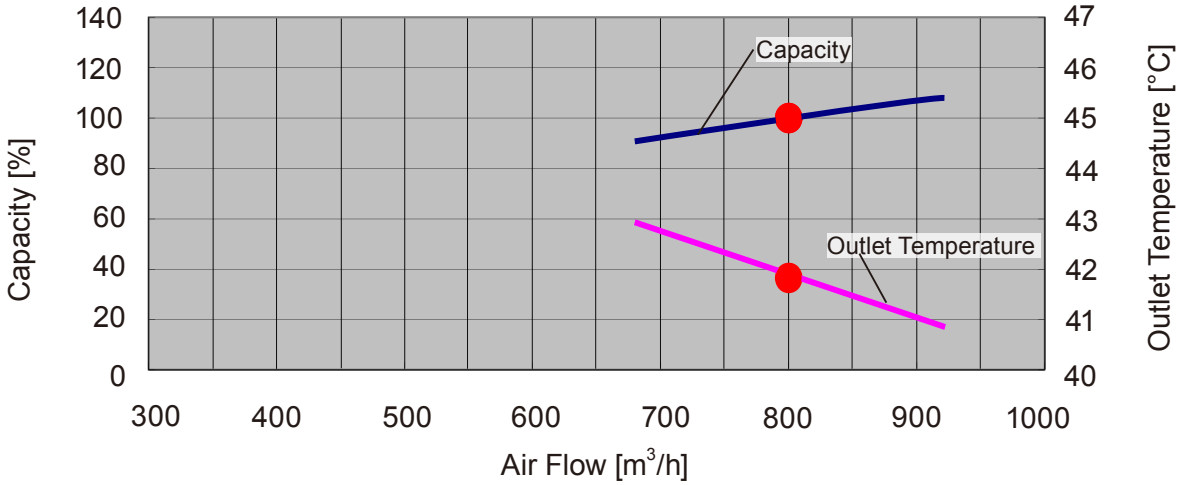


*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling

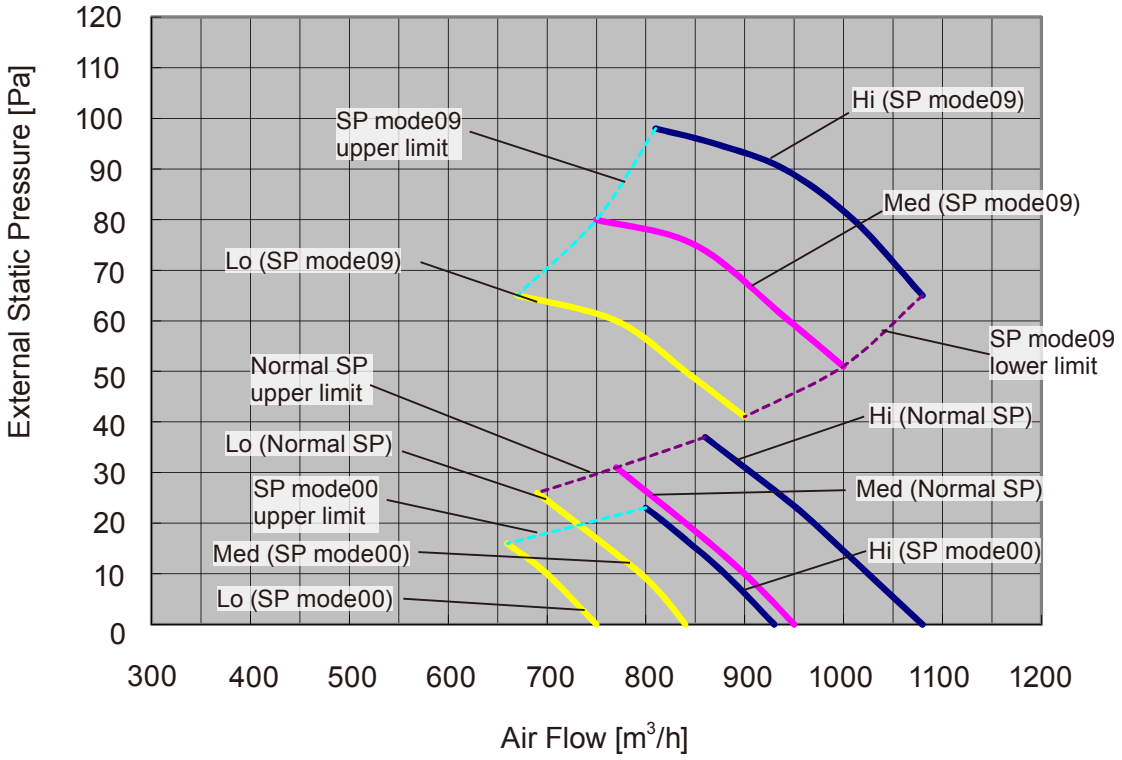


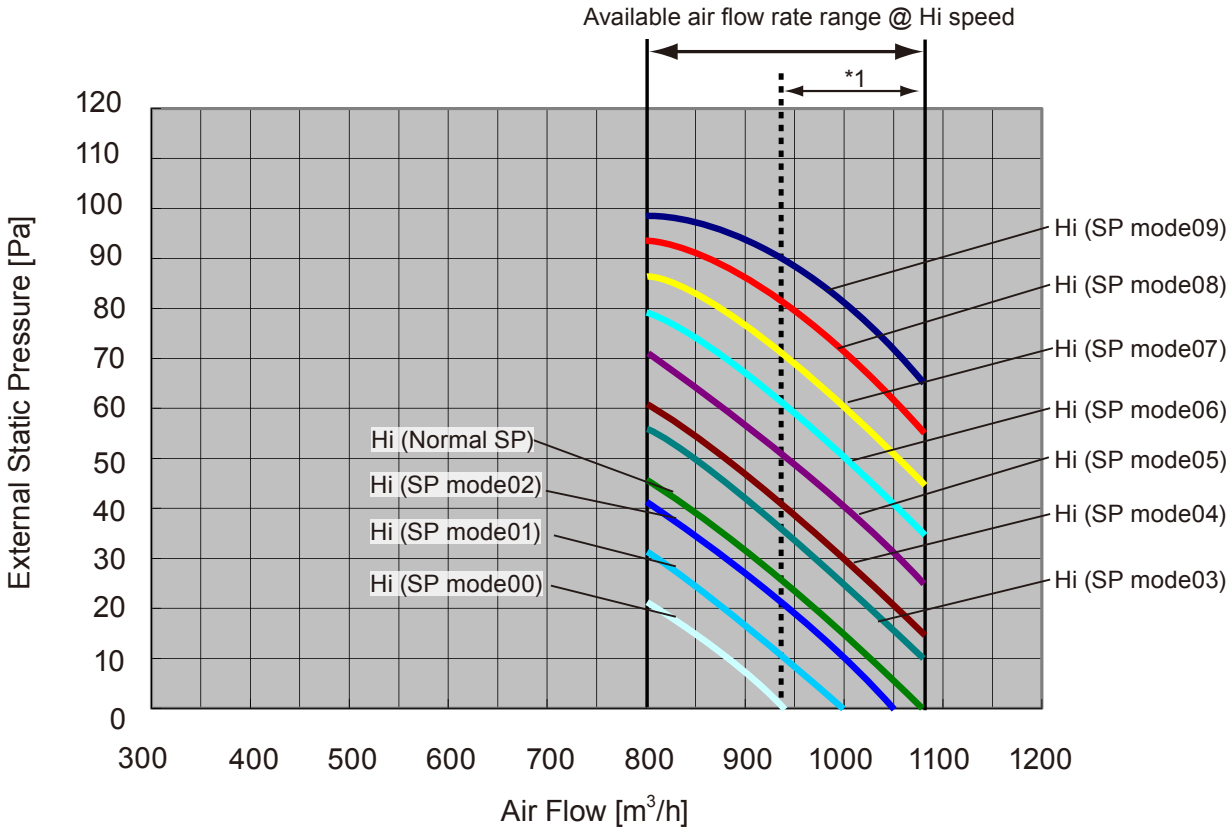
Heating



INDOOR UNITS

■ MODEL: ARXD18GALH

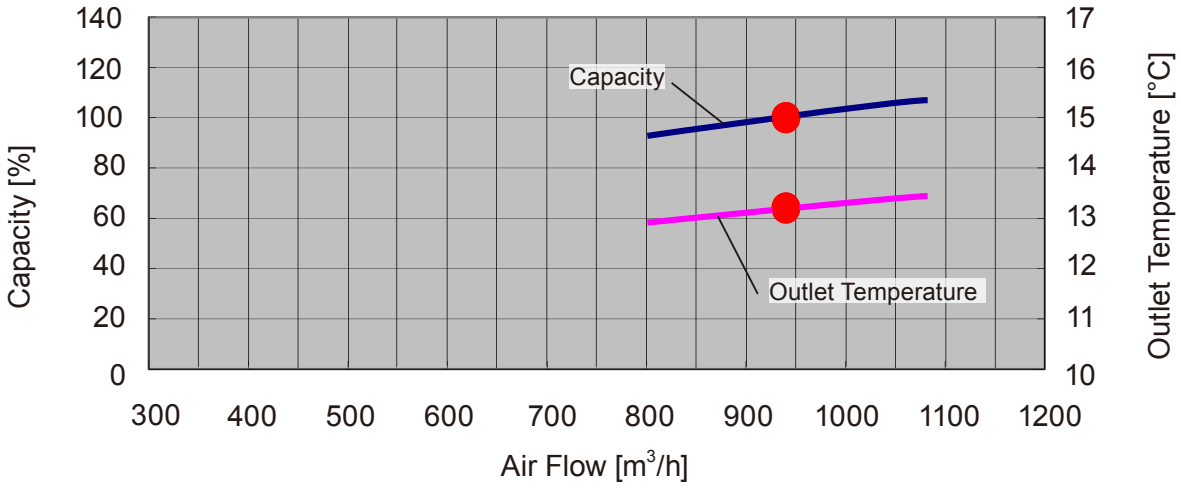




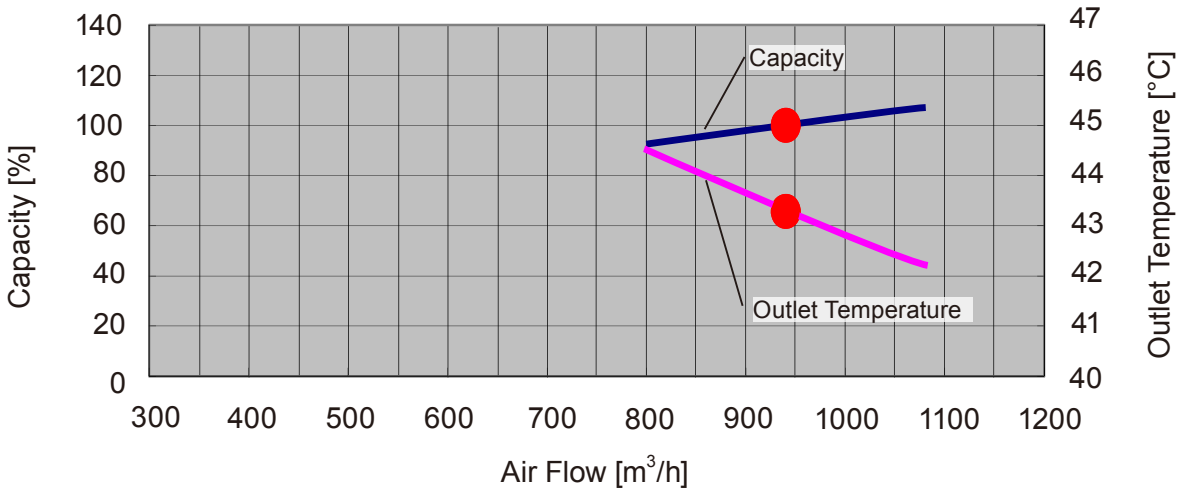
*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

INDOOR UNITS

Cooling

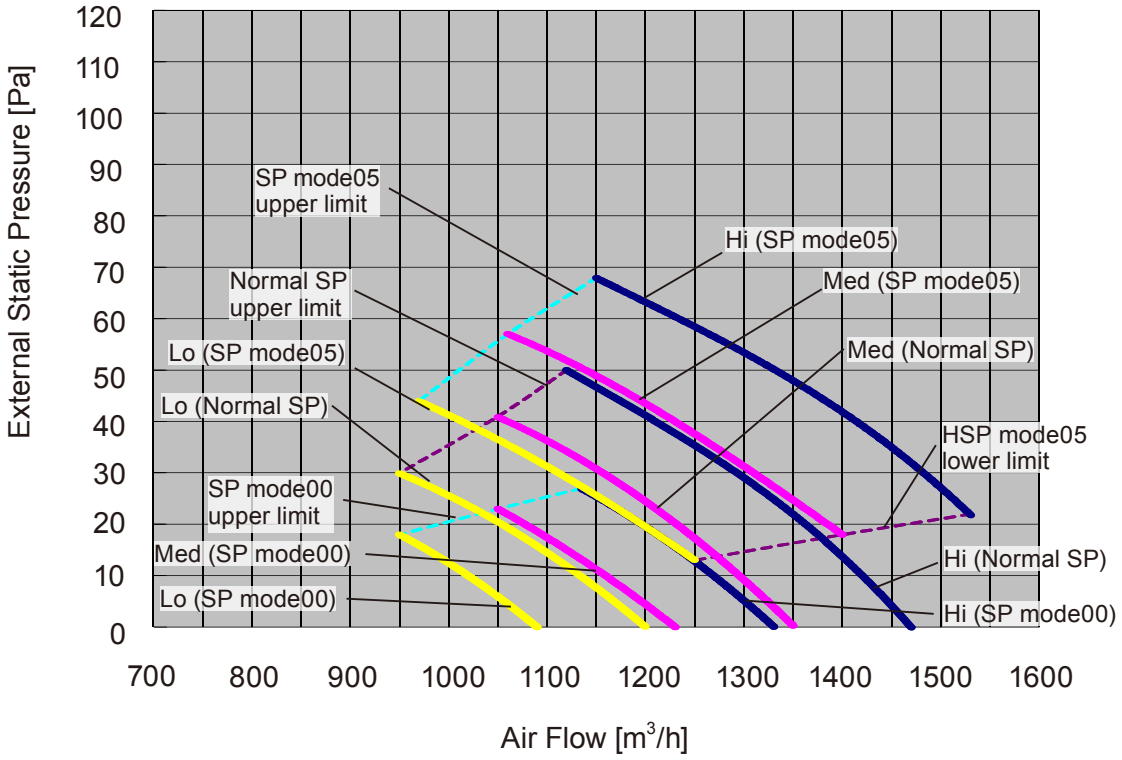


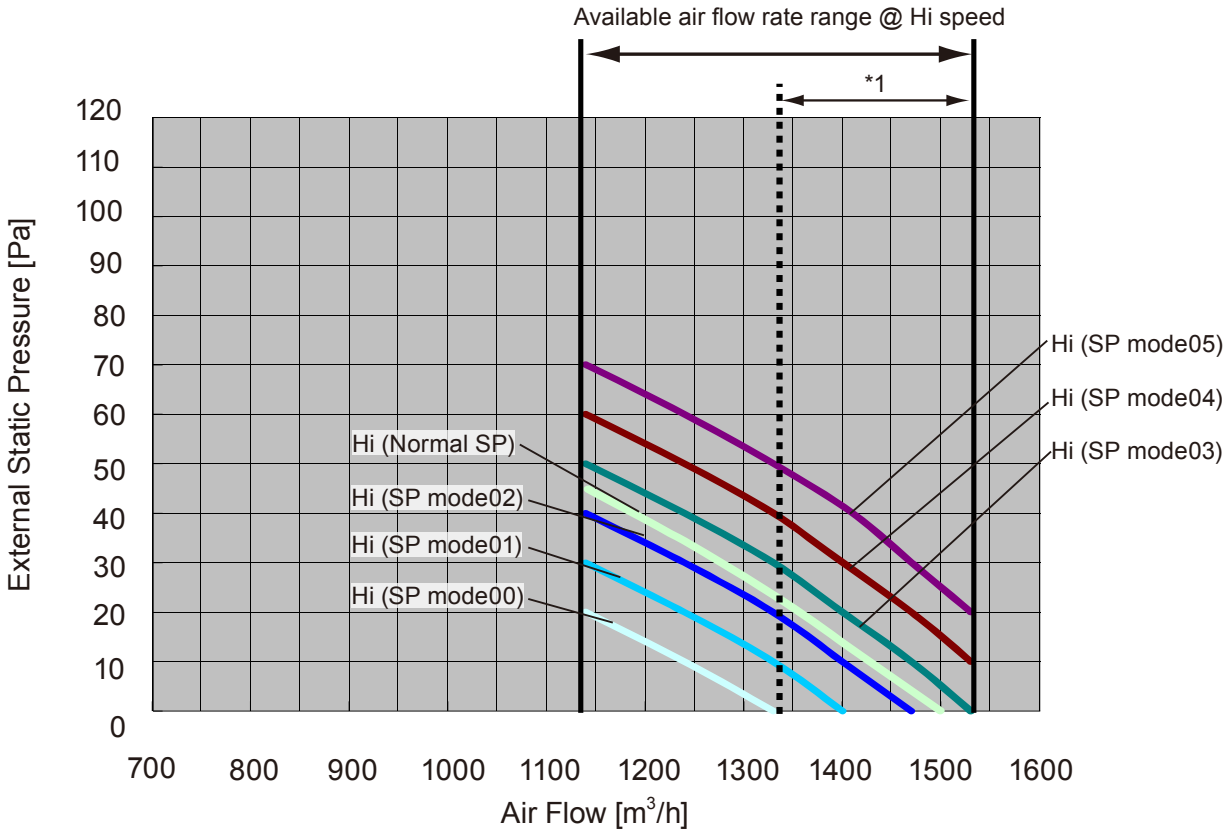
Heating



INDOOR UNITS

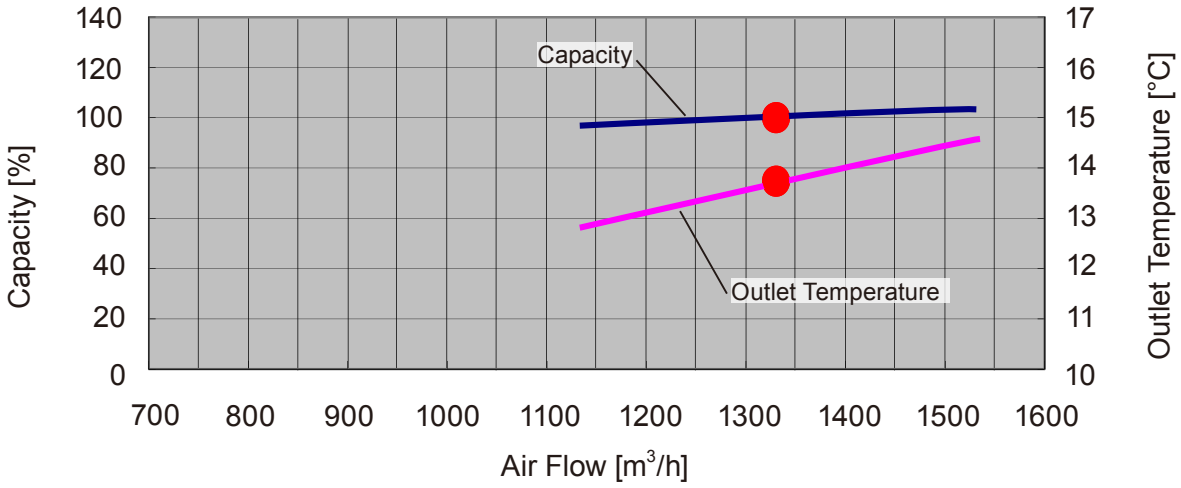
■ MODEL: ARXD24GALH



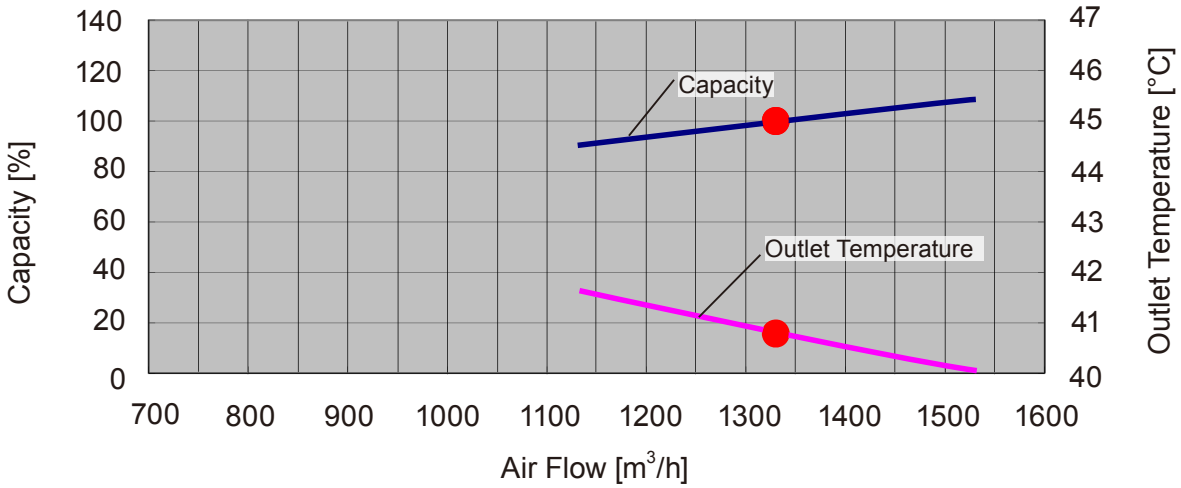


*1: Available air flow rate range when Auto louver grille (option) is installed.
Fan speed : High
Vertical flap : Up

Cooling



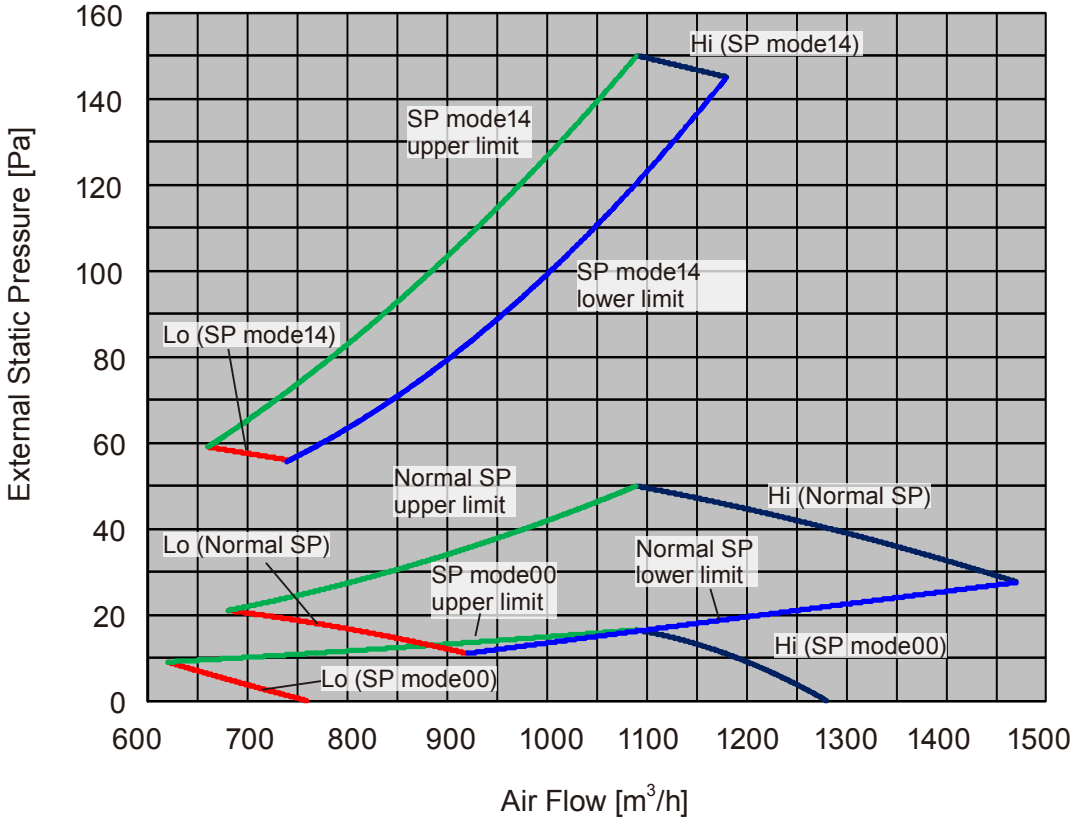
Heating

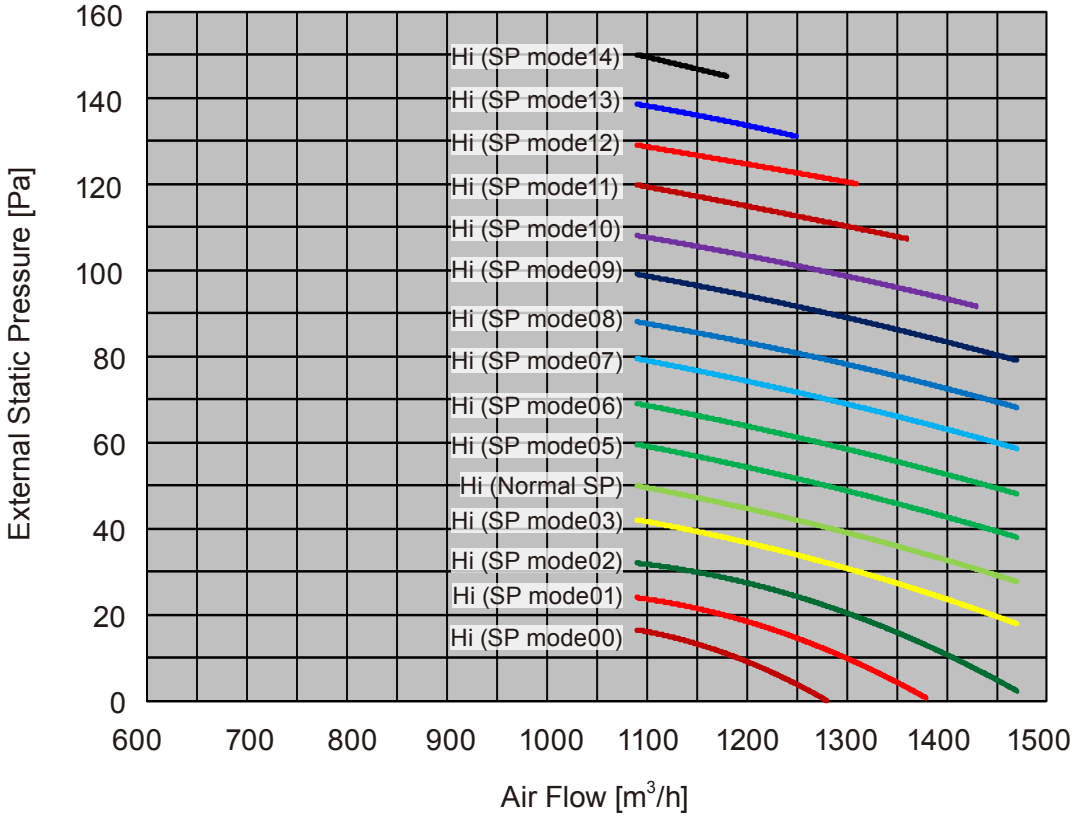


INDOOR UNITS

6-4. MEDIUM STATIC PRESSURE DUCT TYPE

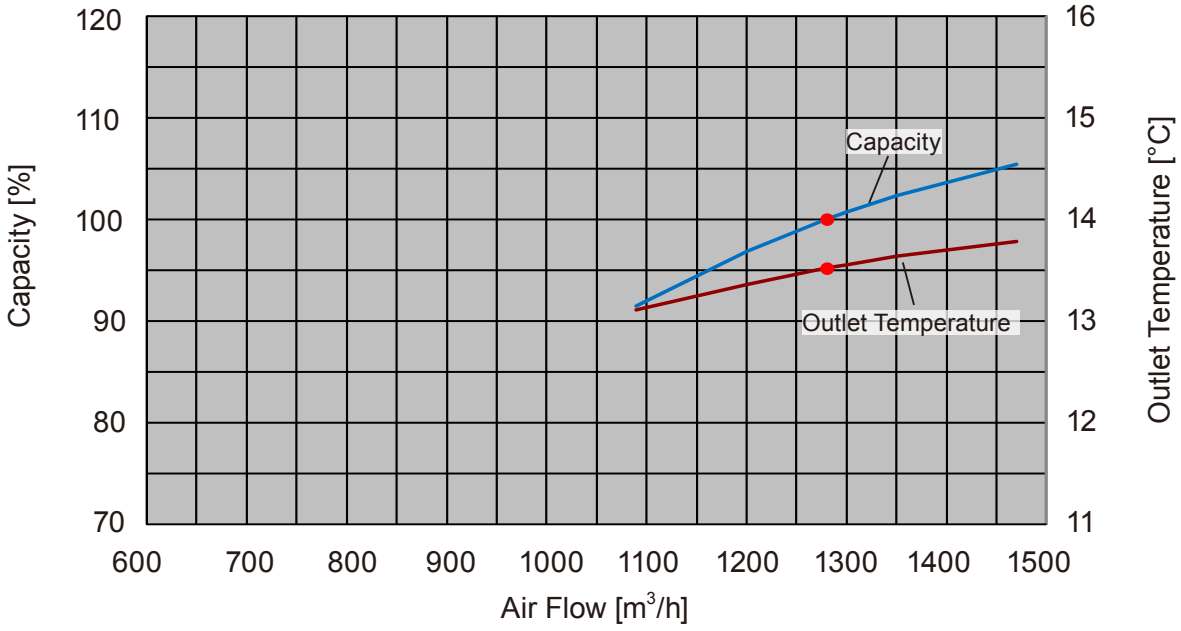
■ MODEL: ARXA24GBLH



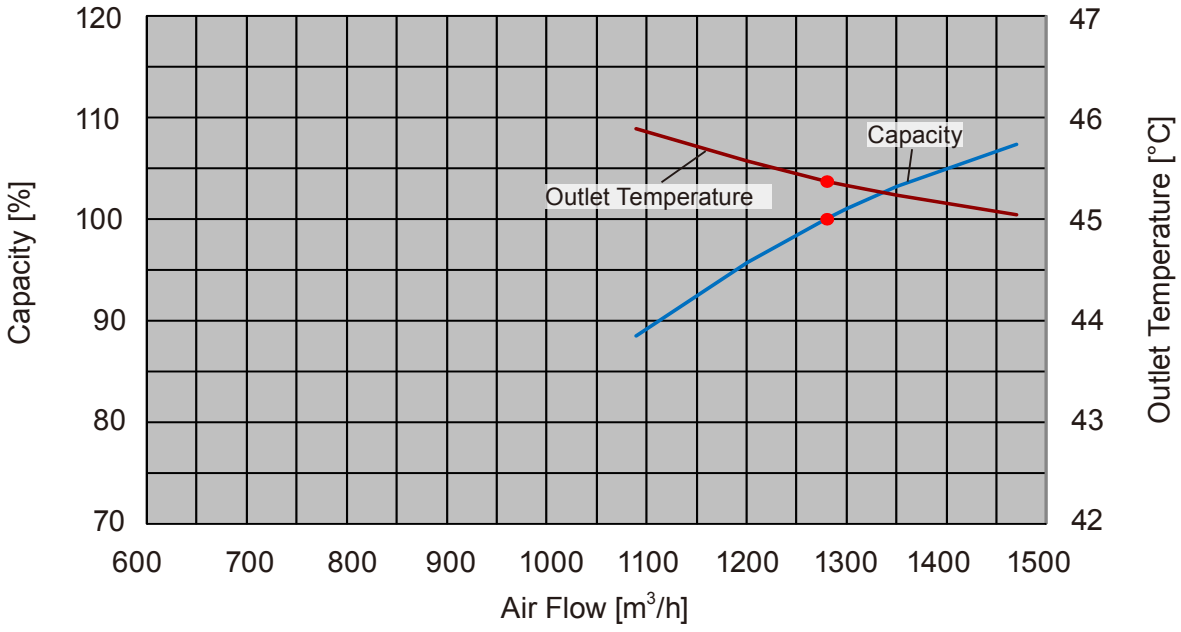


INDOOR UNITS

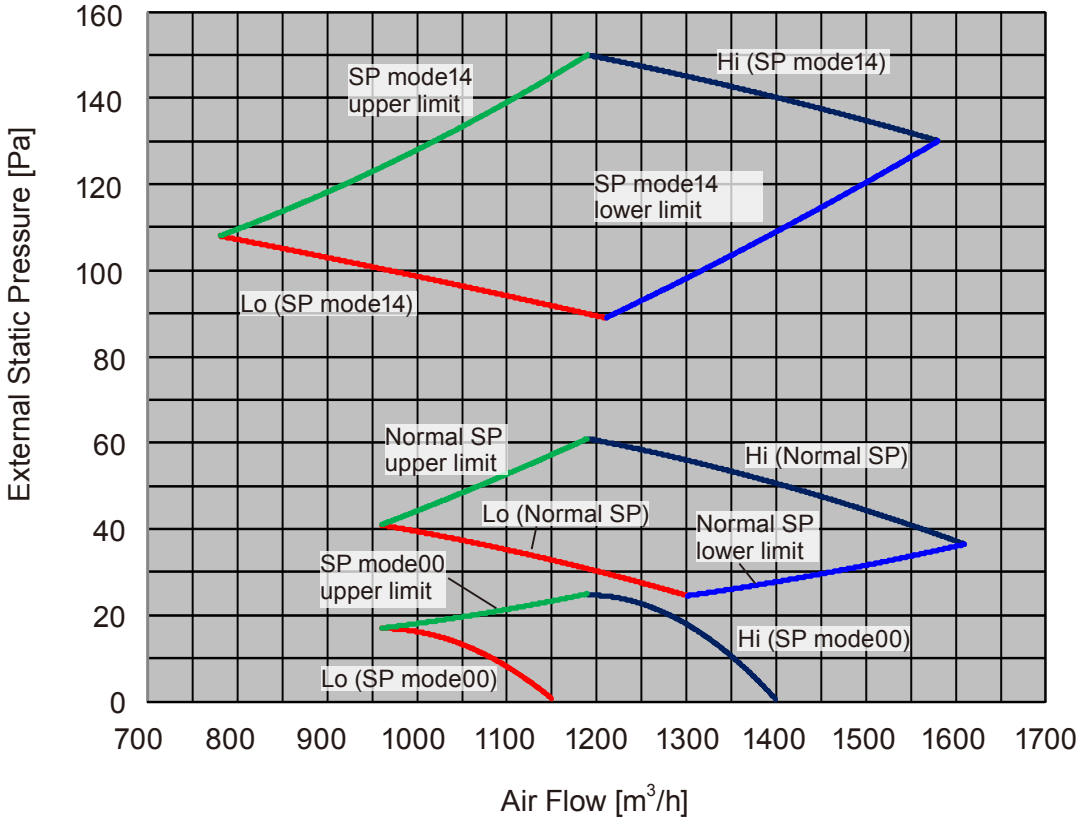
Cooling

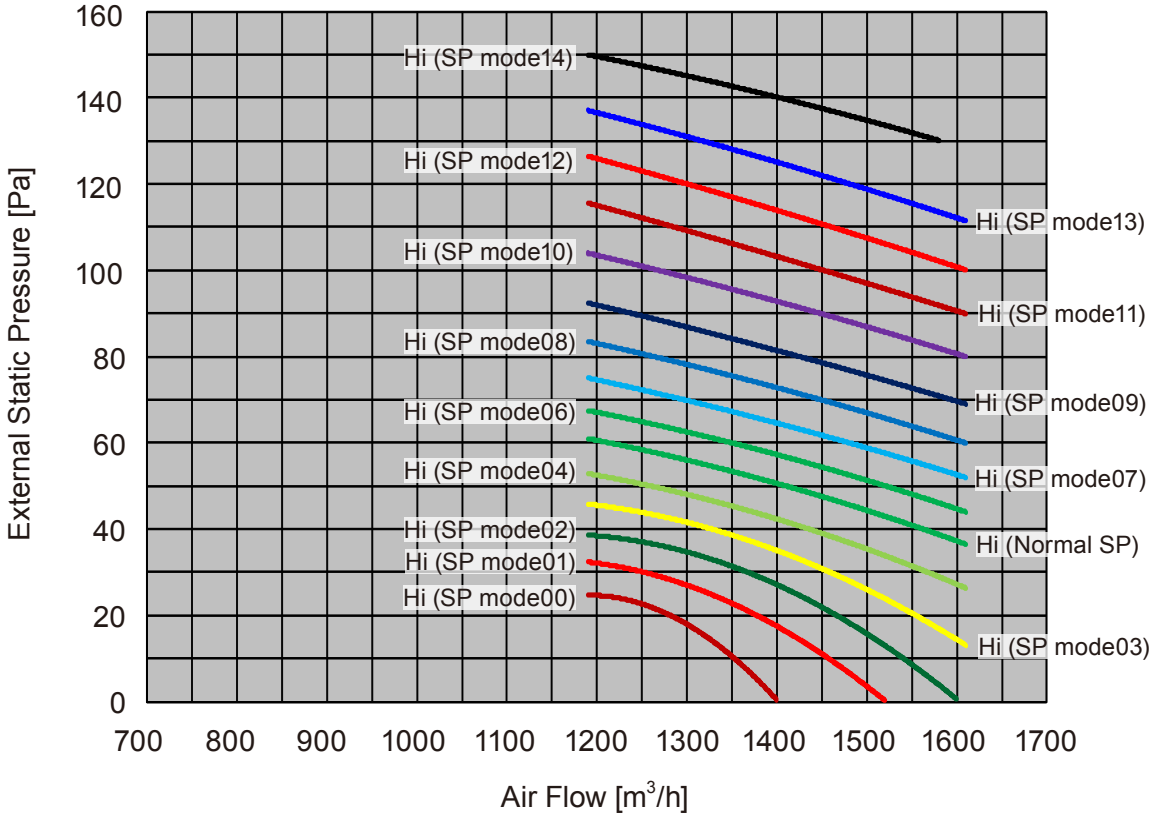


Heating

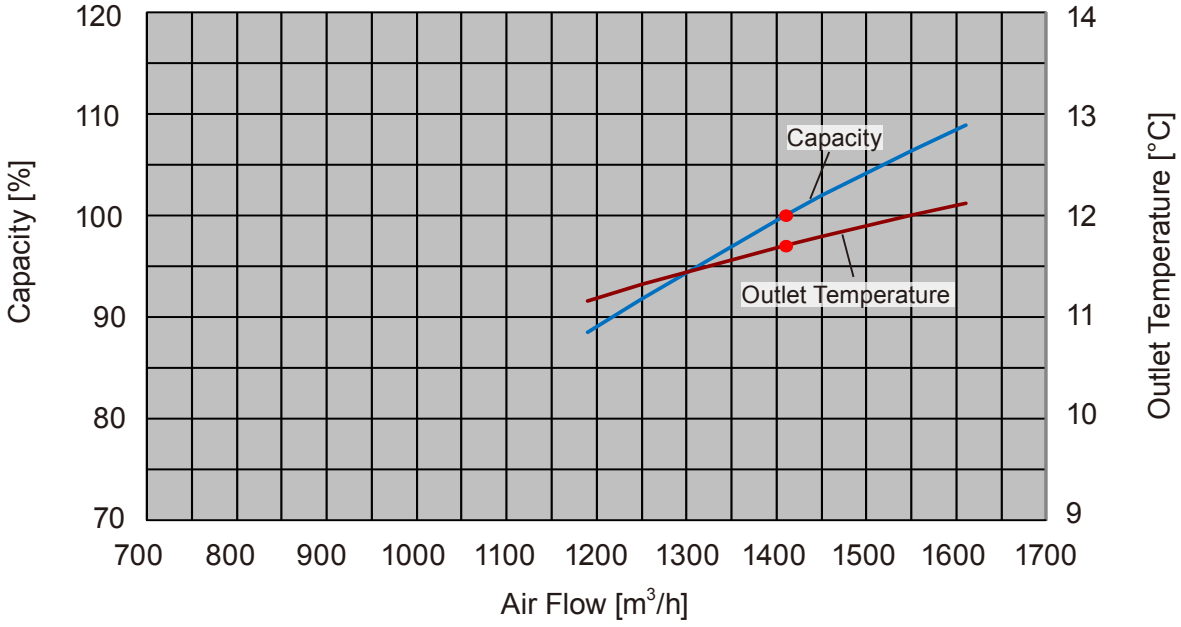


■ MODEL: ARXA30GBLH

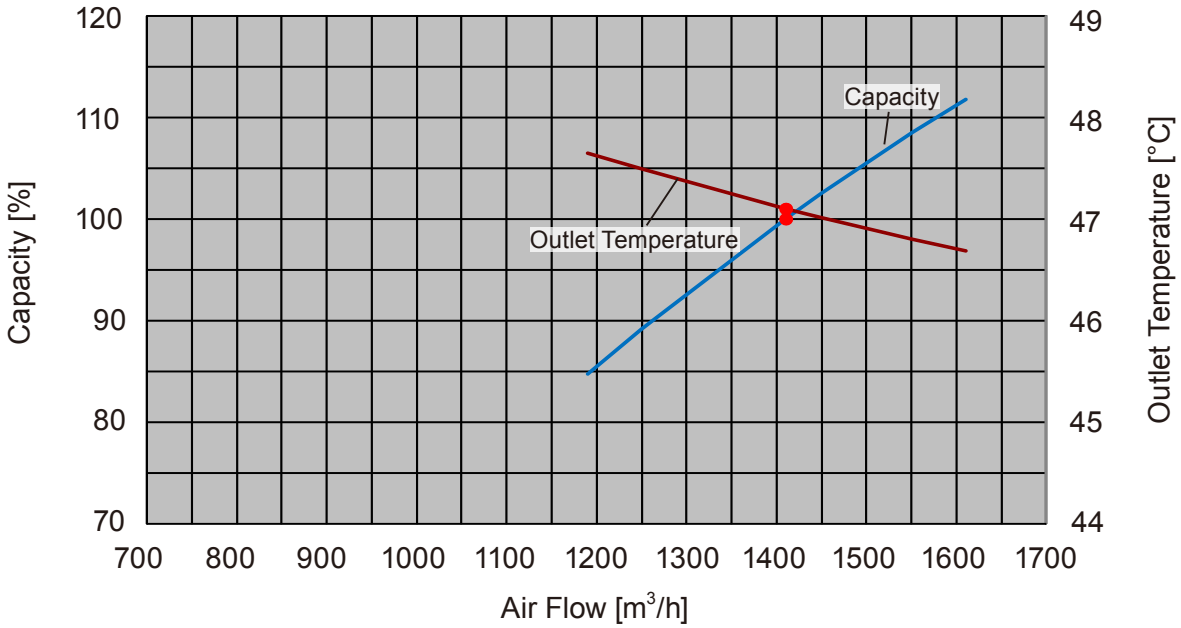




Cooling

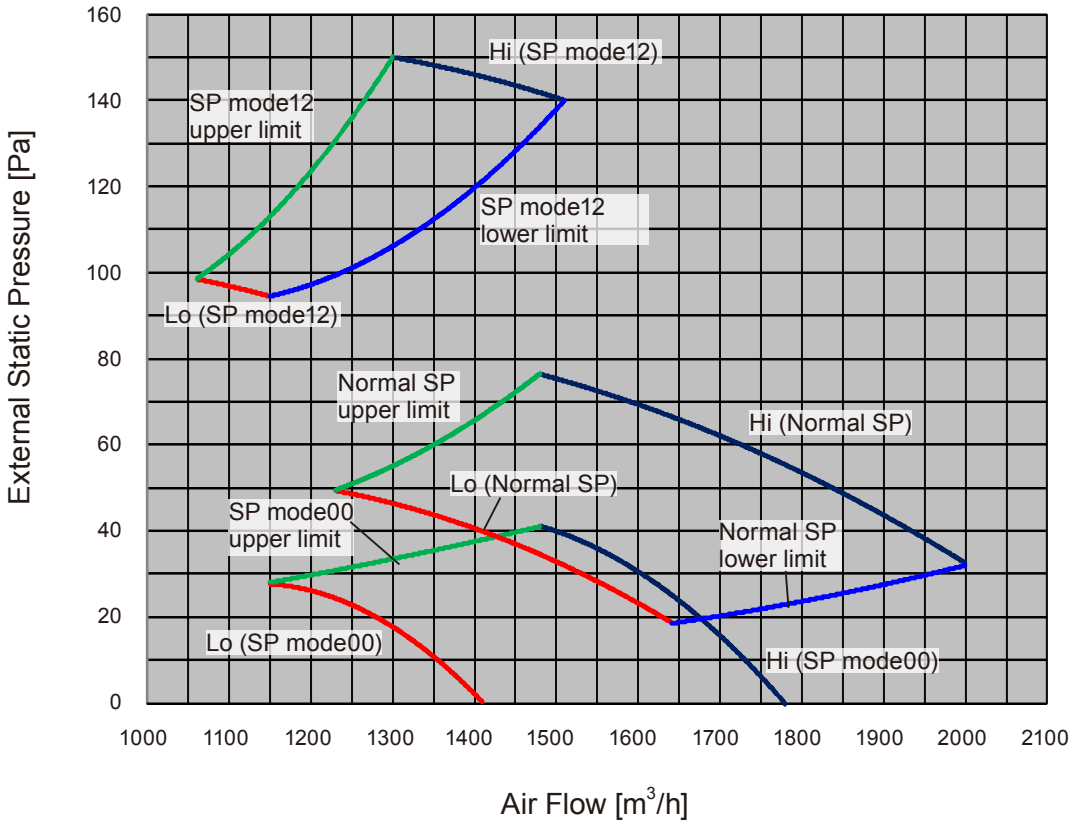


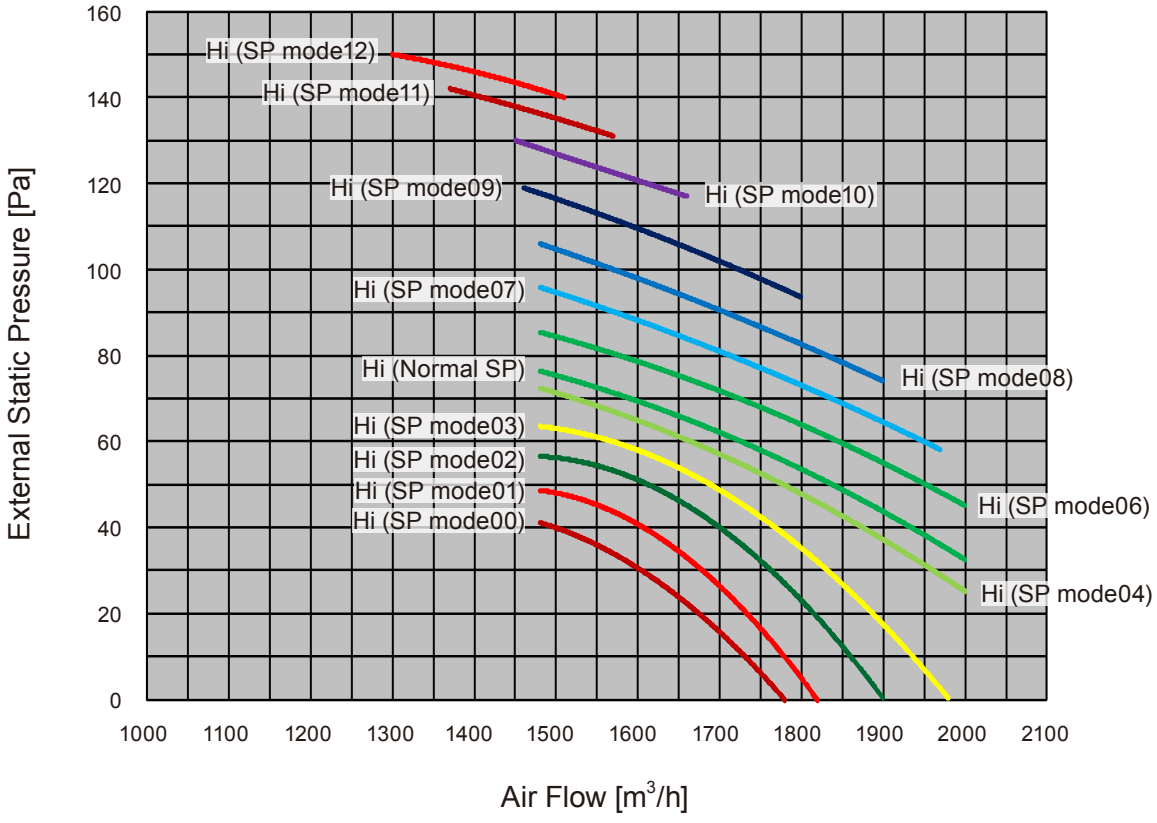
Heating



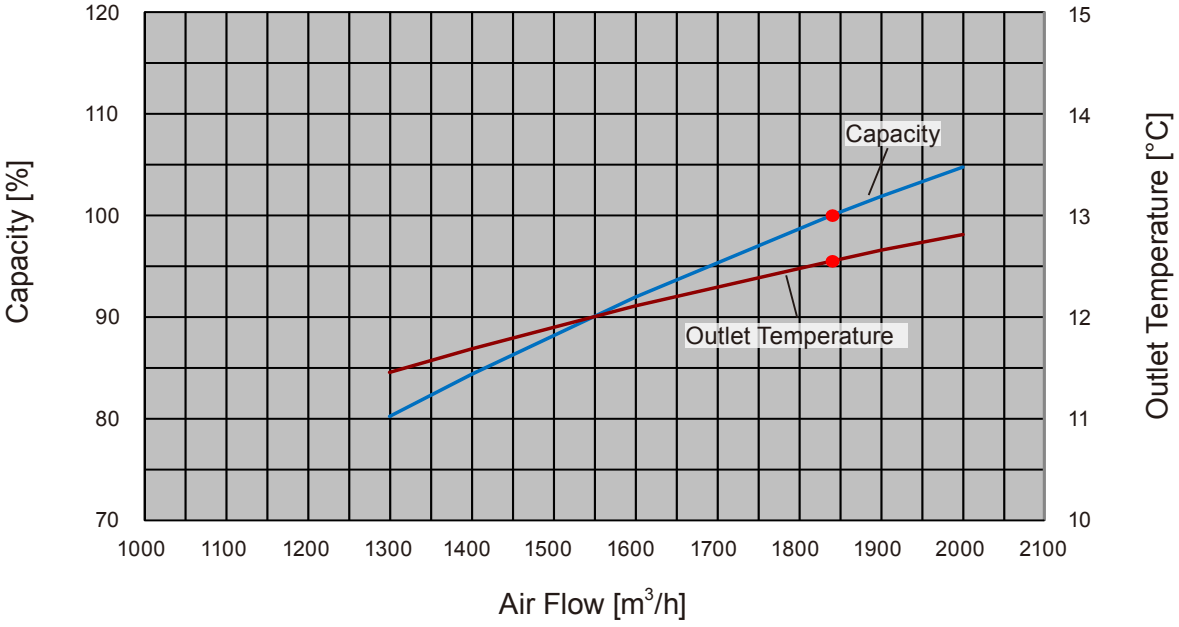
INDOOR UNITS

■ MODEL: ARXA36GBLH

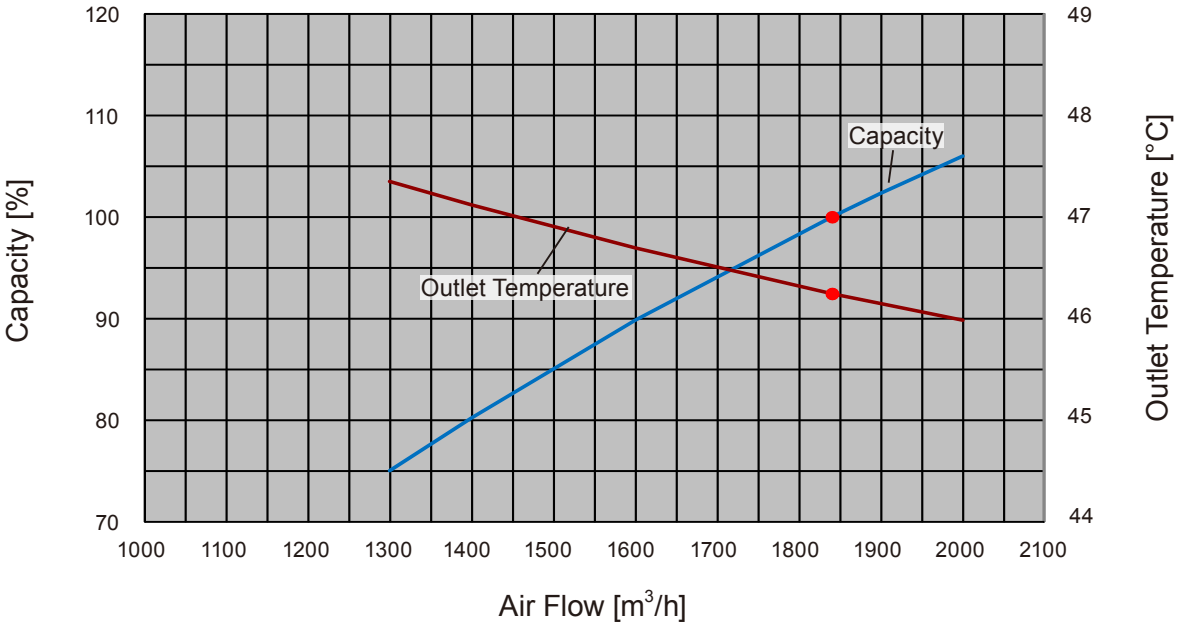




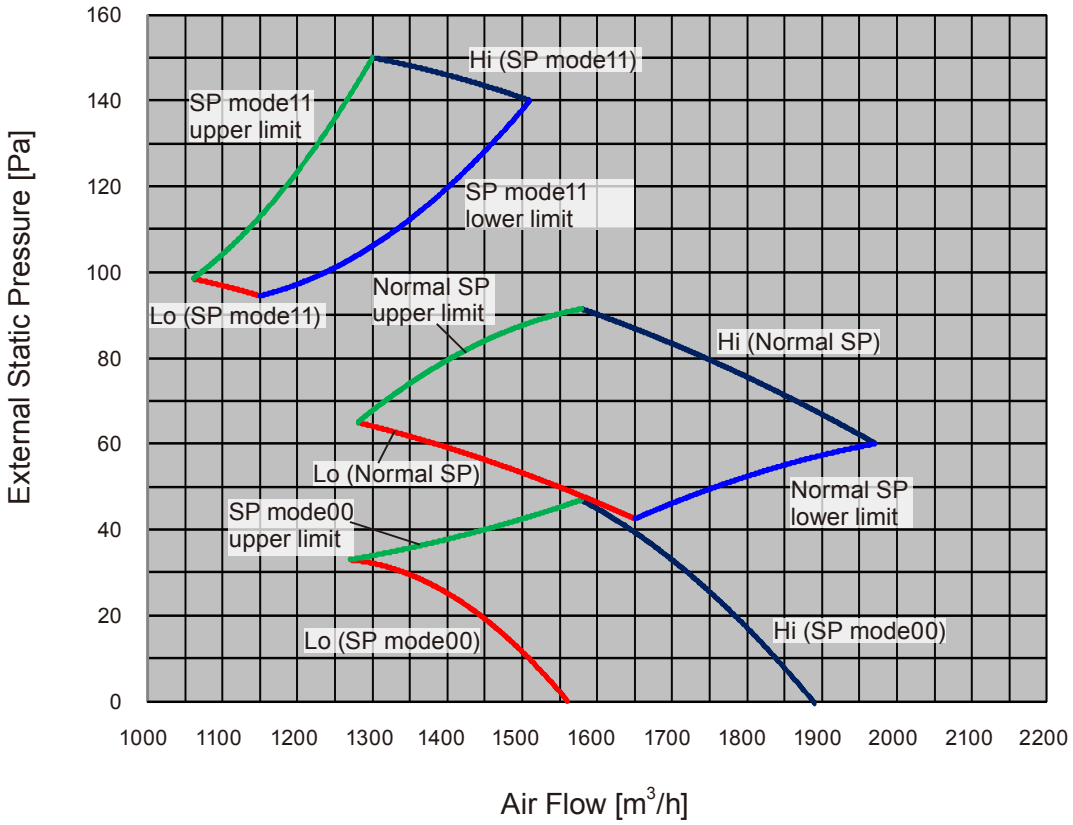
Cooling

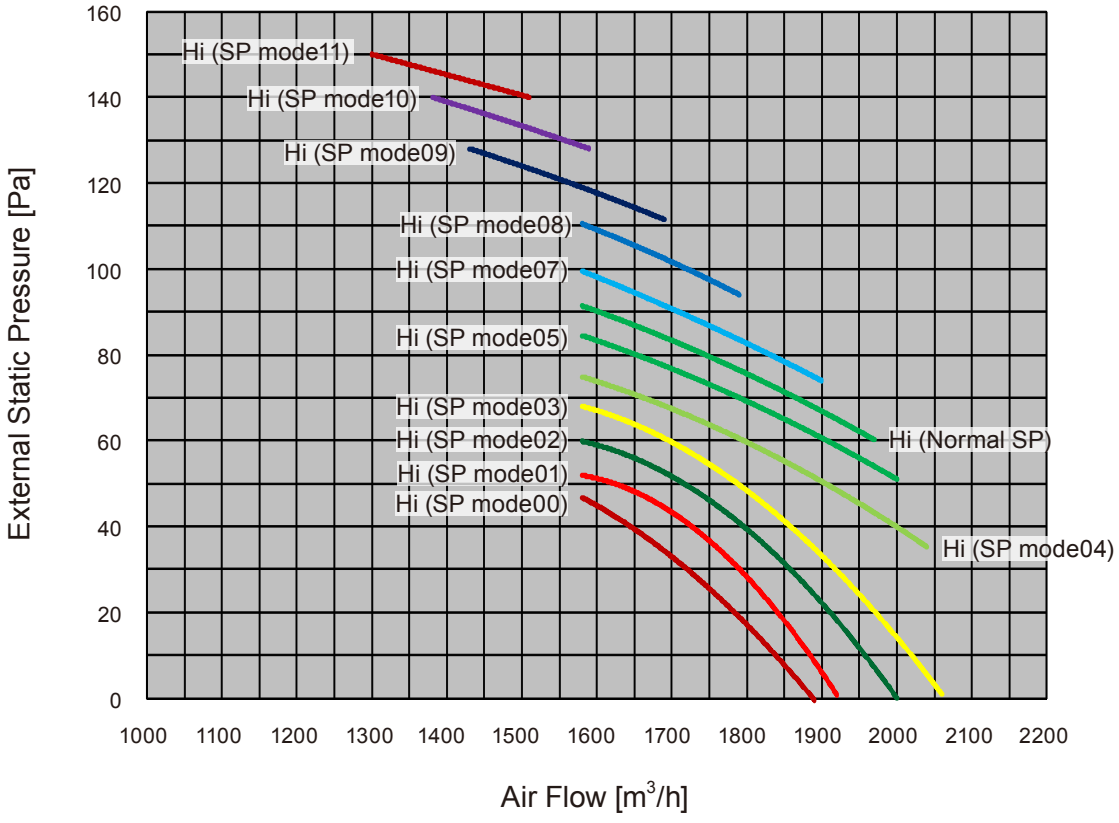


Heating

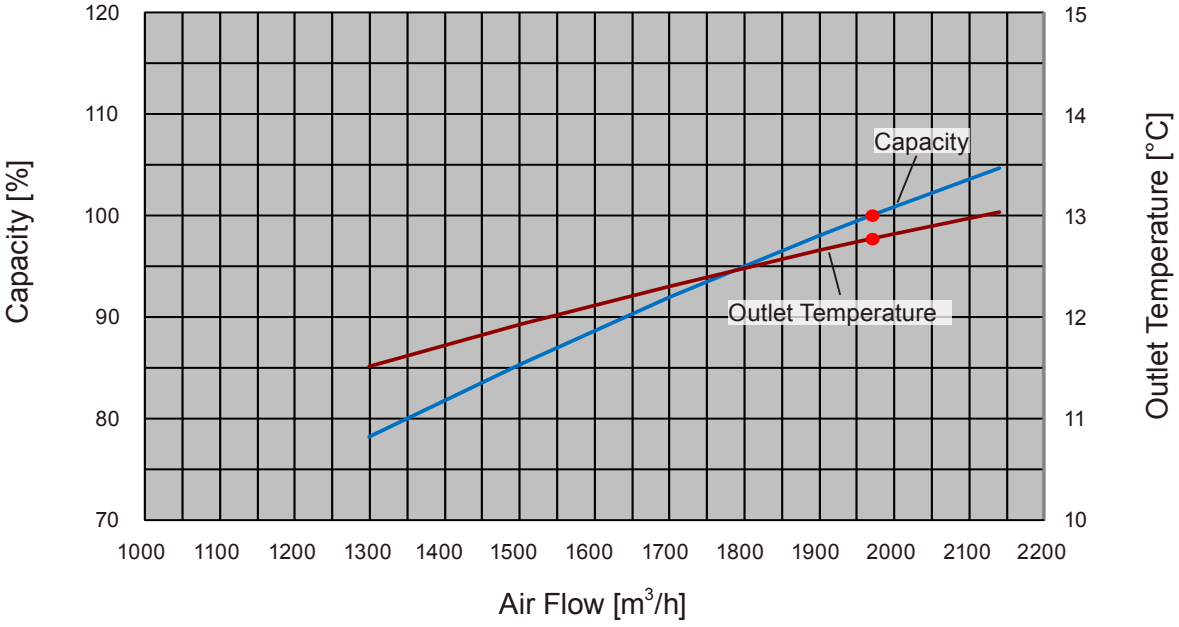


■ MODEL: ARXA45GBLH

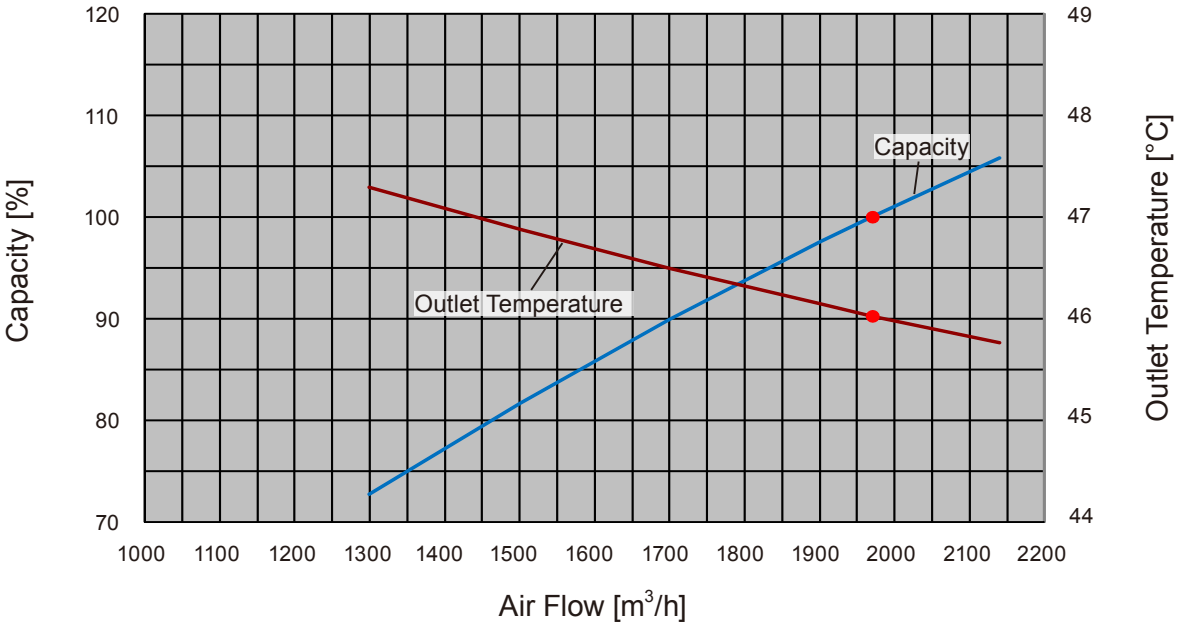




Cooling



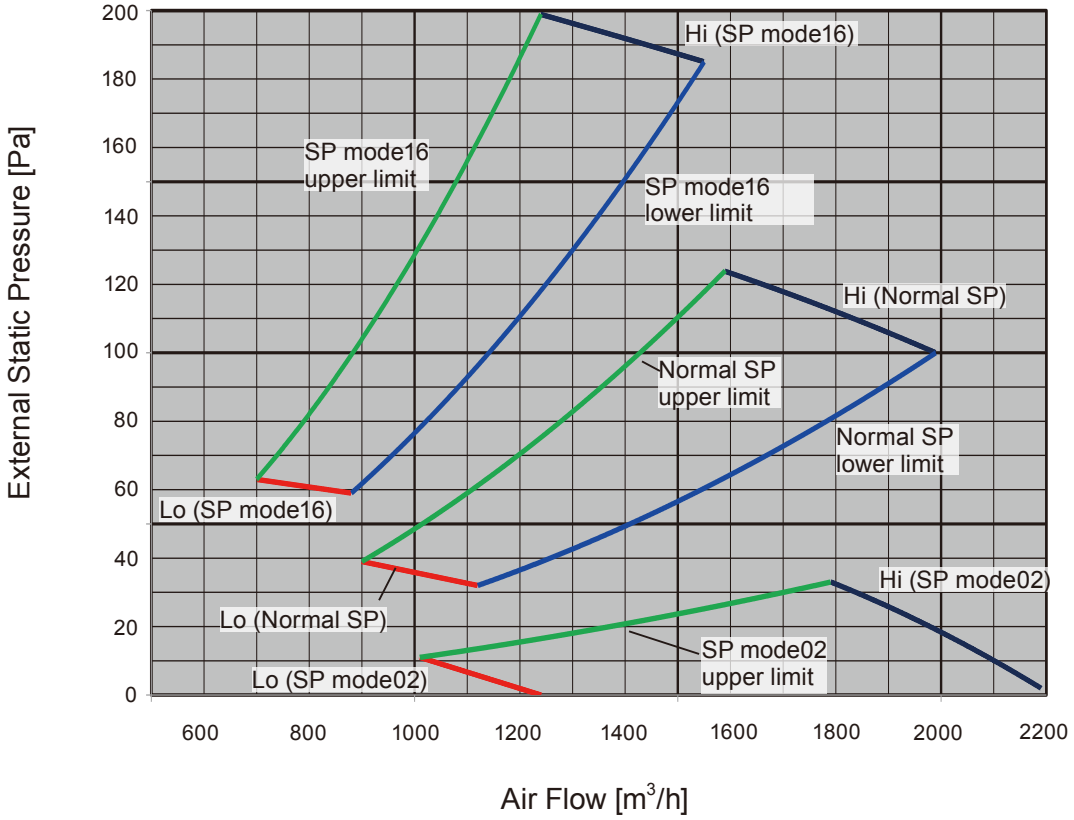
Heating

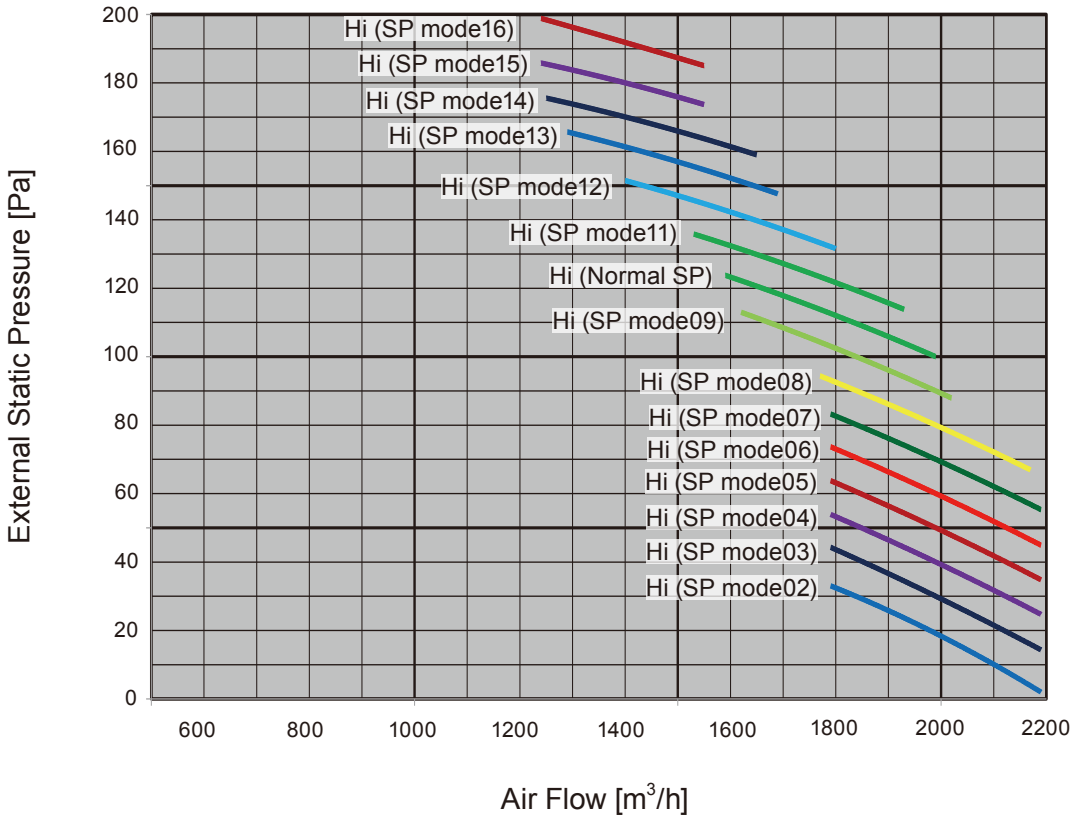


INDOOR UNITS

6-5. HIGH STATIC PRESSURE DUCT TYPE

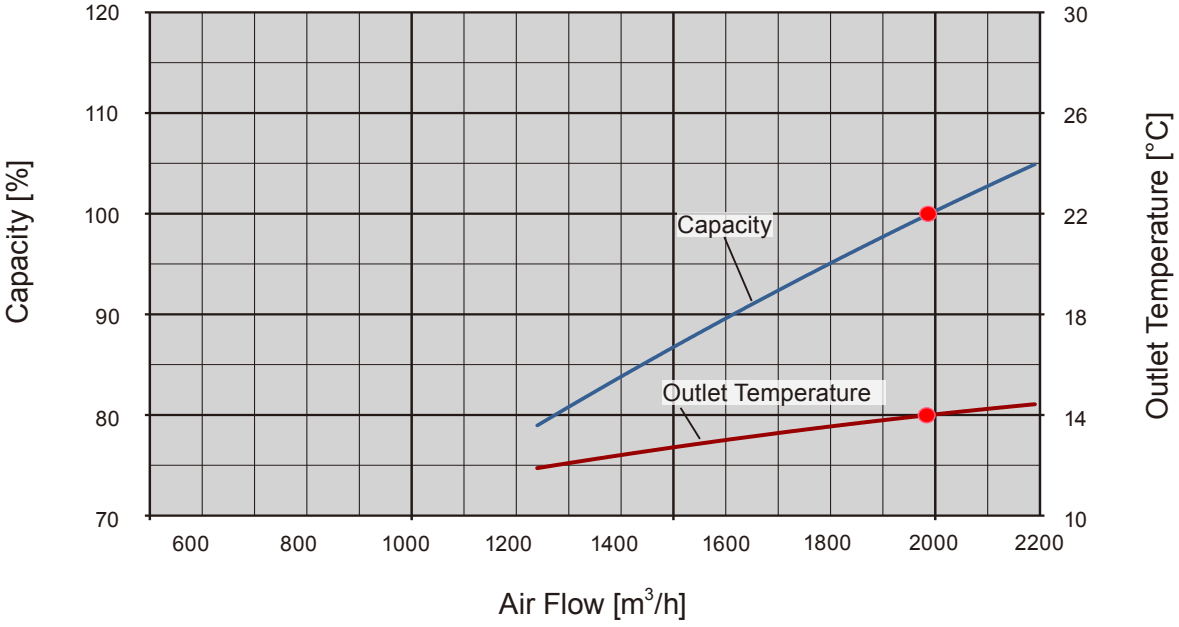
■ MODEL: ARXC36GBTH



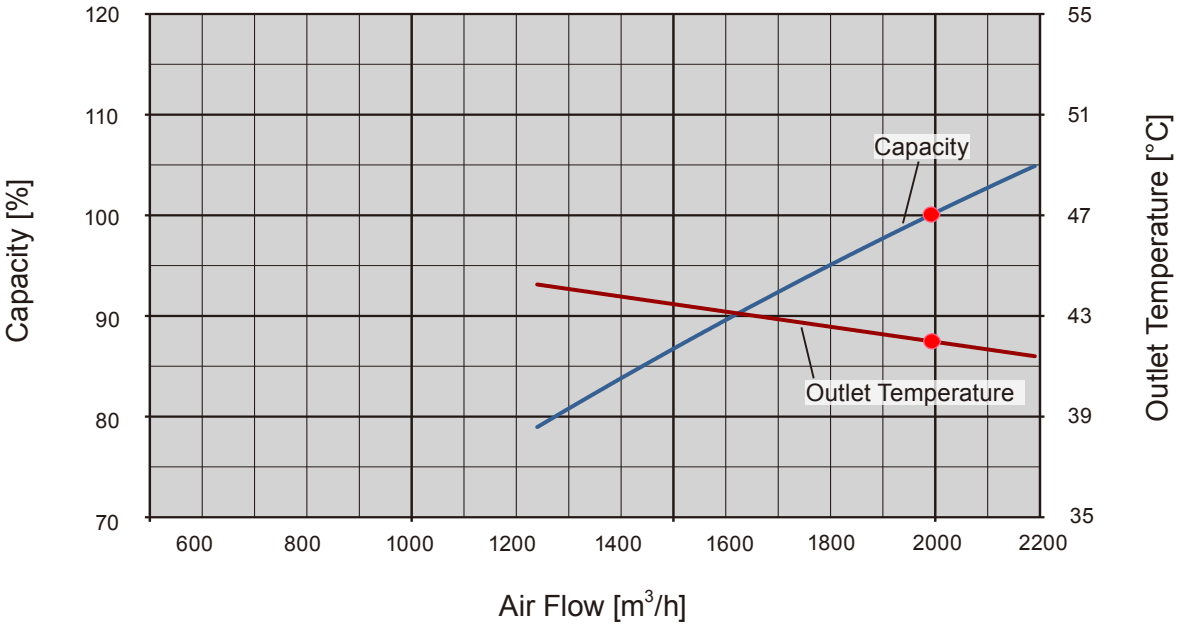


INDOOR UNITS

Cooling

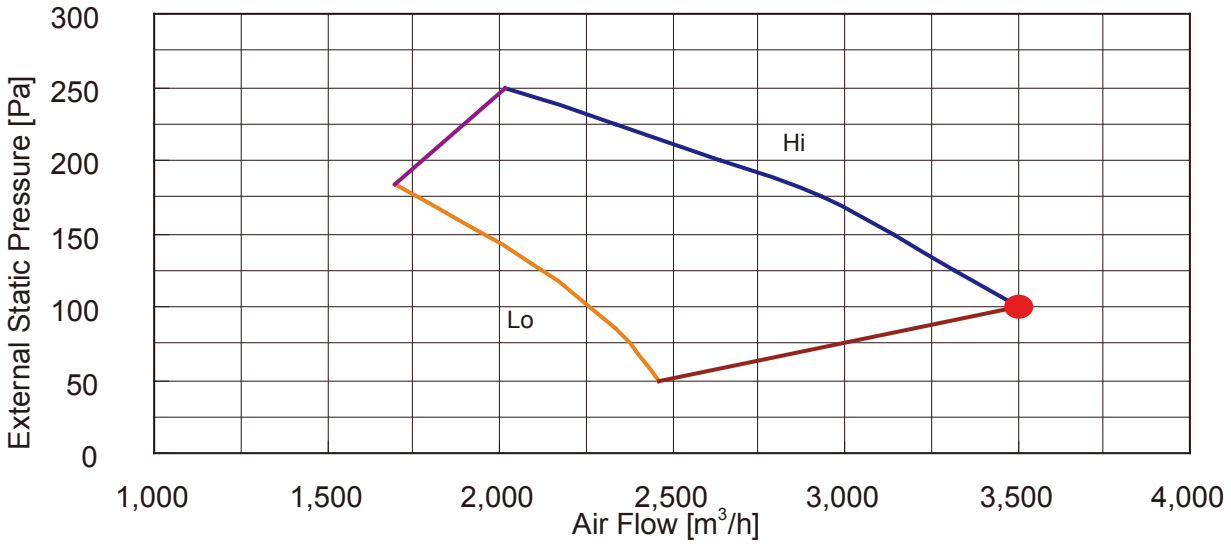


Heating

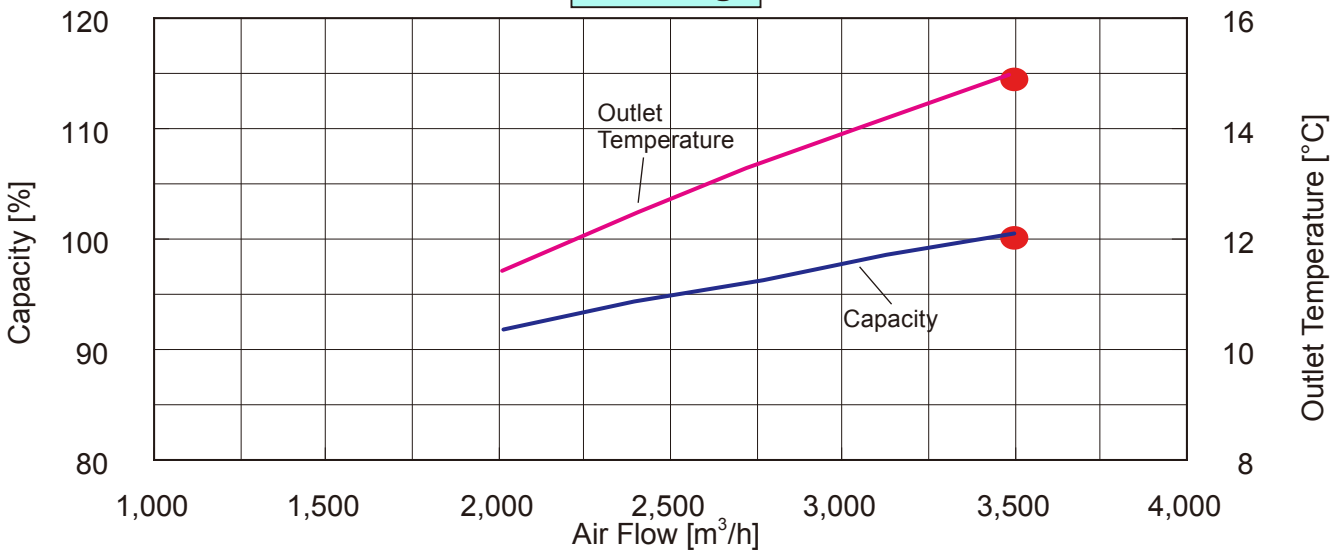


INDOOR UNITS

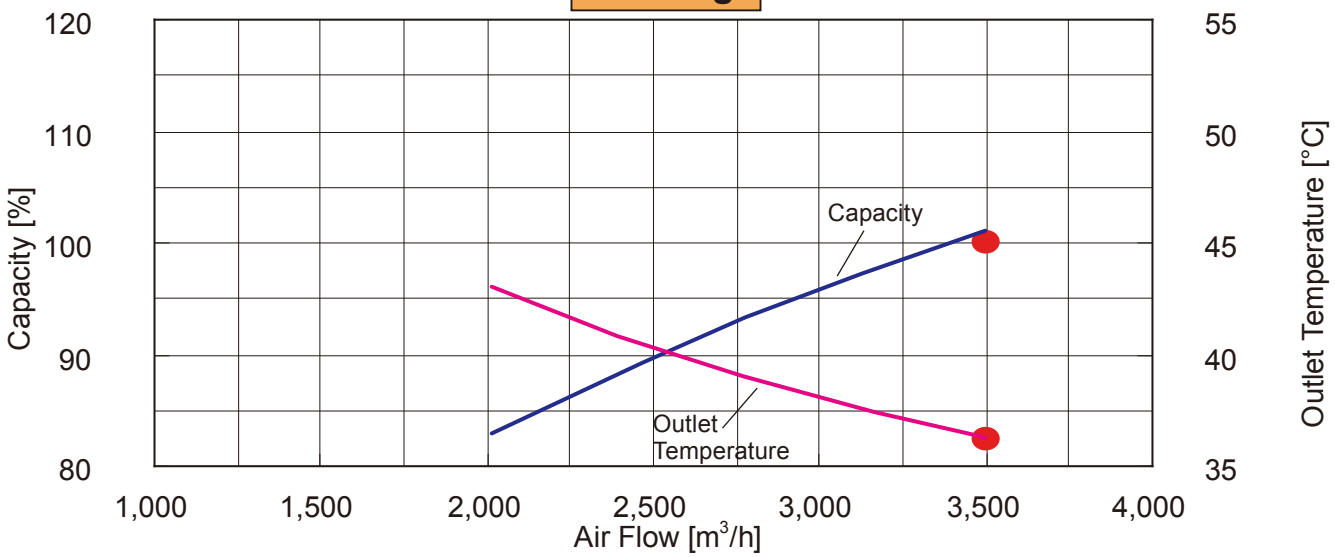
■ MODEL: ARXC45GATH



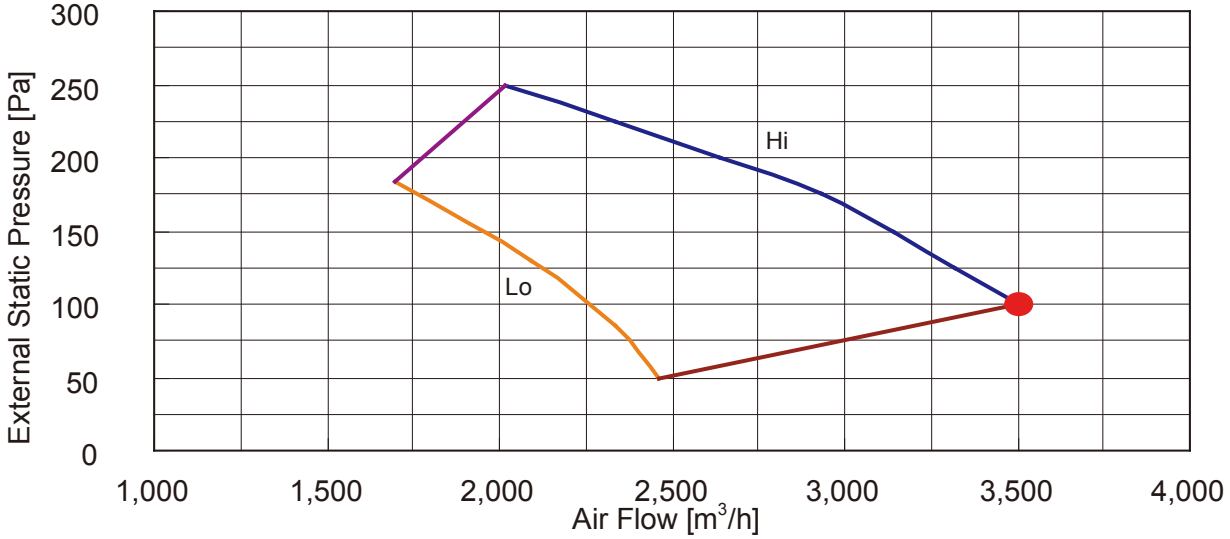
Cooling



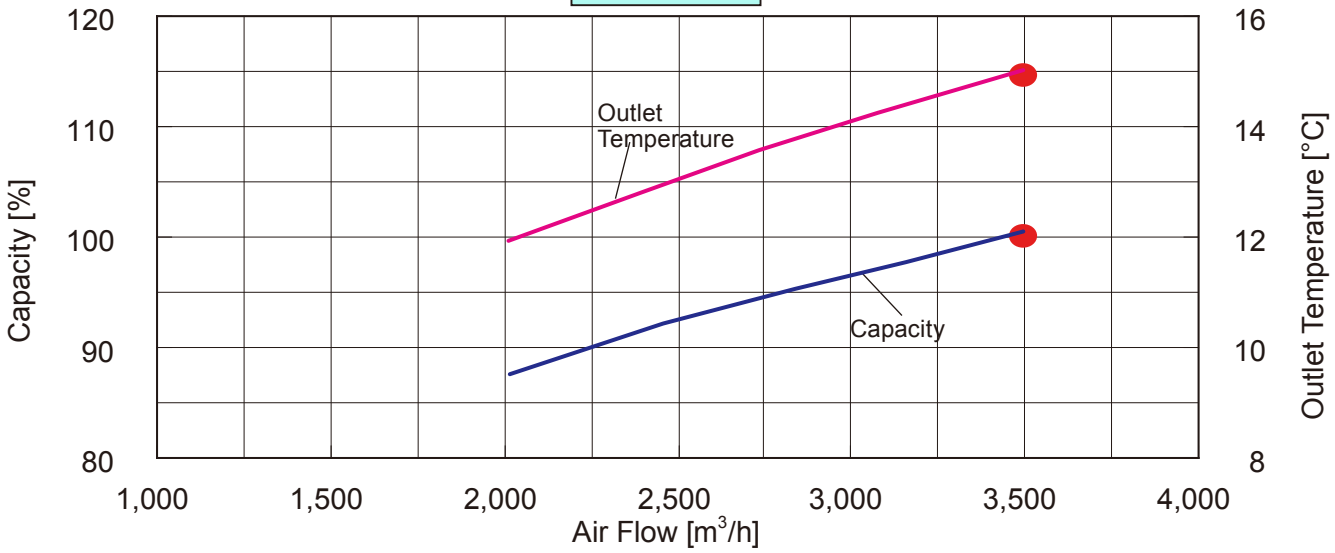
Heating



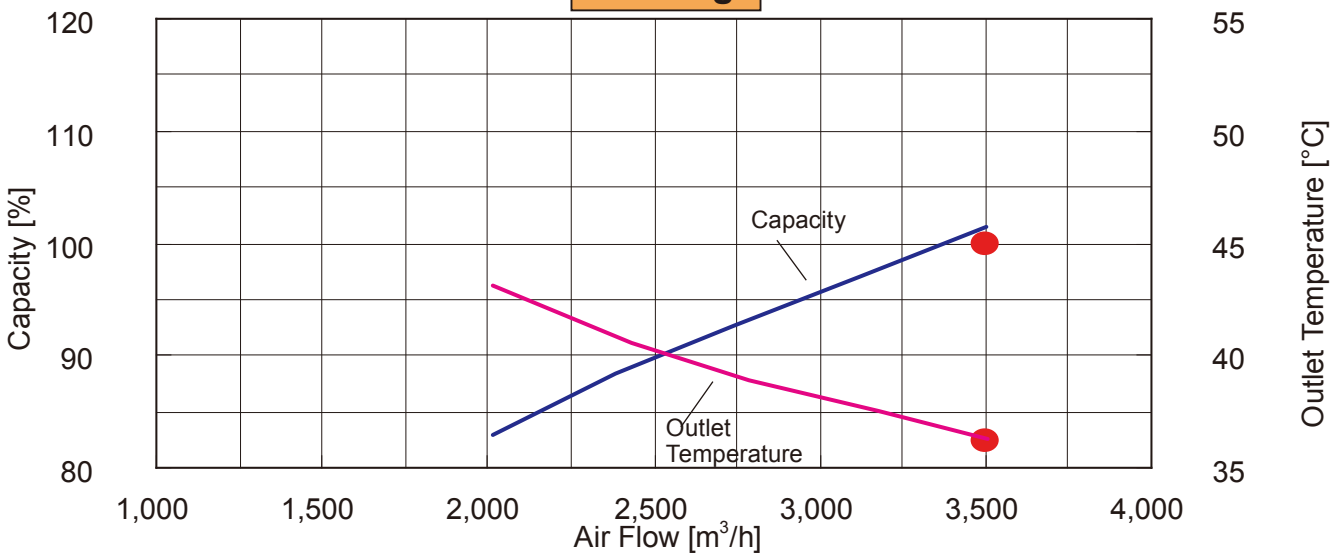
■ MODEL: ARXC60GATH



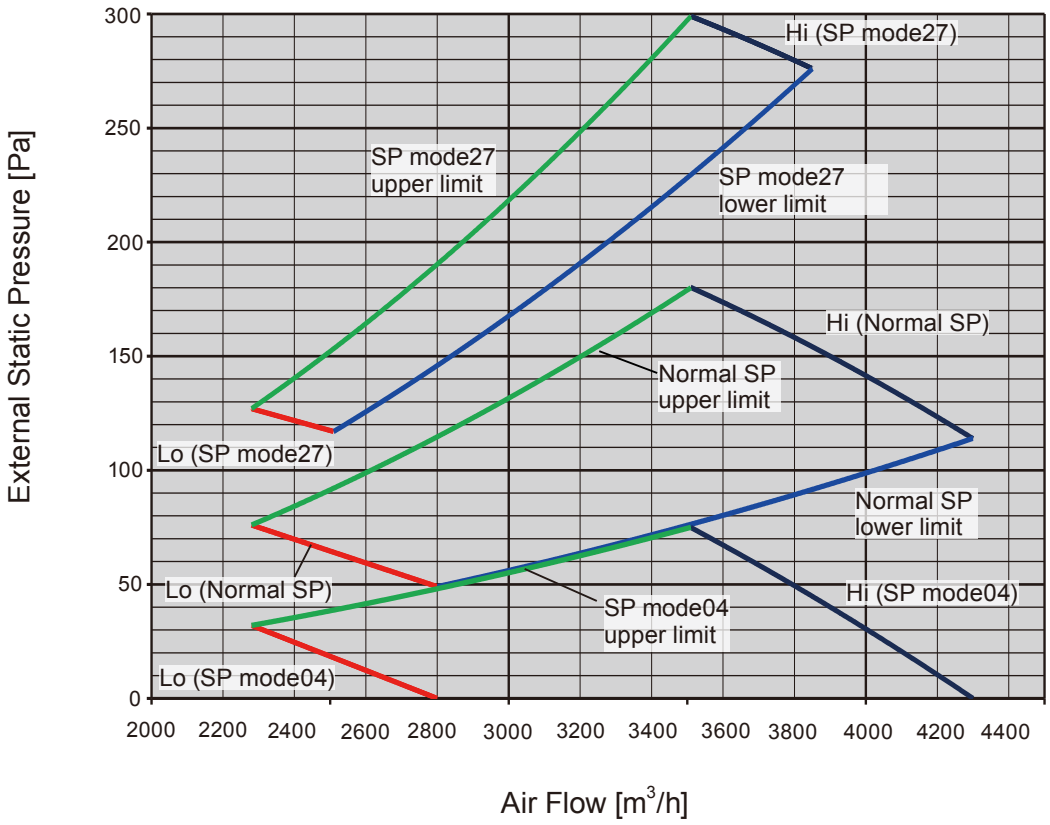
Cooling

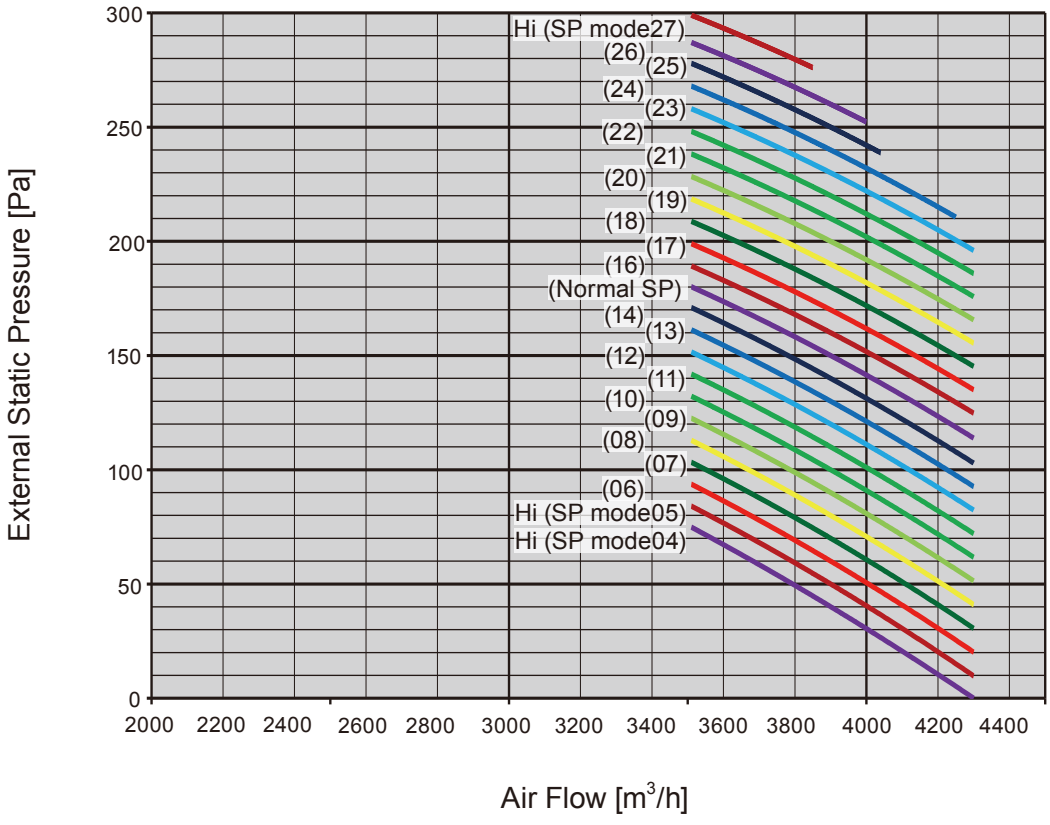


Heating

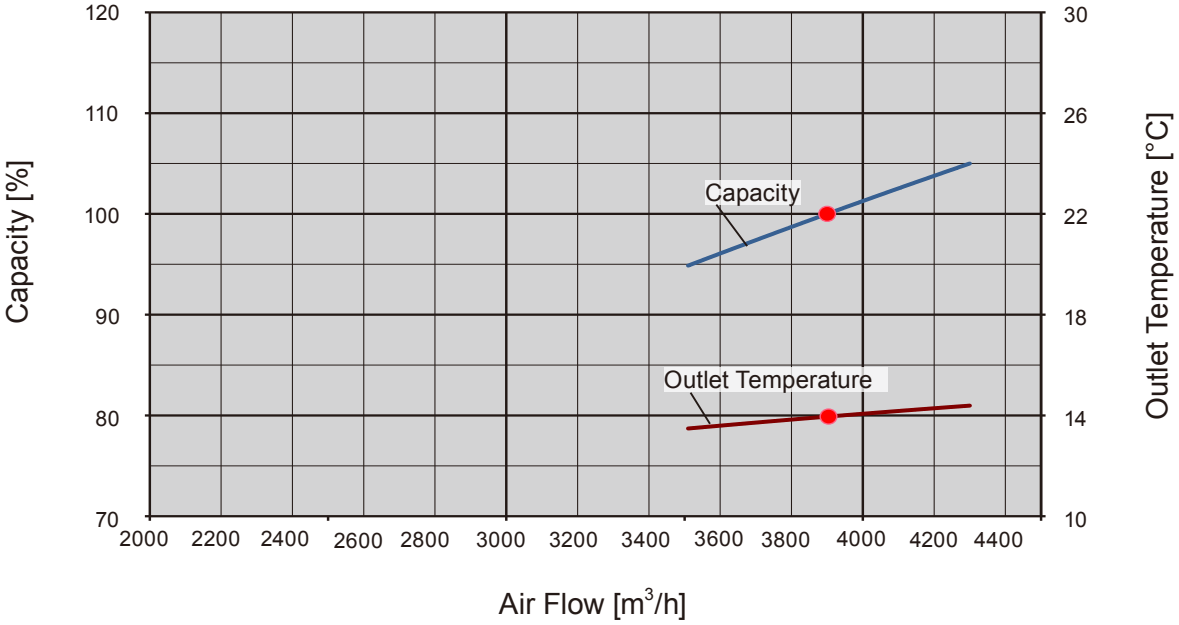


■ MODEL: ARXC72GBTH

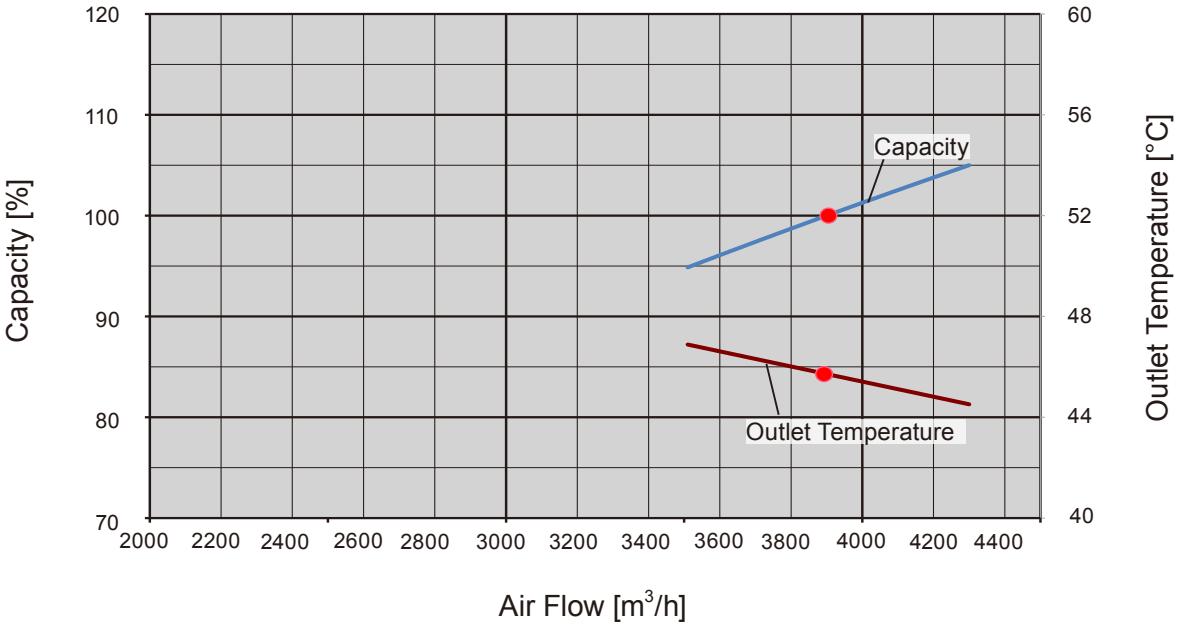




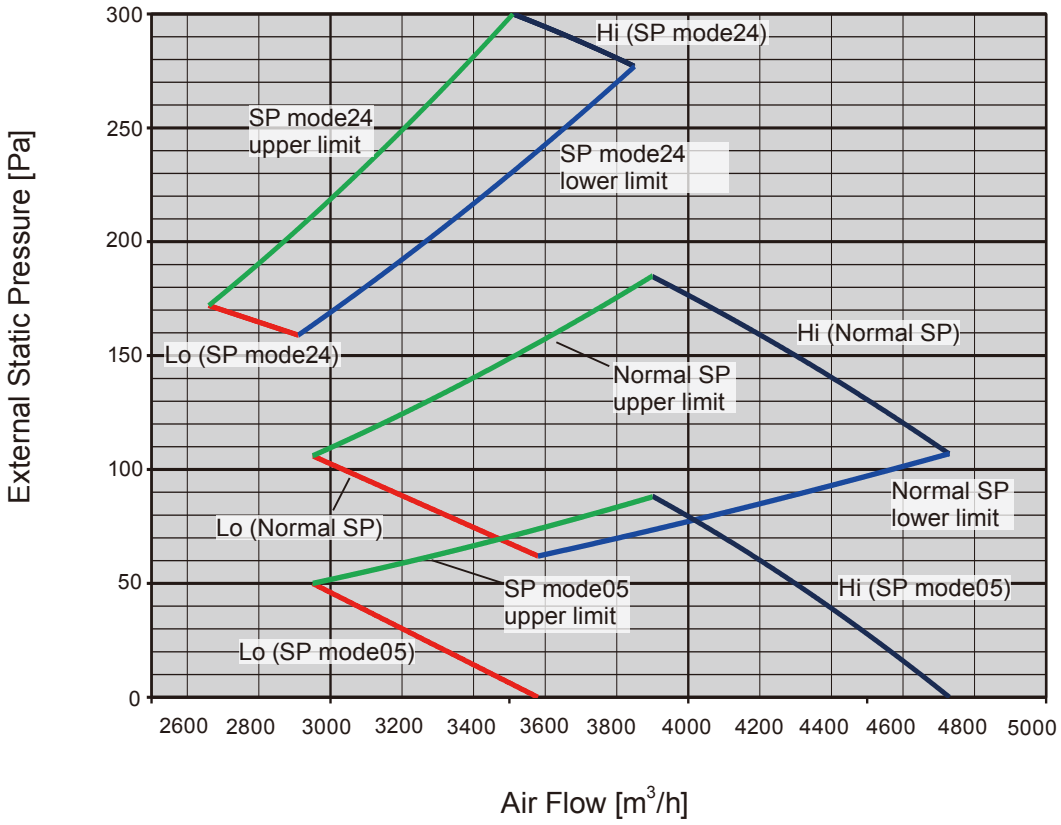
Cooling

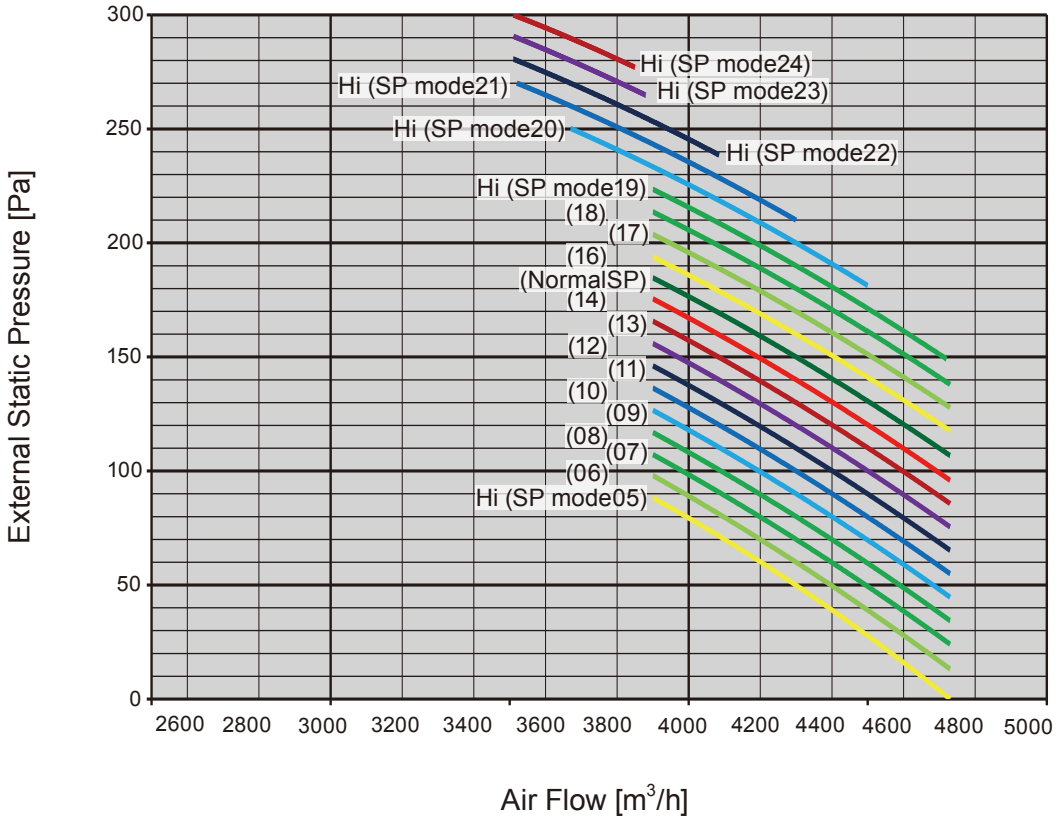


Heating

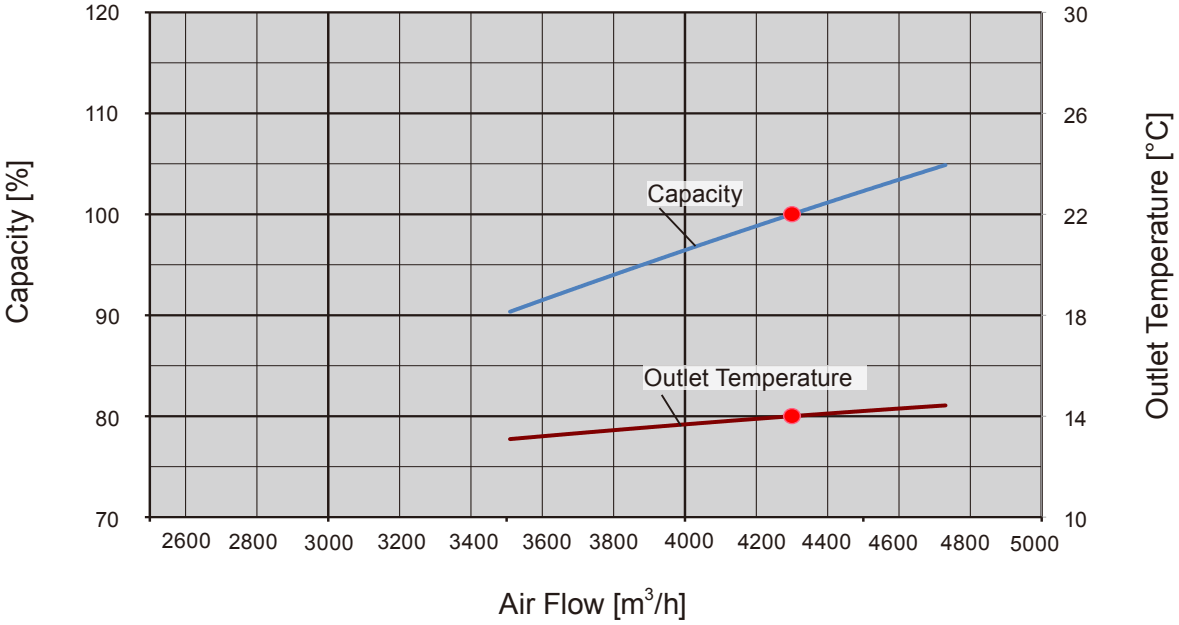


■ MODEL: ARXC90GBTH

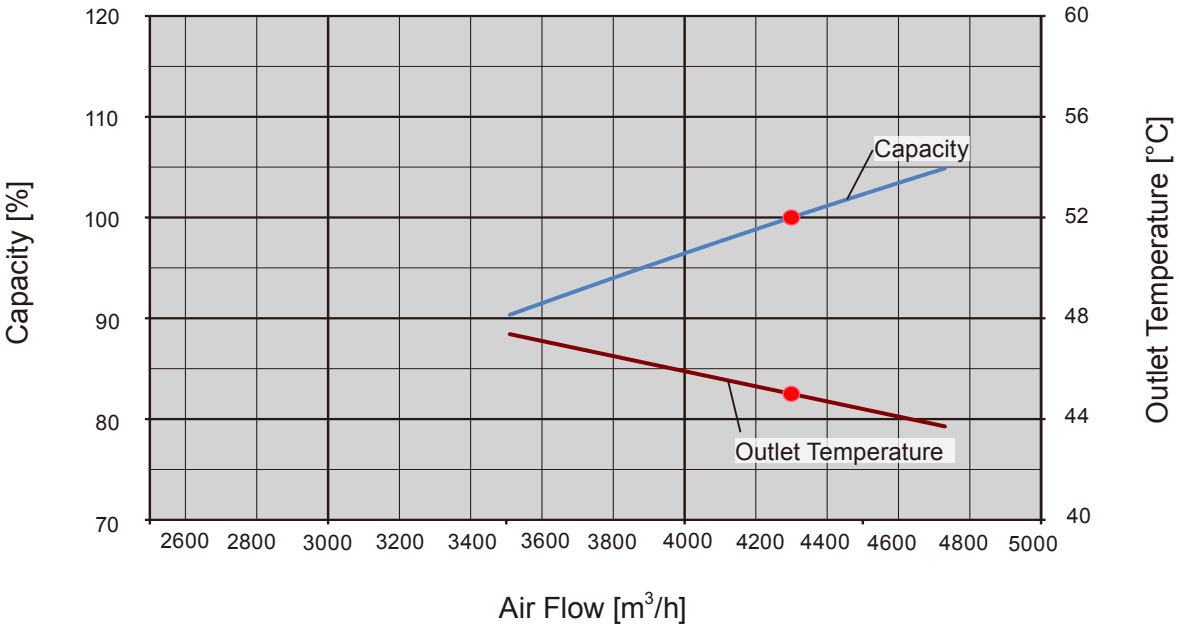




Cooling

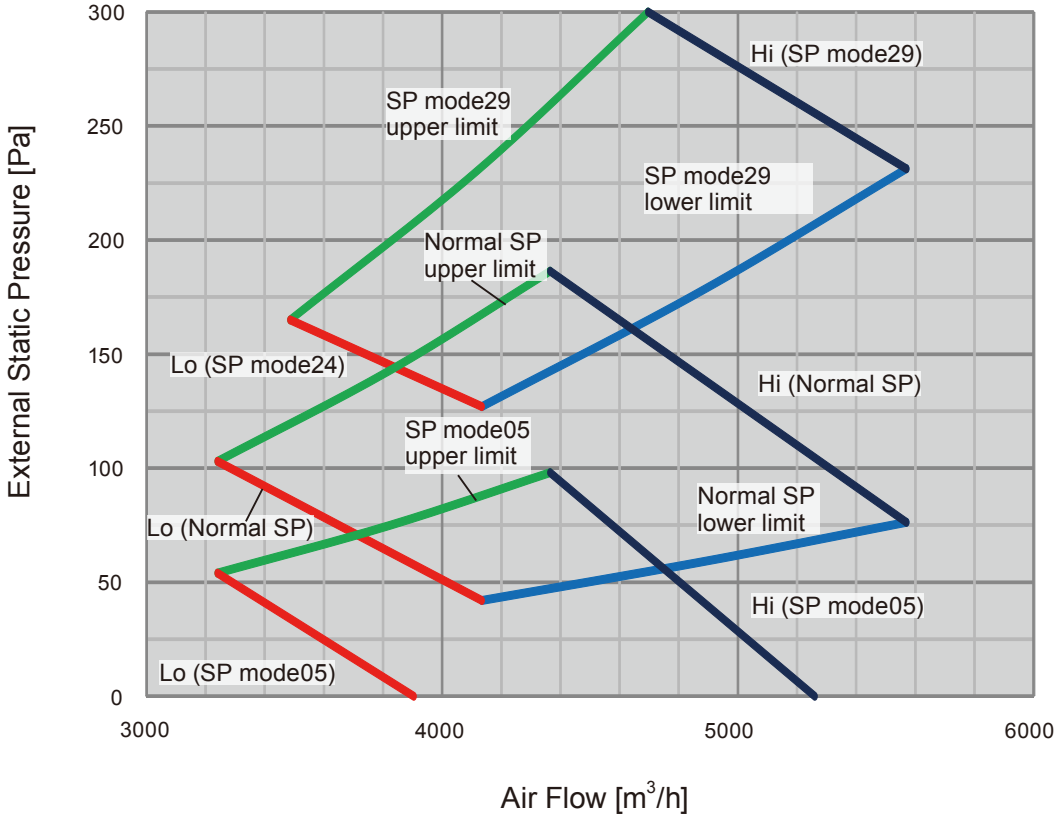


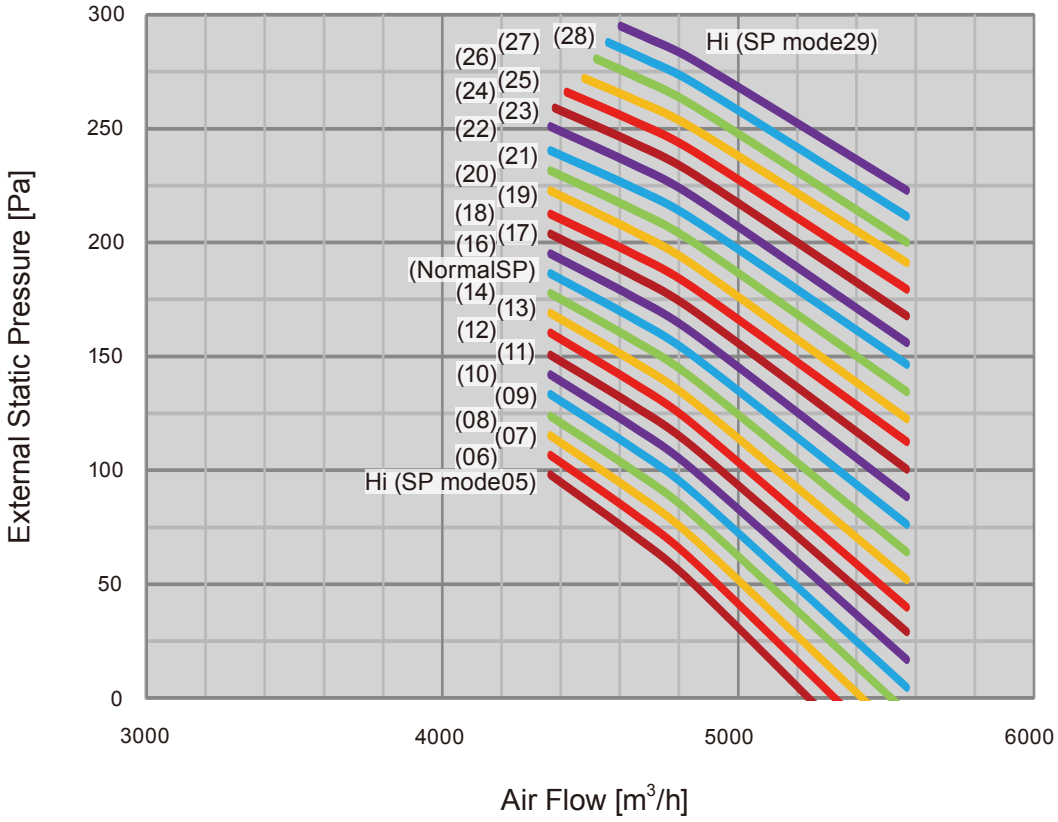
Heating



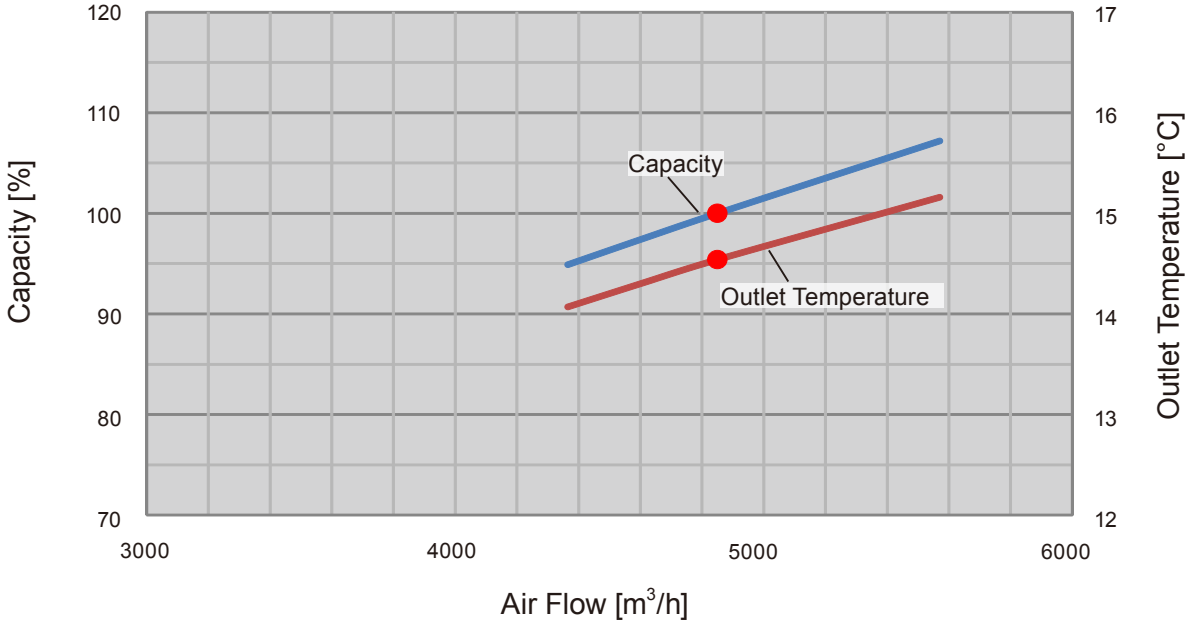
INDOOR UNITS

■ MODEL: ARXC96GATH

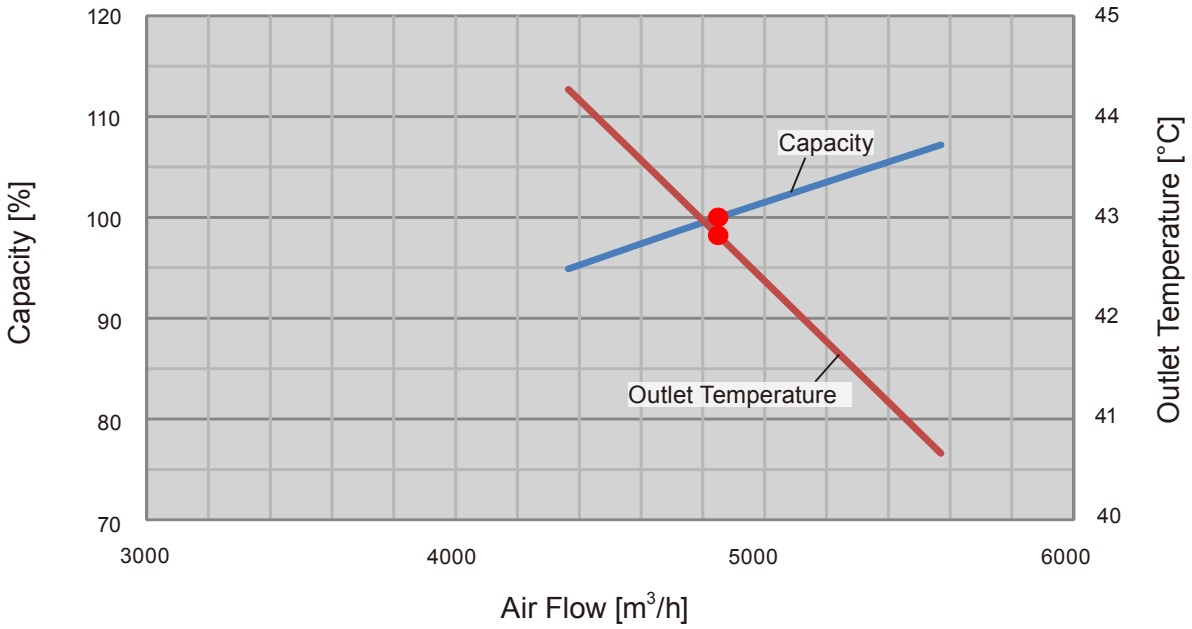




Cooling



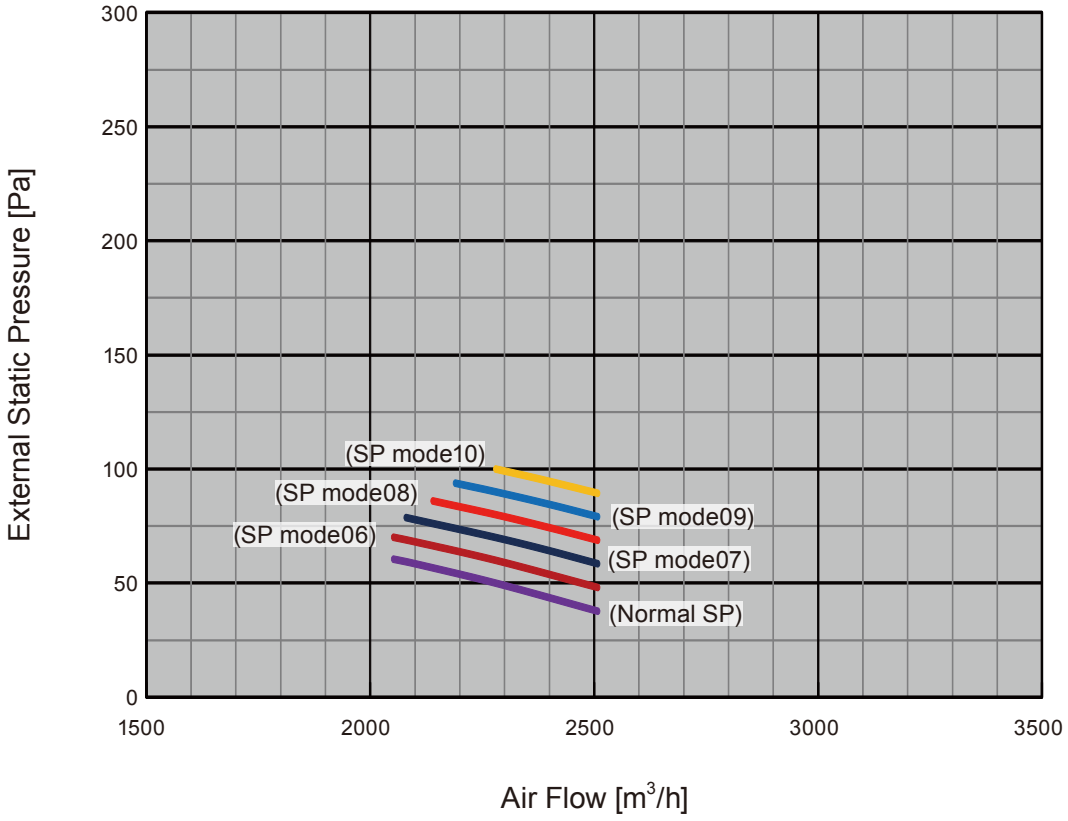
Heating



INDOOR UNITS

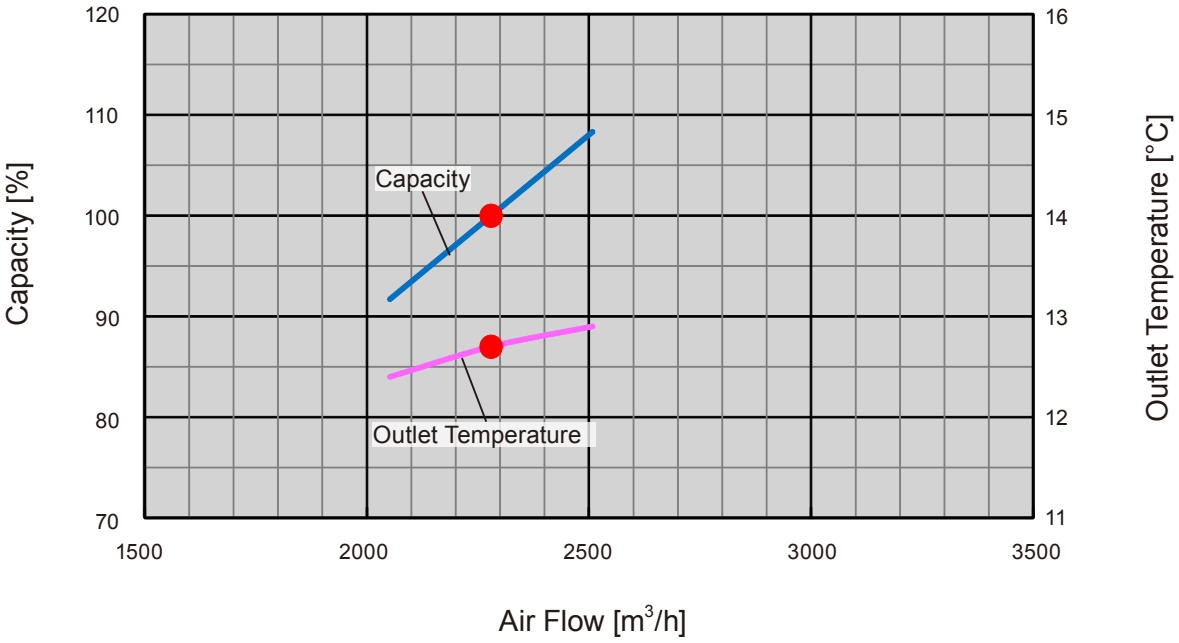
6-6. LARGE AIRFLOW DUCT TYPE

■ MODEL: ARXN18GATH

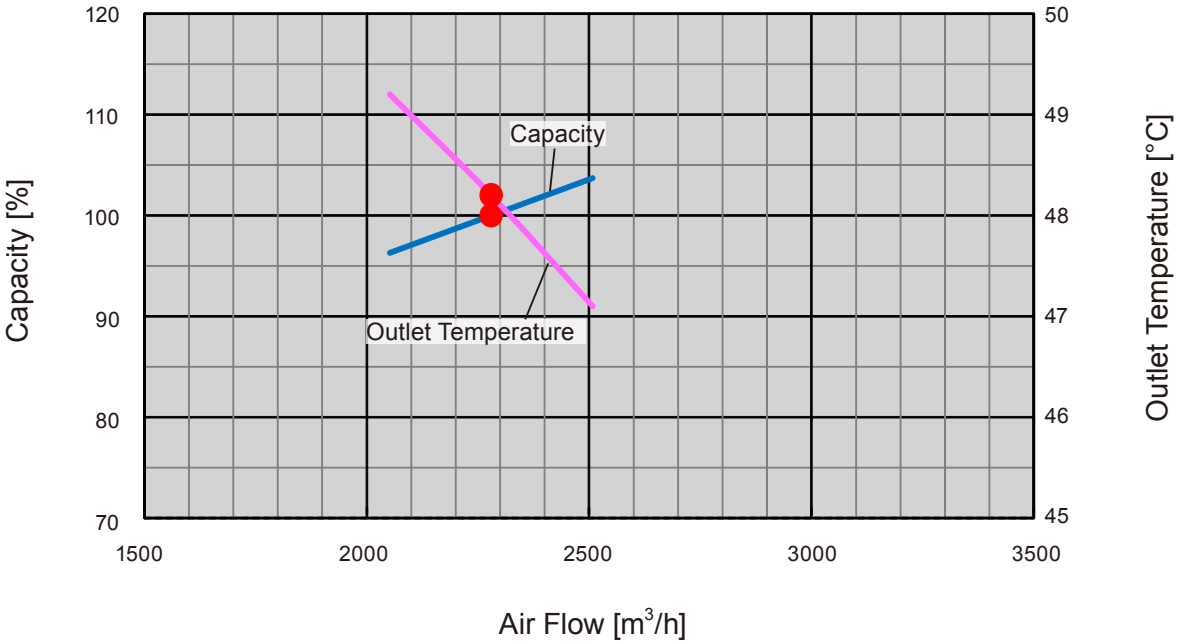


INDOOR UNITS

Cooling

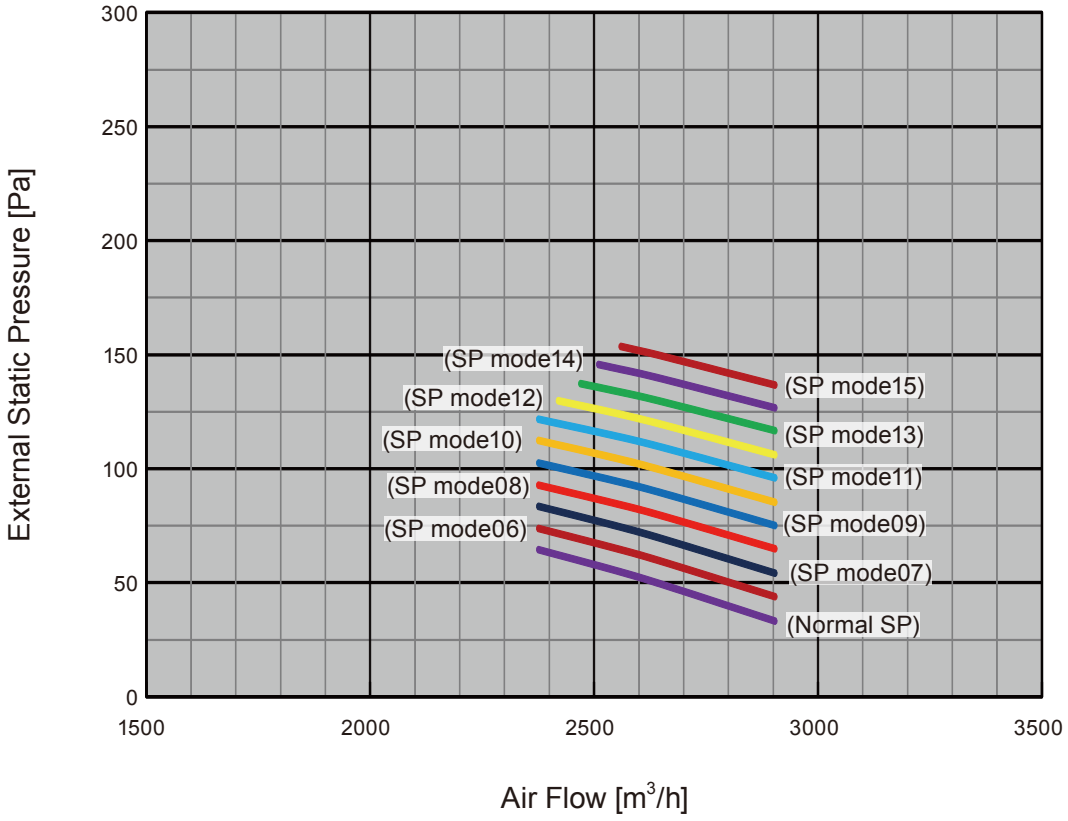


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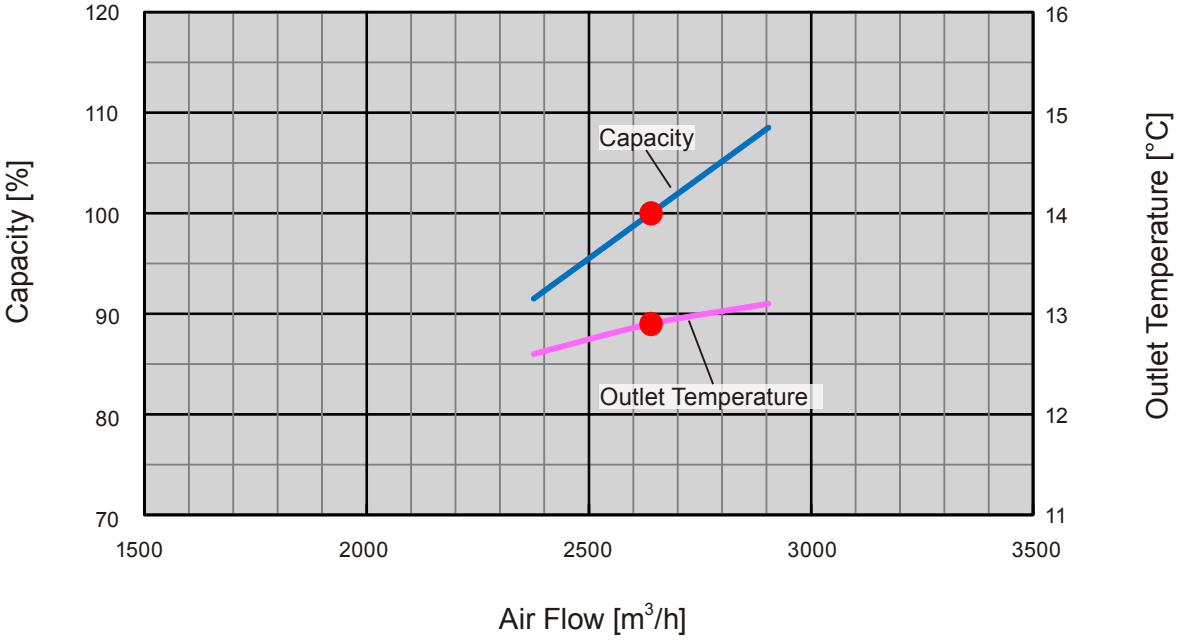
INDOOR UNITS

■ MODEL: ARXN24GATH

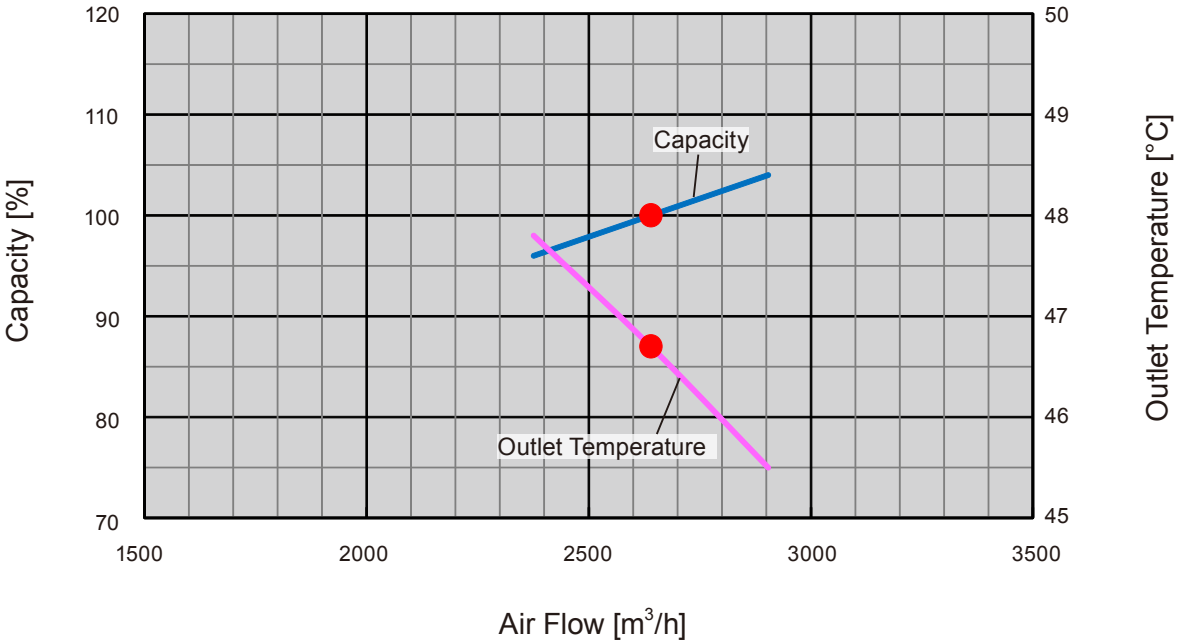


INDOOR UNITS

Cooling

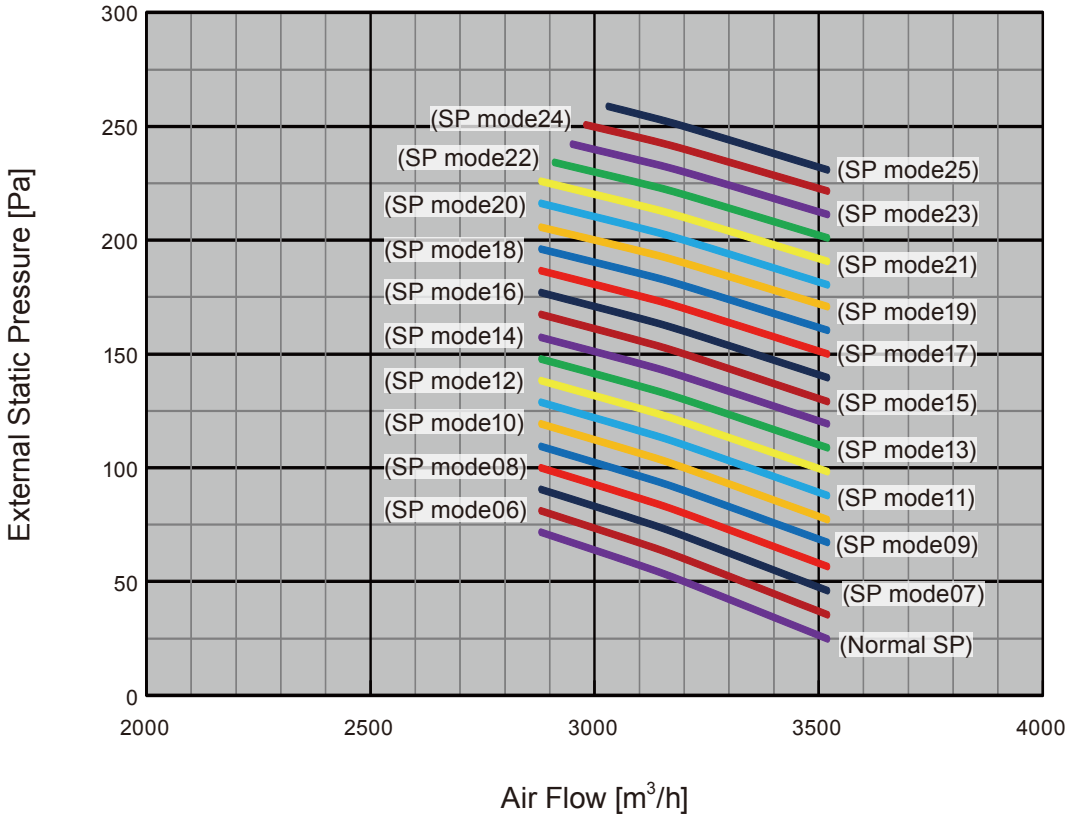


Heating



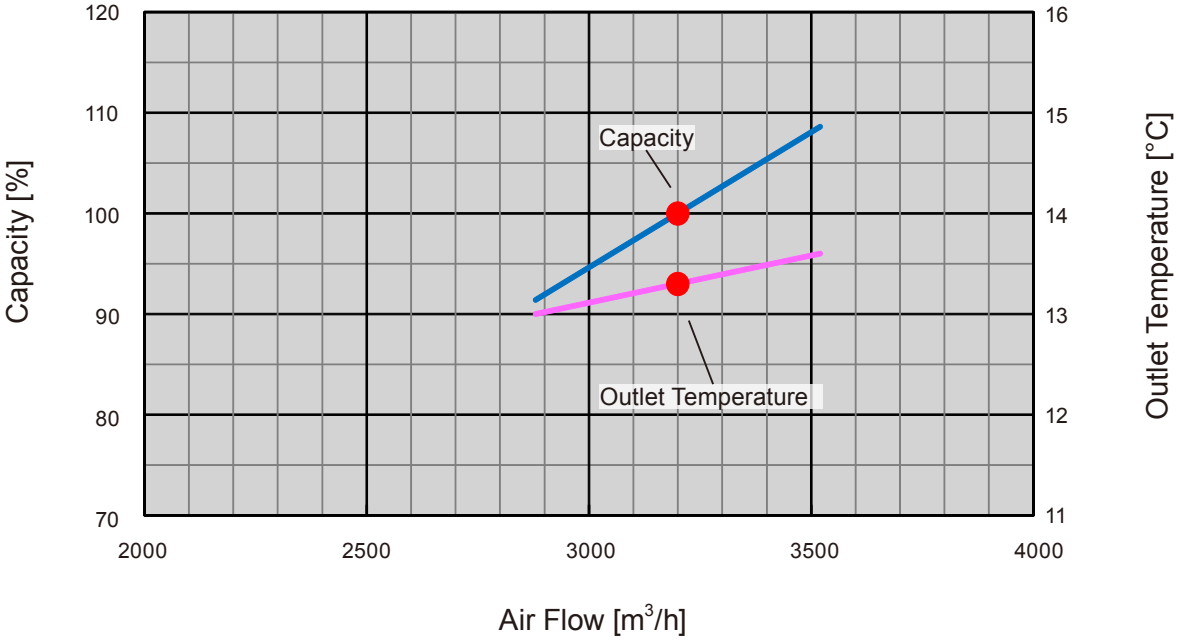
INDOOR UNITS

■ MODEL: ARXN30GATH

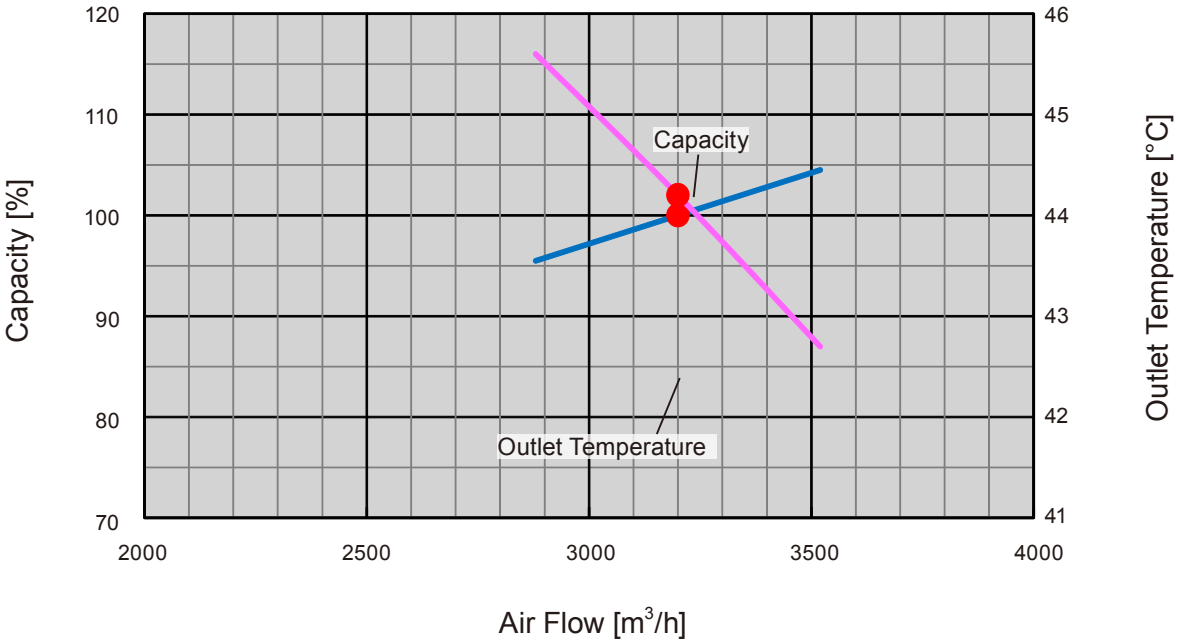


INDOOR UNITS

Cooling

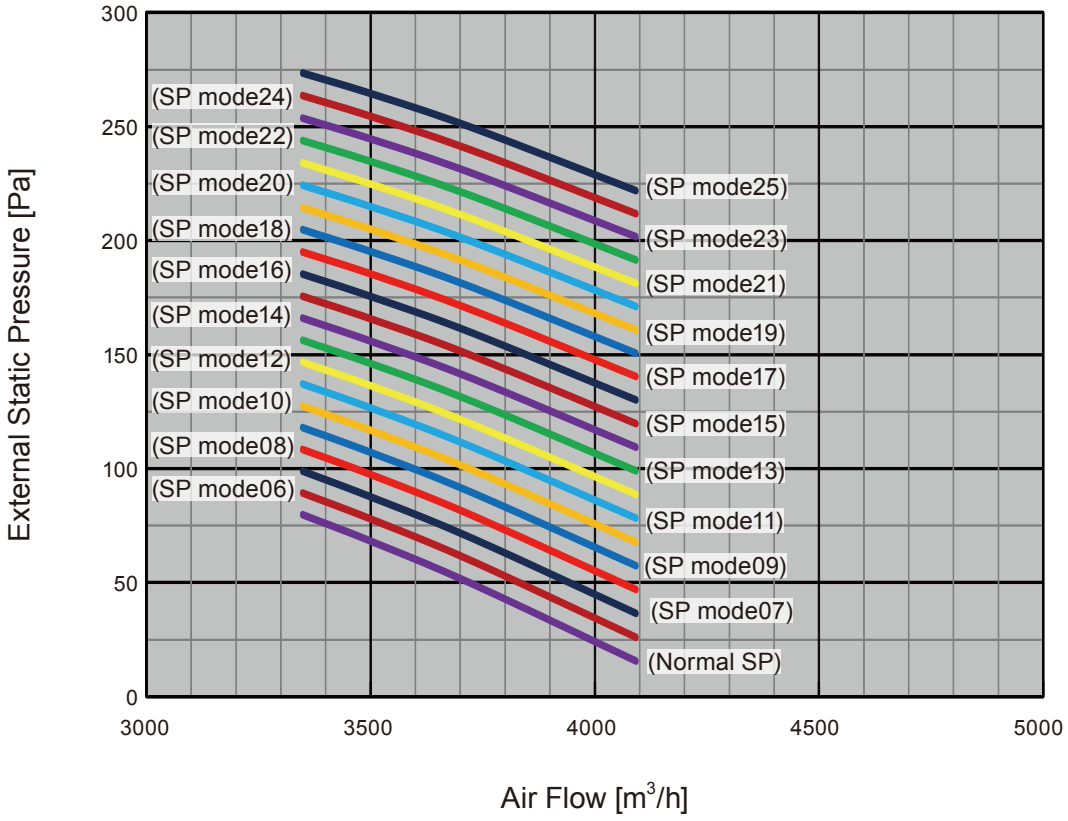


Heating



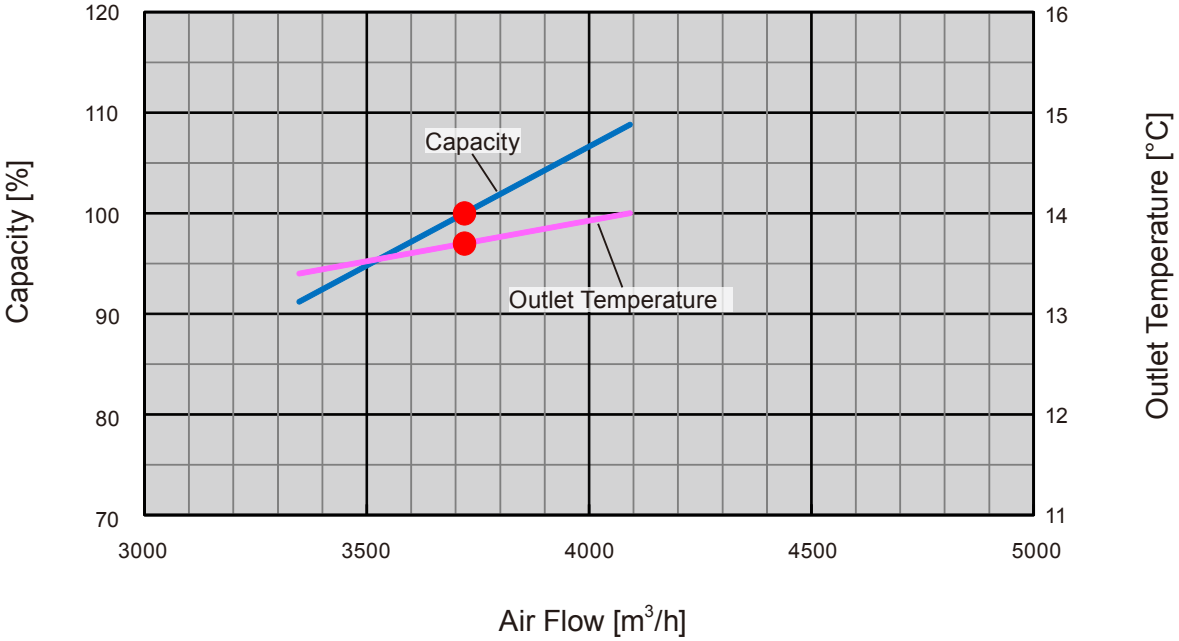
INDOOR UNITS

■ MODEL: ARXN34GATH

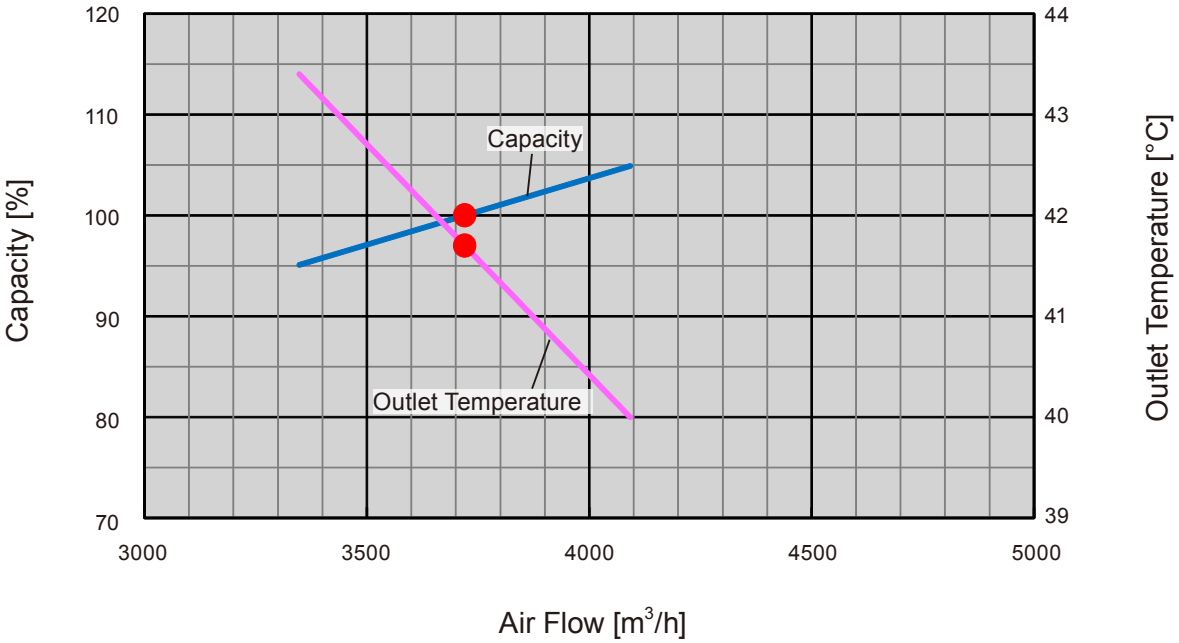


INDOOR UNITS

Cooling

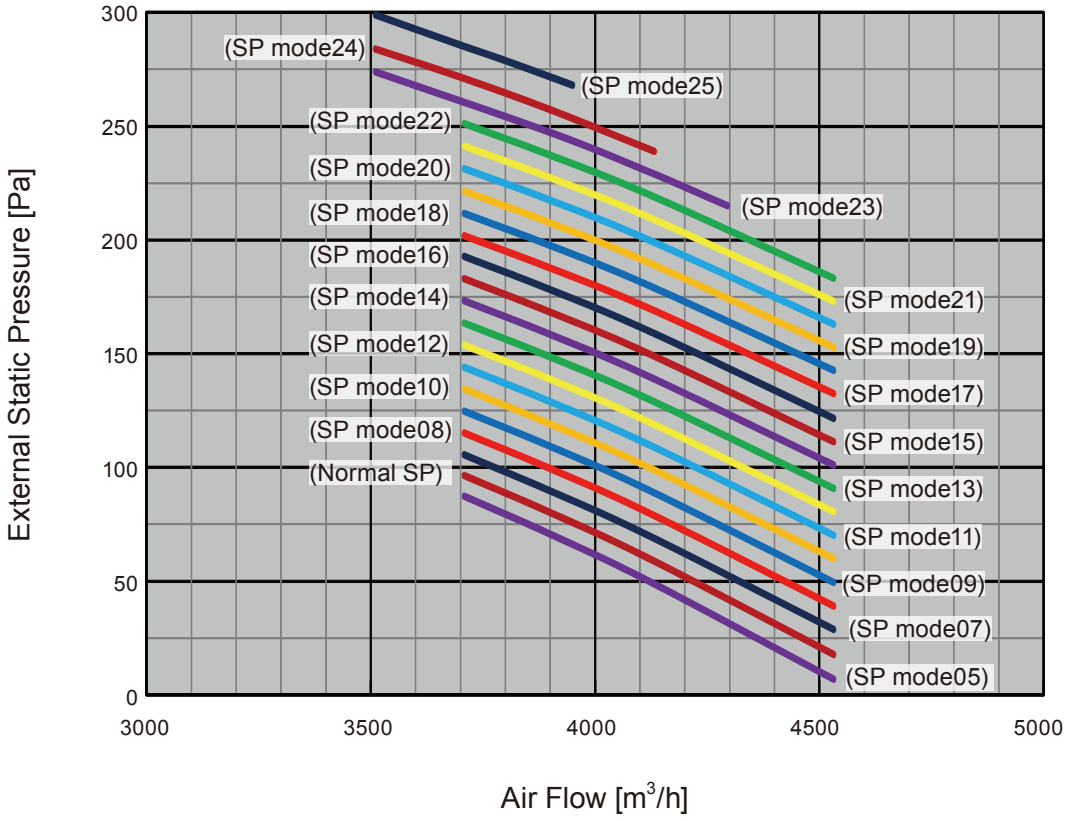


Heating



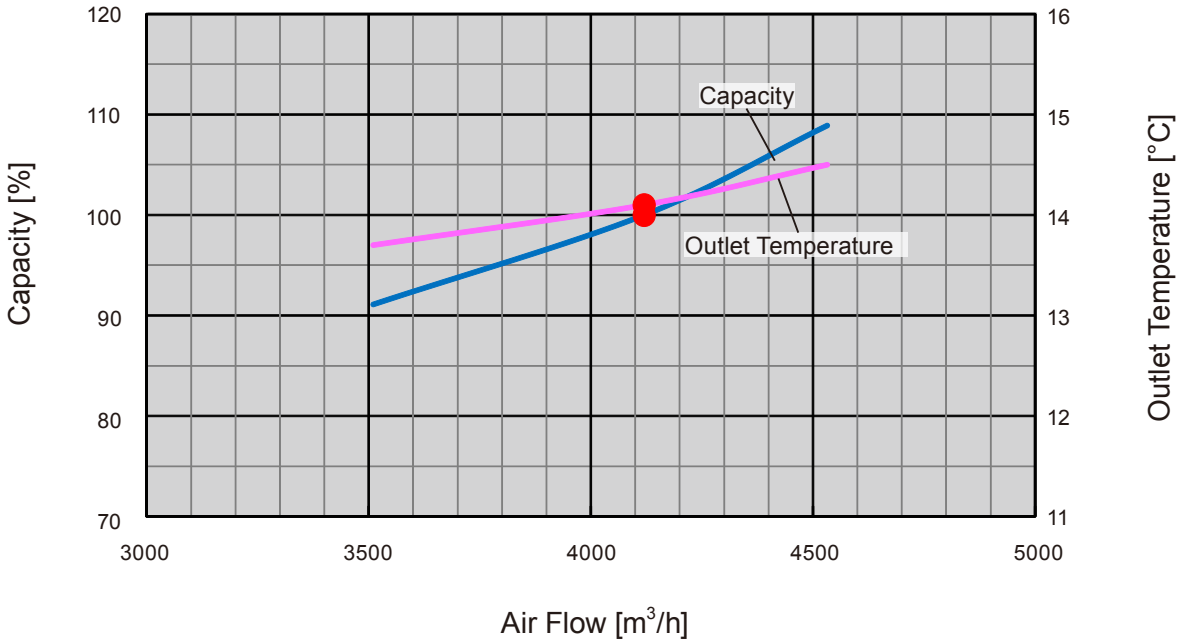
INDOOR UNITS

■ MODEL: ARXN36GATH

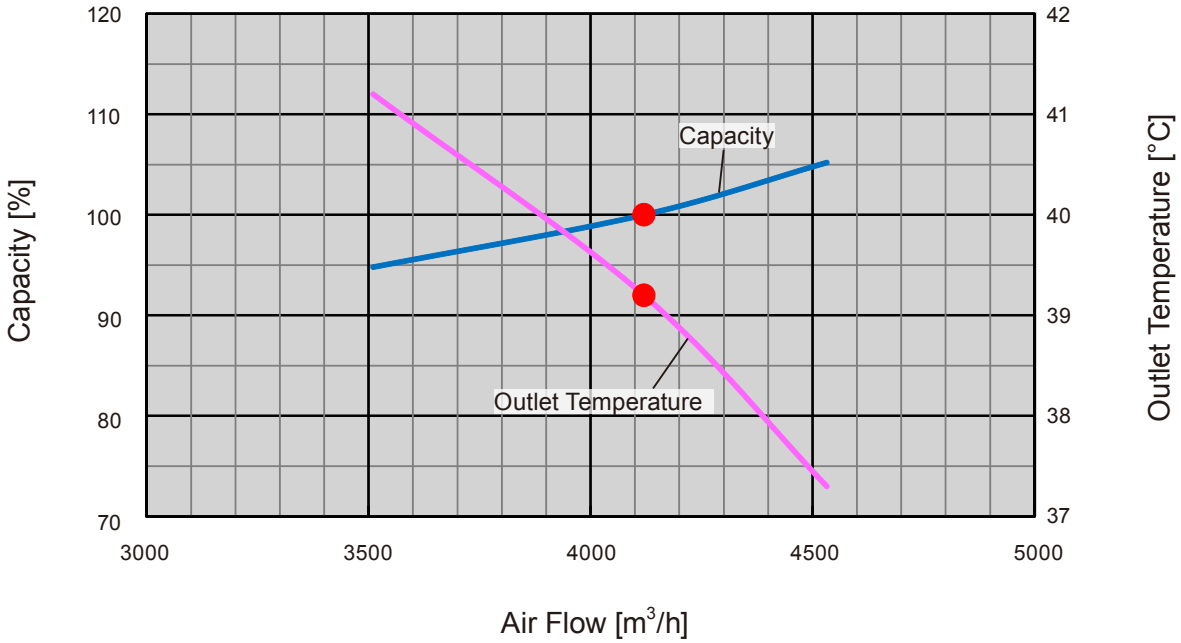


INDOOR UNITS

Cooling

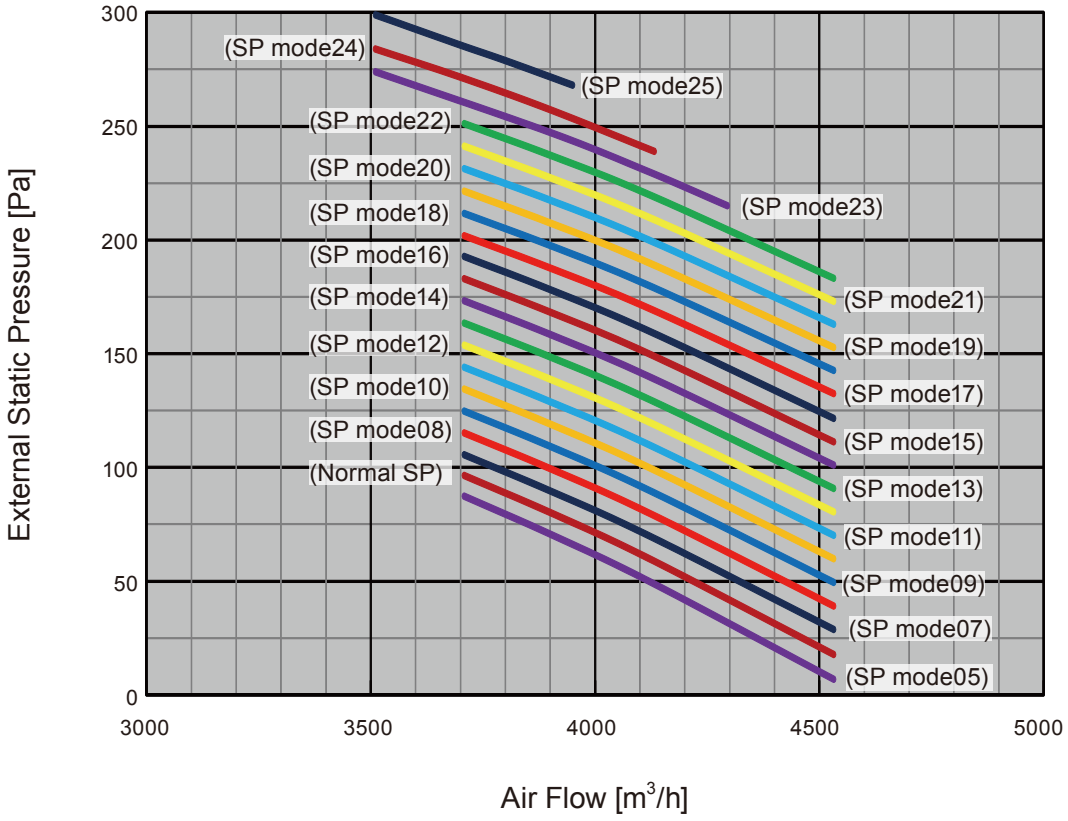


Heating



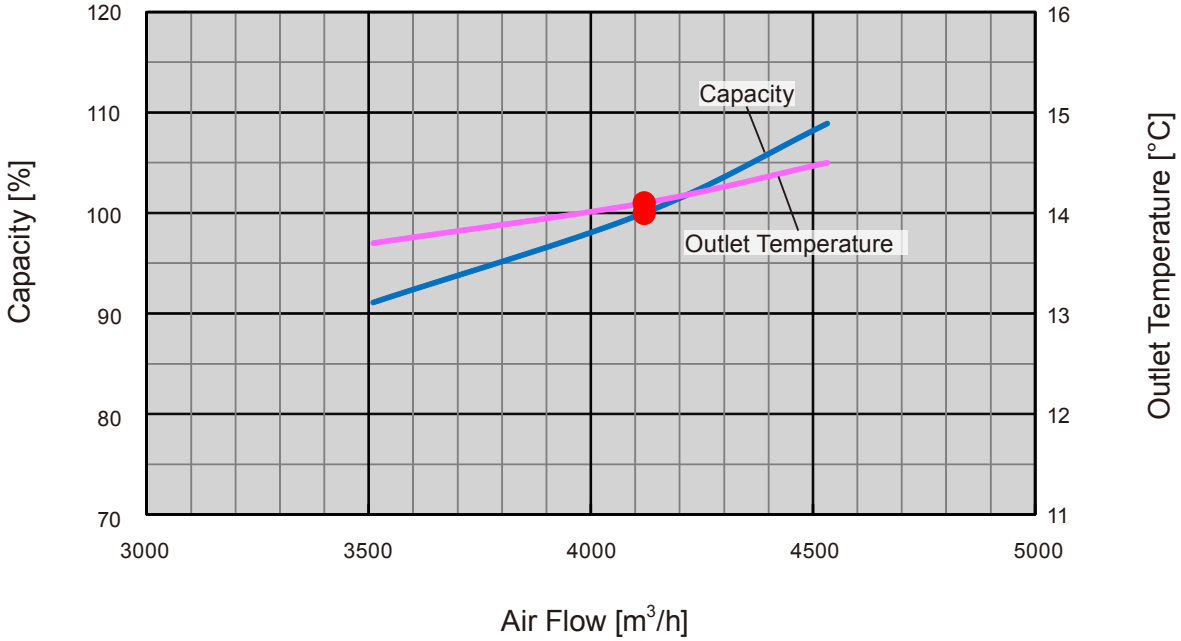
INDOOR UNITS

■ MODEL: ARXN45GATH

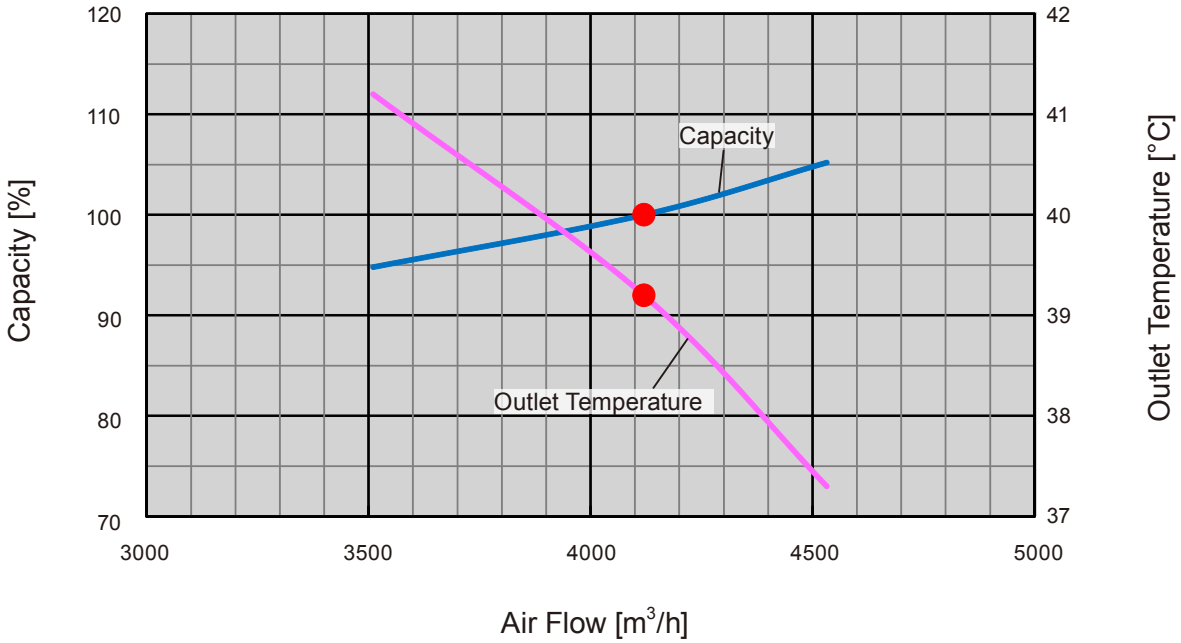


INDOOR UNITS

Cooling



Heating

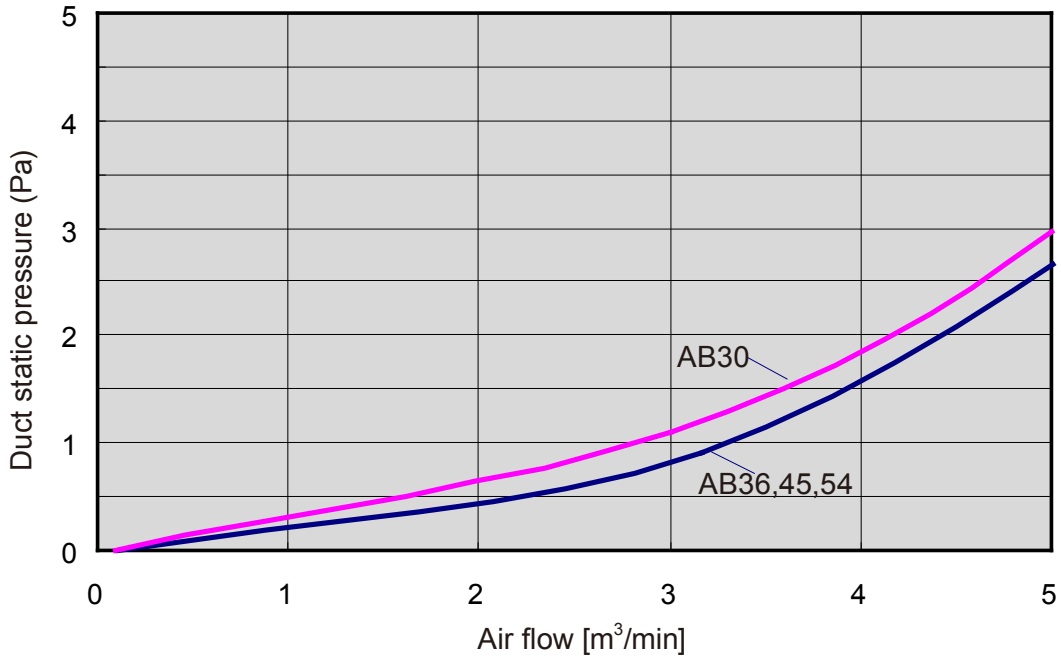


INDOOR UNITS

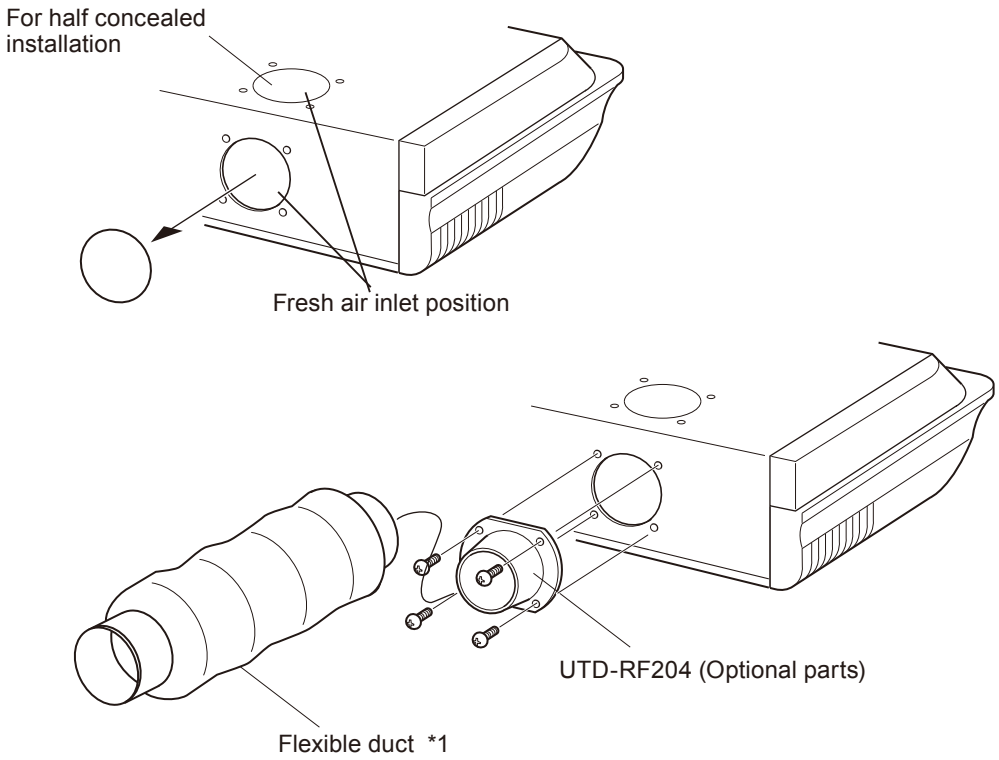
6-7. CEILING TYPE (FRESH AIR)

■ MODELS: AB∗A30GATH, AB∗A36GATH, AB∗A45GATH, AB∗A54GATH

● Air flow volume - Static pressure of Fresh air intake characteristics



● Installation

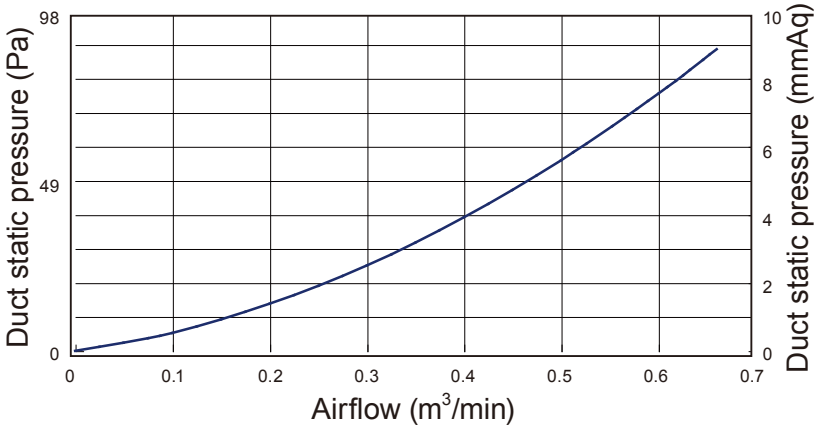


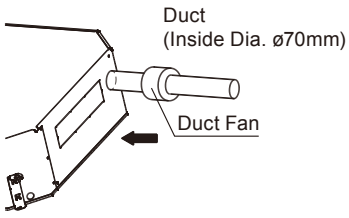
*1 : Locally procured parts

INDOOR UNITS

6-8. CASSETTE TYPE (FRESH AIR)

■ MODELS: AUXM018GLAH, AUXM024GLAH, AUXM030GLAH, AUXK018GLAH, AUXK024GLAH, AUXK030GLAH, AUXK034GLAH, AUXK036GLAH, AUXK045GLAH, AUXK054GLAH, AUXD18GALH, AUXD24GALH, AUXA18GALH, AUXA24GALH, AUXA30GALH, AUXA34GALH,AUXA36GALH, AUXA45GALH AUXA54GALH

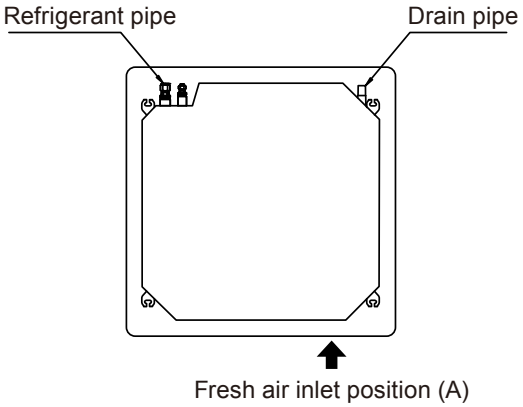




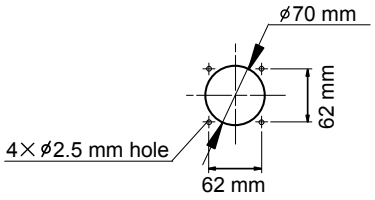
Static pressure required to take in fresh air

● Air flow volume - Static pressure of Fresh air intake characteristics

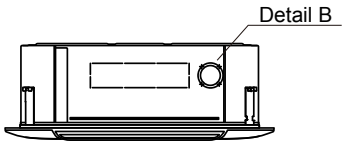
● Installation



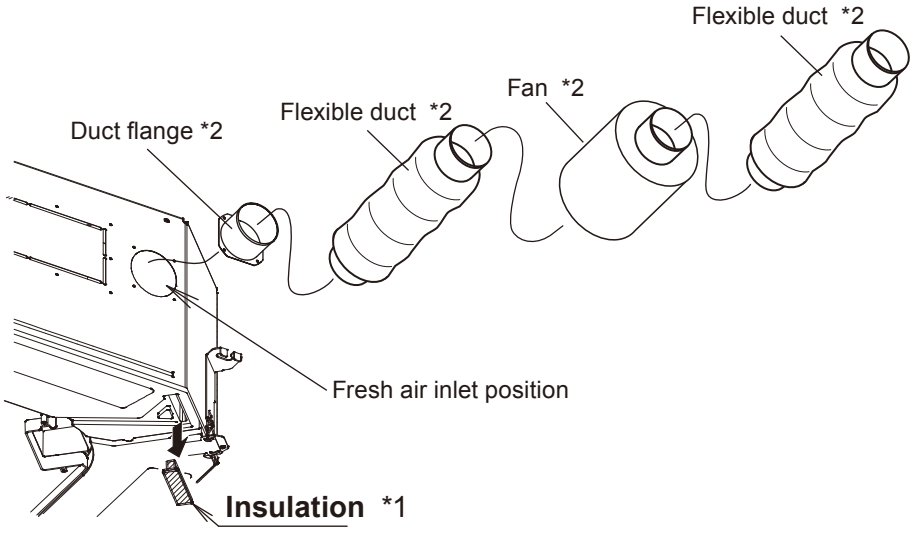
Fresh air inlet position (A)
Top view



Detail (B)



View (A)
Fresh air inlet position



*1 : In case of fresh air intake, please remove the insulation.

*2 : Locally procured parts

INDOOR UNITS

7. AIRFLOW

Type	Model	Airflow			
			m^3/h	l/s	CFM
Compact cassette	AUXB04 GBLH / GALH	High	530	147	312
		Med *1	450 / 420	125 / 117	265 / 247
		Low *1	350 / 300	97 / 83	206 / 177
	AUXB07 GALH	High	540	150	318
		Med	450	125	265
		Low	350	97	206
	AUXB09 GALH	High	550	153	324
		Med	450	125	265
		Low	350	97	206
	AUXB12 GALH	High	600	167	353
		Med	530	147	312
		Low	390	108	230
	AUXB14 GALH	High	680	189	400
		Med	590	164	347
		Low	390	108	230
	AUXB18 GALH	High	710	197	418
		Med	580	161	341
		Low	400	111	235
	AUXB24 GALH	High	1030	286	606
		Med	830	231	489
		Low	450	125	265
Cassette	AUXM018 GLAH	High	1050	292	618
		Me-Hi	930	258	547
		Med	900	250	530
		Lo-Hi	870	242	512
		Low	810	225	447
		Quiet	780	217	459
	AUXM024 GLAH	High	1120	311	659
		Me-Hi	1050	292	618
		Med	930	258	547
		Lo-Hi	900	250	530
		Low	870	242	512
		Quiet	780	217	459
	AUXM030 GLAH	High	1470	408	865
		Me-Hi	1160	322	683
		Med	1070	297	630
		Lo-Hi	930	258	547
		Low	900	250	530
		Quiet	780	217	459
	AUXK018 GLAH	High	1420	394	836
		Me-Hi	1360	378	800
		Med	1300	361	765
		Lo-Hi	1270	353	748
		Low	1200	333	706
		Quiet	1150	319	677
	AUXK024 GLAH	High	1420	394	836
		Me-Hi	1360	378	800
		Med	1300	361	765
		Lo-Hi	1270	353	748
		Low	1200	333	706
		Quiet	1150	319	677
	AUXK030 GLAH	High	1440	400	848
		Me-Hi	1400	389	824
		Med	1340	372	789
		Lo-Hi	1300	361	765
		Low	1280	356	753
		Quiet	1150	319	677
	AUXK034 GLAH	High	1440	400	848
		Me-Hi	1400	389	824
		Med	1340	372	789
		Lo-Hi	1300	361	765
		Low	1280	356	753
		Quiet	1150	319	677

Type	Model	Airflow			
			m^3/h	l/s	CFM
Cassette	AUXK036 GLAH	High	1620	450	954
		Me-Hi	1500	417	883
		Med	1400	389	824
		Lo-Hi	1340	372	789
		Low	1280	356	753
		Quiet	1150	319	677
	AUXK045 GLAH	High	1820	506	1071
		Me-Hi	1590	442	936
		Med	1500	417	883
		Lo-Hi	1400	389	824
		Low	1300	361	765
		Quiet	1150	319	677
	AUXK054 GLAH	High	2040	567	1201
		Me-Hi	1800	500	1059
		Med	1590	442	936
		Lo-Hi	1440	400	848
		Low	1300	361	765
		Quiet	1150	319	677
	AUXD18 GALH	High	1150	319	677
		Med	940	261	553
		Low	870	242	512
	AUXD24 GALH	High	1280	356	753
		Med	1040	289	612
		Low	870	242	512
	AUXA18 GALH	High	1420	394	836
		Med	1230	342	724
		Low *1	1100 / 1000	306 / 278	647 / 589
	AUXA24 GALH	High	1420	394	836
		Med	1230	342	724
		Low *1	1100 / 1000	306 / 278	647 / 589
	AUXA30 GALH	High	1600	444	942
		Med	1300	361	765
		Low	1100	306	647
	AUXA34 GALH	High	1750	486	1030
		Med	1300	361	765
		Low	1100	306	647
	AUXA36 GALH	High	1800	500	1059
		Med	1300	361	765
		Low	1100	306	647
	AUXA45 GALH	High	1900	528	1118
		Med	1370	381	806
		Low	1100	306	647
	AUXA54 GALH	High	2000	556	1177
		Med	1370	381	806
		Low	1100	306	647
Low static pressure duct / concealed floor	ARXB07 GALH	High	370	103	218
		Med	310	86	182
		Low	280	78	165
	ARXB09 GALH	High	440	122	259
		Med	370	103	218
		Low	340	94	200
	ARXB12 GALH	High	590	164	347
		Med	500	139	294
		Low	450	125	265
	ARXB14 GALH	High	800	222	471
		Med	750	208	441
		Low	700	194	412
	ARXB18 GALH	High	890	247	524
		Med	810	225	477
		Low	730	203	430

*1: This value is "cooling operation / heating operation".

Conversion Factor
1 m^3/h = 0.2778 l/s = 0.5886 CFM
3.6 m^3/h = 1 l/s
1.699 m^3/h = 1 CFM

INDOOR UNITS

Type	Model	Airflow			
			m^3/h	l/s	CFM
Mini duct	ARXK04 GCLH	High	460	128	271
		Me-Hi	440	122	259
		Med	420	117	247
		Lo-Hi	400	111	235
		Low	370	103	218
		Quiet	340	94	200
	ARXK07 GCLH	High	460	128	271
		Me-Hi	440	122	259
		Med	420	117	247
		Lo-Hi	400	111	235
		Low	370	103	218
		Quiet	340	94	200
	ARXK09 GCLH	High	460	128	271
		Me-Hi	440	122	259
		Med	420	117	247
		Lo-Hi	400	111	235
		Low	370	108	218
		Quiet	340	94	200
	ARXK12 GCLH	High	550	153	324
		Me-Hi	520	144	306
		Med	480	133	283
		Lo-Hi	450	125	265
		Low	410	114	241
		Quiet	340	94	200
	ARXK14 GCLH	High	760	211	447
		Me-Hi	660	183	388
		Med	560	156	330
		Lo-Hi	490	136	288
		Low	410	114	241
		Quiet	340	94	200
	ARXK18 GCLH	High	930	258	547
		Me-Hi	840	233	494
		Med	740	206	436
		Lo-Hi	640	178	377
		Low	540	150	318
		Quiet	470	131	277
	ARXK24 GCLH	High	1,160	322	683
		Me-Hi	1,060	294	624
		Med	960	267	565
		Lo-Hi	860	239	506
		Low	750	208	441
		Quiet	610	169	359
Slim duct / slim concealed floor	ARXD04 GALH	High	510	142	300
		Med	470 / 400	131 / 111	277 / 235
		Low	440 / 320	122 / 89	259 / 188
	ARXD07 GALH	High	550	153	324
		Med	490	136	288
		Low	440	122	259
	ARXD09 GALH	High	600	167	353
		Med	550	153	324
		Low	480	133	283
	ARXD12 GALH	High	600	167	353
		Med	510	142	300
		Low	450	125	265
	ARXD14 GALH	High	800	222	471
		Med	710	197	418
		Low	610	169	359
	ARXD18 GALH	High	940	261	553
		Med	840	233	494
		Low	750	208	441
	ARXD24 GALH	High	1330	369	783
		Med	1240	344	730
		Low	1100	306	647

*1: This value is "cooling operation / heating operation".

Conversion Factor
1 m^3/h = 0.2778 l/s = 0.5886 CFM
3.6 m^3/h = 1 l/s
1.699 m^3/h = 1 CFM

Type	Model	Airflow			
			m^3/h	l/s	CFM
Medium static pressure duct	ARXA24 GBLH	High	1280	356	753
		Med	990	275	583
		Low	840	233	494
	ARXA30 GBLH	High	1410	392	830
		Med	1280	356	753
		Low	1150	319	677
	ARXA36 GBLH	High	1840	511	1083
		Med	1600	444	942
		Low	1470	408	865
	ARXA45 GBLH	High	1970	547	1160
		Med	1860	517	1095
		Low	1640	456	965
High static pressure duct	ARXC36 GBTH	High	1990	553	1171
		Med	1680	467	989
		Low	1330	369	783
	ARXC45 GATH	High	3500	972	2060
		Med	3000	833	1766
		Low	2460	683	1448
	ARXC60 GATH	High	3500	972	2060
		Med	3000	833	1766
		Low	2460	683	1448
	ARXC72 GBTH	High	3900	1083	2296
		Med	3300	917	1942
		Low	3000	833	1766
	ARXC90 GBTH	High	4300	1195	2531
		Med	4000	1111	2354
		Low	3500	972	2060
	ARXC96 GBTH	High	4850	1347	2855
		Med	4250	1181	2502
		Low	3600	1000	2119
Large airflow duct	ARXN18 GATH	-	2280	633	1342
	ARXN24 GATH	-	2640	733	1554
	ARXN30 GATH	-	3200	889	1884
	ARXN34 GATH	-	3720	1033	2190
	ARXN36 GATH	-	4120	1145	2425
	ARXN45 GATH	-	4120	1145	2425
Floor/ ceiling	AB∗A12 GATH	High	660	183	389
		Med	570	158	336
		Low	490	136	289
	AB∗A14 GATH	High	780	216	459
		Med	640	177	377
		Low	550	152	324
	AB∗A18 GATH	High	1000	277	589
		Med	720	199	424
		Low	580	161	342
	AB∗A24 GATH	High	1000	277	589
		Med	820	227	483
		Low	680	188	401
Ceiling	AB∗A30 GATH	High	1630	452	960
		Med	1370	379	807
		Low	1140	316	671
	AB∗A36 GATH	High	1690	469	995
		Med	1400	389	824
		Low	1170	325	689
	AB∗A45 GATH	High	2010	558	1183
		Med	1600	444	942
		Low	1230	342	724
	AB∗A54 GATH	High	2270	629	1337
		Med	1780	493	1048
		Low	1280	355	754

INDOOR UNITS

Type	Model	Airflow			
			m^3/h	l/s	CFM
Compact floor	AG∗A004 GCAH	High *1	380 / 430	106 / 119	224 / 253
		Me-Hi	350	97	206
		Med	320	89	188
		Lo-Hi	310	86	182
		Low	280	78	165
		Quiet	210	58	124
	AG∗A007 GCAH	High	470	131	277
		Me-Hi	420	117	247
		Med	390	108	230
		Lo-Hi	360	100	212
		Low	330	92	194
		Quiet	270	75	159
	AG∗A009 GCAH	High	500	139	294
		Me-Hi	450	125	265
		Med	400	111	235
		Lo-Hi	360	100	212
		Low	330	92	194
		Quiet	270	75	159
	AG∗A012 GCAH	High	590	164	347
		Me-Hi	520	144	306
		Med	470	131	277
		Lo-Hi	420	117	247
		Low	390	108	230
		Quiet	340	94	200
	AG∗A014 GCAH	High	670	186	394
		Me-Hi	590	164	347
		Med	520	144	306
		Lo-Hi	450	125	265
		Low	390	108	230
		Quiet	340	94	200
Compact floor (EEV external model)	AG∗E004 GCAH	High *1	380 / 430	106 / 119	224 / 253
		Me-Hi	350	97	206
		Med	320	89	188
		Lo-Hi	310	86	182
		Low	280	78	165
		Quiet	210	58	124
	AG∗E007 GCAH	High	470	131	277
		Me-Hi	420	117	247
		Med	390	108	230
		Lo-Hi	360	100	212
		Low	330	92	194
		Quiet	270	75	159
	AG∗E009 GCAH	High	500	139	294
		Me-Hi	450	125	265
		Med	400	111	235
		Lo-Hi	360	100	212
		Low	330	92	194
		Quiet	270	75	159
	AG∗E012 GCAH	High	590	164	347
		Me-Hi	520	144	306
		Med	470	131	277
		Lo-Hi	420	117	247
		Low	390	108	230
		Quiet	340	94	200
	AG∗E014 GCAH	High	670	186	394
		Me-Hi	590	164	347
		Med	520	144	306
		Lo-Hi	450	125	265
		Low	390	108	230
		Quiet	340	94	200

Type	Model	Airflow			
			m^3/h	l/s	CFM
Wall mounted	AS∗A004 GTAH	High	430	119	253
		Me-Hi	420	117	247
		Med	390	108	230
		Lo-Hi	380	106	224
		Low	360	100	212
		Quiet	330	92	194
	AS∗A007 GTAH	High	550	153	324
		Me-Hi	460	128	271
		Med	420	117	247
		Lo-Hi	390	108	230
		Low	360	100	212
		Quiet	330	92	194
	AS∗A009 GTAH	High	720	200	424
		Me-Hi	570	158	336
		Med	500	139	294
		Lo-Hi	410	114	241
		Low	360	100	212
		Quiet	330	92	194
	AS∗A04 GACH	High	450	125	265
		Med *1	440 / 370	122 / 103	259 / 218
		Low *1	420 / 320	117 / 89	247 / 188
	AS∗A07 GACH	High	490	136	288
		Med	450	125	265
		Low *1	420 / 370	117 / 103	247 / 218
	AS∗A09 GACH	High	500	139	294
		Med	450	125	265
		Low *1	420 / 370	117 / 103	247 / 218
	AS∗A12 GACH	High	560	156	330
		Med	480	133	283
		Low	420	117	247
	AS∗A14 GACH	High	670	186	394
		Med	490	136	288
		Low	420	117	247
	AS∗A18 GACH / GBCH	High	840	233	495
		Med	770	214	453
		Low	690	192	406
	AS∗A24 GACH / GBCH	High	1100	306	647
		Med	910	252	536
		Low	730	203	430
	AS∗A30 GACH	High	1240	343	730
		Med	980	271	577
		Low	770	213	454
	AS∗A30 GTAH	High	1440	400	848
		Me-Hi	1200	333	706
		Med	1050	292	618
		Lo-Hi	940	261	553
		Low	890	247	524
		Quiet	700	194	412
	AS∗A34 GTAH	High *1	1620 / 1520	450 / 422	954 / 895
		Me-Hi	1300	361	765
		Med	1120	311	659
		Lo-Hi	980	272	577
		Low	890	247	524
		Quiet	700	194	412

*1: This value is "cooling operation / heating operation".

Conversion Factor
1 m^3/h = 0.2778 l/s = 0.5886 CFM
3.6 m^3/h = 1 l/s
1.699 m^3/h = 1 CFM

Type	Model	Airflow			
			m^3/h	l/s	CFM
Wall mounted (EEV external model)	AS∗E004 GTAH	High	430	119	253
		Me-Hi	420	117	247
		Med	390	108	230
		Lo-Hi	380	106	224
		Low	360	100	212
		Quiet	330	92	194
	AS∗E007 GTAH	High	550	153	324
		Me-Hi	460	128	271
		Med	420	117	247
		Lo-Hi	390	108	230
		Low	360	100	212
		Quiet	330	92	194
	AS∗E009 GTAH	High	720	200	424
		Me-Hi	570	158	336
		Med	500	139	294
		Lo-Hi	410	114	241
		Low	360	100	212
		Quiet	330	92	194
	AS∗E04 GACH	High	450	125	265
		Med *1	440 / 370	122 / 103	259 / 218
		Low *1	420 / 300	117 / 83	247 / 177
	AS∗E07 GACH	High	490	136	288
		Med	450	125	265
		Low *1	420 / 370	117 / 103	247 / 218
	AS∗E09 GACH	High	500	139	294
		Med	450	125	265
		Low *1	420 / 370	117 / 103	247 / 218
	AS∗E12 GACH	High	560	156	330
		Med	480	133	283
		Low	420	117	247
	AS∗E14 GACH	High	680	189	400
		Med	490	136	288
		Low	420	117	247

INDOOR UNITS

*1: This value is "cooling operation / heating operation".

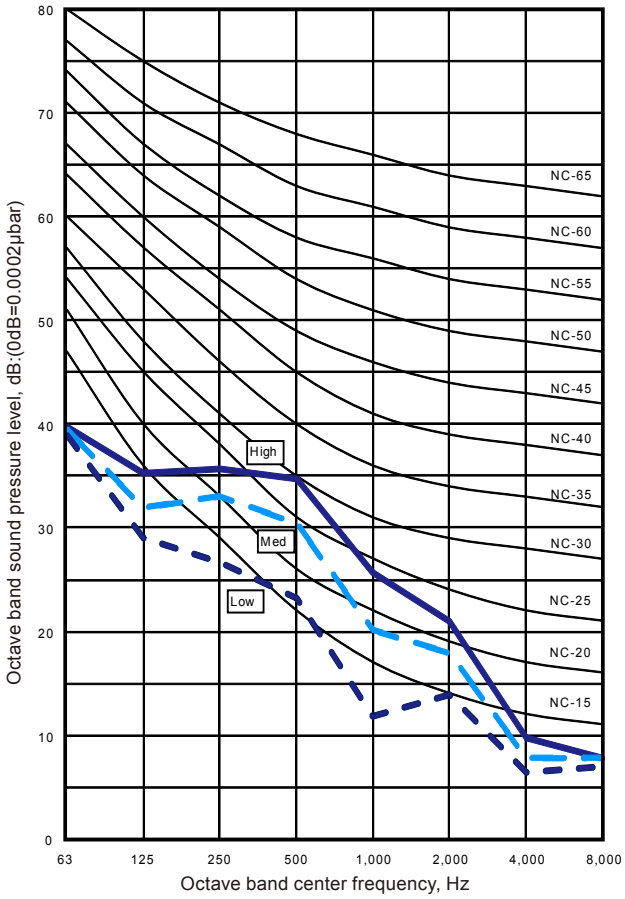
Conversion Factor
1 m^3/h = 0.2778 l/s = 0.5886 CFM
3.6 m^3/h = 1 l/s
1.699 m^3/h = 1 CFM

8. NOISE LEVEL CURVE

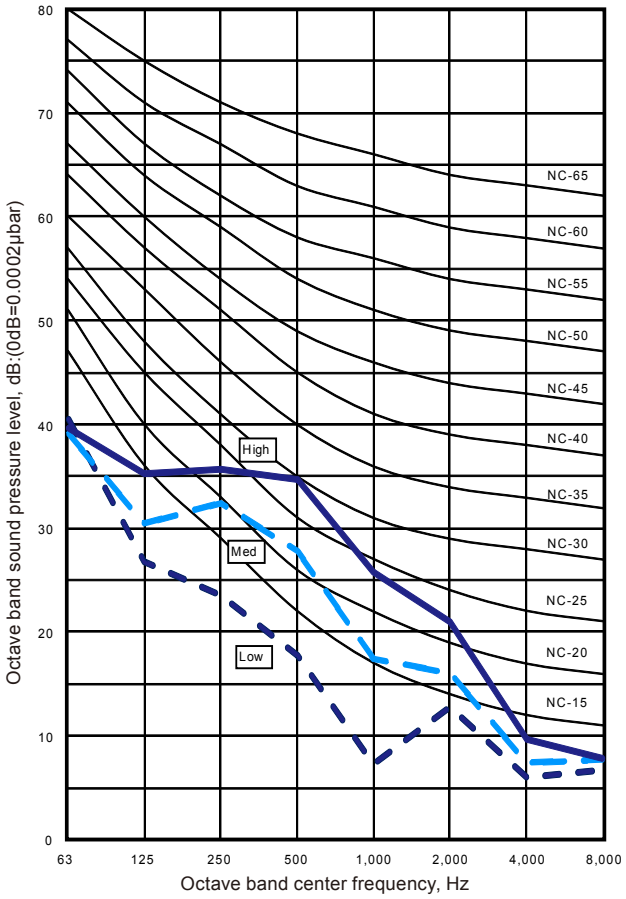
8-1. COMPACT CASSETTE TYPE

■ MODEL: AUXB04GBLH, AUXB04GALH

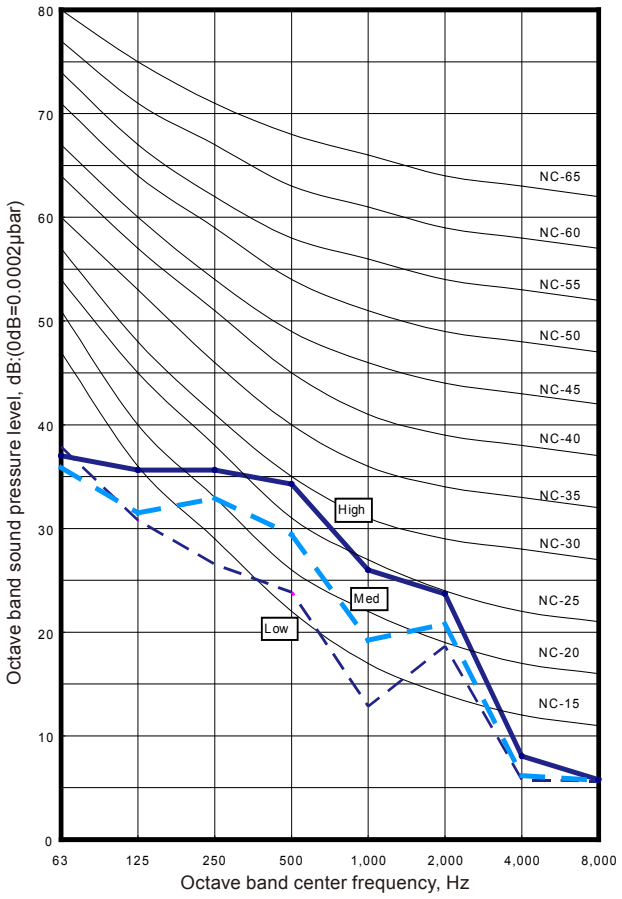
● COOLING



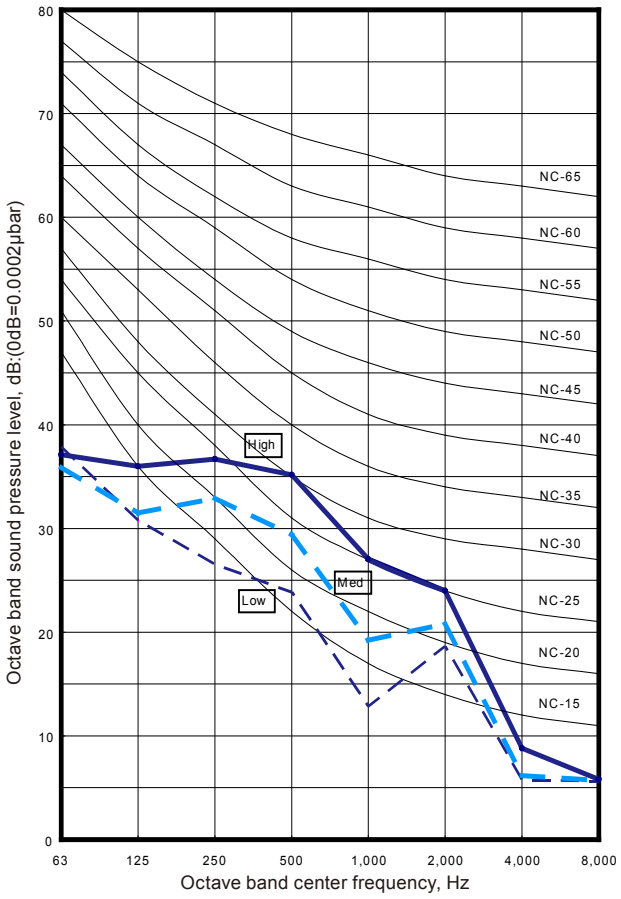
● HEATING



■ MODEL: AUXB07GALH

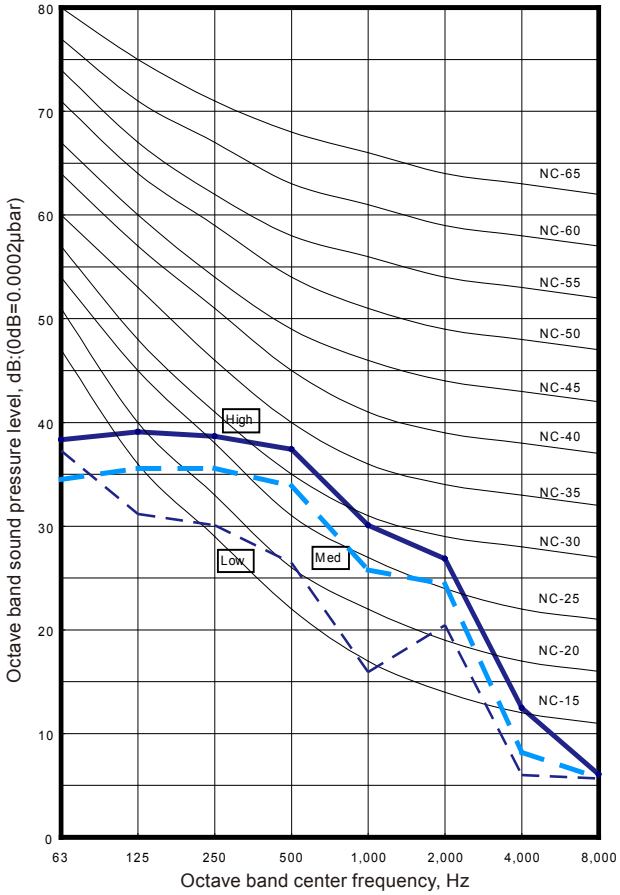


■ MODEL: AUXB09GALH

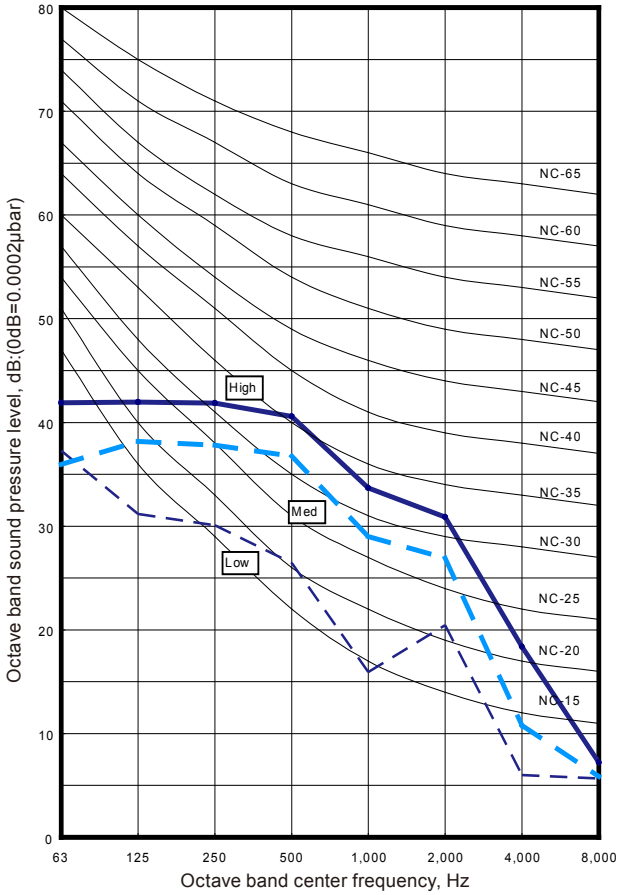


INDOOR UNITS

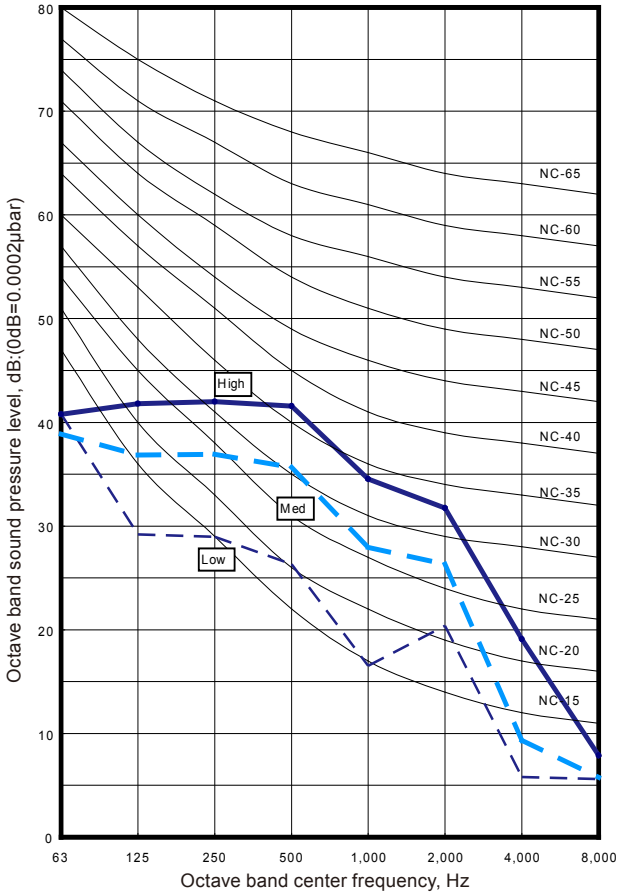
■ MODEL: AUXB12GALH



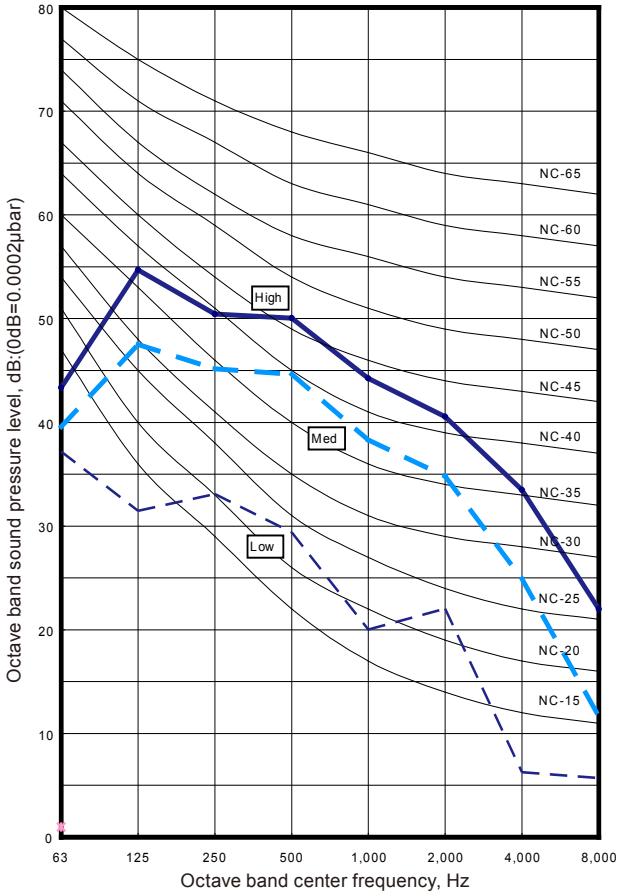
■ MODEL: AUXB14GALH



■ MODEL: AUXB18GALH



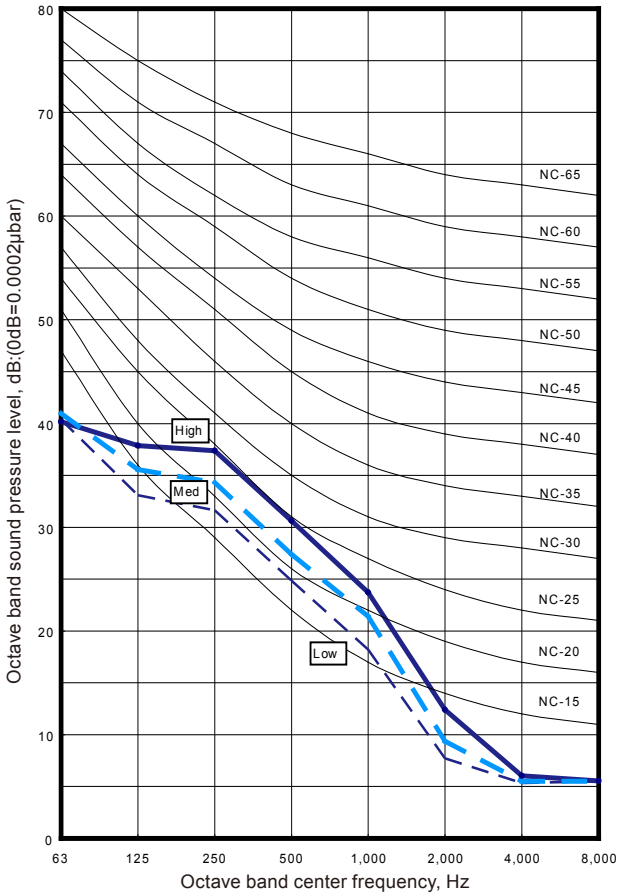
■ MODEL: AUXB24GALH



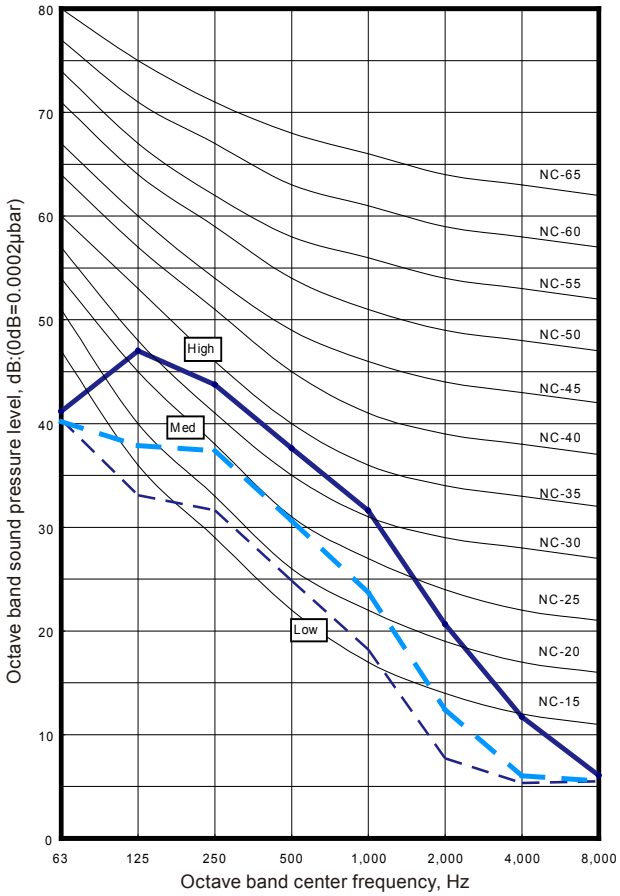
INDOOR UNITS

8-2. CASSETTE TYPE

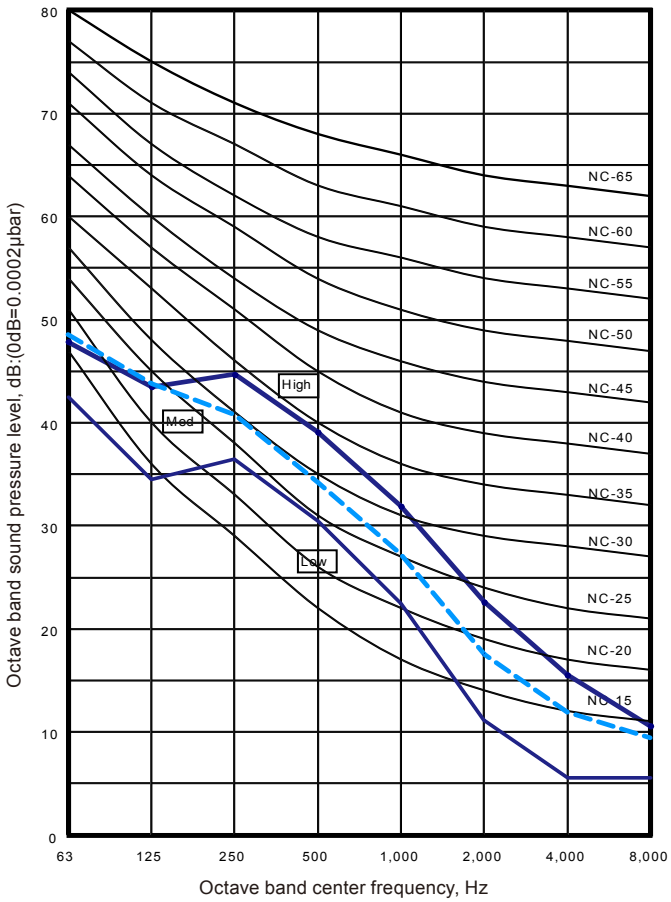
■ MODEL: AUXD18GALH



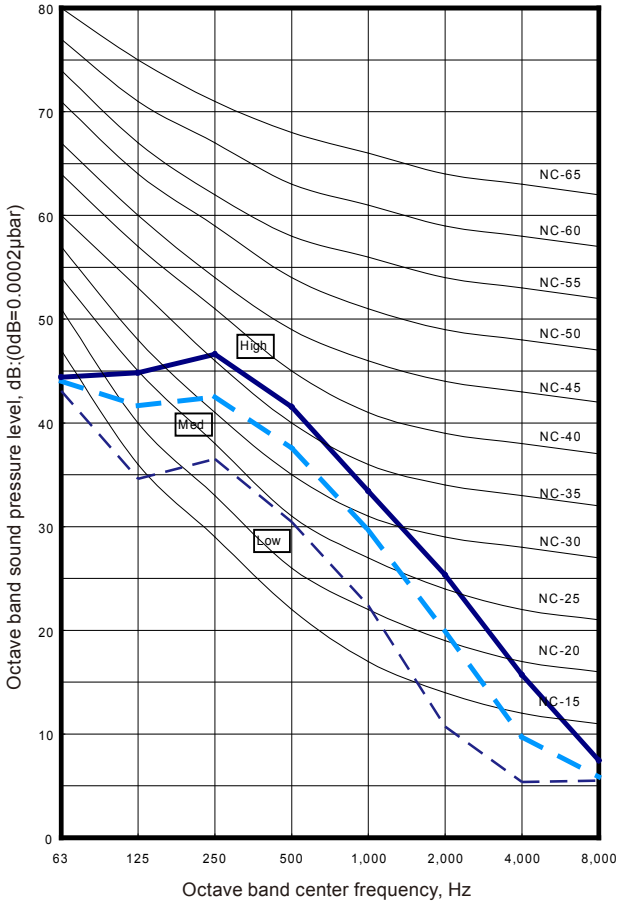
■ MODEL: AUXD24GALH



■ MODELS: AUXA18GALH AUXA24GALH

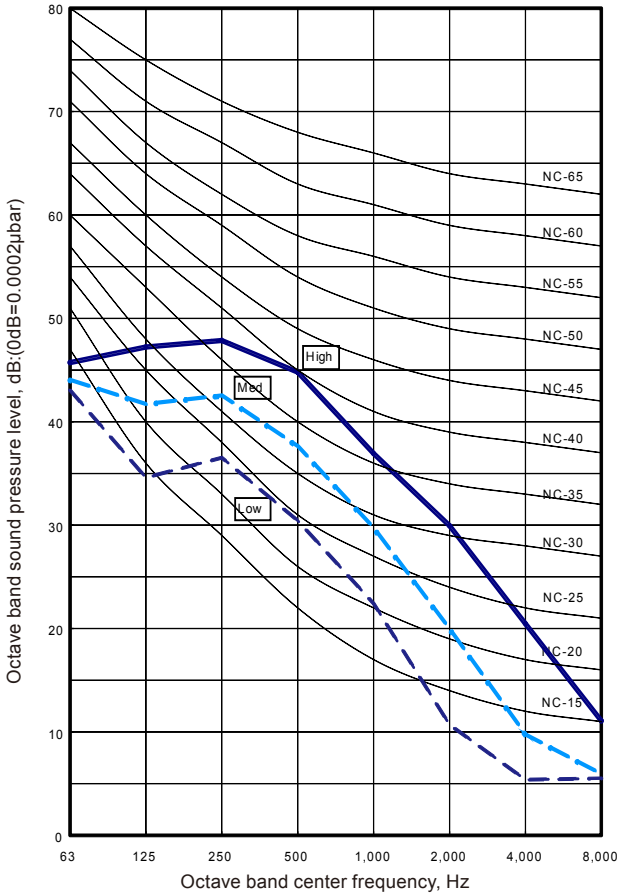


■ MODEL: AUXA30GALH

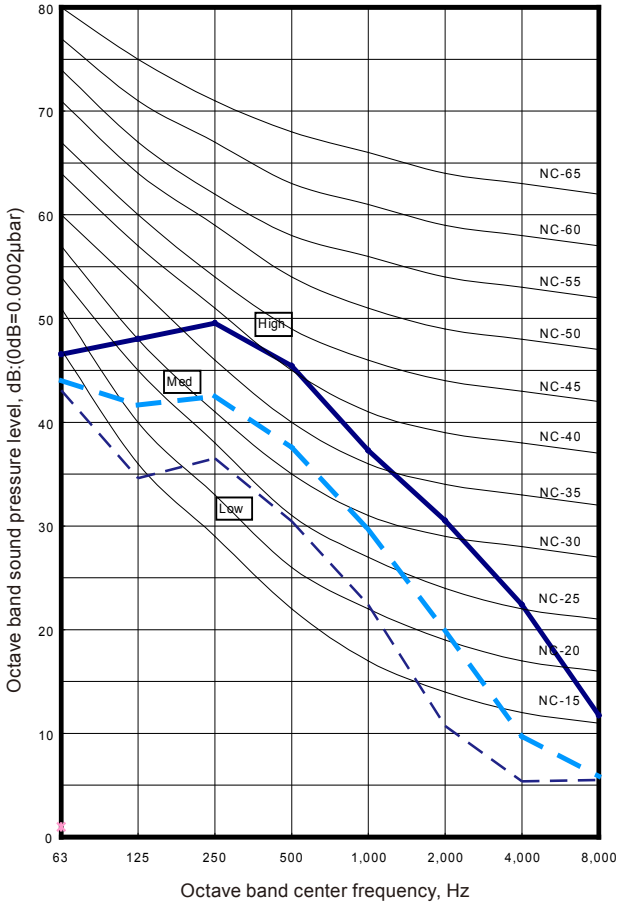


INDOOR UNITS

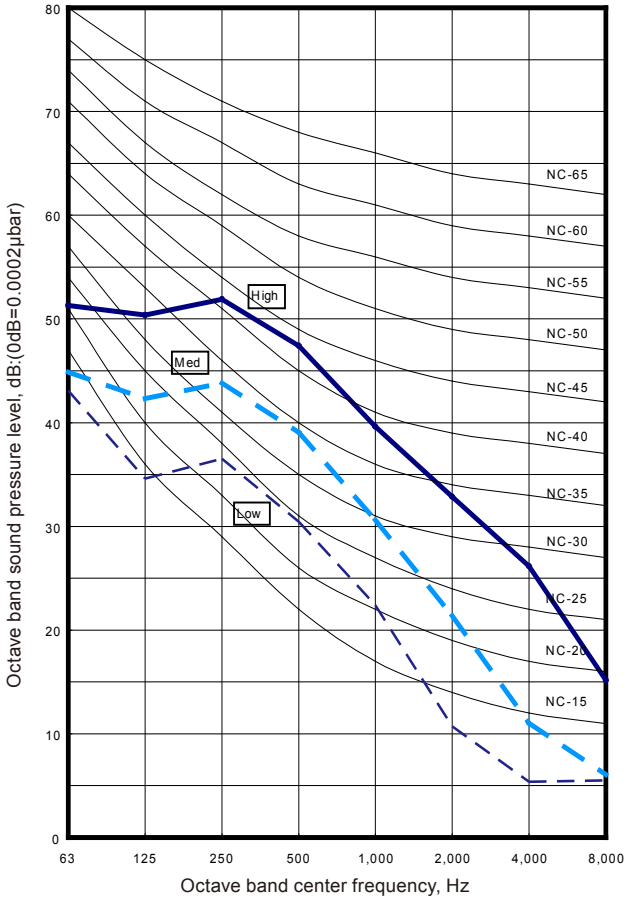
■ MODEL: AUXA34GALH



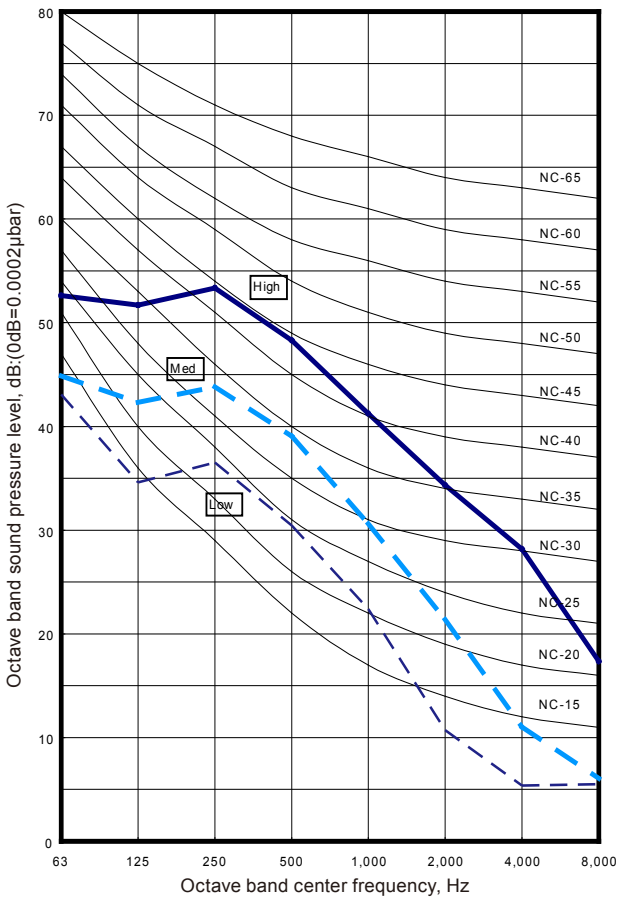
■ MODEL: AUXA36GALH



■ MODEL: AUXA45GALH

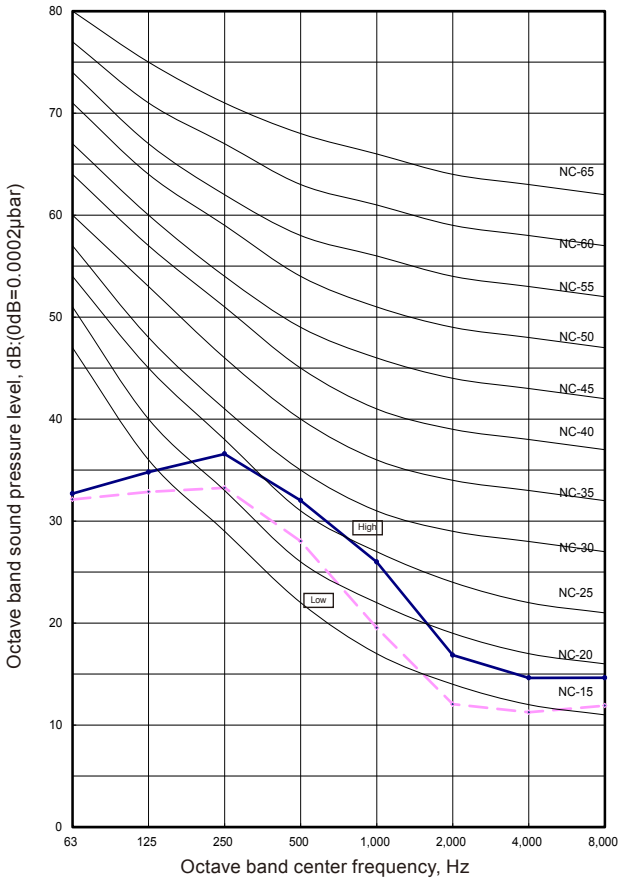


■ MODEL: AUXA54GALH

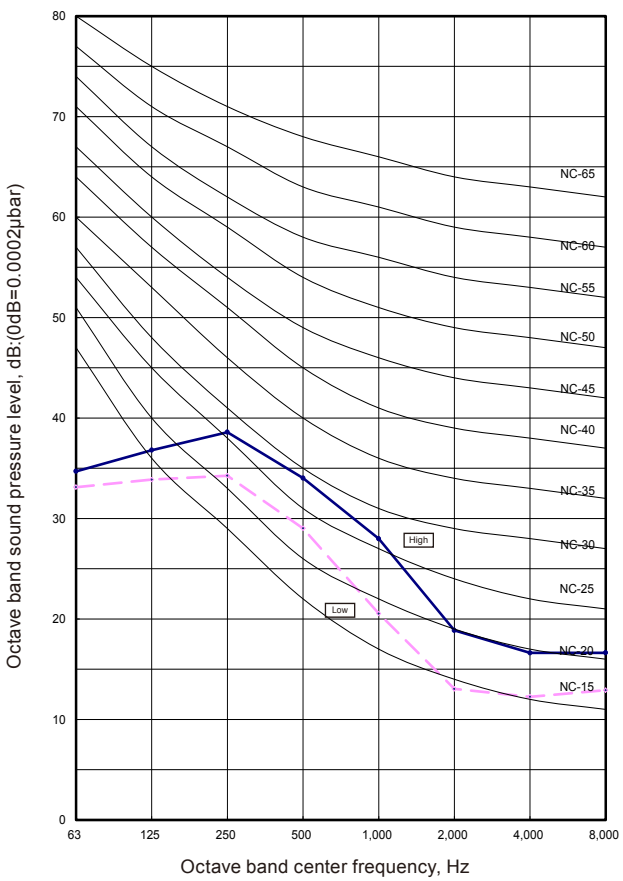


INDOOR UNITS

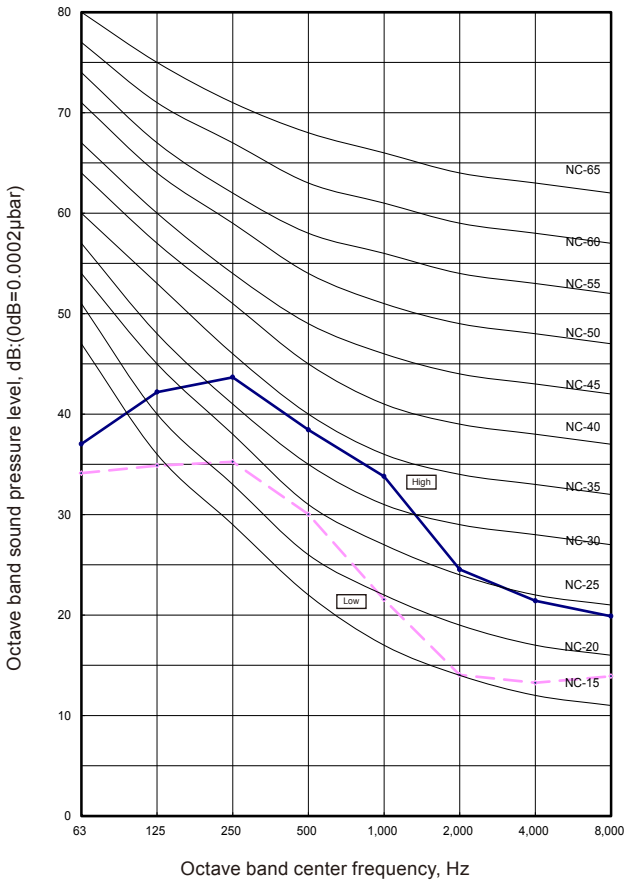
■ MODEL: AUXM018GLAH



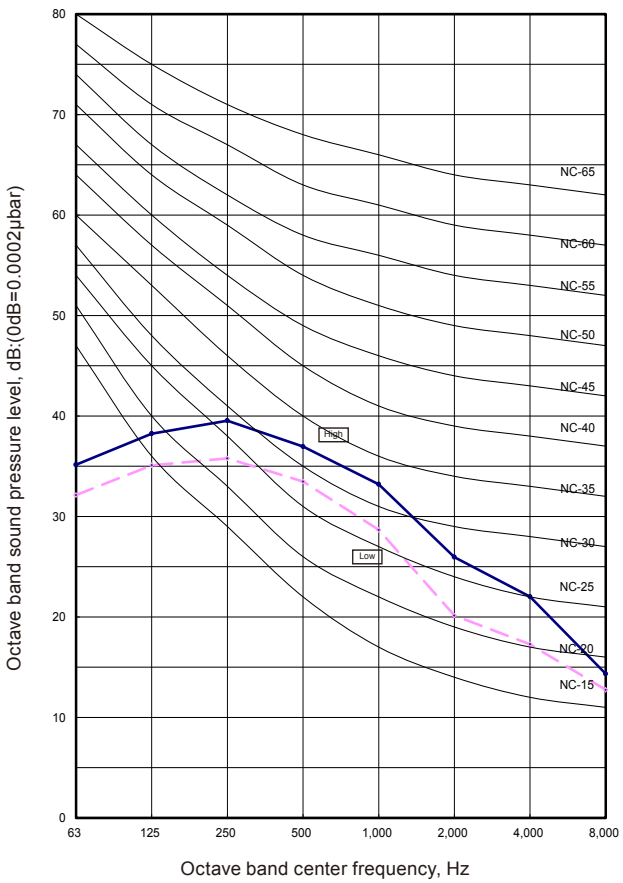
■ MODEL: AUXM024GLAH



■ MODEL: AUXM030GLAH

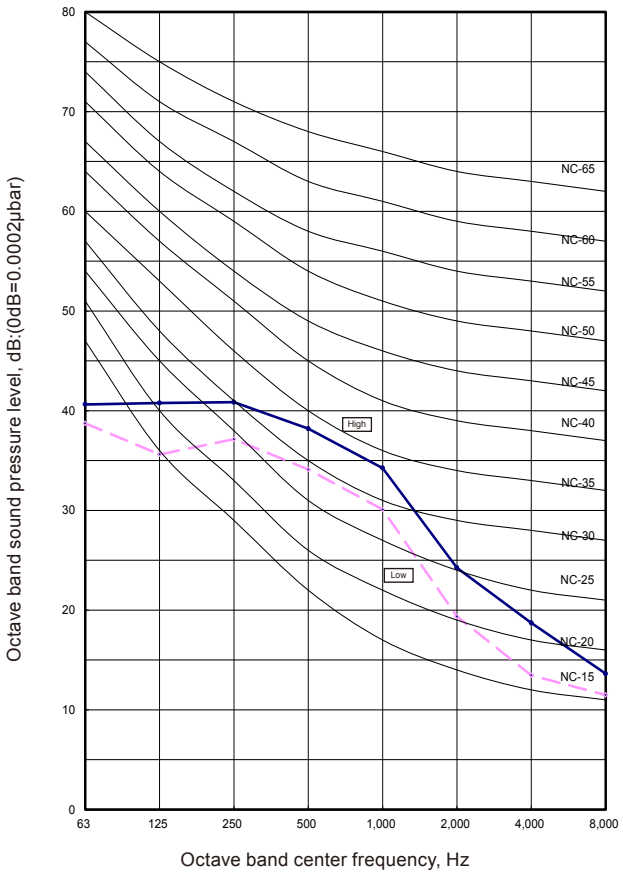


■ MODELS: AUXK018GLAH AUXK024GLAH

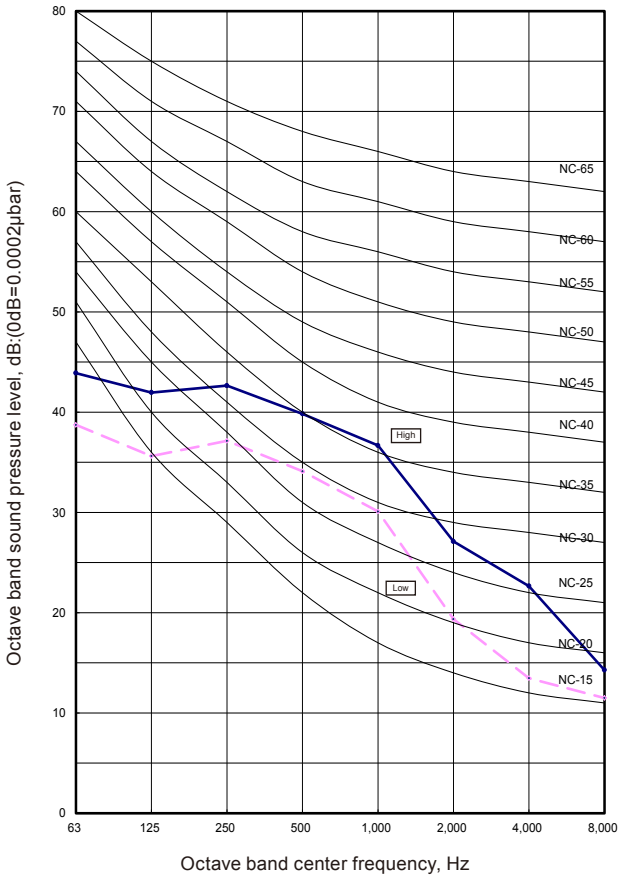


INDOOR UNITS

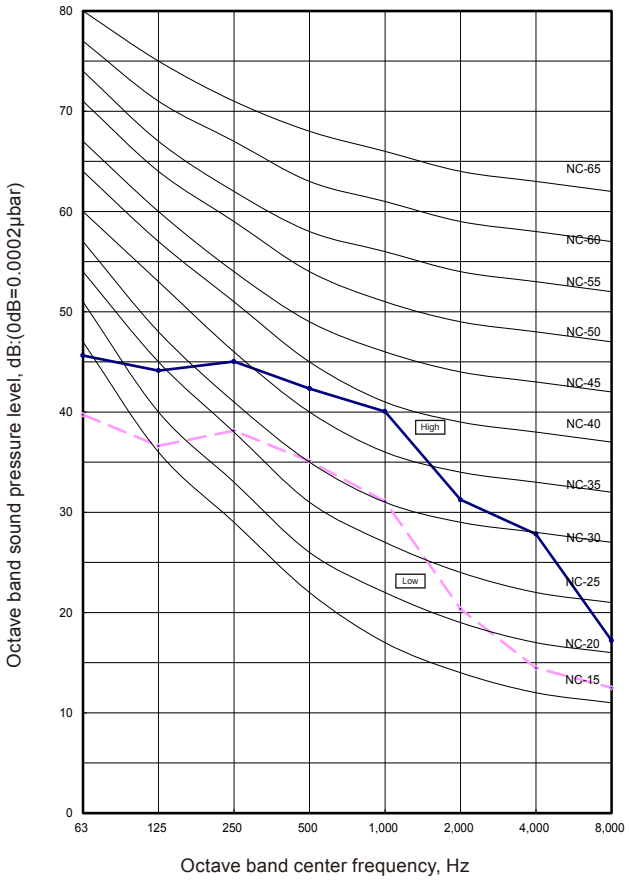
■ MODELS: AUXK030GLAH AUXK034GLAH



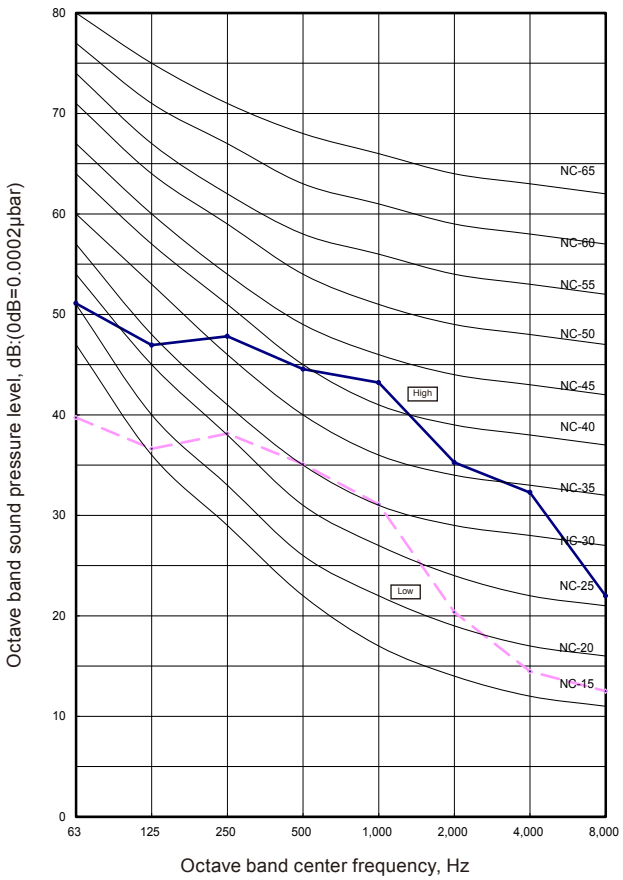
■ MODEL: AUXK036GLAH



■ MODEL: AUXK045GLAH



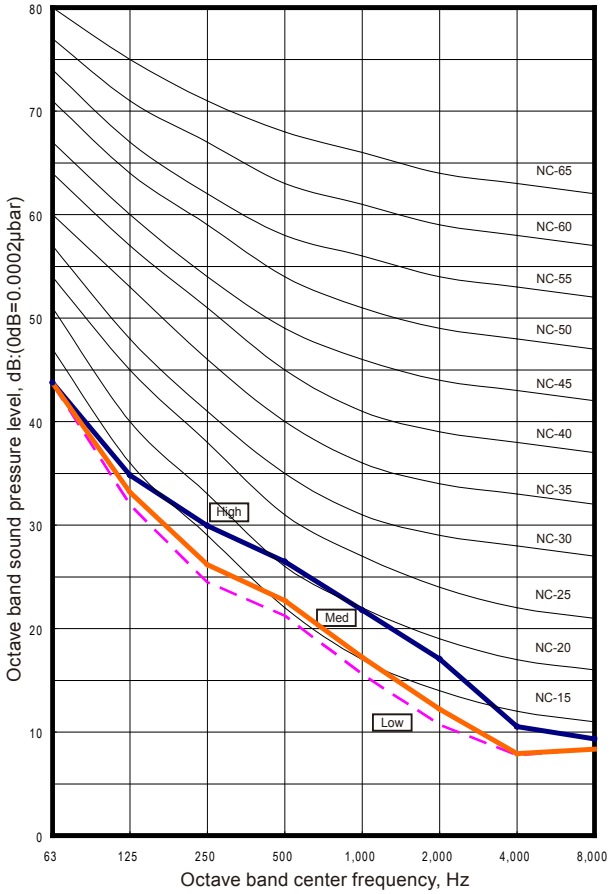
■ MODEL: AUXK054GLAH



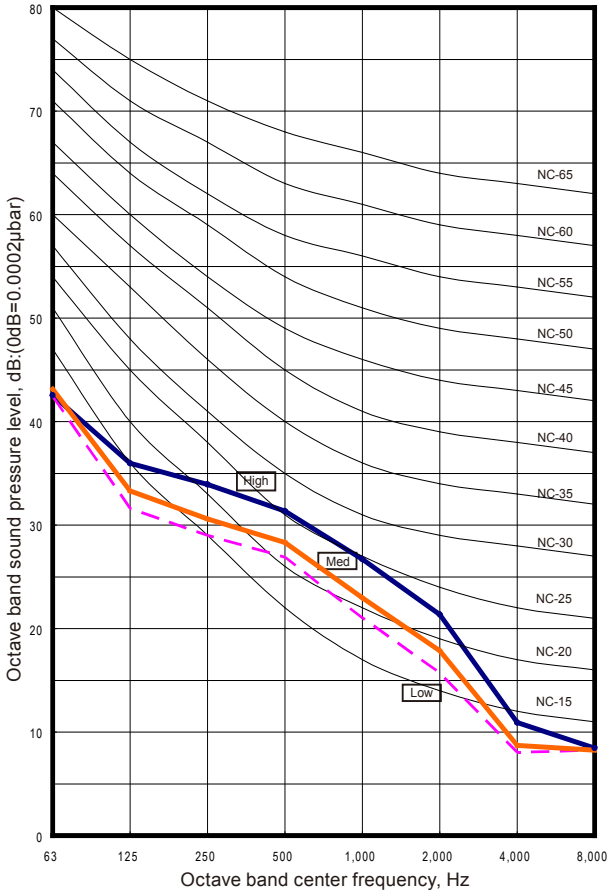
INDOOR UNITS

8-3. LOW STATIC PRESSURE DUCT / CONCEALED FLOOR TYPE

■ MODEL: ARXB07GALH

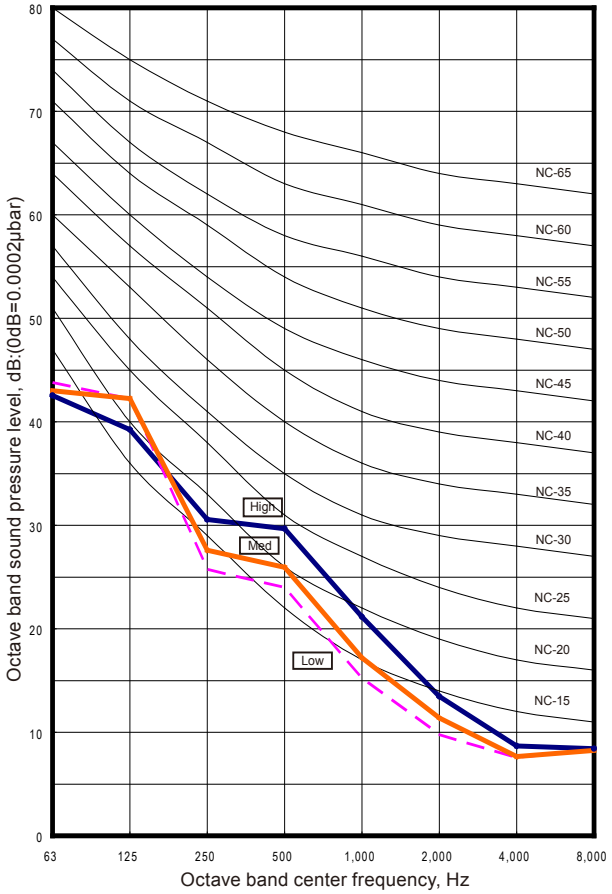


■ MODEL: ARXB09GALH

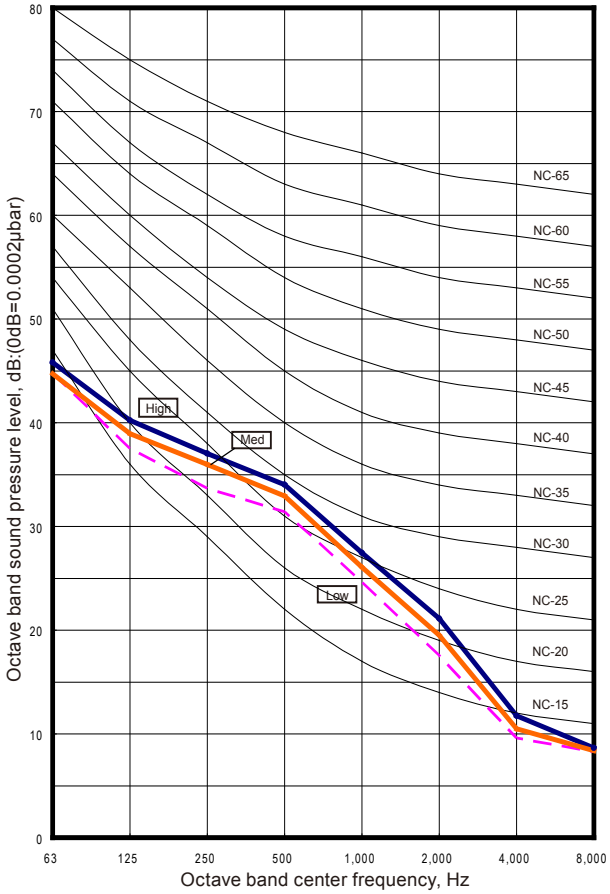


INDOOR UNITS

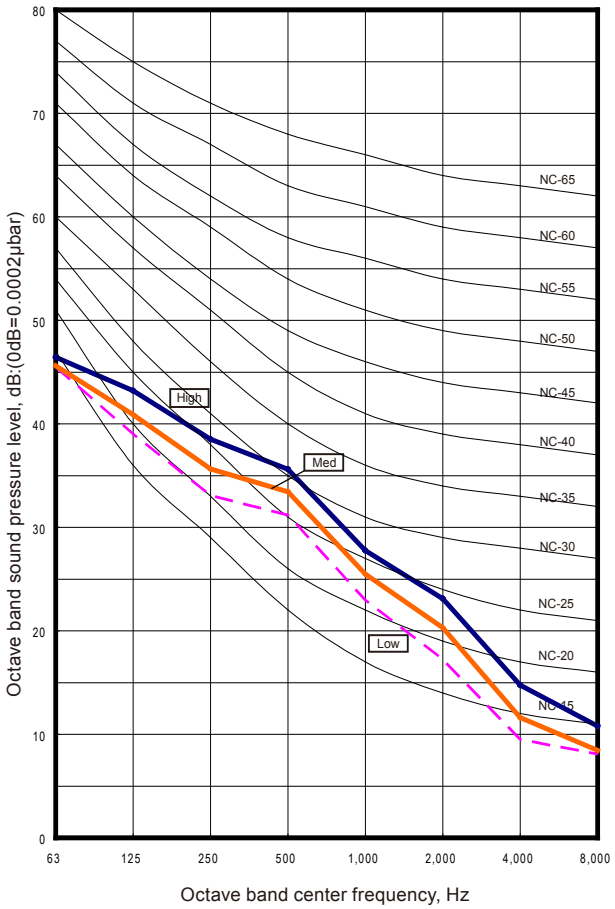
■ MODEL: ARXB12GALH



■ MODEL: ARXB14GALH



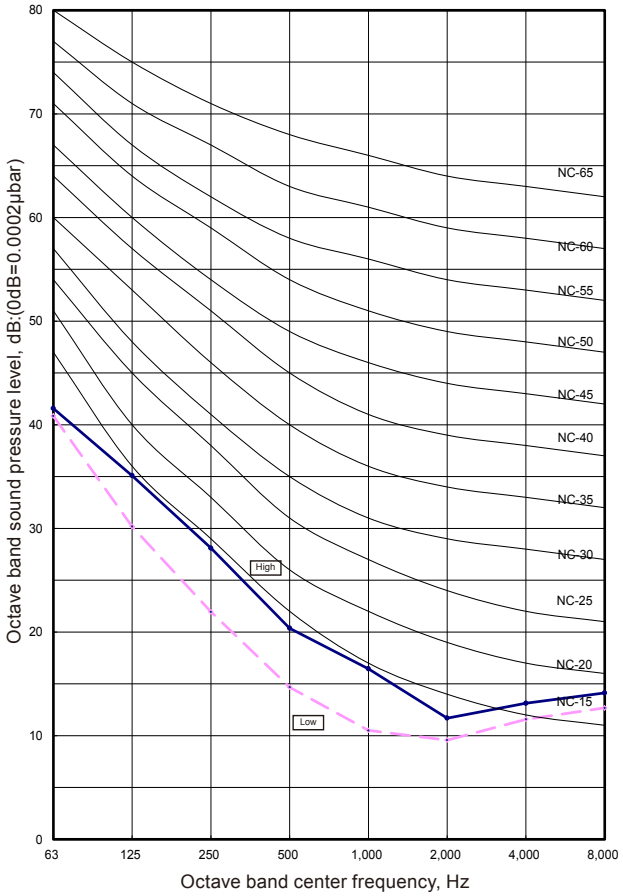
■ MODEL: ARXB18GALH



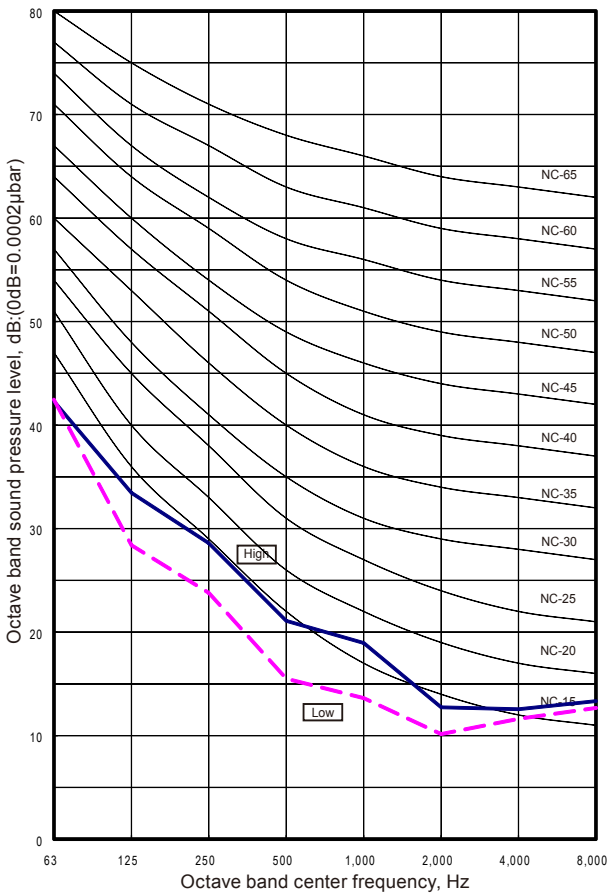
INDOOR UNITS

8-4. MINI DUCT TYPE

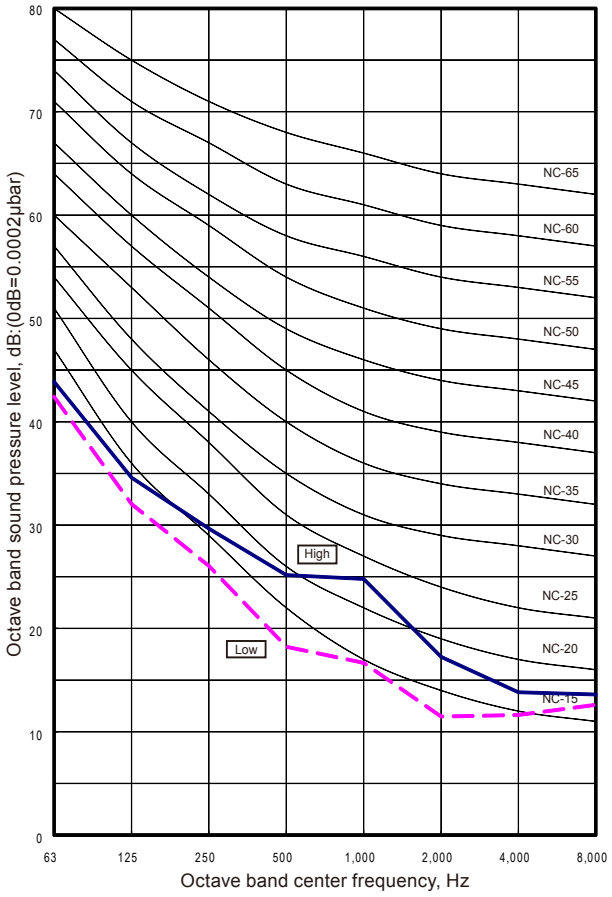
■ MODEL: ARXK04GCLH



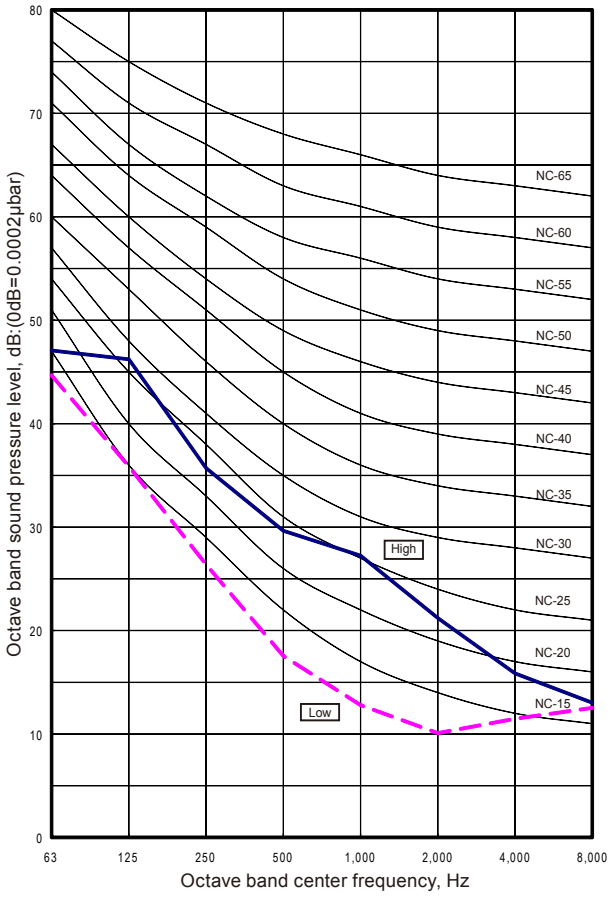
■ MODELS: ARXK07GCLH ARXK09GCLH



■ MODEL: ARXK12GCLH

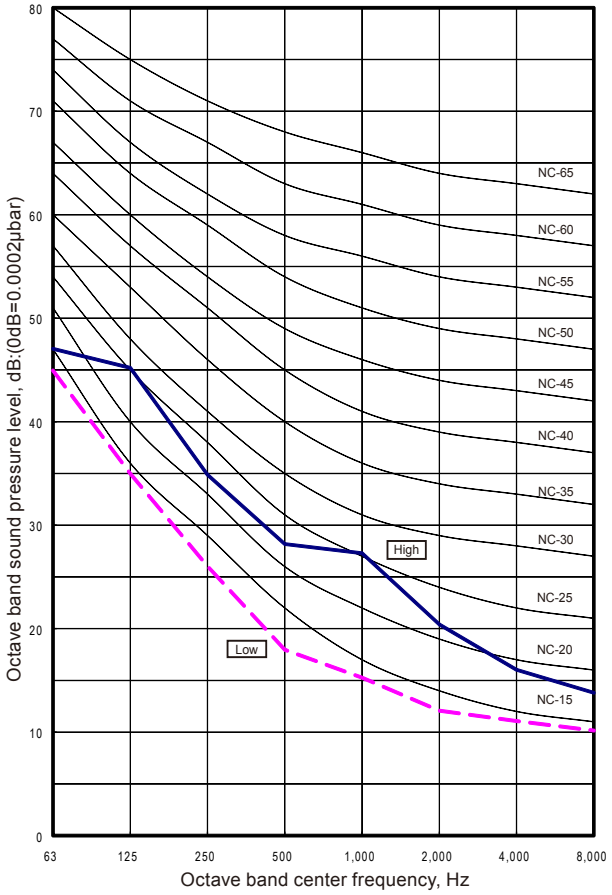


■ MODEL: ARXK14GCLH

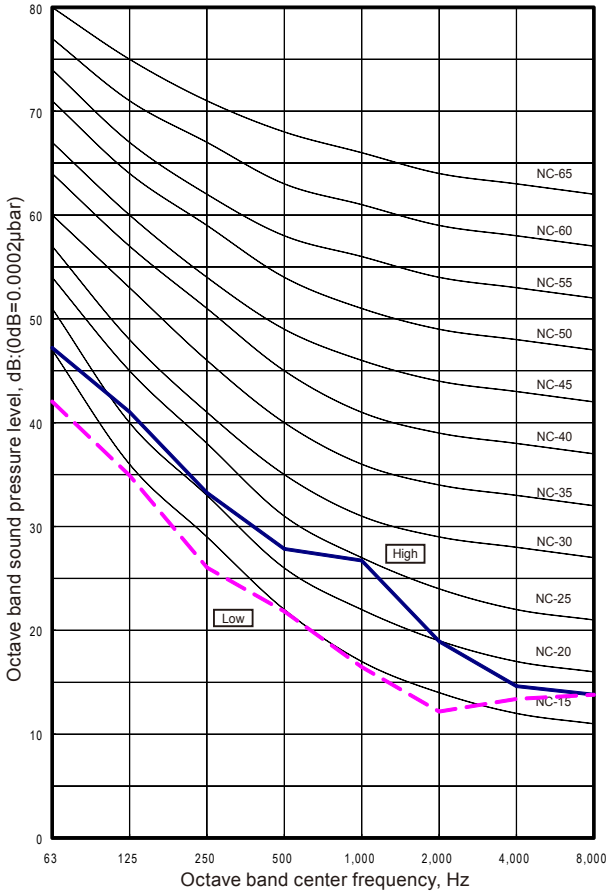


INDOOR UNITS

■ MODEL: ARXK18GCLH



■ MODEL: ARXK24GCLH

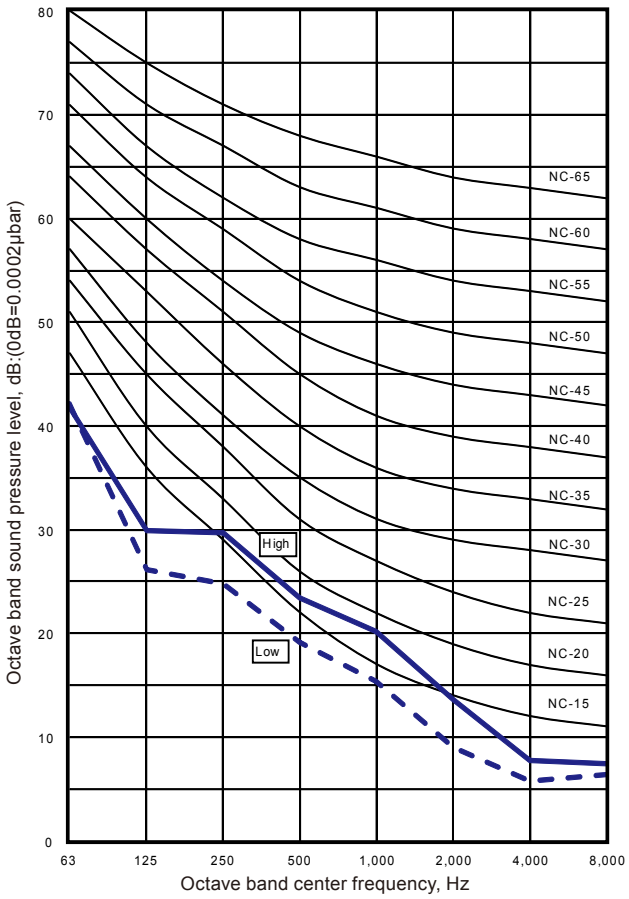


INDOOR UNITS

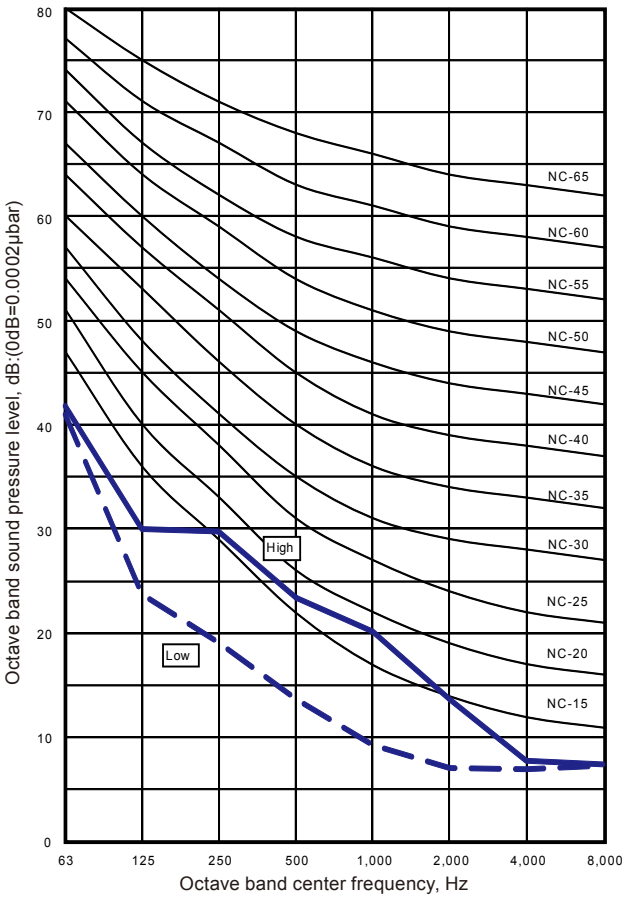
8-5. SLIM DUCT / SLIM CONCEALED FLOOR TYPE

■ MODEL: ARXD04GALH

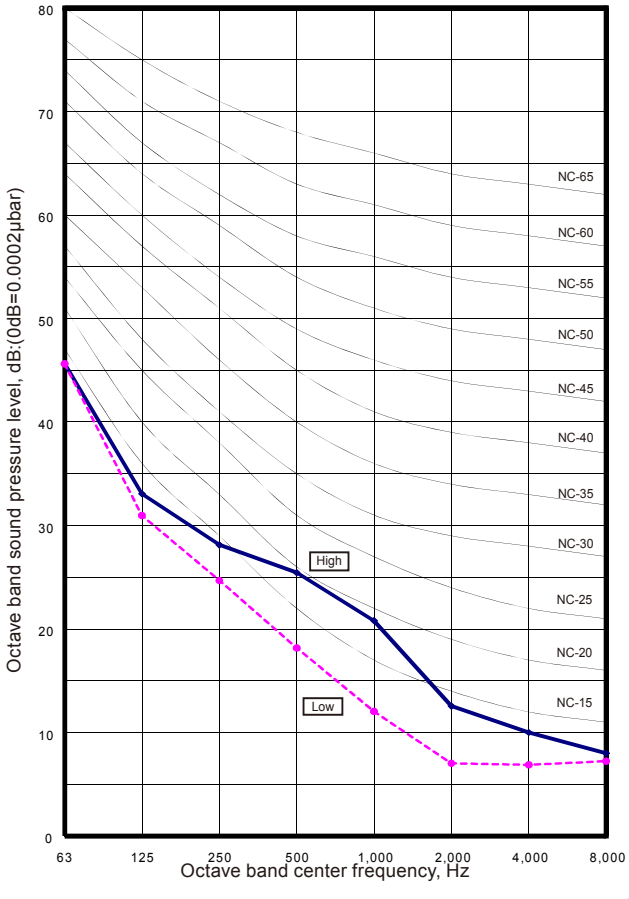
● COOLING



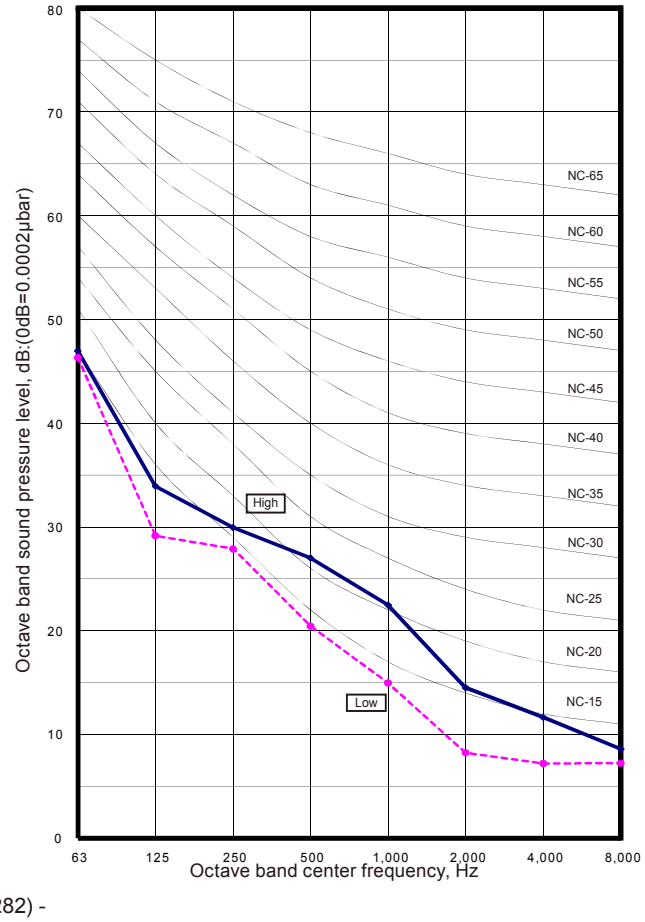
●HEATING



■ MODEL: ARXD07GALH

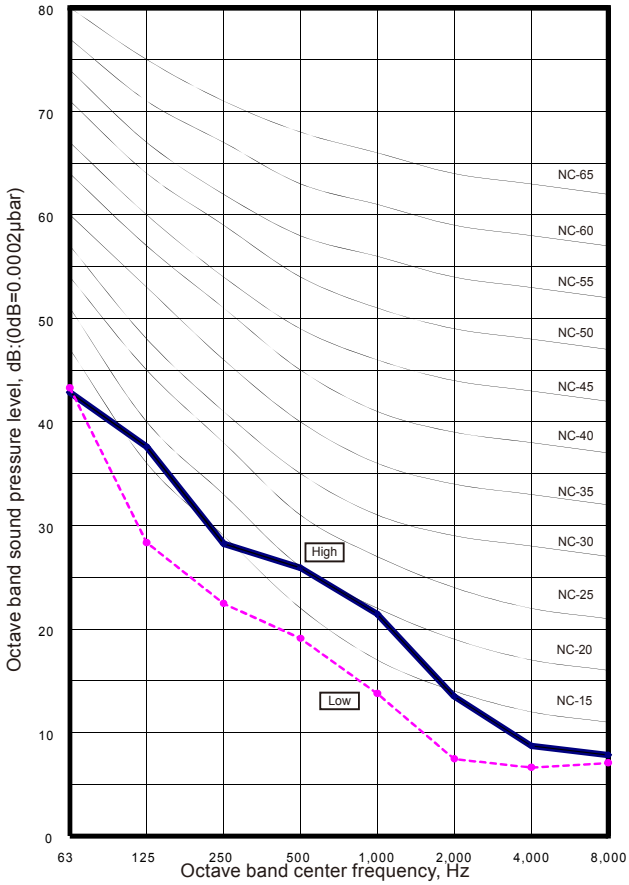


■ MODEL: ARXD09GALH

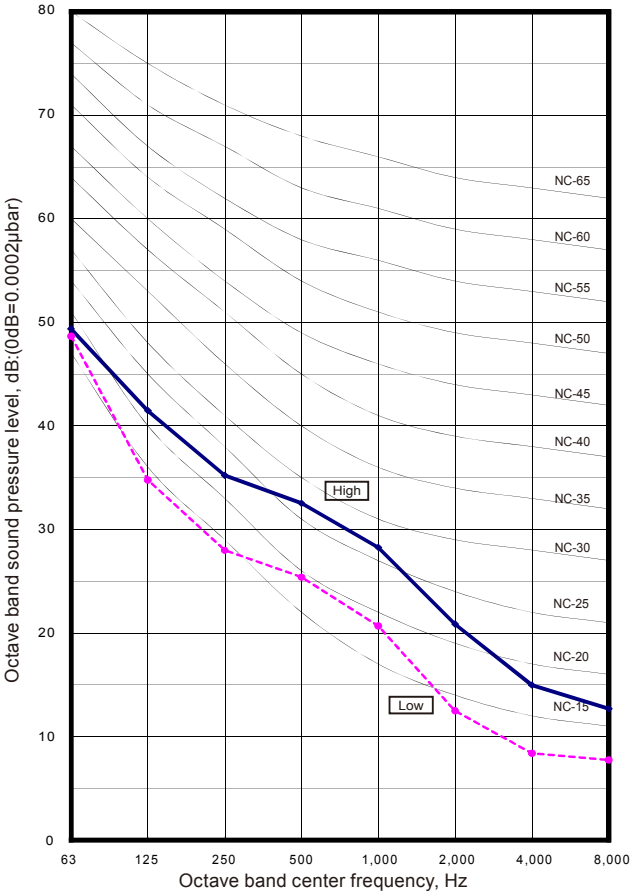


INDOOR UNITS

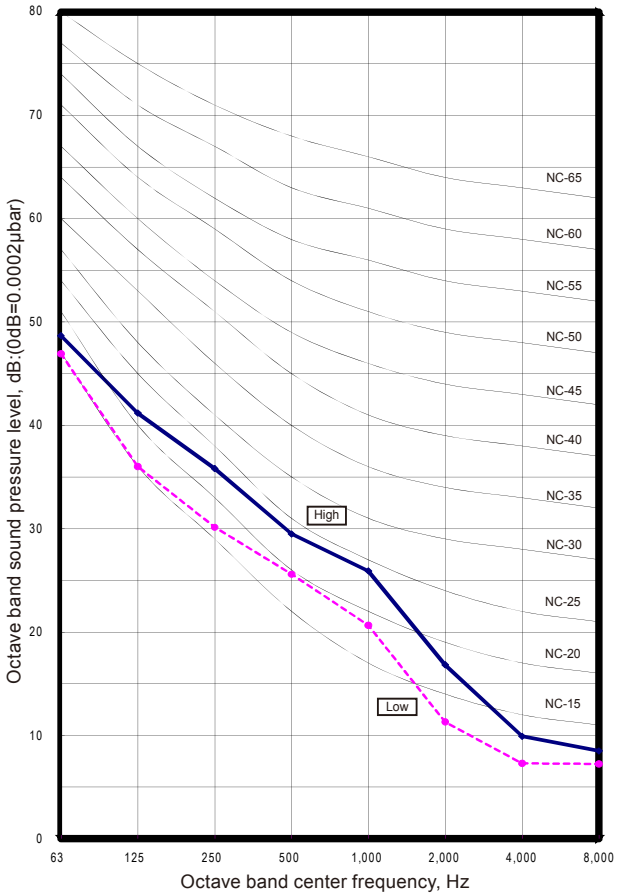
■ MODEL: ARXD12GALH



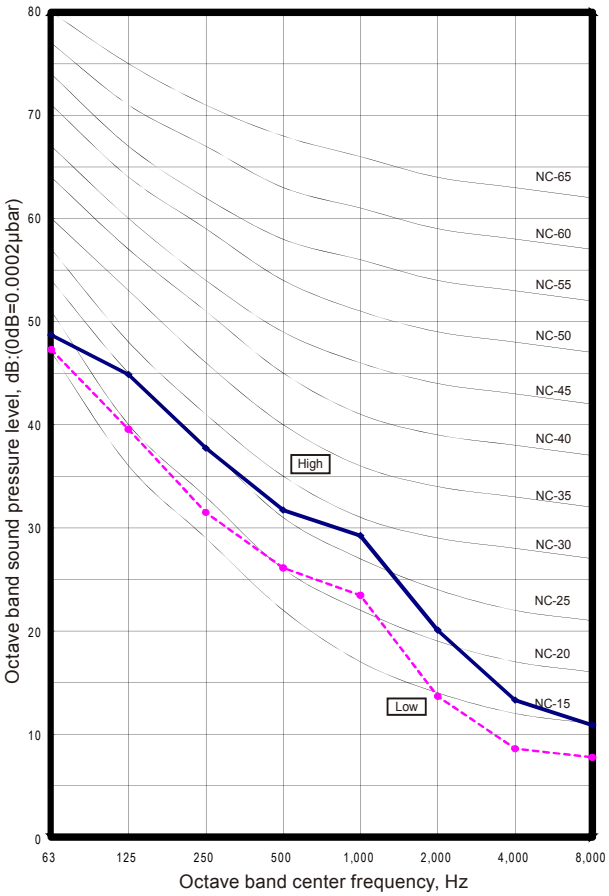
■ MODEL: ARXD14GALH



■ MODEL: ARXD18GALH



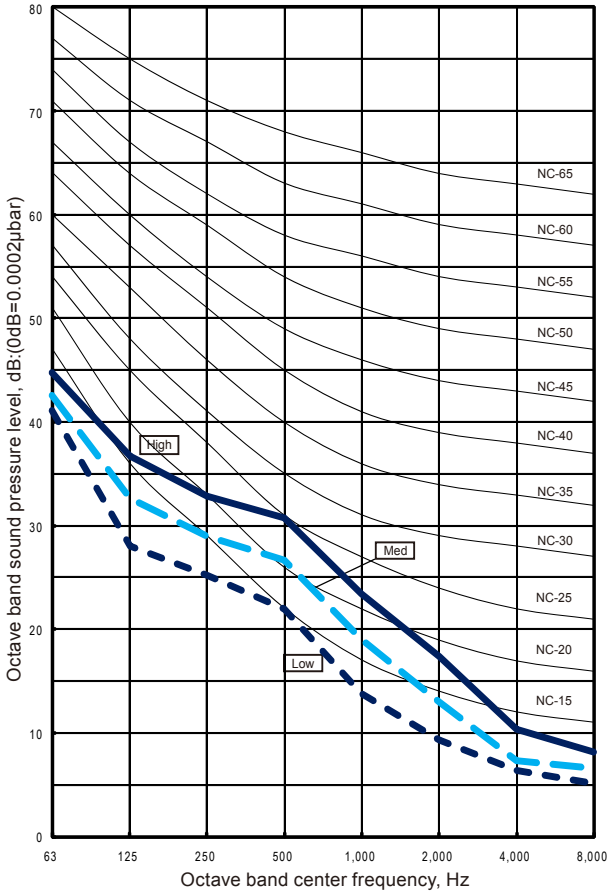
■ MODEL: ARXD24GALH



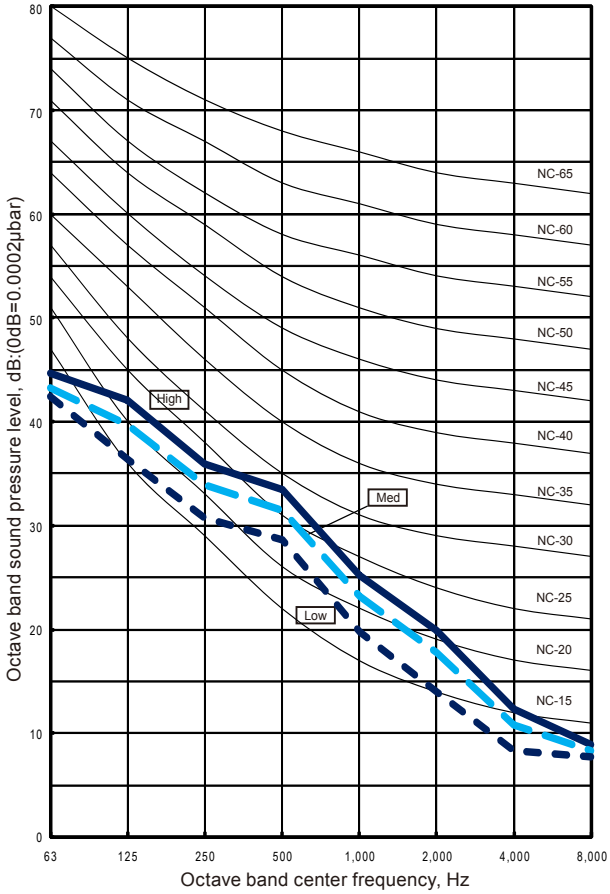
INDOOR UNITS

8-6. MEDIUM STATIC PRESSURE DUCT TYPE

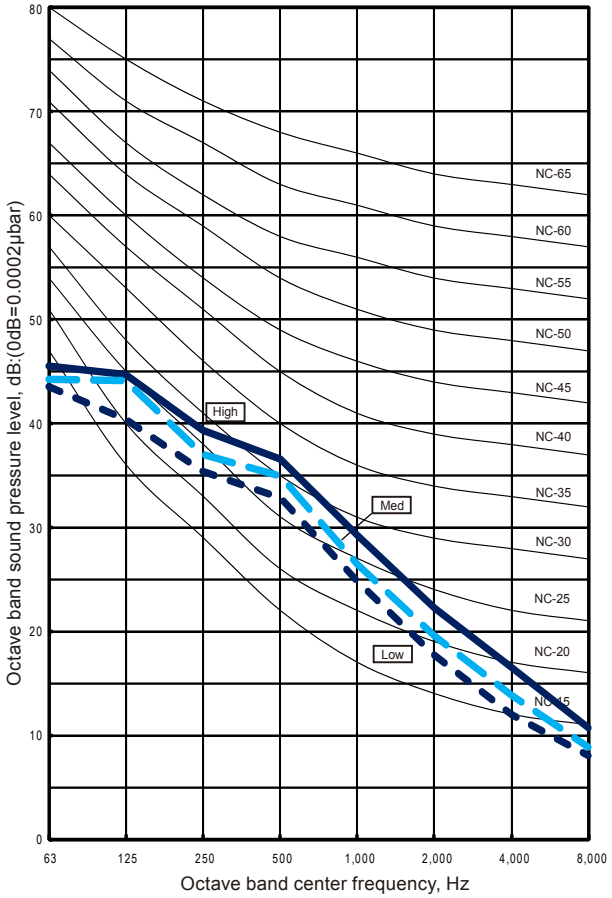
■ MODEL: ARXA24GBLH



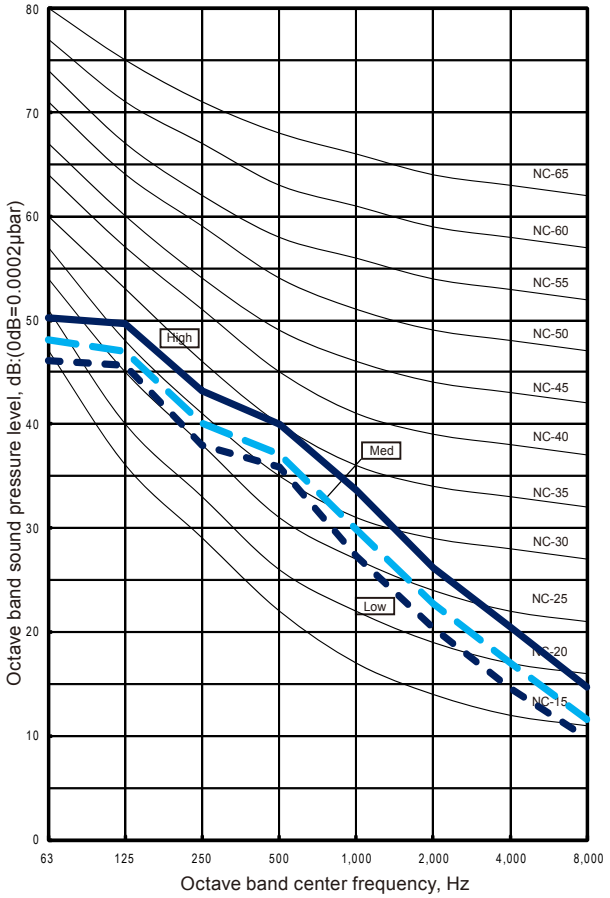
■ MODEL: ARXA30GBLH



■ MODEL: ARXA36GBLH



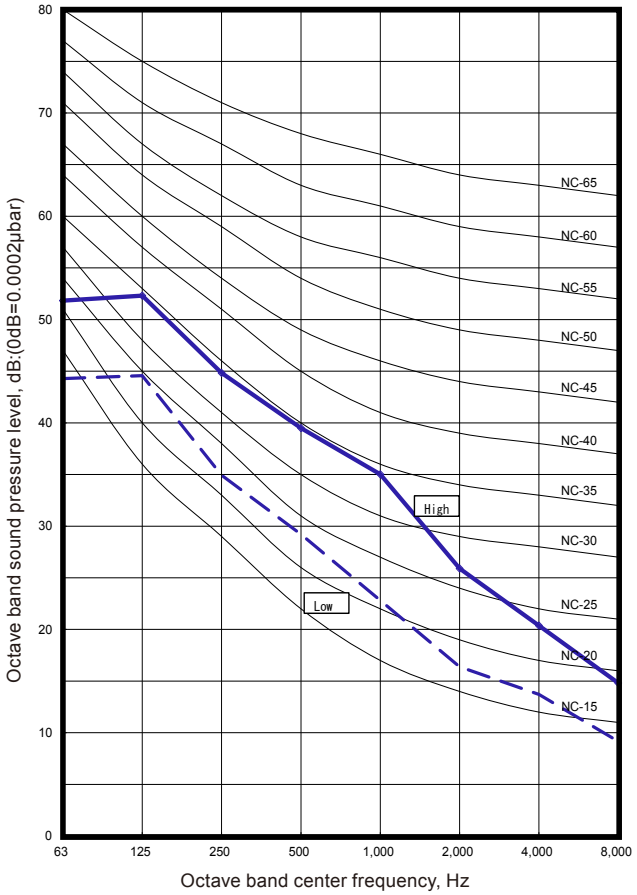
■ MODEL: ARXA45GBLH



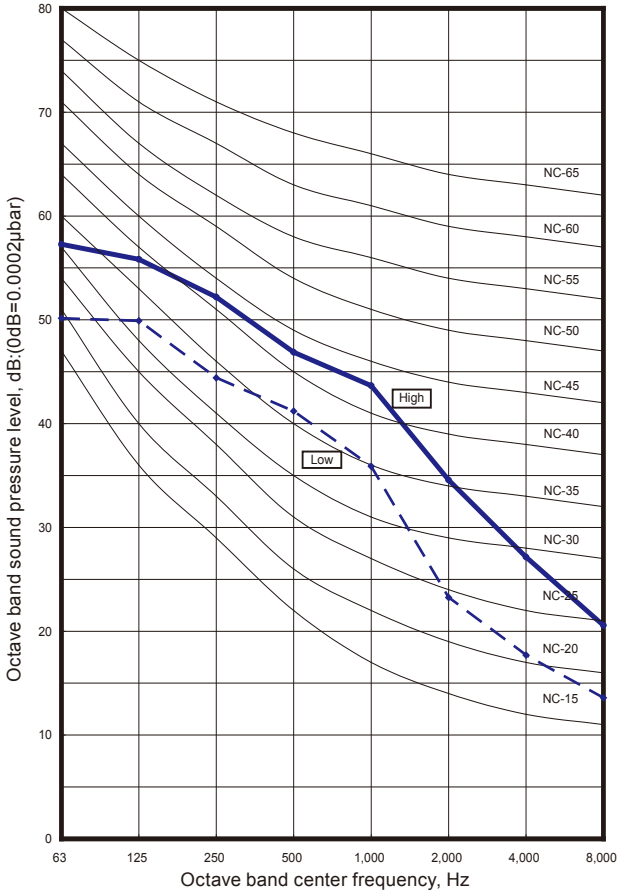
INDOOR UNITS

8-7. HIGH STATIC PRESSURE DUCT TYPE

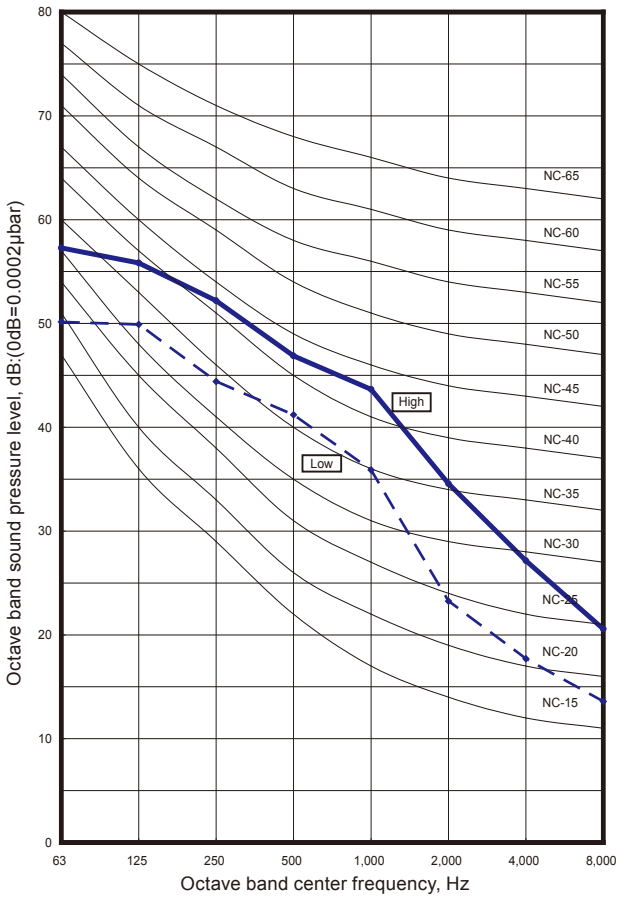
■ MODEL: ARXC36GBTH



■ MODEL: ARXC45GATH

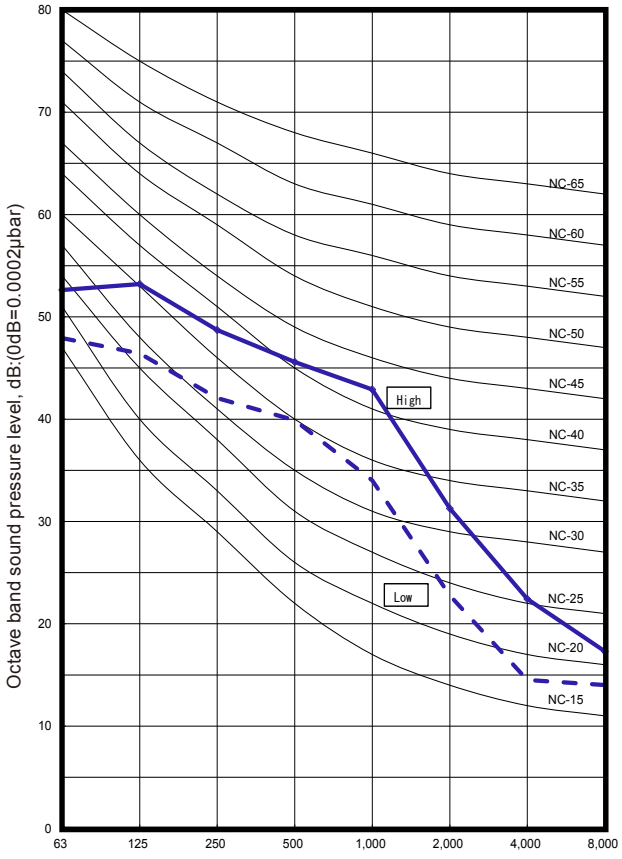


■ MODEL: ARXC60GATH

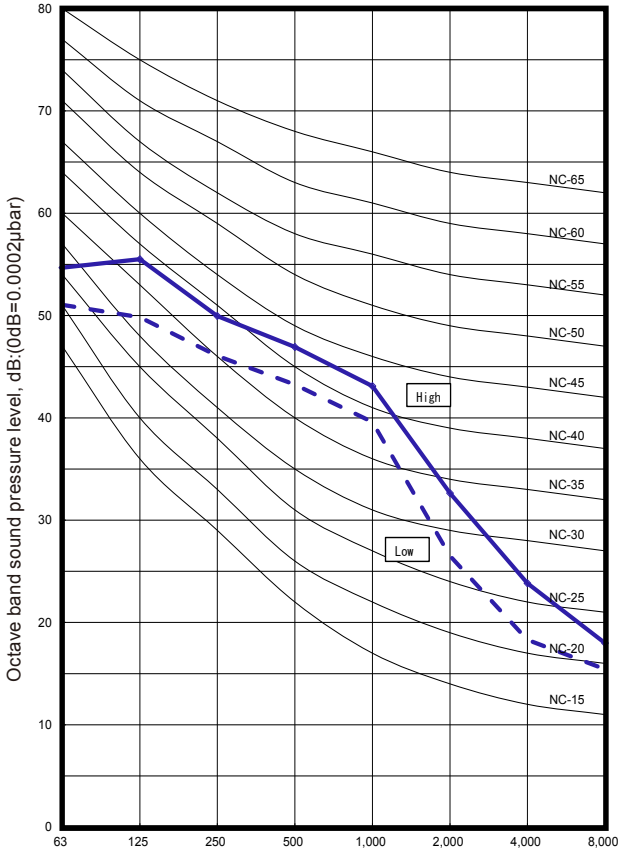


INDOOR UNITS

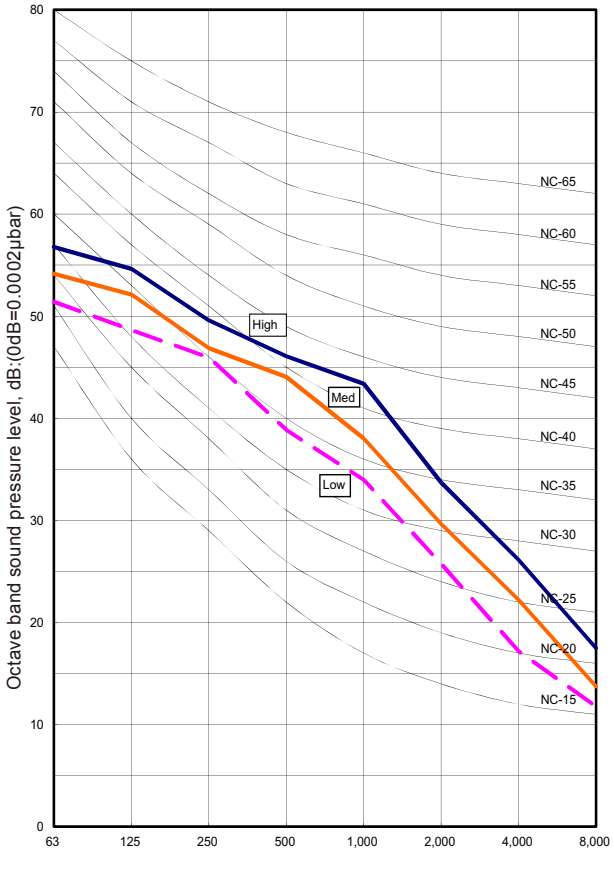
■ MODEL: ARXC72GBTH



■ MODEL: ARXC90GBTH



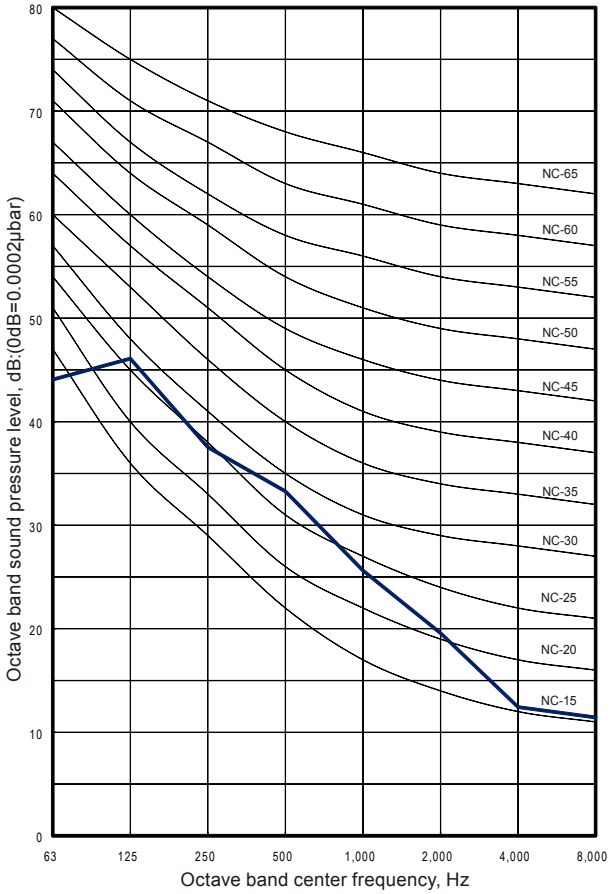
■ MODEL: ARXC96GATH



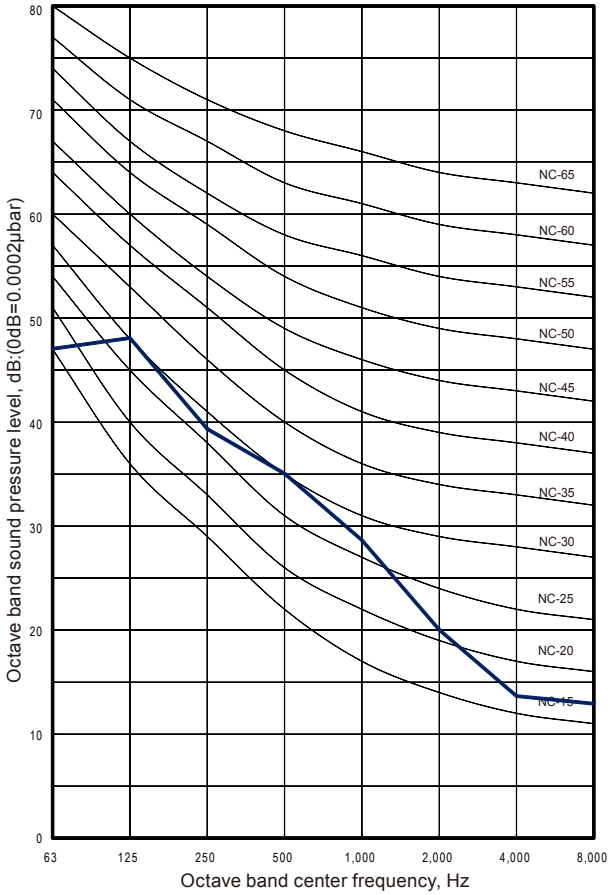
INDOOR UNITS

8-8. LARGE AIRFLOW DUCT TYPE

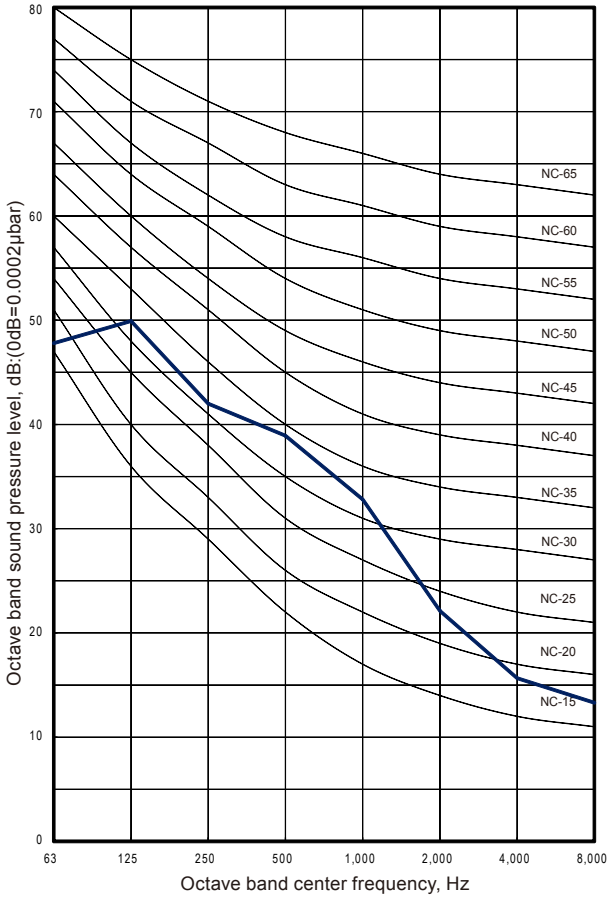
■ MODEL: ARXN18GATH



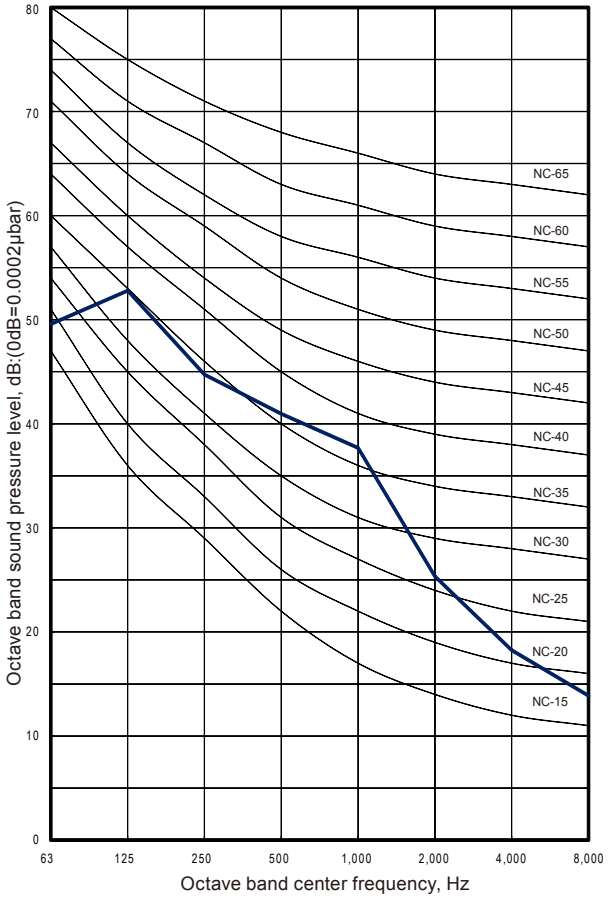
■ MODEL: ARXN24GATH



■ MODEL: ARXN30GATH

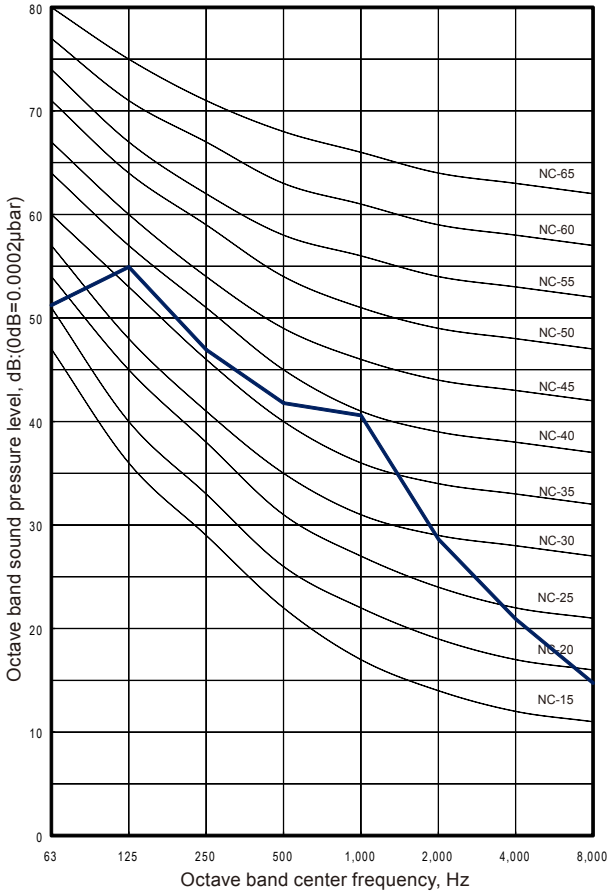


■ MODEL: ARXN34GATH



INDOOR UNITS

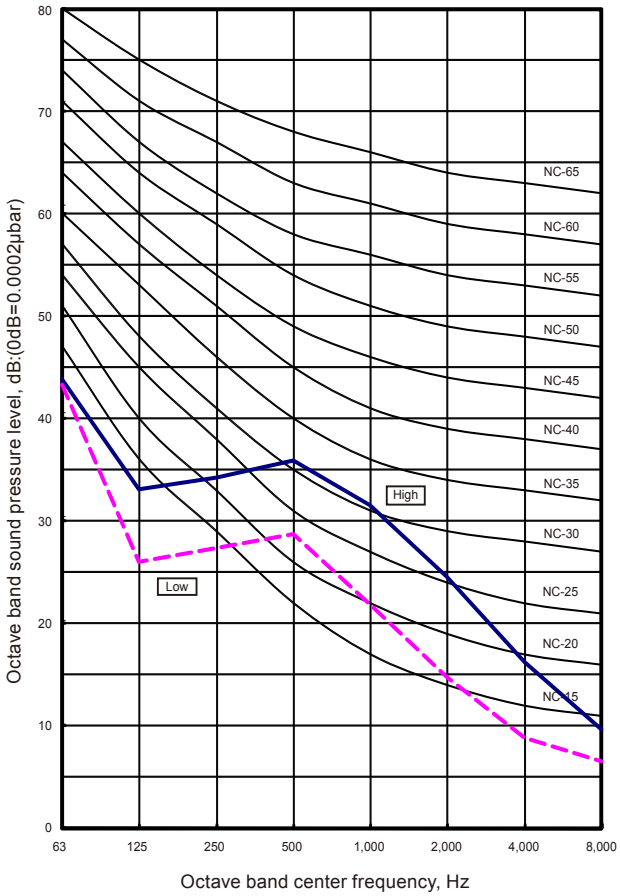
■ MODELS: ARXN36GATH ARXN45GATH



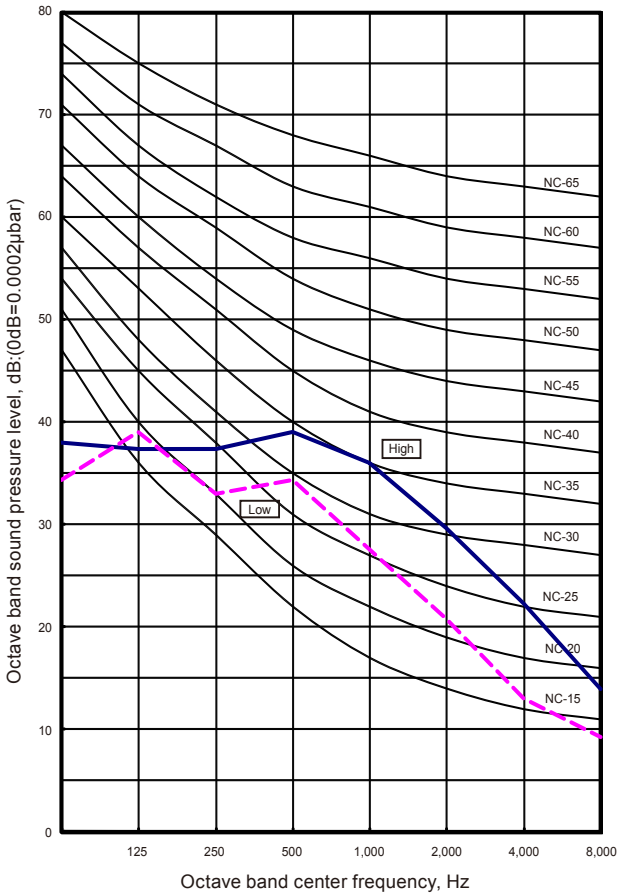
INDOOR UNITS

8-9. FLOOR / CEILING TYPE

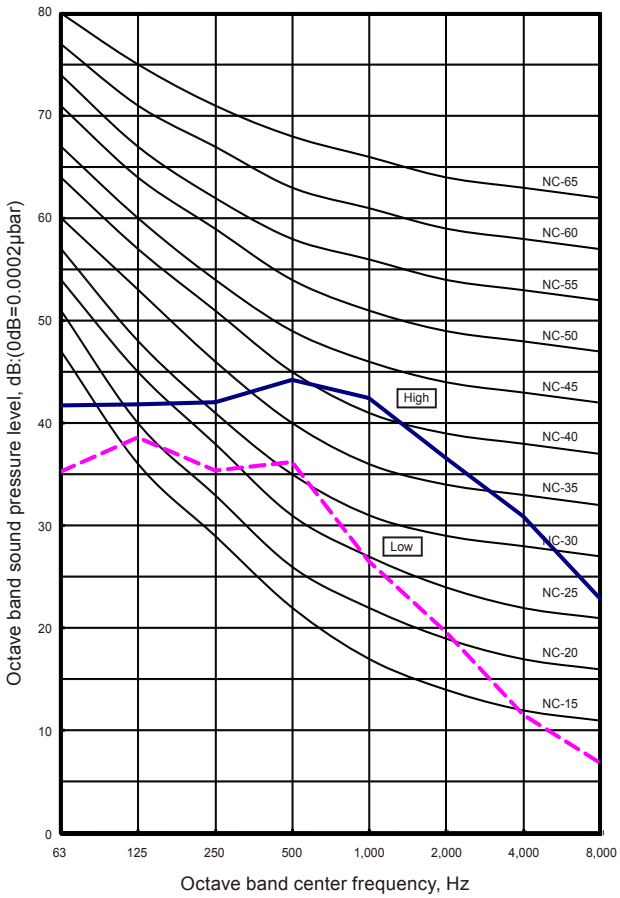
■ MODEL: AB∗A12GATH



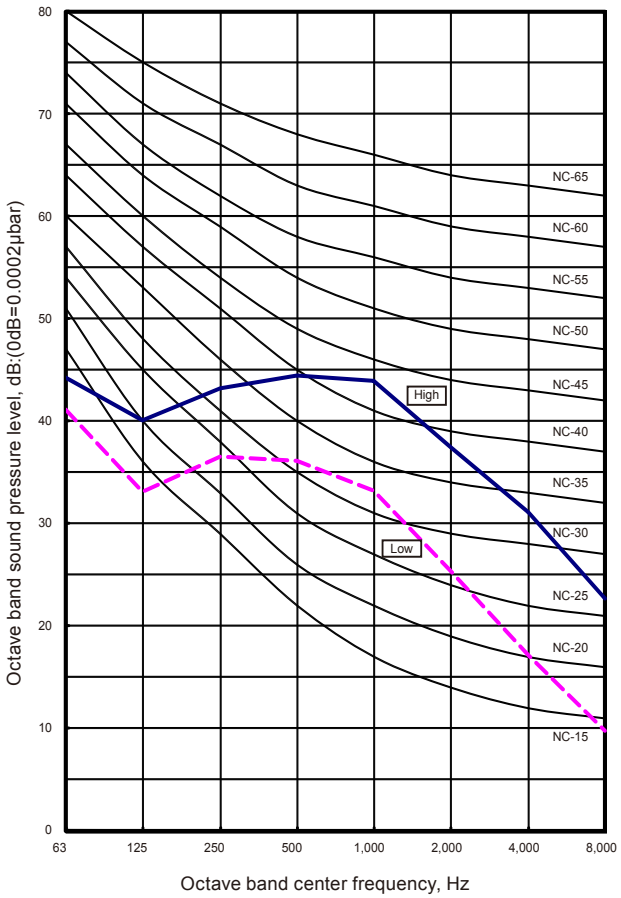
■ MODEL: AB∗A14GATH



■ MODEL: AB∗A18GATH

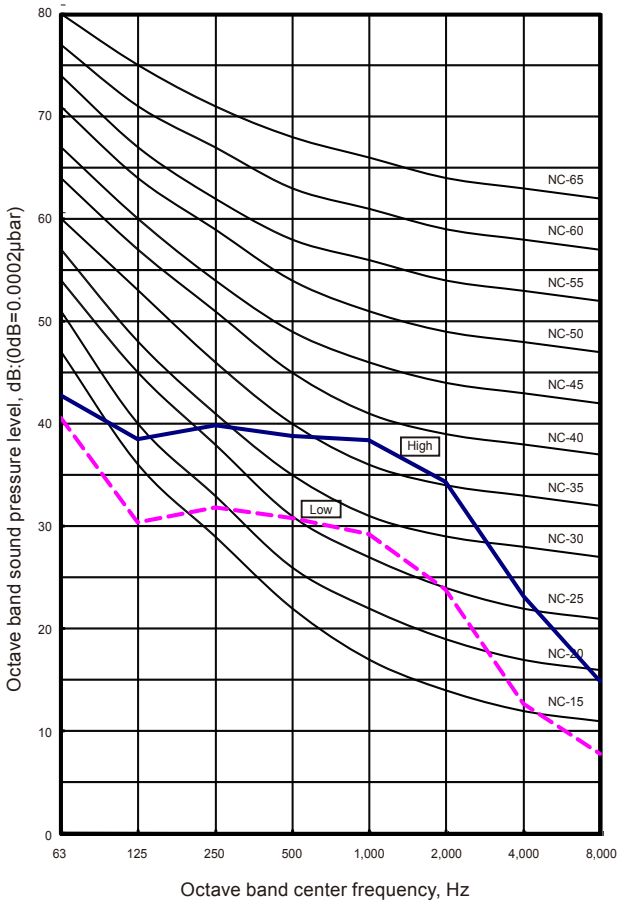


■ MODEL: AB∗A24GATH

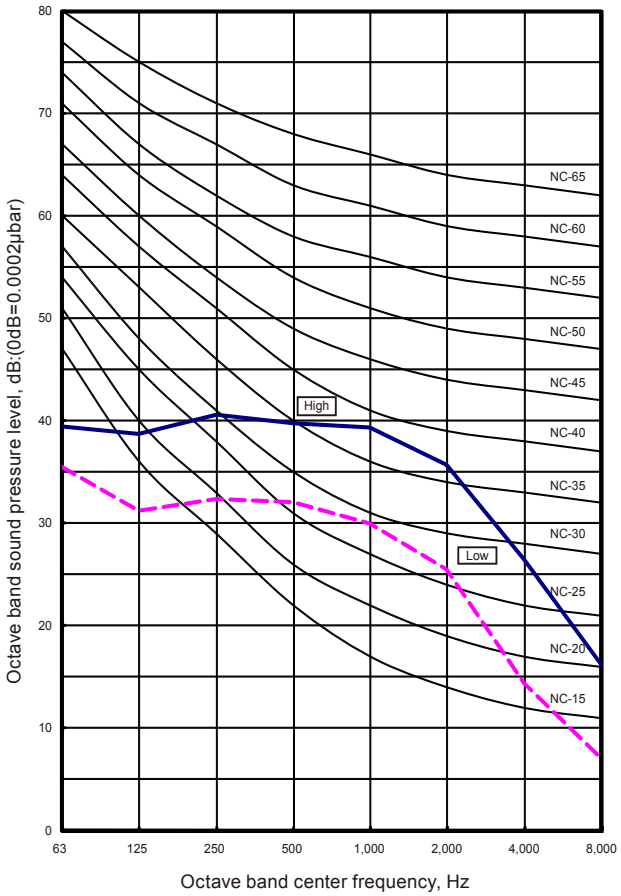


8-10. CEILING TYPE

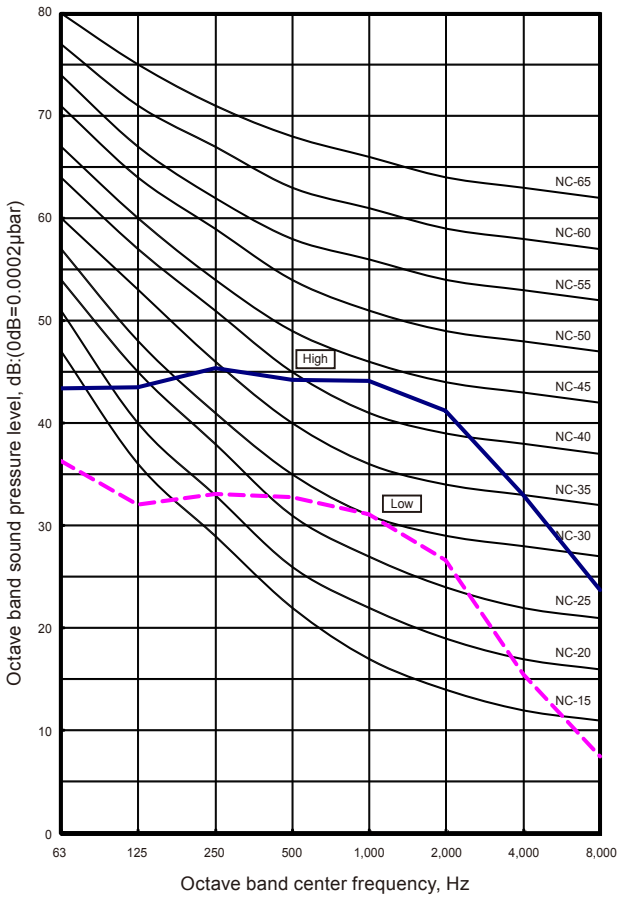
■ MODEL: AB∗A30GATH



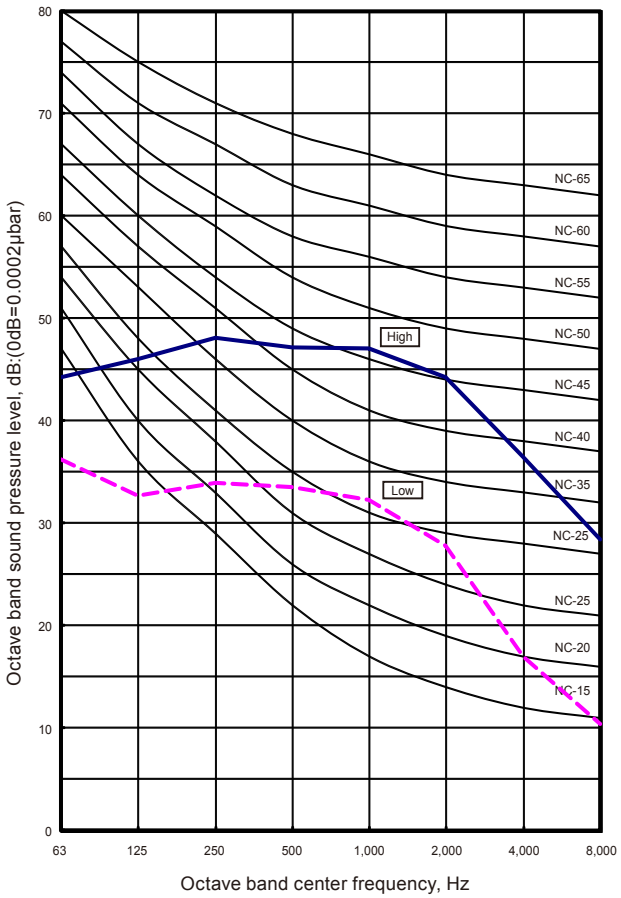
■ MODEL: AB∗A36GATH



■ MODEL: AB∗A45GATH



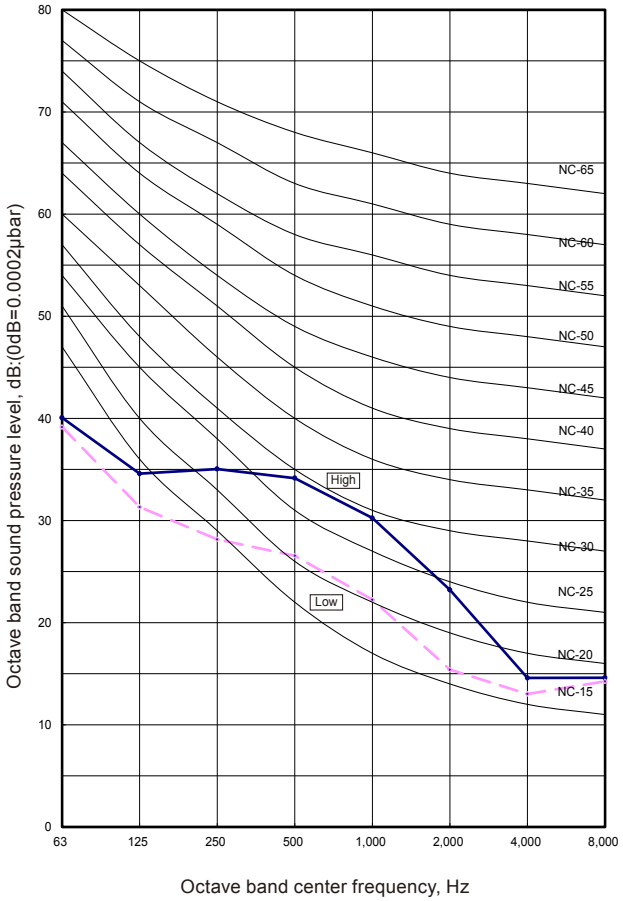
■ MODEL: AB∗A54GATH



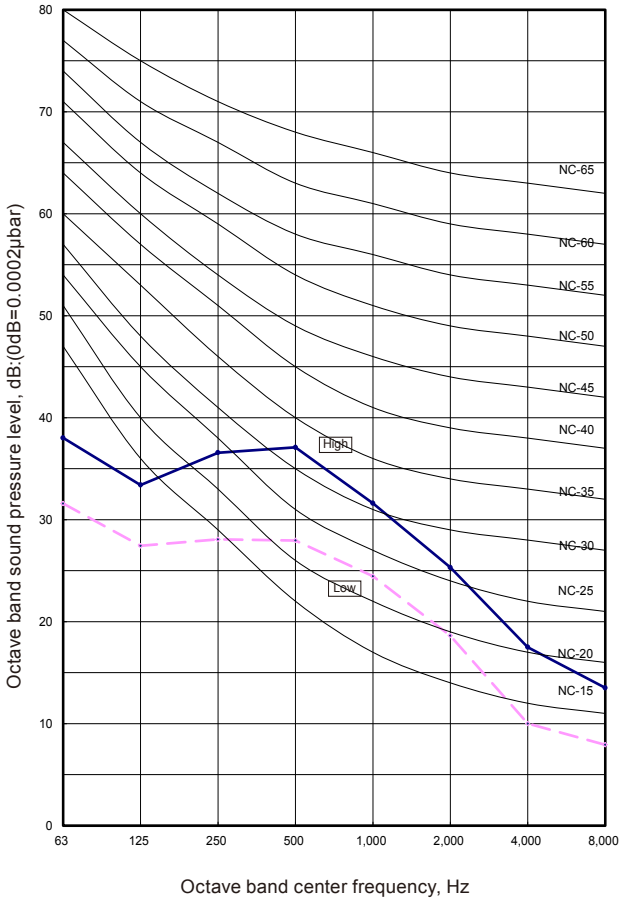
INDOOR UNITS

8-11. COMPACT FLOOR TYPE

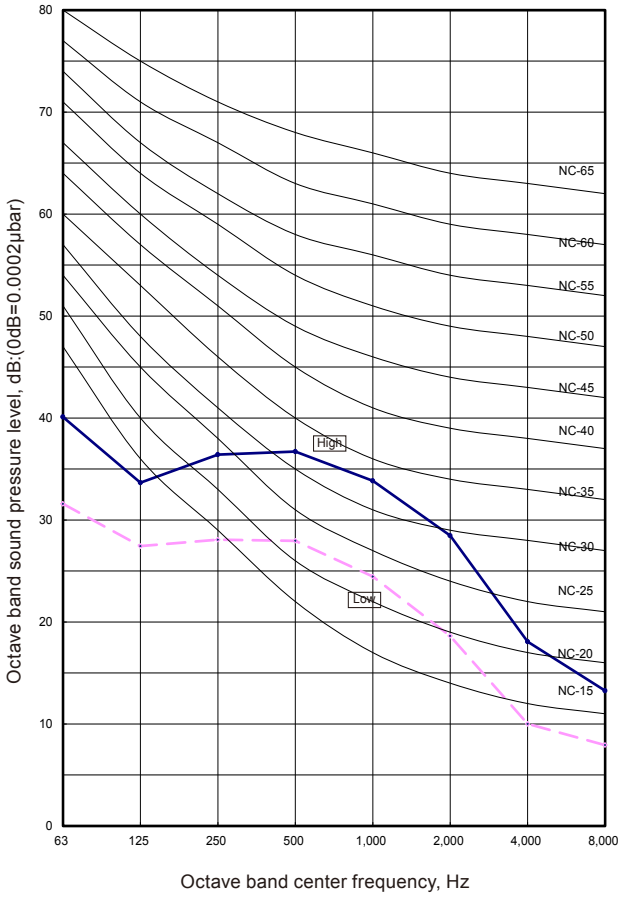
■ MODEL: AG∗A004GCAH



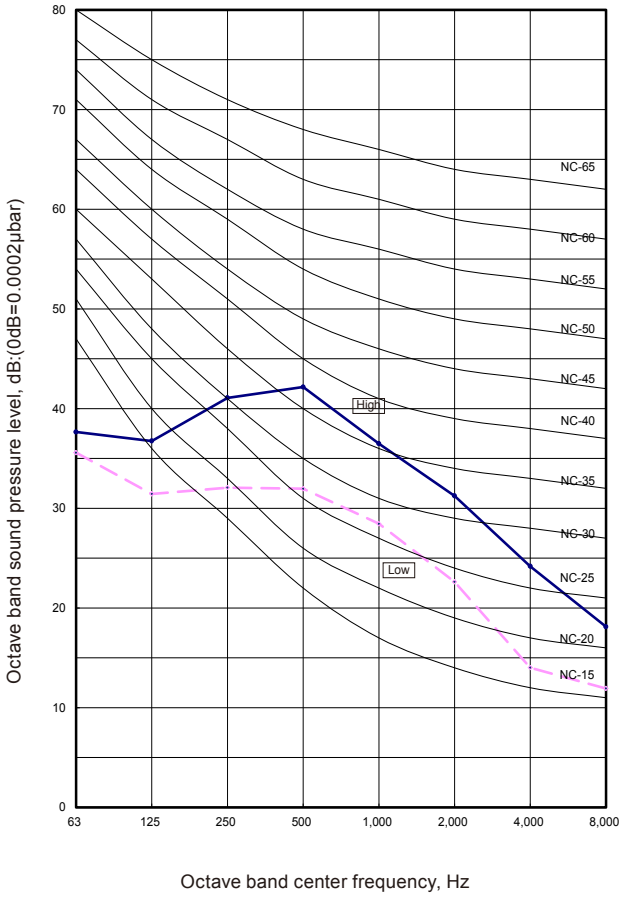
■ MODEL: AG∗A007GCAH



■ MODEL: AG∗A009GCAH

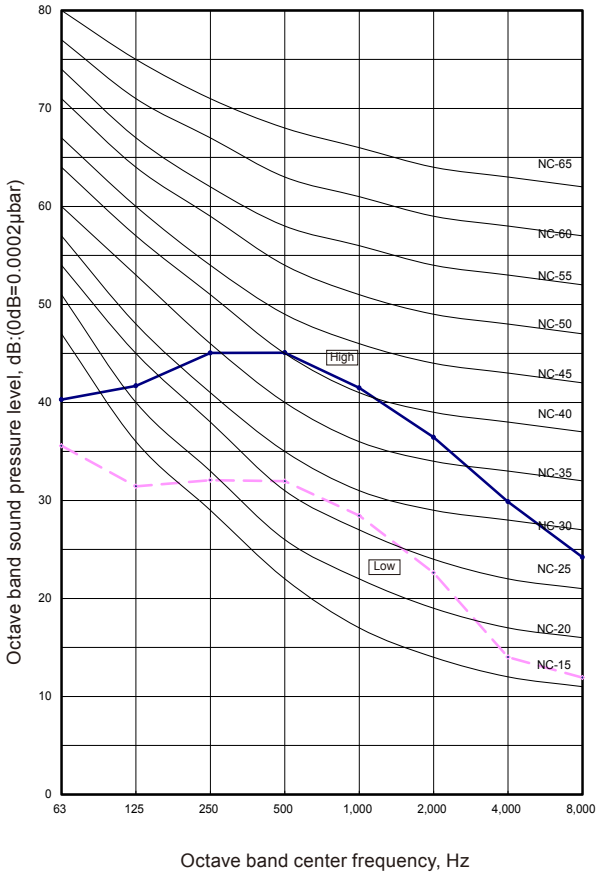


■ MODEL: AG∗A012GCAH



INDOOR UNITS

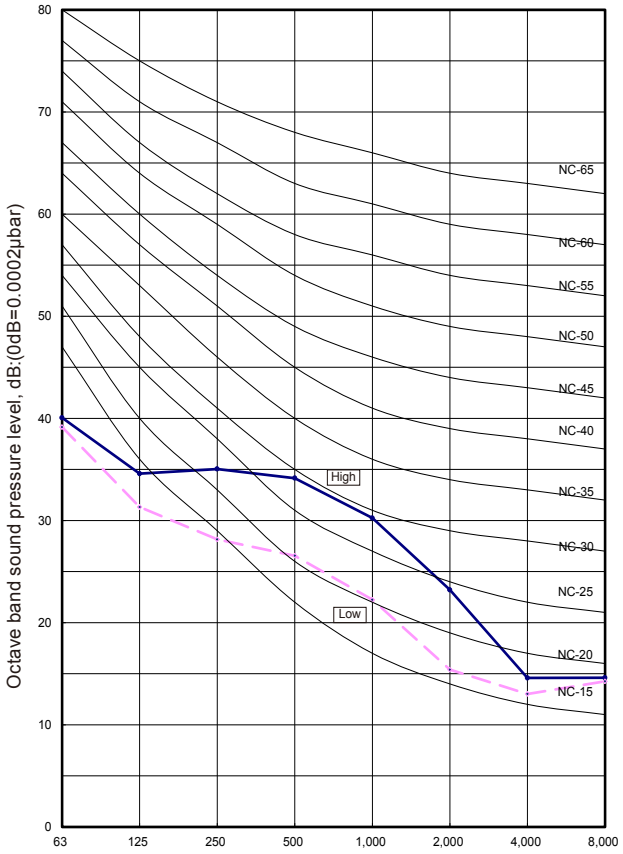
■ MODEL: AG∗A014GCAH



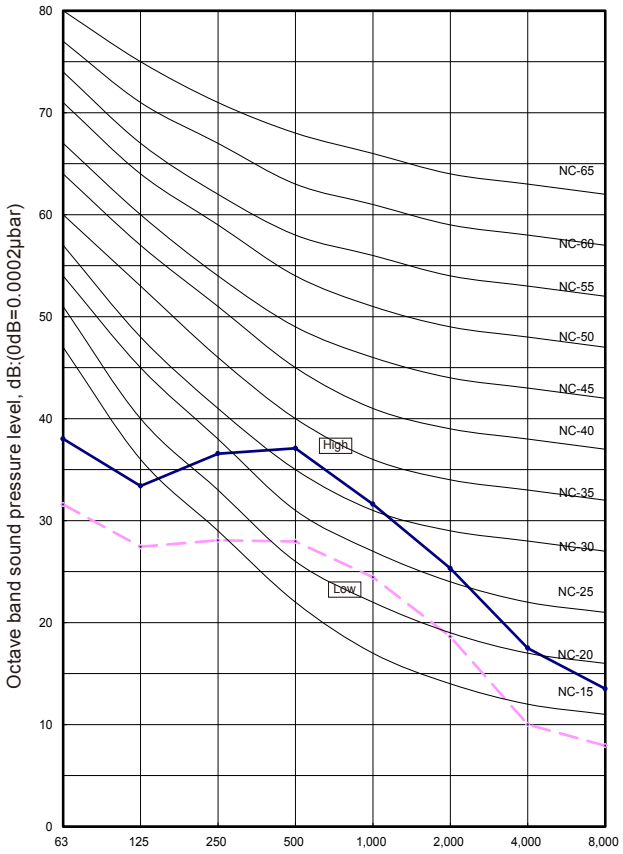
INDOOR UNITS

8-12. COMPACT FLOOR TYPE (EEV external model)

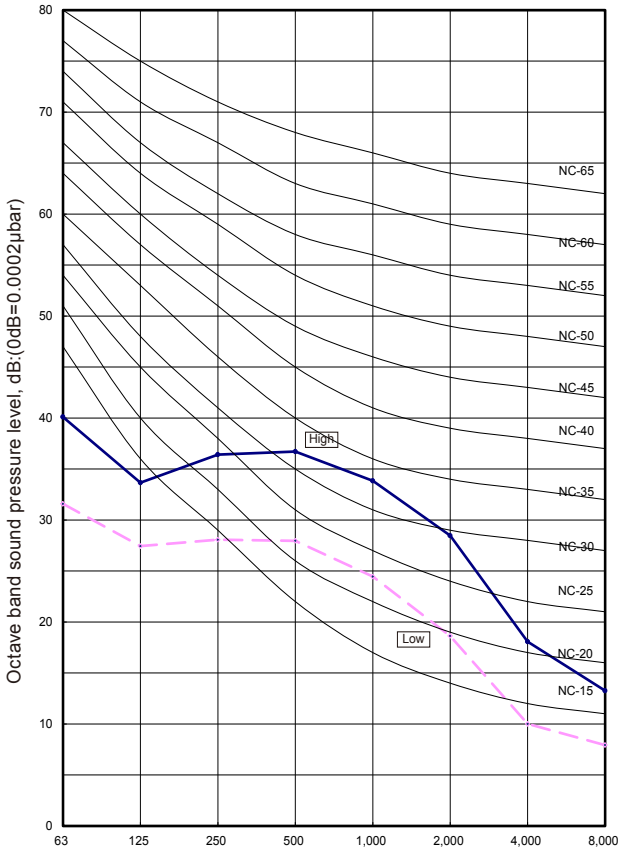
■ MODEL: AG∗E004GCAH



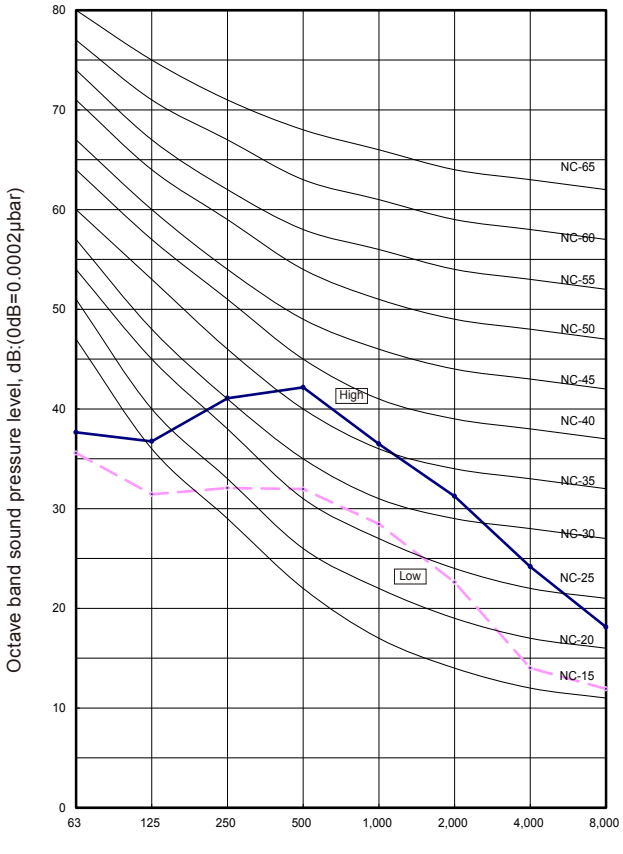
■ MODEL: AG∗E007GCAH



■ MODEL: AG∗E009GCAH

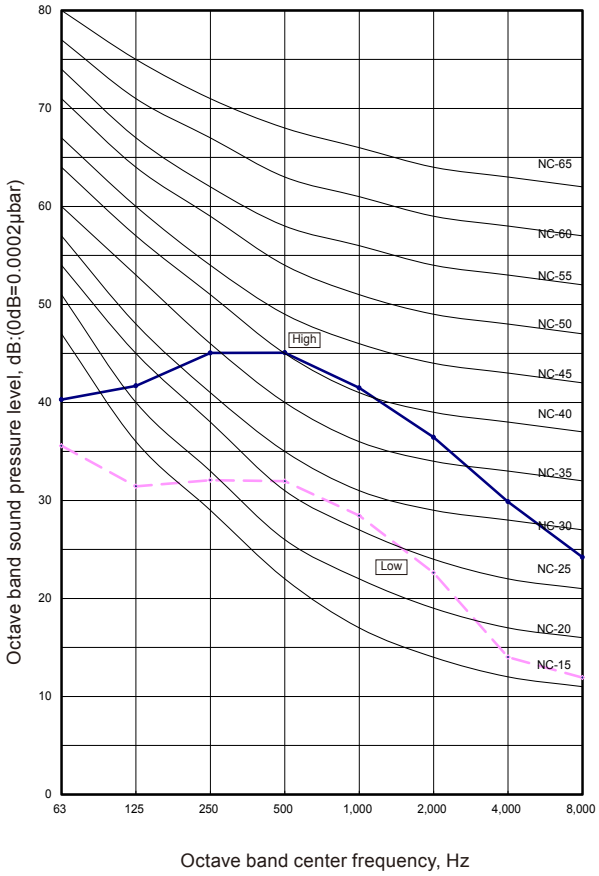


■ MODEL: AG∗E012GCAH



INDOOR UNITS

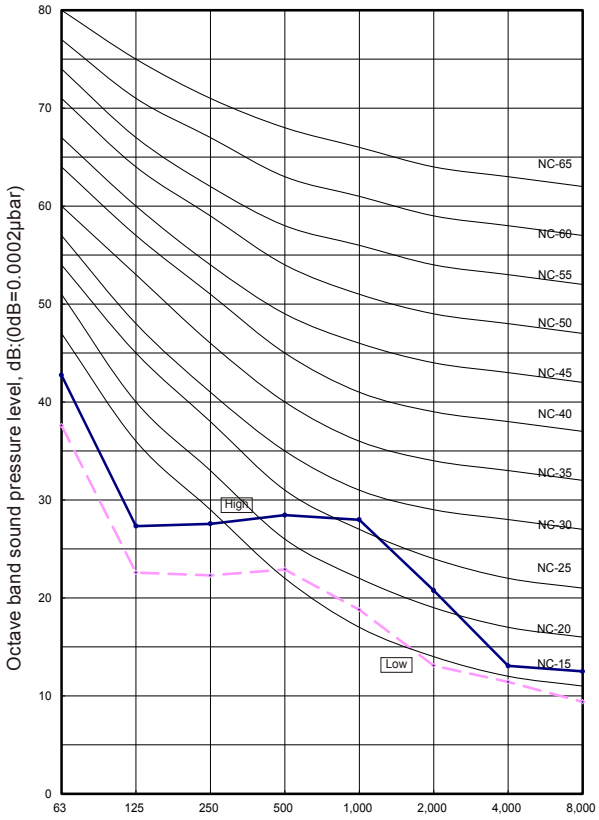
■ MODEL: AG∗E014GCAH



INDOOR UNITS

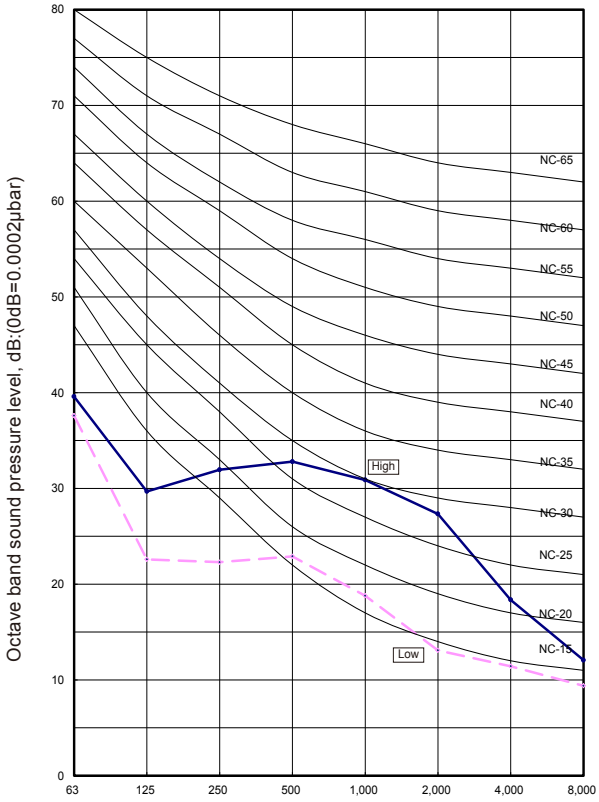
8-13. WALL MOUNTED TYPE

■ MODEL: AS∗A004GTAH



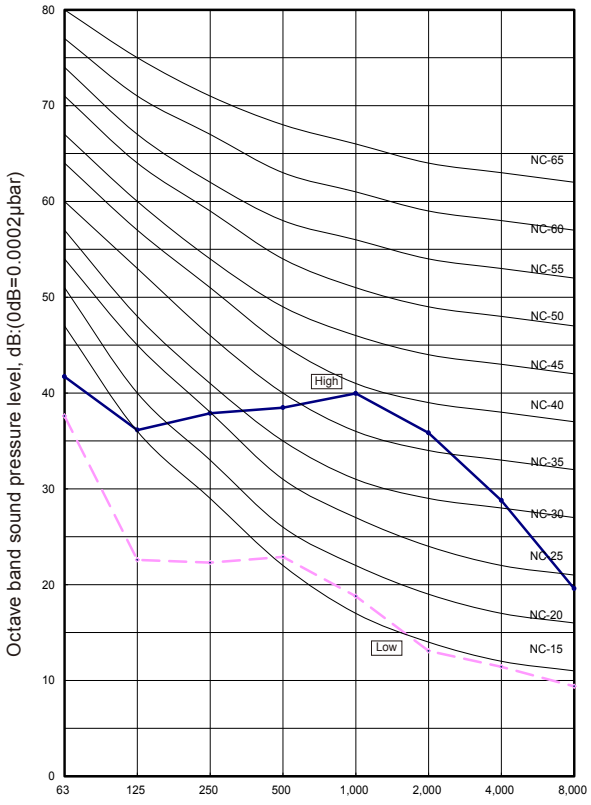
Octave band center frequency, Hz

■ MODEL: AS∗A007GTAH



Octave band center frequency, Hz

■ MODEL: AS∗A009GTAH

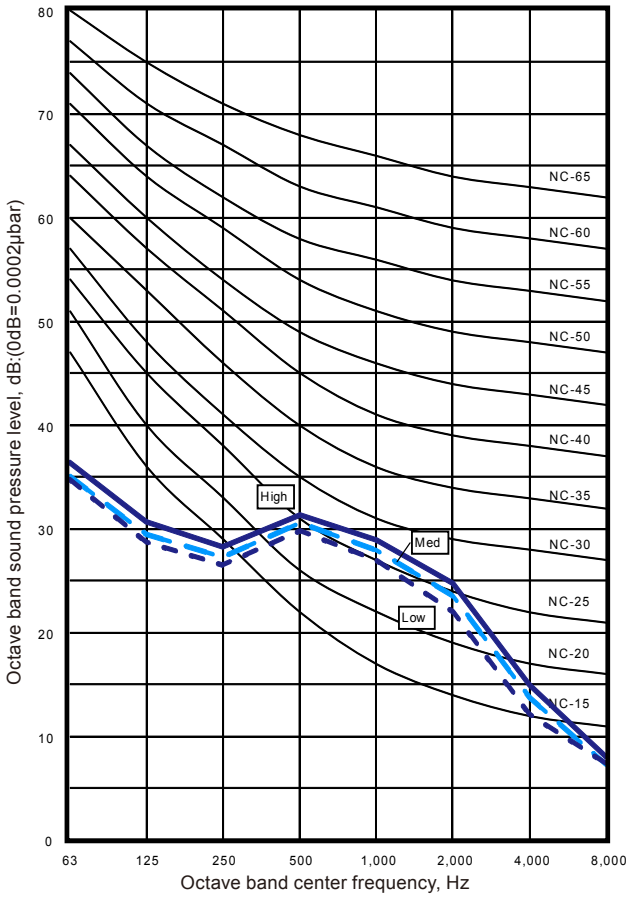


Octave band center frequency, Hz

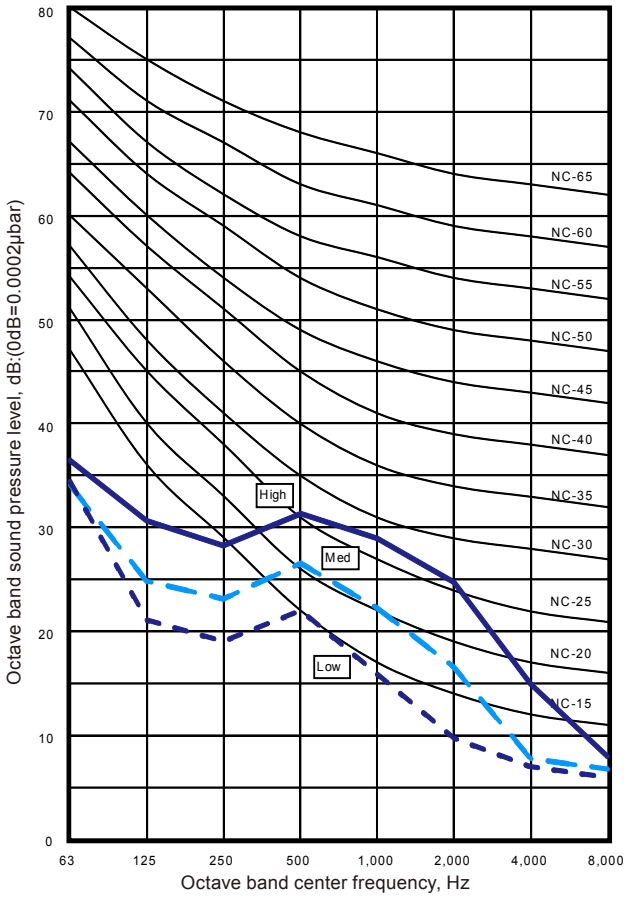
INDOOR UNITS

■ MODEL: AS∗A04GACH

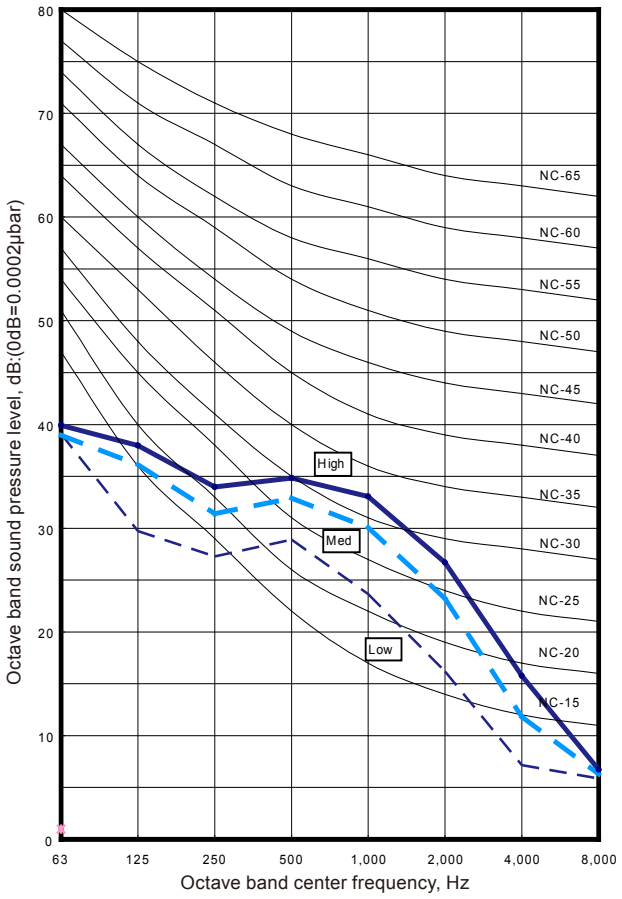
● COOLING



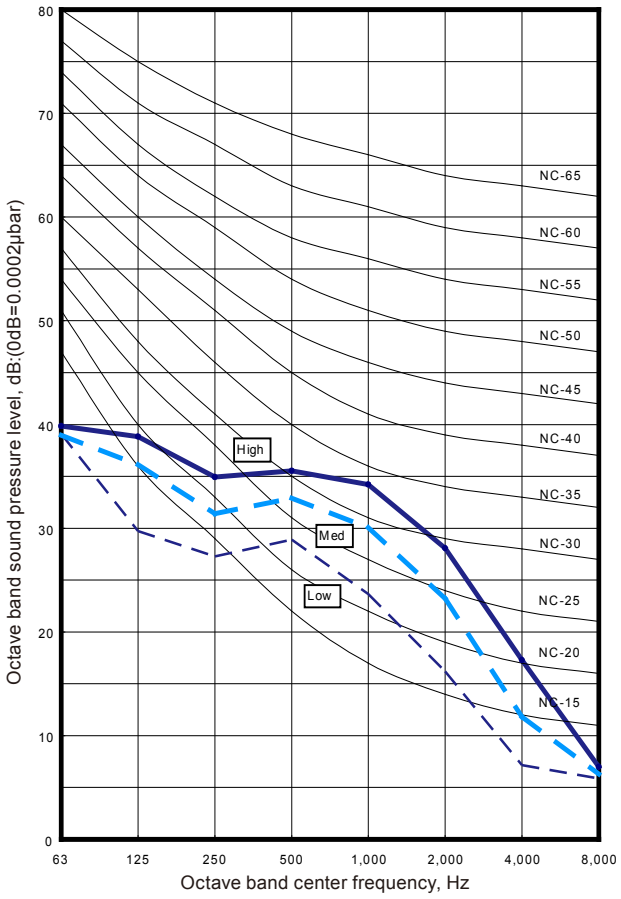
●HEATING



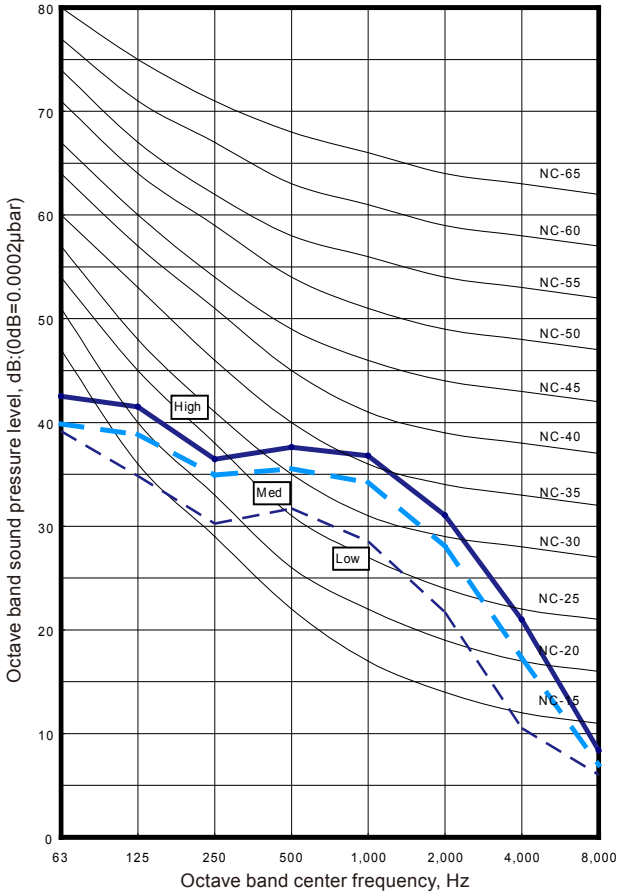
■ MODEL: AS∗A07GACH



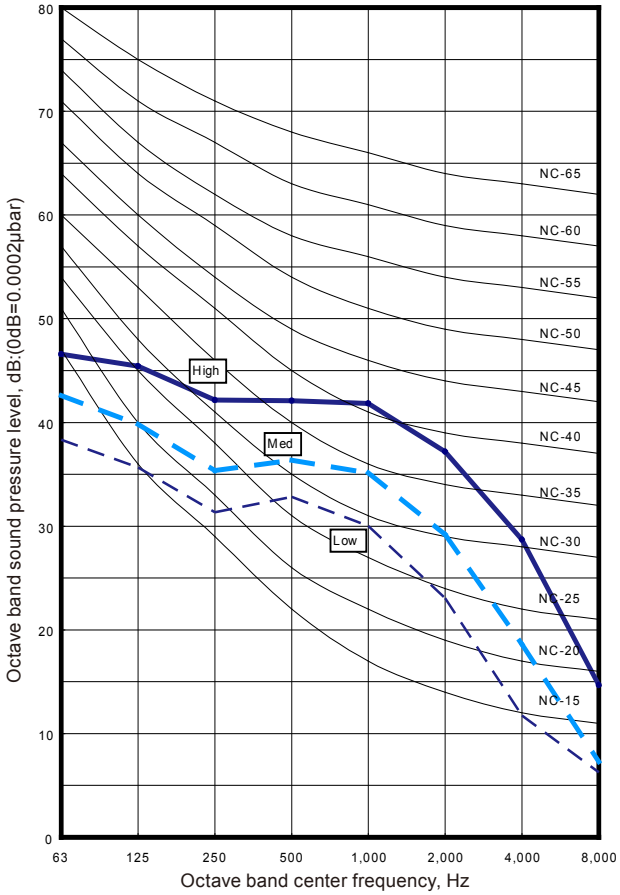
■ MODEL: AS∗A09GACH



■ MODEL: AS∗A12GACH



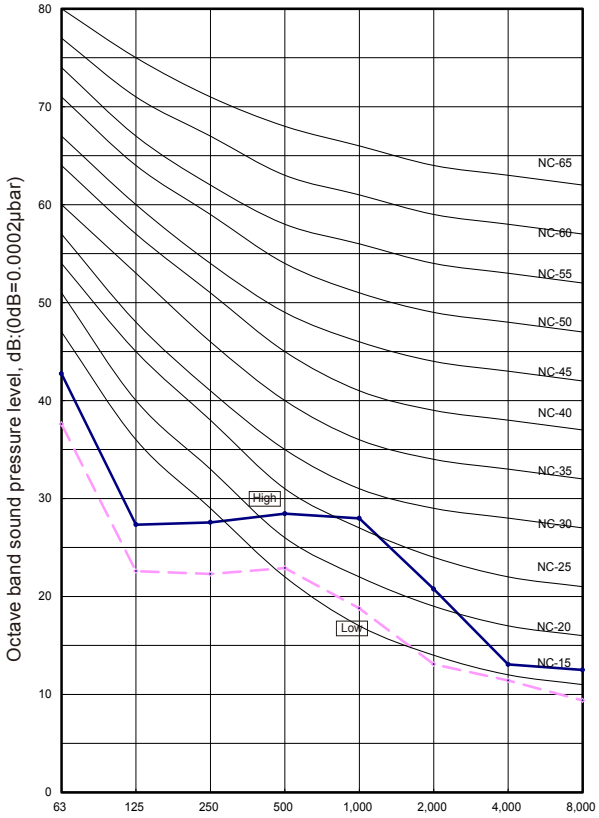
■ MODEL: AS∗A14GACH



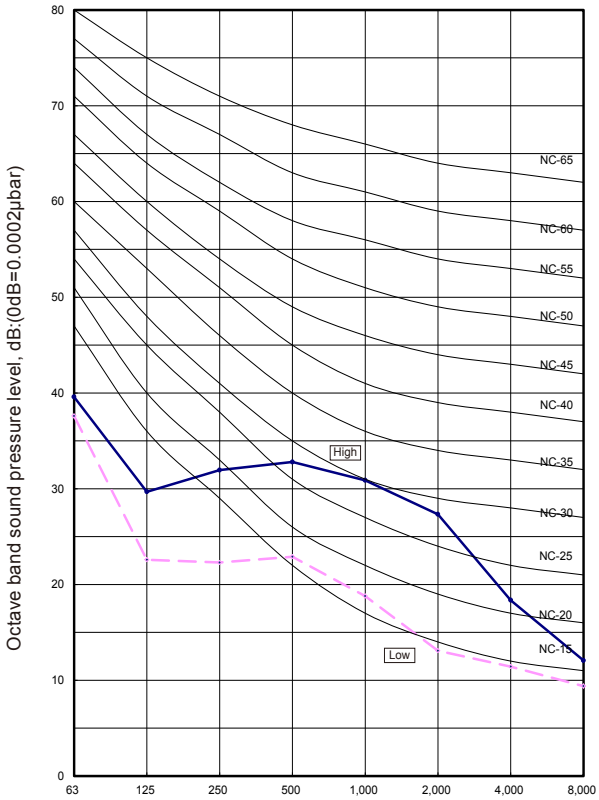
INDOOR UNITS

8-14. WALL MOUNTED TYPE (EEV external model)

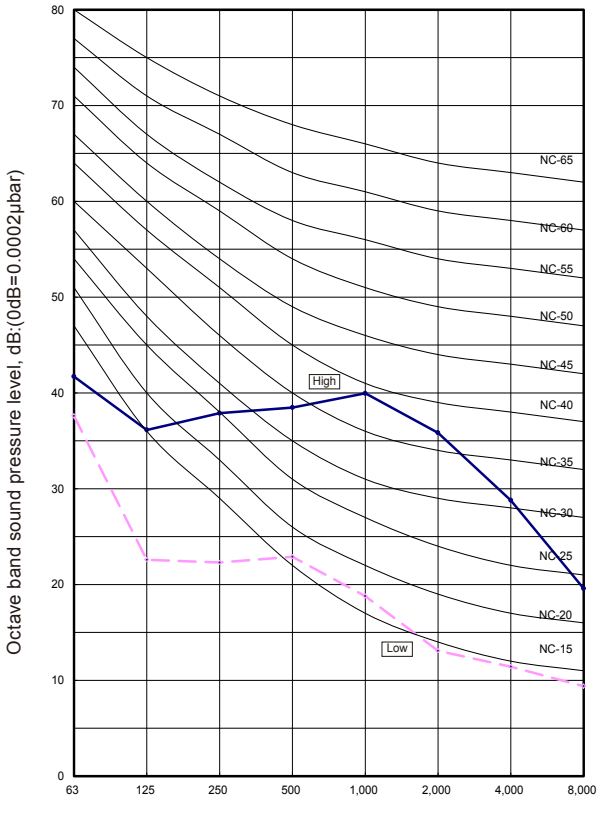
■ MODEL: AS∗E004GTAH



■ MODEL: AS∗E007GTAH



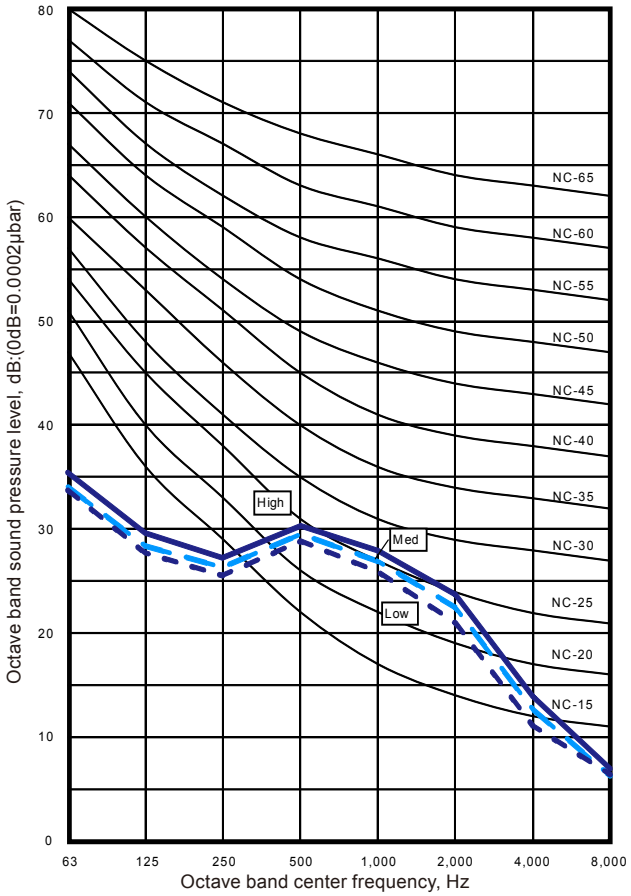
■ MODEL: AS∗E009GTAH



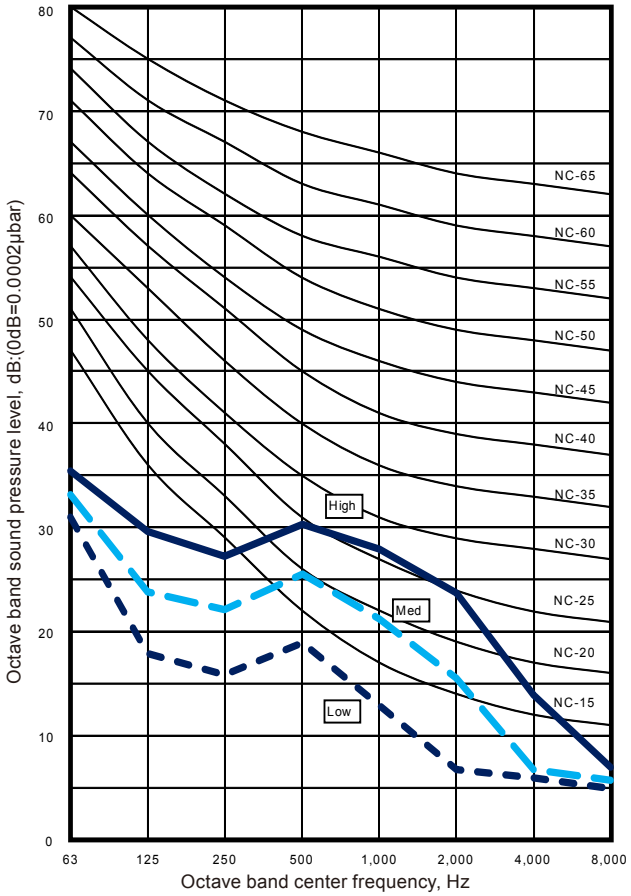
INDOOR UNITS

■ MODEL: AS∗E04GACH

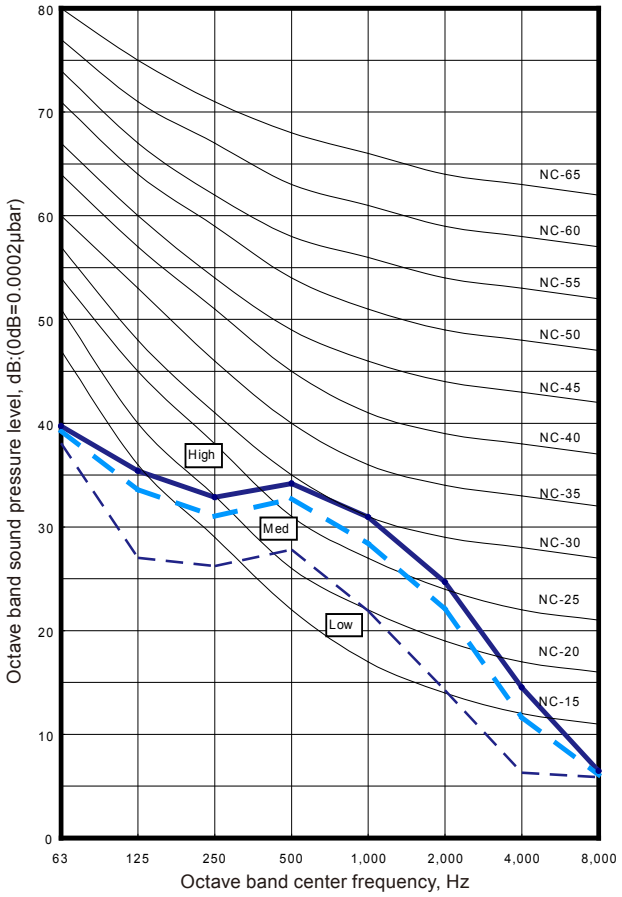
● COOLING



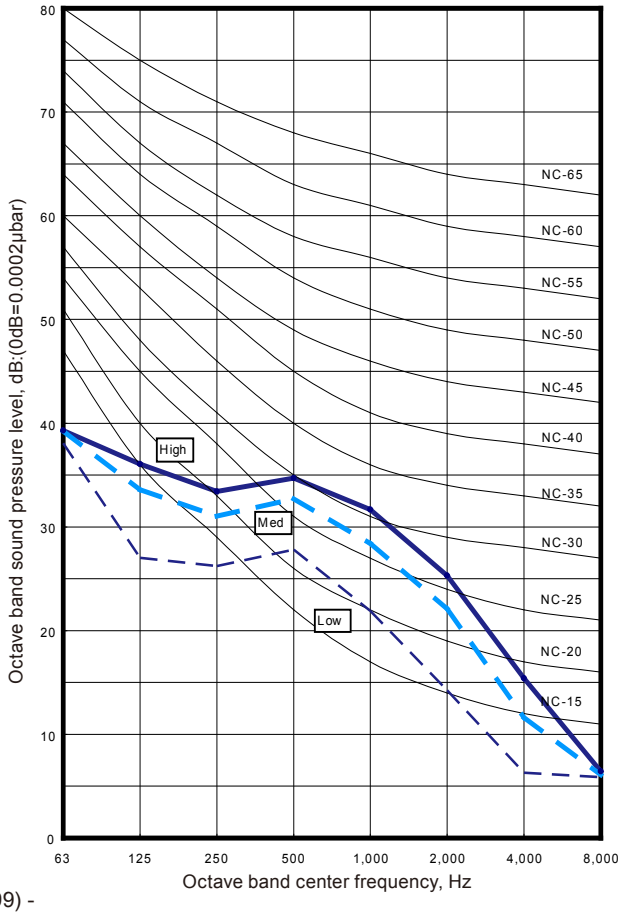
●HEATING



■ MODEL: AS∗E07GACH

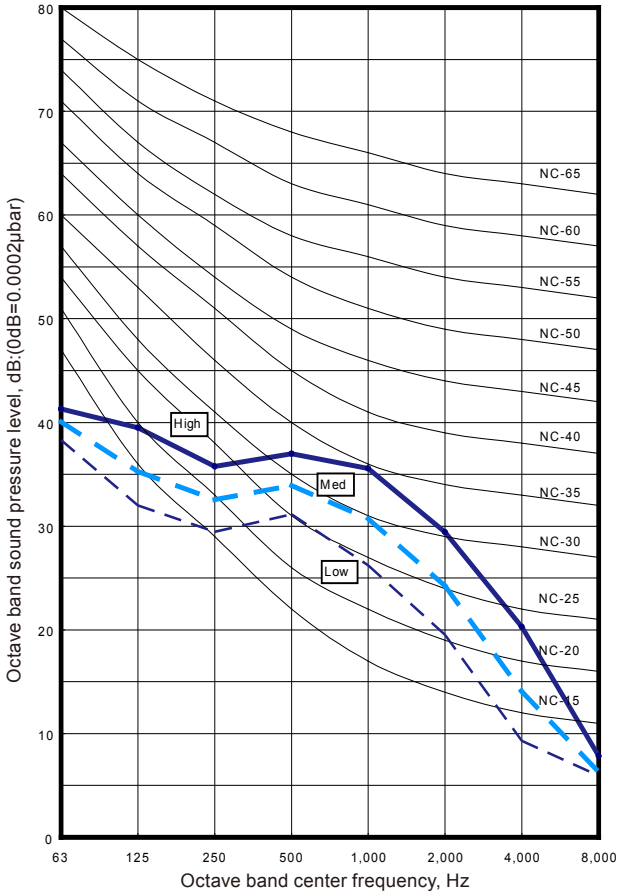


■ MODEL: AS∗E09GACH

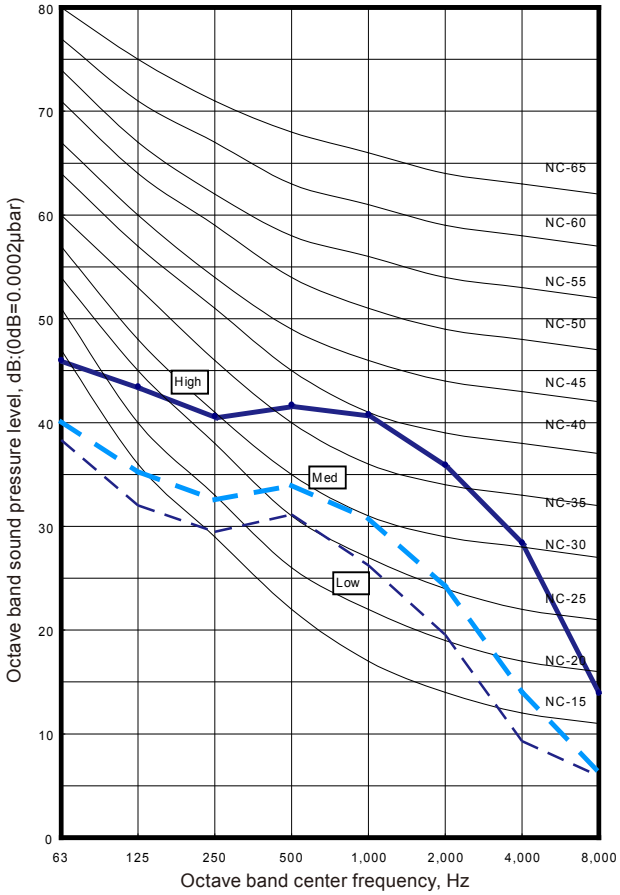


INDOOR UNITS

■ MODEL: AS∗E12GACH



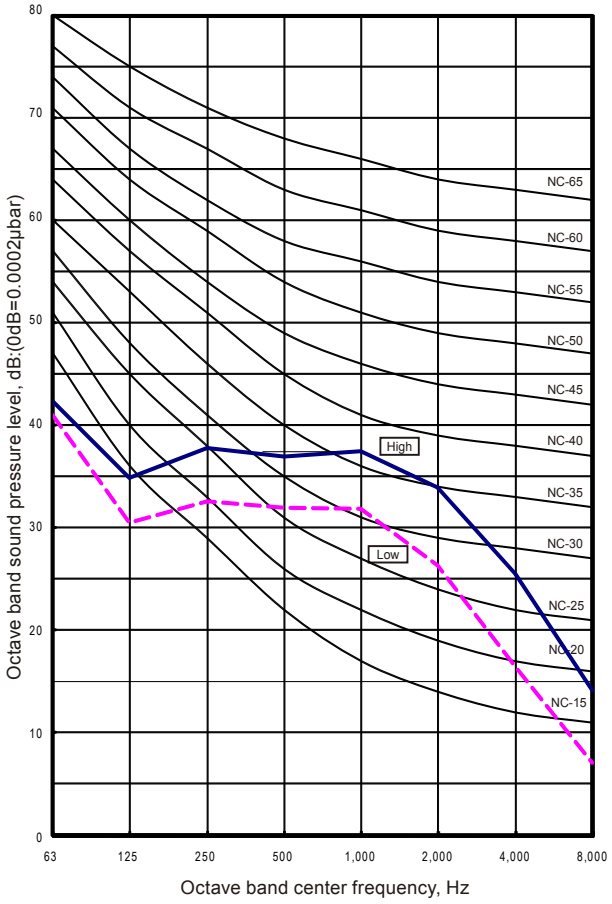
■ MODEL: AS∗E14GACH



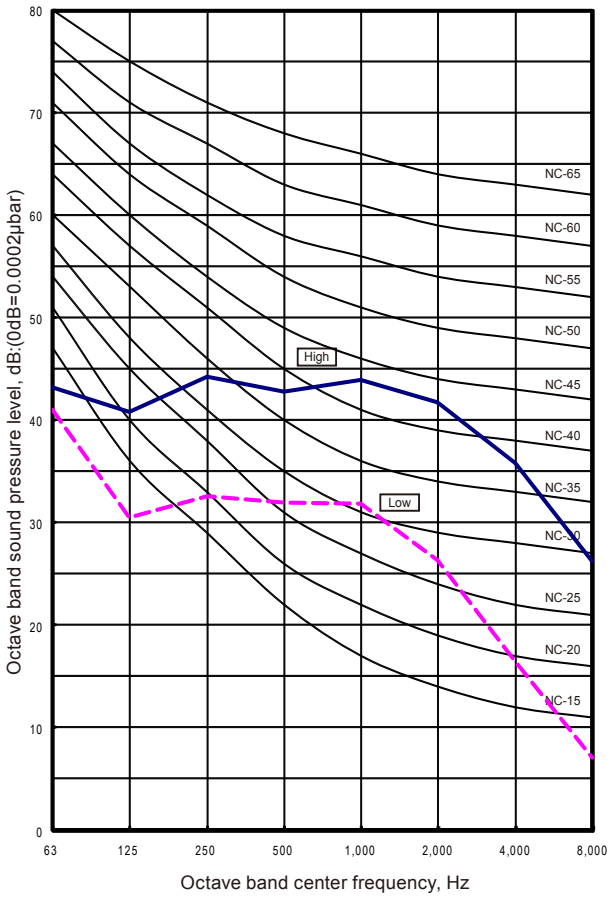
INDOOR UNITS

8-15. WALL MOUNTED TYPE

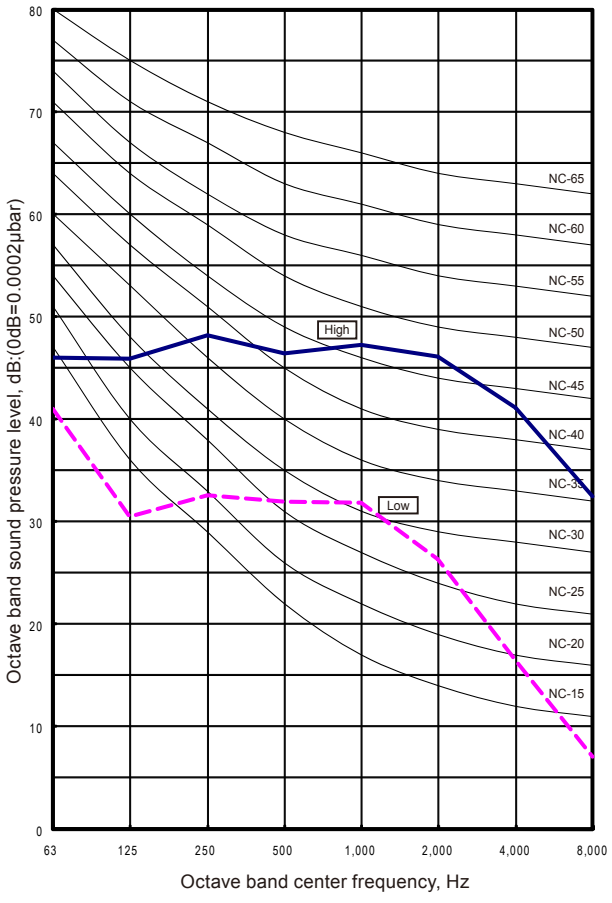
■ MODELS: AS∗A18GBCH AS∗A18GACH



■ MODELS: AS∗A24GBCH AS∗A24GACH

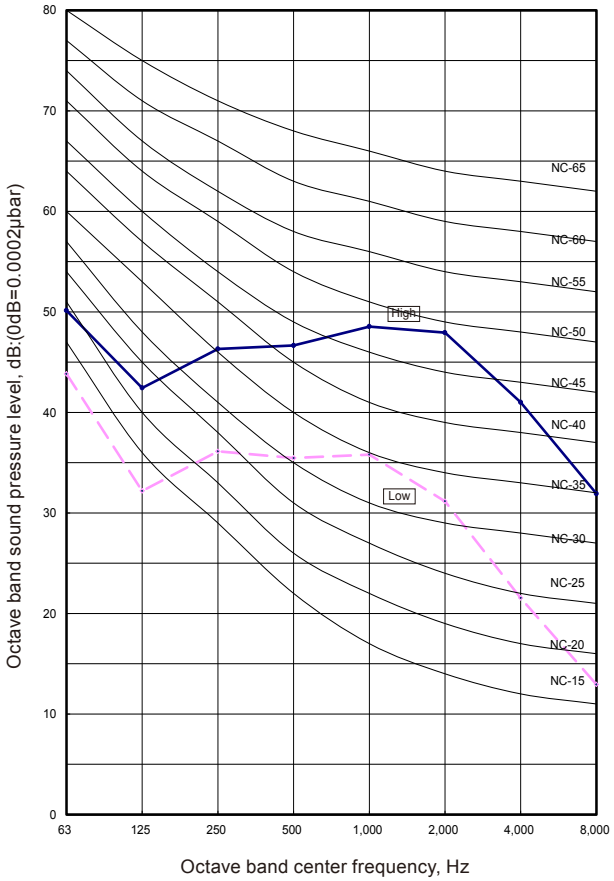


■ MODEL: AS∗A30GACH

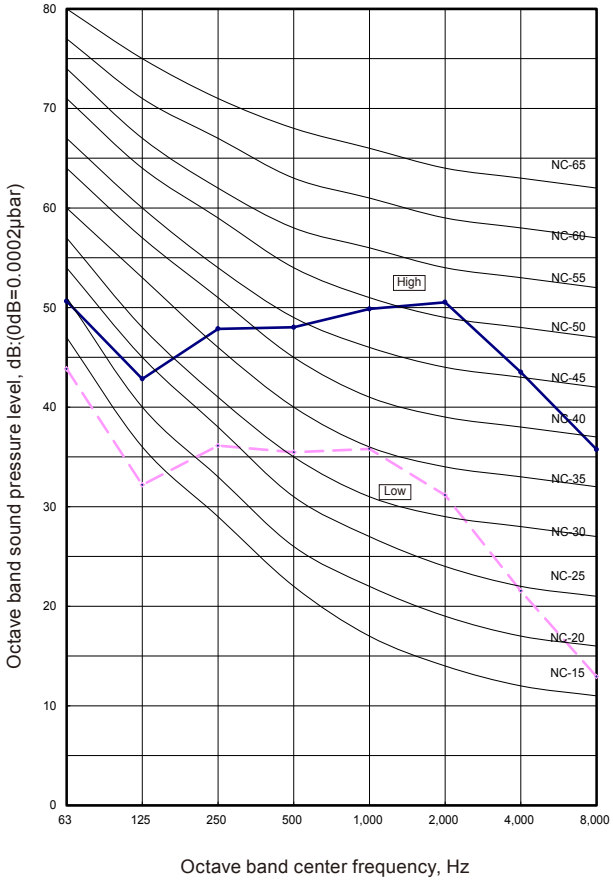


INDOOR UNITS

■ MODEL: AS∗A030GTAH



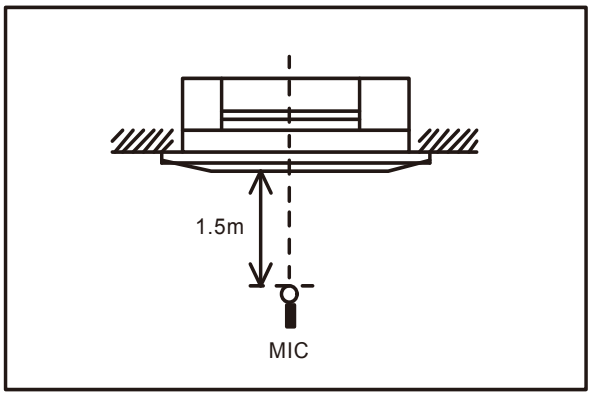
■ MODEL: AS∗A034GTAH



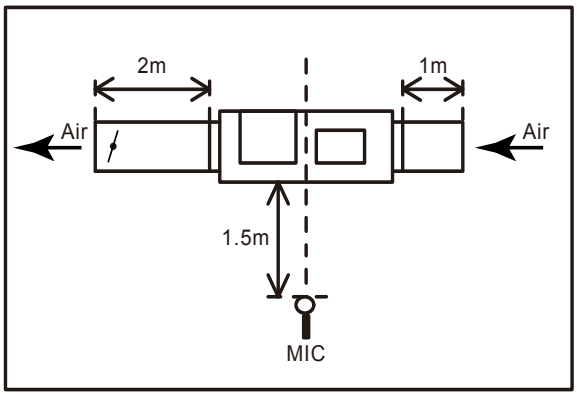
INDOOR UNITS

■ SOUND LEVEL CHECK POINT

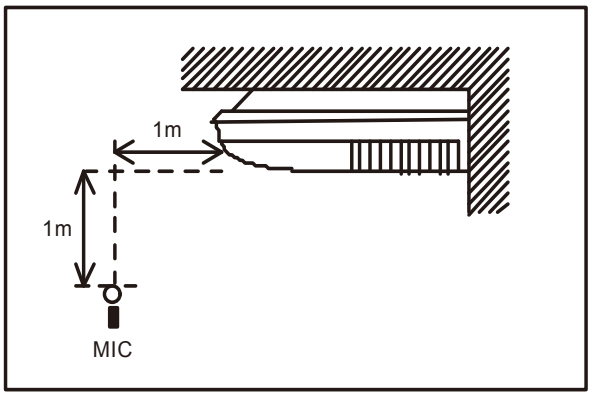
● Compact cassette type
● Cassette type



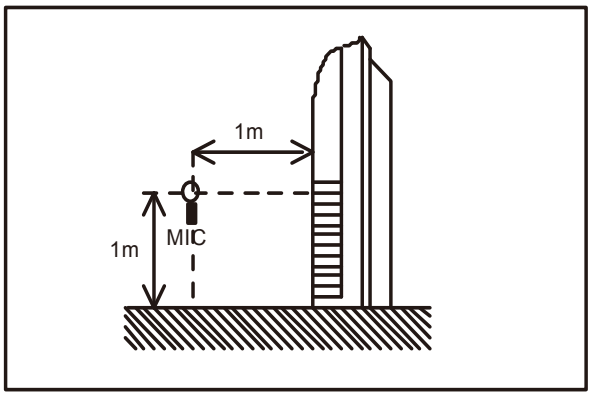
●Mini duct type
● Slim duct type
● Low static pressure duct type
● Medium static pressure duct type
● High static pressure duct type



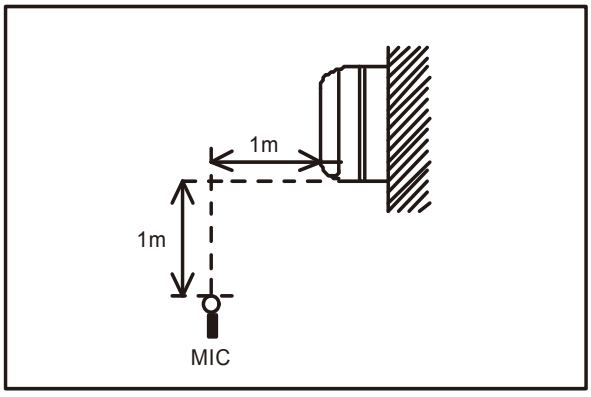
● Floor / Ceiling type
● Ceiling type



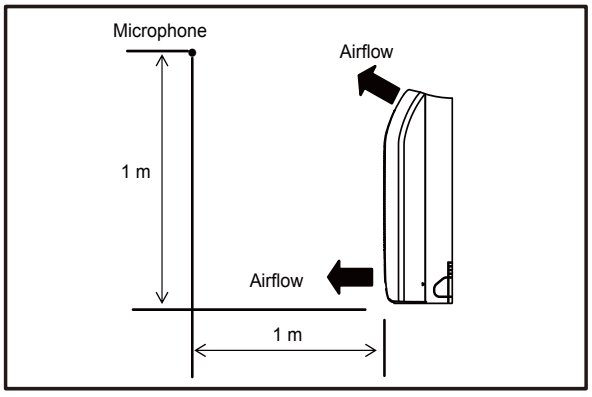
● Floor / Ceiling type



● Wall mounted type



● Compact floor type



9. SAFETY DEVICES

Model and type		Fuse	Fan motor thermal protector	Terminal thermal fuse	Float switch
Compact cassette	AUXB04GBLH	250V 3.15A	Activate (at 125±10°C): Fan motor stop Reset (at 120±10°C): Fan motor restart	-	○
	AUXB04GALH AUXB07GALH AUXB09GALH AUXB12GALH AUXB14GALH AUXB18GALH AUXB24GALH		Activate (at 140±20°C): Fan motor stop Reset (at 110±20°C): Fan motor restart		
Cassette	AUXM018GLAH AUXM024GLAH AUXM030GLAH AUXK018GLAH AUXK024GLAH AUXK030GLAH AUXK034GLAH AUXK036GLAH AUXK045GLAH AUXK054GLAH	250V 3.15A	Activate (at 125±10°C): Fan motor stop Reset (at 120±10°C): Fan motor restart	-	○
	AUXD18GALH AUXD24GALH AUXA18GALH AUXA24GALH AUXA30GALH AUXA34GALH AUXA36GALH AUXA45GALH AUXA54GALH		Activate (at 110^{+15}_{-10}°C): Fan motor stop Reset (at $105+^{15}_{-10}$°C): Fan motor restart		
Low static pressure duct / concealed floor	ARXB07GALH ARXB09GALH ARXB12GALH ARXB14GALH	250V 3.15A	Activate (at 140 ± 5°C): Fan motor stop	-	△*2)
	ARXB18GALH		Activate (at 150 ± 5°C): Fan motor stop		
Mini duct	ARXK04GCLH ARXK07GCLH ARXK09GCLH ARXK12GCLH ARXK14GCLH ARXK18GCLH ARXK24GCLH	250V 3.15A	Activate (at 135±15°C): Fan motor stop Reset (at 115±15°C): Fan motor restart	-	○
Slim duct / slim concealed floor	ARXD04GALH ARXD07GALH ARXD09GALH ARXD12GALH ARXD14GALH ARXD18GALH ARXD24GALH	250V 5A	Activate (at 135±15°C): Fan motor stop Reset (at 115±15°C): Fan motor restart	-	○

*1) Fuse for fan motor.

*2) Including in the Drain Pump Unit (Optional parts)

INDOOR UNITS

Model and type		Fuse	Fan motor thermal protector	Terminal thermal fuse	Float switch
Medium static pressure duct	ARXA24GBLH	250V 5A	Activate (at 135±15°C): Fan motor stop Reset (at 115±15°C): Fan motor restart	-	△*2)
	ARXA30GBLH		Activate (at 115±15°C): Fan motor stop Reset (at 70°C or less): Fan motor restart		
	ARXA36GBLH				
	ARXA45GBLH				
High static pressure duct	ARXC36GBTH	250V 5A	Activate (at 115±15°C): Fan motor stop Reset (at 70°C or less): Fan motor restart	-	-
	ARXC45GATH	250V 3.15A 250V 10A *1)	Activate (at 145 ± 5°C): Fan motor stop		
	ARXC60GATH				
	ARXC72GBTH	250V 3.15A 250V 20A *1)	Activate (at 100^{+15}_{-10}°C) Fan motor stop Reset (at $95+^{15}_{-10}$°C) Fan motor restart	-	-
	ARXC90GBTH				
	ARXC96GATH				
Large airflow duct	ARXN18GATH	250V 3.15A 250V 20A *1)	Activate (at 100^{+15}_{-10}°C) Fan motor stop Reset (at $95+^{15}_{-10}$°C) Fan motor restart	-	-
	ARXN24GATH				
	ARXN30GATH				
	ARXN34GATH				
	ARXN36GATH				
	ARXN45GATH				
Floor / ceiling	AB∗A12GATH	250V 3.15A	Activate (at 135±15°C): Fan motor stop Reset (at 115±15°C): Fan motor restart	-	-
	AB∗A14GATH				
	AB∗A18GATH				
	AB∗A24GATH				
Ceiling	AB∗A30GATH	250V 5A	Activate (at 135±15°C): Fan motor stop Reset (at 115±15°C): Fan motor restart	-	△ *2)
	AB∗A36GATH				
	AB∗A45GATH				
	AB∗A54GATH				
Compact floor	AG∗A004GCAH	250V 3.15A	"Activate (at 150±15°C): Fan motor stop Reset (at 120±15°C): Fan motor restart"	-	-
	AG∗A007GCAH				
	AG∗A009GCAH				
	AG∗A012GCAH				
	AG∗A014GCAH				
Compact floor (EEV external model)	AG∗E004GCAH	250V 3.15A	"Activate (at 150±15°C): Fan motor stop Reset (at 120±15°C): Fan motor restart"	-	-
	AG∗E007GCAH				
	AG∗E009GCAH				
	AG∗E012GCAH				
	AG∗E014GCAH				

*1) Fuse for fan motor.

*2) Including in the Drain Pump Unit (Optional parts)

INDOOR UNITS

Model and type		Fuse	Fan motor thermal protector	Terminal thermal fuse	Float switch
Wall mounted	AS∗A004GTAH	250V 3.15A	Activate (at 160±25°C): Fan motor stop Reset (at 110±25°C): Fan motor restart	-	-
	AS∗A007GTAH				
	AS∗A009GTAH				
	AS∗A04GACH		Activate (at 150 ± 15°C): Fan motor stop Reset (at 120±15°C): Fan motor restart	Activate (at 102°C)	-
	AS∗A07GACH				
	AS∗A09GACH				
	AS∗A12GACH				
	AS∗A14GACH				
	AS∗A18GBCH		Activate (at 120 ± 15°C): Fan motor stop		-
	AS∗A24GBCH				
	AS∗A18GACH				-
	AS∗A24GACH				
	AS∗A30GACH				
	AS∗A030GTAH		Activate (at 150±15°C): Fan motor stop Reset (less than 135°C): Fan motor restart	-	-
	AS∗A034GTAH				
Wall mounted (EEV external model)	AS∗E004GTAH	250V 3.15A	Activate (at 160±25°C): Fan motor stop Reset (at 110±25°C): Fan motor restart	-	-
	AS∗E007GTAH				
	AS∗E009GTAH				
	AS∗E04GACH		Activate (at 150 ± 15°C): Fan motor stop Reset (at 120±15°C): Fan motor restart	Activate (at 102°C)	-
	AS∗E07GACH				
	AS∗E09GACH				
	AS∗E12GACH				
	AS∗E14GACH				

*1) Fuse for fan motor.

*2) Including in the Drain Pump Unit (Optional parts)

INDOOR UNITS

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

5. CONTROL SYSTEM

DTV_VR2E018E_11--CHAPTER05
2017.03.31

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1. CONTROL SYSTEM

1-1. LINE UP OF CONTROLLERS

■ FEATURES OF CONTROL SYSTEM

Installation Work Saving

Simplified wiring and reduced installation cost by the use of non-polar 2-core transmission lines.

Control System Configuration Expansion

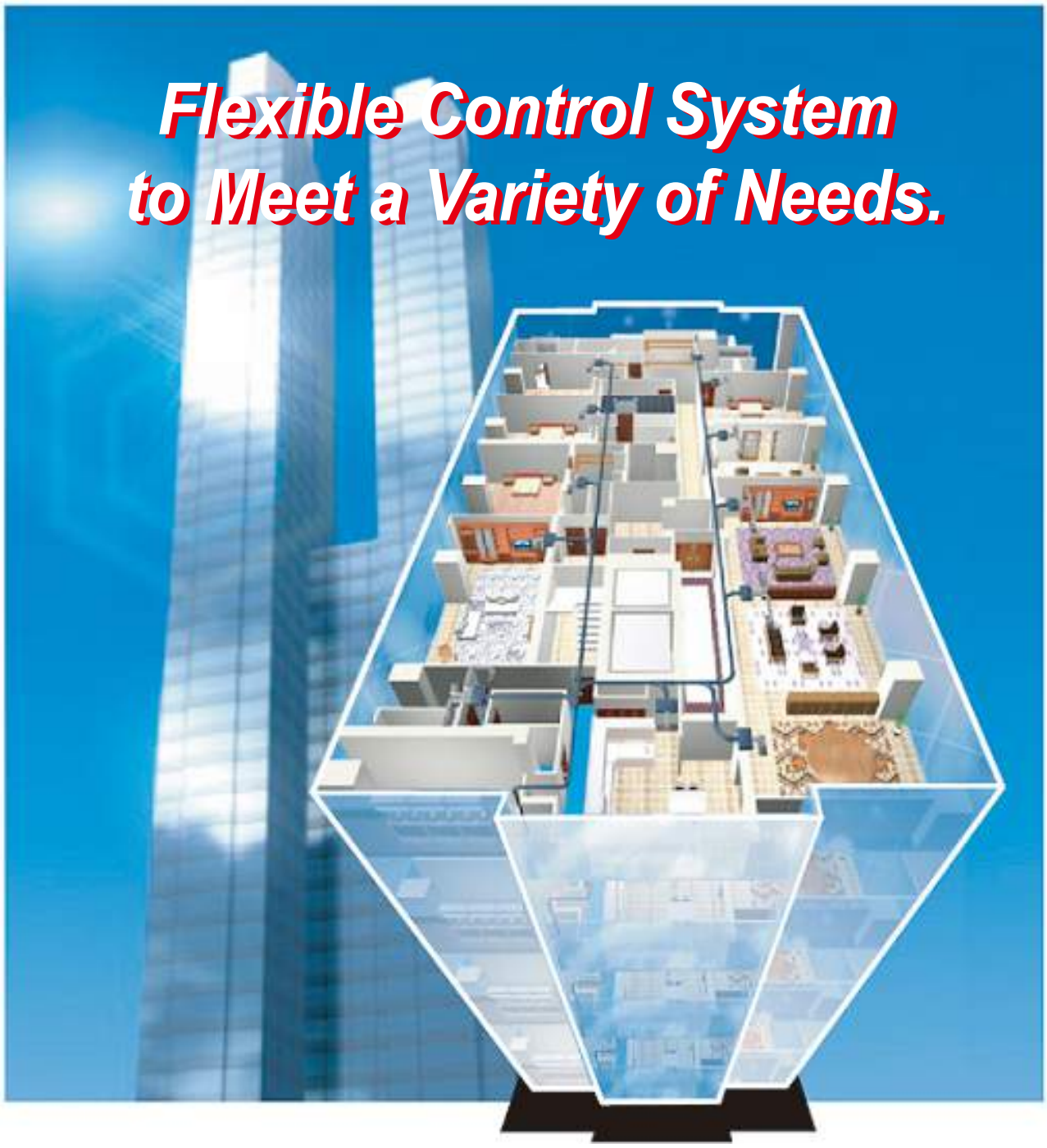
Optimum system configuration by various controller combinations, allowing for various applications and future expansion.

Easy Operation

Advanced control functions can be set up with the easy-to-use setting operation.

Free System Configuration

Up to 400 indoor units are connectable in one system. System is adaptable to various applications, from small to large buildings.



CONTROL SYSTEM

Air Conditioning Central Control

System Controller, System Controller Lite, Touch Panel Controller, Central Remote Controller and Group Remote Controller specially designed for centralized control.



System Controller

UTY-APGXZ1, UTY-APGX

High performance and optimum control system for all building applications

A high degree of building air conditioning management is possible including electricity charge apportionment and numerous data management functions as well as standard equipment monitoring and control.



System Controller Lite

UTY-ALGXZ1, UTY-ALGX

Optimum control system for small or medium building applications.

System Controller Lite has the subset functions of System Controller. Some functions such as electricity charge apportionment, remote monitoring, and energy saving can be supported by additional options in order to meet your demands.



Touch Panel Controller

UTY-DTG∗Z1, UTY-DTG∗

Functionality in a compact housing with built-in schedule timer

Allows operation and monitoring to be achieved from the central control room, at each floor, by each tenant, or in the plant room.



Central Remote Controller

UTY-DCG∗

Central control of small- and medium-sized buildings and tenants.

The operation status of all connected indoor units can be viewed at a glance on a large LCD monitor to simplify individual control to batched control.



Group Remote Controller

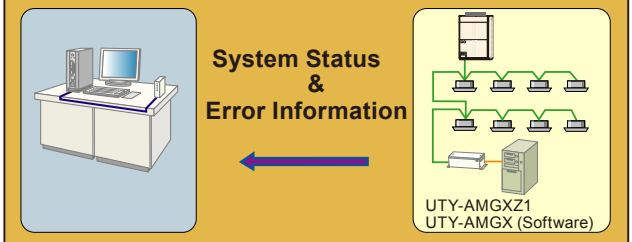
UTY-CGG∗

Group control of indoor units with simple operation

Network convertor (UTY-VGGX) is required to connect group remote controllers to a VRF system.

Web Monitoring Tool

Trouble-shooting is performed by monitoring each air conditioning unit remotely during periodical system checks.



Error notification can be automatically transmitted to several locations using the Internet*.
Requires either a dedicated Internet connection* or public telephone line.

*Fixed global IP address is required.

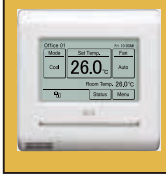
CONTROL SYSTEM

CONTROL SYSTEM

Air Conditioning Individual Control

A range of Remote Controllers suitable for a wide range of individual control situations, using various built-in timers

Wired Remote Controller (Touch panel)

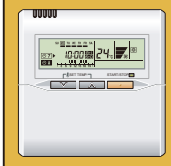


UTY-RNR∗Z2, UTY-RNR∗Z1

UTY-RNR∗

Wired remote controller with the largest LCD touch panel in the industry

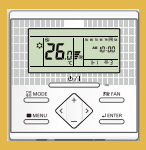
Wired Remote Controller



UTY-RNK∗

The room temperature can be controlled by detecting the temperature accurately with the built-in thermo sensor.

Wired Remote Controller



UTY-RLR∗

The room temperature can be controlled by detecting the temperature accurately with the built-in thermo sensor.

Simple Remote Controller (With Operation mode)



UTY-RSR∗, UTY-RSK∗

Compact remote controller concentrates on the basic functions such as Start/Stop, Fan Control, Temperature Setting and Operation mode.

Simple Remote Controller (Without Operation mode)



UTY-RHR∗, UTY-RHK∗

Compact remote controller concentrates on the basic functions such as Start/Stop, Fan Control and Temperature Setting.

Wireless Remote Controller



UTY-LNH∗

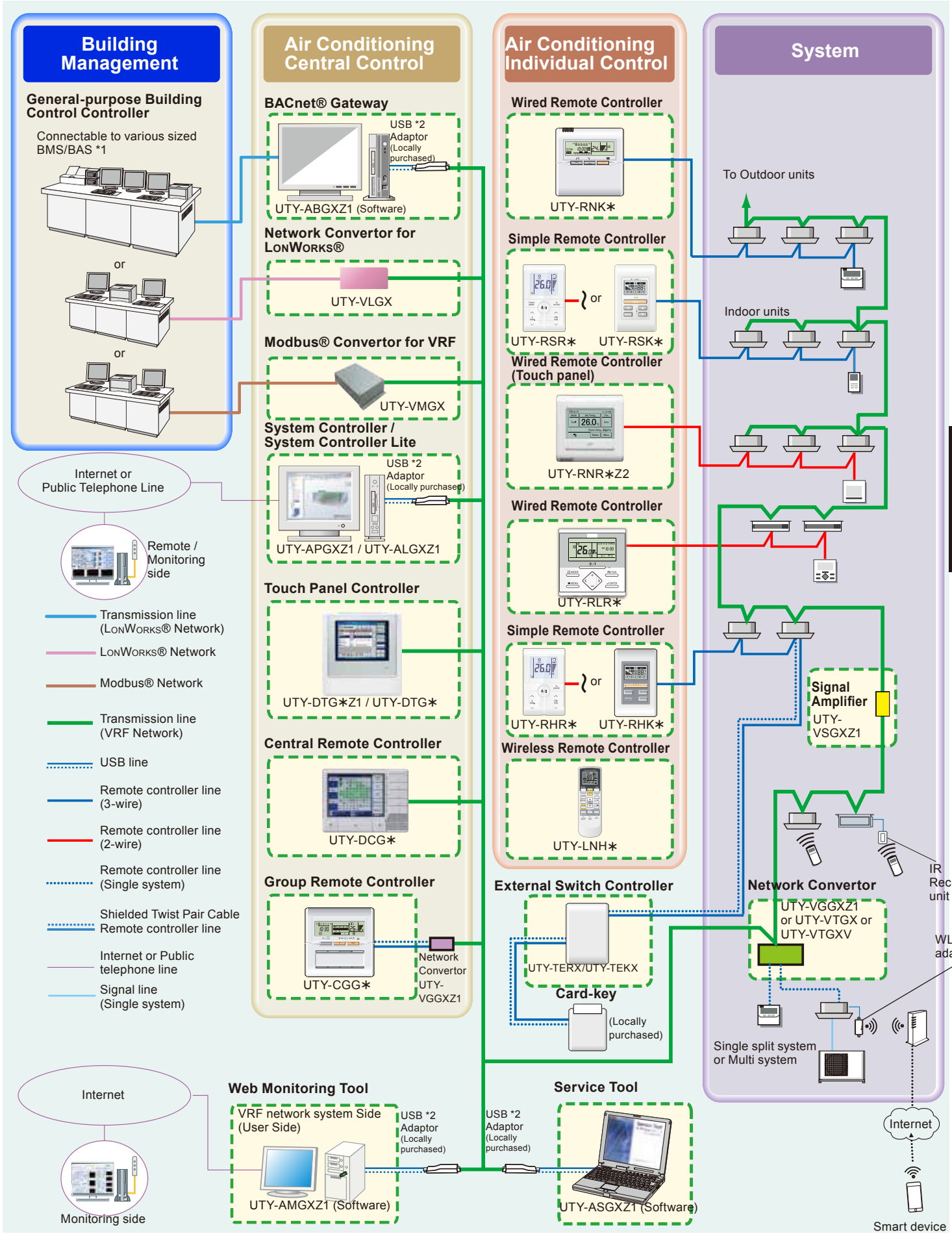
Simple and sophisticated operation with a choice of 4 daily timers

CONTROL SYSTEM

CONTROL SYSTEM

1-2. CONTROL SYSTEM DESIGN

■ ADVANCED INTEGRATED CONTROL SYSTEM



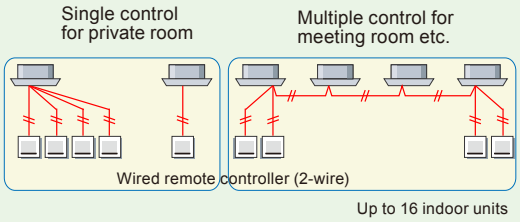
*1: BMS/BAS : Building Management System / Building Automation System.
*2: Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R).

1-3. SYSTEM CONFIGURATION EXAMPLES

■ INDIVIDUAL CONTROL

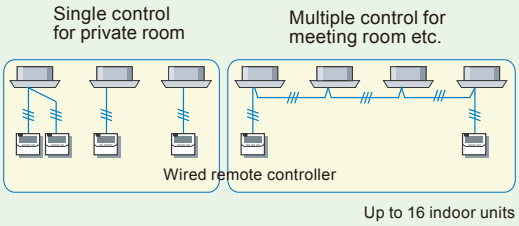
Wired Remote Controller (2-wire)

- Up to 16 indoor units can be controlled with one wired remote controller.
- Wired and wireless remote controllers can be used jointly.
- 4 remote controllers can be connected with single indoor unit.



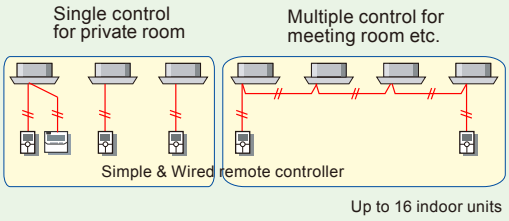
Wired Remote Controller (3-wire)

- Up to 16 indoor units can be controlled with one wired remote controller.
- Wired, simple, and wireless remote controllers can be used jointly.
- 2 remote controllers can be connected with single indoor unit.



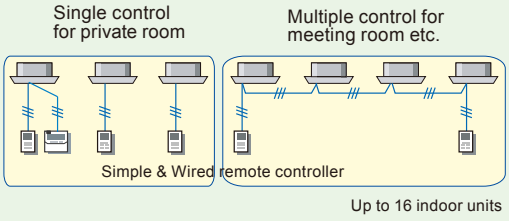
Simple Remote Controller (2-wire)

- Up to 16 indoor units can be controlled with one simple remote controller.
- Enables easy control of basic functions by the hotel or office guest.
- Wired, simple, and wireless remote controllers can be used jointly.
- 4 remote controllers can be connected with single indoor unit.



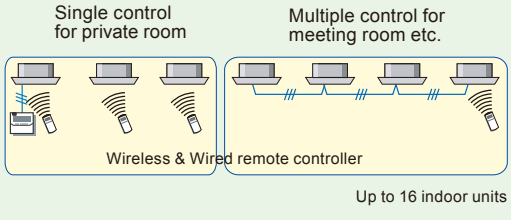
Simple Remote Controller (3-wire)

- Up to 16 indoor units can be controlled with one simple remote controller.
- Enables easy control of basic functions by the hotel or office guest.
- Wired, simple, and wireless remote controllers can be used jointly.
- 2 remote controllers can be connected with single indoor unit.



Wireless Remote Controller

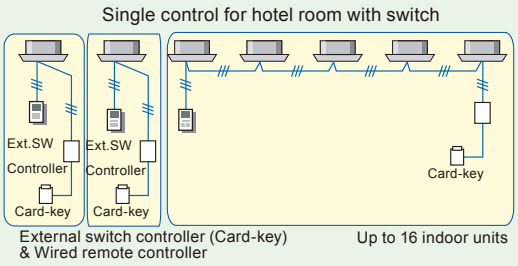
- Up to 16 indoor units can be controlled with one wireless remote controller.
- Wired, simple, and wireless remote controllers can be used jointly.



CONTROL SYSTEM

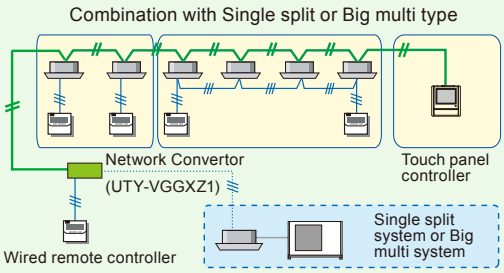
External Switch Controller

- Up to 16 indoor units can be controlled with one external switch controller.
- In combination with a locally purchased card-key switch or other sensor, External switch controller allows control of basic functions by the hotel or office guest.



Single Split or Big Multi System Connectability

- Single spilit system or Big multi system can be connected to the VRF network system and can be controlled from Touch panel controller or System controller.

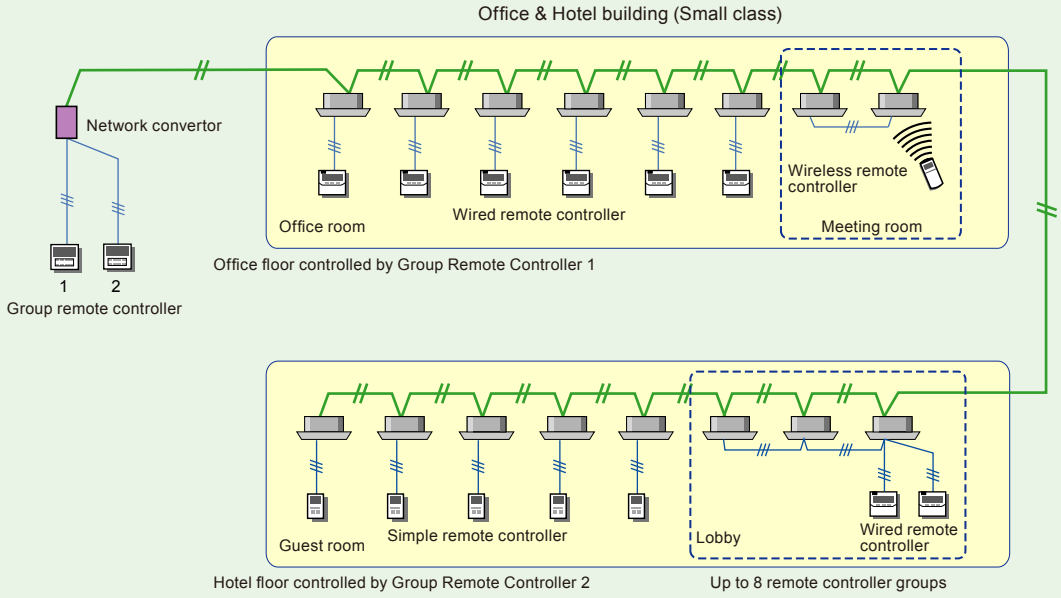


CONTROL SYSTEM

■ CENTRAL CONTROL

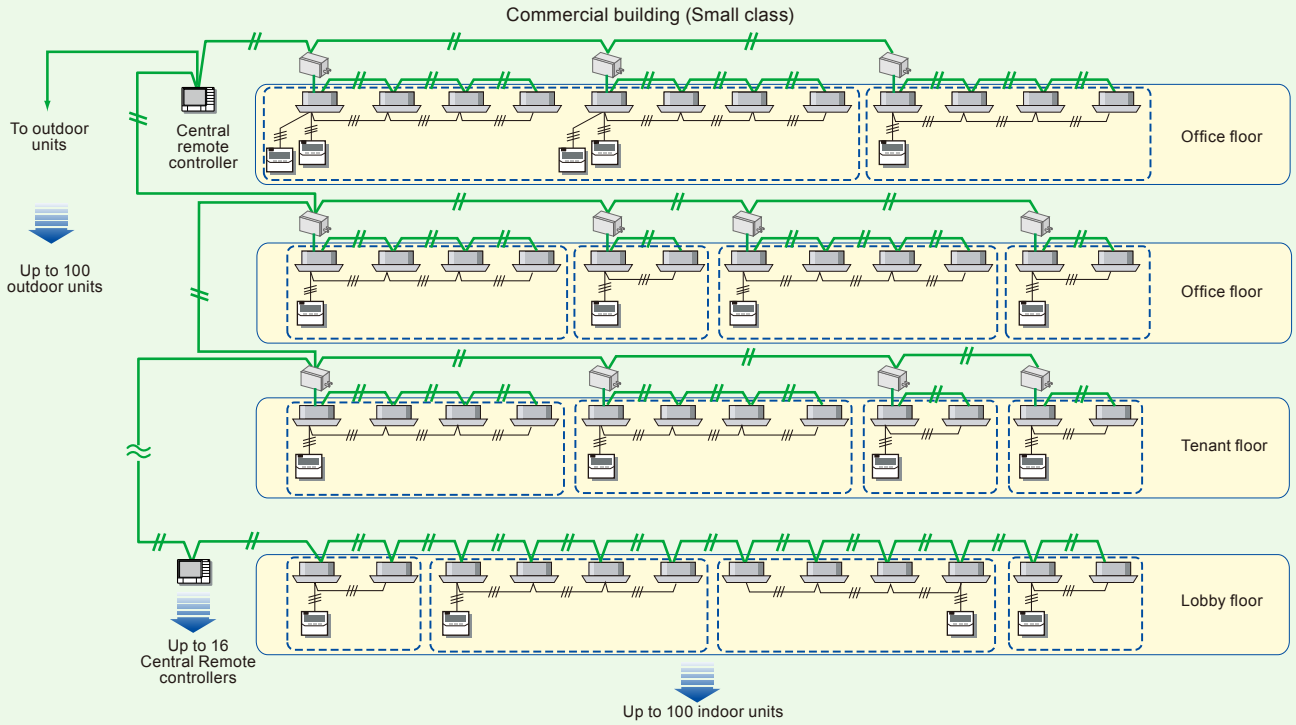
Group Remote Controller

- Up to 8 remote controller groups can be controlled with one group remote controller.
- Up to 4 Group remote controllers can be connected to a single network convertor (UTY-VGGXZ1).
- One network convertor (UTY-VGGXZ1) is allowed 2 refrigerant systems.
- Up to a total of 16 network convertors, central remote controllers and touch panel controllers, group remote controller and network convertor for LONWORKS® can be connected to single VRF network system.



Central Remote Controller

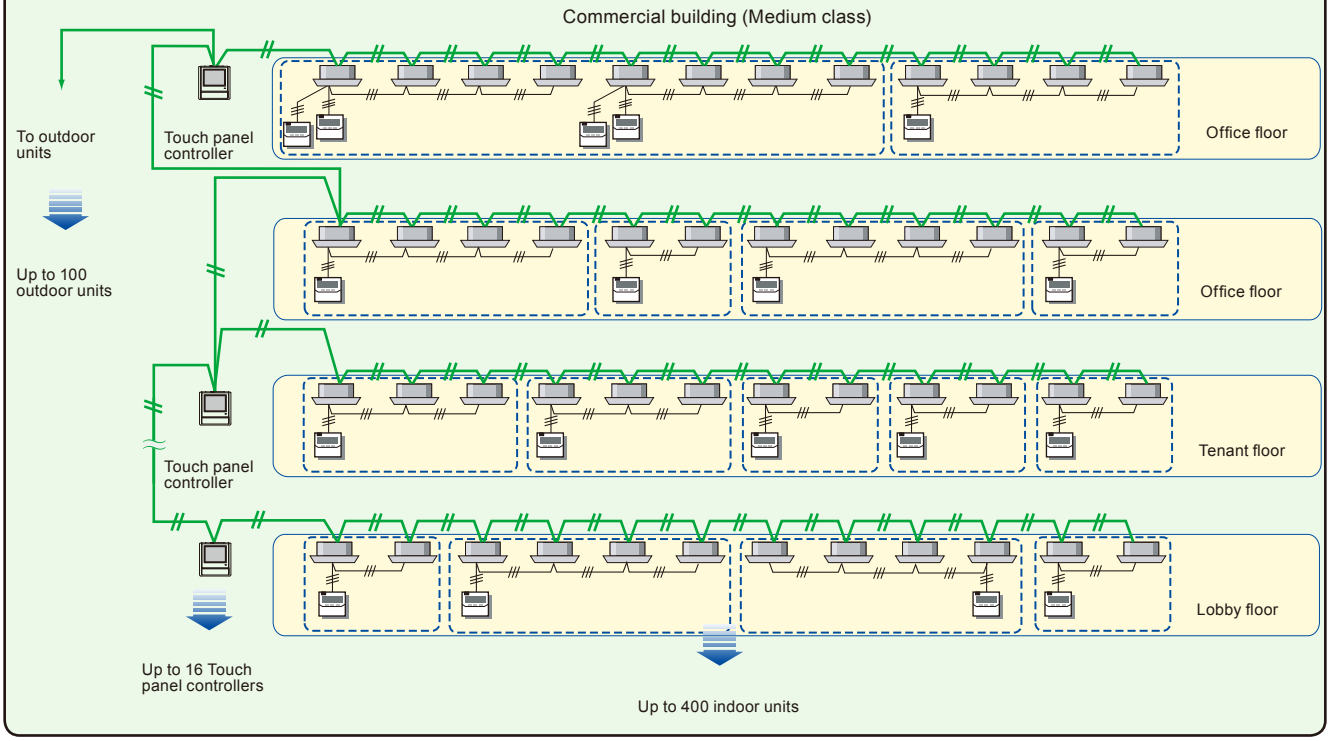
- Up to 100 indoor units / 16 groups can be controlled with one central remote controller.
- The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller , Modbus® convertor and Network convertor for LONWORKS® is a maximum of 16.



CONTROL SYSTEM

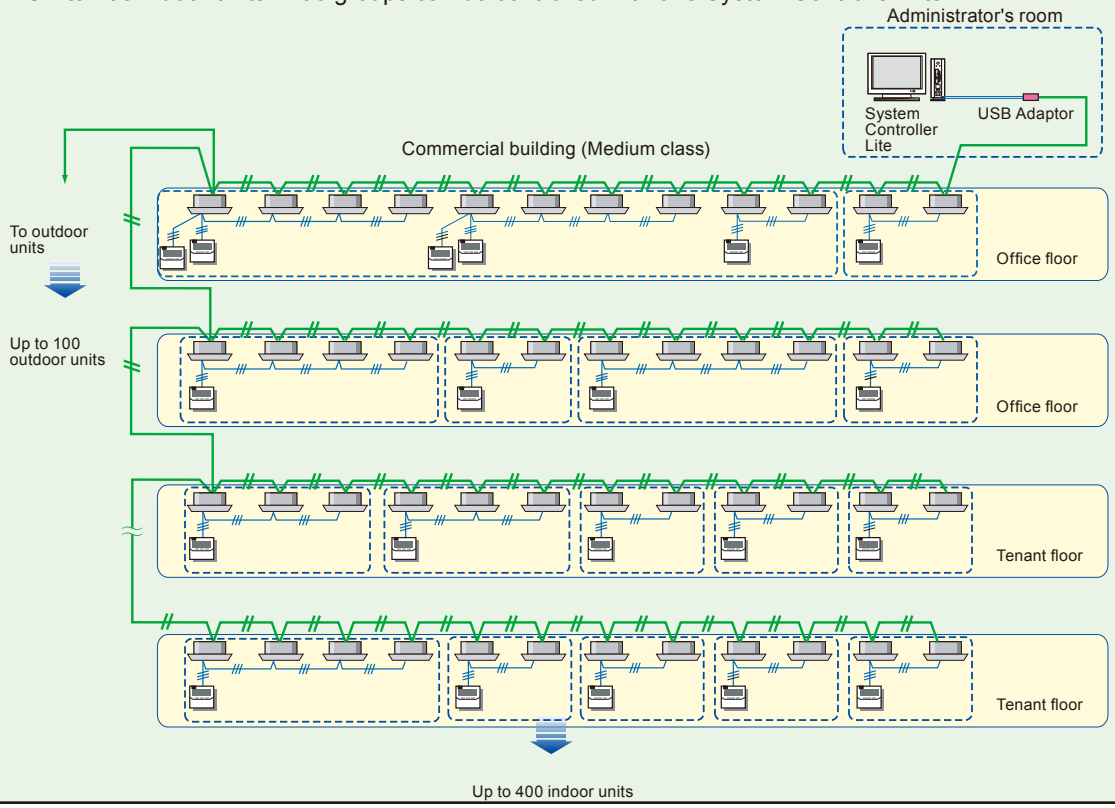
Touch Panel Controller

- Up to 400 indoor units / 400 groups can be controlled with one touch panel controller.
- Up to a total of 16 network convertors, central remote controllers and touch panel controllers, group remote controller and network convertor for LONWORKS® can be connected to a single VRF network system.



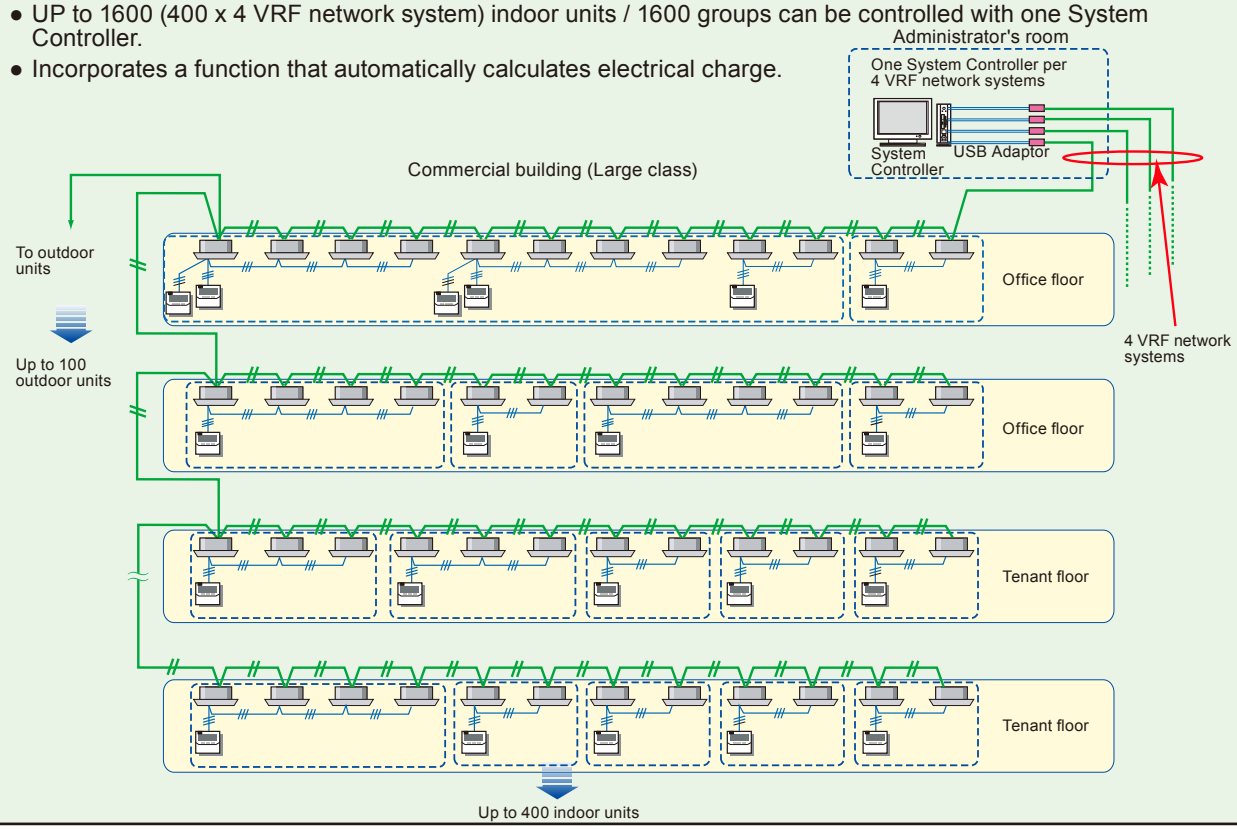
System Controller Lite

- UP to 400 indoor units / 400 groups can be controlled with one System Controller Lite.



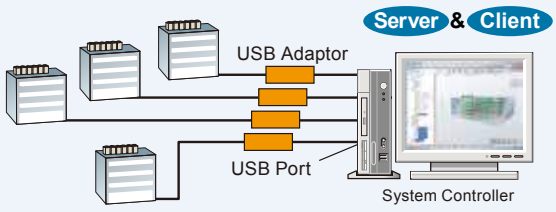
System Controller

- UP to 1600 (400 x 4 VRF network system) indoor units / 1600 groups can be controlled with one System Controller.
- Incorporates a function that automatically calculates electrical charge.



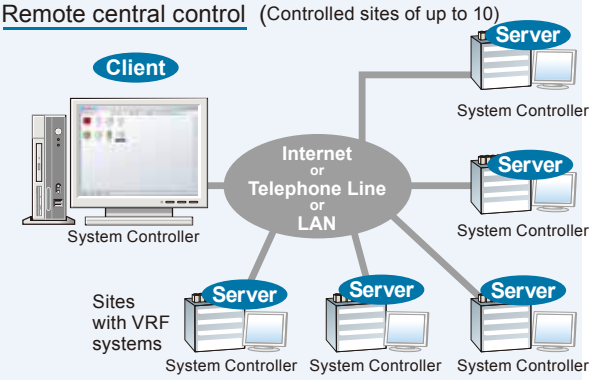
System Controller can perform as an on site central control and remote central control.

On site central control (Max. 4 VRF network systems)

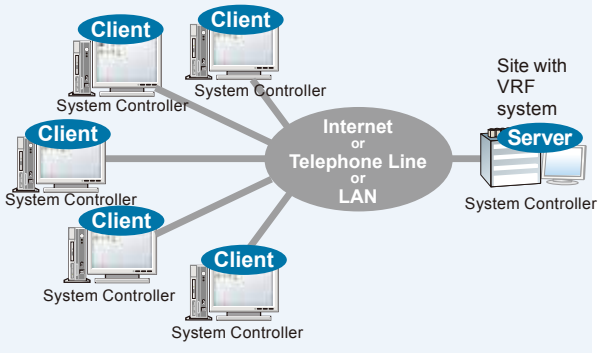


1 VRF network system	Max. controllable		Max. transmission line length
	400 Indoor units	100 Outdor units	3,600m

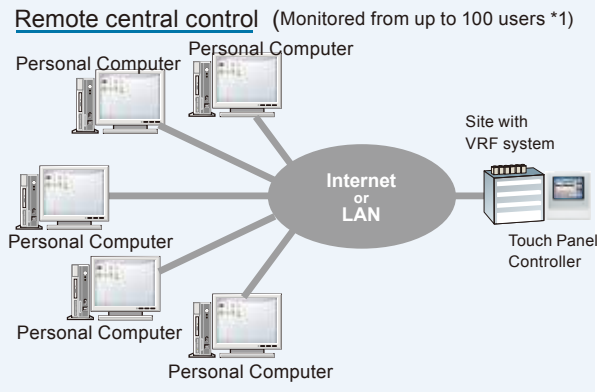
Remote central control (Controlled sites of up to 10)



Remote central control (Monitored from up to 5 Clients)



Touch Panel Controller can perform as a remote central control.



*1: Up to 4 administrators and 10 general users can log in simultaneously.

CONTROL SYSTEM

■ INDOOR UNIT TYPE AND THE APPLICABLE CONTROL METHOD

	Wired Remote Controller (Touch panel)	Wired Remote Controller	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	External Switch Controller	Wireless LAN Adapter
	UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	UTY-RLR∗	UTY-RNK∗	UTY-RSR∗ UTY-RHR∗ UTY-RSK∗ UTY-RHK∗	UTY-LNH∗	UTY-TERX UTY-TEKX	UTY-TFSXZ1
Compact Cassette	○	○	○	○	○	○	-
Circular Flow Cassette	○	○	-	○	○	○	○
Cassette	○	○	○	○	△ *1	○	-
Low Static Pressure Duct / Concealed Floor	○	○	○	○	△ *2	○	-
Mini Duct	○	○	○	○	△ *2	○	-
Slim Duct / Slim Concealed Floor	○	○	○	○	△ *2	○	-
Low Static Pressure Duct	○	○	○	○	△ *2	○	-
Medium Static Pressure Duct	○	○	○	○	△ *2	○	-
High Static Pressure Duct	○	○	○	○	△ *2	○	-
Compact Floor	○	○	-	○	○	○	○
Compact Floor (EEV external)	○	○	-	○	○	○	○
Floor / Ceiling	○	○	○	○	○	○	-
Ceiling	○	○	○	○	○	○	-
Wall Mounted (EEV external)	○	○	○ *5	○	○	○	○ *3
Wall Mounted	○	○	○ *5	○	○	○	○ *4

*1 : IR Receiver Unit (Optional part : UTY-LRH∗B1, UTY-LBHXD) is necessary.
*2 : IR Receiver Unit (Optional part : UTB-∗WC) is necessary.
*3 : AS∗∗004/007/009GTAH only.
*4 : AS∗A030/034GTAH only.
*5 : It is not connectable with indoor unit "AS∗∗∗∗∗GTAH" (∗: arbitrary character).

■ CONVERTORS (ADAPTORS) AND RELATED EQUIPMENTS (SYSTEM)

		Within VRF network system								VRF network system ↔ Other System	
		System Controller	System Controller Lite	Touch Panel Controller	Central Remote Controller	Group Remote Controller	Web Monitoring Tool	Service Tool	BACnet® Gateway	Single Split System / Multi System	BMS/ BAS
		UTY-APGXZ1 UTY-APGX	UTY-ALGXZ1 UTY-ALGX	UTY-DTG∗Z1 UTY-DTG∗	UTY-DCG∗	UTY-CGG∗	UTY-AMGXZ1 UTY-AMGX	UTY-ASGXZ1 UTY-ASGX	UTY-ABGXZ1 UTY-ABGX		
Network Convertor	UTY-VTGX	-	-	-	-	-	-	-	-	○	-
	UTY-VTGXV	-	-	-	-	-	-	-	-	○	-
	UTY-VGGXZ1	-	-	-	-	○	-	-	-	○	-
USB adaptor *3	Locally purchased	○	○	-	-	-	○	○	○	-	-
Network Convertor for LonWorks®	UTY-VLGX	-	-	-	-	-	-	-	-	-	○
BACnet® Gateway	UTY-ABGXZ1 UTY-ABGX	-	-	-	-	-	-	-	-	-	○
Modbus® Convertor	UTY-VMGX	-	-	-	-	-	-	-	-	-	○

*3 : Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R)

CONTROL SYSTEM

1-4. FEATURES OF CONTROL SYSTEM

■ SIMPLE WIRING SYSTEM

- 1 transmission line can interlink all equipments regardless refrigerant circuit.
- Non polar 2-conductor transmission cable.
- Central control equipment can be connected anywhere on the transmission line, with no need to bring from the outdoor unit.
  - Making up the network system easily.
  - Saving the total wiring length.
  - Preventing incorrect connection.
  - Saving installation time.

■ ADOPTION TO LARGE SCALE BUILDINGS

- 1 VRF network system allows to form large scale application as follows:
  - Total transmission wiring length can be extended up to 3,600 m with signal amplifier unit.
  - Indoor units can be connected up to 400.
  - Outdoor units can be connected up to 100.
  - Touch Panel Controller can be covered to control whole equipment centrally.
  - By using multiple Touch Panel Controllers, control by individual zone or floor is possible for convenient usage in various building applications.
  - By adopting a separate interface, it is possible to connect other products and systems by FUJITSU GENERAL such as Single type models (excluding some models), J series or Multi air conditioner for buildings (e.g. Big multi). (Refer to 3-1. NETWORK CONVERTOR.)
- System Controller allows to control up to 4 VRF network systems (Max. 1600 indoor units), suitable for huge scale application.

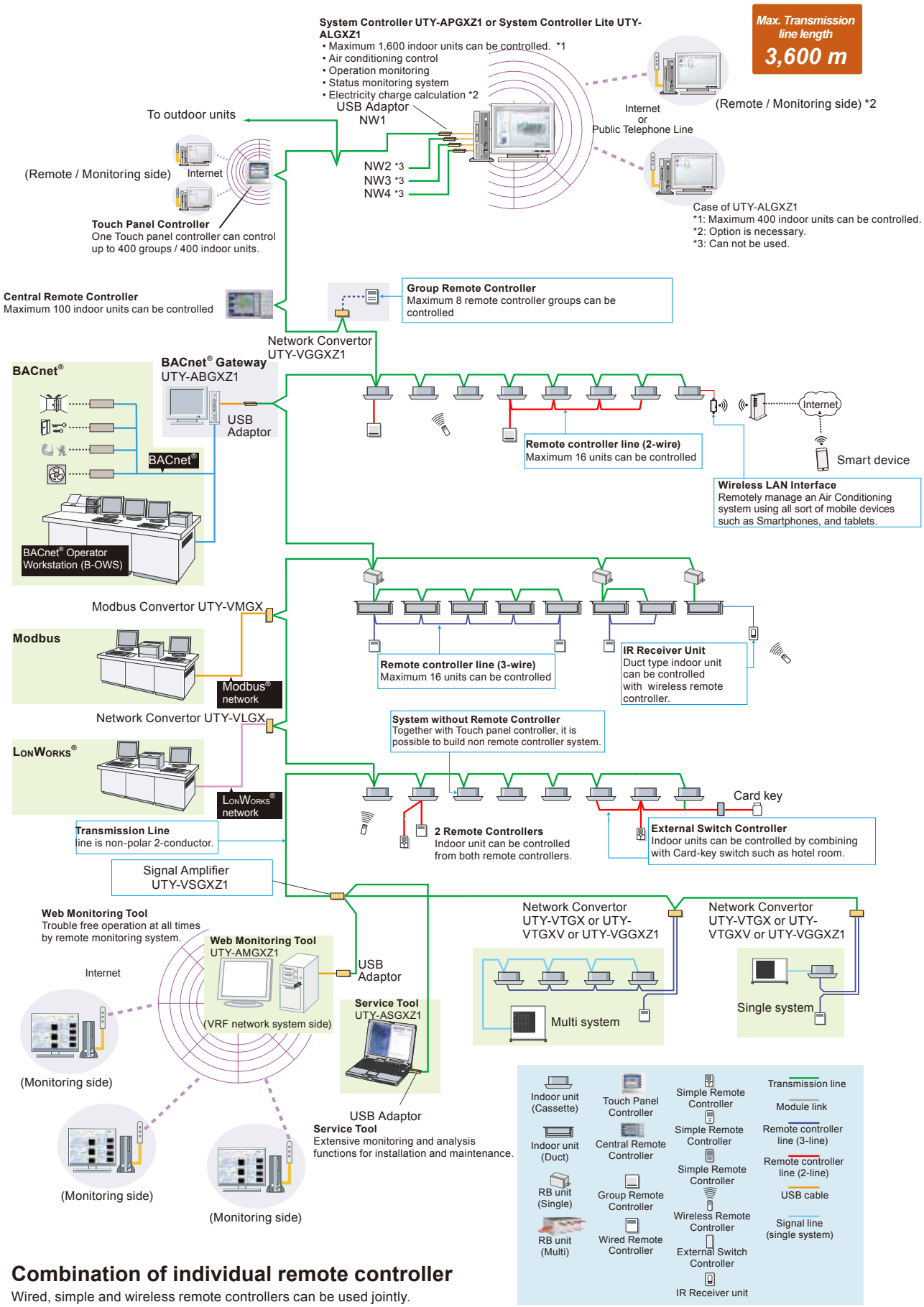
■ RELIABILITY AND EASY MAINTENANCE

- Stand-alone transmission network, allows each equipment to operate individually, thus failure of the units does not affect other indoor units operation.
- When a failure occurs, the error code is displayed on the individual controller and central controller excepting Wireless Remote Controller.
- Also error histories can memorized by each individual controller and central controller excepting Wireless Remote Controller.
- System Controller and Web Monitoring Tool allow to monitor operation status in real time via Internet, and enable quick diagnoses.
- Maintenance work is improved efficiency, because Service Tool can be connected to anywhere on the transmission line.

CONTROL SYSTEM

1-5. WIRING SYSTEM

- Wiring configulation of the control system is made of power source wiring, transmission wiring, and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 3,600 m (by using signal amplifiers).



Combination of individual remote controller

Wired, simple and wireless remote controllers can be used jointly.

CONTROL SYSTEM

1-6. CONTROL EQUIPMENT DESIGN LIMITATION

			Model	Necessary equipment	Number of connectable units	Number of manageable Indoor units	Connectable outdoor units
Controller	Central Controller	System Controller	UTY-APGXZ1 UTY-APGX	USB Adaptor	1 / system	1600 (4 VRF Networks)	400 (4 VRF Networks)
		System Controller Lite	UTY-ALGXZ1 UTY-ALGX	USB Adaptor	1 / system	400 (1 VRF Network)	100 (1 VRF Network)
		Group Remote Controller	UTY-CGG∗	UTY-VGGXZ1	4 / UTY-VGGXZ1	2 refrigerant system	
		Touch Panel Controller	UTY-DTG∗Z1 UTY-DTG∗	—	16 / system	400	100
		Central Remote Controller	UTY-DCG∗	—		100	
Adaptor / Convertor		Network Convertor	UTY-VTGX UTY-VTGXV UTY-VGGXZ1	—	100 / system *1	—	—
		Network Convertor for LonWorks® *3	UTY-VLGX	—	1 / system	128 *2	100
		BACnet® Gateway	UTY-ABGXZ1 UTY-ABGX	USB Adaptor	1 / system	1600 (4 VRF Networks)	400 (4 VRF Networks)
		Modbus® Convertor	UTY-VMGX	—	9 / system	128 *2	100
		Signal Amplifier	UTY-VSGXZ1	—	40 / system	—	—
Service and Maintenance		Service Tool	UTY-ASGXZ1 UTY-ASGX	USB Adaptor	1 / system	400	100
		Web Monitoring Tool	UTY-AMGXZ1 UTY-AMGX	USB Adaptor		1600 (4 VRF Networks)	400 (4 VRF Networks)

*1: Maximum 100 Refrigerant systems.

*2: Maximum controllable indoor unit number per one Convertor.
(Check the System Diagram (Item: 3-2) for proper configuration.)

*3: A maximum of 4 Network Convertors for LonWorks® can be connected to 1 BMS.

			Model	The number that can be connected	Remarks
Controller	Individual Controller	Wireless Remote Controller	UTY-LNH∗		
		Wired Remote Controller (Touch panel)	UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	4 / Remote control group	2-wire type
		Wired Remote Controller	UTY-RLR∗		
		Simple Remote Controller (with operation mode)	UTY-RSR∗		
		Simple Remote Controller (without operation mode)	UTY-RHR∗		
		Wired Remote Controller	UTY-RNK∗	2 / Remote control group	3-wire type
		Simple Remote Controller (with operation mode)	UTY-RSK∗		
		Simple Remote Controller (without operation mode)	UTY-RHK∗		
Adaptor / Convertor		External Switch Controller	UTY-TERX UTY-TEKX		
		IR Receiver unit		1 / Indoor unit	

CONTROL SYSTEM

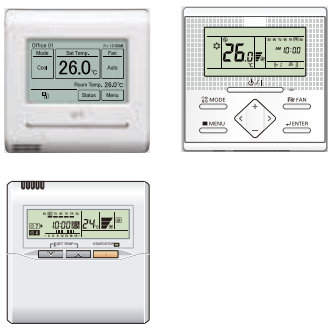
2. CONTROL UNITS

- System Controller
- System Controller Lite
- Touch Panel Controller
- Central Remote Controller
- Group Remote Controller
- Wired Remote Controller
- Simple Remote Controller
  (With operation mode)
  (Without operation mode)
- Wireless Remote Controller
- IR Receiver Unit

Central Control

System Controller / System Controller Lite	Touch Panel Controller	Central Remote Controller	Group Remote Controller
			

Individual Control

Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	IR Receiver Unit
(Touch panel) 	(With operation mode) (Without operation mode) 		

2-1. SYSTEM CONTROLLER

2-1-1. MODEL : UTY-APGXZ1 (Option: UTY-PEGXZ1, UTY-PPGXP2)



This system realizes the advanced general monitoring & control of VRF system from small scale buildings to large scale buildings.

- Maximum of 4 network systems, 1600 indoor units can be controlled.
- Supports VRF VR-II Series, V-III Series, V-II Series, J-III Series, J-IIIL Series, J-II Series, J-IIS Series, V Series & S Series. *1
- In addition to air conditioning precision control function, central remote control, electricity charge calculation, schedule management, and energy saving functions are strengthened and building manager and owner needs are met.
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface and personal computer are locally purchased items.
- Extended feature*2 supported by use of options.

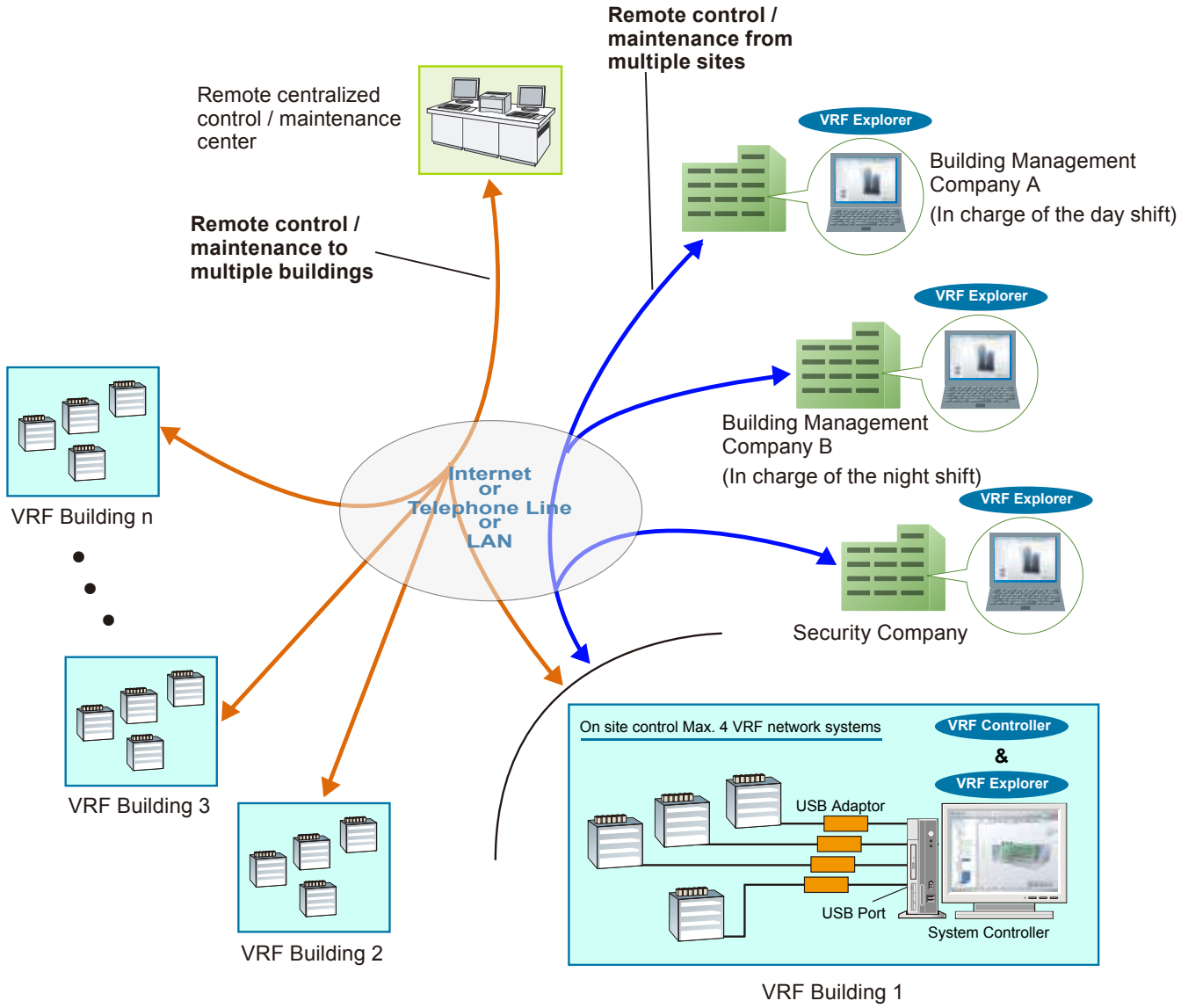
*1: Different VRF series may be connected for each of the 4 VRF networks supported by the System Controller, but different series may not coexist within the same network.

*2: Electricity charge apportionment using electricity meter, energy saving control. (Only for VR-II, V-III, V-II, J-III, J-IIIL, J-II, J-IIS Series)

CONTROL SYSTEM

■ SYSTEM DIAGRAM

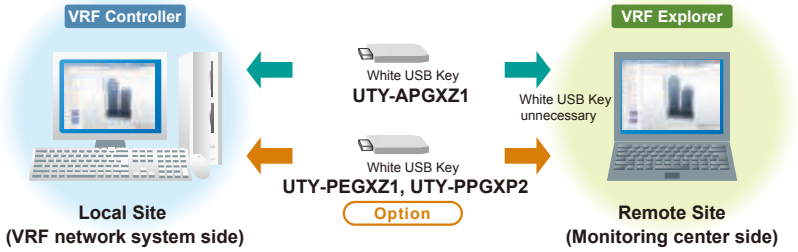
- System controller may be used on site or remotely over various networks for remote central control.
- System controller consists of VRF Controller software and VRF Explorer software, both software are working together.
- VRF Controller software runs in the background and communicate with VRF System.
- VRF Explorer software provides user interface and communicate with the VRF Controller.
- VRF Controller and VRF Explorer software may run in a single PC or in different PCs separated by network.
- VRF Explorer software does not require WibuKey (Software protection key).



■ PACKING LIST

Name and shape	Quantity	Application
WHITE-USB-KEY (software protection key with software) 	1	Software protection key to be connected to an USB port on the PC that the System Controller is installed. System Controller runs only on a PC with this WHITE-USB-KEY. However, this WibuKey is not required for remote VRF Explorer software.

■ SOFTWARE CONFIGURATION



Any number can be installed in remote site personal computers

System Controller UTY-APGXZ1 can be installed in the local site PCs (VRF Controller) connected to the VRF network system, and multiple remote site PCs (VRF Explorer) can be connected to VRF Controller via Internet or LAN. Just this single product creates the control, management, and monitoring environment for the customer's properties including remote operation.

*The WHITE-USB-KEY is not required for PCs on the remote site side. Some functions, such as equipment registration, and input/output, are invalid on the remote site side.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 5 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 1 USB ports are required for White USB Key connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible
Software	Adobe® Reader® 9.0 or later

■ AVAILABLE OPTION

Energy Manager	UTY-PEGXZ1	Additional support for energy saving function and electricity charge apportionment using electricity meter.
Prepaid air conditioning	UTY-PPGXP2	The prepaid management of VRF air conditioner is performed and the collection of charge for air conditioning is supported for building administrator.

CONTROL SYSTEM

■ SPECIFICATION SUMMARY

Type	Function	UTY-APGXZ1	UTY-PEGXZ1 Option	UTY-PPGXP2 Option	Remark
System specification	Max. System Controller per VRF Network	1	—	—	
	Max. VRF networks supported	4	—	—	Site with up to 4 VRF networks may be administered with 1 System Controller
	Max. indoor units / remote controller groups per VRF network	400	—	—	
	Max. indoor units / remote controller groups per System Controller	1,600	—	—	4 VRF networks
Site supervision	Multiple sites display	10	—	—	
	2D/3D graphical layout view	●	—	—	2D: Site, floor, 3D: Building Quick control from display available.
	List display	●	—	—	Quick control from display available.
	Tree display	●	—	—	Quick control from display available.
Operation control	Start/Stop, Operation mode, Room temperature	●	—	—	
	Fan speed, Air flow direction	●	—	—	
	Economy mode	●	—	—	
	Antifreeze	●	—	—	
	Remote control prohibition setting	●	—	—	
	Temperature upper and lower limit setting	●	—	—	
	Filter sign reset	●	—	—	
	Human sensing	●	—	—	
	Annual schedule	●	—	—	Week of year, day of month, day of week setting. Holiday special day settings.
	Low noise mode weekly schedule	●	—	—	Outdoor unit control only.
	Number of groups	1,600	—	—	
	Group in group	3 Levels	—	—	Lv.1 – 2 – 3.
	Max. overlap definitions	1,600	—	—	1 unit may belong to up to 1,600 groups.
	Auto generation	●	—	—	By site, building and floor.
	Memory operation	●	—	—	Operation pattern memorized and reused.
	Pattern operation	●	—	—	Reuse operation pattern once used.
Operation status monitoring	Controlled status	●	—	—	See items controlled by operation.
	Special operation	●	—	—	Defrost, Oil Recovery.
Room Temp.	Room temperature	●	—	—	*2
Error management	Error notification	●	—	—	
	Audible alarm	●	—	—	
	Error e-mail notification	●	—	—	
History management	Error history	1 year	—	—	
	Operation control & status history	1 year	—	—	
Energy saving management	Indoor unit rotation	—	●		
	Outdoor unit capacity save	—	●		
	Peak cut control	—	1 month		
	Power consumption monitor	—	●		
	Electricity meters supported	—	200		Outdoor unit required per connection
	Power consumption information	—	3 years		
Electricity charge apportionment	Apportionment charge calculation	●	—		
	Apportionment charge bill creation	●	—		
	Tenant (block) setting	1600	—		
	Common facilities apportionment setting	●	—		
	Rated power consumption allotment setting	●	—		
	Electricity meters supported	—	200		Same meters used for energy saving.
	Electricity charge apportionment period	2 years	—		
	Prepaid air conditioning	—	—	●	
	Cooling and Heating information	●	—	—	
Remote control	Internet, telephone line support	●	—		
	Max. client connection per server	5	—		
	Max. host connection from client	10	—		
	Data encryption	●	—		SSL used.

CONTROL SYSTEM

Type	Function	UTY-APGXZ1	UTY-PEGXZ1 Option	UTY-PPGXP2 Option	Remark
Others	External device control function	●	—	—	
	WEB Operation	●	—	—	
	User control	●	—	—	Authorization level setting.
	Database import / export (manual)	●	—	—	
	Periodical backup	●	—	—	
	The refrigerant systems of non-operation status function	●	—	—	
	Auto Start Setting	●	—	—	
	Multiple language display	●	●	—	English, Chinese, French, German, Spanish, Russian, Polish.
	Floor layout editor	●	—	—	
	Floor layout import/export	●	—	—	

NOTE: The S, V, VR-II, V-III, V-II, J-III, J-IIIL, J-II, J-IIS series are supported, but with the S and V series, there are some functions that cannot be used, such as energy saving function and electricity meter use.

- The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously.

*1: Energy saving software (UTY-PEGX) is available for the indoor units and the outdoor units with revision code B or later.

*2: To display the room temperature on the monitor, connect the wired remote controller to the indoor unit, and perform the function setting for detecting the temperature using the mounted sensor.

CONTROL SYSTEM

2-1-2. MODEL : UTY-APGX (Option: UTY-PEGX)



This system realizes the advanced general monitoring & control of VRF system from small scale buildings to large scale buildings.

- Maximum of 4 network systems, 1600 indoor units can be controlled.
- Supports VRF VR-II Series, V-III Series, V-II Series, J-IIIL Series, J-III Series, J-II Series, J-IIS Series, V Series & S Series. *1
- In addition to air conditioning precision control function, central remote control, electricity charge calculation, schedule management, and energy saving functions are strengthened and building manager and owner needs are met.
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface and personal computer are locally purchased items.
- Extended feature*2 supported by use of options.

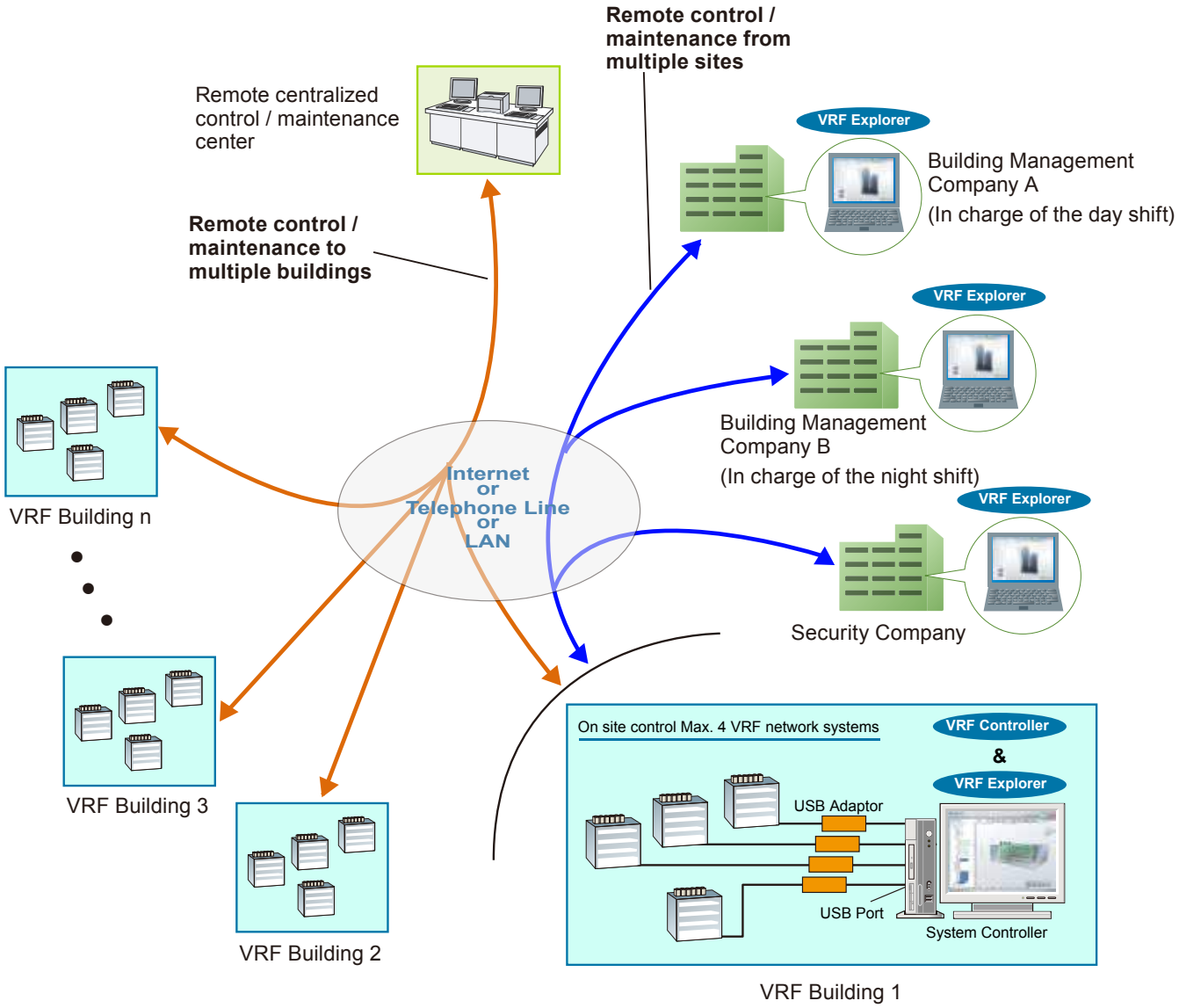
*1: Different VRF series may be connected for each of the 4 VRF networks supported by the System Controller, but different series may not coexist within the same network.

*2: Electricity charge apportionment using electricity meter, energy saving control.
(Only for VR-II, V-III, V-II, J-III, J-IIIL, J-II, J-IIS Series)

CONTROL SYSTEM

■ SYSTEM DIAGRAM

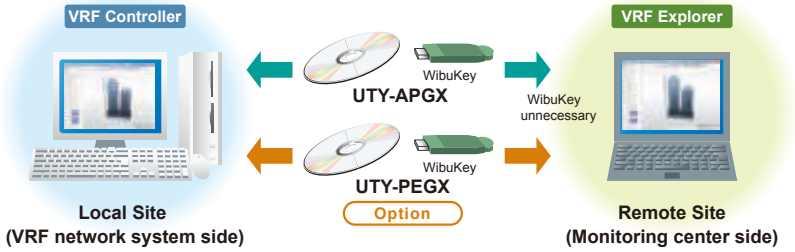
- System controller may be used on site or remotely over various networks for remote central control.
- System controller consists of VRF Controller software and VRF Explorer software, both software are working together.
- VRF Controller software runs in the background and communicate with VRF System.
- VRF Explorer software provides user interface and communicate with the VRF Controller.
- VRF Controller and VRF Explorer software may run in a single PC or in different PCs separated by network.
- VRF Explorer software does not require WibuKey (Software protection key).



■ PACKING LIST

Name and shape	Quantity	Application
DVD-ROM 	1	Includes the software and manuals for System Controller. Both VRF Controller and VRF Explorer software are included.
WibuKey (Software protection key) 	1	Software protection key to be connected to an USB port on the PC that the System Controller is installed. System Controller runs only on a PC with this WibuKey. However, this WibuKey is not required for remote VRF Explorer software.

■ SOFTWARE CONFIGURATION



Any number can be installed in remote site personal computers

System Controller UTY-APGX can be installed in the local site PCs (VRF Controller) connected to the VRF network system, and multiple remote site PCs (VRF Explorer) can be connected to VRF Controller via Internet or LAN. Just this single product creates the control, management, and monitoring environment for the customer's properties including remote operation.

*The WibuKey is not required for PCs on the remote site side. Some functions, such as equipment registration, and input/output, are invalid on the remote site side.

Optional software to strengthen the energy saving function

Installing the optional UTY-PEGX will strengthen the energy saving management function.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 2 USB ports are required for WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible
Software	Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

■ AVAILABLE OPTION

Energy Manager	UTY-PEGX	Additional support for energy saving function and electricity charge apportionment using electricity meter.

CONTROL SYSTEM

■ SPECIFICATION SUMMARY

Type		Function	UTY-APGX	UTY-PEGX *1 Option	Remark
System specification		Max. System Controller per VRF Network	1	—	
		Max. VRF networks supported	4	—	Site with up to 4 VRF networks may be administered with 1 System Controller
		Max. indoor units / remote controller groups per VRF network	400	—	
		Max. indoor units / remote controller groups per System Controller	1,600	—	4 VRF networks
Site supervision		Multiple sites display	10	—	
		2D/3D graphical layout view	●	—	2D: Site, floor, 3D: Building Quick control from display available.
		List display	●	—	Quick control from display available.
		Tree display	●	—	Quick control from display available.
Operation control	Individual	Start/Stop, Operation mode, Room temperature	●	—	
		Fan speed, Air flow direction	●	—	
		Economy mode	●	—	
		Antifreeze	●	—	
		Remote control prohibition setting	●	—	
		Temperature upper and lower limit setting	●	—	
		Filter sign reset	●	—	
	Schedule	Annual schedule	●	—	Week of year, day of month, day of week setting. Holiday special day settings.
		Low noise mode weekly schedule	●	—	Outdoor unit control only.
	Group management	Number of groups	1,600	—	
		Group in group	3 Levels	—	Lv.1 – 2 – 3.
		Max. overlap definitions	1,600	—	1 unit may belong to up to 1,600 groups.
		Auto generation	●	—	By site, building and floor.
	Others	Memory operation	●	—	Operation pattern memorized and reused.
		Pattern operation	●	—	Reuse operation pattern once used.
Operation status monitoring		Controlled status	●	—	See items controlled by operation.
		Special operation	●	—	Defrost, Oil Recovery.
Error management		Error notification	●	—	
		Audible alarm	●	—	
		Error e-mail notification	●	—	
History management		Error history	1 year	—	
		Operation control & status history	1 year	—	
Energy saving management		Indoor unit rotation	—	●	
		Outdoor unit capacity save	—	●	
		Peak cut control	—	1 month	
		Power consumption monitor	—	●	
		Electricity meters supported	—	200	Outdoor unit required per connection
		Power consumption information	—	3 years	
Electricity charge apportionment		Apportionment charge calculation	●	—	
		Apportionment charge bill creation	●	—	
		Tenant (block) setting	1600	—	
		Common facilities apportionment setting	●	—	
		Rated power consumption allotment setting	●	—	
		Electricity meters supported	—	200	Same meters used for energy saving.
		Electricity charge apportionment period	2 years	—	
Remote control		Internet, telephone line support	●	—	
		Max. client connection per server	5	—	
		Max. host connection from client	10	—	
		Data encryption	●	—	SSL used.
Others		User control	●	—	Authorization level setting.
		Database import / export	●	—	
		Multiple language display	●	●	English, Chinese, French, German, Spanish, Russian, Polish.
		Floor layout editor	●	—	
		Floor layout import/export	●	—	

NOTE: The S, V, VR-II, V-III, V-II, J-IIIL, J-III, J-II, J-IIS series are supported, but with the S and V series, there are some functions that cannot be used, such as energy saving function and electricity meter use.

- The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously.

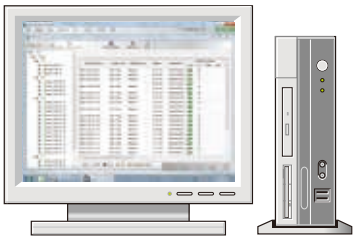
*1: Energy saving software (UTY-PEGX) is available for the indoor units and the outdoor units with revision code B or later.

CONTROL SYSTEM

2-2. SYSTEM CONTROLLER LITE

2-2-1. MODEL : UTY-ALGXZ1

(Option: UTY-PLGXA2, UTY-PLGXR2, UTY-PLGXE2, UTY-PLGXP2, UTY-PLGXX2)



System Controller Lite is advanced software of central controller for small and medium buildings. It can be supported by additional options, electricity charge apportionment, remote monitoring, and energy saving in order to meet your demands.

- Supports up to 1 VRF network system and Max. controllable 400 indoor units.
- Supports VRF VR-II Series, V-III Series, V-II Series, J-III Series, J-IIIL Series, J-II Series, J-IIS Series, V Series & S Series. *1
- Various high level functions from individual control to yearly schedule management, operation history and error history management.
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface and personal computer are locally purchased items.
- The status of units can be monitored and operated for each site, group, or unit. *1

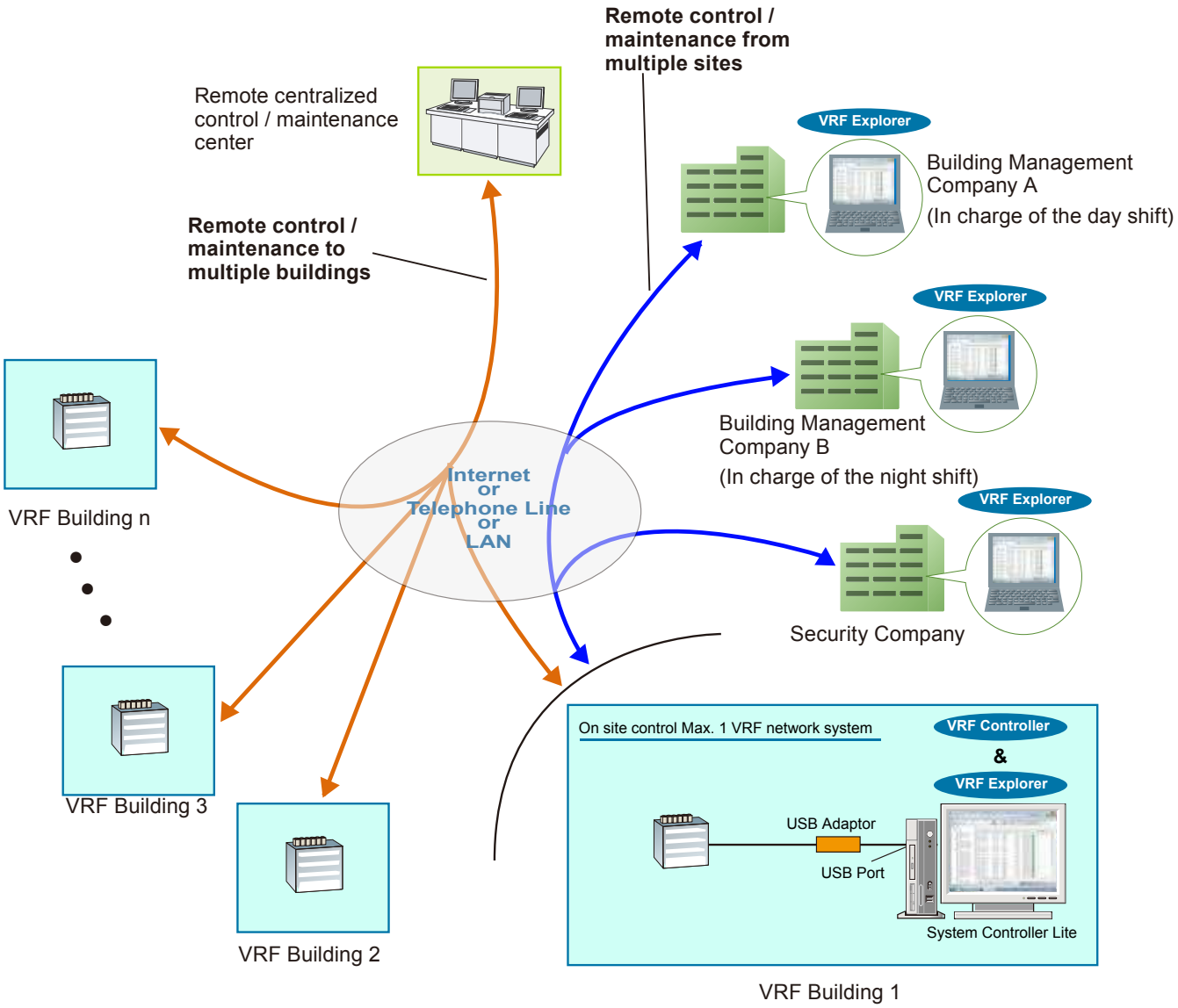
*1: 2D floor layout / 3D building display are not available. Use System Controller (UTY-APGX), if you want to use these functions.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

- System controller may be used on site or remotely over various networks for remote central control. (*1)
- System controller consists of VRF Controller software and VRF Explorer software, both software are working together.
- VRF Controller software runs in the background and communicate with VRF System.
- VRF Explorer software provides user interface and communicate with the VRF Controller.
- VRF Controller and VRF Explorer software may run in a single PC or in different PCs separated by network. (*1)
- VRF Explorer software does not require WibuKey (software protection key).

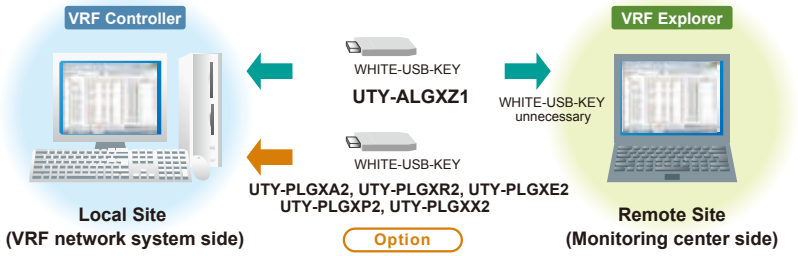
*1: UTY-PLGXR2 option is necessary.



■ PACKING LIST

Name and shape	Quantity	Application
WHITE-USB-KEY (software protection key with software) 	1	Software protection key to be connected to an USB port on the PC that the System Controller is installed. System Controller runs only on a PC with this WHITE-USB-KEY. However, this WibuKey is not required for remote VRF Explorer software.

■ SOFTWARE CONFIGURATION



Any number can be installed in remote site personal computers

System Controller Lite UTY-ALGXZ1 can be installed in the local site PCs (VRF Controller) connected to the VRF network system, and multiple remote site PCs (VRF Explorer) can be connected to VRF Controller via Internet or LAN. Just this single product creates the control, management, and monitoring environment for the customer's properties including remote operation.

*The WHITE-USB-KEY is not required for PCs on the remote site side. Some functions, such as equipment registration, and input/output, are invalid on the remote site side.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

CONTROL SYSTEM

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 2 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 1 USB ports are required for White USB Key connection - 1 USB port is required for Echelon® U10 USB Network Interface * The maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible
Software	Adobe® Reader® 9.0 or later

CONTROL SYSTEM

■ AVAILABLE OPTION

Electricity charge apportionment option	UTY-PLGXA2	Apportions the power used by indoor and outdoor units, and automatically calculates the electricity charge such as for hotels or muli-tenant buildings. Computation linked with an electric meter is also possible.
Remote access option	UTY-PLGXR2	VRF system can be monitored remotely from multiple PCs. Multiple VRF systems can be controlled or monitored from 1 PC.
Energy saving option	UTY-PLGXE2	A variety of energy saving operations can be set and managed depending on the season, weather, and time period.
Prepaid air conditioning	UTY-PLGXP2	The prepaid management of VRF air conditioner is performed and the collection of charge for air conditioning is supported for building administrator.
External device control	UTY-PLGXP2	By enabling central control of third-party external devices, burden on maintenance and administration of the devices by the building administrator is reduced.

■ SPECIFICATION SUMMARY

Type		Function	UTY-ALGXZ1	UTY-PLGXA2 Option	UTY-PLGXR2 Option	UTY-PLGXE2 Option *1	UTY-PLGXP2 Option	UTY-PLGXX2 Option	Remark
System specification		Max. System Controller Lite per VRF Network	1	—	—	—	—	—	
		Max. VRF networks supported	1	—	—	—	—	—	
		Max. indoor units / remote controller groups per VRF network	400	—	—	—	—	—	
		Max. indoor units / remote controller groups per System Controller Lite	400	—	—	—	—	—	
Site supervision		Multiple sites display	10	—	—	—	—	—	
		2D/3D graphical layout view	—	—	—	—	—	—	.
		List display	●	—	—	—	—	—	Quick control from display available.
		Tree display	●	—	—	—	—	—	Quick control from display available.
Operation control	Individual	Start/Stop, Operation mode, Room temperature	●	—	—	—	—	—	
		Fan speed, Air flow direction	●	—	—	—	—	—	
		Economy mode	●	—	—	—	—	—	
		Antifreeze	●	—	—	—	—	—	
		Remote control prohibition setting	●	—	—	—	—	—	
		Temperature upper and lower limit setting	●	—	—	—	—	—	
		Filter sign reset	●	—	—	—	—	—	
		Human sensing	●	—	—		—	—	
	Schedule	Annual schedule	●	—	—	—	—	—	Week of year, day of month, day of week setting. Holiday special day settings.
		Low noise mode weekly schedule	●	—	—	—	—	—	Outdoor unit control only.
	Group management	Number of groups	400	—	—	—	—	—	
		Group in group	3 Levels	—	—	—	—	—	Lv.1 – 2 – 3.
		Max. overlap definitions	400	—	—	—	—	—	1 unit may belong to up to 400 groups.
		Auto generation	●	—	—	—	—	—	By site, building and floor.
	Others	Memory operation	●	—	—	—	—	—	Operation pattern memorized and reused.
		Pattern operation	●	—	—	—	—	—	Reuse operation pattern once used.
Operation status monitoring		Controlled status	●	—	—	—	—	—	See items controlled by operation.
		Special operation	●	—	—	—	—	—	Defrost, Oil Recovery.
Room Temp.		Room temperature	●	—	—		—	—	*2
Error management		Error notification	●	—	—	—	—	—	
		Audible alarm	●	—	—	—	—	—	
		Error e-mail notification	●	—	—	—	—	—	
History management		Error history	1 year	—	—	—	—	—	
		Operation control & status history	1 year	—	—	—	—	—	
Energy saving management		Indoor unit rotation	—	—	—	●	—	—	
		Outdoor unit capacity save	—	—	—	●	—	—	
		Peak cut control	—	—	—	1 month	—	—	
		Power consumption monitor	—	—	—	●	—	—	
		Electricity meters supported	—	—	—	200	—	—	Outdoor unit required per connection
		Power consumption information	—	—	—	3 years	—	—	
Electricity charge apportionment		Apportionment charge calculation	—	●	—	—	—	—	
		Apportionment charge bill creation	—	●	—	—	—	—	
		Tenant (block) setting	—	1600	—	—	—	—	
		Common facilities apportionment setting	—	●	—	—	—	—	
		Rated power consumption allotment setting	—	●	—	—	—	—	
		Electricity meters supported	—	200	—	—	—	—	Same meters used for energy saving.
		Electricity charge apportionment period	—	2 years	—	—	—	—	
		Prepaid air conditioning	—	—	—	—	●	—	
		Cooling and Heating information	—	●	—		—	—	
Remote control		Internet, telephone line support	—	—	●	—	—	—	
		Max. client connection per server	—	—	5	—	—	—	
		Max. host connection from client	—	—	10	—	—	—	
		Data encryption	—	—	●	—	—	—	SSL used.

CONTROL SYSTEM

Type	Function	UTY-ALGXZ1	UTY-PLGXA2 Option	UTY-PLGXR2 Option	UTY-PLGXE2 Option *1	UTY-PLGXP2 Option	UTY-PLGXX2 Option	Remark
Others	External device control function	—	—	—	—	—	●	
	WEB Operation	●	—	—	—	—	—	
	User control	●	—	—	—	—	—	Authorization level setting.
	Database import / export	●	—	—	—	—	—	
	Periodical backup	●	—	—	—	—	—	
	The refrigerant systems of non-operation status function	●	—	—	—	—	—	
	Auto Start Setting	●	—	—	—	—	—	
	Multiple language display	●	●	●	●	—	—	English, Simplified Chinese, French, German, Spanish, Russian, Polish.
	Floor layout editor	●	—	—	—	—	—	
	Floor layout import/export	●	—	—	—	—	—	

NOTE: The S, V, VR-II, V-III, V-II, J-III, J-IIIL, J-II, J-IIS series are supported, but with the S and V series, there are some functions that cannot be used, such as energy saving function and electricity meter use.

● The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously.

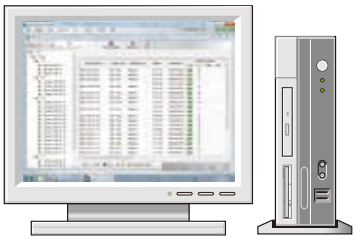
*1: Energy saving option (UTY-PLGXE2) is available for the indoor units and the outdoor units with revision code B or later.

*2: To display the room temperature on the monitor, connect the wired remote controller to the indoor unit, and perform the function setting for detecting the temperature using the mounted sensor.

CONTROL SYSTEM

2-2-2. MODEL : UTY-ALGX

(Option: UTY-PLGXA1, UTY-PLGXR1, UTY-PLGXE1)



System Controller Lite is advanced software of central controller for small and medium buildings. It can be supported by additional options, electricity charge apportionment, remote monitoring, and energy saving in order to meet your demands.

- Supports up to 1 VRF network system and Max. controllable 400 indoor units.
- Supports VRF VR-II Series, V-III Series, V-II Series, J-IIIL Series, J-III Series, J-II Series, J-IIS Series, V Series & S Series. *1
- Various high level functions from individual control to yearly schedule management, operation history and error history management.
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface and personal computer are locally purchased items.
- The status of units can be monitored and operated for each site, group, or unit. *1

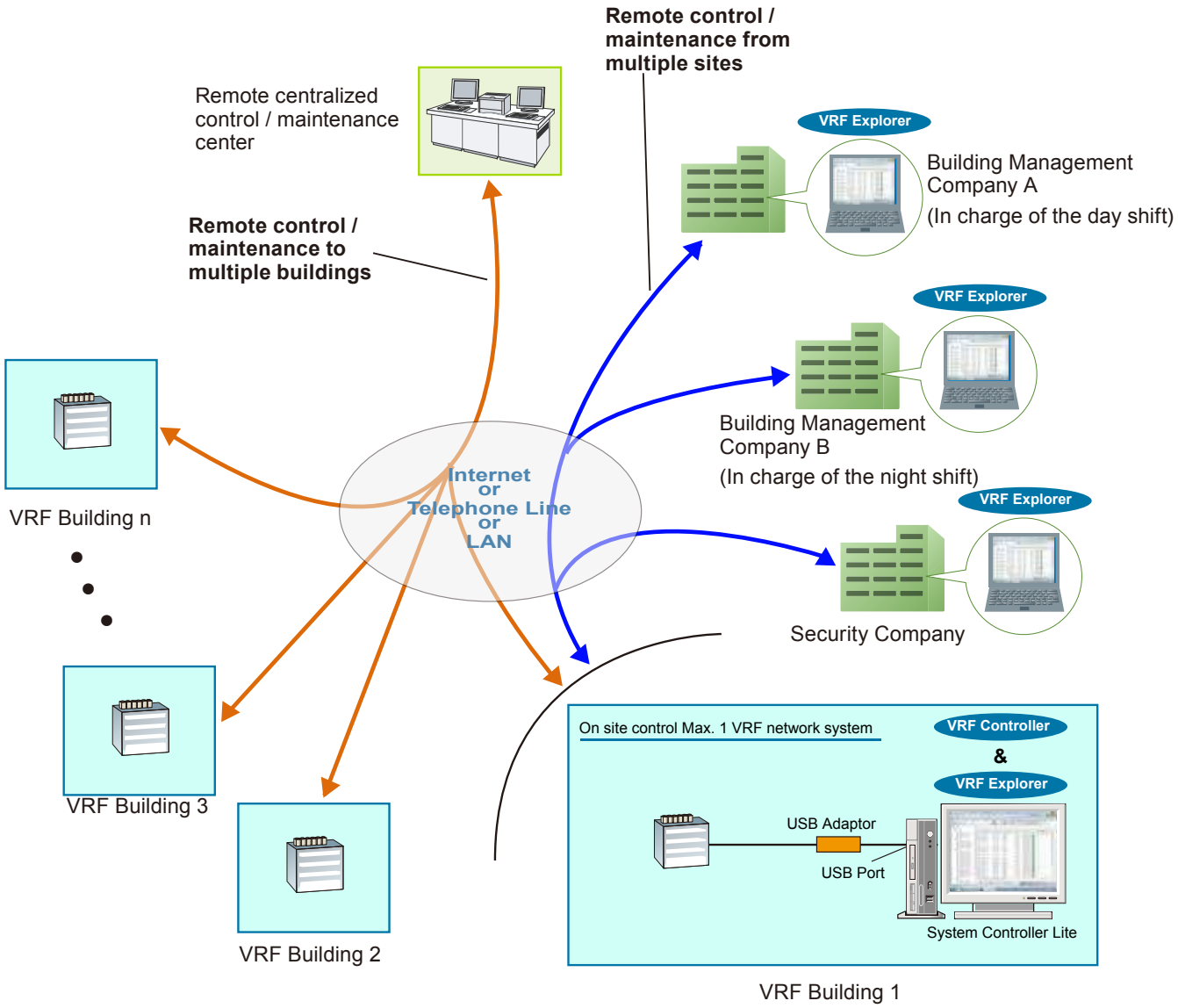
*1: 2D floor layout / 3D building display are not available. Use System Controller (UTY-APGX), if you want to use these functions.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

- System controller may be used on site or remotely over various networks for remote central control. (*1)
- System controller consists of VRF Controller software and VRF Explorer software, both software are working together.
- VRF Controller software runs in the background and communicate with VRF System.
- VRF Explorer software provides user interface and communicate with the VRF Controller.
- VRF Controller and VRF Explorer software may run in a single PC or in different PCs separated by network. (*1)
- VRF Explorer software does not require WibuKey (software protection key).

*1: UTY-PLGXR1 option is necessary.



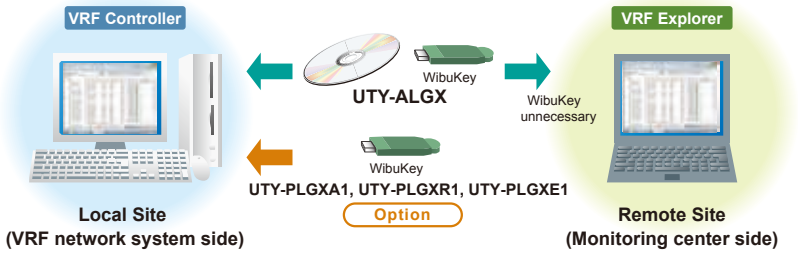
CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
DVD-ROM *1 	1	Includes the software and manuals for System Controller Lite. Both VRF Controller and VRF Explorer software are included.
WibuKey (Software protection key) 	1	Software protection key to be connected to an USB port on the PC that the System Controller is installed. System Controller runs only on a PC with this WibuKey. However, this WibuKey is not required for remote VRF Explorer software.

*1: DVD-ROM is not attached to OPTION (UTY-PLGXA1, UTY-PLGXR1, UTY-PLGXE1).

■ SOFTWARE CONFIGURATION



Any number can be installed in remote site personal computers

System Controller Lite UTY-ALGX can be installed in the local site PCs (VRF Controller) connected to the VRF network system, and multiple remote site PCs (VRF Explorer) can be connected to VRF Controller via Internet or LAN. Just this single product creates the control, management, and monitoring environment for the customer's properties including remote operation.

*The WibuKey is not required for PCs on the remote site side. Some functions, such as equipment registration, and input/output, are invalid on the remote site side.

Optional software to strengthen the various functions

- Electricity charge apportionment function can be added by installing optional UTY-PLGXA1.
- Remote centralized control function can be added by installing optional UTY-PLGXR1.
- Energy saving management function can be added by installing optional UTY-PLGXE1.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

CONTROL SYSTEM

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 5 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 4 USB ports are required for WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface * The maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible
Software	Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

CONTROL SYSTEM

■ AVAILABLE OPTION

Electricity Charge Apportionment option	UTY-PLGXA1	Apportions the power used by indoor and outdoor units, and automatically calculates the electricity charge such as for hotels or muli-tenant buildings. Computation linked with an electric meter is also possible.
Remote Access option	UTY-PLGXR1	VRF system can be monitored remotely from multiple PCs. Multiple VRF systems can be controlled or monitored from 1 PC.
Energy Saving option	UTY-PLGXE1	A variety of energy saving operations can be set and managed depending on the season, weather, and time period.

■ SPECIFICATION SUMMARY

Type		Function	UTY-ALGX	UTY-PLGXA1 Option	UTY-PLGXR1 Option	UTY-PLGXE1 Option *1	Remark
System specification		Max. System Controller Lite per VRF Network	1	—	—	—	
		Max. VRF networks supported	1	—	—	—	
		Max. indoor units / remote controller groups per VRF network	400	—	—	—	
		Max. indoor units / remote controller groups per System Controller Lite	400	—	—	—	
Site supervision		Multiple sites display	10	—	—	—	
		2D/3D graphical layout view	—	—	—	—	.
		List display	●	—	—	—	Quick control from display available.
		Tree display	●	—	—	—	Quick control from display available.
Operation control	Individual	Start/Stop, Operation mode, Room temperature	●	—	—	—	
		Fan speed, Air flow direction	●	—	—	—	
		Economy mode	●	—	—	—	
		Antifreeze	●	—	—	—	
		Remote control prohibition setting	●	—	—	—	
		Temperature upper and lower limit setting	●	—	—	—	
		Filter sign reset	●	—	—	—	
	Schedule	Annual schedule	●	—	—	—	Week of year, day of month, day of week setting. Holiday special day settings.
		Low noise mode weekly schedule	●	—	—	—	Outdoor unit control only.
	Group management	Number of groups	400	—	—	—	
		Group in group	3 Levels	—	—	—	Lv.1 – 2 – 3.
		Max. overlap definitions	400	—	—	—	1 unit may belong to up to 400 groups.
		Auto generation	●	—	—	—	By site, building and floor.
	Others	Memory operation	●	—	—	—	Operation pattern memorized and reused.
		Pattern operation	●	—	—	—	Reuse operation pattern once used.
Operation status monitoring		Controlled status	●	—	—	—	See items controlled by operation.
		Special operation	●	—	—	—	Defrost, Oil Recovery.
Error management		Error notification	●	—	—	—	
		Audible alarm	●	—	—	—	
		Error e-mail notification	●	—	—	—	
History management		Error history	1 year	—	—	—	
		Operation control & status history	1 year	—	—	—	
Energy saving management		Indoor unit rotation	—	—	—	●	
		Outdoor unit capacity save	—	—	—	●	
		Peak cut control	—	—	—	1 month	
		Power consumption monitor	—	—	—	●	
		Electricity meters supported	—	—	—	200	Outdoor unit required per connection
		Power consumption information	—	—	—	3 years	
Electricity charge apportionment		Apportionment charge calculation	—	●	—	—	
		Apportionment charge bill creation	—	●	—	—	
		Tenant (block) setting	—	1600	—	—	
		Common facilities apportionment setting	—	●	—	—	
		Rated power consumption allotment setting	—	●	—	—	
		Electricity meters supported	—	200	—	—	Same meters used for energy saving.
		Electricity charge apportionment period	—	2 years	—	—	
Remote control		Internet, telephone line support	—	—	●	—	
		Max. client connection per server	—	—	5	—	
		Max. host connection from client	—	—	10	—	
		Data encryption	—	—	●	—	SSL used.
Others		User control	●	—	—	—	Authorization level setting.
		Database import / export	●	—	—	—	
		Multiple language display	●	●	●	●	English, Simplified Chinese, French, German, Spanish, Russian, Polish.
		Floor layout editor	●	—	—	—	
		Floor layout import/export	●	—	—	—	

NOTE: The S, V, VR-II, V-III, V-II, J-IIIL, J-III, J-II, J-IIS series are supported, but with the S and V series, there are some functions that cannot be used, such as energy saving function and electricity meter use.

● The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously.

*1: Energy saving option (UTY-PLGXE1) is available for the indoor units and the outdoor units with revision code B or later.

CONTROL SYSTEM

2-3. TOUCH PANEL CONTROLLER

■ MODEL: UTY-DTG∗Z1 (Option: UTY-PTGXA)

■ MODEL: UTY-DTG∗



- Large-sized 7.5-inch TFT color.
- LCD easy finger touch operation.
- Stylish shape and design to suit all application.
- No additional component is required for installation.
- Up to 400 indoor units can be controlled.
- Selectable 2 display types (Icon / List) in monitoring mode
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)

CONTROL SYSTEM

■ FUNCTIONS

● MODEL: UTY-DTG∗Z1

Item		Main unit	PC / Tablet	Description
Installation	Indoor unit registration	●	—	Indoor unit registration. Max. 400 units. (Set data can be written to and read from USB flash drive)
	Functions setting	●	—	Temperature set point limitation, external input, central operation on/off setting.
Monitor	Display switching	●	●	Icon display, list display
	Display units	●	●	ALL, group, individual (remote control group)
	Monitor contents (icon display)	●	●	Group name, operation, operation mode, set temperature, time, errors, timer setting, filter sign
	Monitor contents (list display)	●	●	Group name, operation, operation mode, set temperature, airflow, air direction, special operation, anti-freeze, time, errors, timer setting, filter sign
	Error list	●	●	Group name, remote control group name, address, error code
	Special state	●	●	Display during special operation
Control	Control units	●	●	ALL, group, individual (remote control group)
	Control contents	●	●	Operation, operation mode, set temperature, airflow, RC Prohibition, filter sign reset
	Detailed control contents	●	●	Air direction, energy saving, anti-freeze, test run
Setting	Individual setting reset of air flow direction	—	●	Sets the position of indoor unit's airflow direction louver individually.
	Human sensor	—	●	Sets the human sensor on the indoor unit.
	Setting temperature limitation of room	●	●	Adjusts the upper and lower limits of temperature for the indoor unit.
	Language setting	●	●	Design considering multi-language correspondence. *1
	Date and time	●	●	Time display switching, year/month/day display switching, system clock setting, summer time
	Time zone	●	●	Set the time zone of the area where this unit is used
	Panel cleaning and correction	●	—	Select display area for panel cleaning. User can select black screen on display.
	Group	●	●	Stages: Max. 3 stages Settable up to 400 groups. (Set data can be written to and read from USB flash drive)
	Background light and beep sound	●	—	Backlighting off time and brightness setting, BEEP sound operation setting
	Password	●	—	Management level: 3 kinds
	Schedule timer	●	●	Max. 30 items settable
	Temperature range	●	—	Celsius/Fahrenheit switching, cooling, heating, and AUTO each settable.
	Network	●	●	function of Email notification for malfunction, or electricity charge apportionment option is used via LAN
	Low noise operation	●	●	"Low noise operation" is set to all the outdoor units registered by this controller.
	Electricity charge apportionment *2	●	●	Start/stop of ECA, importing/exporting of ECA setting, and exporting ECA data.
	Remote language additional registration	—	●	Additional language can be integrated on remote device by creating language database. Additional language is displayed on only the remote device and touch panel controller cannot be added other language.
	Auto OFF timer	—	●	Function to stop the operation automatically when a preset time lapses after turning on the operation.
	Set temperature auto return	—	●	Function to restore the temperature to the original set temperature when a preset time lapses after changing the set temperature.
	Display item setting	—	●	Sets the items to be displayed on the monitor.
	Failure notification Email	—	●	Failure notification Email: Sends a notification Email to the preset Email address in the event of failure.
Maintenance	Error history	●	●	Recording of Max. 10 errors each for touch panel controller and each unit (indoor unit, outdoor unit)
	Status history	●	●	Recording of Max. 100 operations each for each indoor unit. Writable to USB flash drive.
	Operation history	●	●	Recording of Max. 100 operations. Writable to USB flash drive.
	Version display	●	●	Version display
Others	External input/output	●	—	Input: Batch operation/stop, emergency stop, electricity meter Output: Operation monitoring, error

CONTROL SYSTEM

- When Start/Stop, operation mode setting, room temp. setting, fan speed setting, air flow direction setting, swing setting, economy mode, and anti freeze setting are changed frequently by using the central controller like System Controller, Touch Panel Controller, etc. or from Building Management System (BMS) via BACnet® Gateway or via Network Convertor, the number of operations for each indoor unit must not exceed 7,500 times/year.

  If the number of setting change exceeds the above specified number, the rewriting count limit of the non-volatile memory (memory built into the air conditioner and used for recording settings) will be exceeded, and may cause breakdown.

*1 : Product specifications are subject to change without notice.

*2 : Option

CONTROL SYSTEM

● MODEL: UTY-DTG∗

No.	Item		Description
1	Installation	Language setting	Design considering multi-language correspondence. *1
		Indoor unit registration	Indoor unit registration. Max. 400 units. (Set data can be written to and read from USB flash drive)
		Functions setting	Temperature set point limitation, external input, central operation on/off setting.
2	Monitor	Display switching	Icon display, list display
		Display units	ALL, group, individual (remote control group)
		Monitor contents (icon display)	Group name, operation, operation mode, set temperature, time, errors, timer setting, filter sign
		Monitor contents (list display)	Group name, operation, operation mode, set temperature, airflow, air direction, special operation, anti-freeze, time, errors, timer setting, filter sign
		Error list	Group name, remote control group name, address, error code
		Special state	Display during special operation
3	Control	Control units	ALL, group, individual (remote control group)
		Control contents	Operation, operation mode, set temperature, airflow, RC Prohibition, filter sign reset
		Detailed control contents	Air direction, energy saving, anti-freeze, test run
4	Setting	Date and time	Time display switching, year/month/day display switching, system clock setting, summer time
		Panel cleaning and correction	Select display area for panel cleaning. User can select black screen on display.
		Group	Stages: Max. 3 stages Settable up to 400 groups. (Set data can be written to and read from USB flash drive)
		Background light and beep sound	Backlighting off time and brightness setting, BEEP sound operation setting
		Password	Management level: 3 kinds
		Schedule timer	Max. 30 items settable
		Temperature range	Celsius/Fahrenheit switching, cooling, heating, and AUTO each settable.
		Network	function of Email notification for malfunction, or electricity charge apportionment option is used via LAN
		Low noise operation	"Low noise operation" is set to all the outdoor units registered by this controller.
		Time zone	Set the time zone of the area where this unit is used
		Electricity charge apportionment	Start/stop of ECA, importing/exporting of ECA setting, and exporting ECA data.
5	Remote connection	User setting (Admin:5, User:100)	Register the user or administrator who is permitted to use remote connection operation.
		Automatic logout	Can be set Automatic logout.
		Permission	Can be select the functions.
		Unit setting	Can be select the units.
		Mail setting	When an error is generated at the touch panel controller or a registered outdoor unit or indoor unit, an Email can be sent to a pre-registered address.
6	Others	External input/output	Input: Batch operation/stop, emergency stop, electricity meter Output: Operation monitoring, error

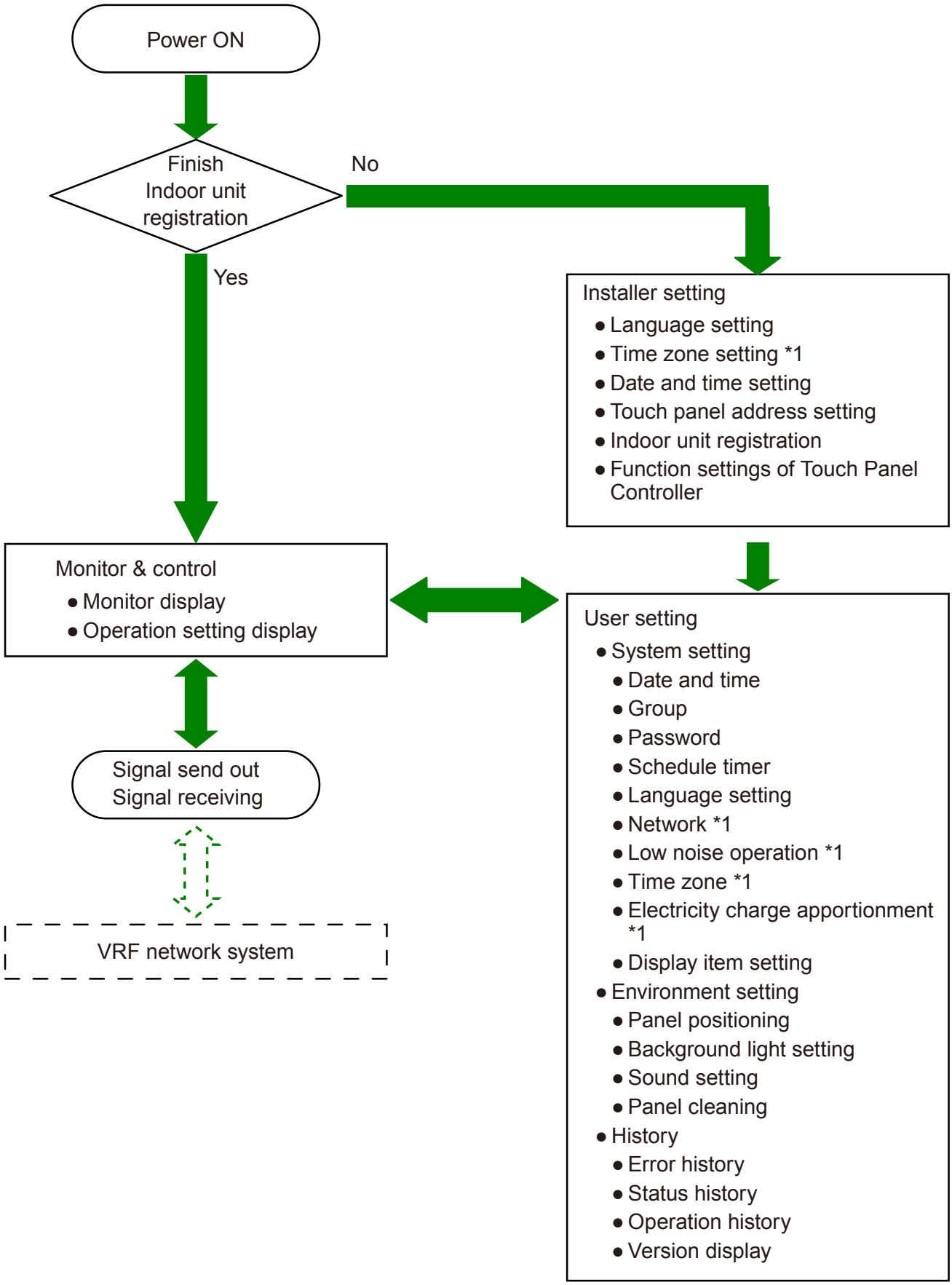
- When Start/Stop, operation mode setting, room temp. setting, fan speed setting, air flow direction setting, swing setting, economy mode, and anti freeze setting are changed frequently by using the central controller like System Controller, Touch Panel Controller, etc. or from Building Management System (BMS) via BACnet® Gateway or via Network Convertor, the number of operations for each indoor unit must not exceed 7,500 times/year.

  If the number of setting change exceeds the above specified number, the rewriting count limit of the non-volatile memory (memory built into the air conditioner and used for recording settings) will be exceeded, and may cause breakdown.

*1 : Product specifications are subject to change without notice.

CONTROL SYSTEM

■ STATE TRANSITION DIAGRAM



*1: Only for UTY-DTG*Z1

CONTROL SYSTEM

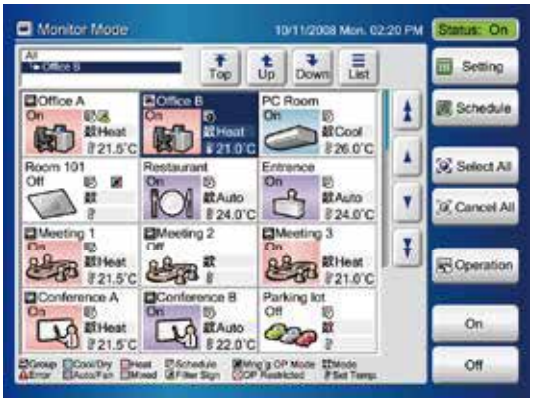
■ MAIN FUNCTIONS AND SCREEN EXAMPLES

● Monitor display example

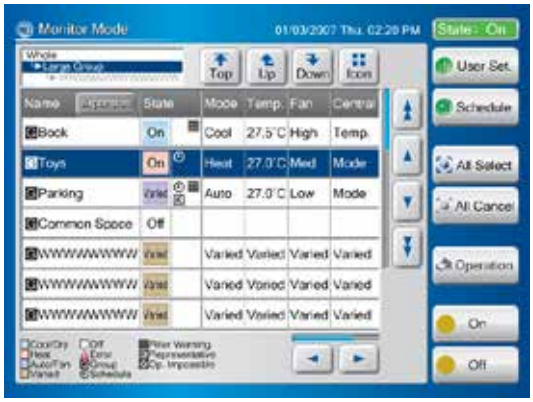
An easy-to-use display mode can be selected.

Easy-to-understand GUI of adopted icon.

Icon display



List display example



● Operation setting example

Large button is designed for easy to access.

Operation setting display



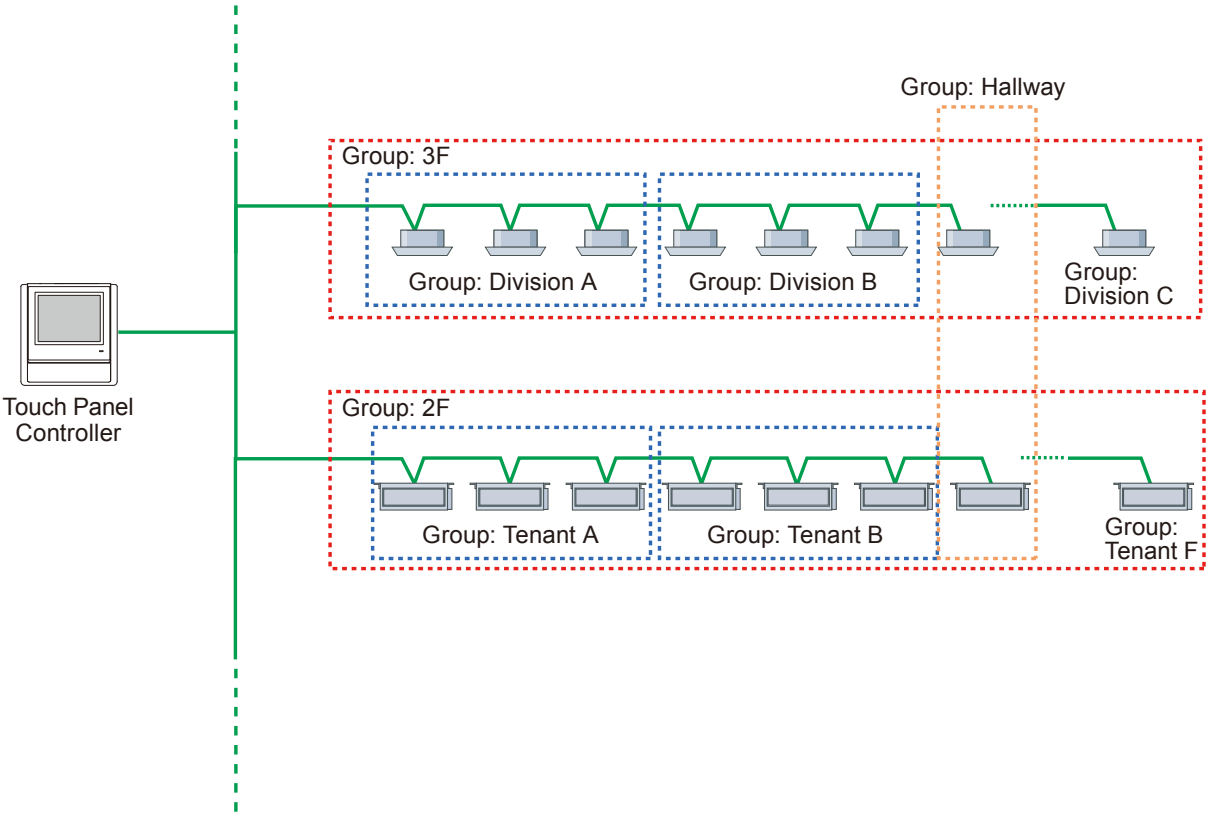
Optional setting display



CONTROL SYSTEM

● Group setting

Groups can be arbitrarily set in easy to manage units as shown in the figure.
Control and monitoring are performed in these group units.



Group setting screen



CONTROL SYSTEM

● System schedule timer

Annual schedule can be set of a maximum 30 items.

Schedule setting screen

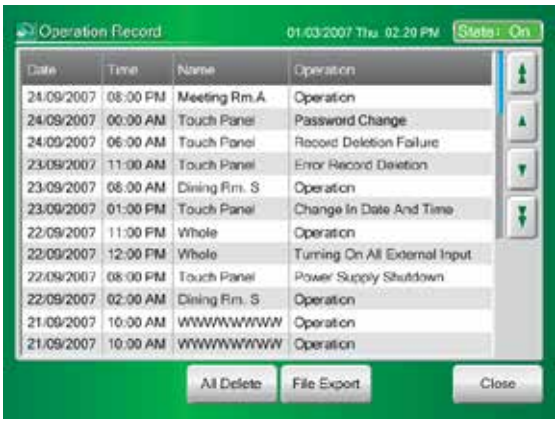


● History recording and display

Error, status and operation histories can be recorded. Each recording can be also written to USB flash drive.

- Error history: Max. 10 items each recorded for touch panel controller and each unit (indoor unit, outdoor unit)
- Status history: Max. 100 operations each recorded for indoor unit of each room
- Operation history: Operation of Max. 100 operations recorded

Optional history screen



CONTROL SYSTEM

■ SCREEN EXAMPLES (For Remote monitoring)

● Main screens of Monitor Mode example

Icon display



List display



● Main screens of Control example

Operation setting display

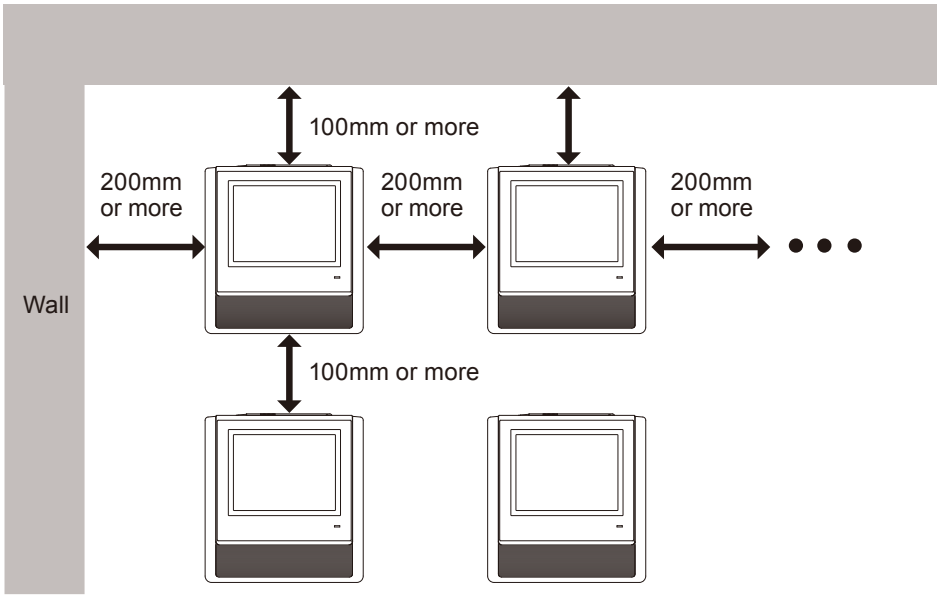


CONTROL SYSTEM

■ INSTALLATION

● Installation space

When installing Touch Panel Controller in a row, keep the space shown below from the surrounding projecting parts.

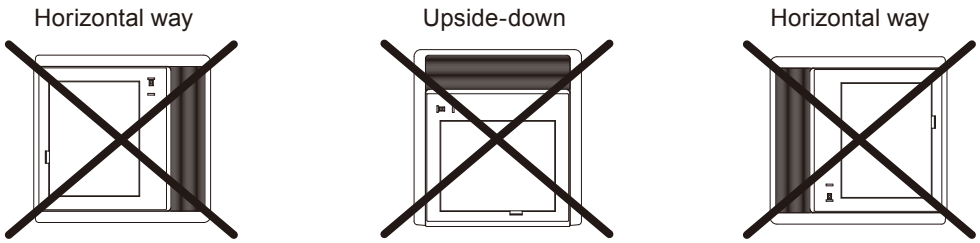


NOTE: The switchbox that Touch Panel Controller is to be mounted to should be installed horizontally in advance.

CONTROL SYSTEM

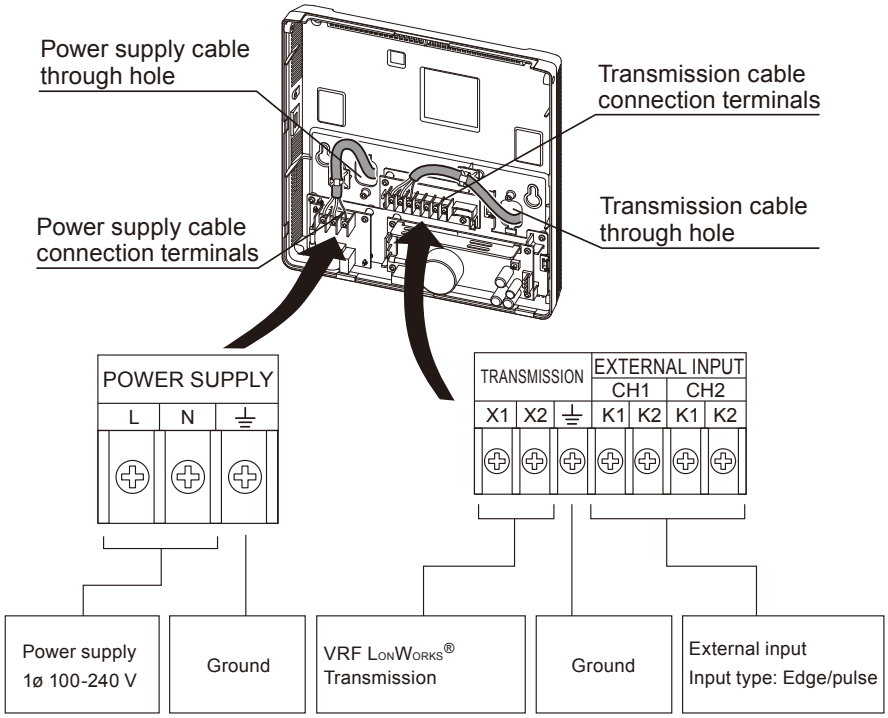
⚠ CAUTION

Following installation positions are prohibited:



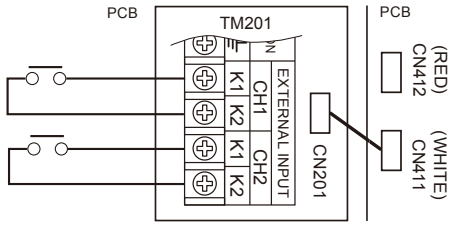
● Terminal names

Names of connection terminals in rear cover.

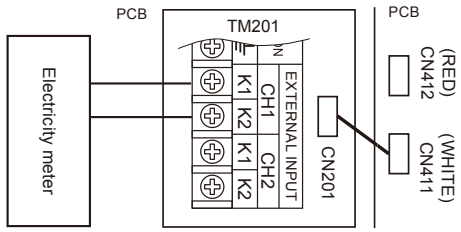


● External input terminals

Case 1: Batch start / stop and Emergency stop commands.



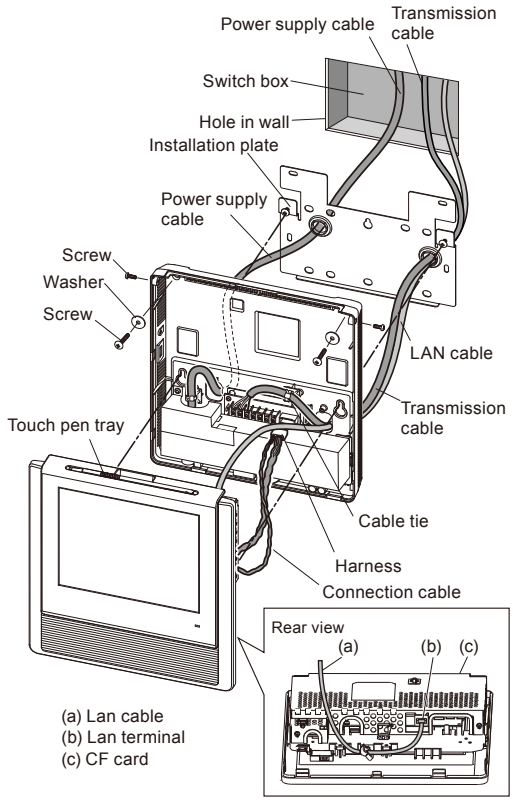
Case 2: The electricity meter is connected. (Only for UTY-DTG*Z1)



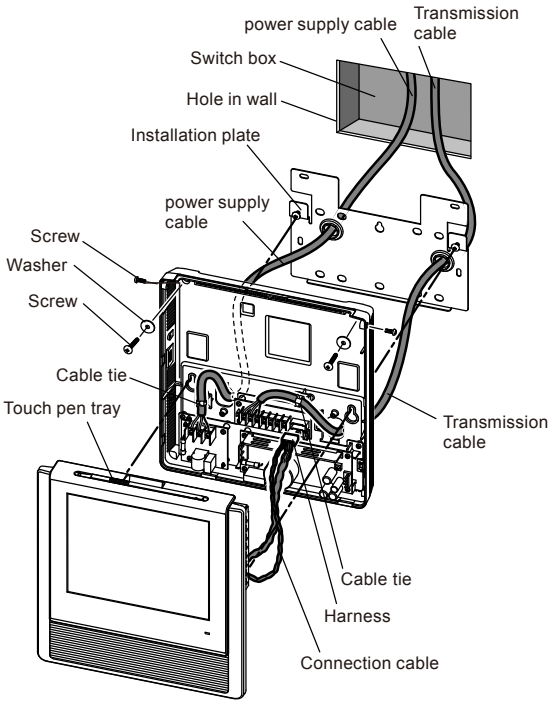
CONTROL SYSTEM

● Installation method

Refer to an installation manual for the details.



Case of UTY-DTG*Z1

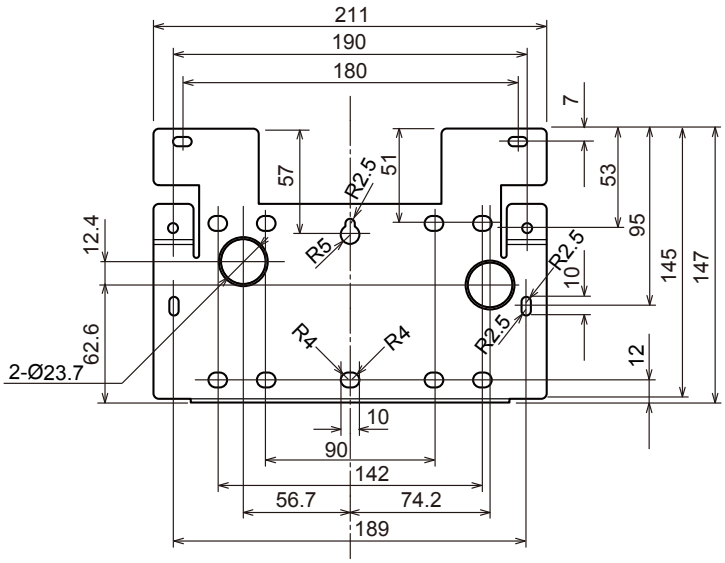


Case of UTY-DTG*

CAUTION: In advance install a switchbox to the wall where the touch panel controller is to be installed.

● The diagram of the mounting plate screw hole positions

(Unit : mm)

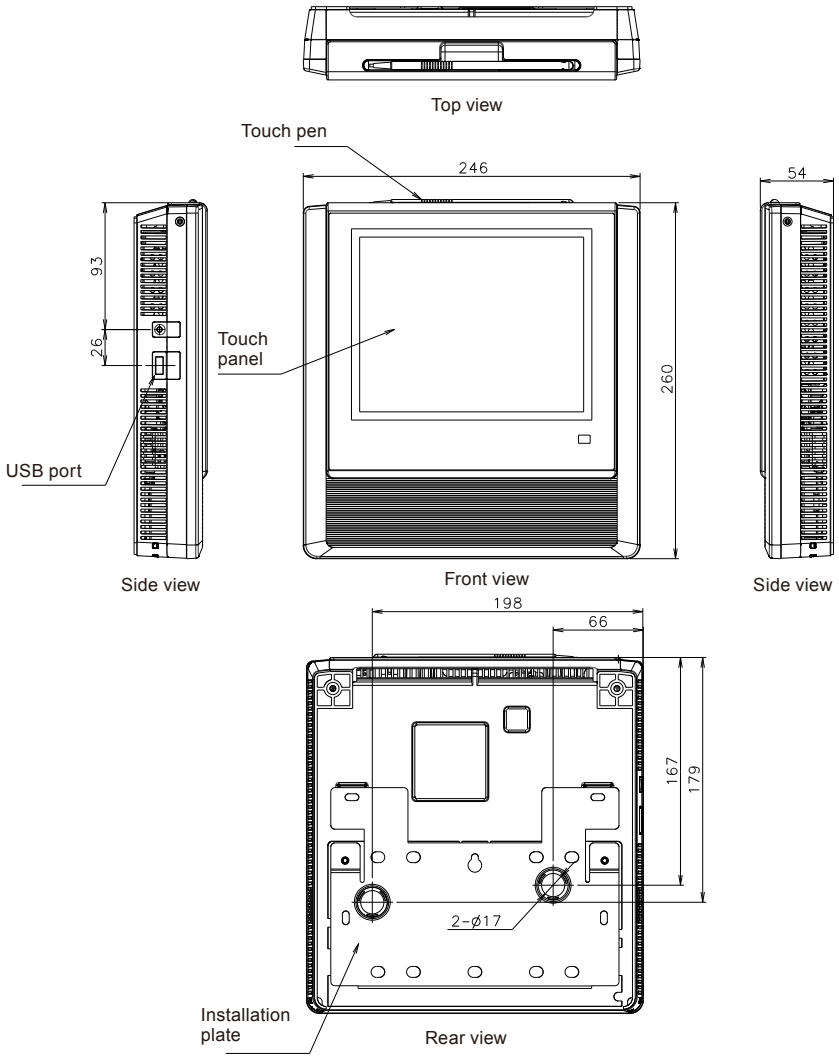


CAUTION: Refer to the mounting screw hole positions of the switchbox that is to be installed in advance and check the compatibility.

CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



■ PACKING LIST

Name and shape	Quantity	Application
Installation plate	1	For Touch Panel Controller installation (It is attached to the back of the Touch Panel Controller)
Screw	8	Screw for Touch Panel Controller installation (M4 × 20 mm)
Washer	8	Washer for Touch Panel Controller installation
Touch pen	1	Pen for Touch Panel Controller operation
Cable tie	4	Prevents dropping off of the cable
CD-R	1	Includes the operating manual and file making sheet of this controller
Installation manual	1	
Operation manual	1	

CONTROL SYSTEM

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2	60245 IEC 57 or equivalent	1 ø AC100-240 V 50/60 Hz, 2-Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2-core, twisted pair solid core Shielded	LONWORKS® compatible cable
External input / output cable	0.33 mm^2 (22AWG)		Polar 2-core, Twisted pair	Use cable in accordance with local rules for cable.
Fuse capacity	5 A			

■ SPECIFICATIONS

Power source voltage (V)	1 ø AC 100 - 240
Power source frequency (Hz)	50 / 60
Input Power (W)	22
Display	7.5-inch TFT color LCD (640 × 480 pixels), with Touch panel
LED indicator	Power LED (Green)
External interface	USB 2.0
	Transmission line
	Ethernet port *1 (Ethernet port is required for remote connection using internet.)
	External Input: (Either emergency stop or batch operation/stop, Electricity meter *1) (Either Dry contact or Apply voltage can be selected)
	External Output: (Operation state, error state)
	Reset switch
Usage temperature range (°C)	0 to 40
Usage humidity range (%)	0 to 85 (no condensation)
Storage temperature range (°C)	-20 to 70
Storage humidity range (%)	0 to 85 (no condensation)
Dimensions [H × W × D] (mm)	260 × 246 × 54
Weight (g)	2150

*1: Only for UTY-DTG*Z1

CONTROL SYSTEM

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

When using for touch panel controller, the following personal computer system requirement is necessary.

CPU	2 GHz or higher
Memory	2 GB or more
HDD	10 GB or more of free space
Display	1366 × 768 or higher resolution
Interface	• USB port • Ethernet port (Ethernet port is required for remote connection using internet.)
Software	•Microsoft® Office® Excel® (2007, 2010, 2013, 2016) and Microsoft® Excel® (2007, 2010, 2013) •Adobe® Reader® 10.0 or later •Internet Explorer 11

■ AVAILABLE OPTION

Electricity Charge Apportionment option	UTY-PTGXA	Apportions the power used by indoor and outdoor units, and automatically calculates the electricity charge such as for hotels or multi-tenant buildings. Computation linked with an electric meter is also possible.

● Specifications

Number of sites	Max. 20
Number of contracts	Max. 400 (per site)
Number of blocks	Max. 1600 (per site)
Data storage period	Max. 2 years

● Personal computer system requirements

(ELECTRICITY CHRGRE APPORTIONMENT TOOL)

Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 (32-bit or 64-bit), Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows Vista® and Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8, Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• USB port • Ethernet Port (to communicate with TPC via LAN)
Software	Adobe® Reader® 9.0 or later

CONTROL SYSTEM

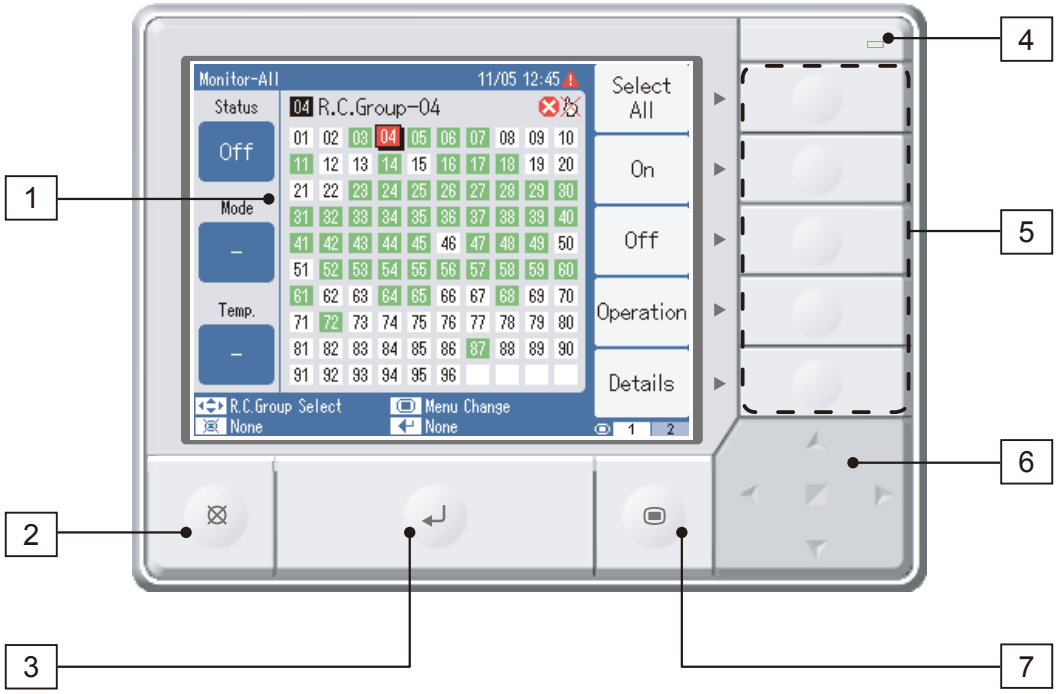
2-4. CENTRAL REMOTE CONTROLLER

■ MODEL : UTY-DCG∗



- Individual control and monitor of 100 indoor units.
- 5-inch TFT color screen.
- User friendly view and easy operation.
- External input / output contact.
- Detachable power supply unit.
- Corresponds to 7 different languages. (English, Chinese, French, German, Spanish, Russian, Polish)

■ FUNCTIONS



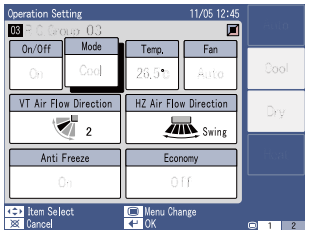
1	LCD panel	4	LED lamp
2	[CANCEL] button	5	Function buttons
3	[OK] button	6	[Arrow] button
		7	[MENU] button

CONTROL SYSTEM

■ MAIN FUNCTIONS AND SCREEN EXAMPLES

● Individual control

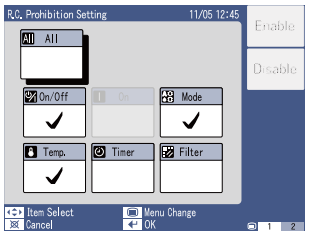
(On / Off, Mode, Set Temp, Fan Speed, Airflow Direction, Anti Freeze, Economy)



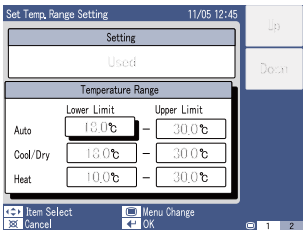
● Remote controller prohibition

(All, On / Off, Mode, Temp, Timer, Filter):

R.C prohibition setting prohibits individual remote control operation from this controller.

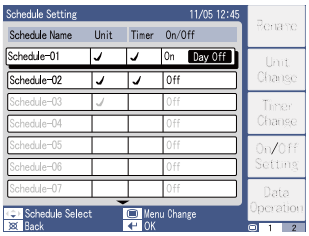


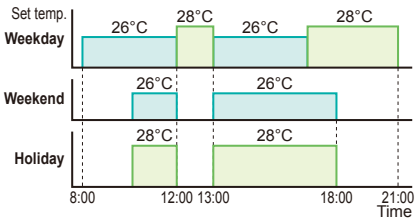
● Room temperature set point upper and lower limitation



● Weekly timer

Weekly timer can set the timer by various combinations.

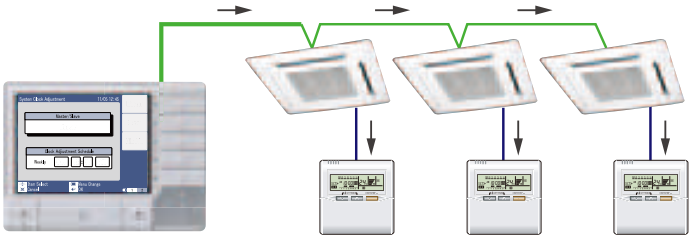




CONTROL SYSTEM

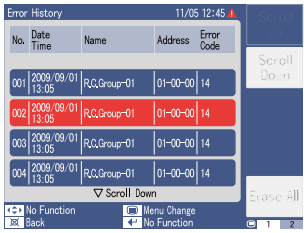
● Automatic clock adjustment

The time setting of each controller can be set in batch automatically.



● Error history

- Able to memorize Max. 200 Errors.
- Suitable maintenance is possible by analysis of the error history data.

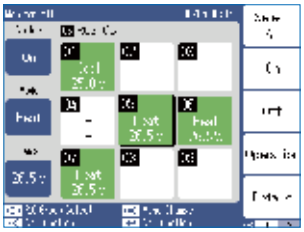


● Main screen display auto switching

Main Screen automatically switches at 5 steps by the number of connected indoor units.

	1	2	3	4	5
Number of connected indoor units	1 to 9 units	10 to 20 units	21 to 40 units	41 to 80 units	81 to 100 units
Display pattern	9 units display	20 units display	40 units display	80 units display	100 units display

● 9 / 20 units display pattern



● 40 / 80 / 100 units display pattern

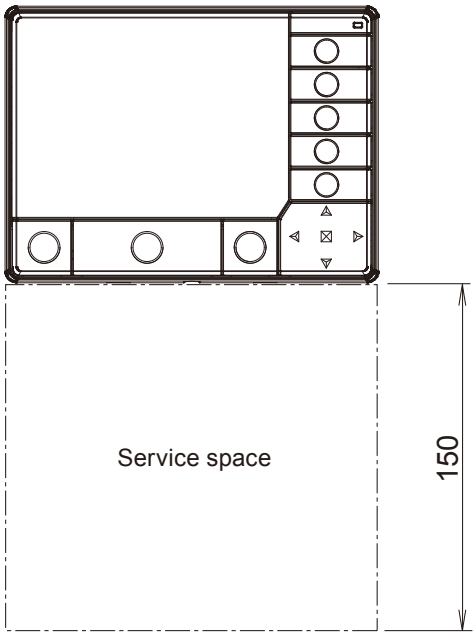


■ INSTALLATION

● Installation space

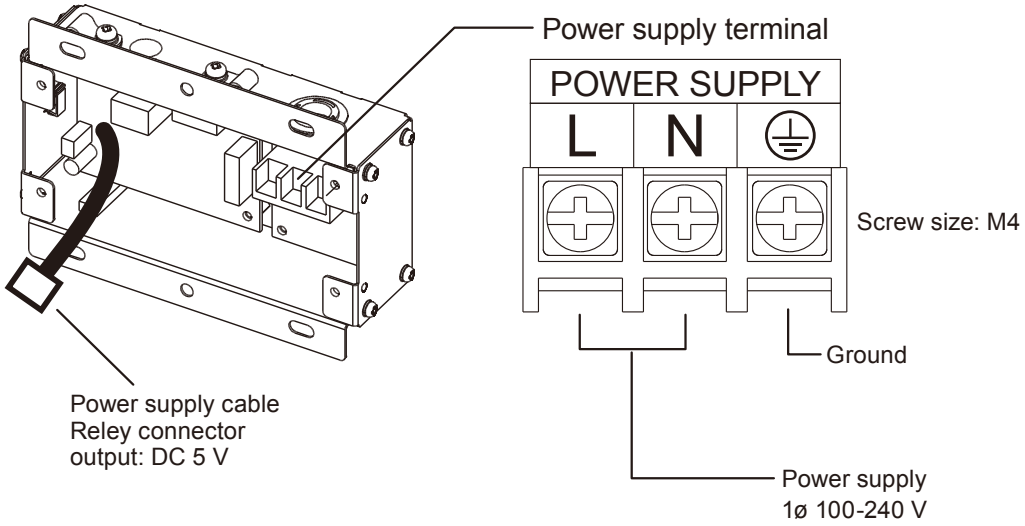
Make a service space to perform installation work.

(Unit : mm)

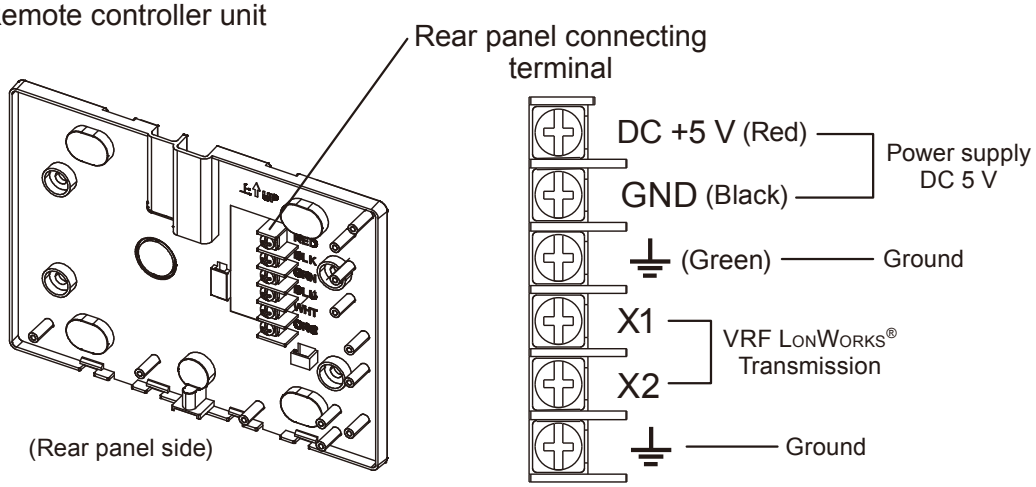


● Terminal names

● Power supply unit



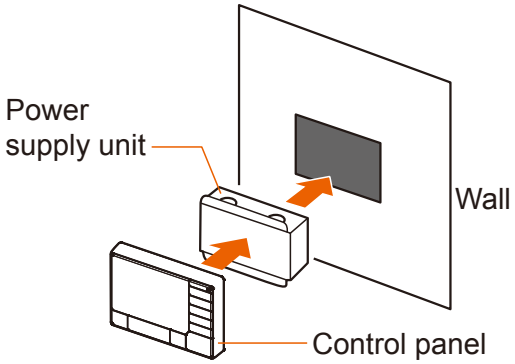
● Remote controller unit



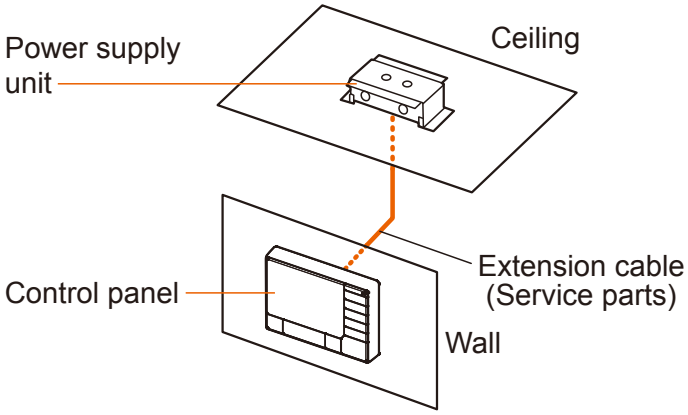
CONTROL SYSTEM

● Installation method

Setting pattern 1: Integrated type

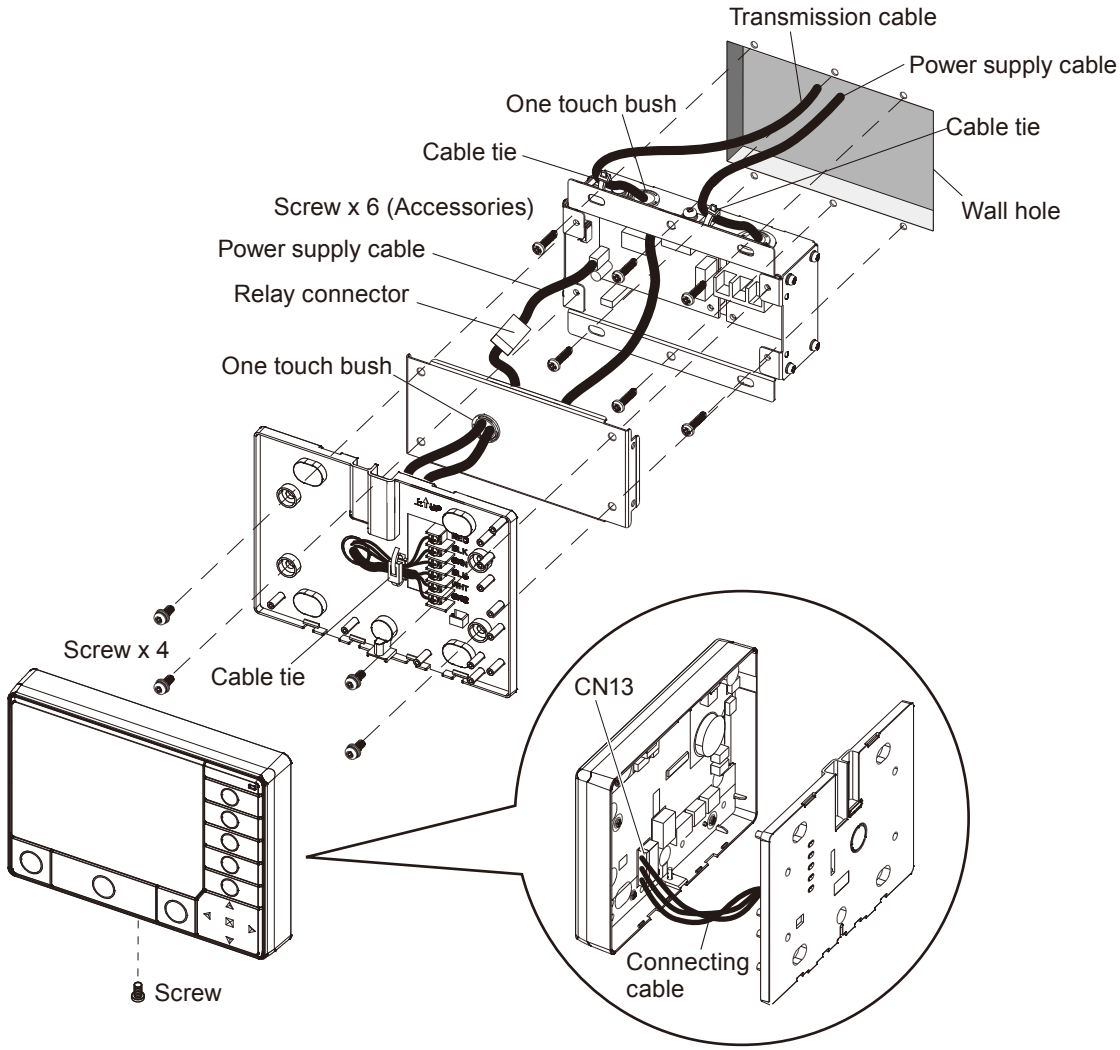


Setting pattern 2: Separate type



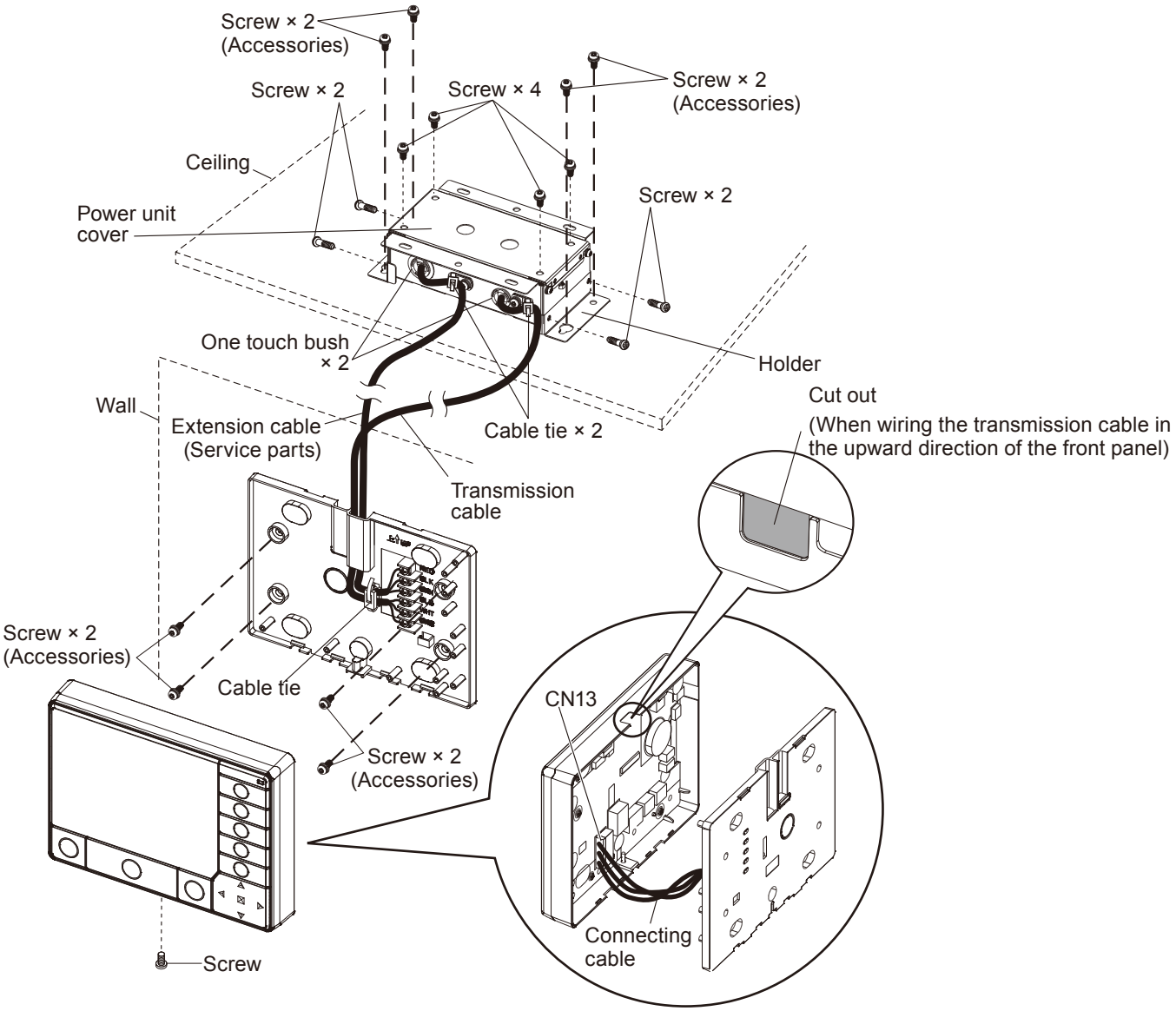
● **Integrated type**

Refer to an installation manual for the details.



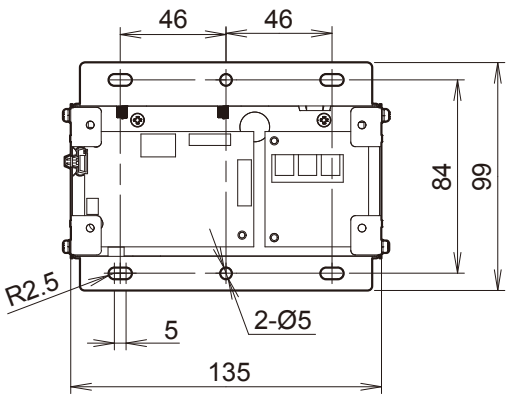
CONTROL SYSTEM

● **Separate type**



● Mounting plate screw hole positions

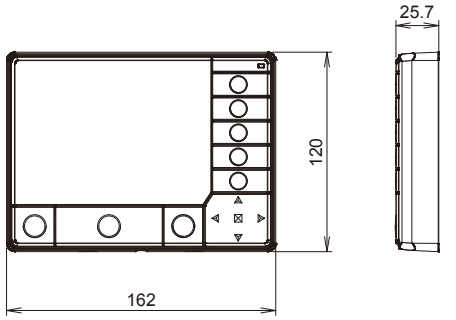
(Unit : mm)



■ DIMENSIONS

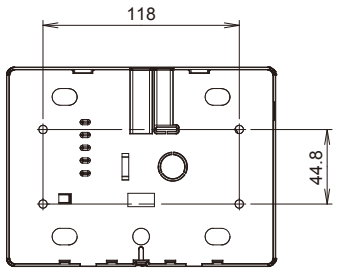
(Unit : mm)

● Control unit



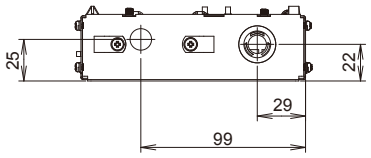
Front view

Side view

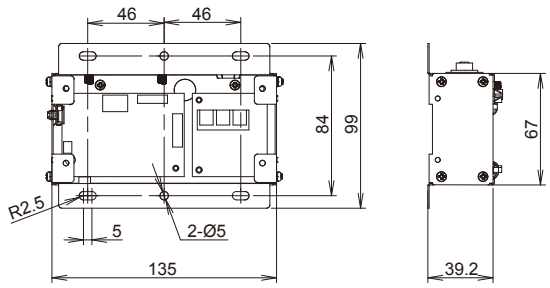


Rear view

● Power supply unit



Top view



Front view

Side view

■ PACKING LIST

Name and shape	Quantity	Application
Controller unit	1	
Power supply unit	1	
Holder	1 (Set)	For power supply unit installation (Used for separate type)
One-touch bush	2	For protection of power supply unit cable
Screw	8	Screw for Central Remote Controller installation (M4 × 20 mm)
Connecting cable	1	For power supply unit connection
Cable tie	4	Prevents dropping off of the cable
CD-R	1	Includes the operating manual for Central remote controller
Installation manual	1	
Operation manual	1	Instruction book for operation

CONTROL SYSTEM

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2	60245 IEC 57 or equivalent	1 ø AC100–240 V 50/60 Hz, 2-Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2-core, twisted pair solid core Shielded	LonWorks® compatible cable
External input / output cable	0.33 mm^2 (22AWG)		Polar 2core, Twisted pair	Use cable in accordance with local rules for cable.
Fuse capacity	5 A			

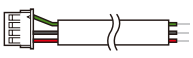
■ SPECIFICATIONS

Model name		UTY-DCG∗
Power source voltage (V)		1 ø AC 100–240
Power source frequency (Hz)		50 / 60
Input Power (W)		3
Display		5.0-inch TFT color LCD panel (QVGA)
External interface		Transmission line
		External Input: (Either emergency stop or batch operation / stop) (Either Dry contact or Apply voltage can be selected)
		External Output: (Operation state, error state)
Usage temperature range (°C)		0 to 40
Usage humidity range (%)		0 to 85 (no condensation)
Storage temperature range (°C)		-20 to 70
Storage humidity range (%)		0 to 85 (no condensation)
Dimensions (mm) [H × W × D]	Control unit	120 × 162 × 25.7
	Power supply unit	99 × 135 × 39.2
Weight (g)	Control unit	308
	Power supply unit	355

■ OPTIONAL SERVICE PARTS

Use the parts number shown below to order the cable from your sales representative.

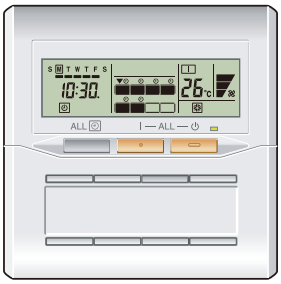
Use the shielded type conncetion cable in accordance with the standard of the country.

Name and shape	Type	Parts No.
Extension cable (5 m) 	Shielded	9708798011

CONTROL SYSTEM

2-5. GROUP REMOTE CONTROLLER

■ MODEL : UTY - CGG∗



- Control and monitoring of up to 8 remote controller groups is possible with one group remote controller.
- The optional network convertor (Model name: UTY-VGGXZ1) allows up to 4 Group Remote Controllers to be incorporated within the control layout. This flexibility is ideal for a number of different building sizes, types and applications.
- Up to 64 group remote controllers (with 16 network convertors UTY-VGGXZ1) can be connected in one VRF network system.
- Start/Stop, operation mode, set temperature, timer control and fan speed can be controlled / monitored centrally or individually.
- Easy installation with a slim shape with no bulge in the back.
- One-touch Start/Stop operation of each indoor unit is possible. All the indoor units can also be easily operated by pressing an ALL ON, ALL OFF, or ALL TIMER ON/OFF button.

CONTROL SYSTEM

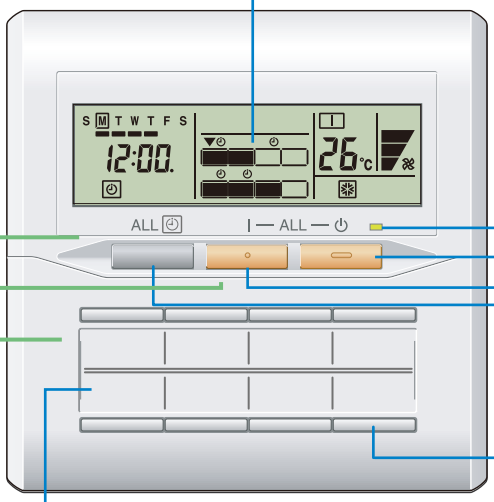
■ FUNCTIONS

1 Timer setting at all the connected indoor units is possible by centralized timer on the front panel.

2 All the connected indoor units can be turned on / off simultaneously by centralized ON/OFF button on the front of the cover.

3 The indoor unit can be quickly turned on and off by ON / OFF button of each indoor unit on the front of the door.

With cover closed



Indoor Unit Operation Indicators

Timer setting at all the connected indoor units is possible by centralized timer on the front panel.

■ : On □ : Off
● : Timer operation ▼ : Selection

Operation Lamp

This is on if any of the indoor units is operating. This flashes if any of the indoor units has malfunction(s).

ALL OFF Button

Press the ALL OFF button to turn off all of the indoor units.

ALL ON Button

Press the ALL ON button to turn on all of the indoor units.

ALL TIMER Button

Press the ALL TIMER button to turn the timer operation on or off for all indoor units.

Start / Stop Button

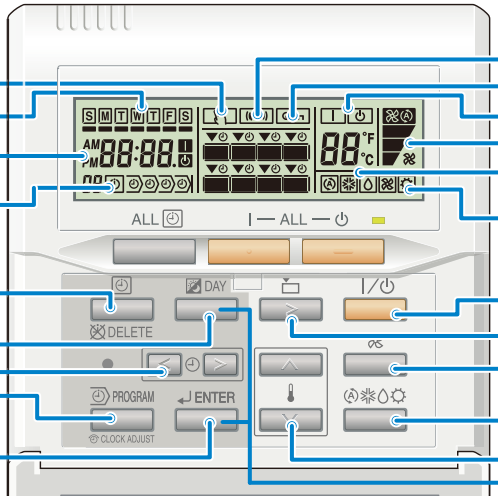
Press the ON / OFF button to turn the corresponding indoor unit on or off.

Indoor Unit Name Labels

Write the names of the indoor units on the included labels and attach them.

Timer and Clock Display and setting

With cover open



Setting Indicator
Day Indicator
Timer and Clock Indicator
Timer Mode Indicator
Timer Mode (DELETE) Button
DAY Button
Set Time Button
PROGRAM (CLOCK ADJUST) Button
ENTER Button

Displaying the Status and Controlling indoor units

Transmission Indicator
Operation Lock Indicator
ON / OFF Indicator
Fan Speed Indicator
Set Temperature Indicator
Operation Mode Indicator
Start / Stop Button
Select Button
Fan Control Button
*1, *2, *3
Operation Mode Button
Set Temperature Button
Child Lock Function

*1: "AUTO Ⓐ" is not available for a heat pump model unless it is set up as an administrative indoor unit.

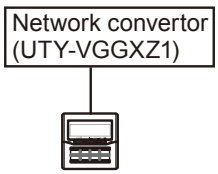
*2: "FAN ※" is not available for a heat pump model.

*3: "HEAT ☼" is not available for a cooling only model.

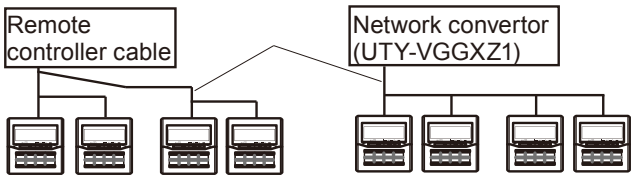
CONTROL SYSTEM

■ SYSTEM DIAGRAM

● When connecting one group remote controller

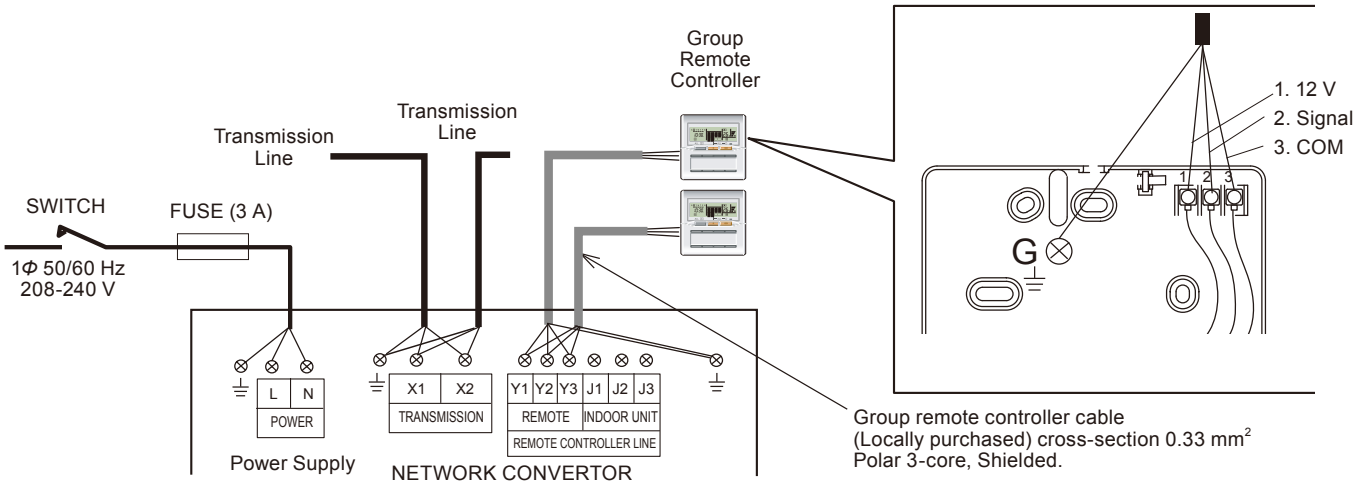


● When multiple group remote controllers are connected



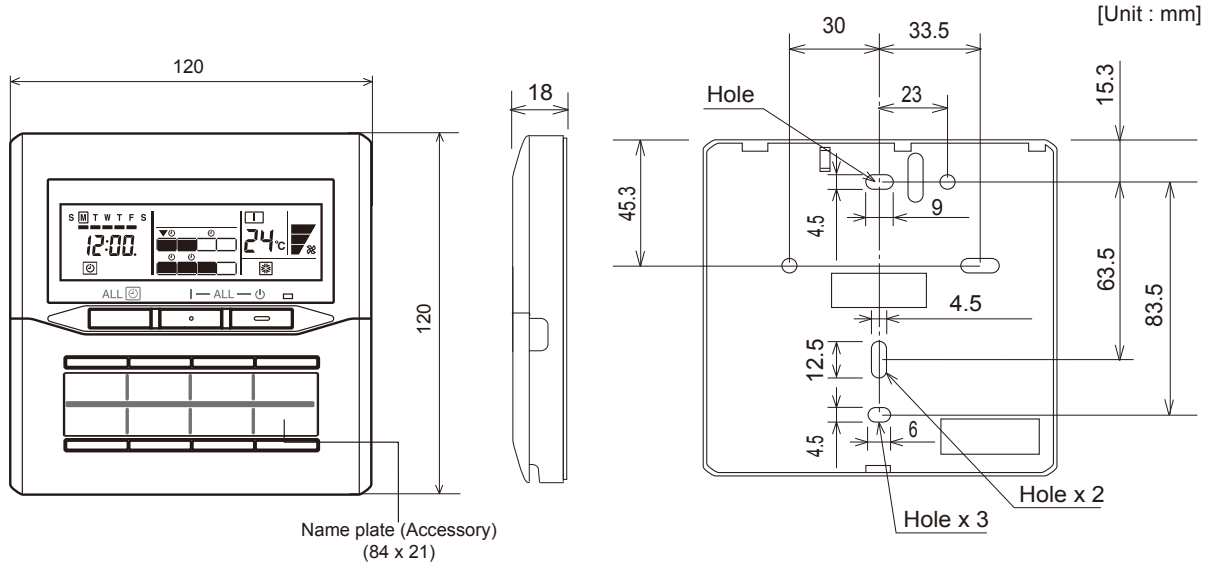
- Total remote controller cable length : Max. 100 m.
- Connectable group remote controller : Max. 4 units / convertor.
- Use of a terminal box is recommended when a junction is made in the wiring.

■ ELECTRICAL WIRING

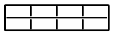
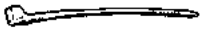


■ DIMENSIONS

[Unit : mm]



■ PACKING LIST

Name and shape	Quantity	Application
Label 	4	Use this for writing the names of the indoor units that have been registered.
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

■ WIRING SPECIFICATIONS

Use	Size	Wire type	Remarks
Remote controller cable	0.33 mm^2 (22AWG)	Polar 3 core	Use sheathed PVC cable or shielded cable in accordance with the regional cable standard.

■ SPECIFICATIONS

Model name	UTY - CGG∗
Dimensions [H × W × D] (mm)	120 × 120 × 18
Weight (g)	200

CONTROL SYSTEM

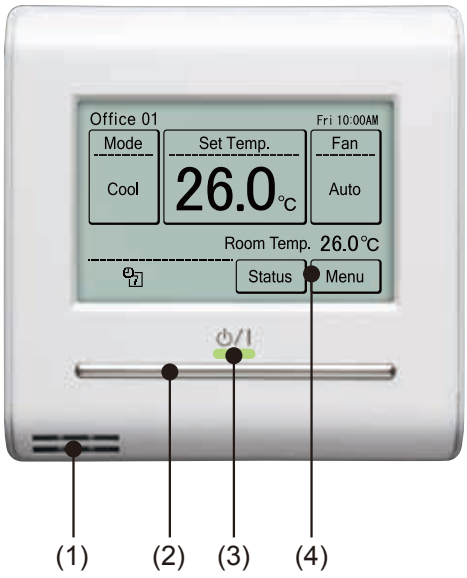
2-6. WIRED REMOTE CONTROLLER (Touch panel)

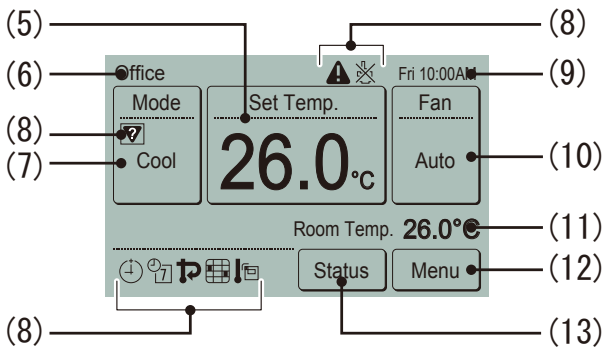
■ MODEL: UTY - RNR∗Z2, UTY - RNR∗Z1, UTY - RNR∗



- Easy finger touch operation with LCD panel
- Built-in Weekly/Daily timer (On/Off, Temp., Mode)
- The backlit LCD enables easy operation in a dark room
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 12 different languages (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Portuguese, Greek, Turkish, and Dutch)

■ FUNCTIONS





(1) Room temperature sensor (inside)

(2) On/Off button:

It is possible to operate only while displaying the Monitor Mode screen.

(3) LED lamp (Operation indicator)

(4) Touch panel display

(5) Set Temp.:

Set the operating temperature.

(6) R.C. Group name

(7) Mode:

Set the operation mode.

(8) Status icons

(9) Clock

(10) Fan:

Set the fun speed.

(11) Room temperature

(12) Menu:

Set the various settings.

(13) Status:

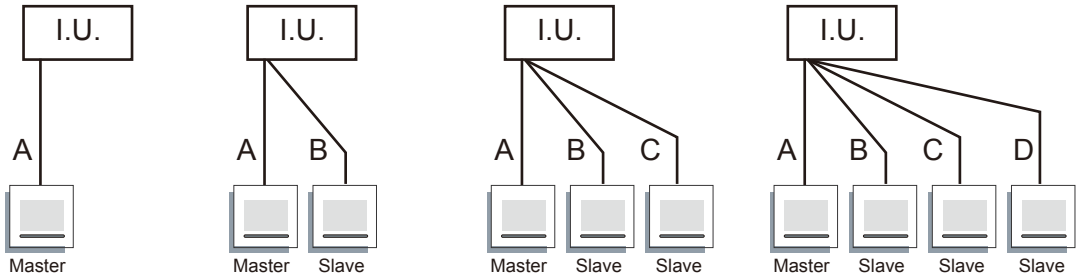
Check the status of indoor unit and error.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

● Multiple remote control

Up to 4 remote controllers can be used to operate the indoor units.



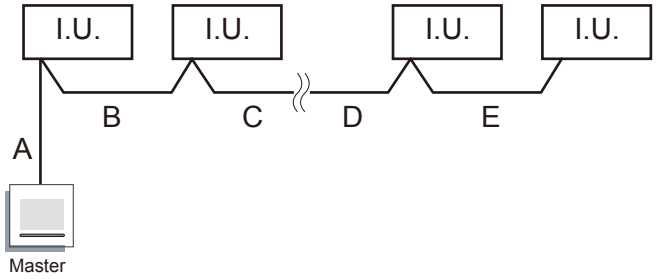
A, B, C, D : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)

A ≤ 500 m, A+B ≤ 500 m, A+B+C ≤ 500 m, A+B+C+D ≤ 500 m.

NOTE: Multiple installation method described above is prohibited to combine with UTY-RNK* (3-wired type) or UTY-RSK* (3-wired type) or UTY-RHK* (3-wired type) and UTY-RNR* (2-wired type) or UTY-RNR*Z1 (2-wired type) or UTY-RLR* (2-wired type).

● Group control

With a single remote controller, up to 16 units can be simultaneously operated.



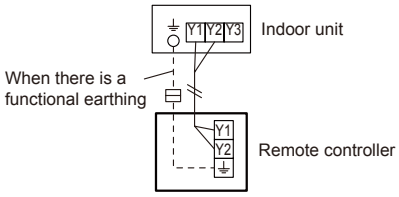
A, B, C, D, E : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)

A+B+C+D+E ≤ 500 m.

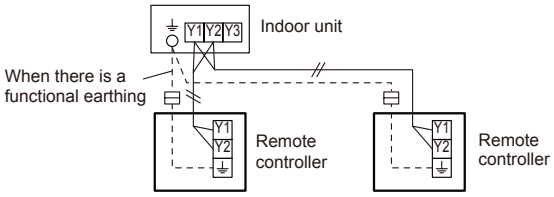
CONTROL SYSTEM

■ ELECTRICAL WIRING

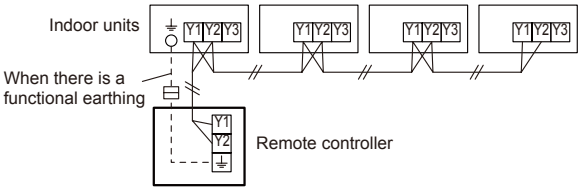
● Single control



● Multiple remote control

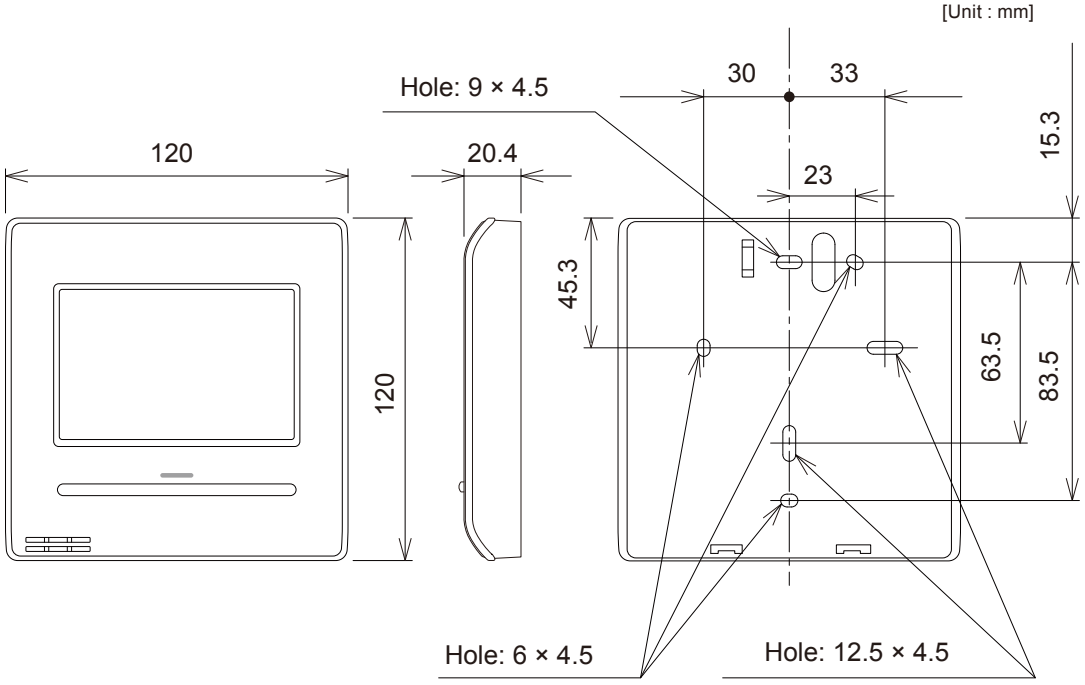


● Group control



■ DIMENSIONS

[Unit : mm]



CONTROL SYSTEM

■ INSTALLATION

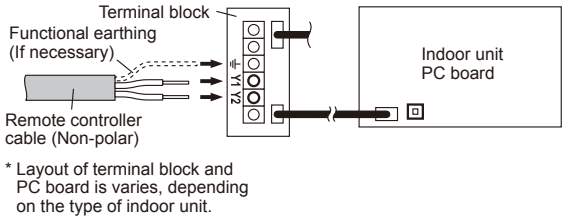
● Connection Pattern

NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

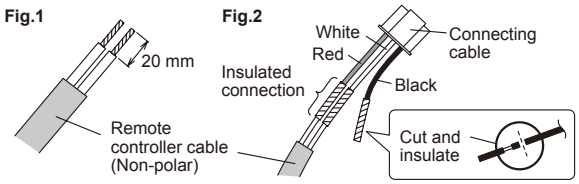


* Layout of terminal block and PC board is varies, depending on the type of indoor unit.

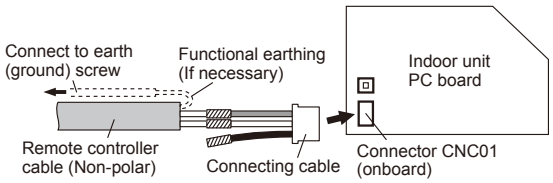
NOTE: Operation may fail if it is connected to the outdoor unit or the terminal block for power supply.

● Pattern B

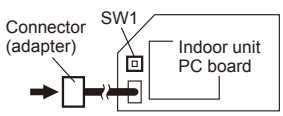
1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.



2) Connect the remote controller cable to the connecting cable, and insert it to the connector.

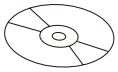


* Layout of Connector and PC board varies, depending on the type of indoor unit.



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
CD-ROM 	1	
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Model name	Remarks
Remote controller cable	0.33 to 1.25 mm^2	Non polar 2 core	UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	Use sheathed twisted pair cable*

*Use shielded cable (locally purchased) in accordance with the regional cable standard

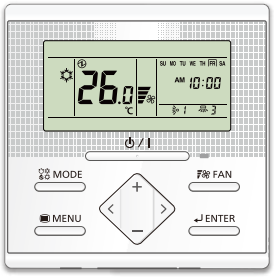
■ SPECIFICATIONS

Model name	UTY-RNR∗Z2, UTY-RNR∗Z1, UTY-RNR∗
Input voltage	DC 12 V
Power consumption	Max. 0.3 W
Display	3.8 inch FSTN LCD (255 × 160 dots) with Touch panel
Usage temperature range	0 to 40 °C
Usage humidity range	20 to 90 % (no condensation)
Storage temperature range	-10 to 60 °C
Storage humidity range	20 to 90 % (no condensation)
Dimensions [H × W × D] (mm)	120 × 120 × 20.4
Weight (g)	220

CONTROL SYSTEM

2-7. WIRED REMOTE CONTROLLER

■ MODEL : UTY - RLR∗

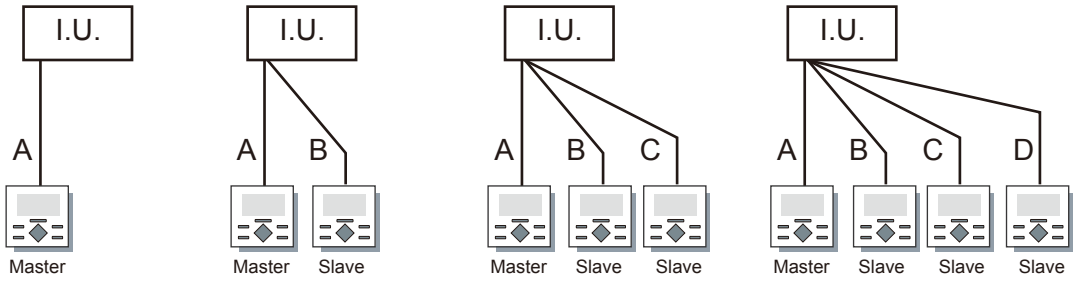


- Various timer setup (ON / OFF / WEEKLY) are possible.
- Equipped with weekly timer as standard function.
  (Start / Stop, Temp, Mode function is twice per day for a week)
- When setting up a timer, start / stop and the temperature setup can be changed.
- When a failure occurs, the error code is displayed.
- Error history.(Last 16 error codes can be accessed.)
- Up to 8 indoor units can be simultaneously controlled.
- The room temperature can be controlled by detecting the temperature accurately with Built-in thermo sensor.

■ SYSTEM DIAGRAM

● Multiple remote control

Up to 4 remote controllers can be used to operate the indoor units.



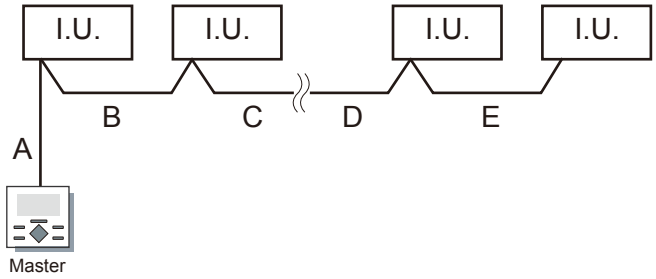
A, B, C, D : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications)

A≤500m, A+B≤500m, A+B+C≤500m, A+B+C+D≤500m.

NOTE: Multiple installation method described above is prohibited to combine with UTY-RNK* (3-wired type) or UTY-RSK* (3-wired type) or UTY-RHK* (3-wired type) and UTY-RNR* (2-wired type) or UTY-RNR*Z1 (2-wired type) or UTY-RLR* (2-wired type).

● Group control

With a single remote controller, up to 16 units can be simultaneously operated.



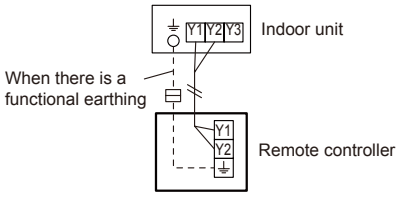
A, B, C, D, E : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications)

A+B+C+D+E≤500m.

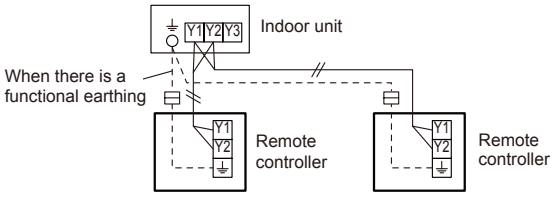
CONTROL SYSTEM

■ ELECTRICAL WIRING

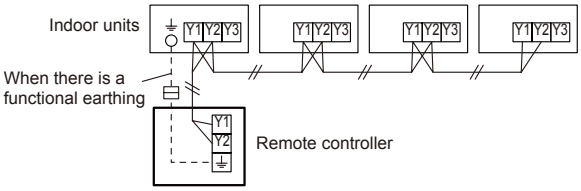
● Single control



● Multiple remote control

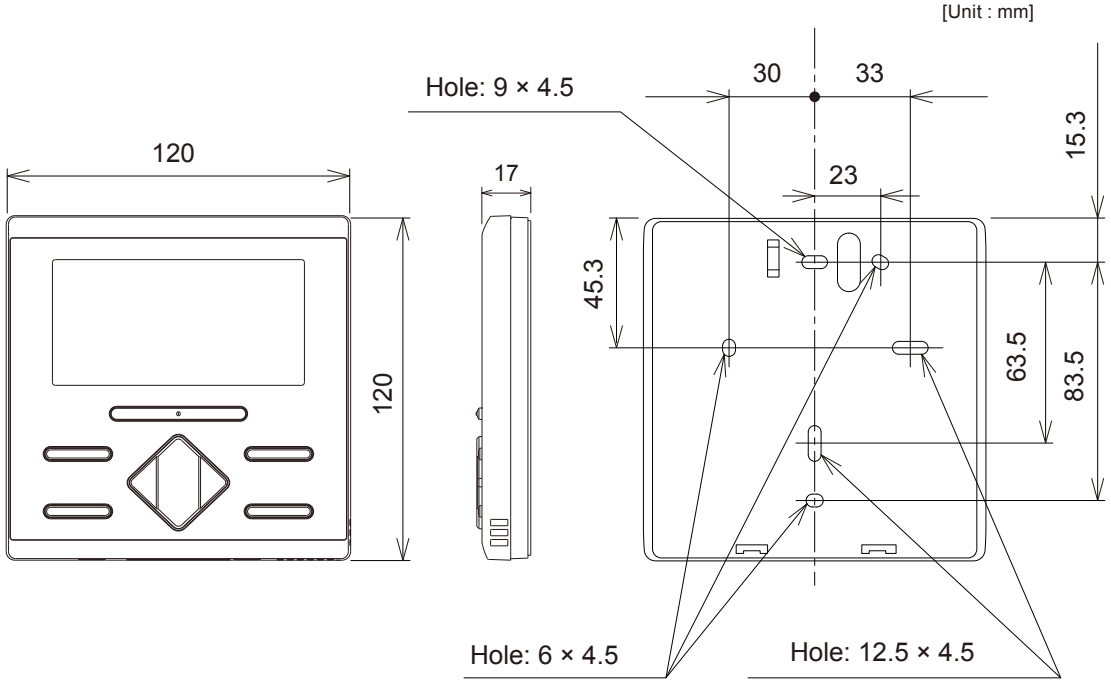


● Group control



■ DIMENSIONS

[Unit : mm]



CONTROL SYSTEM

■ INSTALLATION

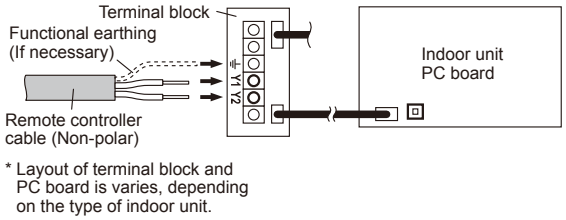
● Connection Pattern

Note: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

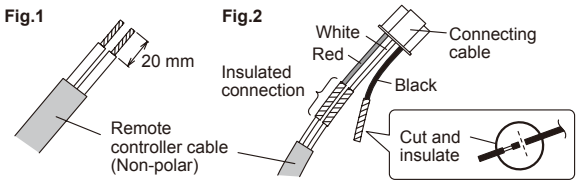


* Layout of terminal block and PC board is varies, depending on the type of indoor unit.

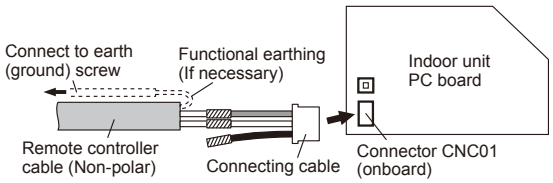
Note: Operation may fail if it is connected to the outdoor unit or the terminal block for power supply.

● Pattern B

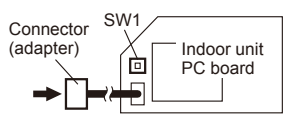
1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.



2) Connect the remote controller cable to the connecting cable, and insert it to the connector.



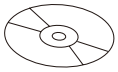
* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
CD-ROM 	1	
Screw (M4 x 16mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Model name	Remarks
Remote controller cable	0.33 to 1.25 mm^2	Non polar 2 core	UTY-RLR∗	Use sheathed twisted pair cable*

*Use shielded cable (locally purchased) in accordance with the regional cable standard

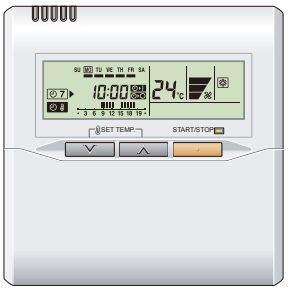
CONTROL SYSTEM

■ SPECIFICATIONS

Input voltage	DC 12 V
Power consumption	Max. 0.23 W
Usage temperature range	0 to 46 °C
Usage humidity range	0 to 90 % (no condensation)
Storage temperature range	-20 to 70 °C
Storage humidity range	0 to 90 % (no condensation)
Dimensions [H × W × D mm]	120 × 120 × 17
Weight [g]	80

2-8. WIRED REMOTE CONTROLLER

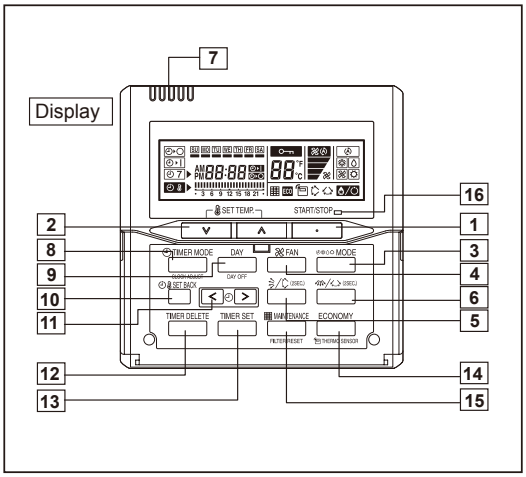
■ MODEL : UTY - RNK∗



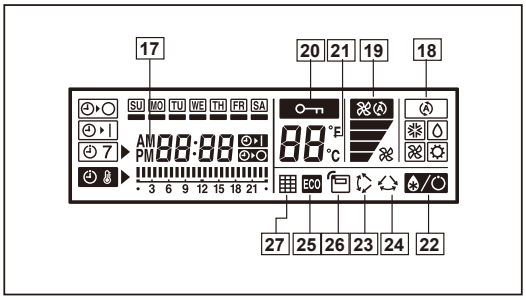
- Various timer setup available (ON / OFF / WEEKLY).
- Equipped with weekly timer as standard function.
  (Start / Stop function is twice per day for a week.)
- When setting up a timer, start / stop and the temperature setup can be changed.
- When a failure occurs, the error code is displayed.
- Error history. (Last 16 error codes can be accessed.)
- Up to 16 indoor units can be simultaneously controlled.
- The room temperature can be controlled by detecting the temperature accurately with Built-in thermo sensor.

CONTROL SYSTEM

■ FUNCTIONS



Display panel



1 START/STOP button
Pressed to start and stop operation.

2 Set Temperature button
Selects the setting temperature.(18-30°C[COOL], 10-30°C[HEAT])

3 Operation mode button ∗2
Selects the operating mode (AUTO Ⓐ∗1, COOL ❄, DRY◊ , FAN ∗3, HEAT ☼∗4).

4 Fan control button
Selects the fan speed (AUTO , LOW , MED , HIGH).

5 Vertical air flow direction and swing button
Press for two seconds to change the swing mode

6 Horizontal air flow direction and swing button
Press for two seconds to change the swing mode.

7 Built-in thermo sensor
Detect room temperature.

8 Timer mode (CLOCK ADJUST) button
Selects the timer mode (OFF TIMER, ON TIMER, WEEKLY TIMER)
Set the current time.

9 Day (DAY OFF) button
Temporarily cancels of one day timer.

10 Set back button
Pressed select the set back timer.

11 Set time button
Pressed to select the set back timer.

12 Timer delete button
The schedule of a weekly timer is deleted.

13 Timer set button
Sets the date, hour, minute and on-off time.

14 Economy button / Thermo sensor button

15 Maintenance button / Filter reset button

16 Operation lamp
Lights during operation and when the timer is on.

17 Timer and clock indicator

18 Operation mode indicator

19 Fan speed indicator

20 Operation lock indicator

21 Temperature indicator
Displayed temperature is set temperature.

22 Defrost indicator
Indicates during the oil recovery and defrosting operation.

23 Vertical swing indicator

24 Horizontal swing indicator

25 Economy indicator

26 Thermo sensor indicator

27 Filter indicator

∗1 : "AUTOⒶ" is not available for a heat pump model unless it is set up as an administrative indoor unit.

∗2 : Indoor unit can be set to administrative indoor unit by pressing "MODE" button for 5 seconds or more.

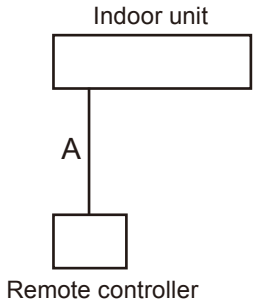
∗3 : "FAN" is not available for a heat pump model.

∗4 : "HEAT☼" is not available for a cooling only model.

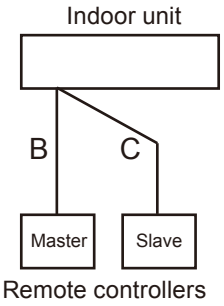
CONTROL SYSTEM

■ SYSTEM DIAGRAM

● 1 remote controller



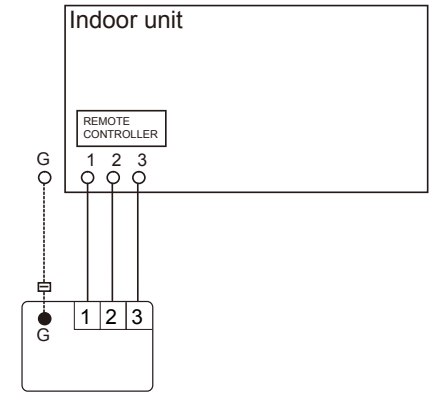
● 2 remote controllers



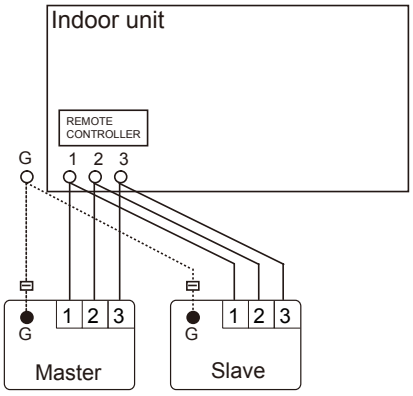
A , B , C : Remote controller cable.
Refer to 6-4-4 for detail specifications.
A ≦ 500 m ; B+C ≦ 500 m

■ ELECTRICAL WIRING

● 1 remote controller



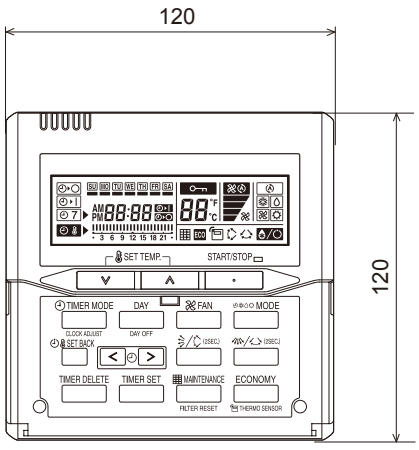
● 2 remote controllers



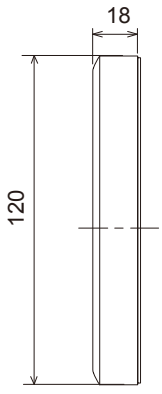
1 (RED) : 12 V
2 (WHITE) : Signal
3 (BLACK) : COM

■ DIMENSIONS

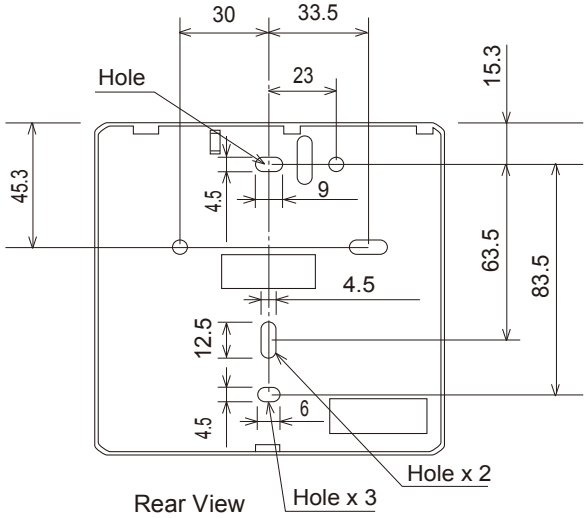
[Unit : mm]



Front View



Side View



Rear View

■ INSTALLATION

● Connection Pattern

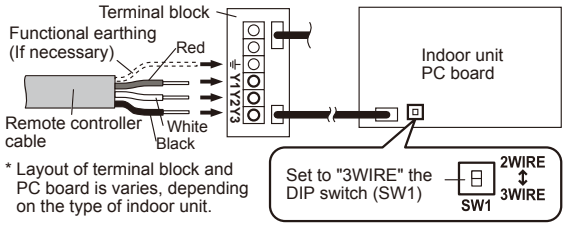
NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

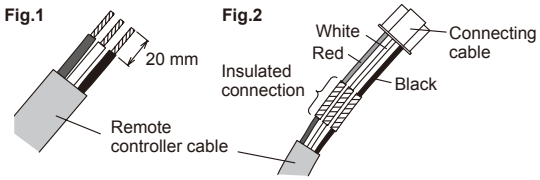
Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

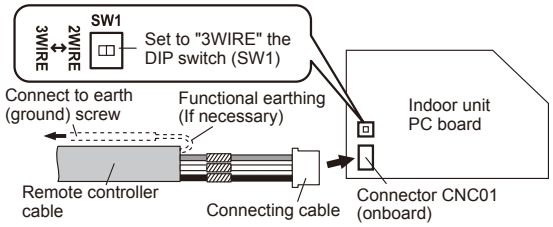
● Pattern B

1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.

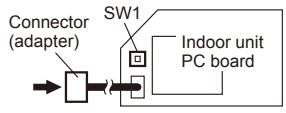


2) Connect the remote controller cable to the connecting cable, and insert it to the connector.

Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.

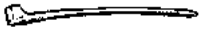


* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Remote controller cable *1 	10 m	For connecting the remote controller
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

*1 : UTY-RNKYT does not contain cables.

■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Model name *2	Remarks
Remote controller cable	0.33mm^2 (22AWG)	Polar 3 core	UTY-RNKY UTY-RNKG	Use sheathed PVC cable.
			UTY-RNKYT	Use shielded cable (locally purchased) in accordance with the regional cable standard.

*2 : UTY-RNKY (FUJITSU BRAND), UTY-RNKG (GENERAL BRAND), UTY-RNKYT (Oceania MODEL)

■ SPECIFICATIONS

Model name	UTY - RNK∗
Dimensions [H × W × D] (mm)	120 × 120 × 18
Weight (g)	160

CONTROL SYSTEM

2-9. SIMPLE REMOTE CONTROLLER (With Operation mode)

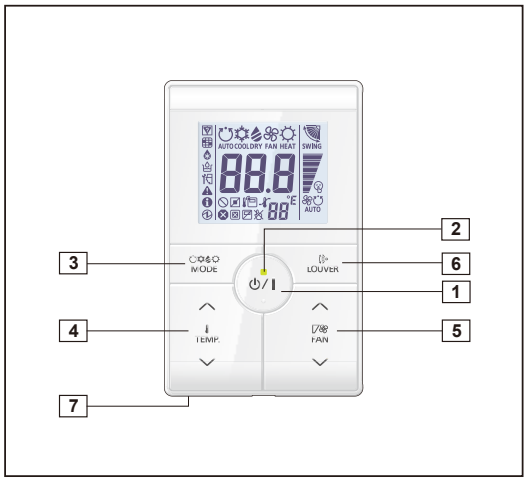
2-9-1. MODEL : UTY - RSR∗



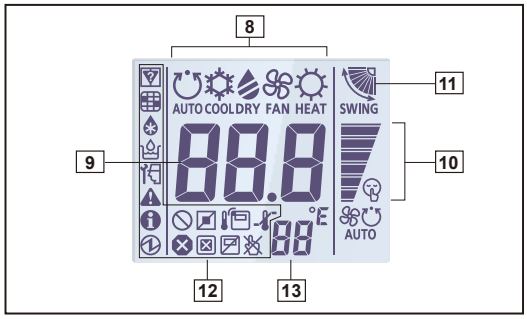
- Easy operation.
- Stylish design
- Large LCD screen & simple operation buttons
- Built-in background light function.
- Easy installation with a slim shape with no bulge in the back.
- Up to 16 indoor units can be simultaneously controlled.
- Can be installed onto SW-BOX. (applies to European and other country's standard)

CONTROL SYSTEM

■ FUNCTIONS



Display panel



1 START/STOP button
Pressed to start and stop operation.

2 LED lamp
Lights during operation.

3 Operation mode button
Selects the operating mode.

4 Set temperature button
Selects the setting temperature.(18-30°C[COOL], 10-30°C[HEAT])

5 Fan control button
Selects the fan speed.

6 Louver button
Set the airflow direction.

7 Room temperature sensor(inside)

8 Operating mode indicator (AUTO *1, COOL, DRY, FAN *2, HEAT *3)

9 Set temperature
Indicates Indoor unit address. *4

10 Fan speed indicator (AUTO, HIGH, MED, LOW, QUIET)

11 Airflow direction indicator

12 Status icons
- Mode mismatch
- Filter sign *5
- Defrost operation
- Oil recovery operation
- Under maintenance
- Error
- Special state
- Conducting electricity
- Emergency stop
- Operation controlled
- Forced stop
- Room temperature sensor is enabled *5
- Central controlled
- Setting temperature range is enabled
- Operation prohibited

13 Indicates the remote controller address. *4

*1 : "AUTO" is not available for a heat pump model unless it is set up as an administrative indoor unit.

*2 : "FAN" is not available for a heat pump model.

*3 : "HEAT" is not available for a cooling only model.

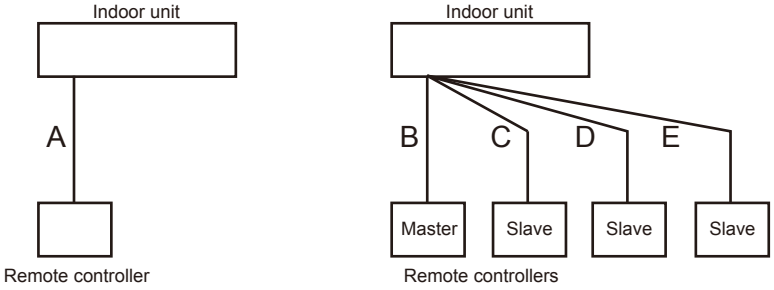
*4 : During address display mode.

*5 : For single split system, to use this function, set the Function setting of the indoor unit accordingly.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

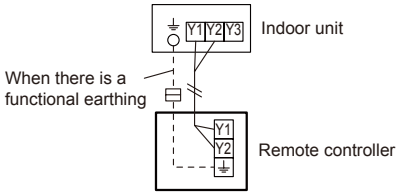
● 1 remote controller ● 4 remote controllers



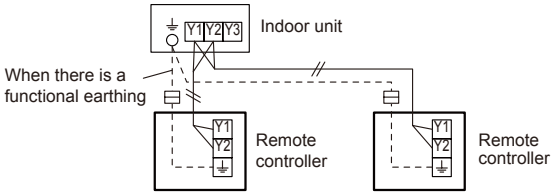
A , B , C , D , E : Remote controller cable.
Refer to 6-4-4 for detail specifications.
A ≦ 500 m ; B+C+D+E ≦ 500 m

■ ELECTRICAL WIRING

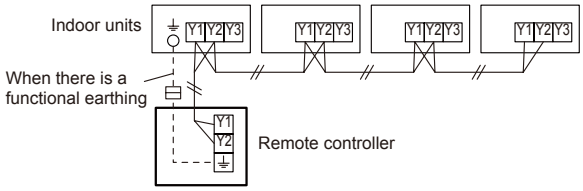
● Single control



● Multiple remote control

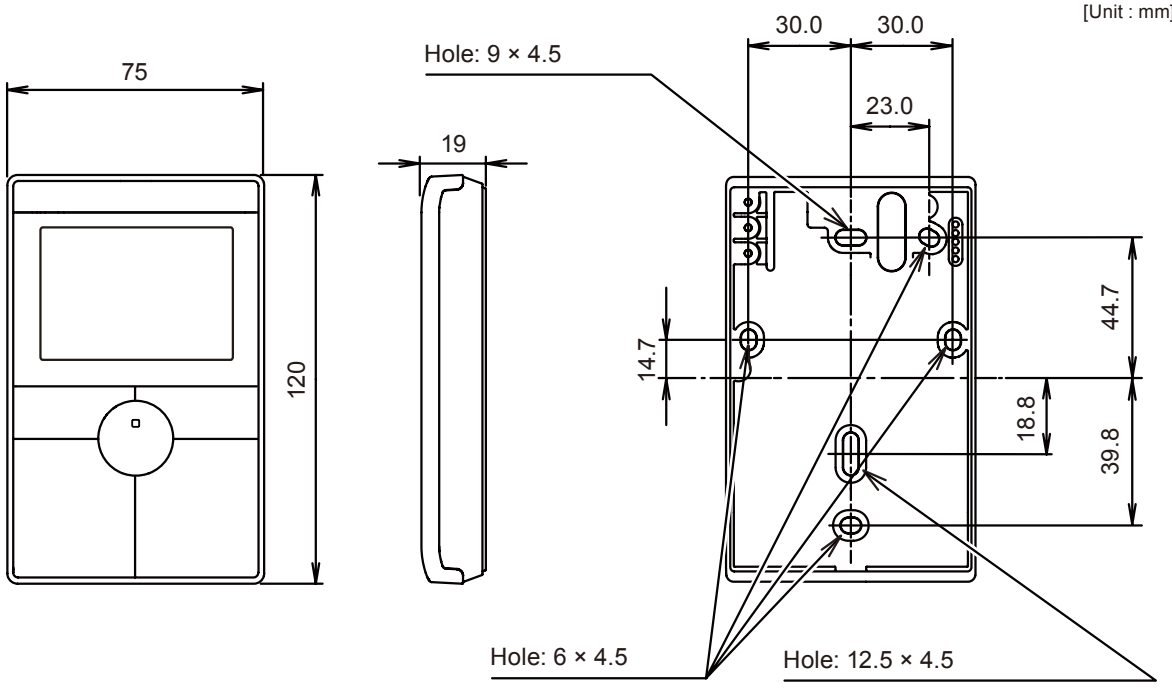


● Group control



■ DIMENSIONS

[Unit : mm]



■ INSTALLATION

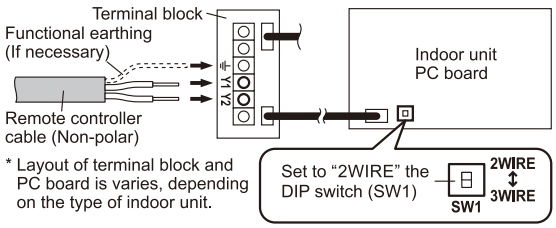
● Connection Pattern

NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

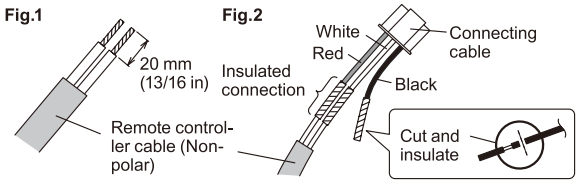
Connect the end of remote controller cable directly to the exclusive terminal block. Set to “2WIRE” the DIP switch (SW1) on the PC board (printed circuit board) of the indoor unit.



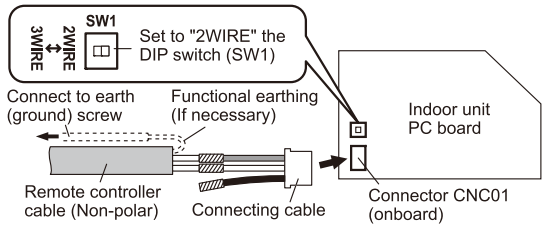
NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

● Pattern B

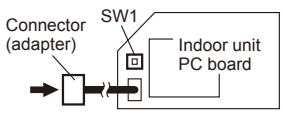
1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.



2) Insert connecting cable to the connector. Set to “2WIRE” the DIP switch (SW1) on the PC board of the indoor unit.

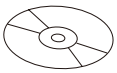


* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Wired remote controller 	1	
Installation manual 	1	
Operating manual 	1	
CD-ROM 	1	
Screw (M4 × 16mm) 	2	For installing the remote controller
Cable tie 	1	For binding remote controller and remote controller cable

■ WIRING SPECIFICATIONS

Cable type	Size	Remarks
Sheathed cable	0.33 to 1.25 mm² (22 to 16 AWG)	Non polar 2 core, Twisted pair
Shielded cable*		

* Use shielded cable in accordance with local rules for remote controller cable.

■ SPECIFICATIONS

Model name	UTY - RSR✳
Dimensions [H × W × D] (mm)	120 × 75 × 19
Weight (g)	120

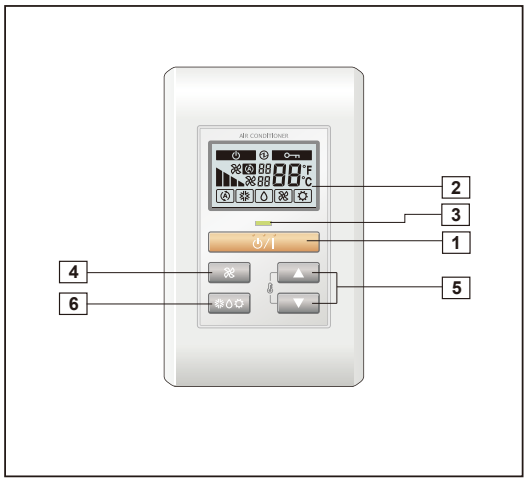
CONTROL SYSTEM

2-9-2. MODEL : UTY - RSK∗

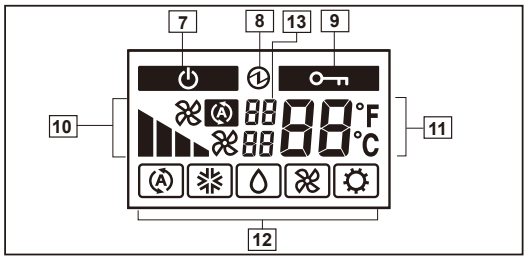


- Easy operation.
- Built-in background light function.
- Easy installation with a slim shape with no bulge in the back.
- Error history. (Last 16 error codes can be accessed.)
- Up to 16 indoor units can be simultaneously controlled.
- Can be installed onto SW-BOX. (applies to European and other country's standard)

■ FUNCTIONS



Display panel



1 START/STOP button
Pressed to start and stop operation.

2 Display with backlight
Lights during operation.

3 Operation lamp
Lights during operation.

4 Fan control button
Selects the fan speed.

5 Set temperature button
Selects the setting temperature.(18-30°C[COOL], 16-30°C[HEAT])

6 Operation mode button
Selects the operating mode.

7 Standby indicator
Indicates during the oil recovery and defrosting operation.

8 Power source indicator
Indicates the main power ON.

9 Central control indicator
Indicates when function is locked from Touch Panel Controller or System Controller.

10 Fan speed indicator (AUTO, HIGH, MED, LOW)

11 Set temperature
Indicates Error history number. *4
Indicates Indoor unit address. *5

12 Operating mode indicator (AUTO *1, COOL, DRY, FAN *2, HEAT *3)

13 (Upper) Indicates the error code *4 *6 / the refrigerant system address. *5

(Lower) Indicates the remote controller address. *4 *5 *6

*1 : "AUTO" is not available for a heat pump model unless it is set up as an administrative indoor unit.

*2 : "FAN" is not available for a heat pump model.

*3 : "HEAT" is not available for a cooling only model.

*4 : during Error code history display mode.

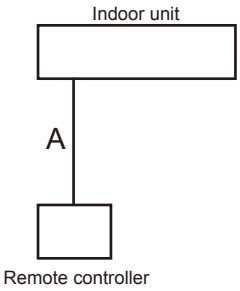
*5 : during address display mode.

*6 : during self Diagnosis mode.

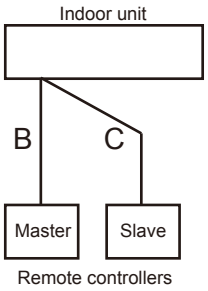
CONTROL SYSTEM

■ SYSTEM DIAGRAM

● 1 remote controller



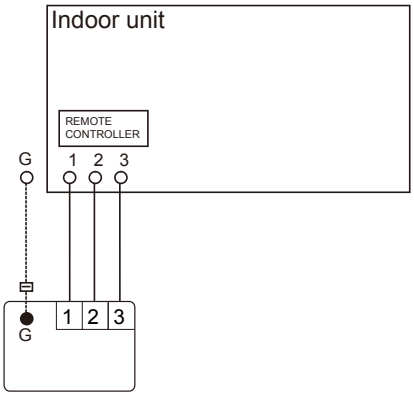
● 2 remote controllers



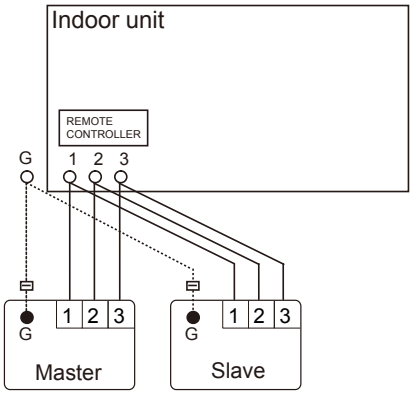
A , B , C : Remote controller cable.
Refer to 6-4-4 for detail specifications.
A ≦ 500 m ; B+C ≦ 500 m

■ ELECTRICAL WIRING

● 1 remote controller



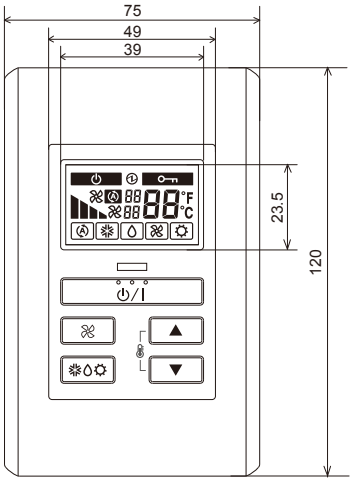
● 2 remote controllers

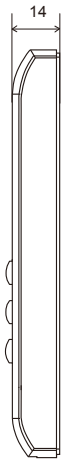


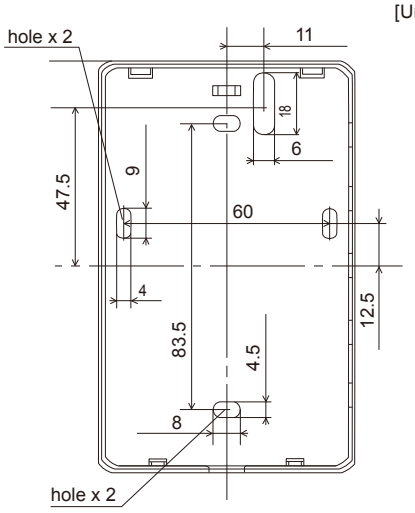
1 (RED) : 12 V
2 (WHITE) : Signal
3 (BLACK) : COM

■ DIMENSIONS

[Unit : mm]







■ INSTALLATION

● Connection Pattern

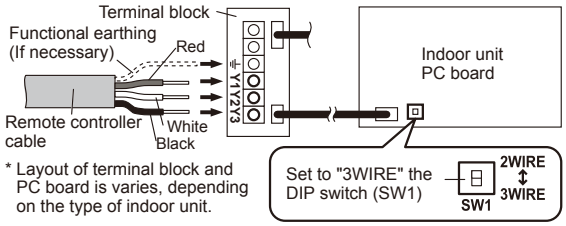
NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

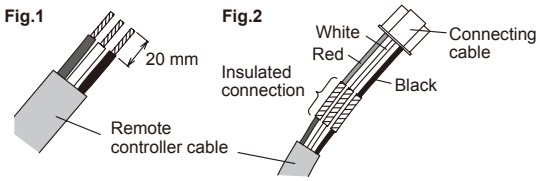
Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

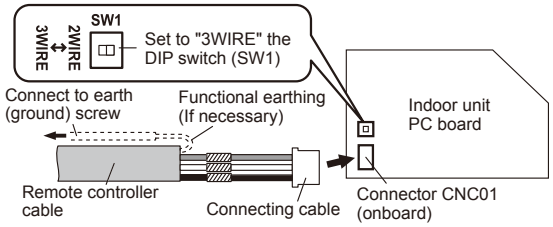
● Pattern B

1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.

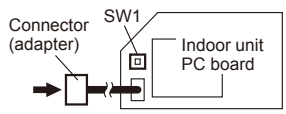


2) Connect the remote controller cable to the connecting cable, and insert it to the connector.

Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.

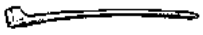


* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Remote controller cable *1 	10 m	For connecting the remote controller
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

*1 : UTY-RSKYT does not contain cables

■ WIRING SPECIFICATIONS

Use	Size	Wire type	Model name *2	Remarks
Remote controller cable	0.33 mm^2 (22AWG)	Polar 3 core	UTY-RSKY UTY-RSKG	Use sheathed PVC cable.
			UTY-RSKYT	Use shielded cable (locally purchased) in accordance with the regional cable standard.

*2 : UTY-RSKY (FUJITSU BRAND), UTY-RSKG (GENERAL BRAND), UTY-RSKYT (Oceania MODEL)

■ SPECIFICATIONS

Model name	UTY - RSKY UTY - RSKG	UTY - RSKYT
Dimensions [H × W × D] (mm)	120 × 75 × 14	
Weight (g)	90	100

CONTROL SYSTEM

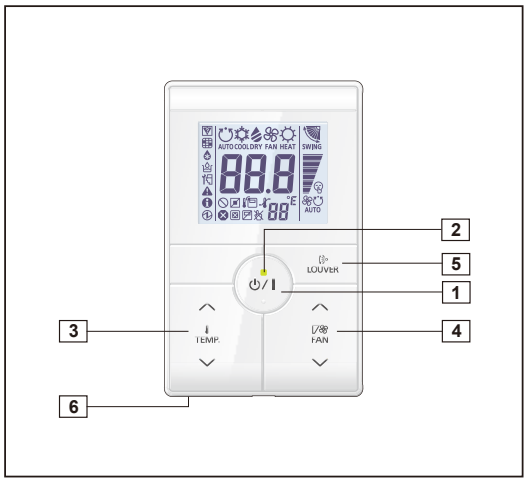
2-10. SIMPLE REMOTE CONTROLLER (Without Operation mode)

2-10-1. MODEL : UTY - RHR∗

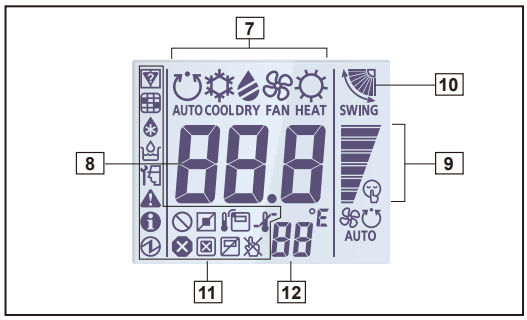


- Easy operation.
- Stylish design
- Large LCD screen & simple operation buttons
- Built-in background light function.
- Easy installation with a slim shape with no bulge in the back.
- Up to 16 indoor units can be simultaneously controlled.
- Can be installed onto SW-BOX. (applies to European and other country's standard)

■ FUNCTIONS



Display panel



1 START/STOP button
Pressed to start and stop operation.

2 LED lamp
Lights during operation.

3 Set temperature button
Selects the setting temperature.(18-30°C[COOL], 10-30°C[HEAT])

4 Fan control button
Selects the fan speed.

5 Louver button
Set the airflow direction.

6 Room temperature sensor(inside)

7 Operating mode indicator

8 Set temperature
Indicates Indoor unit address. *1

9 Fan speed indicator (AUTO, HIGH, MED, LOW, QUIET).

10 Airflow direction indicator

11 Status icons
- Mode mismatch
- Filter sign *2
- Defrost operation
- Oil recovery operation
- Under maintenance
- Error
- Special state
- Conducting electricity
- Emergency stop
- Operation controlled
- Forced stop
- Room temperature sensor is enabled *2
- Central controlled
- Setting temperature range is enabled
- Operation prohibited

12 Indicates the remote controller address. *1

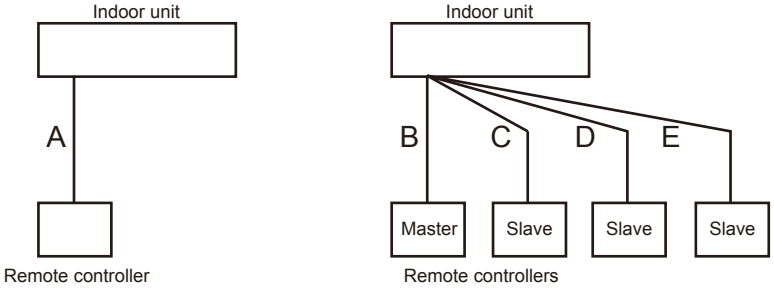
*1 : During address display mode.

*2 : For single split system, to use this function, set the Function setting of the indoor unit accordingly.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

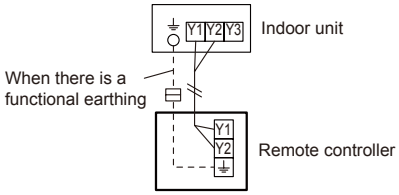
● 1 remote controller ● 4 remote controllers



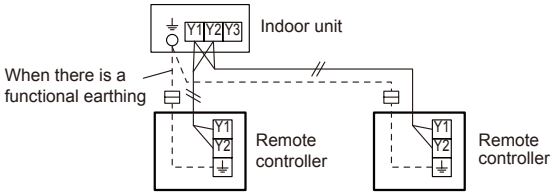
A , B , C , D , E : Remote controller cable.
Refer to 6-4-4 for detail specifications.
A ≦ 500 m ; B+C+D+E ≦ 500 m

■ ELECTRICAL WIRING

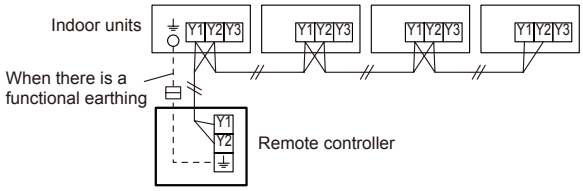
● Single control



● Multiple remote control

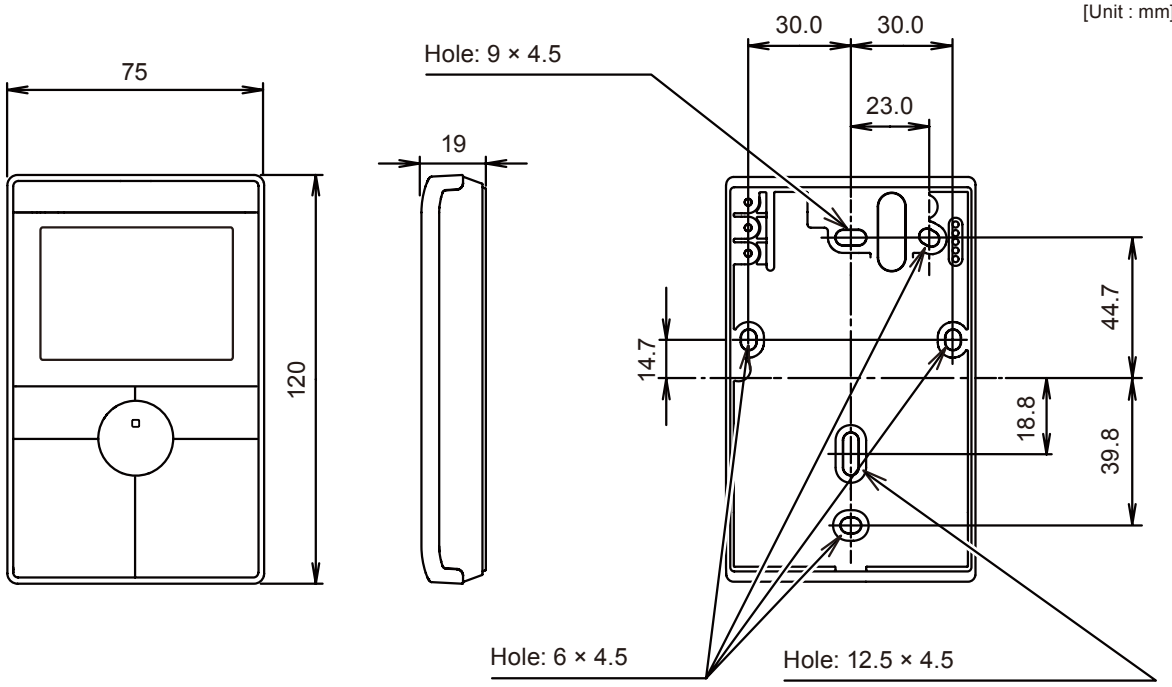


● Group control



■ DIMENSIONS

[Unit : mm]



Front View Side View Rear View

■ INSTALLATION

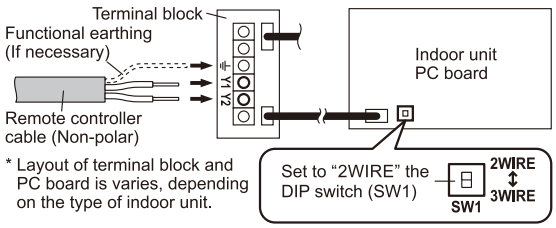
● Connection Pattern

NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

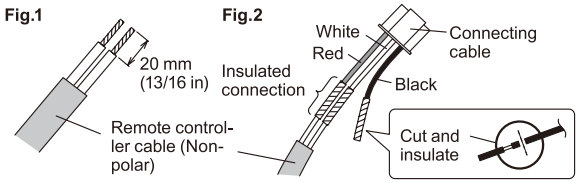
Connect the end of remote controller cable directly to the exclusive terminal block. Set to “2WIRE” the DIP switch (SW1) on the PC board (printed circuit board) of the indoor unit.



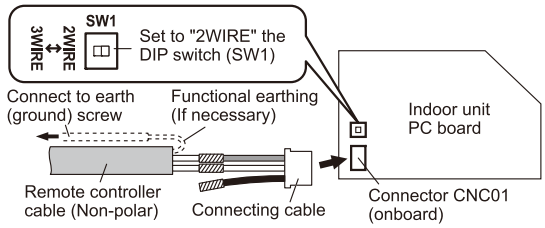
NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

● Pattern B

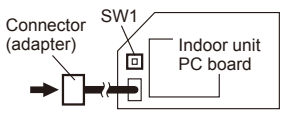
1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.



2) Insert connecting cable to the connector. Set to “2WIRE” the DIP switch (SW1) on the PC board of the indoor unit.

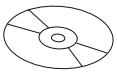


* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Wired remote controller 	1	
Installation manual 	1	
Operating manual 	1	
CD-ROM 	1	
Screw (M4 × 16mm) 	2	For installing the remote controller
Cable tie 	1	For binding remote controller and remote controller cable

■ WIRING SPECIFICATIONS

Cable type	Size	Remarks
Sheathed cable	0.33 to 1.25 mm² (22 to 16 AWG)	Non polar 2 core, Twisted pair
Shielded cable*		

* Use shielded cable in accordance with local rules for remote controller cable.

■ SPECIFICATIONS

Model name	UTY - RHR∗
Dimensions [H × W × D] (mm)	120 × 75 × 19
Weight (g)	120

CONTROL SYSTEM

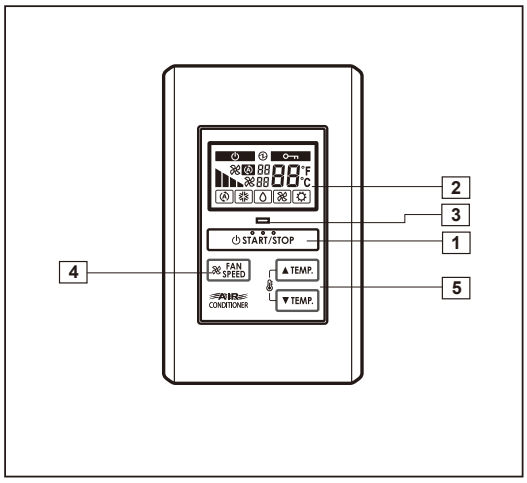
2-10-2. MODEL : UTY - RHK∗

NOTE: A part of function is limited. It is recommended to use it together with other type controller.

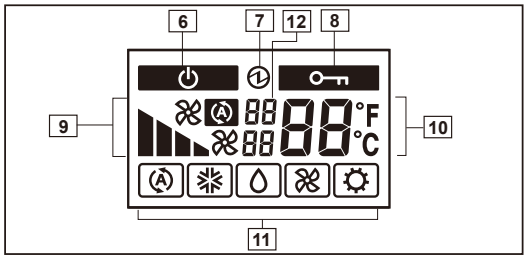


- Easy operation.
- Built-in Backgroud Light function.
- Easy installation with a slim shape with no bulge in the back.
- Error history. (Last 16 error codes can be accessed.)
- Up to 16 indoor units can be simultaneously controlled.
- Can be installed onto Switch Box. (Applies to European and other country's standard.)
- Concentrates on the basic operations such as Start/Stop, Fan Control, and Temperature Setting.

■ FUNCTIONS



Display panel



1 START/STOP button
Pressed to start and stop operation.

2 Display with backlight
Lights during operation.

3 Operation lamp
Lights during operation.

4 Fan control button
Selects the fan speed.

5 Set temperature button
Selects the setting temperature. (18-30°C [COOL], 16-30°C [HEAT])

6 Standby indicator
Indicates during the oil recovery and defrosting operation.

7 Power source indicator
Indicates the main power ON.

8 Central control indicator
Indicates when function is locked from Touch Panel Controller or System Controller.

9 Fan speed indicator (AUTO, HIGH, MED, LOW)

10 Set temperature
Indicates Error history number. *1
Indicates Indoor unit address. *2

11 Operating mode indicator(AUTO *1, COOL, DRY, FAN *2, HEAT *3)

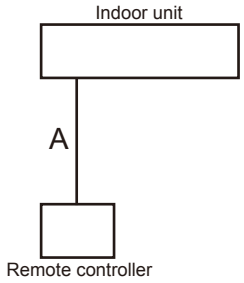
12 (Upper) Indicates the error code *1, *3 / the refrigerant system address. *2
(Lower) Indicates the remote controller address. *1, *2, *3

*1 : during Error code history display mode.
*2 : during address display mode.
*3 : during self Diagnosis mode.

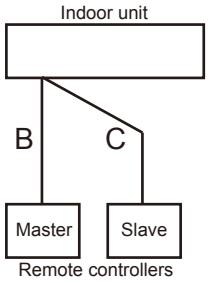
CONTROL SYSTEM

■ SYSTEM DIAGRAM

● 1 remote controller



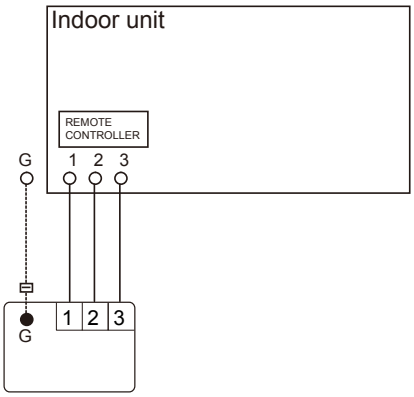
● 2 remote controllers



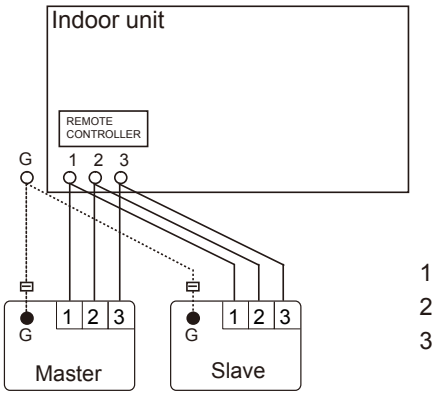
A , B , C : Remote controller cable. Refer to 6-4-4 for detail specifications.
A ≦ 500 m ; B+C ≦ 500 m

■ ELECTRICAL WIRING

● 1 remote controller



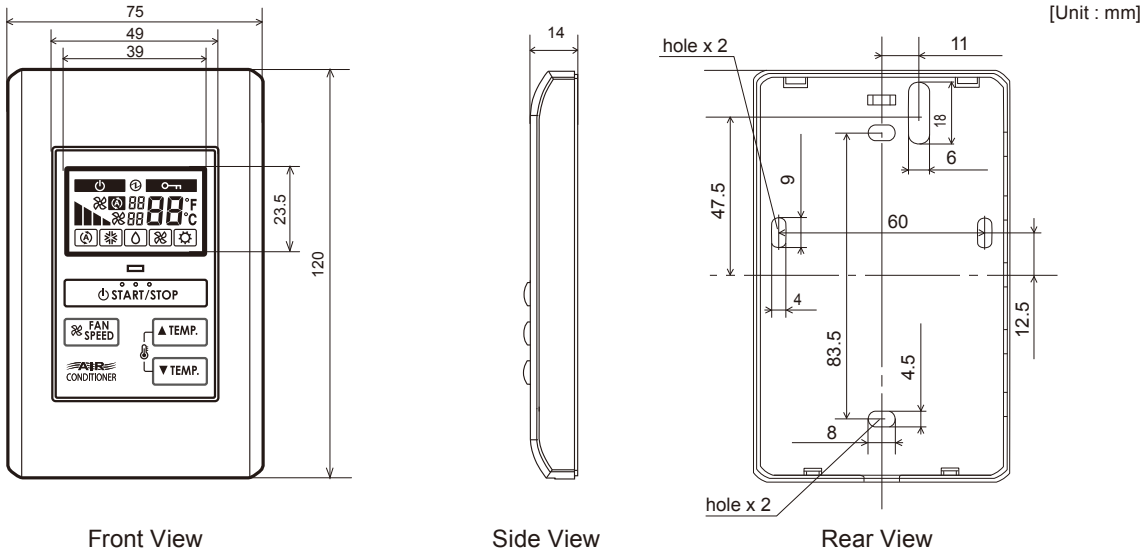
● 2 remote controllers



1 (RED) : 12 V
2 (WHITE) : Signal
3 (BLACK) : COM

■ DIMENSIONS

[Unit : mm]



Front View　　Side View　　Rear View

■ INSTALLATION

● Connection Pattern

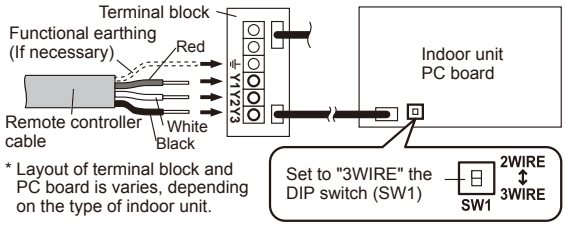
NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

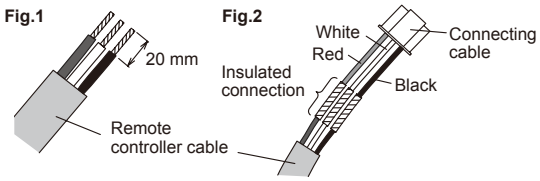
Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

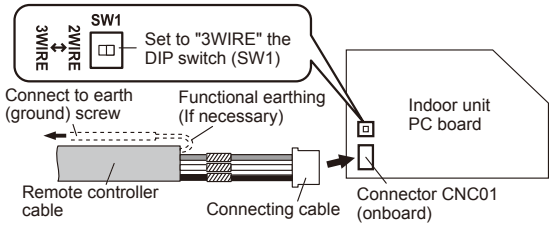
● Pattern B

1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.

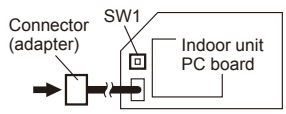


2) Connect the remote controller cable to the connecting cable, and insert it to the connector.

Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



* Layout of Connector and PC board varies, depending on the type of indoor unit



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Remote controller cable *1 	10 m	For connecting the remote controller
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie 	1	For remote controller and remote controller cable binding
Installation manual 	1	
Operating manual 	1	

*1 : UTY-RHKYT does not contain cables.

■ WIRING SPECIFICATIONS

Use	Size	Wire type	Model name *2	Remarks
Remote controller cable	0.33 mm^2 (22AWG)	Polar 3 core	UTY-RHKY UTY-RHKG	Use sheathed PVC cable.
			UTY-RHKYT	Use shielded cable (locally purchased) in accordance with the regional cable standard.

*2 : UTY-RHKY (FUJITSU BRAND), UTY-RHKG (GENERAL BRAND), UTY-RHKYT (Oceania MODEL)

■ SPECIFICATIONS

Model name	UTY - RHKY UTY - RHKG	UTY - RHKYT
Dimensions [H × W × D] (mm)	120 × 75 × 14	
Weight (g)	90	100

CONTROL SYSTEM

2-11. WIRELESS REMOTE CONTROLLER

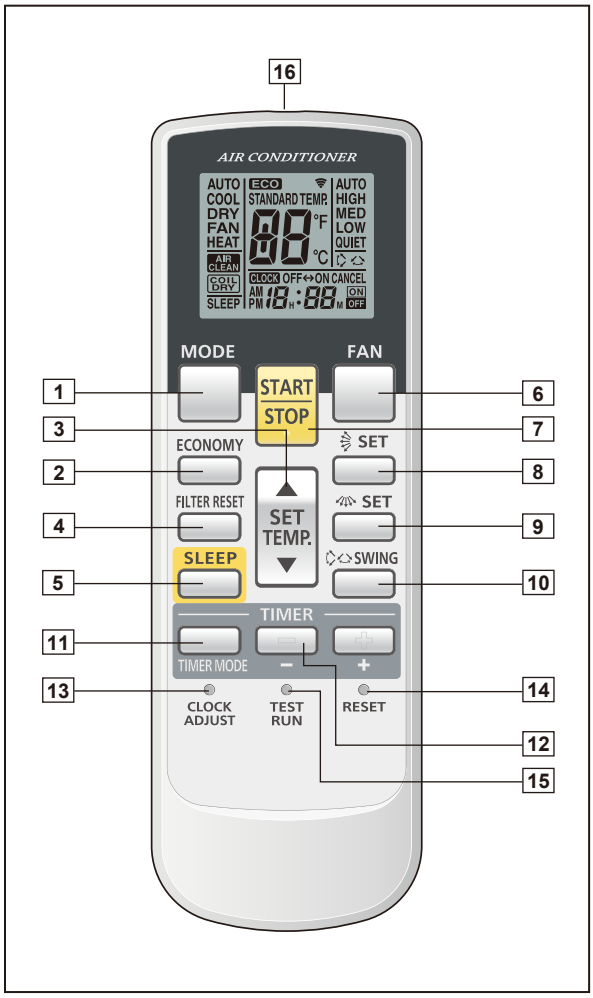
■ MODEL : UTY - LNH∗



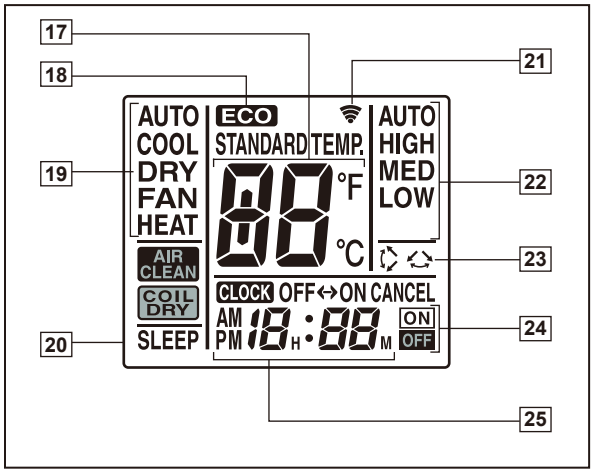
- 4 mode timer setup available (ON / OFF / PROGRAM / SLEEP).
- Up to 16 indoor units connected within the remote controller group can be simultaneously controlled.
- Can be used jointly with wired remote controllers.
- Easy to change custom code (max. 4 codes).

CONTROL SYSTEM

■ FUNCTIONS



Display panel



1 OPERATION MODE button
Selects the operating mode (AUTO, HEAT, FAN, COOL, DRY).
/Start / end R.C. custom code change. (Max 4 codes)

2 Economy button

3 Set temp. button (▲ / ▼)
Set remote controller custom code buttons
Sets the indoor temp./ Sets R.C. custom code.

4 Filter reset button

5 Sleep button
Pressed to select sleep timer.

6 Fan button
Selects the fan speed (AUTO, LOW, MED, HIGH).

7 START/STOP button
Pressed to start and stop operation.

8 Set button (Vertical)
Vertical airflow direction set button.

9 Set button (Horizontal)
Horizontal airflow direction set button.

10 Swing button
Swing airflow button.

11 Timer mode button
Pressed to select the timer mode. (OFF TIMER, ON TIMER, PROGRAM TIMER, TIMER RESET)

12 Timer set (+ / -) button
Sets the current time and on-off time.

13 Clock adjust button
Sets the current time.

14 Reset button
Used when replacing batteries.

15 Test run button
Used when testing the air conditioner after installation.

16 Signal transmitter

17 Temperature set indicator

18 Economy indicator

19 Operating mode indicator

20 Sleep indicator

21 Transmit indicator

22 Fan speed indicator

23 Swing indicator

24 Timer mode indicator

25 Clock indicator

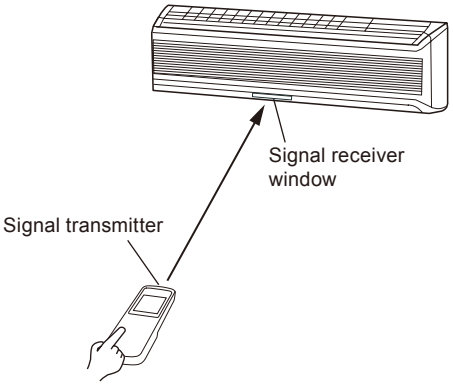
*1 : "AUTO" is not available for a heat pump model unless it is set up as an administrative indoor unit.

*2 : "FAN" is not available for a heat pump model.

*3 : "HEAT" is not available for a cooling only model.

CONTROL SYSTEM

■ SYSTEM DIAGRAM

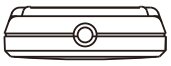


- Control signal might not be recognized in following cases:
  (i) A curtain or a wall, etc. exists between transmitter and receiver.
  (ii) There is an instant-start type (inverter type, etc.) fluorescent lamp in the room.
- Air conditioner might not work correctly when strong light hits the signal receiver window. Shut off the direct sunlight and also keep the illuminator far away from the receiver window.

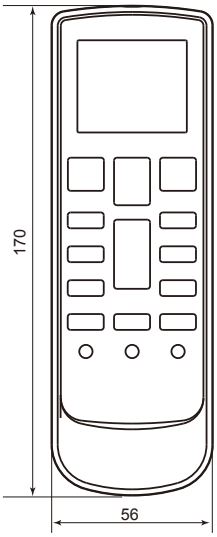
■ DIMENSIONS

(Unit : mm)

● Controller



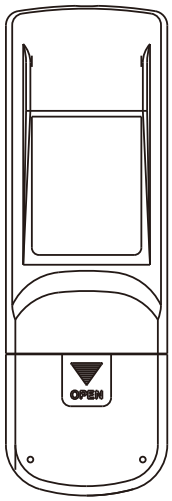
Top View



Front View

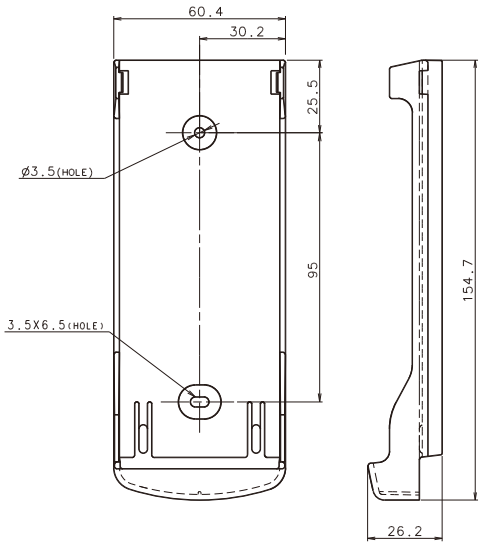


Side View



Rear View

● Holder



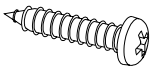
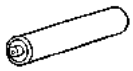
Front View

Side View

Bottom View

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Installation manual 	1	
Operating manual 	1	
Remote controller holder 	1	Use as remote controller holder
Screw (M3 × 12 mm) 	2	For remote controller holder installation
Battery [1.5 V (R03 / AAA)] 	2	For remote controller

■ SPECIFICATIONS

Model name	UTY - LNH∗
Dimensions [H × W × D] (mm)	170 × 56 × 19
Weight (g)	85 (w/o batteries)

CONTROL SYSTEM

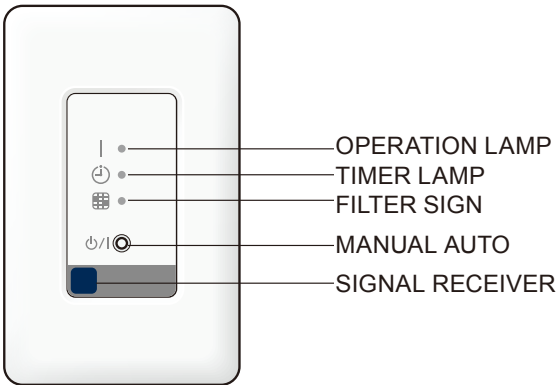
2-12. IR RECEIVER UNIT (for ALL DUCT TYPE)

■ MODELS : UTB - ∗WC



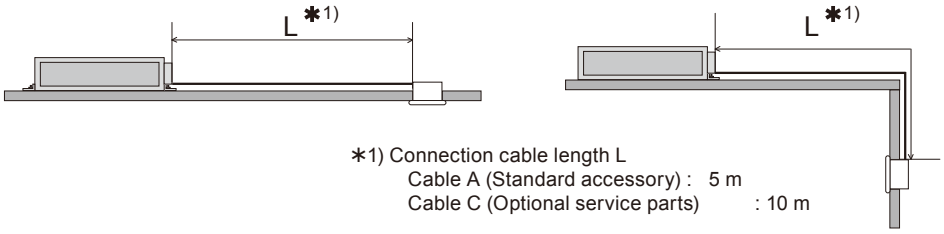
Duct type indoor unit can be controlled with wireless remote controller if the IR receiver unit is used.

■ FUNCTIONS



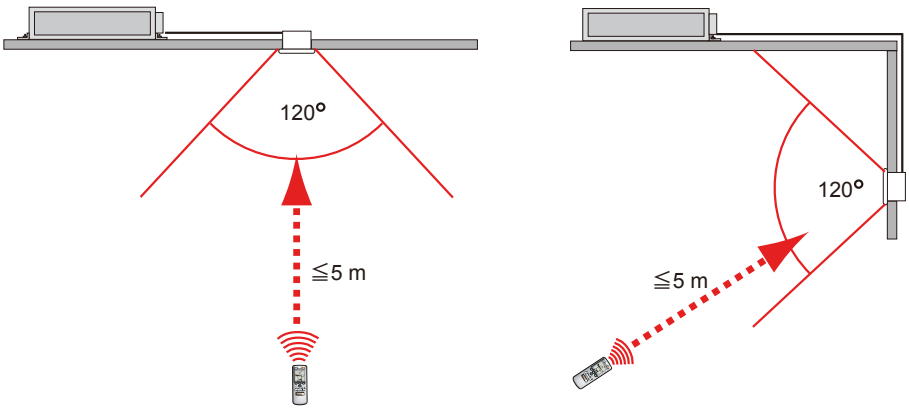
■ SYSTEM DIAGRAM

● ATTACHMENT RANGE



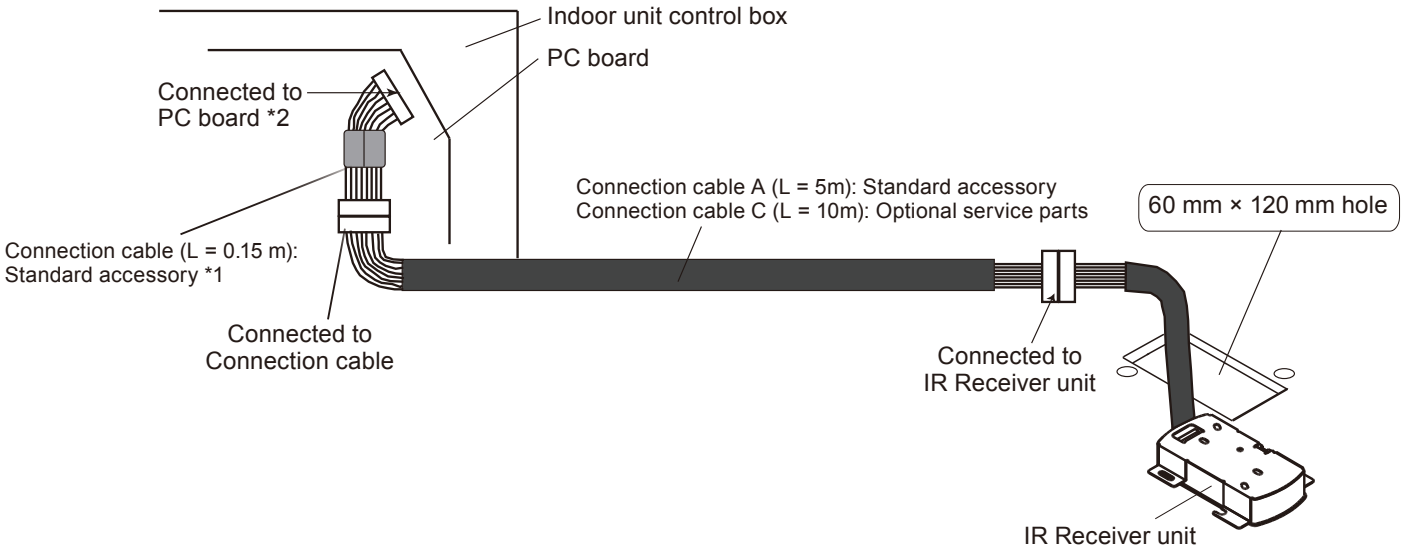
∗1) Connection cable length L
Cable A (Standard accessory) : 5 m
Cable C (Optional service parts) : 10 m

● SIGNAL ANGLE



CONTROL SYSTEM

■ ELECTRICAL WIRING

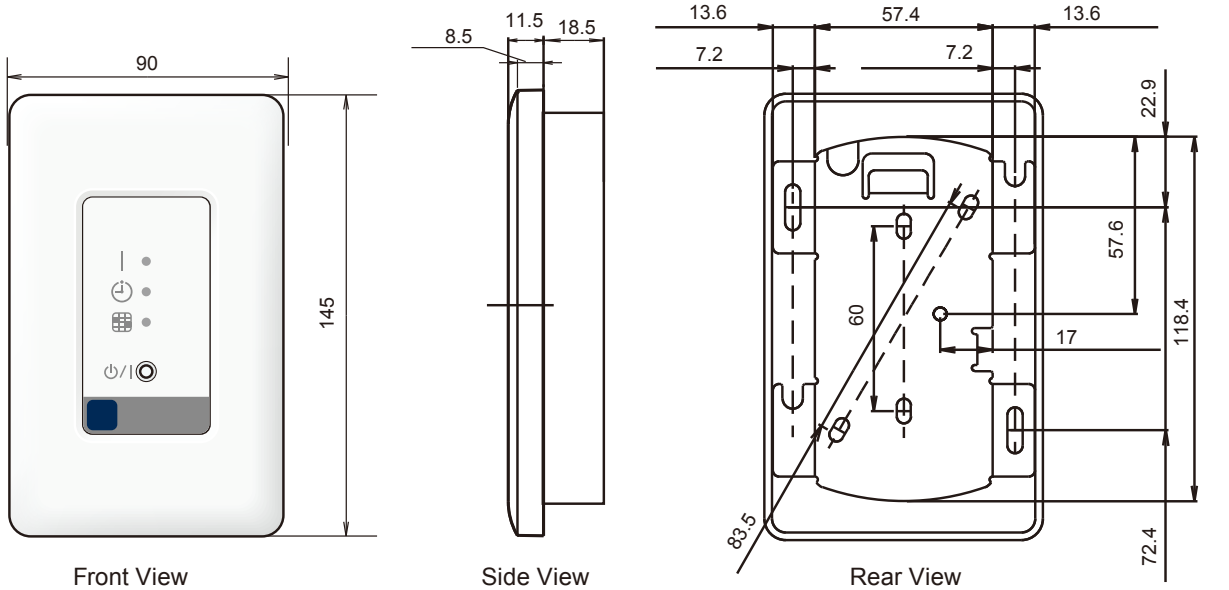


*1 Connection cable	Connection cable D
*2 Connected to PC board	CN18

CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)

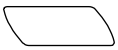
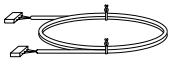
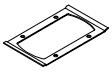


Front View

Side View

Rear View

■ PACKING LIST

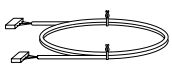
Name and shape	Quantity	Application
Installation manual 	1	
Cover 	1	For receiver unit
Insulation 	1	For receiver unit
Cable tie	Small:1 Medium:1	For receiver unit
Screw (M4 × 20 mm) 	2	For installing receiver unit to wall, etc.
Screw (M4 × 12 mm) 	1	For attaching the hook metal to the holder cover
Screw (M4 × 10 mm) 	2	For attaching the hook metal to the indoor unit
Connection cable A (5 m) 	1	For connecting PC board of indoor unit to receiver unit
Connection cable B (0.15 m) 	1	-
Connection cable D (0.15 m) 	1	For connecting PC board of indoor unit to receiver unit
Hook metal 	1	For installing receiver unit to indoor unit
Bracket (cover) 	1	For receiver unit

■ SPECIFICATIONS

Model name	UTB - ∗WC
Dimensions [H × W × D] (mm)	145 × 90 × 30
Weight (g)	150

■ OPTIONAL SERVICE PARTS

Use the parts number shown below to order the cable from your sales representative.
Select shielded type conncetion cable in accordance with the standard of the country.

Name and shape	Type	Parts No.
Connection cable C (10 m) 	Non-shielded	9378143012
	Shielded	9378143036

CONTROL SYSTEM

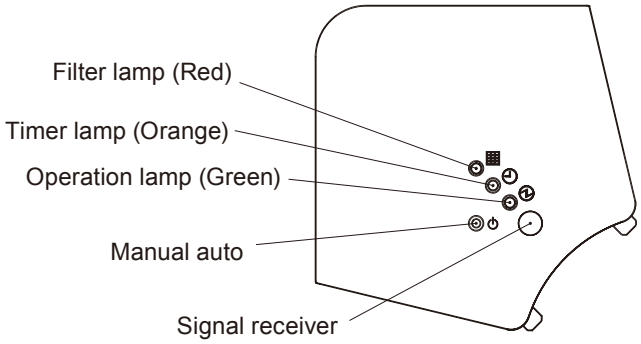
2-13. IR RECEIVER UNIT (for CASSETTE TYPE)

■ MODEL : UTY - LRH∗B1

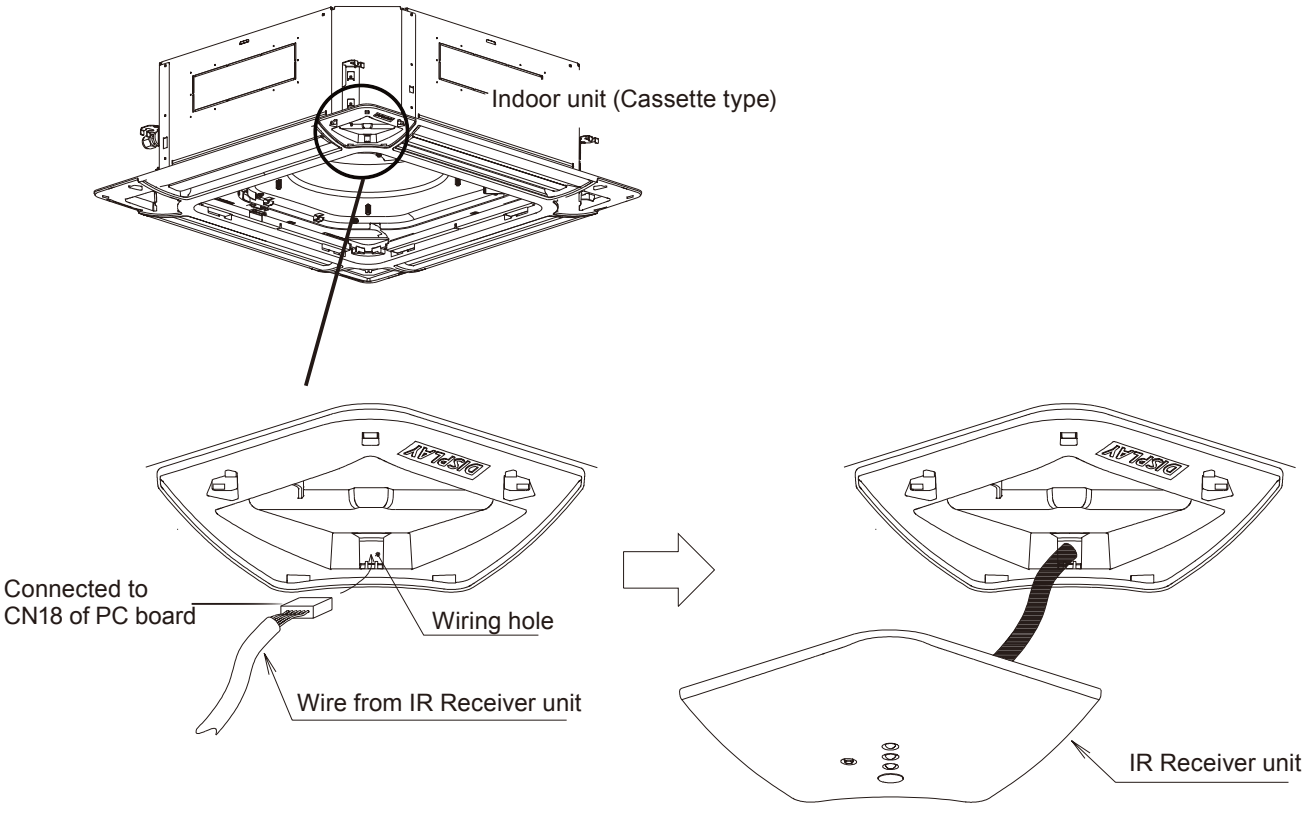


Cassette type indoor unit can be controlled with wireless remote controller if the IR receiver unit is used.

■ FUNCTIONS



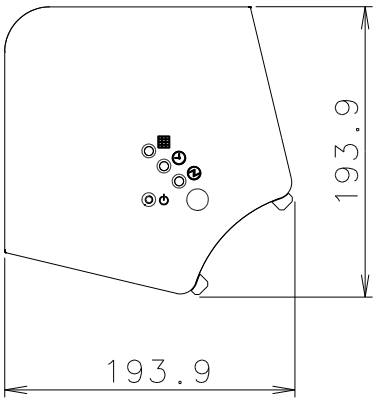
■ ELECTRICAL WIRING



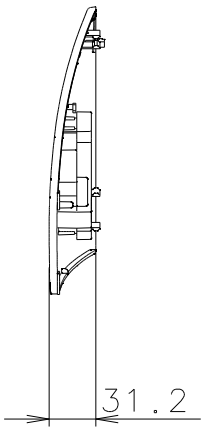
CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



Front View



Side View

■ PACKING LIST

Name and shape	Quantity	Application
Installation manual	1	
Strap	1	Prevents receiver kit from falling down

■ SPECIFICATIONS

Model name	UTY - LRH∗B1
Dimensions [H × W × D] (mm)	193.9 × 193.9 × 31.2
Weight (g)	140

CONTROL SYSTEM

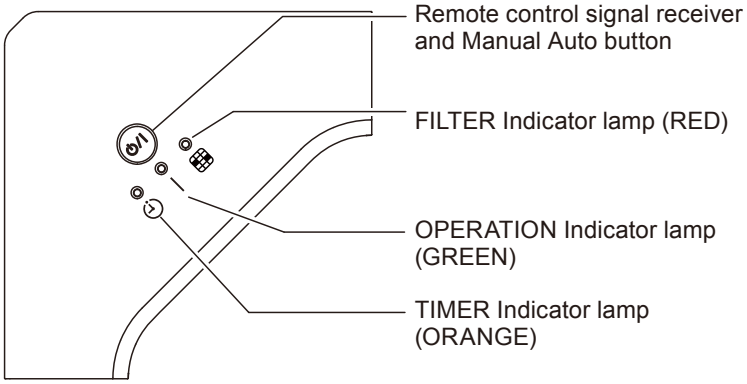
2-14. IR RECEIVER UNIT [for CASSETTE TYPE (CIRCULAR FLOW)]

■ MODELS : UTY - LBHXD

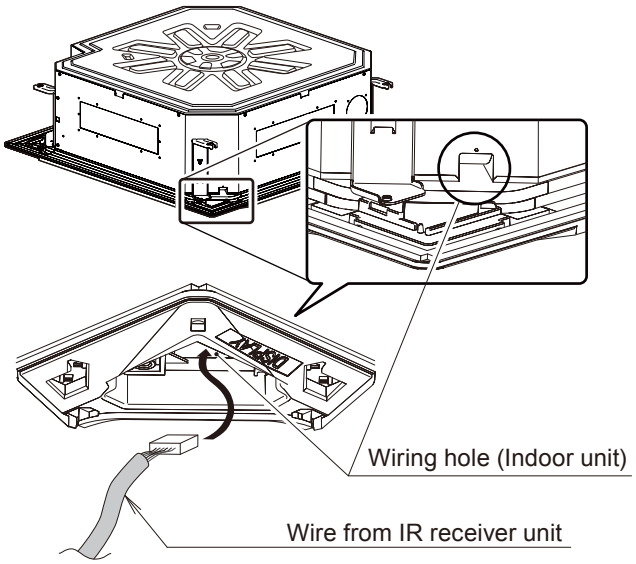


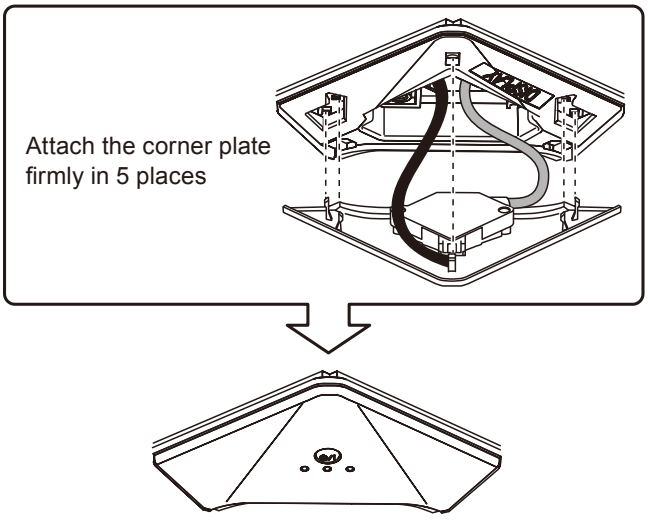
Duct type indoor unit can be controlled with wireless remote controller if the IR receiver unit is used.

■ FUNCTIONS



■ ELECTRICAL WIRING

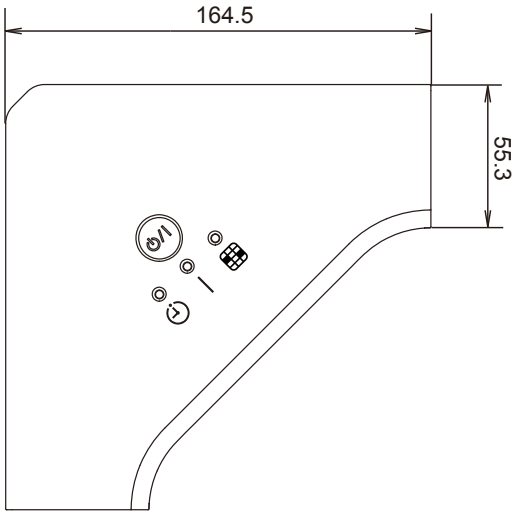




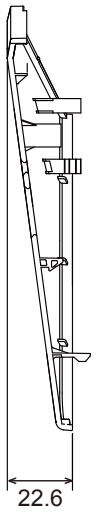
CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



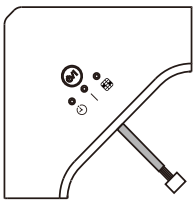
Front View



Side View

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
IR receiver unit 	1	For receiving the signal from the remote control unit
Strap 	1	Prevent IR receiver unit from falling down
Cable tie 	2	For electrical wiring

■ SPECIFICATIONS

Model name	UTY - LBHXD
Dimensions [H × W × D] (mm)	164.5 × 164.5 × 22.6
Weight (g)	110

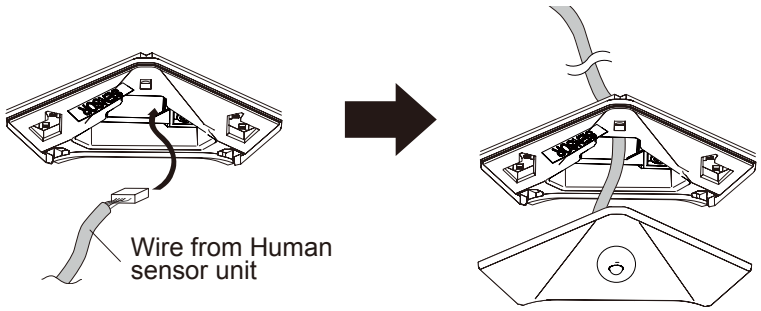
2-15. HUMAN SENSOR KIT [for CASSETTE TYPE (CIRCULAR FLOW)]

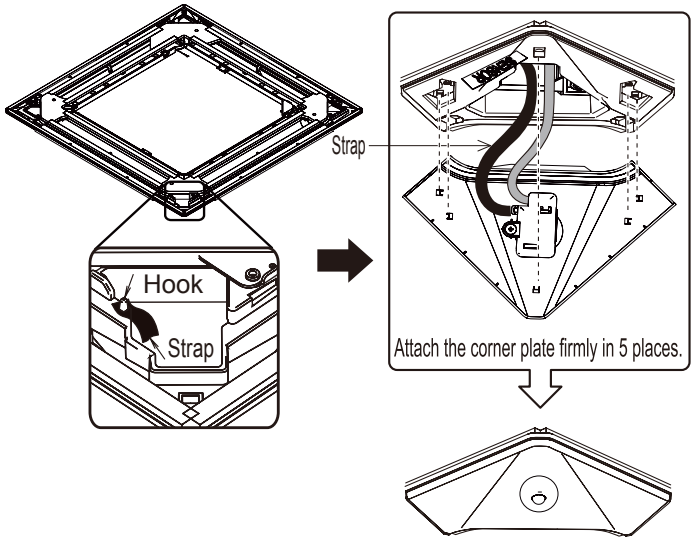
■ MODEL : UTY - SHZXC



Cassette type indoor unit can be controlled with wireless remote controller if the IR receiver unit is used.

■ ELECTRICAL WIRING

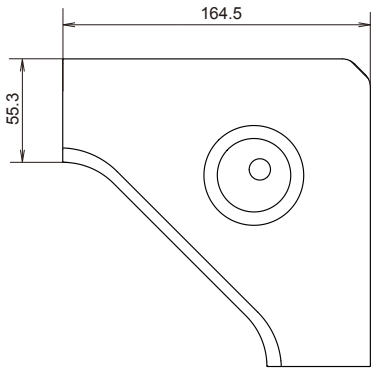




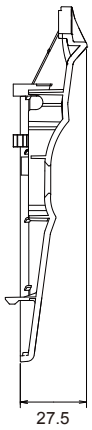
CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)

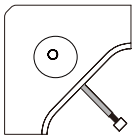
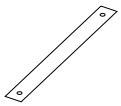


Front View



Side View

■ PACKING LIST

Name and shape	Quantity	Application
Human sensor unit 	1	For detection of movement
Cable tie 	3	For binding wires
Strap 	1	To prevent Human sensor unit from falling
Insulation 	3	To fasten the Human sensor wire

■ SPECIFICATIONS

Model name	UTY - SHZXC
Dimensions [H × W × D] (mm)	164.5 × 164.5 × 27.5
Weight (g)	110

CONTROL SYSTEM

2-16. REMOTE SENSOR UNIT

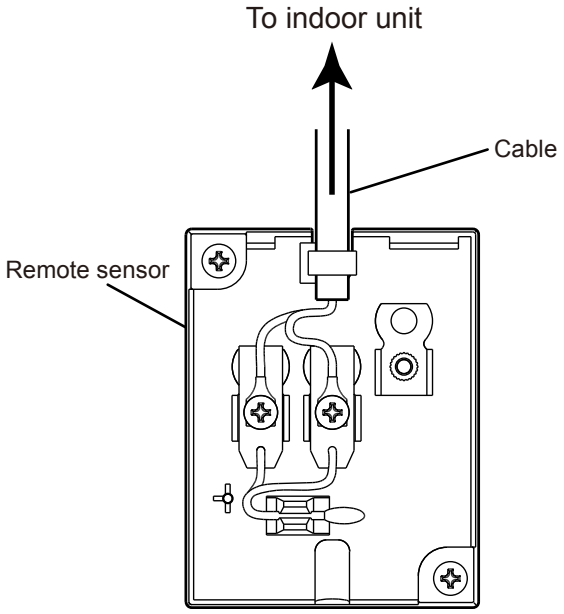
■ MODEL : UTY-XSZX



Amenity space can be offered by installing the Remote sensor.

■ ELECTRICAL WIRING

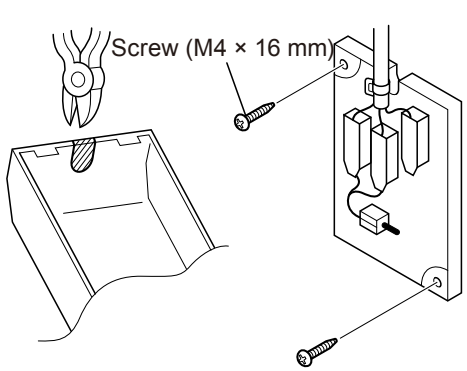
- Remove the screws from the remote sensor, and remove the cover.
- Connect the cable to the remote sensor as shown below.
- Ensure that the wires do not contact each other.

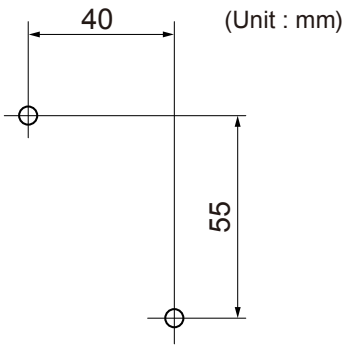


■ INSTALLATION

● When the cable is attached to the wall

- Remove the material covering the wiring penetration (thin material) in the cover of the sensor unit with a pair of cutters. The cable passes through this hole.
- Now attach the remote sensor on the wall using the screws.



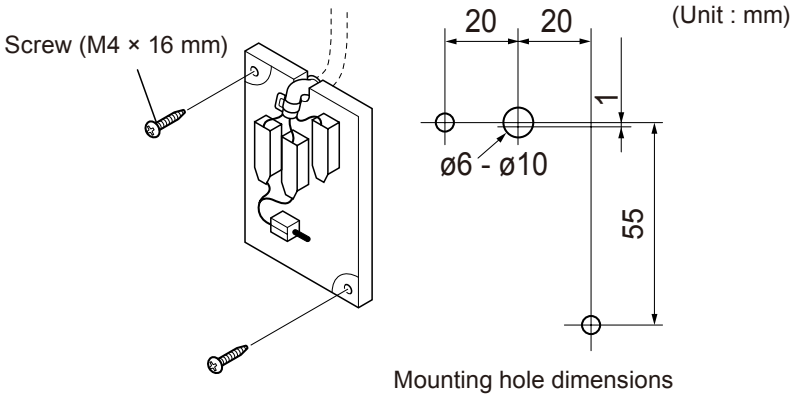


Mounting hole dimensions

CONTROL SYSTEM

● When the cable is buried in the wall

- Remove the material (thinner than the surrounding material) in the wiring hole in the remote sensor using a pair of cutters.
- Drill a hole in the wall for the cable.
- Seal the area around the cable penetration with putty.



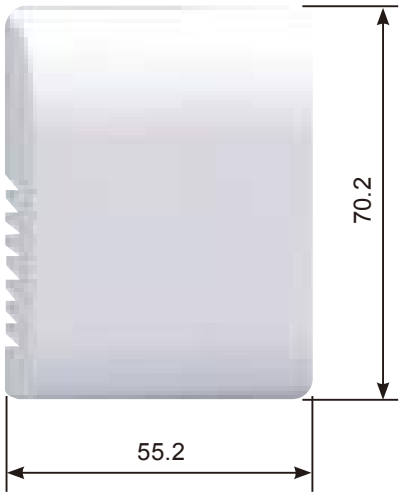
Mounting hole dimensions

● Finish

- Fit the cover on the remote sensor and screw it in place.

CONTROL SYSTEM

■ DIMENSIONS



■ PACKING LIST

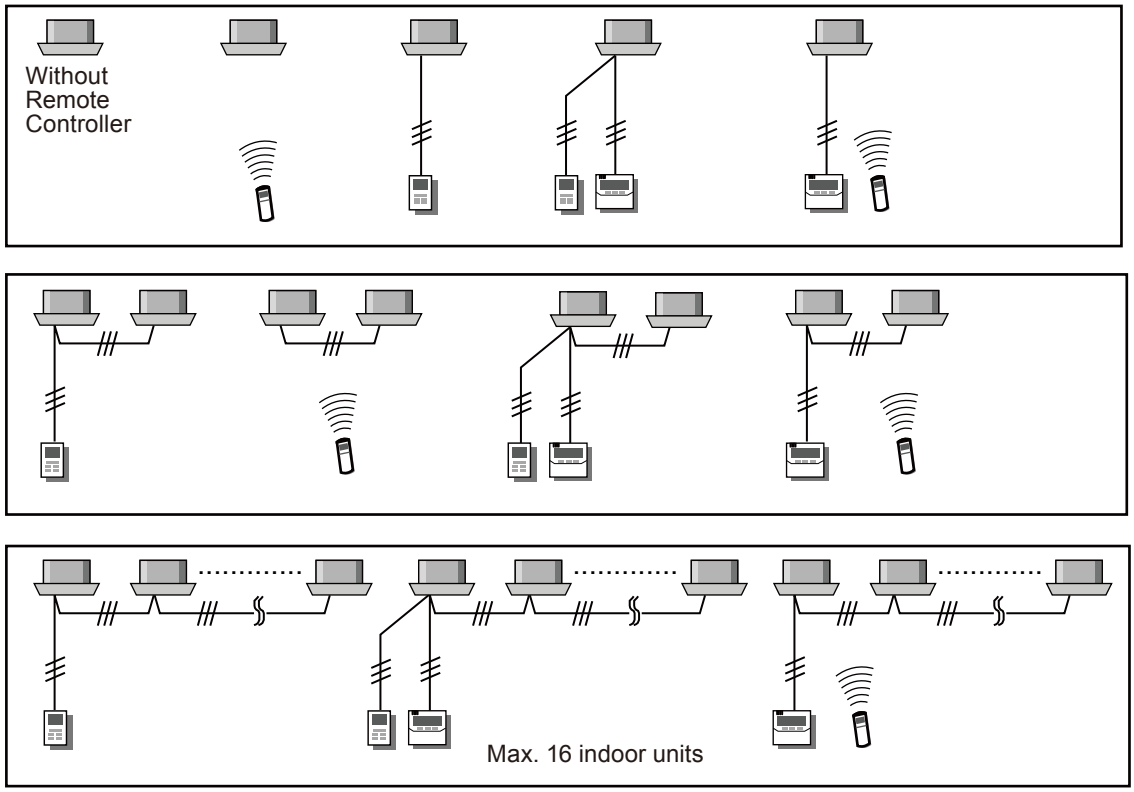
Name and shape	Quantity	Application
Installation manual	1	
Cable (10 m)	1	
Screw (M4 × 16 mm)	2	
Screw (M4 × 10 mm)	2	
Cord clamp	1	

2-17. GROUP CONTROL METHOD

■ REMOTE CONTROLLER GROUP

Wired, Simple and Wireless Remote Controllers can be used jointly in the following combinations.

Example of combination for "Remote controller group"



Connectable indoor unit : 1-16
Connectable remote controller : 0 - 2

NOTES:

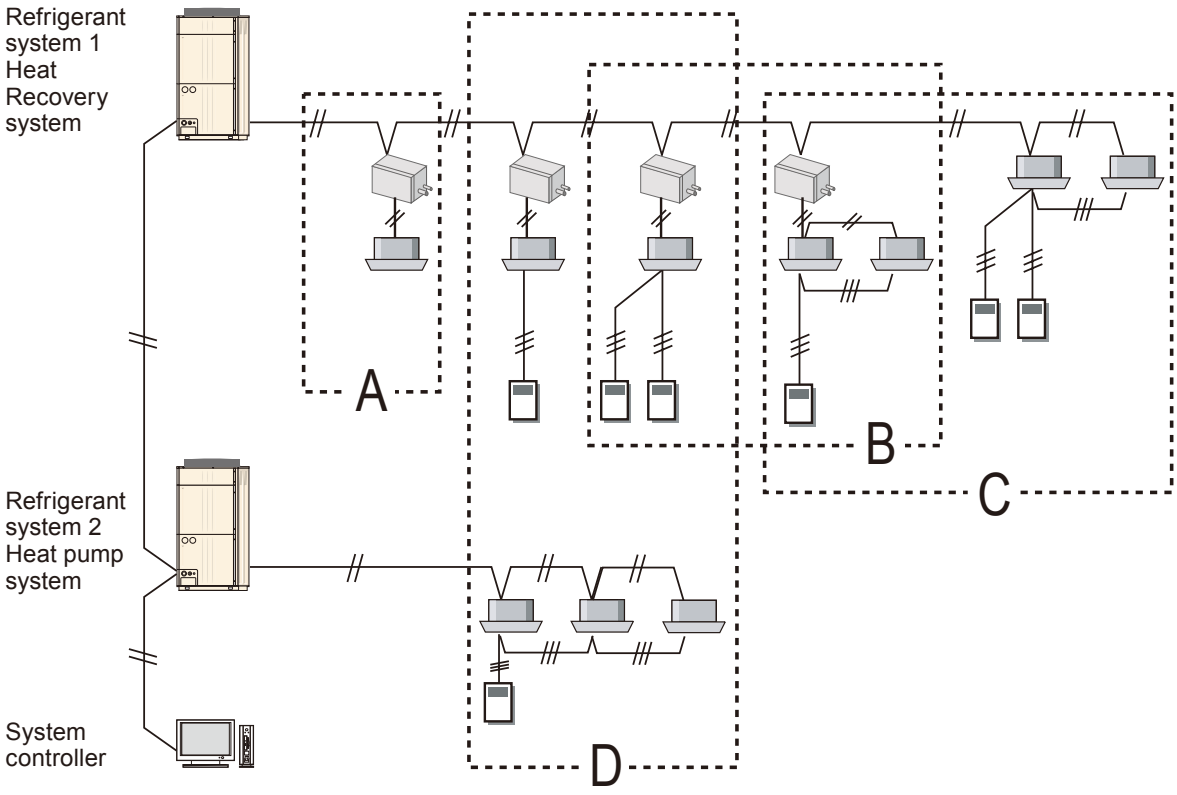
- Indoor units in same remote controller group will conduct the same operation.
- When using 2 remote controllers;
  - Last command has priority. (Operation mode might be fixed by system operation.)
  - Timer setting function on the slave remote controller or Wireless Remote Controller may become invalid.

CONTROL SYSTEM

■ GROUP

This function is used when operating a multiple number of remote controller group at a time from the System Controller or Touch Panel Controller or Central Remote Controller.

● Example



Group A: "Group" is possible with only one indoor unit
Group B: "Group" is possible with spanning the RB groups.
Group C: "Group" is possible with spanning the RB group and indoor unit of cooling only type.
Group D: "Group" is possible with spanning the refrigerant systems.

- The contents of a setting may not be reflected by operational status. (B, C, D group)

CONTROL SYSTEM

2-18. COMPARISON TABLE OF CONTROLLERS

■ LIST OF CONTROLLER FUNCTION

Item		System Controller	System Controller Lite	Touch Panel Controller	Central Remote Controller	Group Remote Controller	Wired Remote Controller (Touch panel)	Wired Remote Controller	Wired Remote Controller	Simple Remote Controller	Simple *1 Remote Controller	Wireless Remote Controller
Model		UTY-APGXZ1 UTY-APGX	UTY-ALGXZ1 UTY-ALGX	UTY-DTG∗Z1 UTY-DTG∗	UTY-DCG∗	UTY-CGG∗	UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	UTY-RLR∗	UTY-RNK∗	UTY-RSR∗ (UTY-RSK∗)	UTY-RHR∗ (UTY-RHK∗)	UTY-LNH∗
Max. controllable remote controller groups		1600	400	400	100	8	1	1	1	1	1	1
Max. controllable indoor units		1600	400	400	100	*2	16	16	16	16	16	16
Max. controllable groups		1600	400	400	16	-	-	-	-	-	-	-
Air conditioning control function	On / Off	●	●	●	●	●	●	●	●	●	●	●
	Operation mode setting	●	●	●	●	●	●	●	●	●	-	●
	Fan speed setting	●	●	●	●	●	●	●	●	●	●	●
	Room temp. setting	●	●	●	●	●	●	●	●	●	●	●
	Room temp. set point limitation	●	●	●	●	-	●	●	-	● (-)	● (-)	-
	Test operation	-	-	●	●	-	●	●	●	●	● (-)	●
	Up / down air direction flap setting	●	●	●	●	-	●	●	●	● (-)	● (-)	●
	Right / left air direction flap setting	●	●	●	●	-	●	●	●	-	-	●
	Group setting	●	●	●	●	-	-	-	-	-	-	-
	RC prohibition	●	●	●	●	-	-	-	-	-	-	-
	Anti freeze setting	●	●	●	●	-	●	-	-	-	-	-
	Economy mode setting	●	●	●	●	-	●	●	●	-	-	●
Display	Failure	●	●	●	●	●	●	●	●	●	●	-
	Defrosting	●	●	●	●	-	●	●	●	●	●	-
	Current time	●	●	●	●	●	●	●	●	-	-	●
	Day of week	●	●	●	-	●	●	●	●	-	-	-
	R.C. prohibition	●	●	●	●	●	●	●	●	●	●	-
	Cooling / heating priority	●	●	●	●	●	●	●	●	●	●	-
	Address display	●	●	●	●	●	●	●	●	●	●	-
	Room temp	-	-	-	-	-	●	-	-	● (-)	● (-)	-
	Multi language	●	●	●	●	-	●	-	-	-	-	-
	Summer time	●	●	●	●	-	●	●	-	-	-	-
	Name registration	●	●	●	●	-	●	-	-	-	-	-
	Backlight	-	-	●	●	-	●	-	-	●	●	-

*1: "Operation mode" setting is not available for this model.
*2: Up to 2 refrigerant system.
●: Supported, -: Not supported yet

CONTROL SYSTEM

Item			System Controller	System Controller Lite	Touch Panel Controller	Central Remote Controller	Group Remote Controller	Wired Remote Controller (Touch panel)	Wired Remote Controller	Wired Remote Controller	Simple Remote Controller	Simple *1 Remote Controller	Wireless Remote Controller
Model			UTY-APGXZ1 UTY-APGX	UTY-ALGXZ1 UTY-ALGX	UTY-DTG∗Z1 UTY-DTG∗	UTY-DCG∗	UTY-CGG∗	UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	UTY-RLR∗	UTY-RNK∗	UTY-RSR∗ (UTY-RSK∗)	UTY-RHR∗ (UTY-RHK∗)	UTY-LNH∗
Timer	Schedule timer	Period	Year	Year	Year	Week	Week	Week	Week	Week	-	-	-
		On/Off, Temp, mode, times per day	144	144	20	20	4	8	8	4	-	-	-
	On / Off timer		-	-	-	-	-	●	●	●	-	-	●
	Sleep timer		-	-	-	-	-	-	-	-	-	-	●
	Program timer		-	-	-	-	-	-	-	-	-	-	●
	Auto off timer		-	-	-	-	-	●	●	-	-	-	-
	Day off		●	●	●	●	-	●	●	●	-	-	-
	Min. unit of timer setting (Minutes)		10	10	10	10	10	10 - 30	30	30	-	-	5
Control	Status monitoring system		●	●	●	●	-	-	-	-	-	-	-
	Electricity charge calculation		●	●	-	-	-	-	-	-	-	-	-
	Error history		●	●	●	●	●	●	●	●	-	-	-
	Emergency stop		-	-	●*3	●*3	-	-	-	-	-	-	-
	Control via Internet		●	●	-	-	-	-	-	-	-	-	-
	E-mail notiffication for malfunction		●	●	-	-	-	-	-	-	-	-	-
	Key lock		● Password setting	● Password setting	● Password setting	● Password setting	● Child lock	● Child lock	● Child lock Part lock	-	-	-	-

*1: "Operation mode" setting is not available for this model.
*3: This function is available only through external input control.
●: Supported, -: Not supported yet

CONTROL SYSTEM

3. ADAPTOR / CONVERTOR UNITS

The following types of convertors and adaptors are available.

- **Network Convertor (UTY-VTGX, UTY-VTGXV)**
  - For connecting single split type system.
- **Network Convertor (UTY-VGGXZ1)**
  - For connecting single split type system.
    (A change of DIP switch setting is necessary)
  - For connecting group remote controller(s).
- **Modbus® Convertor for VRF (UTY-VMGX)**

  For connection between VRF network system and a modbus open network
- **Network Convertor for LonWorks® (UTY-VLGX)**

  For connection between VRF network system and a LonWorks® open network for management of small to medium-sized BMS.
- **BACnet® Gateway (UTY-ABGXZ1, UTY-ABGX: Software)**

  The central control of maximum 1600 indoor units can be realized by connecting the VRF network system to the BACnet®, a global standard for open networks.
- **Signal Amplifier (UTY-VSGXZ1)**

  When the total length of transmission line exceeds 500 m or the number of units exceeds 64, Signal amplifier will be necessary.
- **External Switch Controller (UTY-TERX, UTY-TEKX)**

  Air conditioner switching can be controlled by connecting other sensor switches.

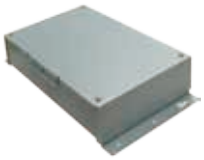
CONTROL SYSTEM

3-1. NETWORK CONVERTOR

■ MODEL : UTY - VTGX / UTY-VTGXV

■ FEATURES

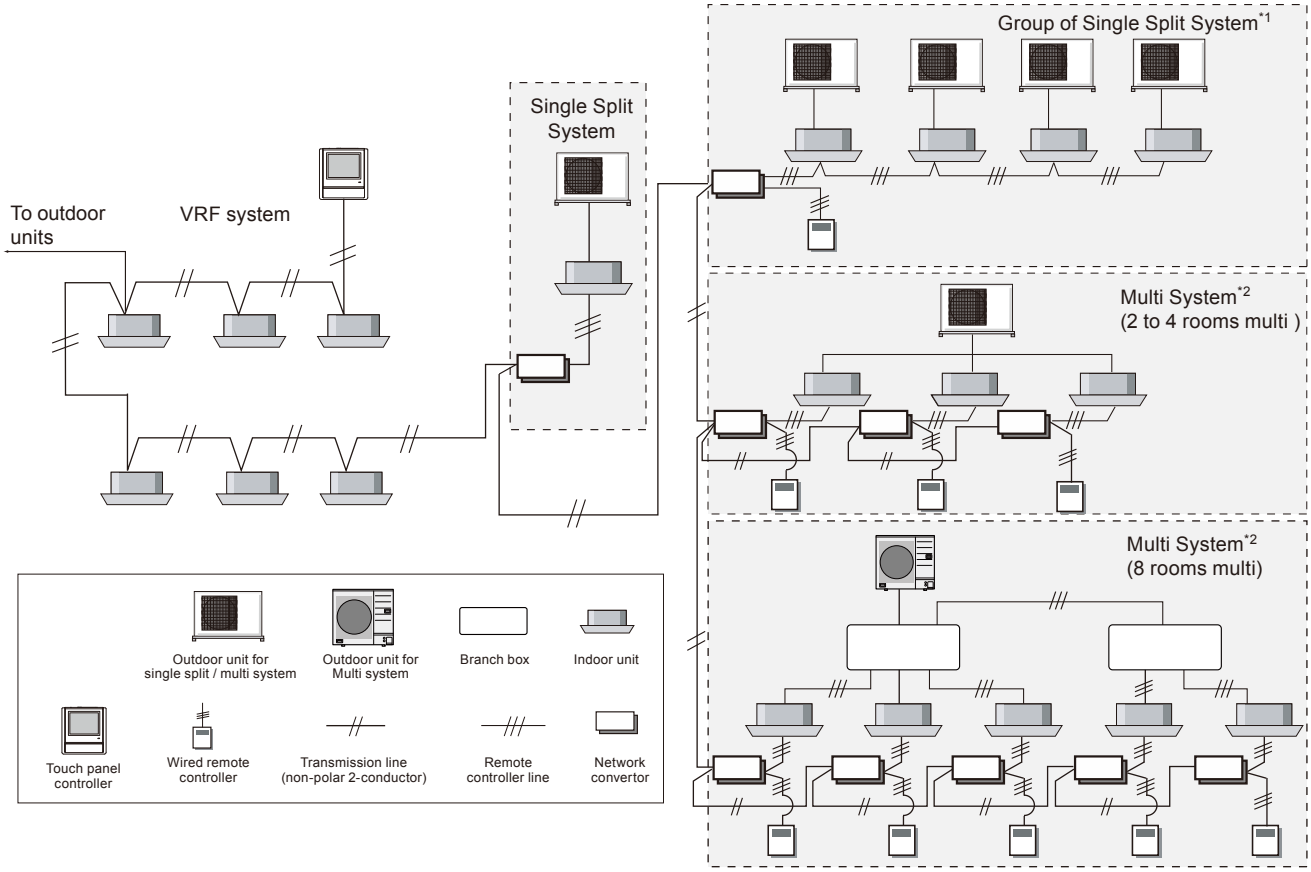




- With this network convertor, single split type and multi system air conditioners can be controlled by Central remote controller, Touch panel controller, System controller in VRF network system or by wired remote controller that is connected to the Network convertor.
- Start/Stop, operation mode, temperature setting, fan speed, etc. can be done with these controllers.
- One Network convertor can be connected and controlled up to 16 indoor units.
- 2 wired remote controllers are possible for one network convertor by UTY-VTGXV.
- 1 wired remote controller is possible for one network convertor by UTY-VTGX.
- Up to 100 network convertors can be connected in one VRF network system. (One Network convertor is regarded as one refrigerant system. The total refrigerant systems in one VRF network system must be within 100.)

CONTROL SYSTEM

■ SYSTEM DIAGRAM



*1 : All indoor units connected to a network convertor are operating under same status.

*2 : Network convertor is necessary for each indoor unit to control indoor unit individually.

■ APPLICABLE MODELS

● Connectable remote controllers

5 types of wired remote controller shown in the table below can be connected to this unit.

The indoor unit that can be connected is the indoor unit that can connect to following remote controller.

Model name	RC number	Type
UTY-RNR＊ UTY-RNR＊Z1	AR-WEA＊＊ AR-WEB＊＊ AR-WEC＊＊	Non-polar 2 wire
UTY-RLR＊	AR-WFA＊＊ AR-WFB＊＊ AR-WFC＊＊ AR-WFD＊＊	
UTY-RVN＊＊	AR-WDC＊＊ AR-WDD＊＊	Polar 3 wire
UTY-RNN＊＊	AR-WAE＊＊	
UTB-＊UD	AR-6TC＊＊	

(＊ arbitrary character)

CONTROL SYSTEM

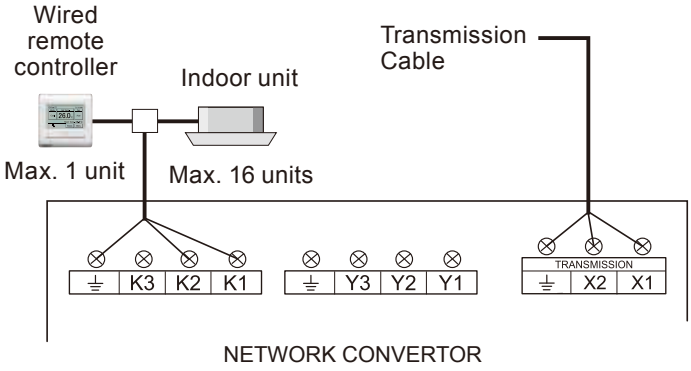
■ FUNCTIONS

Operation	Non-polar 2 wire	Polar 3 wire
Operation of louver from VRF	○	×
Operation of louver from wired remote controller	○	○
Restriction of wireless remote controller from central	○	×
Restriction of wired remote controller from central	○	○
Antifreeze	×	×
Setting high and low temperature limit	○	×
Indoor unit rotation	×	×
Turning off indoor unit external thermostat	×	×
Outdoor unit forced stop	×	×
Outdoor unit capacity save	×	×
Outdoor unit low noise	×	×
Electricity distribution	×	×
Display model name	×	×
System time	○	×
Remote setting	×	×
Local setting by the wired remote controller	○	×

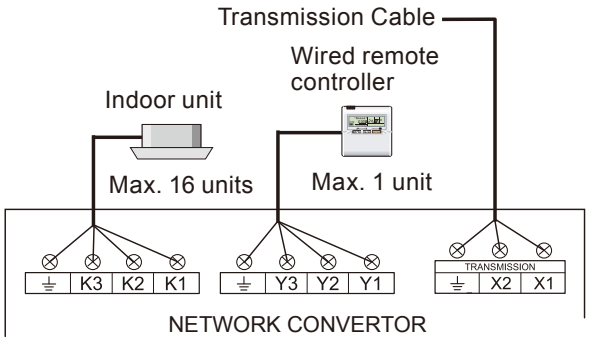
3-1-1. MODEL : UTY - VTGX

■ ELECTRICAL WIRING

● For non-polar 2 wire



● For polar 3 wire



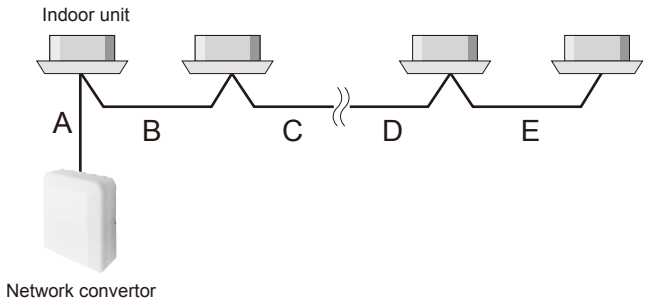
NOTES:

- Do not bind the power cable and remote controller cable to avoid an erroneous operation.
- Use shield cable for transmission cable in accordance with the regional cable standard.
- Use sheathed PVC cable or shielded cable for remote controller cable in accordance with the regional cable standard.
- Use ground wire to ground the network convertor.

CONTROL SYSTEM

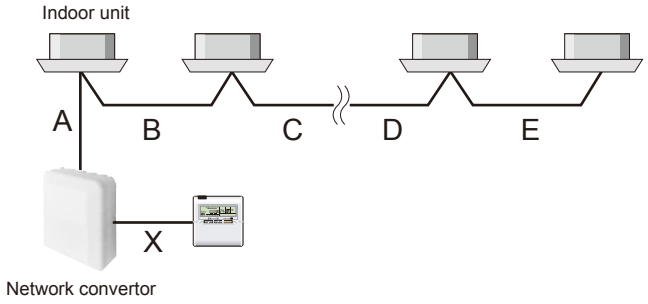
■ LIMITED WIRING LENGTH

● For non-polar 2 wire



A, B, C, D, E : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)
A ≤ 2 m and A+B+C+D+E ≤ 500 m.

● For polar 3 wire

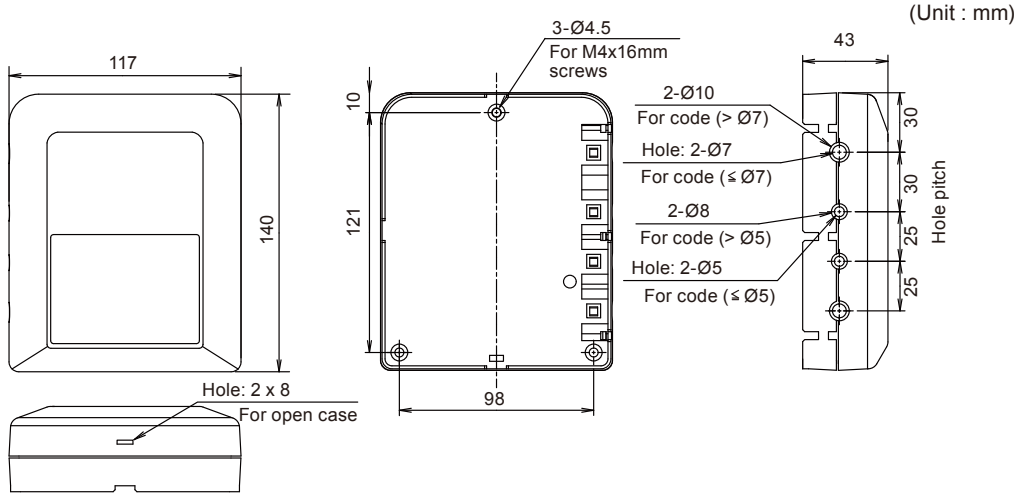


A, B, C, D, E, X : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)
A ≤ 2 m, A+B+C+D+E ≤ 100 m and X ≤ 100 m.

CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



■ PACKING LIST

The following installation parts are supplied. Use them as required.

Name and shape	Quantity	Application
Installation manual	1	
Cable tie	4	For mounting the remote controller cable and transmission cable.
Screw (M4 × 16 mm)	3	For mounting the network convertor.

■ WIRING SPECIFICATIONS

Use	Size	Wire type	Remarks
Transmission cable	0.33 mm^2 (22AWG)	LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
Remote controller cable (2-wire type)	0.33 to 1.25 mm^2 (22 - 16AWG)	Non-polar 2core	Use sheathed PVC cable or shielded cable in accordance with the regional cable standard.
Remote controller cable (3-wire type)	0.33 mm^2 (22AWG)	Polar 3 core	

■ SPECIFICATIONS

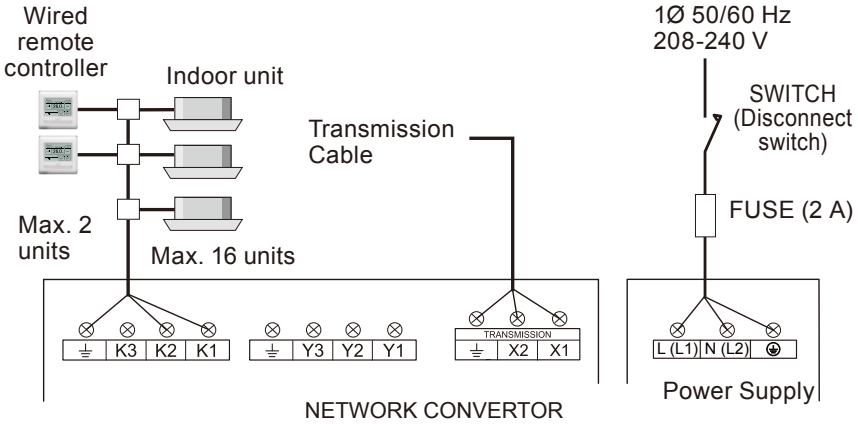
Input Power (W)		1.2
Temperature(°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation
Dimensions [H × W × D] (mm)		140 × 117 × 43
Weight (g)		250

CONTROL SYSTEM

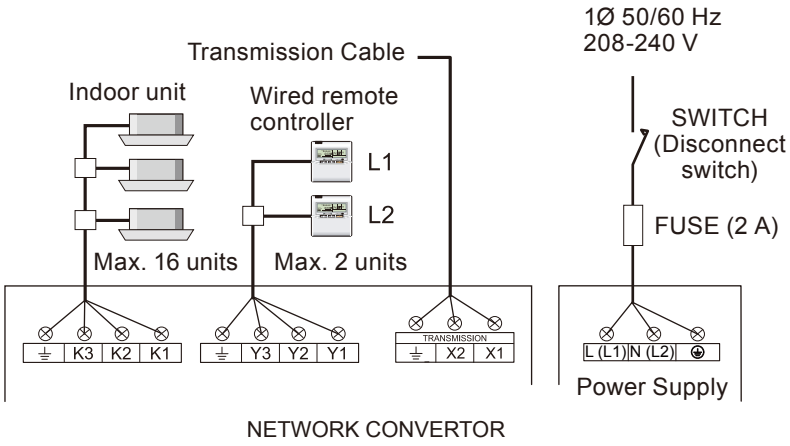
3-1-2. MODEL : UTY - VTGXV

■ ELECTRICAL WIRING

● For non-polar 2 wire



● For polar 3 wire



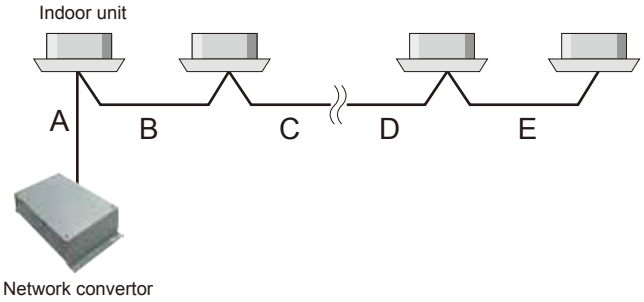
NOTES:

- Do not bind the power cable and remote controller cable to avoid an erroneous operation.
- Use shield cable for transmission cable in accordance with the regional cable standard.
- Use sheathed PVC cable or shielded cable for remote controller cable in accordance with the regional cable standard.
- Use ground wire to ground the network convertor.

CONTROL SYSTEM

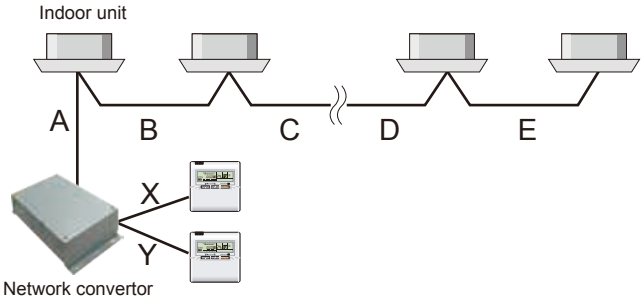
■ LIMITED WIRING LENGTH

● For non-polar 2 wire



A, B, C, D, E : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)
A ≤ 2 m and A+B+C+D+E ≤ 500 m.

● For polar 3 wire

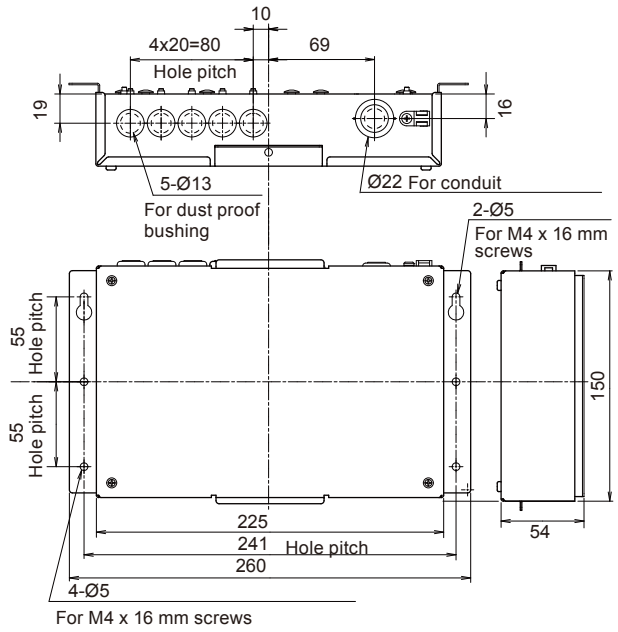


A, B, C, D, E, Y : Remote controller cable. (Refer to Chapter6. 4-4 for detail specifications.)
A ≤ 2 m, A+B+C+D+E ≤ 100 m and X+Y ≤ 100 m.

CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



■ PACKING LIST

The following installation parts are supplied. Use them as required.

Name and shape	Quantity	Application
Installation manual	1	
Cable tie	7	For mounting the power supply cable, remote controller cable and transmission cable.
Screw (M4 × 16 mm)	4	For mounting the network convertor.

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2 (16AWG)	60245 IEC 57 or equivalent	1 ø AC 208-240 V 50/60 Hz, 2 Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2 (20AWG)		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
Remote controller cable (2-wire type)	0.33 to 1.25 mm^2 (22 - 16AWG)		Non-polar 2core	Use sheathed PVC cable or shielded cable in accordance with the regional cable standard.
Remote controller cable (3-wire type)	0.33 mm^2 (22AWG)		Polar 3 core	
Fuse capacity	2 A			

■ SPECIFICATIONS

Power supply		1ø AC208-240 V 50/60 Hz
Input Power (W)		3.0
Temperature(°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation
Dimensions [H × W × D] (mm)		54 × 260 × 150
Weight (g)		1100

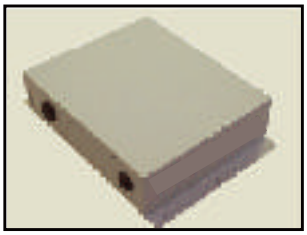
CONTROL SYSTEM

3-2. NETWORK CONVERTOR

■ MODEL : UTY - VGGXZ1

1. For connecting single split type system

[A change of DIP switch setting is necessary]



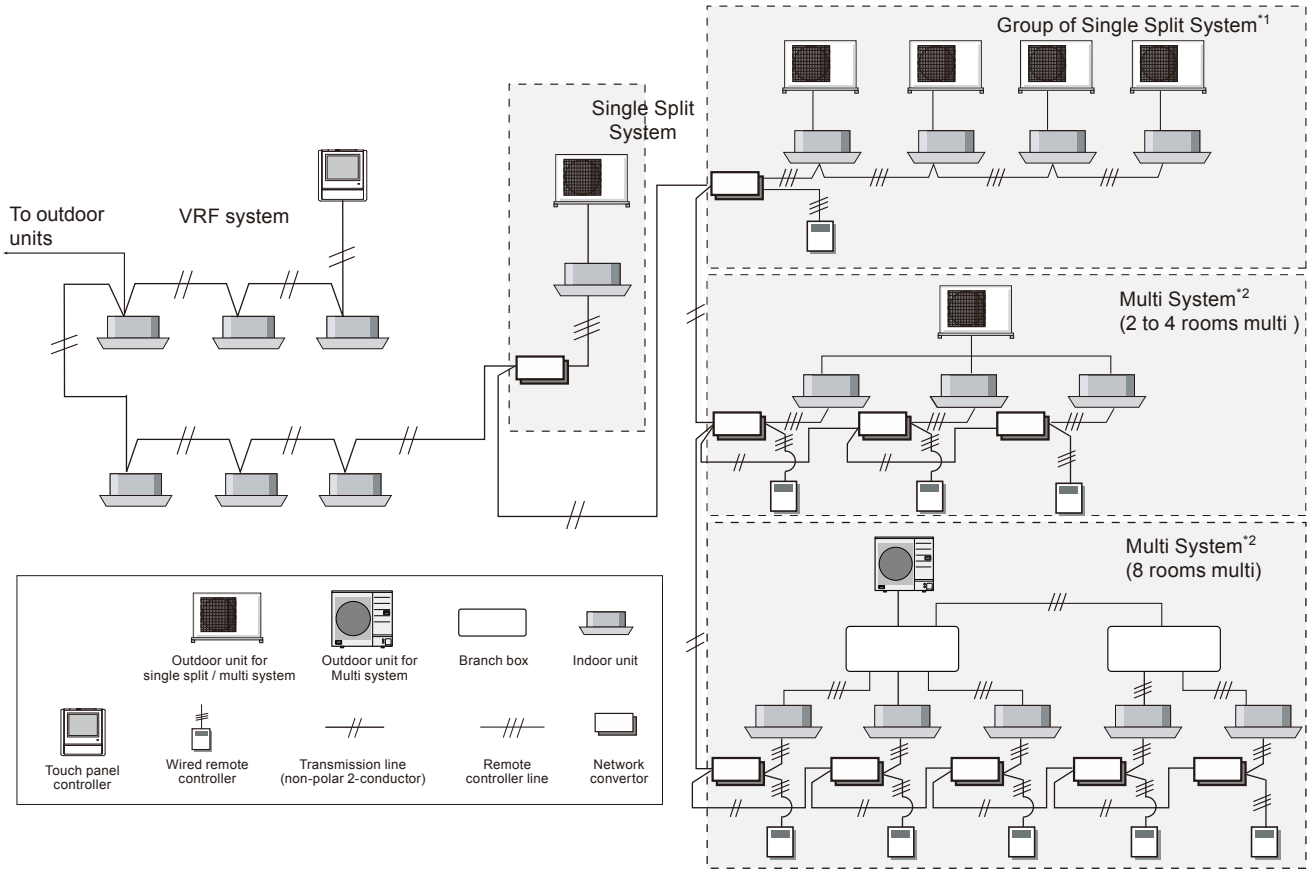
- With this network convertor, single split type and multi system air conditioners can be controlled by Central remote controller, Touch panel controller, System controller in VRF network system or by wired remote controller that is connected to the Network convertor.
- Start/Stop, operation mode, temperature setting, fan speed, etc. can be done with these controllers.
- 1 Network convertor can be connected and controlled up to 16 indoor units.
- 2 wired remote controllers are possible for 1 network convertor.
- Up to 100 network convertors can be connected in 1 VRF network system. (1 Network convertor is regarded as one refrigerant system. The total refrigerant systems in one VRF network system must be within 100.)

■ FUNCTIONS

●Start/Stop ●Temperature control ●Operation mode ●Timer setting

●Fan control ●Central control (Lock the remote controller functions)

■ SYSTEM DIAGRAM

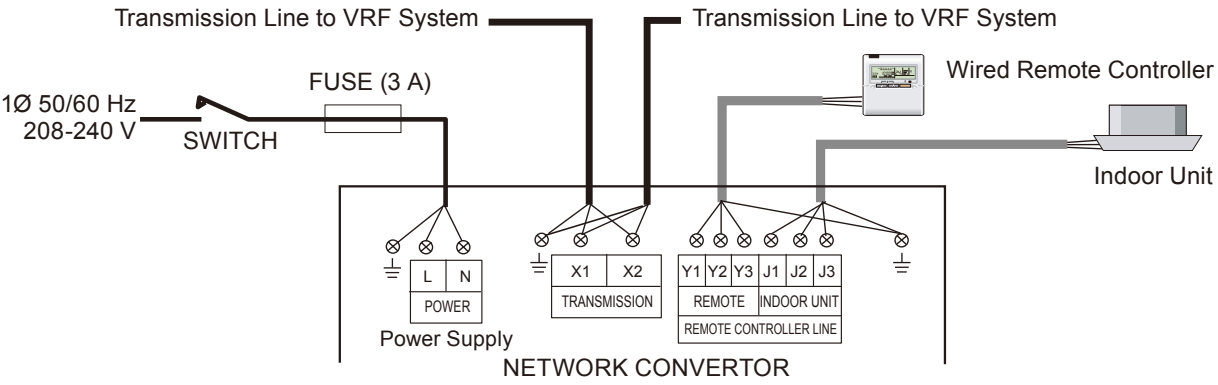


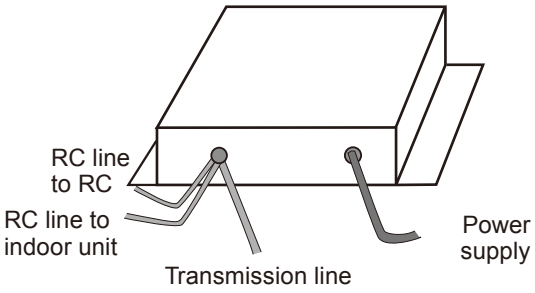
*1 : All indoor units connected to a network convertor are operating under same status.

*2 : Network convertor is necessary for each indoor unit to control indoor unit individually.

CONTROL SYSTEM

■ ELECTRICAL WIRING





NOTES:

- Do not bind the power cable and remote controller cable to avoid an erroneous operation.
- Use shield cable for transmission line and remote controller line. The shield metal should be grounded.
- Use ground wire to ground the network convertor.

CONTROL SYSTEM

■ APPLICABLE MODELS

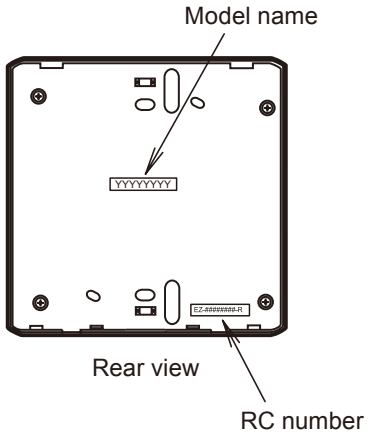
		○
Single Split type	Wired Remote Controller model	○
	Wireless Remote Controller model	×

● Connectable remote controllers

3 types of wired remote controller shown in the table below can be connected to this unit.

Model name	RC number
UTB-∗UB *1	AR-3TA∗∗
UTB-∗UD *1	AR-6TC∗∗
UTY-RNN∗M *1	AR-WAE∗∗

(∗ arbitrary character)



● Connectable indoor units

Indoor units that accept following wired remote controllers (accessories or optional parts) are connectable with this unit.

RC number
AR-3TA∗∗, AR-6TC∗∗, AR-WAE∗∗
EZ-099DHSE-R, EZ-000DHSE-R, EZ-0001HSE-R, EZ-000GHSE-R, EZ-00004HSE-R, EZ-00005HSE-R, EZ-0015HSE-R, EZ-0019HSE-R, EZ-099DHSEFR, EZ-0001HSEFR, EZ-000DHSEFR, EZ-000GHSEFR, EZ-0015HSEFR EZ-0994HSE-R, EZ-000EHSE-R, EZ-0994HSEFR EZ-099CWSE-R, EZ-000AWSE-R, EZ-0001WSE-R, EZ-000FWSE-R, EZ-0012WSE-R, EZ-099CWSEFR, EZ-0001WSEFR, EZ-000AWSEFR EZ-09906WSE-R, EZ-000BWSE-R, EZ-09906WSEFR

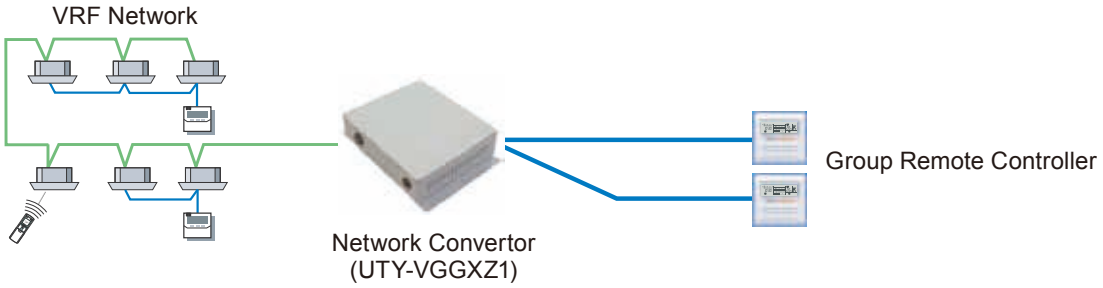
EZ type remote controllers cannot control indoor units via this unit. When you want to operate indoor units directly by remote controller, the optional remote controller (*1) must be purchased.

CONTROL SYSTEM

2. For connecting group remote controller(s)

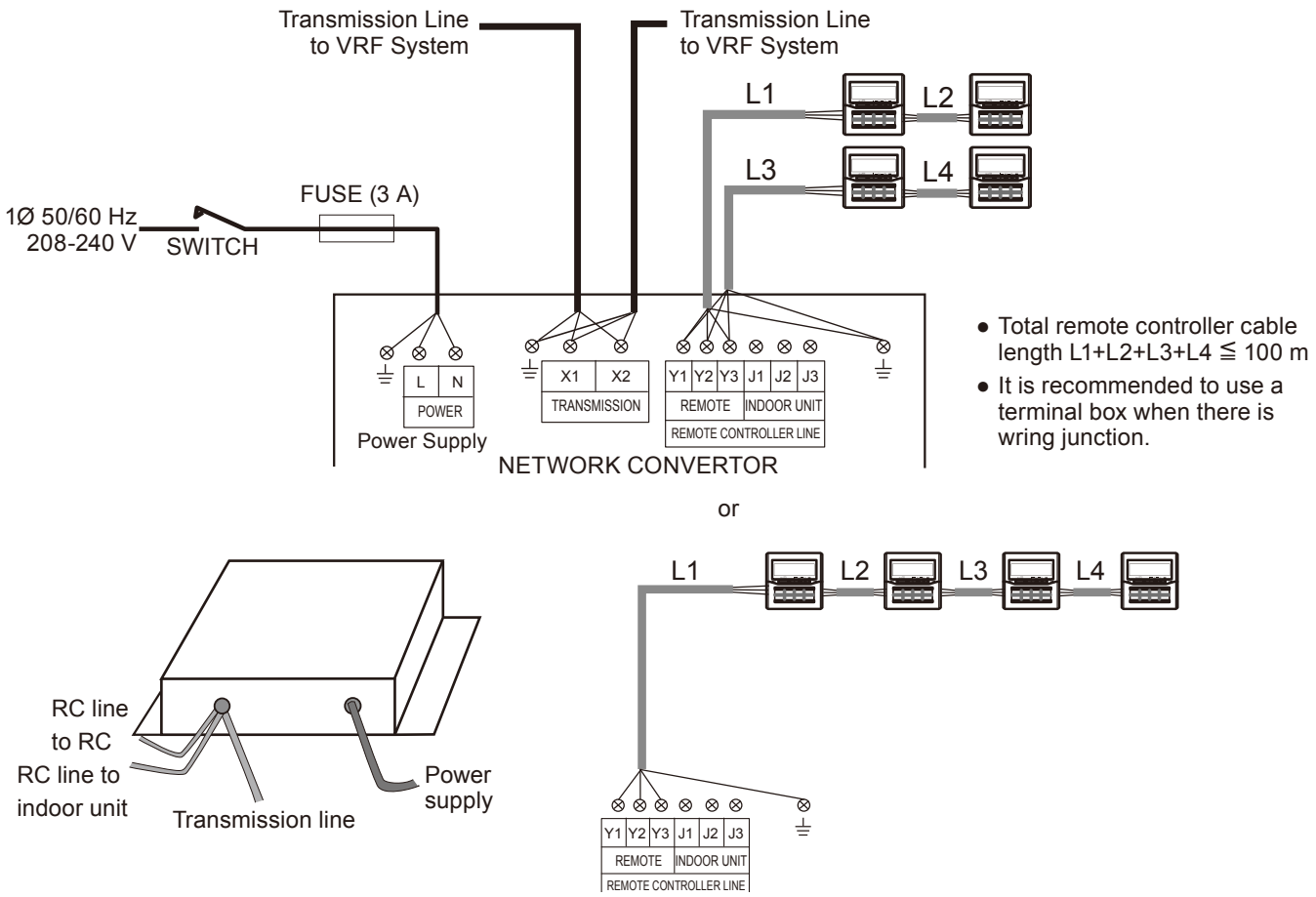
- Up to a total of 16 network convertors, Central remote controller and Touch panel controller can be connected in 1 VRF network system.
- 4 group remote controllers can be connected to 1 network convertor.
- 2 refrigerant systems can be covered by 1 network convertor.

■ SYSTEM DIAGRAM



■ ELECTRICAL WIRING

Group Remote Controllers (Max. 4 sets)



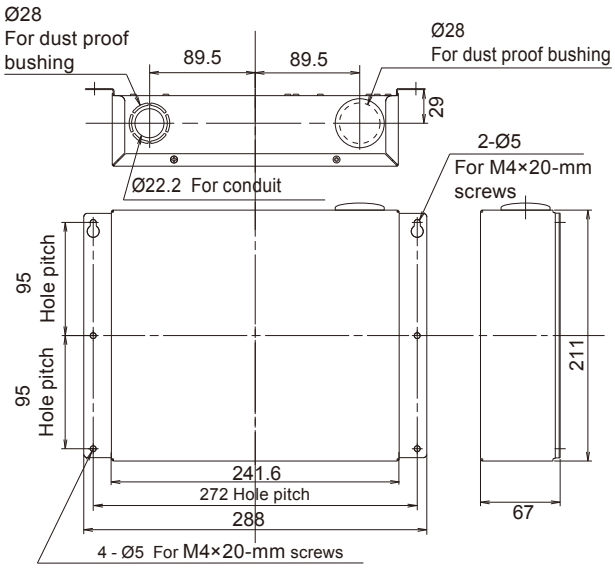
- Total remote controller cable length L1+L2+L3+L4 ≦ 100 m
- It is recommended to use a terminal box when there is wring junction.

NOTES:

- Do not bind the power cable and remote controller cable to avoid an erroneous operation.
- Use shield cable for transmission line and remote controller line. The shield metal should be grounded.
- Use ground wire to ground the network convertor.

■ DIMENSIONS

(Unit : mm)



■ PACKING LIST

The following installation parts are supplied. Use them as required.

Name and shape	Quantity	Application
Installation manual	1	
Cable tie	4	For mounting the power supply cable, remote controller cable and transmission cable.
Screw (M4 × 20 mm)	4	For mounting the network convertor.
Dust proof bushing	1	For connecting the power supply cable.

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2	60245 IEC 57 or equivalent	1 ø AC 208-240 V 50/60 Hz, 2 Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
Remote controller cable	0.33 mm^2 (22AWG)		Polar 3 core	Use sheathed PVC cable or shielded cable in accordance with the regional cable standard.
External input / output cable	0.33 mm^2 (22AWG)		Polar 2core, Twisted pair	Use shielded cable in accordance with the regional cable standard.
Fuse capacity	3 A			

■ SPECIFICATIONS

Power supply		1ø AC208-240 V 50/60 Hz
Input Power (W)		6.5
Temperature(°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation
Dimensions [H × W × D] (mm)		67 × 288 × 211
Weight (g)		1500

CONTROL SYSTEM

3-3. MODBUS® CONVERTOR FOR VRF

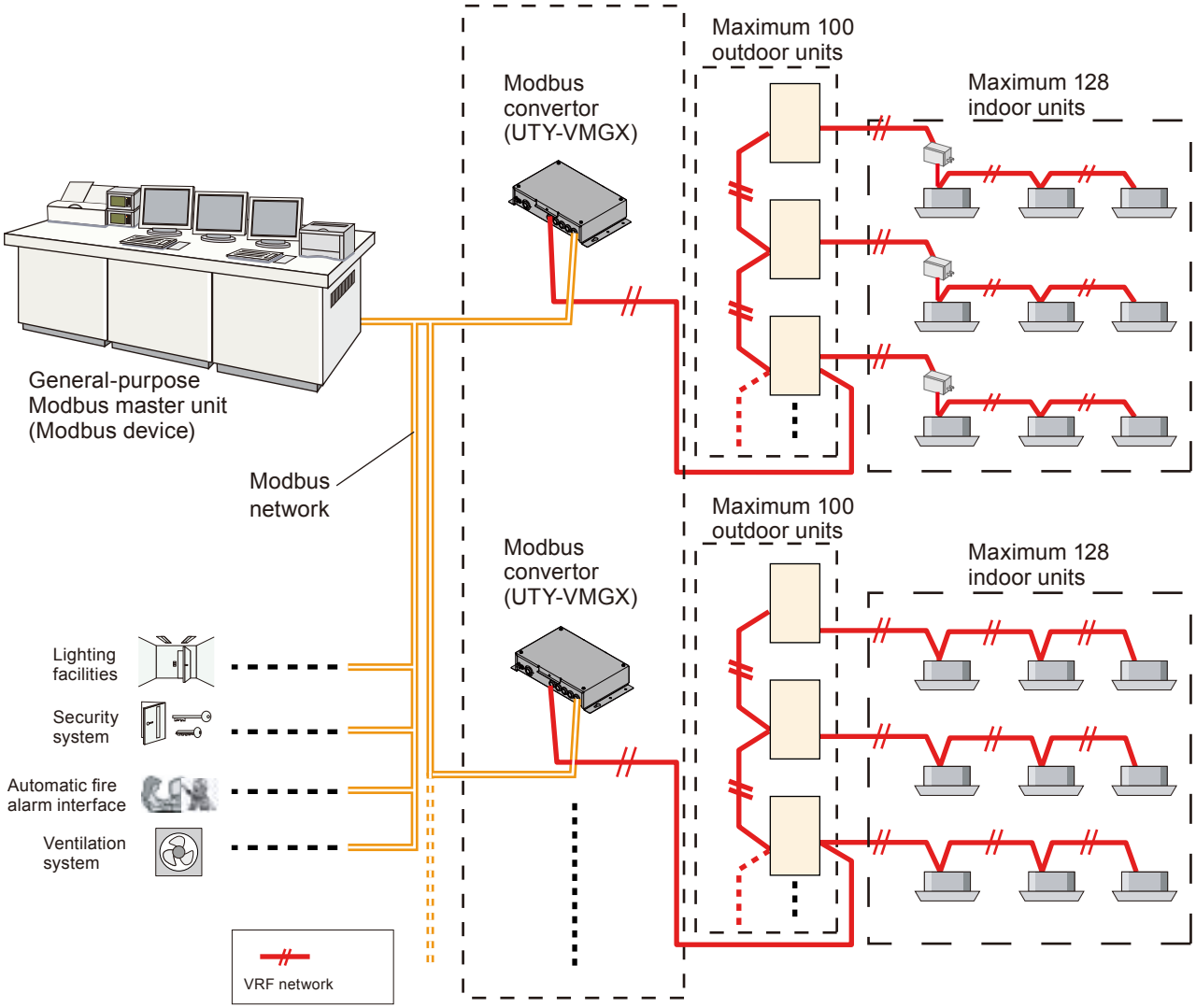
■ MODEL : UTY - VMGX



- The convertor for connecting VRF network system to the BMS system built by Modbus open network, for manage small to medium sized BMS and VRF network system.

■ SYSTEM DIAGRAM

● Proper system diagram



● Connected unit

Maximum controllable indoor unit number per 1 Modbus Convertor		128
Maximum controllable outdoor unit number per 1 Modbus Convertor		100
Maximum connectable Modbus Convertor number per 1 VRF network system		9
Maximum number of connected Modbus Convertor units to one Modbus master unit	Without repeater	31
	With repeater	247

CONTROL SYSTEM

■ FUNCTIONS

● Indoor unit control

● Individual control

Commands from Modbus Network are sent to the respective indoor units. (Modbus Network → respective indoor units of VRF Network)

● Batch control

Commands from Modbus Network are sent to all indoor units connected to VRF Network. (Modbus Network → All indoor units of VRF Network)

● Indoor unit status monitoring

Indoor unit status is communicated to the Modbus Network in the form of LON® Network variables. (Modbus Network ← All indoor units of VRF Network)

CONTROL SYSTEM

■ CONTROL AND MONITORING ITEMS

NOTE: For detailed information, check the Interface Specification.

Item	Function	Description
Indoor Unit Control (Individual / Batch)	ON/OFF Command	Start / Stop operation
	Operation Mode Setting	Cooling / Heating / Auto / Fan / Dry
	Temperature Setting	Set room temperature
	Airflow Mode Setting	Set airflow
	Set Point Temperature Limit Setting	Set room temperature lower limit & room temperature upper limit
	Thermostat Off setting	Thermostat off (Only one controller in VRF Network System can do this)
	Centrally Control (Filter Reset)	Prohibition of filter sign reset of remote controller
	Centrally Control (All Mode)	Prohibition of all mode of remote controller
	Centrally Control (Timer Mode)	Prohibition of timer mode of remote controller
	Centrally Control (Set Temperature Mode)	Prohibition of set temperature mode of remote controller
	Centrally Control (ON/OFF Mode)	Prohibition of ON/OFF mode of remote controller
	Centrally Control (ON Mode)	Prohibition of ON mode of remote controller
	Centrally Control (Operation Mode)	Prohibition of operation mode of remote controller
Indoor Unit Control (Individual)	Filter Sign Reset	Set filter sign reset command
	Antifreeze Setting	Set antifreeze command
	Energy Save Mode Setting	Set energy save command
	Vertical/Horizontal Airflow Direction Louver Setting	Set Vertical/Horizontal airflow direction louver
Indoor Unit Control (Batch)	Time Setting	Set time setting command (The controllers those are connected in VRF Network System are an object)
	Emergency STOP Setting	Set Emergency STOP command
Outdoor Unit Control (Individual)	Outdoor Unit Low Noise	Outdoor unit low noise level setting
	Outdoor Unit Capacity Save	Outdoor unit capacity save setting
Indoor Unit Monitoring (Individual)	ON/OFF Status	ON / OFF status
	Operation Mode Setting Status	Heating / Cooling / Auto / Fan / Dry mode status
	Temperature Setting Status	Room set temperature status
	Airflow Mode Setting Status	Airflow mode status
	Set Point Temperature Limit Status	Room set temperature limit status
	Thermostat Off Setting Status	Thermostat off set value status
	Centrally Control (Filter Reset) Status	Remote controller filter reset prohibition status
	Centrally Control (All Mode) Status	Remote controller all mode prohibition status
	Centrally Control (Timer Mode) Status	Remote controller timer mode prohibition status
	Centrally Control (Set Temperature) Status	Remote controller set temp. prohibition status
	Centrally Control (ON/OFF) Status	Remote controller ON / OFF prohibition status
	Centrally Control (ON) Status	Remote controller ON prohibition status
	Centrally Control (Operation) Status	Remote controller operation prohibition status
	Antifreeze Setting Status	Antifreeze set status
	Energy Save Mode Setting Status	Energy save mode set status
	Filter Sign Reset Status	Filter sign reset status
	Room Temperature Status	Room temperature status
	Error Code Status	Error Code status can be monitored
	Vertical/Horizontal Airflow Direction Louver Status	Vertical/Horizontal Airflow Direction Louver Status
	Indoor Unit Status	Defrost / oil recovery / pumpdown can be monitored

*1: All operation setting, Timer setting, Room temperature setting, Operation mode setting, ON/OFF operation, Filter reset operation, On operation setting.

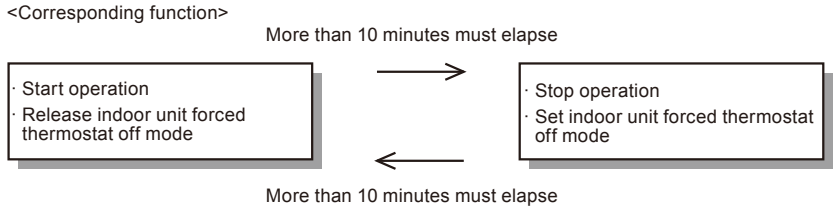
CONTROL SYSTEM

Item	Function	Description
Indoor Unit Monitoring (Batch)	Maintenance Mode Status	Maintenance status
	Emergency STOP Setting Status	Emergency STOP setting status
	ON / OFF Status	The indoor unit which is now operating can be monitored in all indoor units
	Error Status	The indoor unit which is now error can be monitored in all indoor units
Outdoor Unit Monitoring (Individual)	Outdoor Unit Low Noise	Outdoor unit low noise level can be monitored
	Outdoor Unit Capacity Save	Outdoor unit capacity save can be monitored
Convertor Unit Monitoring (Individual)	Error code Status	Error code status
	Modbus Communication Setting Information	Baud rate / slave address can be monitored
	Model Name	Convertor model name can be confirmed
	Software Version	Convertor software version can be confirmed

*1: All operation setting, Timer setting, Room temperature setting, Operation mode setting, ON/OFF operation, Filter reset operation, On operation setting.

CONTROL SYSTEM

* To protect the compressor of the outdoor unit, carefully read and understand the following cautions that may affect the operation of the compressor before executing the setting.
  - When performing periodical settings like schedule settings for the following functions, perform the setting to all the indoor units in the same refrigerant system simultaneously, conforming to the timing restriction described below.



* Forced thermostat OFF instruction
  - Only one equipment can send these instructions for each refrigerant system.
  - When these instructions are sent by multiple equipment, the system may not respond as instructed or may malfunction.

■ SPECIFICATIONS

Power supply		1ø AC208-240 V 50/60 Hz
Input Power (W)		2.0
Temperature(°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation
Dimensions [H × W × D] (mm)		54 × 260 × 150
Weight (g)		1100

● Transmission specifications

Transfer mode	RTU mode
Communication method	Half-duplex operation, Master/slave method
Communication speed	9600bps / 19200bps
Synchronous system	Asynchronous communication method
Data bit	8 bit
Parity	even/odd/none
Stop bit	2 bit (no parity) / 1 bit
Network	3 wire RS485
Maximum cable length	1000 m

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Installation manual 	1	Use during installation.
Cable tie 	7	For mounting the power supply cable and transmission cable.
Screw (M4 × 16 mm) 	4	For mounting the network convertor.
DVD 	1	For initial setting.
MODBUS connector 	1	For connecting the cable and attaching the board connector.
USB cable 	1	For initial setting tool.

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

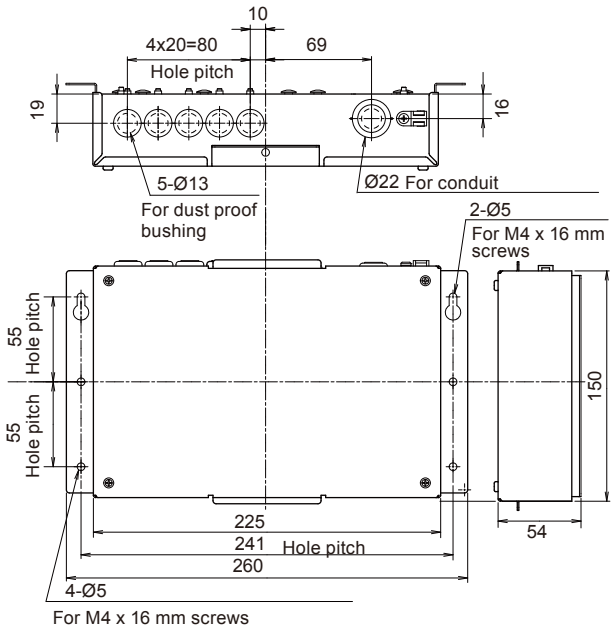
To install Tool for Convertor (UTY-VMGX), applicable PC needs to satisfy the following system requirements.

Operating System	• Microsoft® Windows® 7 SP1 (32/64-bit) Home Premium, Professional • Microsoft® Windows® 8 (32/64-bit) • Microsoft® Windows® 8.1 (32/64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
Memory	1 GB or more
Display	1366 × 768 dots or higher resolution
Interface	USB port (x1)
Software	Adobe® Reader 11.0 or later
Optical drive	DVD drive

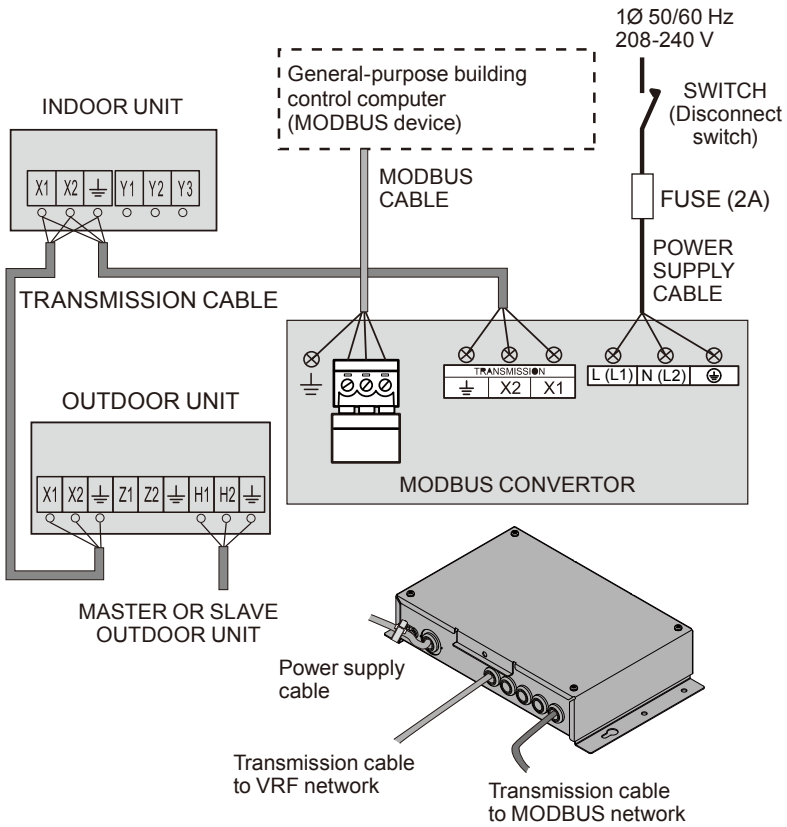
CONTROL SYSTEM

■ DIMENSIONS

(Unit : mm)



■ ELECTRICAL WIRING

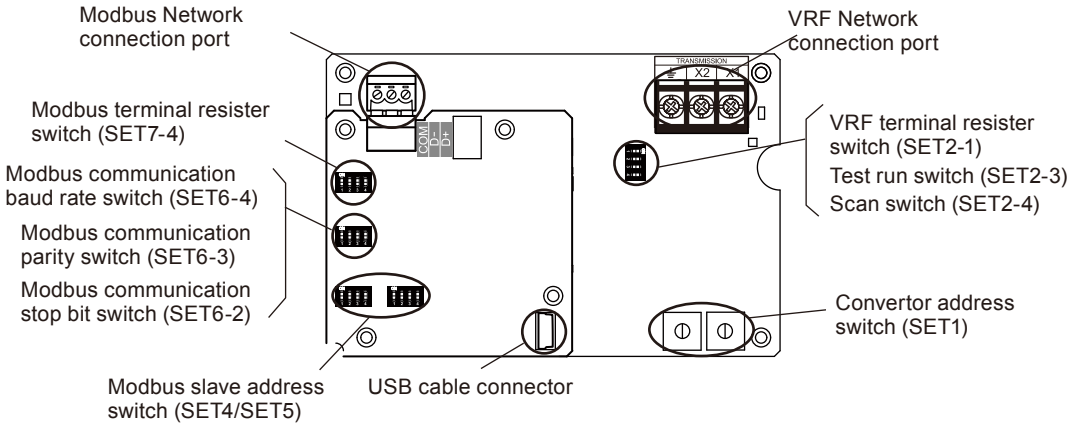


CONTROL SYSTEM

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2 (16AWG)	60245 IEC 57 or equivalent	1 ø AC208-240 V 50/60 Hz, 2-Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2 (20AWG)		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
MODBUS cable	Maximum	1.25 mm^2 (16AWG)	AWG16-26 3Wire+ Sheathed PVC cable	
	Minimum	0.128 mm^2 (26AWG)		
Fuse capacity	2 A			

■ PCB FOR MODBUS CONVERTOR (UTY-VMGX)



CONTROL SYSTEM

■ PROCEDURE IN BRIEF REGISTER DATA TO MODBUS CONVERTOR FOR VRF (UTY-VMGX)

Address initial settings are 3 methods as follows.

(1) Default addresses of indoor unit and outdoor unit are used. (Initial setting is not necessary)

Default address value ([RefNo.—NodeNo.])

Indoor unit: [00—00] [00—01] ••• [00—63]
[01—00] [01—01] ••• [01—63]

Outdoor unitt: [00—00] [00—01] ••• [00—03]
[01—00] [01—01] ••• [01—03]

(2) Scan

Scan procedure is as follows.

STEP 1: Turn on the switch of scan setting.

STEP 2: “Scan display” by LED (address is registering inside the convertor.)

STEP 3: “Number of connected indoor unit display” by LED (Scan is complete)

STEP 4: Turn off the switch of scan setting

STEP 5: “Address update display” by LED

STEP 6: Turn on the main power again.

STEP 7: “Address rewriting display” by LED (Addresses are synchronized among boards)

* When scan error is generated, performing the scan again is necessary.

(3) Setting from PC

NOTE: For detailed information, check the Application Manual which is included inside packaged DVD.

STEP 1: Install Tool for Convertor (software) for UTY-VMGX in PC.
Tool for Convertor is the accessory item of UTY-VMGX.

STEP 2 Connect the PC and Modbus convertor for VRF (UTY-VMGX) .
Connection will be done by the connector cable provided as an accessory item of UTY-VMGX.

STEP 3: Set Modbus Convertor (UTY-VMGX) to USB Mode.

STEP 4: Initial setting of Indoor Unit & Outdoor Unit Addresses by using the Tool for Convertor.

STEP 5: Register the initial setting data to UTY-VMGX. Click ‘Register’ dialog.
In this stage, Modbus Convertor (UTY-VMGX) is ready for binding and commissioning.

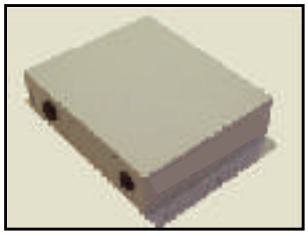
Important: Modbus Convertor will not operate if,

- VRF network system address (Outdoor and Indoor units address) allocation information are not registered to Modbus Convertor.

CONTROL SYSTEM

3-4. NETWORK CONVERTOR FOR LONWORKS®

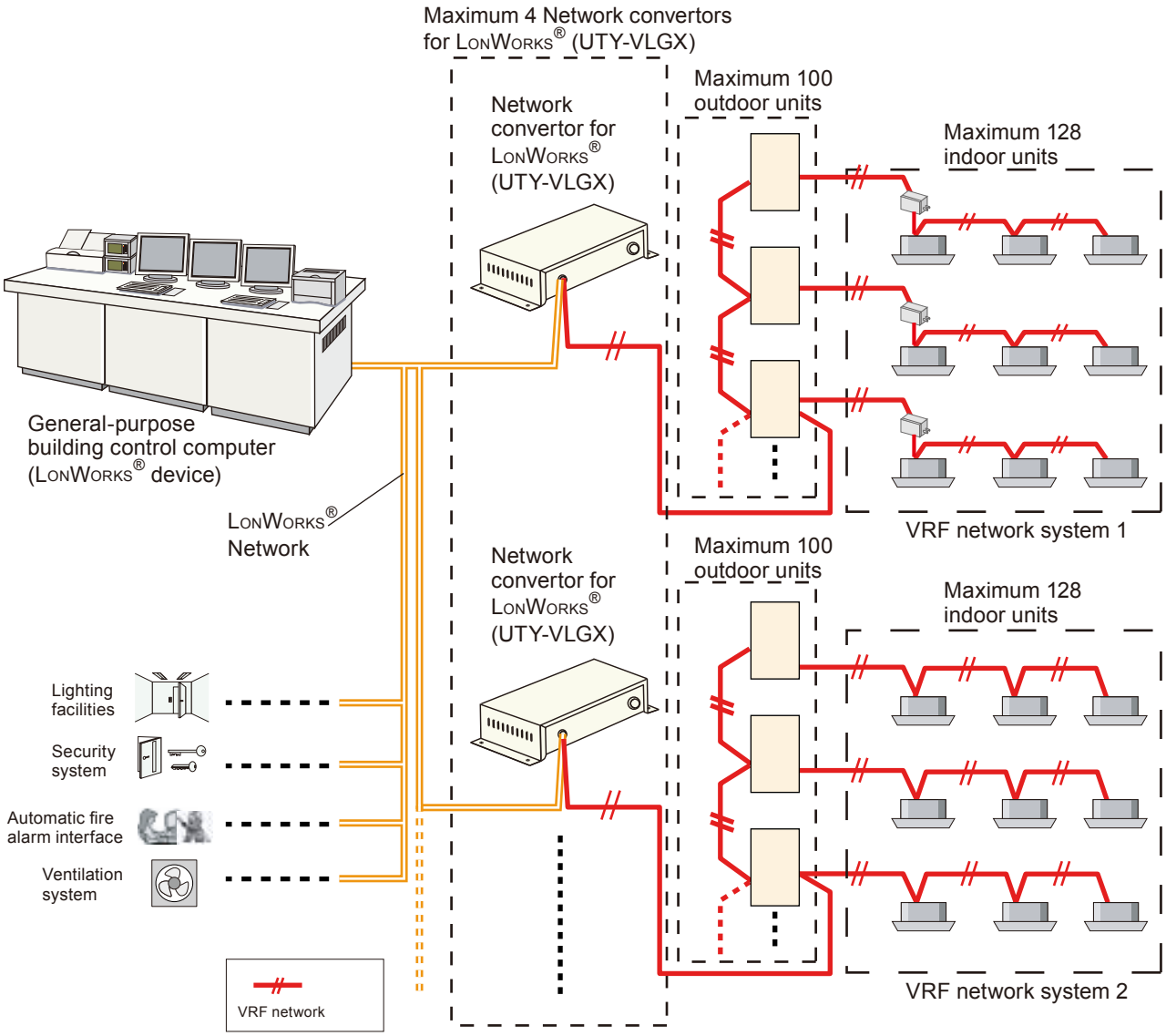
■ MODEL : UTY - VLGX



- The convertor for connecting VRF network system to the BMS system built by LONWORKS® open network, for manage small to medium sized BMS and VRF network system.
- Maximum of 128 indoor units can be connected to one Network Convertor for LONWORKS®.
- VRF system can be centrally controlled or monitored from BMS via UTY-VLGX.
- Maximum of 4 Network Convertors for LONWORKS® can be connected to 1 BMS.

■ SYSTEM DIAGRAM

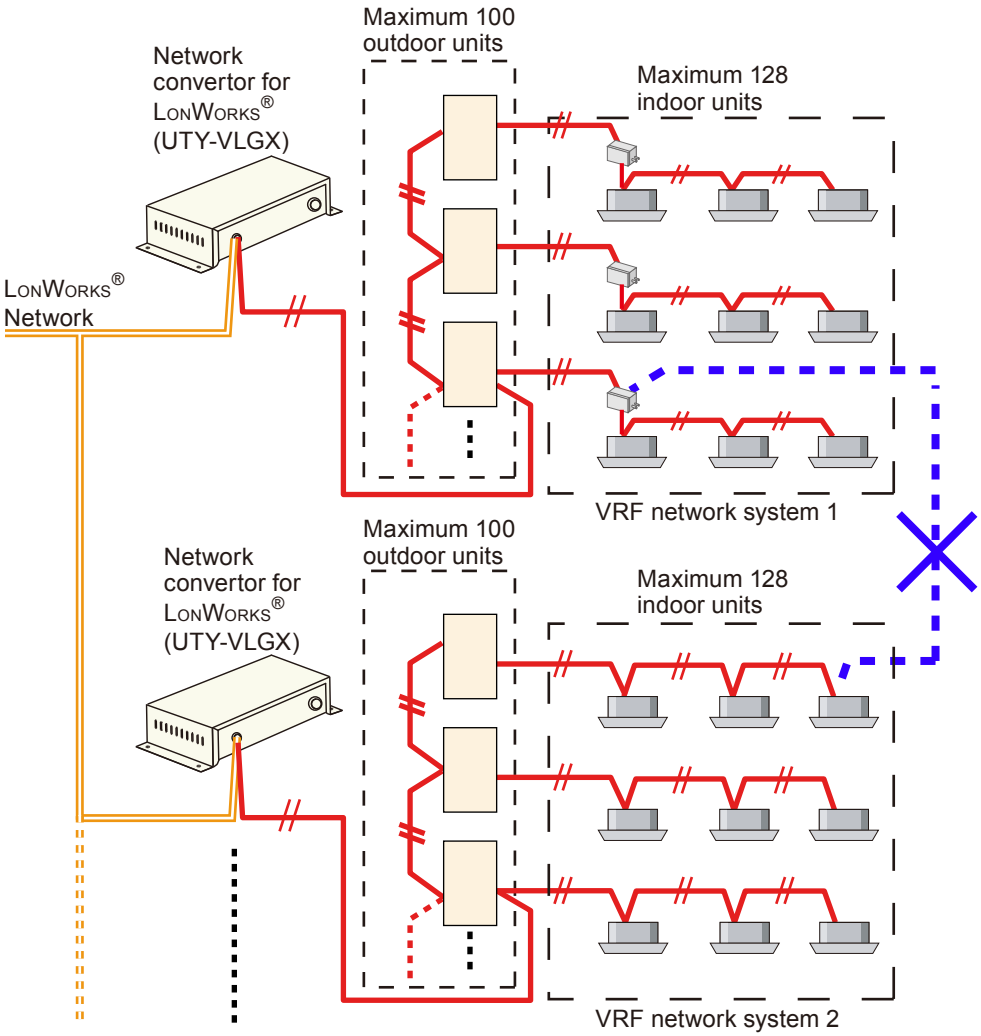
● Proper system diagram



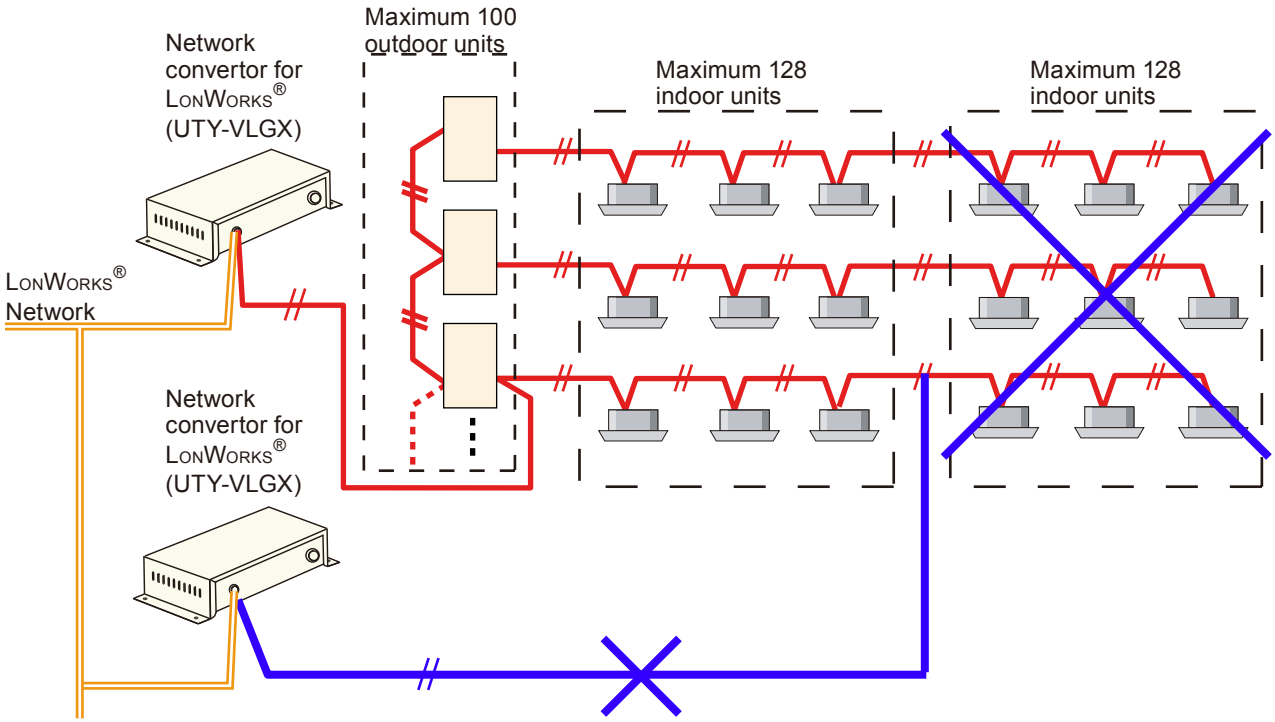
CONTROL SYSTEM

● Improper system diagram

• Example 1 (Prohibited)



• Example 2 (Prohibited)



CONTROL SYSTEM

■ FUNCTIONS

● Indoor unit control

● Individual control

Commands from LonWorks® Network are sent to the respective indoor units. (LonWorks® Network → respective indoor units of VRF Network)

● Batch control

Commands from LonWorks® Network are sent to all indoor units connected to VRF Network. (LonWorks® Network → All indoor units of VRF Network)

● Indoor unit status monitoring

Indoor unit status is communicated to the LonWorks® Network in the form of LON® Network variables. (LonWorks® Network ← All indoor units of VRF Network)

CONTROL SYSTEM

■ CONTROL AND MONITORING ITEMS

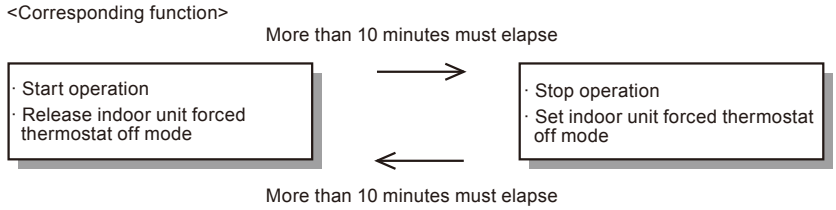
NOTE: For detailed information, check the Interface Specification.

Item	Function	Description
Indoor Unit Control (Individual / Batch)	ON/OFF Command	Start / Stop operation
	Operation Mode Setting	Cooling / Heating / Auto / Fan / Dry
	Temperature Setting	Set room temperature
	Airflow Mode Setting	Set airflow
	Set Point Temperature Limit Setting	Set room temperature lower limit (for cooling mode) & room temperature upper limit (for heating mode)
	Thermostat Off setting	Thermostat off (Only one controller in VRF Network System can do this)
	Centrally Control (Filter Reset)	Prohibition of filter sign reset of remote controller
	Centrally Control (All Mode)	Prohibition of all mode of remote controller
	Centrally Control (Timer Mode)	Prohibition of timer mode of remote controller
	Centrally Control (Set Temperature Mode)	Prohibition of set temperature mode of remote controller
	Centrally Control (ON/OFF Mode)	Prohibition of ON/OFF mode of remote controller
	Centrally Control (ON Mode)	Prohibition of ON mode of remote controller
	Centrally Control (Operation Mode)	Prohibition of operation mode of remote controller
Indoor Unit Control (Individual)	Filter Sign Reset	Set filter sign reset command
	Antifreeze Setting	Set antifreeze command
	Energy Save Mode Setting	Set energy save command
Indoor Unit Control (Batch)	Emergency STOP Setting	Set Emergency STOP command
	Time Setting	Set time setting command (The controllers those are connected in VRF Network System are an object)
Indoor Unit Monitoring (Individual)	ON/OFF Status	ON / OFF status
	Operation Mode Setting Status	Heating / Cooling / Auto / Fan / Dry mode status
	Temperature Setting Status	Room set temperature status
	Airflow Mode Setting Status	Airflow mode status
	Set Point Temperature Limit Status	Room set temperature limit status
	Thermostat Off Setting Status	Thermostat off set value status
	Centrally Control (Filter Reset) Status	Remote controller filter reset prohibition status
	Centrally Control (All Mode) Status	Remote controller all mode prohibition status
	Centrally Control (Timer Mode) Status	Remote controller timer mode prohibition status
	Centrally Control (Set Temperature) Status	Remote controller set temp. prohibition status
	Centrally Control (ON/OFF) Status	Remote controller ON / OFF prohibition status
	Centrally Control (ON) Status	Remote controller ON prohibition status
	Centrally Control (Operation) Status	Remote controller operation prohibition status
	Antifreeze Setting Status	Antifreeze set status
	Energy Save Mode Setting Status	Energy save mode set status
	Filter Sign Reset Status	Filter sign reset status
	Room Temperature Status	Room temperature status
	Error code Status	Only one Error code status can be monitored
	Operation Mode restriction Status	Restriction item (*1) can be monitored
Indoor Unit Monitoring (Batch)	Maintenance Mode Status	Maintenance status
	Emergency STOP Setting Status	Emergency STOP setting status
Outdoor Unit Monitoring (Individual)	Error code Status	Error code status
Convertor Unit Monitoring (Individual)	Error code Status	Error code status

*1: All operation setting, Timer setting, Room temperature setting, Operation mode setting, ON/OFF operation, Filter reset operation, On operation setting.

CONTROL SYSTEM

* To protect the compressor of the outdoor unit, carefully read and understand the following cautions that may affect the operation of the compressor before executing the setting.
  - When performing periodical settings like schedule settings for the following functions, perform the setting to all the indoor units in the same refrigerant system simultaneously, conforming to the timing restriction described below.



* Forced thermostat OFF instruction
  - Only one equipment can send these instructions for each refrigerant system.
  - When these instructions are sent by multiple equipment, the system may not respond as instructed or may malfunction.

■ SPECIFICATIONS

Power supply	1ø AC 208-240 V 50/60 Hz
Input Power (W)	4.5
Dimensions [H × W × D] (mm)	67 × 288 × 211
Weight (g)	1500

● Operating environment

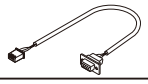
Temperature(°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation

● Transmission specifications

LONWORKS® network	
Transmission speed	78 kbps
Transceiver	FT-X1 (Echelon® Corporation)
Transmission form	Free topology
Cable	Twisted pair cable (shield)
	22AWG equivalent
Network connector	One terminal
Terminal resistor	None attachment (It attaches at the terminal of a network.)

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Installation manual 	1	Use during installation.
Cable tie 	3	For mounting the power supply cable and transmission cable.
Screw (M4 × 20 mm) 	4	For mounting the network convertor.
CD-ROM 	1	Includes the software and manuals of Tool for network convertor.
Connector cable 	1	For initial setting.
Dust proof bushing 	1	For connecting the power supply cable.

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

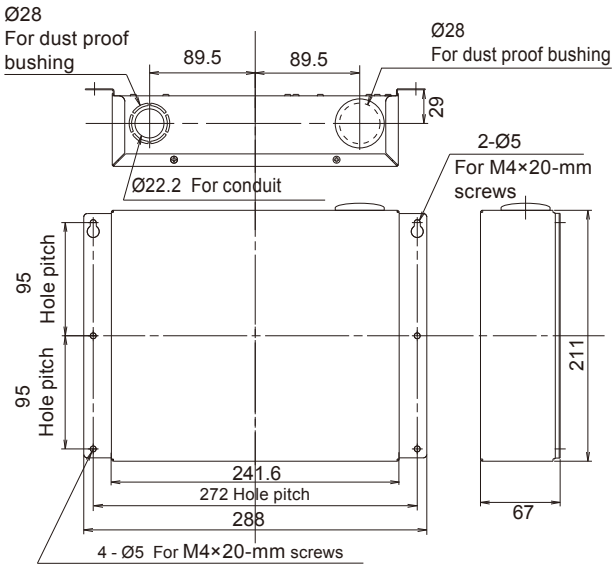
To install Tool for Network Convertor (UTY-VLGX), applicable PC needs to satisfy the following system requirements.

Operating System	• Microsoft® Windows Vista® Home Premium (32-bit) SP1 or later • Microsoft® Windows® 7 Professional (32-bit) • Microsoft® Windows® 8 Pro (32-bit) * 64-bit version of Windows® are not supported. [Supported languages] English and Chinese
Memory	1 GB or more
Display	1024 × 768 or higher resolution, 16-bit or higher color
Interface	RS232C serial port × 1 *Use "COM1" port.
Software	Adobe® Reader 9.0 or later
Optical drive	CD-ROM drive

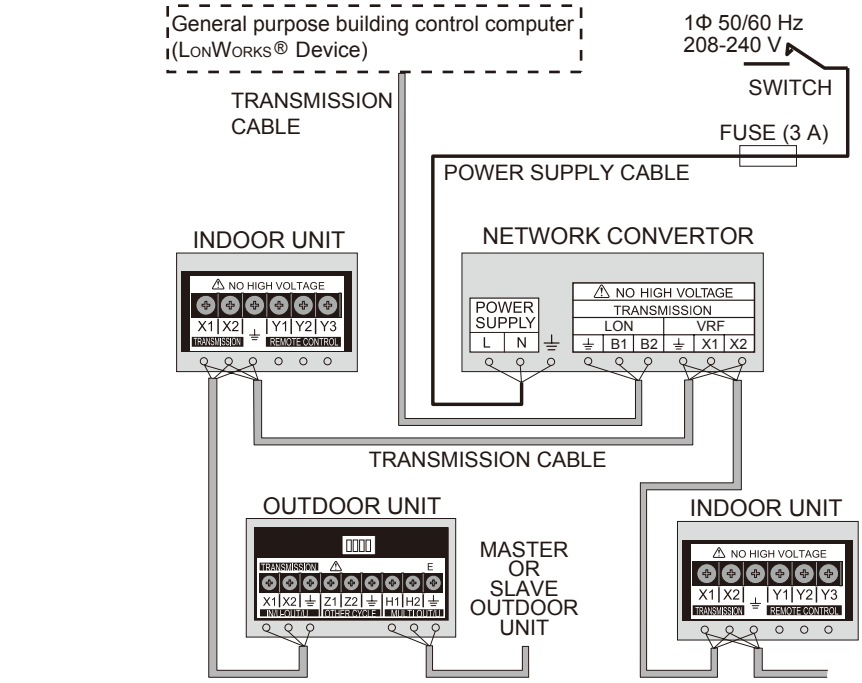
CONTROL SYSTEM

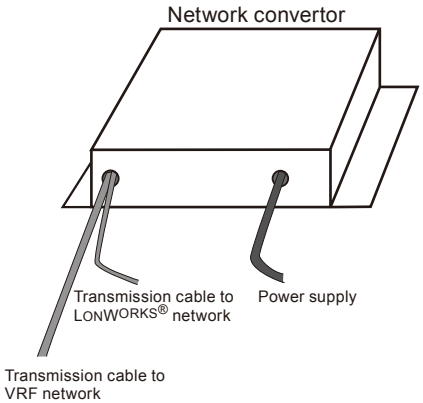
■ DIMENSIONS

(Unit : mm)



■ ELECTRICAL WIRING





NOTES:

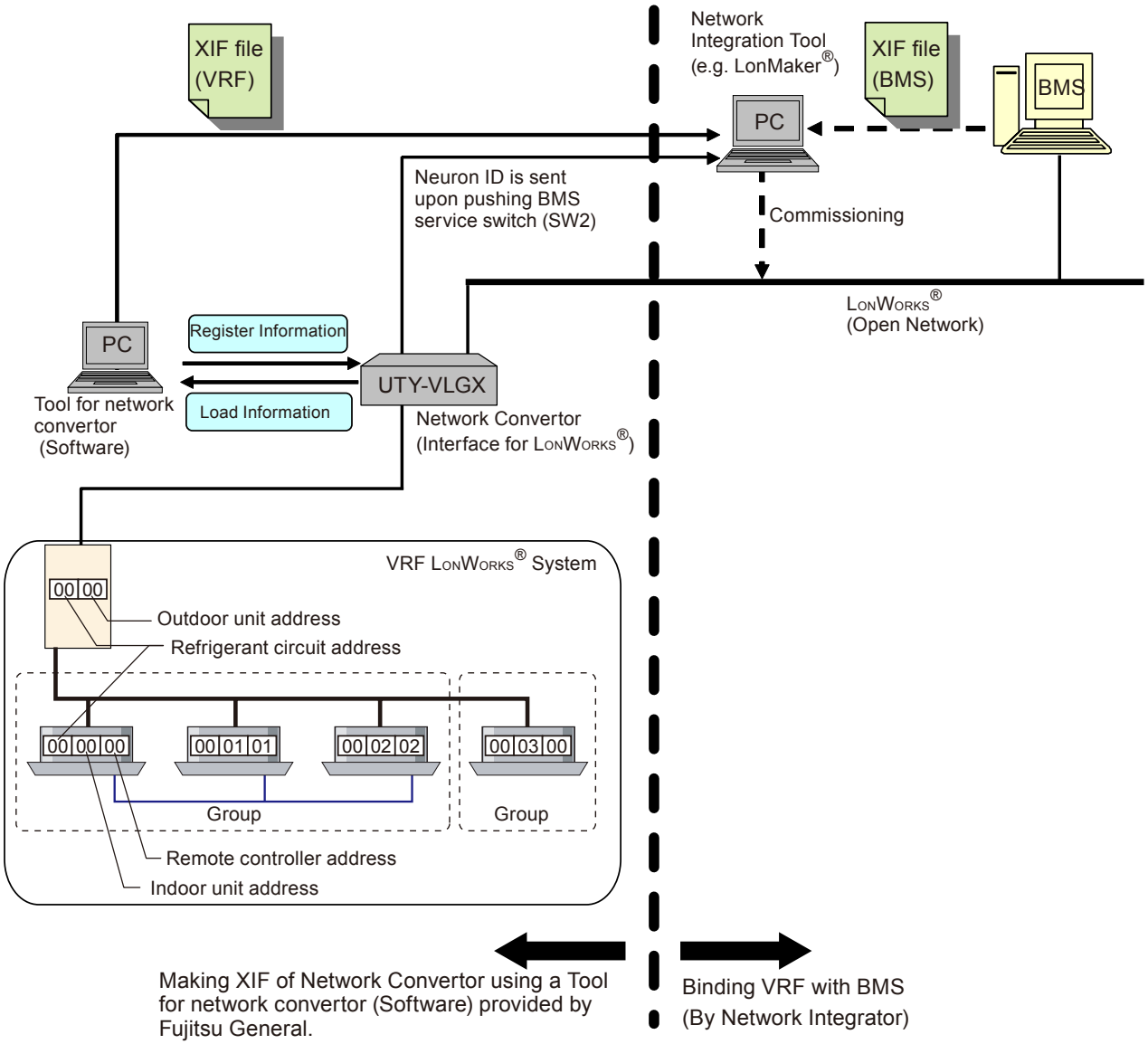
- Do not bind the power cable and transmission cable to avoid an erroneous operation.
- Use shield cable for transmission cable. The shield metal should be grounded.
- Do not forget to ground the Network Convertor.

■ WIRING SPECIFICATIONS

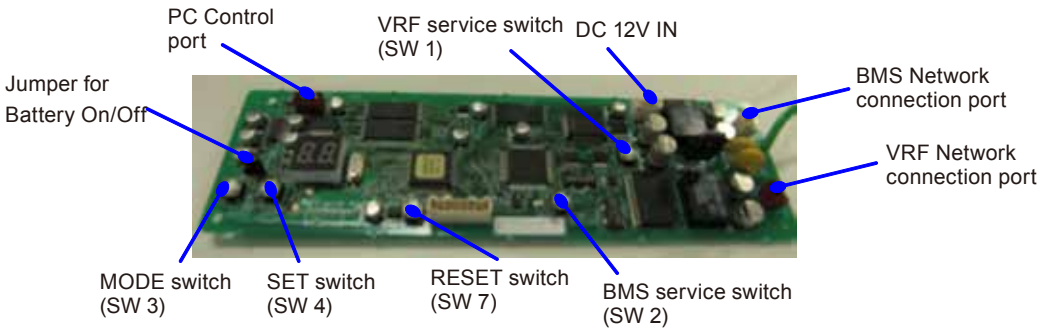
Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2	60245 IEC 57 or equivalent	1 ø AC208-240 V 50/60 Hz, 2-Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
Fuse capacity	3 A			

*Always ground the unit

■ TOTAL SYSTEM CONFIGURATION LAYOUT



■ PCB FOR NETWORK CONVERTOR (UTY-VLGX)



CONTROL SYSTEM

■ PROCEDURE IN BRIEF FOR MAKING XIF & REGISTER DATA TO NETWORK CONVERTOR (UTY-VLGX)

NOTE: For detailed information, check the Application Manual which is included inside packaged CD-ROM.

Following are the work items during on line operation. However, making XIF is also possible during off line operation.

STEP 1: Connect the PC and Network Convertor (UTY-VLGX) .

Connection will be done by the connector cable provided as an accessory item of UTY-VLGX.

STEP 2: Install Tool for Network Convertor (software) for UTY-VLGX in PC.

Tool for Network Convertor is the accessory item of UTY-VLGX.

STEP 3: Set Network Convertor (UTY-VLGX) to Installation Mode.

STEP 4: Setting ID number of UTY-VLGX on PC screen of Tool for Network Convertor.
(ID number is required to identify UTY-VLGX from BMS. A maximum of four Network Convertors can be connected to one BMS, and ID number allocation is like 00, 01, and so on.)

STEP 5: Initial setting of Indoor Unit & Outdoor Unit Addresses by using the Tool for Network Convertor.

STEP 6: Register the initial setting data to UTY-VLGX. Click 'Register' dialog.

STEP 7: Set Configuration Properties.

It is the communication properties of UTY-VLGX. Select the following Communication items & Communication type if necessary. Otherwise, communication will be taken place by the Default values.

- Select Communication items
  - -Event Driven communication or Cyclic communication.
    (Default: Cyclic 3minutes)
  - -Communication Interval Time during turning ON all together.
    (Default: 3 minutes)
- Select Communication type (to communicate data with BMS)
  - -Communicate only when changing network variable or communicate all network variable. (Default: Only when changing network variable)
  - -Communicate only when changing room temperature value.
    (Default: Room temperature changed value 1°C)

STEP 8: Register the Configuration Properties data to UTY-VLGX. Click 'Register' dialog.

STEP 9: Making / Modifying XIF, and transfer XIF data by USB flash drive or floppy disk for binding.

STEP 10: Reset Network Convertor (UTY-VLGX) to press 'Reset SW7'.

STEP 11: Turn OFF the power. After that, remove the connection of PC and Network Convertor (UTR-VLGX) respectively.

In this stage, Network Convertor (UTY-VLGX) is ready for binding and commissioning.

CONTROL SYSTEM

Important: Network Convertor will not operate if,

- VRF network system address (Outdoor and Indoor units address) allocation information are not registered to Network Convertor.
- XIF data information and VRF network system address allocation information must not be same.
- Binding and Commissioning is not executed. (During binding, read out the Network Convertor Neuron ID by pushing BMS service switch [SW 2] on the main PC board of Network Convertor.)
- If the ID number registered to the Network Convertor is not same as the ID number which is included in the XIF of Network Convertor.

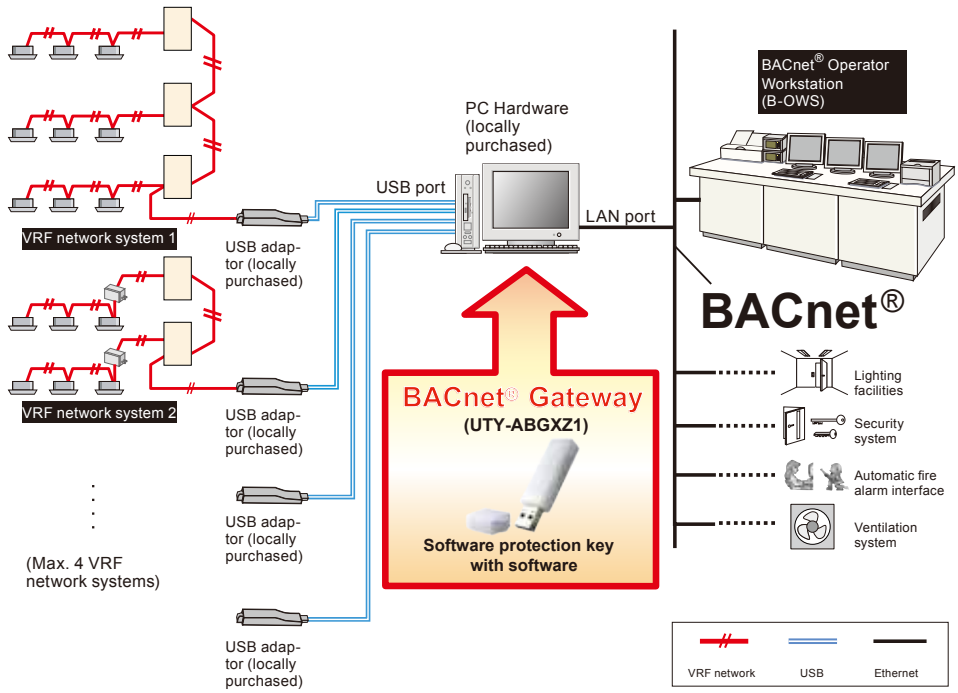
CONTROL SYSTEM

3-5. BACnet® GATEWAY

3-5-1. MODEL : UTY - ABGXZ1

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2012) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, alarm & event functions, electricity charge apportionment function as well as energy saving function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are locally purchased items.

■ SYSTEM DIAGRAM



■ FUNCTIONS

● Indoor unit control (Output Object)

Commands from BMS are sent to the respective indoor units via BACnet® Gateway. (BMS → BACnet® Gateway → respective indoor units of VRF Network system)

● Indoor unit status monitoring (Input Object)

Indoor unit status is communicated to the BMS via BACnet® Gateway. (BMS ← BACnet® Gateway ← respective indoor units of VRF Network system)

● Outdoor unit control (Output Object)

Commands from BMS are sent to the respective outdoor units via BACnet® Gateway. (BMS → BACnet® Gateway → respective outdoor units of VRF Network system)

● Outdoor unit status monitoring (Input Object)

Outdoor unit status is communicated to the BMS via BACnet® Gateway. (BMS ← BACnet® Gateway ← respective outdoor units of VRF Network system)

■ BACnet® OBJECT LIST

● Type : Indoor

Object name	Code (II)	Function	Unit						
			Inactive	Active					
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6	Text-7
AI	10	Set temp. status	Degree						
	11	Space temp.	Degree						
	12	Auto temp. (Low limit status)	Degree						
	13	Auto temp. (High limit status)	Degree						
	14	Cool/Dry temp. (Low limit status)	Degree						
	15	Cool/Dry temp. (High limit status)	Degree						
	16	Heat temp. (Low limit status)	Degree						
	17	Heat temp. (High limit status)	Degree						
AO	10	Temp. setting	Degree						
	11	Auto temp. (Low limit setting)	Degree						
	12	Auto temp. (High limit setting s)	Degree						
	13	Cool/Dry temp. (Low limit setting)	Degree						
	14	Cool/Dry temp. (High limit setting)	Degree						
	15	Heat temp. (Low limit setting)	Degree						
	16	Heat temp. (High limit setting)	Degree						
AV	10	ECA *1 operation data							
BI	10	Operation status	OFF	ON					
	14	Filter sign status	Unsigned	Signed					
	15	Indoor unit error status	Normal	Fault					
	16	Antifreeze operation status	Reset	Set					
	17	SAVE operation status	Normal	SAVE					
	18	Forced thermostat off status	Reset	Set					
	19	Emergency stop status	Normal	Stop					
	20	Mode mismatch status	Normal	Mismatch					
	21	Protect antifreeze status	Reset	Set					
	22	Temp. limit valid status	Invalid	Valid					
BO	10	Operation setting	OFF	ON					
	14	Filter sign resetting	Reset	Not reset					
	15	Antifreeze operation setting	Reset	Set					
	16	SAVE operation setting	Reset	Set					
	17	Forced thermostat OFF setting	Reset	Set					
	18	Emergency stop setting	Reset	Set					
	19	Temp. limit valid setting	Invalid	Valid					
MI	10	Operation mode status	Cool	Heat	Fan	Dry	Auto		
	11	Fan speed status	Low	High	Med	Auto	Quiet	Med-Low	Med-High
	12	Indoor unit error code	Refer to FGL original error code						
	13	R.C. prohibition status	Refer to R.C. prohibition setting chart						
	14	Vertical air flow direction status	1	2	3	4	Swing		
	15	Horizontal air flow direction status	1	2	3	4	5	Swing	
	16	Special driving status	Normal	Defrost	Oil Recovery				
	17	Managed mode	None	Master	Slave	External			
MO	10	Operation mode setting	Cool	Heat	Fan	Dry	Auto		
	11	Fan speed setting	Low	High	Med	Auto	Quiet	Med-Low	Med-High
	12	R.C. prohibition setting	Refer to R.C. prohibition setting chart						
	13	Vertical air flow direction setting	1	2	3	4	Swing		
	14	Horizontal air flow direction setting	1	2	3	4	5	Swing	
TL	10	ECA *1 operation data log							

*1) ECA: Electricity Charge Apportionment.

CONTROL SYSTEM

● Type : Outdoor

Object name	Code (II)	Function	Unit							
			Inactive	Active						
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6	Text-7	Text-8
BI	30	Outdoor unit error status	Normal	Fault						
	31	Forced OFF status	Reset	Set						
BO	30	Forced OFF setting	Reset	Set						
MI	30	Outdoor unit priority operation status *2	Cool	Heat	Neutral	None				
	31	Outdoor unit error code	Refer to FGL original error code							
	32	Capacity Save Status	Not Set	100%	90%	80%	70%	60%	50%	40%
	33	Outdoor low noise operation setting *3								
MO	30	Outdoor low noise operation setting *4	Stop	Level-1 Quiet	Level-1 Ability	Level-2 Quiet	Level-2 Ability	Level-3 Quiet	Level-3 Ability	
	32	Capacity Save Setting	Not Set	100%	90%	80%	70%	60%	50%	40%

*2) Priority operation status is for Heat Pump type VRF
In other types of systems, this status is not necessary.

*3) Refer to the "Outdoor unit low noise operation value table" for the texts used with the "Outdoor low noise operation status"

*4) Outdoor unit firmware may need to be updated for this function to work.
Contact your local sales company for detail.

● Type : Gateway

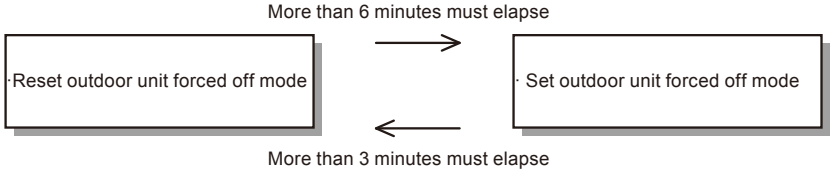
Object name	Code (II)	Function	Unit					
			Inactive	Active				
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6
Device	-	Device information						
BI	00	LON® Network Adaptor error status	Normal	Abnormal				
	01	Gateway error status	Normal	Abnormal				
	02	ES Status	Not Used	Energy Saving				
BO	02	ES Setting	Not Used	Energy Saving				
MI	00	LON® Network Adaptor unit error code	Refer to FGL original error code					
	01	Gateway error code	Refer to FGL original error code					
	02	ECA *1 status	Invalid	Invalid (Stop)	Include Indoor Unit Only	Exclude Indoor And RB Unit	Include Indoor And RB Unit	Include RB Unit Only
MO	01	ECA *1 setting	Stop	Include Indoor Unit Only	Exclude Indoor And RB Unit	Include Indoor And RB Unit	Include RB Unit Only	
Notification	00-99	Notification class						
CAL	00	Calendar “Holiday-1”						
	01	Calendar “Holiday-2”						
	02-31	Calendar “Special day-1” - ”Special day-30”						
Schedule	00-99	Schedule timer						

*1) ECA: Electricity Charge Apportionment.

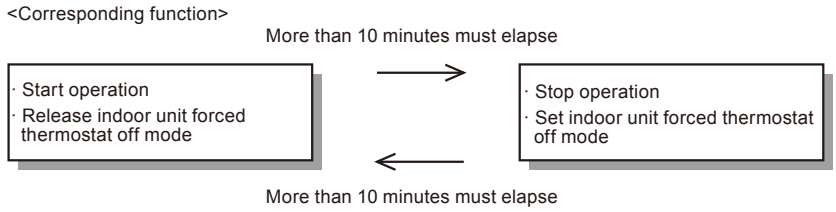
∗ To protect the compressor of the outdoor unit, carefully read and understand the following cautions that may affect the operation of the compressor before executing the setting.

• When regularly making the following settings to the same outdoor unit by using schedule function etc., leave the following interval.

<Corresponding function>



・When performing periodical settings like schedule settings for the following functions, perform the setting to all the indoor units in the same refrigerant system simultaneously, conforming to the timing restriction described below.



* Forced thermostat OFF instruction, outdoor unit forced off instruction and capacity save setting.
  - ・Only one equipment can send these instructions for each refrigerant system.
  - ・When these instructions are sent by multiple equipment (eg.from System Controller & BACnet® Gateway at the same time), the system may not respond as instructed or may malfunction.
* The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously. Therefore, ECA setting, required to be set before performing electricity charge apportionment, can only be sent from one equipment simultaneously.
* The energy saving function of VRF system can only be performed from one equipment simultaneously. Therefore, ES setting, required to be set before performing energy saving, can only be sent from one equipment simultaneously.

■ PACKING LIST

Name and shape	Quantity	Application
WHITE-USB-KEY (software protection key with software) 	1	Includes the software and manuals for Web Monitoring Tool. Additionally, it works as the software protection key. Software protection key to be connected to an USB port on the PC that the Web Monitoring Tool is installed. Web Monitoring Tool runs only on a PC with this WHITE-USB-KEY.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) • USB ports (Maximum of 5 ports) - 1 USB port is required for WHITE USB-Key connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader® 9.0 or later

CONTROL SYSTEM

■ INSTALLATION PROCEDURE

Before installation, connect between the VRF Network System and the USB Adaptor.

Brief installation steps are as follows:
(For detail, check the Instruction Manual.)

Step1: Install an appropriate driver for the USB Adaptor to the PC.
*In this step, do not connect the USB Adaptor to the PC.

Step2: Install the BACnet® Gateway (Application Software) to the PC.

Step3: Restart the PC.

Step4: After restarting the PC, make sure that the USB Adaptor, WHITE-USB-KEY, and Ethernet cable for the BACnet® Gateway are connected to the PC.

Step5: Start the application.

Step6: Configure necessary settings for startup operation as follows:

1. Perform all necessary initial settings such as IP address, etc. Then, click the OK button.
   Adaptor Setting window appears automatically.
2. Select the connected adaptor, and click OK button. Then, Unit Registration window appears and starts scanning all connected units automatically.
3. After finishing the scanning, click OK button.
   Gateway execution window appears on the display when the startup operation is completed.

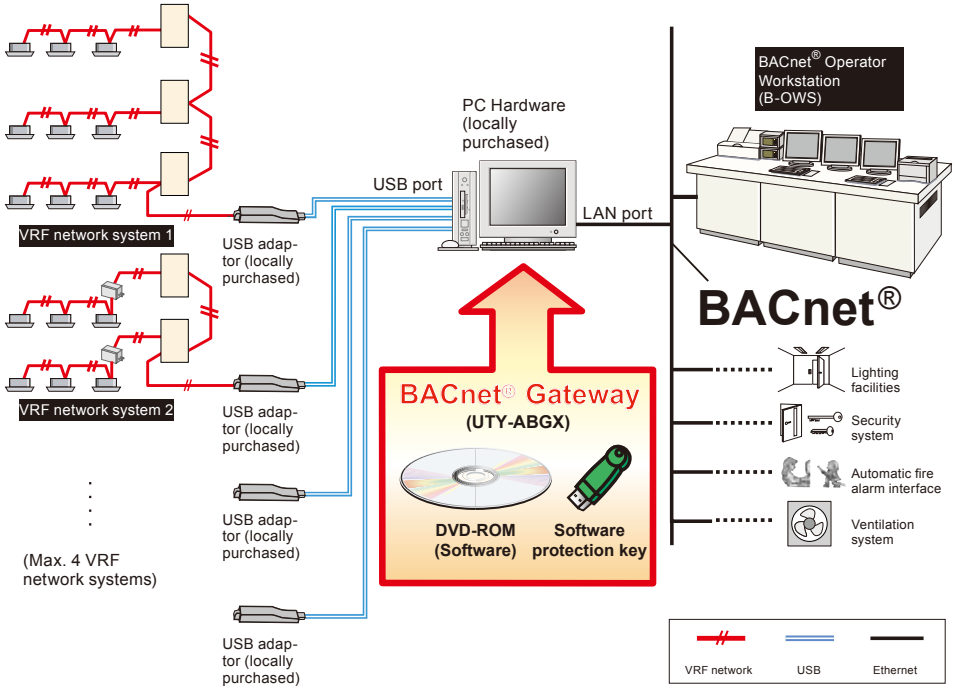
Step7: Arrange the information between BMS and BACnet® Gateway using the Read Property Service, etc.

CONTROL SYSTEM

3-5-2. MODEL : UTY - ABGX

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2004) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, alarm & event functions, electricity charge apportionment function as well as energy saving function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are locally purchased items.

■ SYSTEM DIAGRAM



■ FUNCTIONS

● Indoor unit control (Output Object)

Commands from BMS are sent to the respective indoor units via BACnet® Gateway. (BMS → BACnet® Gateway → respective indoor units of VRF Network system)

● Indoor unit status monitoring (Input Object)

Indoor unit status is communicated to the BMS via BACnet® Gateway. (BMS ← BACnet® Gateway ← respective indoor units of VRF Network system)

● Outdoor unit control (Output Object)

Commands from BMS are sent to the respective outdoor units via BACnet® Gateway. (BMS → BACnet® Gateway → respective outdoor units of VRF Network system)

● Outdoor unit status monitoring (Input Object)

Outdoor unit status is communicated to the BMS via BACnet® Gateway. (BMS ← BACnet® Gateway ← respective outdoor units of VRF Network system)

CONTROL SYSTEM

■ BACnet® OBJECT LIST

● Type : Indoor

Object name	Code (II)	Function	Unit						
			Inactive	Active					
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6	Text-7
AI	10	Set temp. status	Degree						
	11	Space temp.	Degree						
	12	Auto temp. (Low limit status)	Degree						
	13	Auto temp. (High limit status)	Degree						
	14	Cool/Dry temp. (Low limit status)	Degree						
	15	Cool/Dry temp. (High limit status)	Degree						
	16	Heat temp. (Low limit status)	Degree						
	17	Heat temp. (High limit status)	Degree						
AO	10	Temp. setting	Degree						
	11	Auto temp. (Low limit setting)	Degree						
	12	Auto temp. (High limit setting s)	Degree						
	13	Cool/Dry temp. (Low limit setting)	Degree						
	14	Cool/Dry temp. (High limit setting)	Degree						
	15	Heat temp. (Low limit setting)	Degree						
	16	Heat temp. (High limit setting)	Degree						
AV	10	ECA *1 operation data							
BI	10	Operation status	OFF	ON					
	14	Filter sign status	Unsigned	Signed					
	15	Indoor unit error status	Normal	Fault					
	16	Antifreeze operation status	Reset	Set					
	17	SAVE operation status	Normal	SAVE					
	18	Forced thermostat off status	Reset	Set					
	19	Emergency stop status	Normal	Stop					
	20	Mode mismatch status	Normal	Mismatch					
	21	Protect antifreeze status	Reset	Set					
	22	Temp. limit valid status	Invalid	Valid					
BO	10	Operation setting	OFF	ON					
	14	Filter sign resetting	Reset	Not reset					
	15	Antifreeze operation setting	Reset	Set					
	16	SAVE operation setting	Reset	Set					
	17	Forced thermostat OFF setting	Reset	Set					
	18	Emergency stop setting	Reset	Set					
	19	Temp. limit valid setting	Invalid	Valid					
MI	10	Operation mode status	Cool	Heat	Fan	Dry	Auto		
	11	Fan speed status	Low	High	Med	Auto	Quiet	Med-Low	Med-High
	12	Indoor unit error code	Refer to FGL original error code						
	13	R.C. prohibition status	Refer to R.C. prohibition setting chart						
	14	Vertical air flow direction status	1	2	3	4	Swing		
	15	Horizontal air flow direction status	1	2	3	4	5	Swing	
	16	Special driving status	Normal	Defrost	Oil Recovery				
	17	Managed mode	None	Master	Slave	External			
MO	10	Operation mode setting	Cool	Heat	Fan	Dry	Auto		
	11	Fan speed setting	Low	High	Med	Auto	Quiet	Med-Low	Med-High
	12	R.C. prohibition setting	Refer to R.C. prohibition setting chart						
	13	Vertical air flow direction setting	1	2	3	4	Swing		
	14	Horizontal air flow direction setting	1	2	3	4	5	Swing	
TL	10	ECA *1 operation data log							

*1) ECA: Electricity Charge Apportionment.

CONTROL SYSTEM

● Type : Outdoor

Object name	Code (II)	Function	Unit							
			Inactive	Active						
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6	Text-7	Text-8
BI	30	Outdoor unit error status	Normal	Fault						
	31	Forced OFF status	Reset	Set						
BO	30	Forced OFF setting	Reset	Set						
MI	30	Outdoor unit priority operation status *2	Cool	Heat	Neutral	None				
	31	Outdoor unit error code	Refer to FGL original error code							
	32	Capacity Save Status	Not Set	100%	90%	80%	70%	60%	50%	40%
	33	Outdoor low noise operation setting *3								
MO	30	Outdoor low noise operation setting *4	Stop	Level-1 Quiet	Level-1 Ability	Level-2 Quiet	Level-2 Ability	Level-3 Quiet	Level-3 Ability	
	32	Capacity Save Setting	Not Set	100%	90%	80%	70%	60%	50%	40%

*2) Priority operation status is for Heat Pump type VRF
In other types of systems, this status is not necessary.

*3) Refer to the "Outdoor unit low noise operation value table" for the texts used with the "Outdoor low noise operation status"

*4) Outdoor unit firmware may need to be updated for this function to work.
Contact your local sales company for detail.

● Type : Gateway

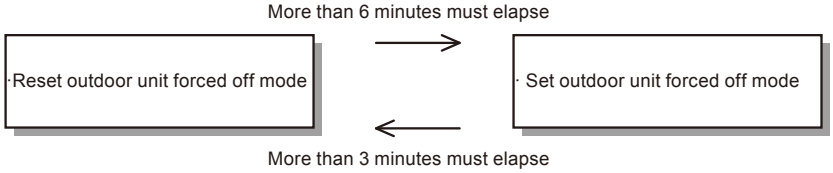
Object name	Code (II)	Function	Unit					
			Inactive	Active				
			Text-1	Text-2	Text-3	Text-4	Text-5	Text-6
Device	-	Device information						
BI	00	LON® Network Adaptor error status	Normal	Abnormal				
	01	Gateway error status	Normal	Abnormal				
	02	ES Status	Not Used	Energy Saving				
BO	02	ES Setting	Not Used	Energy Saving				
MI	00	LON® Network Adaptor unit error code	Refer to FGL original error code					
	01	Gateway error code	Refer to FGL original error code					
	02	ECA *1 status	Invalid	Invalid (Stop)	Include Indoor Unit Only	Exclude Indoor And RB Unit	Include Indoor And RB Unit	Include RB Unit Only
MO	01	ECA *1 setting	Stop	Include Indoor Unit Only	Exclude Indoor And RB Unit	Include Indoor And RB Unit	Include RB Unit Only	
Notification	00-99	Notification class						
CAL	00	Calendar “Holiday-1”						
	01	Calendar “Holiday-2”						
	02-31	Calendar “Special day-1” - ”Special day-30”						
Schedule	00-99	Schedule timer						

*1) ECA: Electricity Charge Apportionment.

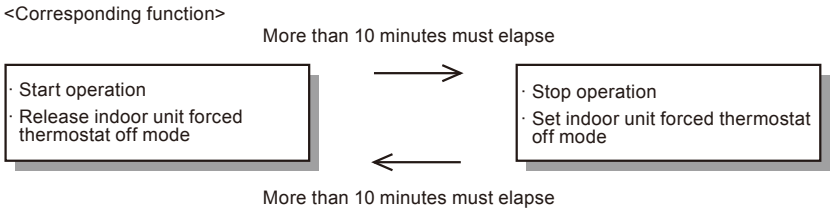
∗ To protect the compressor of the outdoor unit, carefully read and understand the following cautions that may affect the operation of the compressor before executing the setting.

• When regularly making the following settings to the same outdoor unit by using schedule function etc., leave the following interval.

<Corresponding function>



・When performing periodical settings like schedule settings for the following functions, perform the setting to all the indoor units in the same refrigerant system simultaneously, conforming to the timing restriction described below.



* Forced thermostat OFF instruction, outdoor unit forced off instruction and capacity save setting.
  - ・Only one equipment can send these instructions for each refrigerant system.
  - ・When these instructions are sent by multiple equipment (eg.from System Controller & BACnet® Gateway at the same time), the system may not respond as instructed or may malfunction.
* The electricity charge apportionment function of VRF system can only be performed from one equipment simultaneously. Therefore, ECA setting, required to be set before performing electricity charge apportionment, can only be sent from one equipment simultaneously.
* The energy saving function of VRF system can only be performed from one equipment simultaneously. Therefore, ES setting, required to be set before performing energy saving, can only be sent from one equipment simultaneously.

■ PACKING LIST

Name and shape	Quantity	Application
DVD-ROM 	1	Includes the software and manuals for BACnet® Gateway.
WibuKey  (Software protection key)	1	Software protection key to be connected to an USB port on the PC that is BACnet® Gateway is installed. BACnet® Gateway runs only on a PC with this WibuKey.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) • USB ports (Maximum of 5 ports) - 1 USB port is required for WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

CONTROL SYSTEM

■ INSTALLATION PROCEDURE

Before installation, connect between the VRF Network System and the USB Adaptor.

Brief installation steps are as follows:
(For detail, check the Instruction Manual.)

Step1: Install an appropriate driver for the USB Adaptor to the PC.
*In this step, do not connect the USB Adaptor to the PC.

Step2: Install the BACnet® Gateway (Application Software) to the PC.

Step3: Restart the PC.

Step4: After restarting the PC, make sure that the USB Adaptor, WibuKey, and Ethernet cable for the BACnet® Gateway are connected to the PC.

Step5: Start the application.

Step6: Configure necessary settings for startup operation as follows:

1. Perform all necessary initial settings such as IP address, etc. Then, click the OK button.
   Adaptor Setting window appears automatically.
2. Select the connected adaptor, and click OK button. Then, Unit Registration window appears and starts scanning all connected units automatically.
3. After finishing the scanning, click OK button.
   Gateway execution window appears on the display when the startup operation is completed.

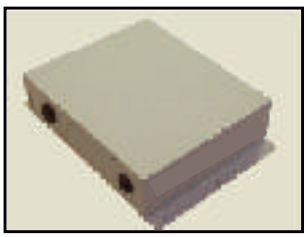
Step7: Arrange the information between BMS and BACnet® Gateway using the Read Property Service, etc.

CONTROL SYSTEM

3-6. SIGNAL AMPLIFIER

■ MODEL : UTY - VSGXZ1

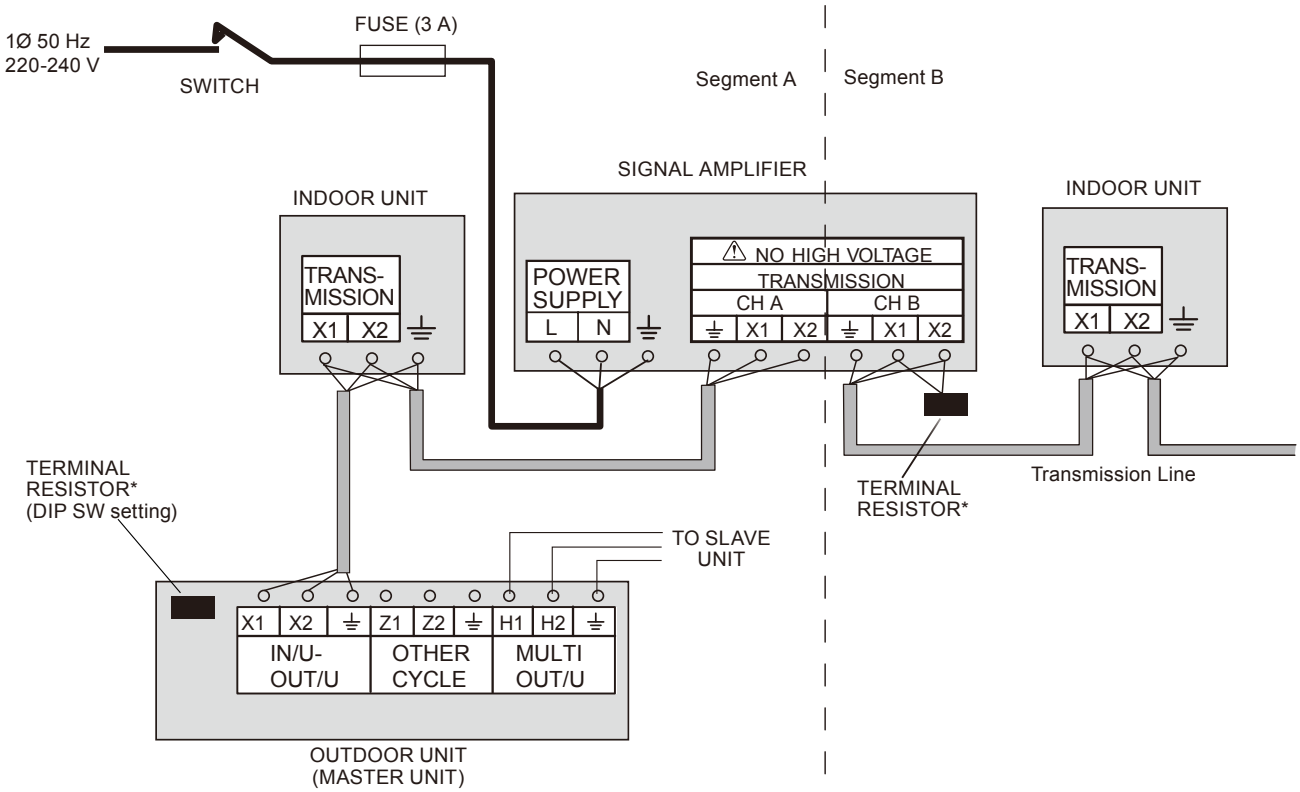
If the total length of transmission line exceeds 500 m, or the number of elements exceeds 64 units, Signal Amplifier will be necessary to use.



- Transmission line length can be extended up to 3600 m with multiple signal amplifier.
- Up to 8 Signal Amplifier (Filter mode is OFF) can be installed in 1 VRF network system.
- Up to 32 Signal Amplifier (Filter mode is ON) can be installed in 1 VRF network system.
- When installing 321 or more indoor units, install 1 Signal amplifier (Filter mode is ON) for every 64 indoor units. (However, only when VR-II Series is installed.)
- To prevent the drop of signal level by taking distance of length or quantity of unit in VRF network with installing signal amplifier, signal level can be recovered.

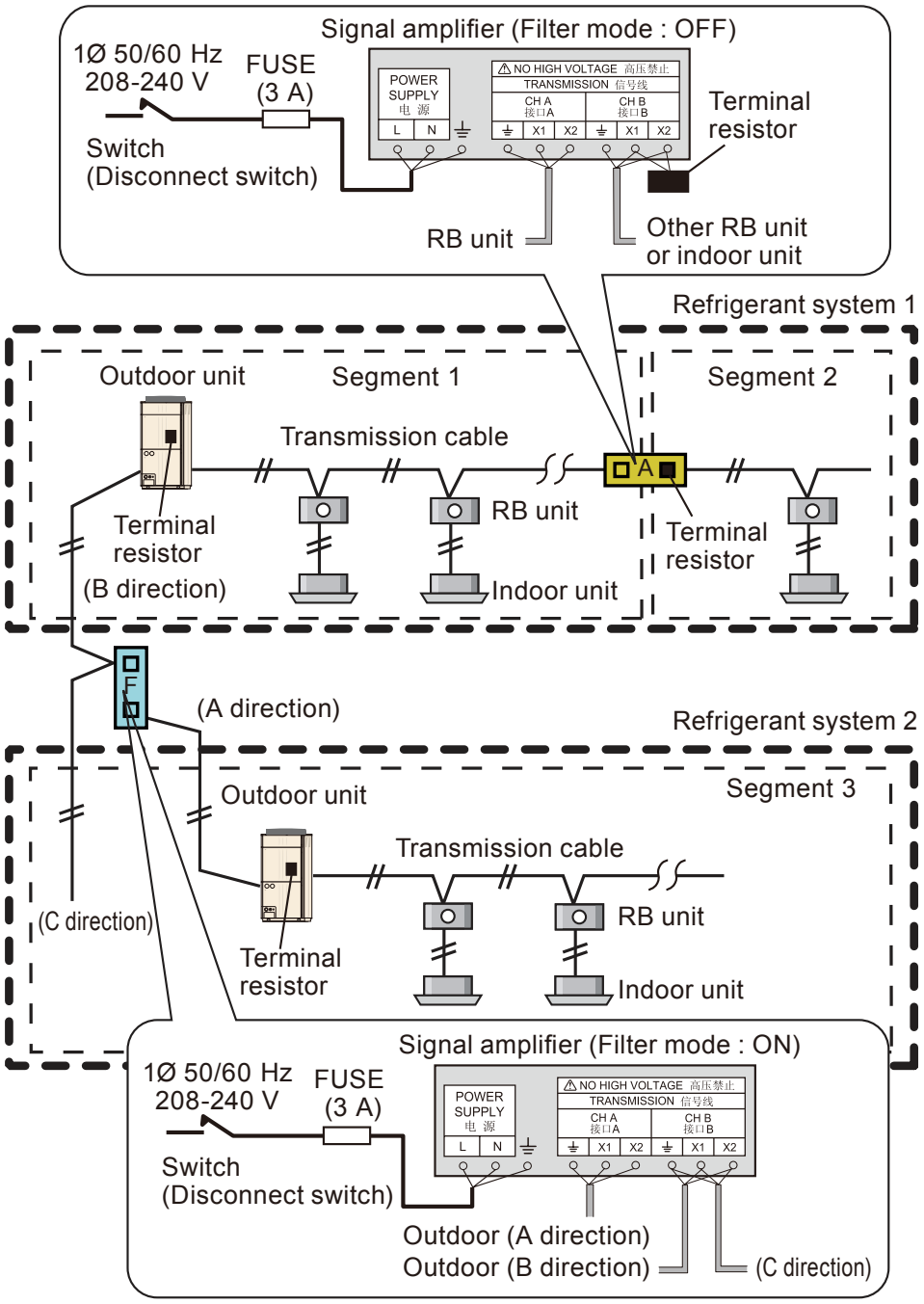
■ ELECTRICAL WIRING

● **Case of V-III, V-II, J-III, J-IIIL, J-II, J-IIS or VR-II** (Indoor unit is installed 320 units or less)



CONTROL SYSTEM

● **Case of VR-II** (321 or more indoor units are installed)



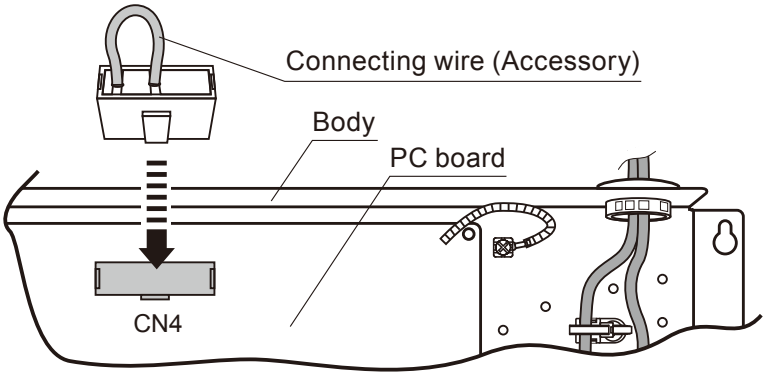
* Make sure to install 1 piece of terminal resistor to each segment.
Terminal resister is provided for each outdoor unit, but confirm that there is only one terminal resistor in the same segment.

CONTROL SYSTEM

● Filter mode setting

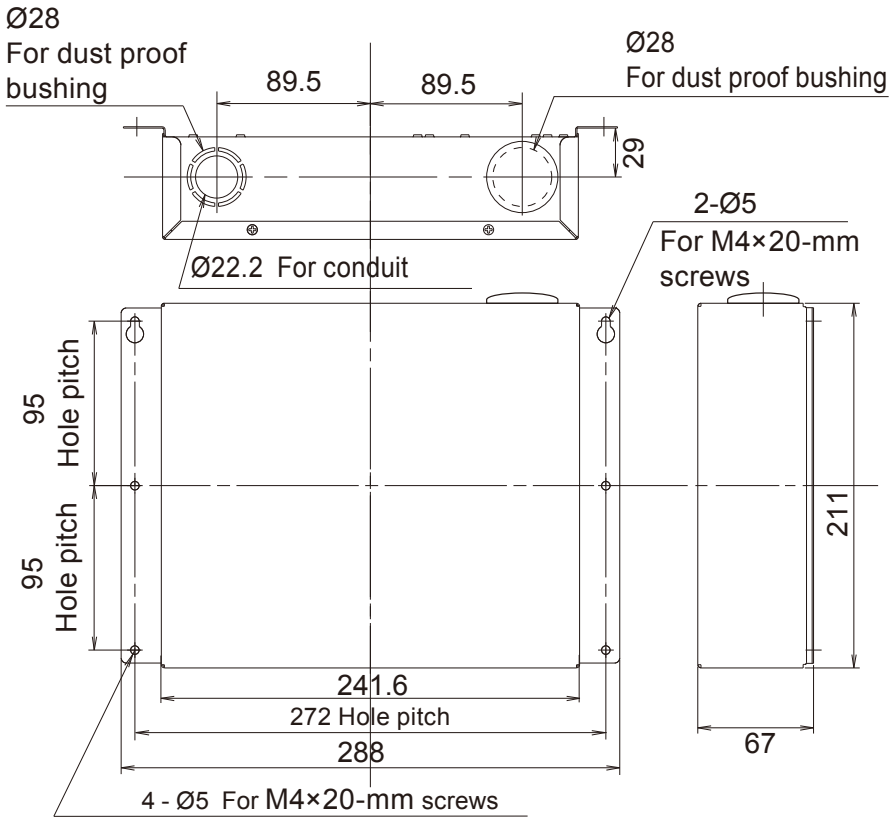
Set the Filter mode to suppress an increase of the amount of communication information in the VR-II system.

- Filter mode is turned on by inserting the accessory connecting wire at the CN4 connector on the PC board.
- When the Filter mode setting is changed, turn the power off once. Otherwise, the setting will not be recognized.



■ DIMENSIONS

(Unit : mm)



CONTROL SYSTEM

■ PACKING LIST

The following installation parts are supplied. Use them as required.

Name and shape	Quantity	Application
Installation manual 	1	
Cable tie 	3	For mounting the power supply cable, and transmission cable.
Screw (M4 × 20 mm) 	4	For mounting the signal amplifier.
Terminal resistor 	1	It is used when there is no terminal resistor in a segment.
Dust proof bushing 	1	For connecting the power supply cable.
Connecting wire 	1	For setting the filter mode

■ WIRING SPECIFICATIONS

Use	Size		Wire type	Remarks
Power supply cable	Maximum	1.25 mm^2	60245 IEC 57 or equivalent	1 ø AC208-240 V 50/60 Hz, 2-Wire + ground (Always ground the unit)
	Minimum	0.5 mm^2		
Transmission cable	0.33 mm^2 (22AWG)		LEVEL4 (NEMA) non-polar 2 core, twisted pair solid core Shielded	LONWORKS® compatible cable
Fuse capacity	3 A			

■ SPECIFICATIONS

● Main specification

Power supply		1ø AC208-240 V 50/60 Hz
Input Power (W)		4.5
Temperature (°C)	Operating	0 to 46
	Packaged	-10 to 60
Humidity (%)	Packaged	0 to 95 (RH) ; No condensation
Dimensions [H × W × D] (mm)		67 × 288 × 211
Weight (g)		1500

CONTROL SYSTEM

3-7. WIRELESS LAN ADAPTER

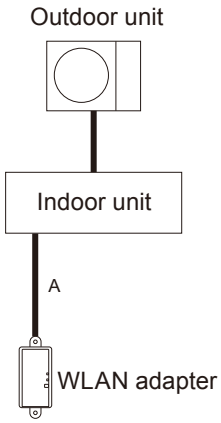
■ MODEL : UTY-TFSXZ1



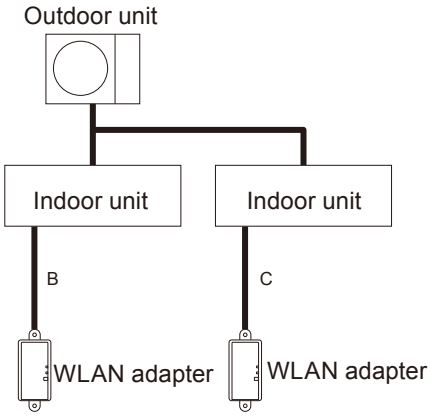
- By installing FGLair on a smart device, several functions can be controlled from outside the house.

■ SYSTEM DIAGRAM

Single system

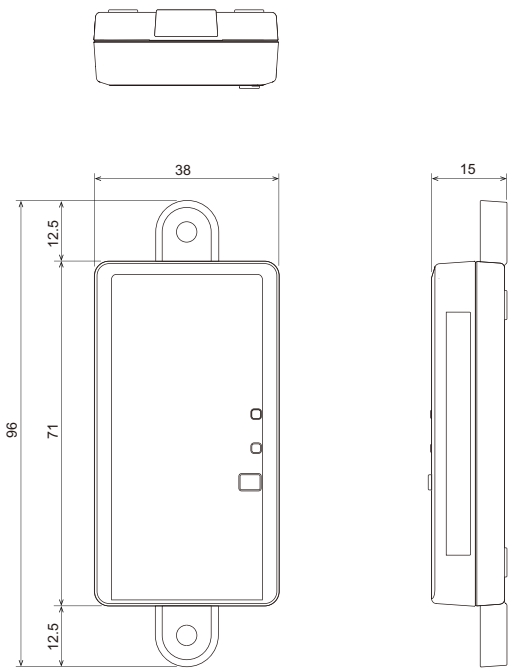


Multiple system



■ DIMENSIONS

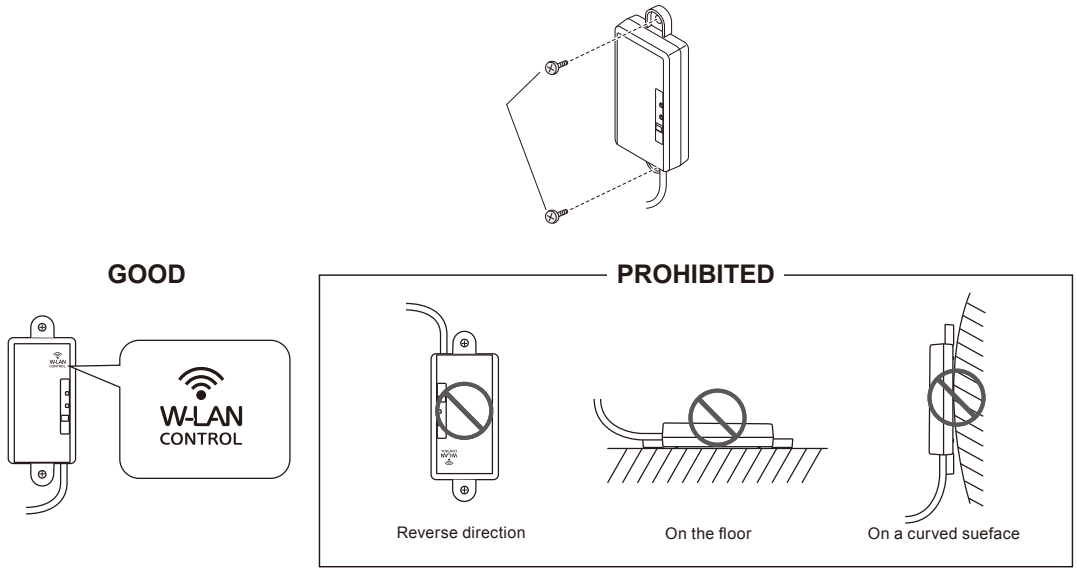
(Unit : mm)



■ INSTALLATION

(1) With referring the setting manual, perform wire connection.

(2) Install the WLAN adapter in the direction as shown in this figure. If the WLAN adapter is installed in the wrong direction, water may get into the adapter through the wire, causing failure.



Connect the remote controller cable to the connecting cable, and insert it to the connector. Set to “2WIRE” the DIP switch (SW1) on the PC board of the indoor unit.

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Setting manual 	1	
Operation manual (CD-ROM) 	1	
EMI core 	1	
Tapping screw M4 × 25 mm 	2	
Wireless LAN label 	1	

■ SPECIFICATIONS

Dimensions (H × W × D)	Net	mm	71 × 38 × 15
	Gross	mm	207 × 138.5 × 50
Weight	Net	g	35 (without cable)
	Gross		380
Operating temperature range		°C	0 to 46

■ WIRELESS SPECIFICATIONS

Communication method between wireless LAN router and WLAN adapter is as follows:

Wireless LAN standard	IEEE802.11b/g/n
Frequency bands	2.4 GHz (1ch—13ch)
Maximum radio-frequency power	80 mW

CONTROL SYSTEM

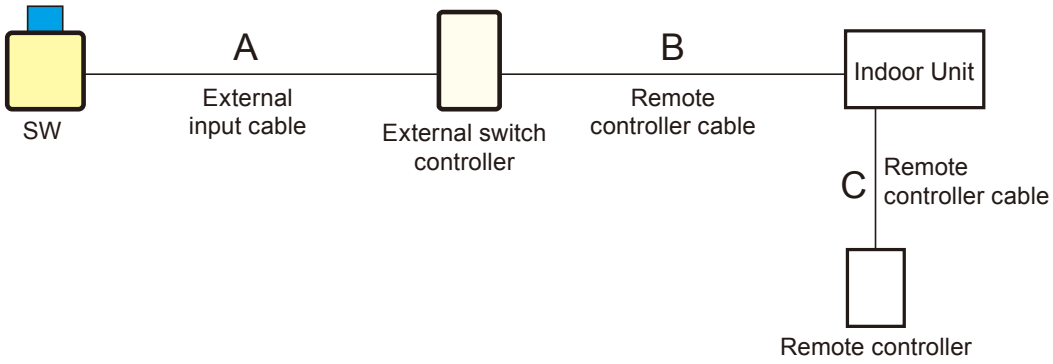
3-8. EXTERNAL SWITCH CONTROLLER

3-8-1. MODEL : UTY-TERX



- Switching of air conditioner settings can be performed using an external switch controller and a third-party device.
- ON/OFF, Temperature, Fan Speed, Operating and Remote controller prohibition Mode can be switched using external devices, such as a room card-key.
- Card-key or other sensor switches are available as a locally purchased parts.

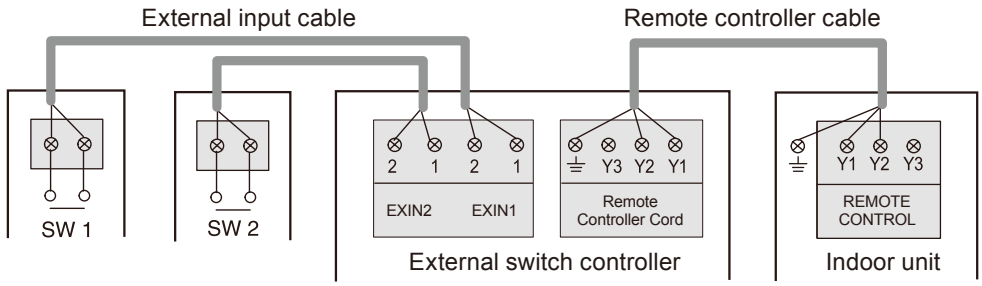
■ SYSTEM DIAGRAM



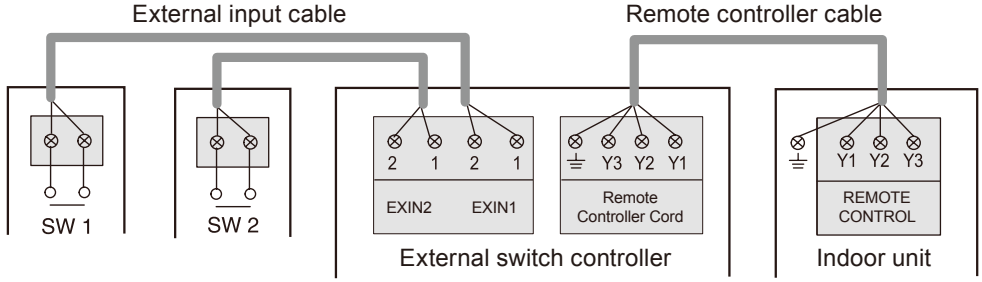
Use	A	B	B + C
2-wire type	50 m or less	-	500 m or less
3-wire type	50 m or less	25 m or less	500 m or less

■ ELECTRICAL WIRING

● For non-polar 2 wire

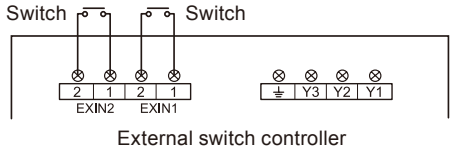


● For polar 3 wire



CONTROL SYSTEM

Connection to external contacts

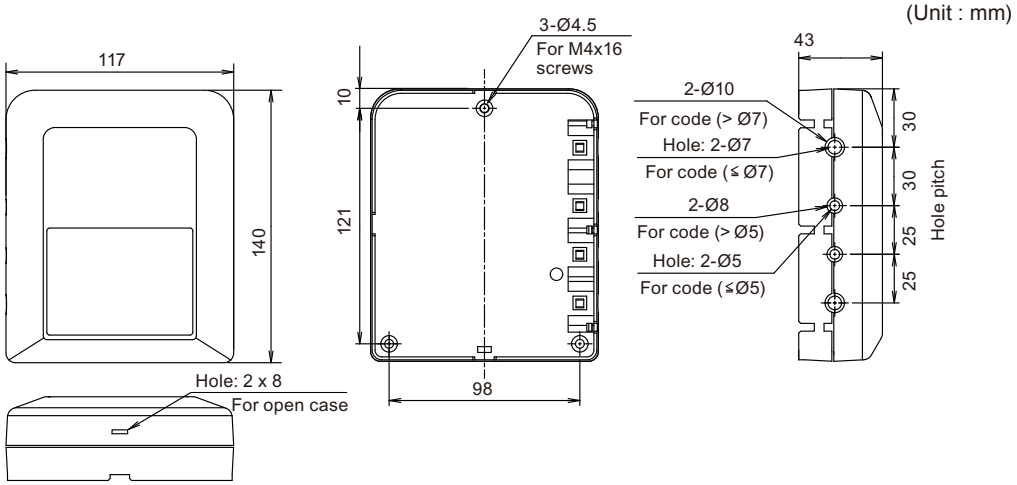


Select low current use contacts (usable at 5V, DC2mA or less).

Short circuit detection resistance (R ON): ≤ 500 (Ω).
Open circuit detection resistance (R OFF): ≥ 100 (kΩ).
A twister pair cable 0.33~1.25 mm² (16~22AWG) should be use.
Maximum length of cable is 50m.

■ DIMENSIONS

(Unit : mm)



■ INSTALLATION

● (1) When connecting to the connector

Case 1: For non-polar 2 wire

Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.

Fig.1

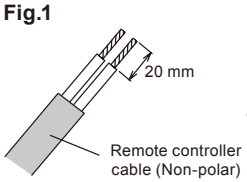
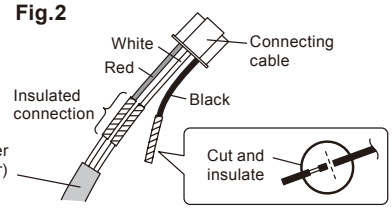
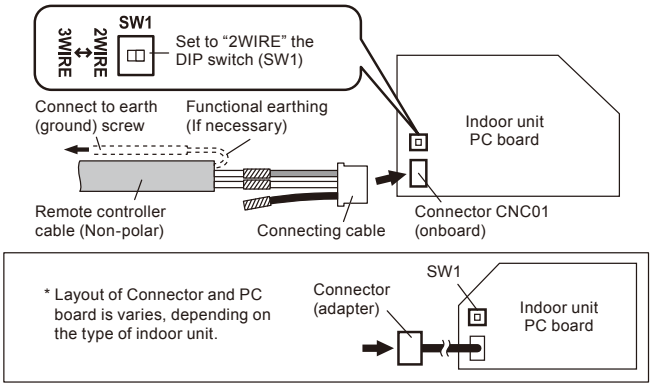


Fig.2



Connect the remote controller cable to the connecting cable, and insert it to the connector. Set to “2WIRE” the DIP switch (SW1) on the PC board of the indoor unit.

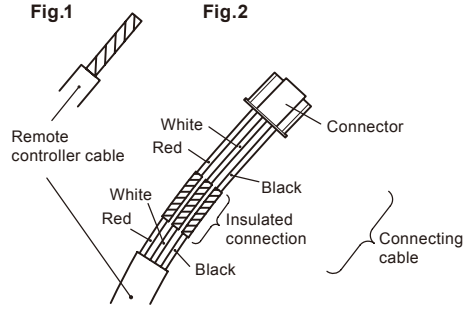


CONTROL SYSTEM

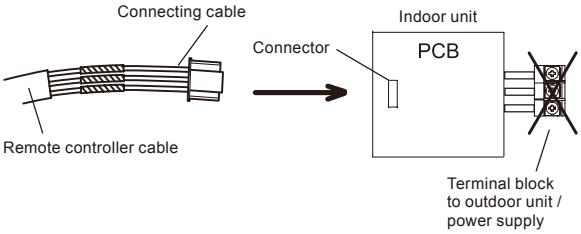
Case 2: For polar 3 wire

Modify the cable as per below methods.
Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1.
Connect the remote controller cable and connecting cable as shown in Fig. 2.
Be sure to insulate the connection between the cables.

Fig.1 Fig.2



Connect the remote controller cable to the connecting cable, and insert it to the connector.



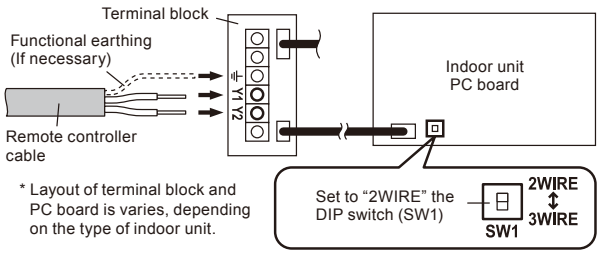
When the board has the 2WIRE/3WIRE DIP switch on it, set it to 3WIRE.
For how to set, see “Case 1: For non-polar 2 wire”.

● (2) When connecting to the exclusive terminal block

Connect the end of remote controller cable directly to the exclusive terminal block.

If there is the 2WIRE/3WIRE switch on the PC board of the indoor unit, set it to match the connection method of the connected remote controller cable.

Example) Connection of non-polar 2 wire



* Layout of terminal block and PC board is varies, depending on the type of indoor unit.

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
Installation manual 	1	
Screw (M4 x 16 mm) 	3	For installing the external switch controller
Cable Tie 	4	For securing controller cable.

■ WIRING SPECIFICATIONS

Use	Size	Cable type	Remarks
Remote controller cable (2-wire type)	0.33 to 1.25 mm^2 (16~22AWG)	Sheathed PVC cable*	Non-polar 2 core, twisted pair (Maximum cable length: 500m)
Remote controller cable (3-wire type)	0.33 mm^2 (22AWG)	Sheathed PVC cable*	Polar 3core, twisted pair (Maximum cable length: 25m)
External input cable	0.33 to 1.25 mm^2 (16~22AWG)	Sheathed PVC cable*	2 core, twisted pair (Maximum cable length: 50m)

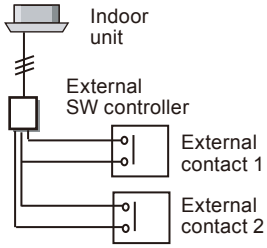
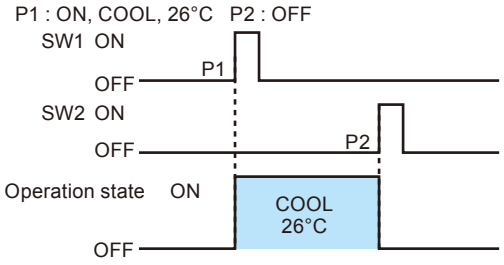
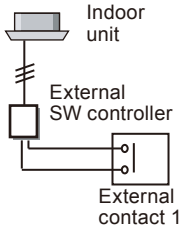
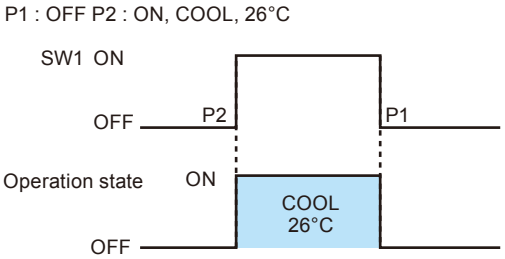
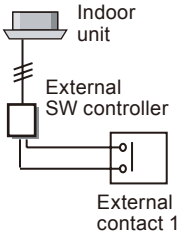
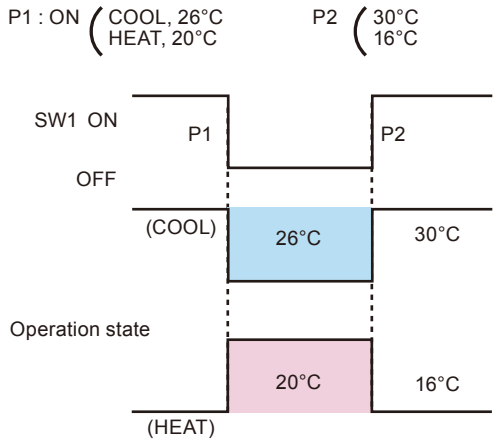
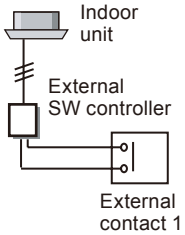
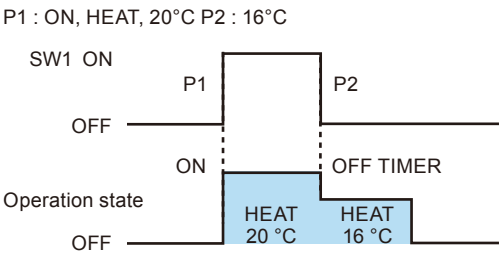
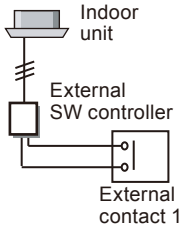
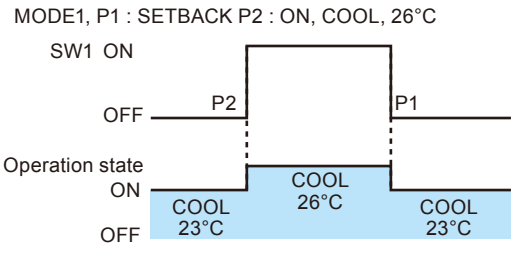
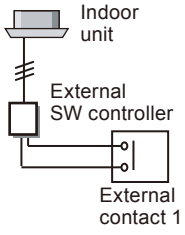
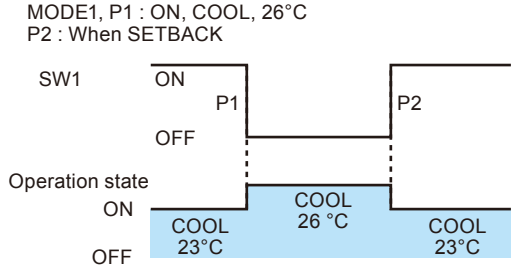
*: Use shielded cable in accordance with local rules for remote controller cable.

■ SPECIFICATIONS

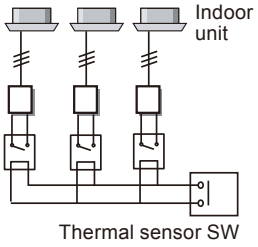
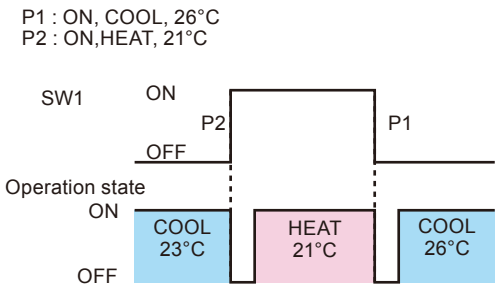
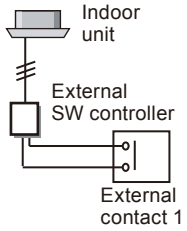
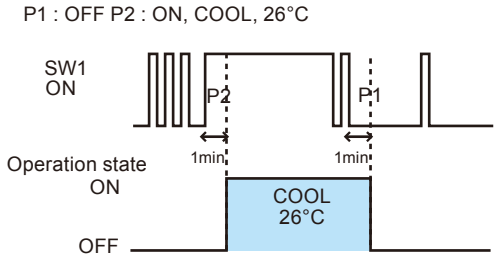
Power consumption (W)		0.6
Temperature (°C)	Operating	0–46
	Packaged	-10–60
Humidity (%)	Packaged	0–95 (RH); No condensation
Dimensions H x W x D in. (mm)		140 × 117 × 43
Weight oz. (g)		250

CONTROL SYSTEM

■ EXAMPLE

Application	Setting	Wiring	Operation example
When controlling the individual operation states with two external contact	MODE0 P1: Arbitrary operation state Contact OFF→ON P2: Arbitrary operation state Contact OFF→ON Others setting are arbitrary.		
When controlling operation by ON or OFF of an external contact switch	MODE1 P1 : Arbitrary operation state P2 : Arbitrary operation state Others setting are arbitrary.		
	MODE1 P1 : Arbitrary operation state P2 : Arbitrary operation state Others setting are arbitrary.		
	MODE1 P1 : Arbitrary operation state P2 : OFF TIMER (1, 3, 6, 12, 24hr) Others setting are arbitrary.		
When operating in the state set when an external contact switch was set to ON and returning to the original operation state when the switch was set to OFF	MODE1 or 0 P1 : SETBACK P2 : Arbitrary operation state Others setting are arbitrary.		
When operated in the state when an external contact switch was set to OFF and returned to original operation state when the switch was set to OFF	MODE1 or 0 P1 : Arbitrary operation state P2 : SETBACK Others setting are arbitrary.		

CONTROL SYSTEM

Application	Setting	Wiring	Operation example
When a temperature sensor switch is connected and cooling and heating switching is performed.	MODE1 OFF output: Enabled P1 : ON, COOL or HEAT P2 : ON, COOL or HEAT Operation conditions: Unit operationg only Others setting are arbitrary.	 An external switch controller is connected to all the indoor units of the same refrigerant system and cooling and heating are switched by one temperature sensor.	
When preventing chattering noise within 1 minute of the external contact switch.	MODE1 Delay-time setting: Delay P1 : Arbitrary operation state P2 : Arbitrary operation state Others setting are arbitrary.		

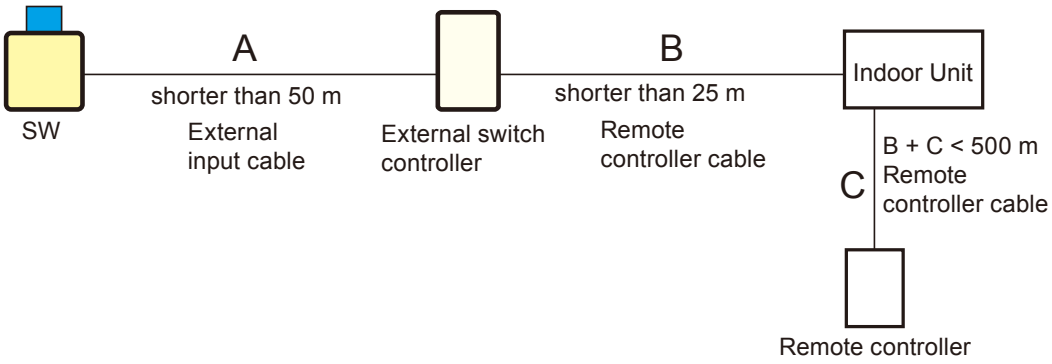
CONTROL SYSTEM

3-8-2. MODEL : UTY-TEKX

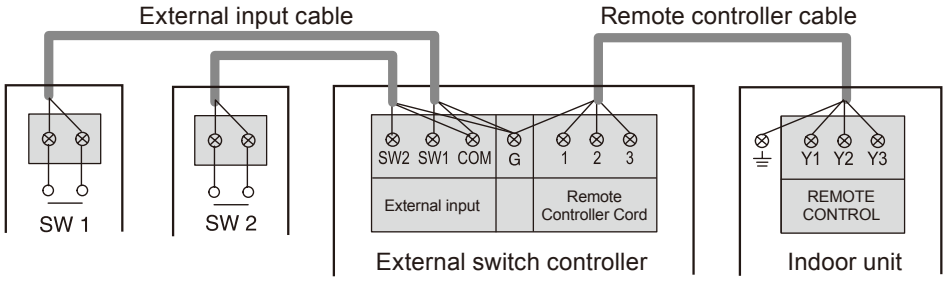


- Air conditioner switching can be controlled by connecting other sensor switches.
- ON/OFF, Temperature, Fan speed and Operating mode can be switched in combination with Card-key switches equipped in facilities such as hotel rooms.
- Card-key or other sensor switches are available as locally purchased parts.

■ SYSTEM DIAGRAM

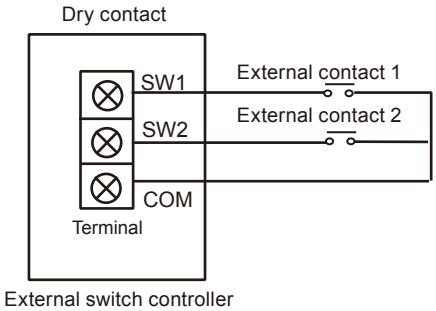


■ ELECTRICAL WIRING



*Connect SW2 only when it is used.

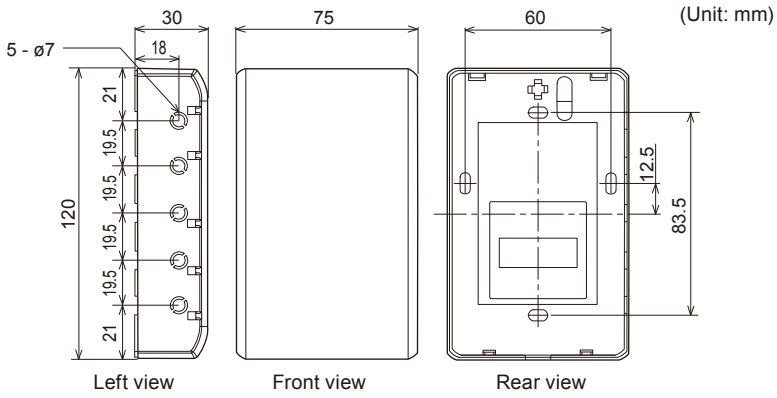
Connection to external contacts



Open circuit voltage : 12 (V) ± 2 (V).
Short circuit current : ≦2 (mA).
Short circuit detection resistance (R_{ON}) : ≦1 (kilo-ohm).
Open circuit detection resistance (R_{OFF}) : ≧50 (kilo-ohm).

CONTROL SYSTEM

■ DIMENSIONS



■ INSTALLATION

● Connection Pattern

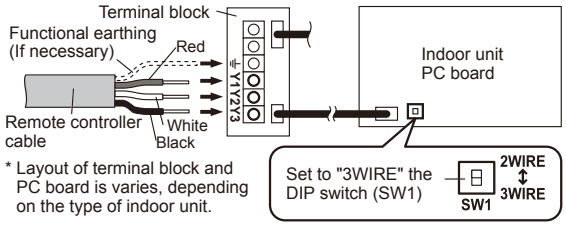
NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern
All Cassette type	Pattern A
All Duct type	
All Ceiling type	
Wall Mounted type	Pattern B

● Pattern A

Connect the end of remote controller cable directly to the exclusive terminal block.

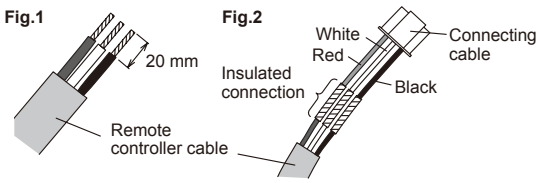
Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



NOTE: The equipment may fail if it is connected to the outdoor unit or the power supply terminal block.

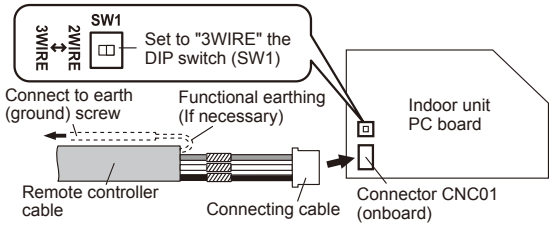
● Pattern B

1) Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown in Fig. 1. Connect the remote controller cable and connecting cable as shown in Fig. 2. Be sure to insulate the connection between the cables.

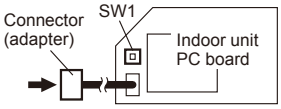


CONTROL SYSTEM

2) Connect the remote controller cable to the connecting cable, and insert it to the connector.
Set the DIP switch (SW1) to "3WIRE" on the PC board of the indoor unit.



* Layout of Connector and PC board varies, depending on the type of indoor unit



■ PACKING LIST

Name and shape	Quantity	Application
Installation manual	1	
Screw (M4 × 16 mm)	2	For installing the external switch controller
Cable tie	5	For external switch controller and cable binding

■ WIRING SPECIFICATIONS

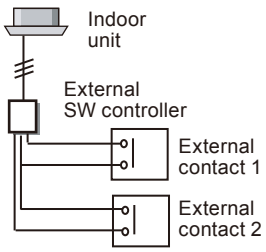
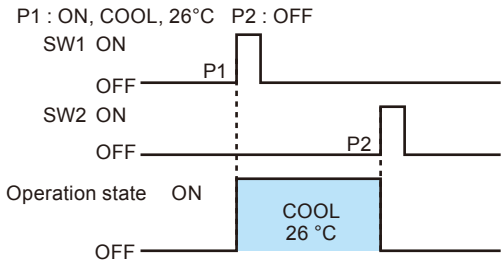
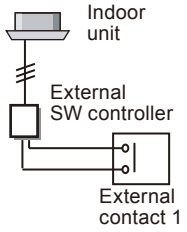
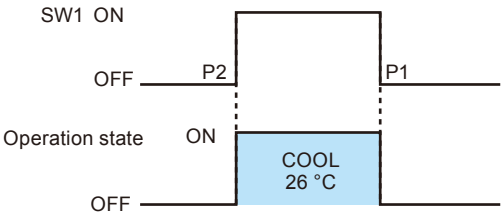
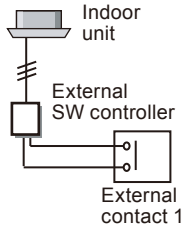
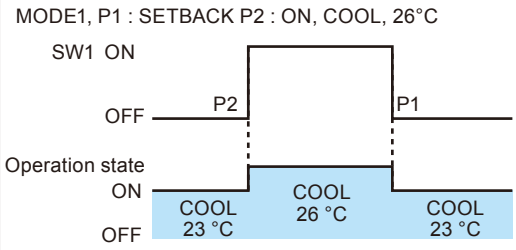
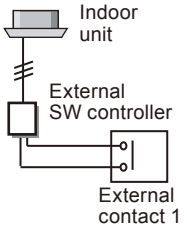
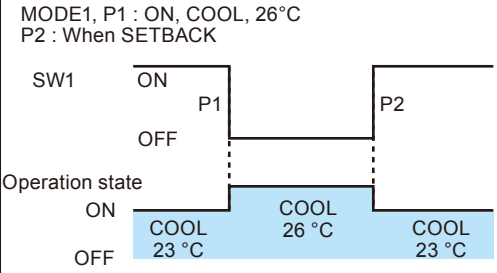
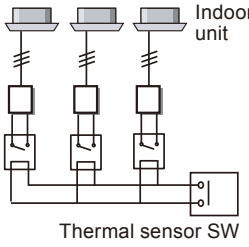
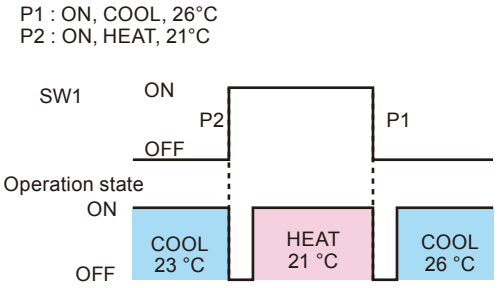
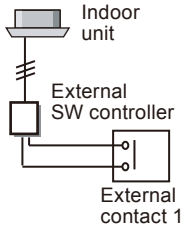
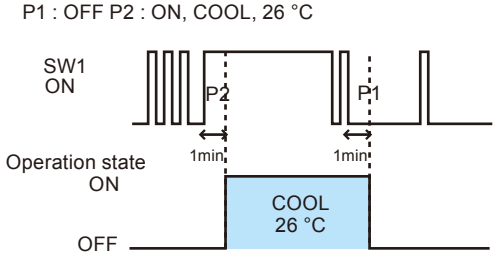
Use	Size	Wire type	Remarks
Remote controller cable	0.33 mm^2 (22AWG)	Polar 3-core	Use sheathed PVC cable or shielded cable in accordance with the regional cable standard.
External input / output cable	0.33 mm^2 (22AWG)	Polar 2-core, Twisted pair	Use shielded cable in accordance with the regional cable standard.

■ SPECIFICATIONS

Power supply	DC 12 V
Dimensions [H × W × D] (mm)	120 × 75 × 30
Weight (g)	100

CONTROL SYSTEM

■ EXAMPLE

Application	Setting	Wiring	Operation example
When controlling the individual operation states with two external contact	MODE0 P1: Arbitrary operation state Contact OFF→ON P2: Arbitrary operation state Contact OFF→ON Others setting are arbitrary.		
When controlling operation by ON or OFF of an external contact switch	MODE1 P1 : Arbitrary operation state P2 : Arbitrary operation state Others setting are arbitrary.		
When operating in the state set when an external contact switch was set to ON and returning to the original operation state when the switch was set to OFF	MODE1 or 0 P1 : SETBACK P2 : Arbitrary operation state Others setting are arbitrary.		
When operated in the state when an external contact switch was set to OFF and returned to original operation state	MODE1 or 0 P1 : Arbitrary operation state P2 : SETBACK Others setting are arbitrary.		
When a temperature sensor switch is connected and cooling and heating switching is performed.	MODE2 P1 : ON, COOL or HEAT P2 : ON, COOL or HEAT Operation conditions: Unit operationg only Others setting are arbitrary.	 An external switch controller is connected to all the indoor units of the same refrigerant system and cooling and heating are switched by one temperature sensor.	
When preventing chattering noise within 1 minute of the external contact switch.	MODE1 Delay-time setting: Delay P1 : Arbitrary operation state P2 : Arbitrary operation state Others setting are arbitrary.		

CONTROL SYSTEM

4. SERVICE & WEB MONITORING TOOL

4-1. SERVICE TOOL

4-1-1. MODEL : UTY - ASGXZ1

Extensive monitoring and analysis functions for installation and maintenance.

Operation status and error history can be grasped promptly and adequately.

■ FUNCTIONS

1) System List

Displays the overall operation status of all or specified units in the system in a list form.



2) Equipment Detail (Diagram)

Displays the detail information for sensor values, electrical components etc. for the specified units in schematic. The information here can be used along with the detailed information in status list form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.



3) Equipment Detail (Status List)

Displays the detail information for sensor values, electrical components etc. of units in a specified refrigerant system in list form. The information here can be used along with the detailed information in diagram form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.



4) Equipment Detail (Check List)

Judges whether the sensor values of outdoor unit and indoor units are appropriate, and displays the result.

By saving the result as a CSV file, it can be outputted with a report format.



5) Operation History

The indoor units or outdoor unit operation history can be recorded.

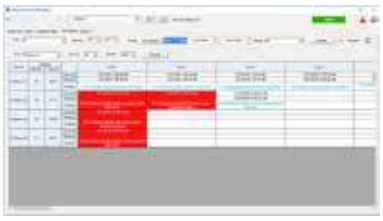
The displayed operation history can be printed out and saved to a CSV file.



CONTROL SYSTEM

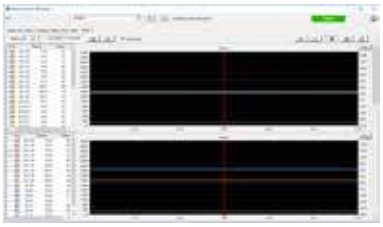
6) Error History

Displays the error information for each unit. The error information can sequentially be displayed up to 50 items as they occur starting with the latest error.



7) Graph

Displays the sensor values of outdoor unit and indoor units in more detail and more easier to see. Sensor information that the user want to check can be selected freely, and the combined information can be displayed.
Up to 6-graph screens can be displayed simultaneously.



8) Data Backup

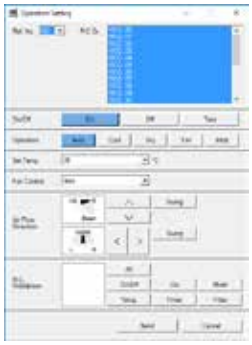
Operation and error history data can be downloaded. Only the required data may be downloaded specifying the refrigerant system, unit and time range.



CONTROL SYSTEM

9) Operation Setting

Changeable the operation status of the indoor unit individually or by group.



10) Network Topology Analyzer

A list of units connected to the VRF system network is displayed in network segments in tree form.

11) Remote Setting

Function (Field) Setting for indoor unit is realized remotely.

12) System Time Setting

An arbitrary time is set for all the remote controllers within the system.

13) Central Control Forced Release

The operation setting restriction function of the indoor units set from the controller can be forcibly released. (remote controller inhibit, temperature upper/lower limit setting)

14) Model Name Writer

An arbitrary model name can be written to the target unit.

15) Error Memory Reader

When an error occurs at an outdoor unit, the operation data records before the error are acquired over a network and saved to a CSV file.

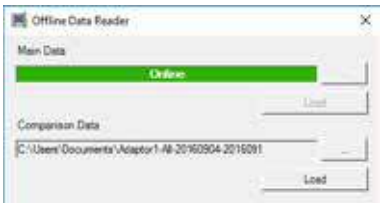
NOTE: To perform "Error Memory Reading", Service Tool and the corresponding outdoor unit must be connected directly with each other. Refer to the Operation Manual of the Service Tool for detail.

16) Time Guard Information

Reference data for judging the maintenance period of indoor and outdoor units (compressor, FAN, etc. integrated time) is output to a CSV file.

17) Offline Data Reader

Displays and compares the current data and the backup data saved in the past on dual screen.



18) Version

Confirm the current version of the software, and if it is not the latest, it can be updated to the latest version.

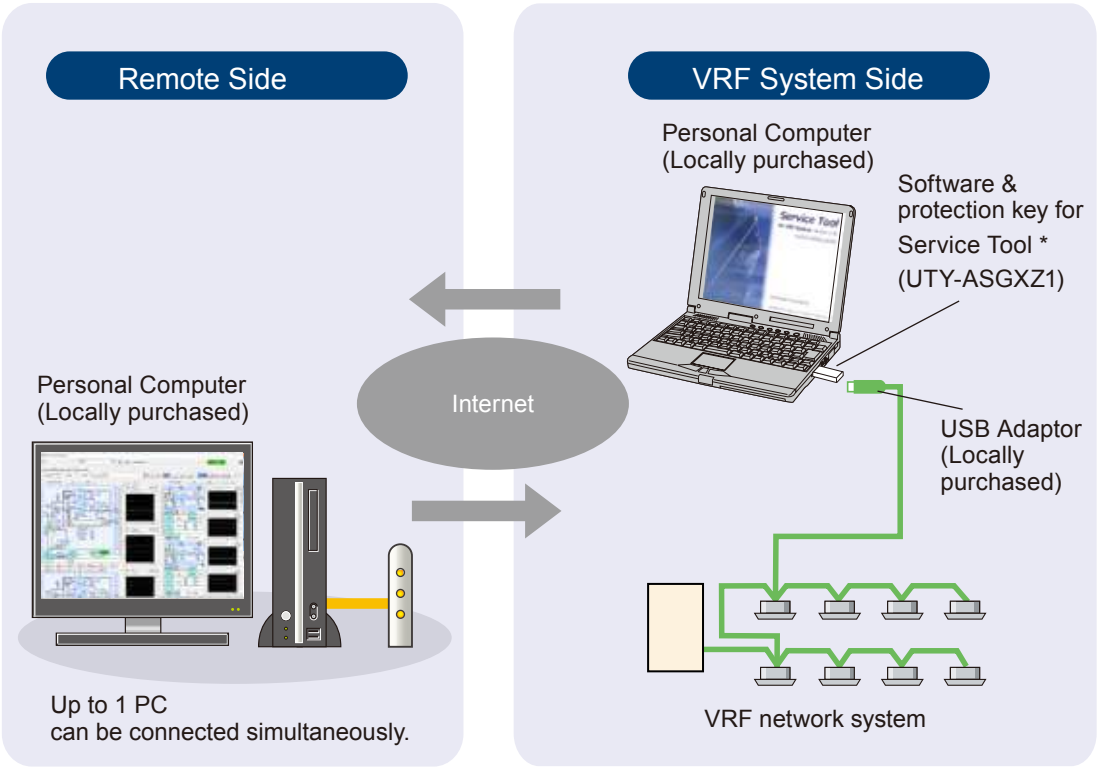


19) Remote Operation

Through the Internet, Service Tool in the PC on VRF system side can be operable in real-time from remote side PC. Chat-enabled, and the acquired data by the Service Tool can be downloaded by remote side PC.

CONTROL SYSTEM

■ SYSTEM DIAGRAM



*WibuKey of UTY-ASGX can be used.

CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
WHITE-USB-KEY  (software protection key with software)	1	Includes the software and manuals for Service Tool.Additionally, it works as the software protection key. Software protection key to be connected to an USB port on the PC that the Service Tool is installed. Service Tool runs only on a PC with this WHITE-USB-KEY.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ SYSTEM REQUIREMENTS

● For VRF System Side PC

Operating system	•Microsoft® Windows® 7 SP1 (32/64-bit) Professional •Microsoft® Windows® 8.1 (32/64-bit) Pro •Microsoft® Windows® 10 (32/64-bit) Pro
CPU	1 GHz or higher
Memory	• 1GB or more (Windows® 7, 8.1, 10 32-bit) • 2GB or more (Windows® 7, 8.1, 10 64-bit)
HDD	40GB or more of free space
Display	1366 × 768 or higher resolution
Interface	2 USB ports - 1 USB port is required for software protection key connection - 1 USB port is required for Echelon® U10 USB Network Interface
Software	Adobe® Reader® 9.0 or later
Internet transmission rate (in remote access)	Internet environment capable for communication speed of 3 Mbps or more (for uploading) all the time (including when accessing to oversea website)

● For Remote Side PC

Web browser	Internet Explorer®11.0 or Microsoft Edge
Display	1366 x 768 or higher resolution (Set the resolution before use so that the resolution of Remote Side PC monitor screen is higher than that of VRF System Side PC.)
Internet transmission rate(in remote access)	Internet environment capable for communication speed of 4 Mbps or more (for downloading) all the time (including when accessing to oversea website)

CONTROL SYSTEM

4-1-2. MODEL : UTY - ASGX

Extensive monitoring and analysis functions for installation and maintenance.

Operation status and error history can be grasped promptly and adequately.

■ FUNCTIONS

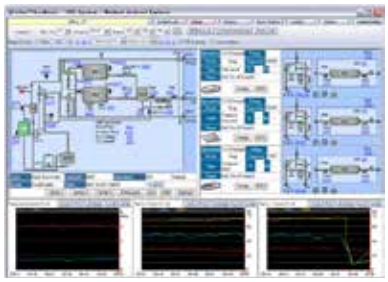
1) System List

Displays the overall operation status of all or specified units in the system in a list form.



2) Equipment Detail (Diagram)

Displays the detail information for sensor values, electrical components etc. for the specified units in schematic. The information here can be used along with the detailed information in list form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.



3) Equipment Detail (List)

Displays the detail information for sensor values, electrical components etc. of units in a specified refrigerant system in list form. The information here can be used along with the detailed information in diagram form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.



4) Operation History

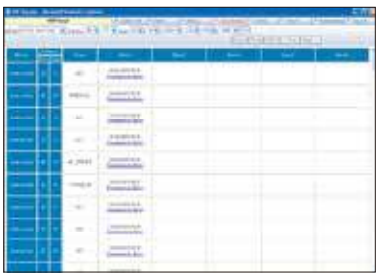
The indoor units or outdoor unit operation history can be recorded.

The displayed operation history can be printed out and saved to a CSV file.



5) Error History

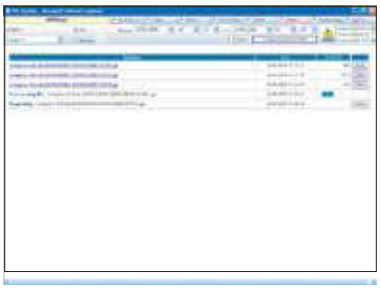
Displays the error information for each unit. The error information can sequentially be displayed up to 50 items as they occur starting with the latest error.



CONTROL SYSTEM

6) Remote File Download

Operation and error history data can be downloaded. Only the required data may be downloaded specifying the refrigerant system, unit and time range.



7) Commissioning Tool

Test run commands can be executed with this tool.

During test running, the outdoor unit / indoor unit sensor data can be saved (commissioning log data).

After the end of test running, this data can be exported in CSV file format.

8) Network Topology Analyzer *

A list of units connected to the VRF system network is displayed in network segments in tree form.



9) Remote Setting *

Function (Field) Setting for indoor unit is realized remotely.



10) System Time Setting *

An arbitrary time is set for all the remote controllers within the system.

11) Central Release *

The operation setting restriction function of the indoor units set from the controller can be forcibly released. (remote controller inhibit, temperature upper/lower limit setting)

12) Model Name Writer *

An arbitrary model name can be written to the target unit.

13) Error Memory Reader *

When an error occurs at an outdoor unit, the operation data records before the error are acquired over a network and saved to a CSV file.

NOTE: To perform "Error Memory Reading", Service Tool and the corresponding outdoor unit must be connected directly with each other. Refer to the Operation Manual of the Service Tool for detail.

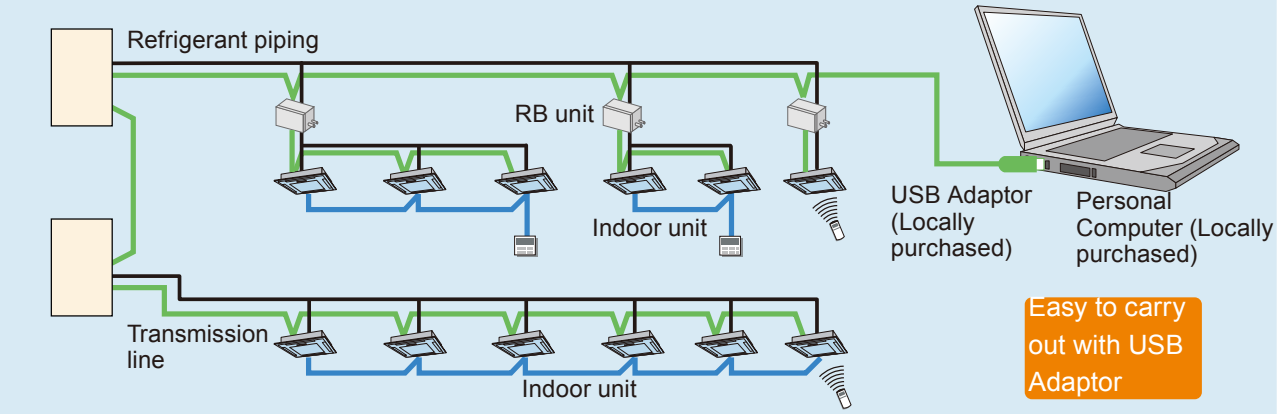
CONTROL SYSTEM

14) Time Guard Information *

Reference data for judging the maintenance period of indoor and outdoor units (compressor, FAN, etc. integrated time) is output to a CSV file.

*: Supported by Ver. 1.1 or later

■ SYSTEM DIAGRAM



* USB Adaptor: Echelon® U10 USB Network interface

■ PACKING LIST

Name and shape	Quantity	Application
DVD-ROM 	1	Includes the software and manuals for Service Tool.
WibuKey (Software protection key) 	1	Software protection key to be connected to an USB port on the PC that the Service Tool is installed. Service Tool runs only on a PC with this WibuKey.

CONTROL SYSTEM

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit] and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit] and Windows® 10 [64-bit])
HDD	10GB or more of free space
Display	1024 × 768 or higher resolution
Interface	2 USB ports - 1 USB port is required for WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface
Software	• Internet Explorer® 8.0, 9.0, 10.0 or 11.0 • Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

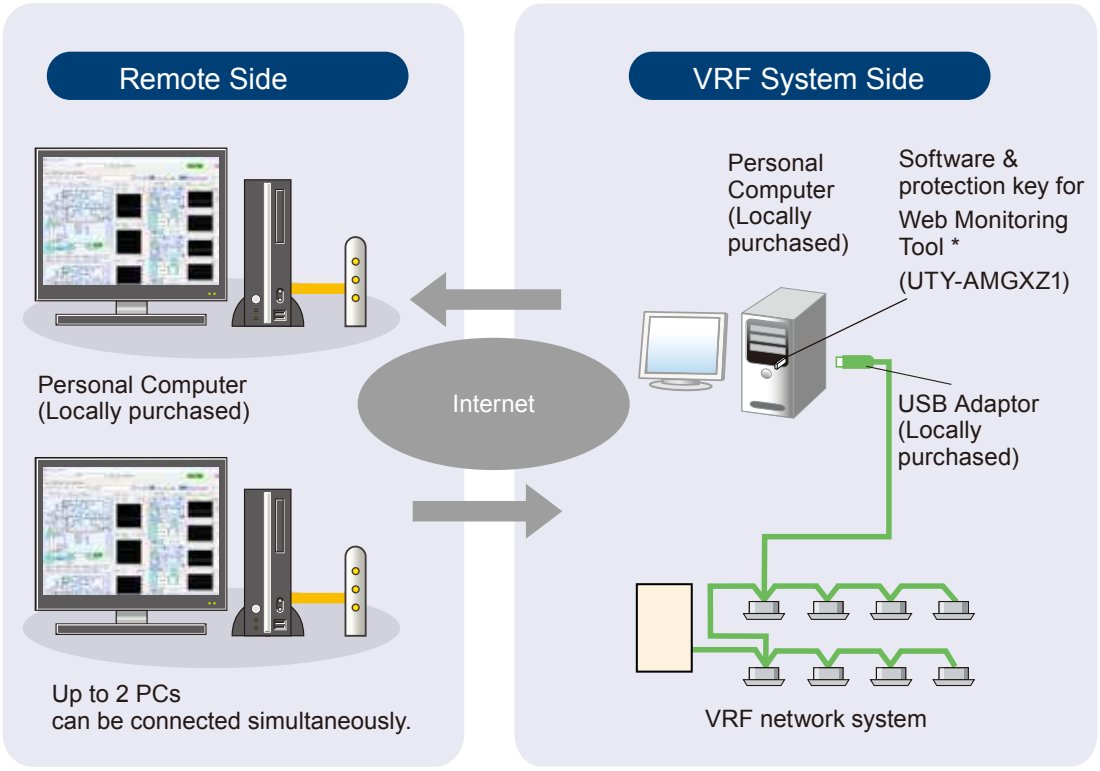
CONTROL SYSTEM

4-2. WEB MONITORING TOOL

4-2-1. MODEL : UTY-AMGXZ1

■ SYSTEM DIAGRAM

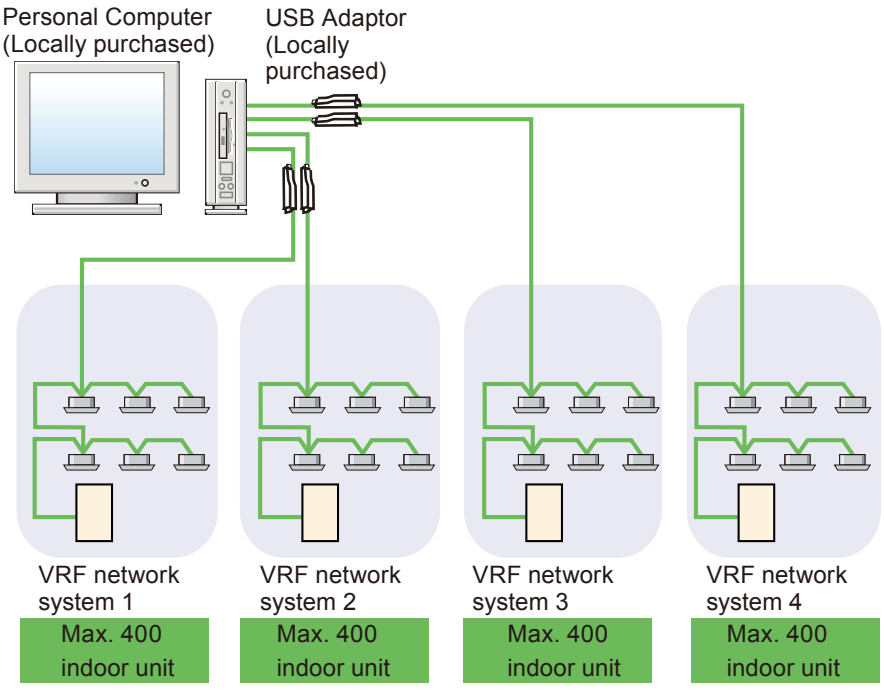
● System components



*WibuKey of UTY-AMGX can be used.

● Support 4 VRF network system

PC USB adaptors (Max. 4 adaptors per PC) permit control and monitoring of up to 1,600 units.
Suitable for large-scale buildings or hotels



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
WHITE-USB-KEY  (software protection key with software)	1	Includes the software and manuals for Web Monitoring Tool. Additionally, it works as the software protection key. Software protection key to be connected to an USB port on the PC that the Web Monitoring Tool is installed. Web Monitoring Tool runs only on a PC with this WHITE-USB-KEY.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ SYSTEM REQUIREMENTS

● For VRF System Side PC

Operating system	•Microsoft® Windows® 7 SP1 (32/64-bit) Professional •Microsoft® Windows® 8.1 (32/64-bit) Pro •Microsoft® Windows® 10 (32/64-bit) Pro
CPU	1 GHz or higher
Memory	• 1GB or more (Windows® 7, 8.1, 10 32-bit) • 2GB or more (Windows® 7, 8.1, 10 64-bit)
HDD	40 GB or more of free space
Display	1366 × 768 or higher resolution
Interface	USB port (for U10 USB Network Interface Max.4 , software protection key) Either of the following interface is required for remote connection: • Internet using LAN : Ethernet port is required
Software	Adobe® Reader® 9.0 or later
Internet transmission rate (in remote access)	Internet environment capable for communication speed of 3 Mbps or more (for uploading) all the time (including when accessing to oversea website)

● For Remote Side PC

Web browser	Internet Explorer®11.0 or Microsoft Edge
Display	1366 x 768 or higher resolution (Set the resolution before use so that the resolution of Remote Side PC monitor screen is higher than that of VRF System Side PC.)
Internet transmission rate(in remote access)	Internet environment capable for communication speed of 4 Mbps or more (for downloading) all the time (including when accessing to oversea website)

CONTROL SYSTEM

■ COMPARISON TABLE

No.	Item	Service Tool UTY-ASGXZ1		Web Monitoring Tool UTY-AMGXZ1	
		VRF system Side	Remote Side	VRF system Side	Remote Side
1	System List	●	●	●	●
2	Equipment Detail (Diagram)	●	●	●	●
3	Equipment Detail (Status List)	●	●	●	●
4	Equipment Detail (Check List)	●	●	●	●
5	Operation History	●	●	●	●
6	Error History	●	●	●	●
7	Graph	●	●	●	●
8	Data Buckup	●	●	●	●
9	Operation Setting	●	●	●	●
10	E-mail automatic transmission of system malfunction	—	—	●*1	—
11	Network Topology Analyzer	●	●	●	●
12	Remote Setting	●	●	●	●
13	System Time Setting	●	●	●	●
14	Central Control Forced Release	●	●	●	●
15	Model Name Writer	●	●	—	—
16	Error Memory Reader	●	●	—	—
17	Time Guard Information	●	●	●	●
18	Offline Data Reader	●	●	—	—
19	Version	●	●	●	●
20	Software Update	●	—	●	—

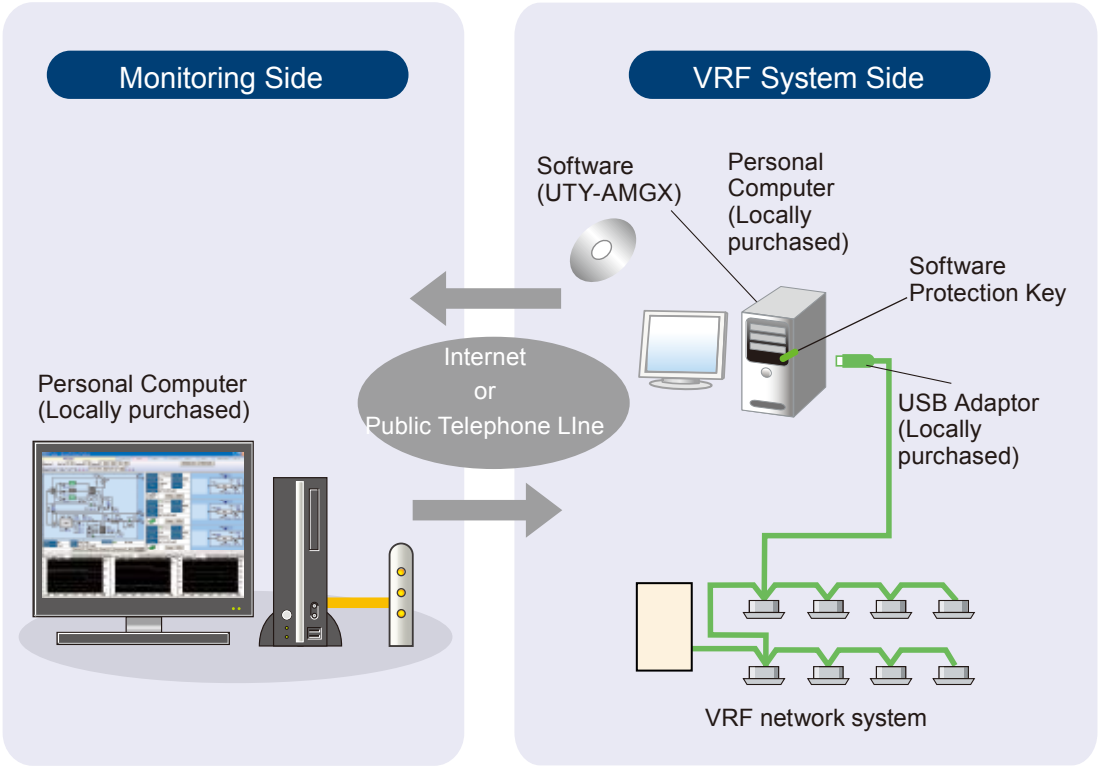
*1: Available only durring connection to the Internet.

CONTROL SYSTEM

4-2-2. MODEL : UTY-AMGX

■ SYSTEM DIAGRAM

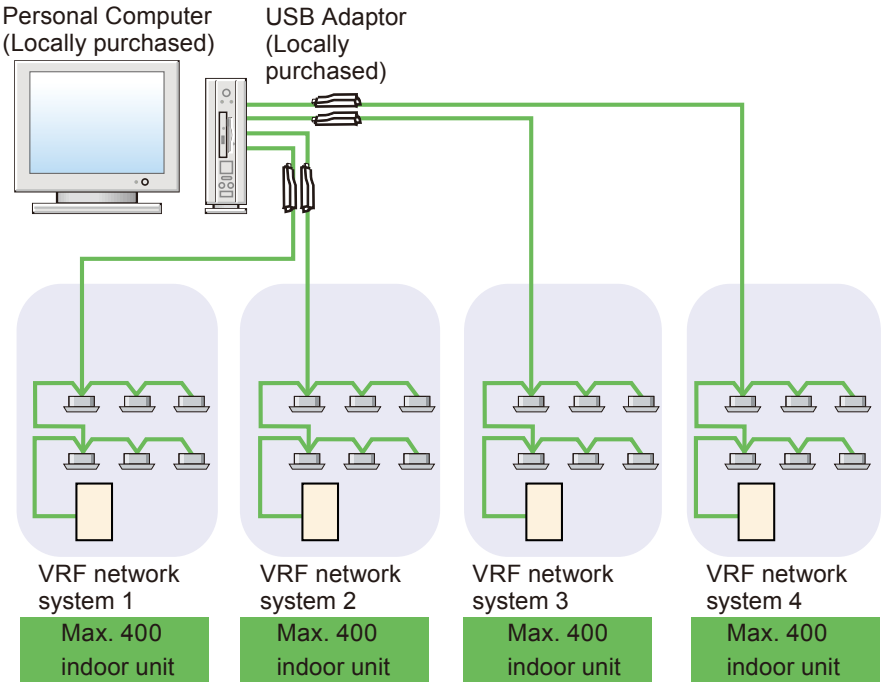
● System components



● Support 4 VRF network system

PC USB adaptors (Max. 4 adaptors per PC) permit control and monitoring of up to 1,600 units.

Suitable for large-scale buildings or hotels



CONTROL SYSTEM

■ PACKING LIST

Name and shape	Quantity	Application
DVD-ROM 	1	Includes the software and manuals for Web Monitoring Tool.
WibuKey  (Software protection key)	1	Software protection key to be connected to an USB port on the PC that the Web Monitoring Tool is installed. Web Monitoring Tool runs only on a PC with this WibuKey.

■ OTHER REQUIRED DEVICES (Locally purchased)

- Personal computer that satisfies the following system requirements
- Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

■ PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	• Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit] and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit] and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1024 × 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 5 ports) - 1 USB port is required for WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	• Internet Explorer® 8.0, 9.0, 10.0 or 11.0 • Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

CONTROL SYSTEM

■ COMPARISON TABLE

No.	Item	Service Tool UTY-ASGX	Web Monitoring Tool UTY-AMGX	
			VRF network system Side	Monitoring Side
1	Interchangeability of equipment	●	●	●
2	Indication of equipment list	●	●	●
3	Operation control	●	●	—
4	Indication of refrigerant circuit diagram	●	●	●
5	Commissioning tool	●	●	—
6	Monitoring of equipment information	●	●	●
7	Monitoring of operating condition	●	●	●
8	Monitoring of sensor data	●	●	●
9	Storage and CSV output of operating history (sensor data)	●	●	●
10	Indication of trend graph	●	●	●
11	Printing of trend graph	●	●	●
12	Monitoring and screen display of abnormalities	●	●	●
13	E-mail automatic transmission of abnormalities	—	●*1	—
14	Setting for user level	—	●	—
15	Network Topology Analyzer *	●	●	—
16	Remote Setting *	●	●	—
17	System Time Setting *	●	●	—
18	Central Release *	●	●	—
19	Model Name Writer *	●	—	—
20	Error Memory Reader *	●	—	—
21	Time Guard Information *	●	●	●

*: Supported by Ver. 1.1 or later

*1: Available only durring connection to the Internet.

CONTROL SYSTEM

Refrigerant R410A INVERTER

AIRSTAGE™

Variable Refrigerant Flow System

6. SYSTEM DESIGN

DTV_J3E050E_01--CHAPTER06
2017.03.31

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1. SYSTEM DESIGN

1-1. REFRIGERANT SYSTEM

■ CONNECTABLE UNIT WITHIN 1 REFRIGERANT SYSTEM

Unit	Quantity	Remarks
Outdoor unit	1 unit	
Indoor unit	1 to Max. 20 units	8HP (AJ∗072LELAH)
	1 to Max. 25 units	10HP (AJ∗090LELAH)
	1 to Max. 30 units	12HP (AJ∗108LELAH)

● Table

HP	Capacity (kW)	Outdoor unit quantity	Maximum connectable indoor unit	Connectable cooling capacity range
8	22.4	1	20	50% to 150%
10	28.0	1	25	
12	33.5	1	30	

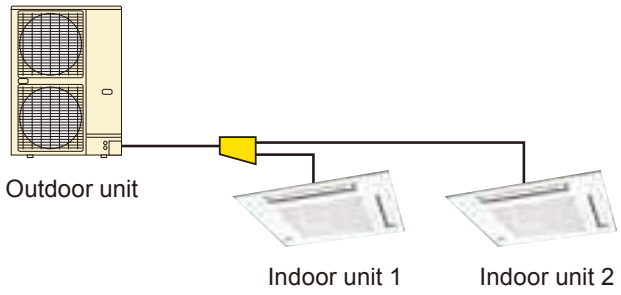
● Caution

- When all indoor units are operating at maximum capacity, individual indoor unit operate at a slightly lower capacity. (When connecting more than 100%)
- Do not exceed both of "connectable capacity range" and "maximum connectable indoor unit", otherwise it may cause hinder the return of the refrigerant oil and cause a compressor breakdown.

SYSTEM DESIGN

1-1-1. EXAMPLE OF REFRIGERANT SYSTEM

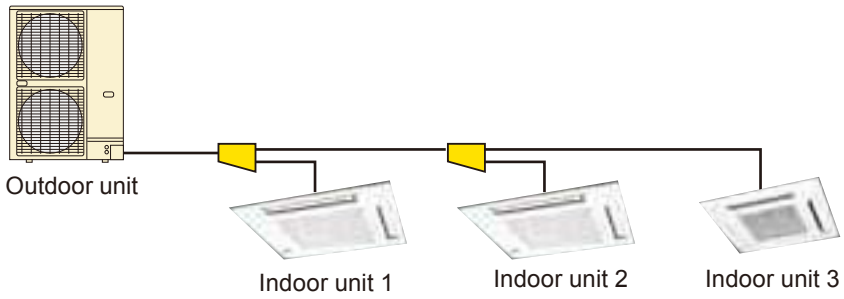
● Example 1 (OK)



Capacity ratio 80%

	Model	Capacity (kW)	Total capacity (kW)	Connectable indoor unit capacity		Judgement
				Min.	Max.	
Outdoor unit	AJ∗072L	22.4	22.4	② 50% 11.2	③ 150% 33.6	②≤ ①≤ ③ 11.2 < 18.0 < 33.6 → OK
Indoor unit 1	AUXD24	9.0	① 18.0			
Indoor unit 2	AUXD24	9.0				

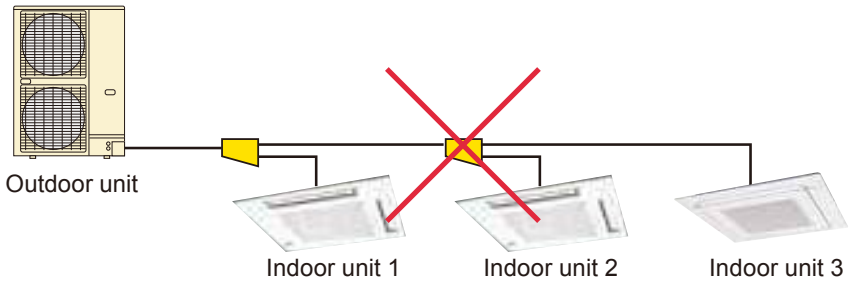
● Example 2 (OK)



Capacity ratio 112%

	Model	Capacity (kW)	Total capacity (kW)	Connectable indoor unit capacity		Judgement
				Min.	Max.	
Outdoor unit	AJ∗072L	22.4	22.4	② 50% 11.2	③ 150% 33.6	②≤ ①≤ ③ 11.2 < 25.1 < 33.6 → OK
Indoor unit 1	AUXA30	9.0	① 25.1			
Indoor unit 2	AUXA30	9.0				
Indoor unit 3	AUXB24	7.1				

● Example 3 (Prohibited)

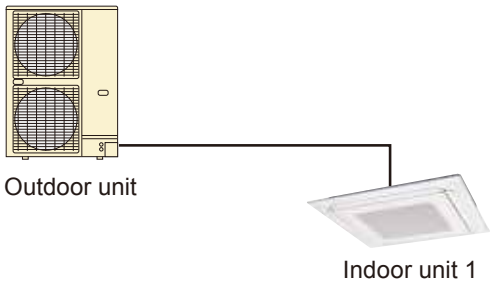


Capacity ratio 175%

	Model	Capacity (kW)	Total capacity (kW)	Connectable indoor unit capacity		Judgement
				Min.	Max.	
Outdoor unit	AJ∗072L	22.4	22.4	② 50% 11.2	③ 150% 33.6	③≤ ① 33.6 < 39.2 → Prohibited
Indoor unit 1	AUXA54	14.0	① 39.2			
Indoor unit 2	AUXA54	14.0				
Indoor unit 3	AUXK036	11.2				

SYSTEM DESIGN

● Example 4 (OK)



Capacity ratio 63%

	Model	Capacity (kW)	Total capacity (kW)	Connectable indoor unit capacity		Judgement
				Min.	Max.	
Outdoor unit	AJ∗072L	22.4	22.4	② 50%	③ 150%	②≤ ①≤ ③
Indoor unit 1	AUXK54	14.0	① 14.0	11.2	33.6	11.2 < 14.0 < 33.6 → OK

SYSTEM DESIGN

1-2. VRF NETWORK SYSTEM

■ MAXIMUM WIRING LENGTH OF VRF NETWORK SYSTEM

Transmission line	Maximum wiring length
Total wiring length of transmission	3600m
Maximum wiring length between units	60m
Total wiring length in 1 segment *	400m

	VRF network system	segment *
Wiring length	3600m	400m
Number of unit	400	

∗ Segment: Please refer to ■MAXIMUM CONNECTION OF NETWORK SEGMENT for network segment figure and explanation.

■ THE MAXIMUM CONNECTABLE UNIT

● Outdoor unit and indoor unit

	Maximum connectable units in one VRF network system
Outdoor unit	100
Indoor unit	400

SYSTEM DESIGN

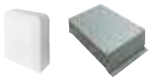
■ CONTROLLER AND CONVERTOR

				Model	Maximum connectable units in one VRF network system	Remarks	
Controller	Central Control	System Controller		UTY-APGXZ1	1	*1:Note	Max.controllable VRF network system : 4 Max.controllable remote controller groups : 1600 per 4 VRF network system Max.controllable indoor unit : 1600 per 4 VRF network system Max.controllable groups : 1600 per 4 VRF network system Option: UTY-PEGXz1, UTY-PPGXP2
		System Controller Lite		UTY-ALGXZ1	1		Max.controllable VRF network system : 1 Max.controllable remote controller groups : 400 Max.controllable indoor unit : 400 Max.controllable groups : 400 Option: UTY-PLGXA2, UTY-PLGXR2,UTY-PLGXE2, UTY-PLGXP2, UTY-PLGXX2
		Touch Panel Controller		UTY-DTG∗Z1	16	*2:Note	Max.controllable remote controller groups : 400 Max.controllable indoor unit : 400 Max.controllable groups : 400 Option: UTY-PTGXA
		Central Remote Controller		UTY-DCG∗	16		Max.controllable indoor unit : 100 Max.controllable groups : 16
		Group Remote Controller		UTY-CGG∗	(64)		When Group Remote Controller is used, Network Convertor (UTY-VGGXZ1) is required. Max controllable remote controller groups : 8 Max controllable indoor units : 60
	Individual Control	Wired Remote Controller		UTY-RNR∗Z2			Max controllable indoor units : 16
				UTY-RLR∗			Max controllable indoor units : 16
				UTY-RNK∗			Max controllable indoor units : 16
		Simple Remote Controller (with master control)		UTY-RSR∗ UTY-RSK∗			Max controllable indoor units : 16
		Simple Remote Controller (without master control)		UTY-RHR∗ UTY-RHK∗			Max controllable indoor units : 16
		Wireless Remote Controller		UTY-LNH∗			

*1 Note: Different VRF series may be connected for each of the 4 VRF networks supported by the unit, but different series may not coexist within the same network.
(VR-II Series, V-III Series, V-II Series, J-IIIL Series, J-III Series, J-II Series and J-IIS Series can exist together on same network. V Series and S Series can exist together on same network, too.)

*2 Note : For one VRF network system, total number of Touch Panel Controller, Central Remote Controller, Network Convertor for Group Remote Controller, Modbus Convertor for VRF is 16, including one Network Convertor for LonWorks®.

SYSTEM DESIGN

			Model	Maximum connectable units in one VRF network system	Remarks	
Adaptor / Convertor	Signal Amplifier		UTY-VSGXZ1	8		The signal amplifier is required when 500m or more in transmission line length or connected unit exceeds 64units.
	Network Convertor		UTY-VTGX / UTY-VTGXV	Used for connecting split system : 100	Total number of refrigerant system and Network convertor is maximum 100.	Max connectable Single split type or Multi type : 16 units.
			UTY-VGGXZ1	Used for connecting Group Remote Controller : 16	*2:Note	Max connectable Group Remote Controller : 4 units. One Network Convertor (UTY-VGGXZ1) covers 2 refrigerant systems.
	Modbus Convertor for VRF		UTY-VMGX	9		Max controllable indoor units : 128
	Network Convertor for LonWorks®		UTY-VLGX	1		
	BACnet® Gateway		UTY-ABGXZ1	1	*1:Note	Max.controllable VRF network system : 4 Max.controllable remote controller groups : 1600 per 4 VRF network system Max.controllable indoor unit : 1600 per 4 VRF network system Max.controllable groups : 1600 per 4 VRF network system
	Wireless LAN Interface		UTY-TFSXZ1			Connected to each indoor unit.
	External Switch Controller		UTY-TERX			Max connectable indoor units : 16
Service & Maintenance	Service Tool		UTY-ASGXZ1	1	1 Service Tool or 1 Web Monitoring Tool can be connected.	PC : Field supplied. USB adaptor is required.
	Web Monitoring Tool		UTY-AMGXZ1		*1:Note.	Web Monitoring Tool: Internet explorer 6.0 or higher. PC : Field supplied. Up to 4 VRF network system can be observed with one Web Monitoring Tool.

*1 Note: Different VRF series may be connected for each of the 4 VRF networks supported by the unit, but different series may not coexist within the same network.
(VR-II Series, V-III Series, V-II Series, J-IIIL Series, J-III Series, J-II Series and J-IIS Series can exist together on same network. V Series and S Series can exist together on same network, too.)

*2 Note : For one VRF network system, total number of Touch Panel Controller, Central Remote Controller, Network Convertor for Group Remote Controller, Modbus Convertor for VRF is 16, including one Network Convertor for LonWorks®.

SYSTEM DESIGN

■ MAXIMUM CONNECTION OF NETWORK SEGMENT

● Network segment : divided network by signal amplifier

- In the following case, signal amplifier is required.

(1) When the total length of the transmission line exceeds 500 m.

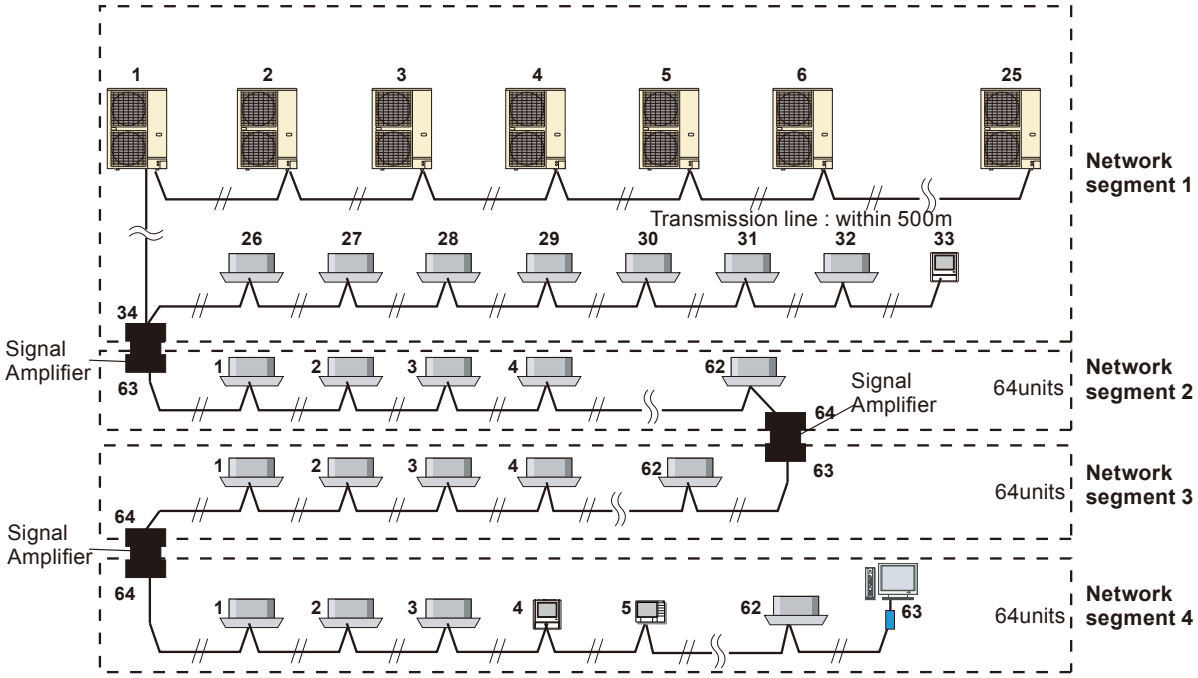
(2) When the number of total unit*1 exceed over 64 units.

- When a signal amplifier is installed, network is divided into two network segments.

Network segments mean divided block which has been connected with signal amplifier within above condition.

In a network segment(NS), divided by a signal amplifier, have to keep the following limitation.

Segment inside	Limitation
Transmission line	500m or less
Number of unit *1 (See the next page)	64 or less
Terminal resistor	1



● Caution

VRF network system should keep both of number of unit and wiring length.
When system exceeds either number of unit or wiring length, system should be devided.
Different VRF series may not coexist within the same network.

SYSTEM DESIGN

● Meaning of unit

		Model name	Unit
Outdoor unit	8HP	AJ∗072LELAH	○
	10HP	AJ∗090LELAH	○
	12HP	AJ∗108LELAH	○
All indoor unit		-	○
Controller	System controller	UTY-APGXZ1	○
	System controller Lite	UTY-ALGXZ1	○
	Touch panel controller	UTY-DTG*Z1	○
	Central Remote controller	UTY-DCG*	○
	Group remote controller	UTY-CGG*	×
	Wired remote controller (Touch panel)	UTY-RNR*Z2	×
	Wired remote controller	UTY-RLR*	×
	Wired remote controller	UTY-RNK*	×
	Simple remote controller (With operation mode)	UTY-RSR*, UTY-RSK*	×
	Simple remote controller (Without operation mode)	UTY-RHR*, UTY-RHK*	×
	Wireless remote controller	UTY-LNH*	×
	IR receiver unit for Duct	UTB-*WC	×
	IR receiver unit for Cassette	UTY-LRHYB1	×
	IR receiver unit for Cassette (Circular flow)	UTY-LBHXD	×
	Human Sensor Kit	UTY-SHZXC	×
Convertor	External switch controller	UTY-TERX	×
	Network convertor	UTY-VTGX UTY-VGGXZ1	○
	Network Convertor (AC power supply)	UTY-VTGXV	○
	Modbus® convertor for VRF	UTY-VMGX	○
	Network convertor for LonWorks®	UTY-VLGX	○
	BACnet® Gateway	UTY-ABGX	○
	Signal amplifier	UTY-VSGXZ1	○
	Wireless LAN adapter	UTY-TFSXZ1	
Maintenance	Service tool	UTY-ASGXZ1	○
	Web monitoring tool	UTY-AMGXZ1	○
Option	Others optional parts	-	×

○: It should be count

×: It should not be count

■ THE MAXIMUM WIRING LENGTH OF UNIT

Name	Model	Maximum wiring length		
Network convertor	UTY-VGGXZ1	Total length of group remote controller cable to convertor	100m	Used for group remote controller
	UTY-VTGX UTY-VTGXV UTY-VGGXZ1	Remote controller to Network convertor	100m	Used for single split Airconditioner
		Indoor unit to Network convertor	100m	
Modbus® convertor	UTY-VMGX	BMS to Modbus convertor	1000m	
Signal amplifier	UTY-VSGXZ1	In each network segment	500m	
External switch controller	UTY-TERX	External switch to UTY-TERX	50m	
		Indoor unit to UTY-TERX	25m	
Wired, Simple remote controller	UTY-RNR* UTY-RLR* UTY-RNK* UTY-RSK* UTY-RHK* UTY-RNR*Z2 UTY-RSR* UTY-RHR*	Remote controller cable	500m	Max.connectable 16 indoor units. 2 Remote controllers can be used jointly.

SYSTEM DESIGN

1-3. MOUNTING POSITION

■ OUTDOOR UNIT

For the air conditioner to operate satisfactorily, install it as outlines in installation manual.

● Outdoor unit mounting position

- A position where satisfies the mounting space described in “chapter 3. 3 Installation space".
- A position where the unit can be installed horizontally.
- A position with enough space for performing pipe work, service and maintenance.
- A position where satisfies the pipe limitations of height and length between the outdoor units to be connected

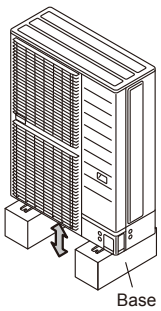
● Outdoor unit mounting limitation

- A position that is not exposed to strong or seasonal winds.
- A position where the blown air does not accumulate.
- A position where there are no obstructions to the air near to the inlet and outlet.
- A position not exposed to radiation from other heat sources.
- A position where the discharge air will not affect animals or plants.
- A position where the noise and hot air will not disturb the neighbour.
- A position with strong installation fixings, which can sufficiently bear the product weight.
- A position that does not transmit noise or vibration.
- A position where drain water discharge is not a problem.
- A position where snow does not accumulate.
- A position not easily affected by electrical noise.
- A position out of reach of children.
- A position where there is no danger of the generation, influx or accumulation of flammable gas.
- A position that does not have a special environment such as large amounts of oil, vapor or sulfide gas.

SYSTEM DESIGN

● Precaution for outdoor unit mounting position

- Do not tilt the outdoor unit more than 5mm (0.3 degrees).However, do not install the unit with it tilted towards the side containing the compressor.
- When mounting units on each floor or multiple units, secure enough outlet space to prevent a short circuit effect.
- In cold or snowy regions, make sure that the mount is high enough and install a snow protection hood.
- Drain water is discharged from the outdoor unit during operation, so make sure that this drain water is possible to flow.
- Use material such as vibration-resistant rubber to prevent the transmission of vibration to the floor.
- Securely fix the unit when it may be in a position exposed to strong winds.



⚠CAUTION
If the unit is installed in a region that is exposed to high winds, freezing conditions, freezing rain, snow fall or heavy snow accumulation, take appropriate measures to protect it from those elements. To ensure stable operation, the outdoor unit must be installed on a raised stand or rack, at or above the anticipated snow depth for the region. The installation of snow hoods and drift prevention fencing is recommended when blowing and drifting snow is common to the region.

■ INDOOR UNIT

For the air conditioner to operate satisfactorily, install it as outlines in installation manual.

● Indoor unit mounting position

- Decide the mounting position with the customer
- Install the unit level on a strong wall, floor, ceiling which is not subject to vibration.
- The inlet and outlet ports should not be obstructed. The air should be able to blow all over the room.
- Install the unit where the connection pipe can be easily installed.
- Install the unit where the drain pipe can be easily installed.
- Take servicing, etc. into consideration and leave the spaces. Also install the unit where the filter can be removed.
- Install the unit where satisfy the pipe length and hight.

● Indoor unit mounting limitation

- Install at a place that can withstand the weight of the indoor unit and install positively so that the unit will not topple or fall.
- Do not install the unit where there is the danger of combustible gas leakage.
- Do not install the unit near heat sources and the location with high temperature.
- Mount with the lowest moving parts at least 2.4m above floor or grade level.
- Do not install the unit near a source of heat, steam, or flammable gas.
- Do not use the unit for air conditioning or saving precision instrument, food, art, plants and animal as special place.
- If children may approach the unit, take preventive measures so that they cannot reach the unit.
- Do not install where there is oily smoke, machine oil (i.e. factory), salty environment with direct sea breeze, and too much of dust.
- Install the unit where drainage does not cause any trouble.
- Welding parts may be fretted if the unit is installed where corrosive gas such as sulphurous acid gas is generated.
- Control may not operate correctly if the unit is installed near machinery which emit electromagnetic wave.
- Install the unit in a well-ventilated place avoiding rains and direct sunlight.
- Install the unit where air from the outlet and noise do not disturb the neighbour.
- Install the indoor and outdoor units, power wiring, signal wiring and remote control wiring 1 m away from television and radio to avoid distorted images and noise. (However, distorted noise may not be avoidable even if units and wiring mentioned above are installed 1m away from television and radio depending on conditions of electromagnetic disturbance.)
- When installing an indoor unit in a small room, a countermeasure must be taken to keep refrigerant concentration limitations will never be exceeded even if there is a refrigerant leak.
- A sound might be heard from the indoor unit such as a refrigerant flowing sound. For using in small and quiet room such as bed room or hotel guest room, select the unit which has not exposed inside the room (Ex. Duct type) or the unit which connects EV kit separately (Ex. Compact wall mounted type (EEV external model) + EV kit).

SYSTEM DESIGN

2. PIPING DESIGN

2-1. IMPORTANT ITEMS WHEN USING REFRIGERANT R410A

R410A operates at higher pressure and has less solubility with mineral oil than traditional R22 refrigerant. Therefore, the lubricant and a part of pipe material are different. Some special tools are necessary.

■ REFRIGERANT PIPING MATERIAL AND WALL THICKNESS

It is necessary to use seamless copper tubes for refrigerant use.
Thickness of tubes are shown in table below.
Endurance pressure of the pipe must be 4.2 MPa.

Nominal Diameter	(in)	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"
Outside Diameter	(mm)	6.35	9.52	12.70	15.88	19.05	22.22	28.58
Material		JIS H3300 C1220T-O or equivalent *1					JIS H3300 C1220T-H or equivalent *2	
Wall Thickness *3	(mm)	0.8	0.8	0.8	1.0	1.2	1.0	1.0

*1: Allowable tensile stress ≥ 33 (N/mm^2)
*2: Allowable tensile stress ≥ 61 (N/mm^2)
*3: Endurance pressure of the pipe must be 4.2 MPa.

Please select the pipe size in accordance with regional standard.

■ LUBRICANT

Refrigerant	R410A (Mixed refrigerant)
Lubricant	Synthetic oil

■ TOOLS

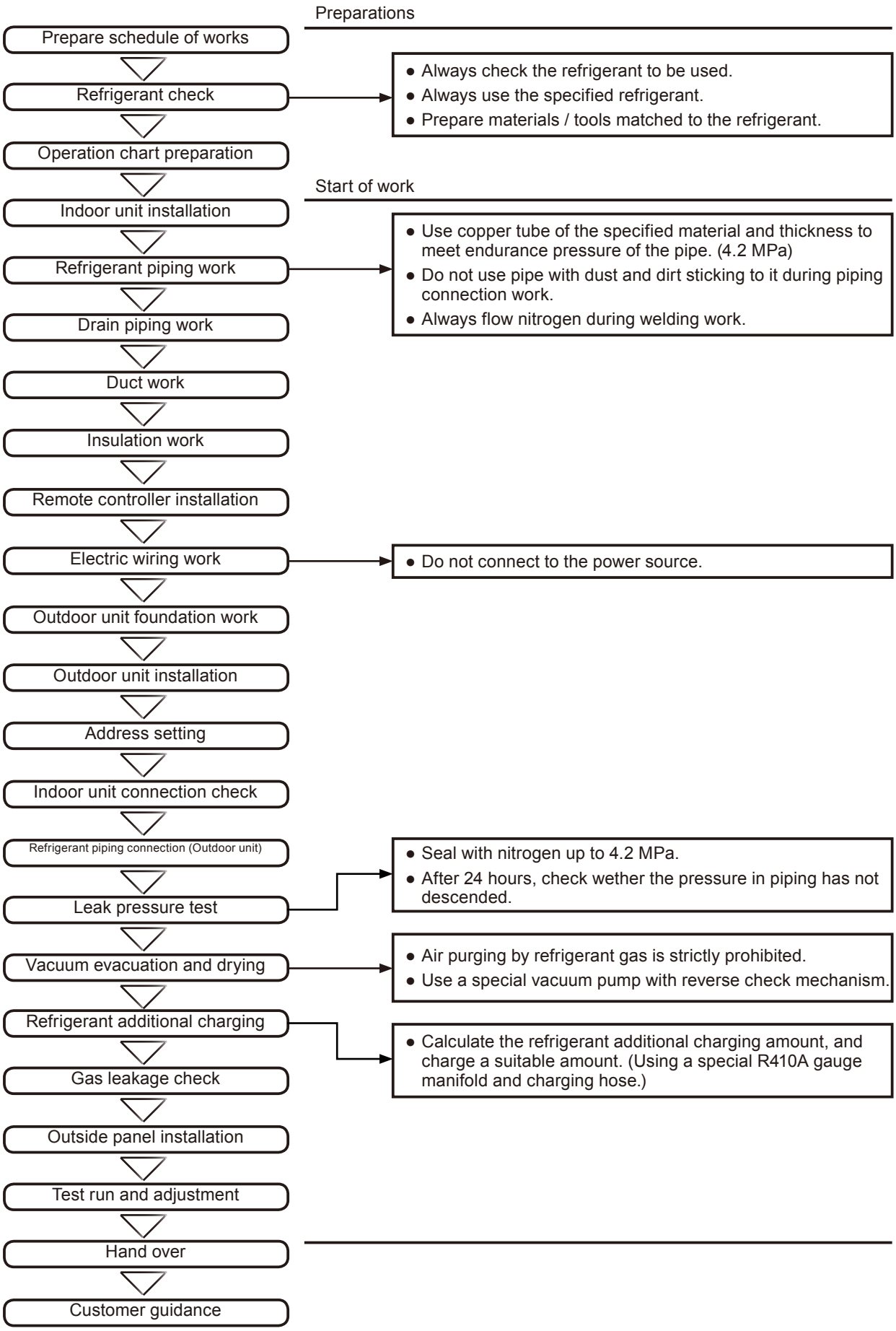
R410A work requires a number of special tools. Since the tools (with *4 symbol) for R22 work cannot be used for R410A, prepare them beforehand.

Tool name	Process and application	
Pipe cutter	Pipe cutting	Refrigerant piping work
Flaring tool *4	Pipe flaring work	
Torque wrench *4	Flare nut connection	
Expander	Expansion at pipe connection	
Pipe bender	Pipe bending work	
Nitrogen gas	Pipe interior oxidation prevention	Air tightness test
Welder	Pipe brazing	
Gauge manifold *4	Vacuum evacuation and refrigerant charging Operation check	Air tightness test ~ Refrigerant additional charging
Charging hose *4		
Vacuum pump (with adaptor) *4		Vacuum drying
Electronic scale for refrigerant charging		Refrigerant additional charging
Gas leak tester *4	Gas leakage test	

*4: Please refer to a service manual for details.

SYSTEM DESIGN

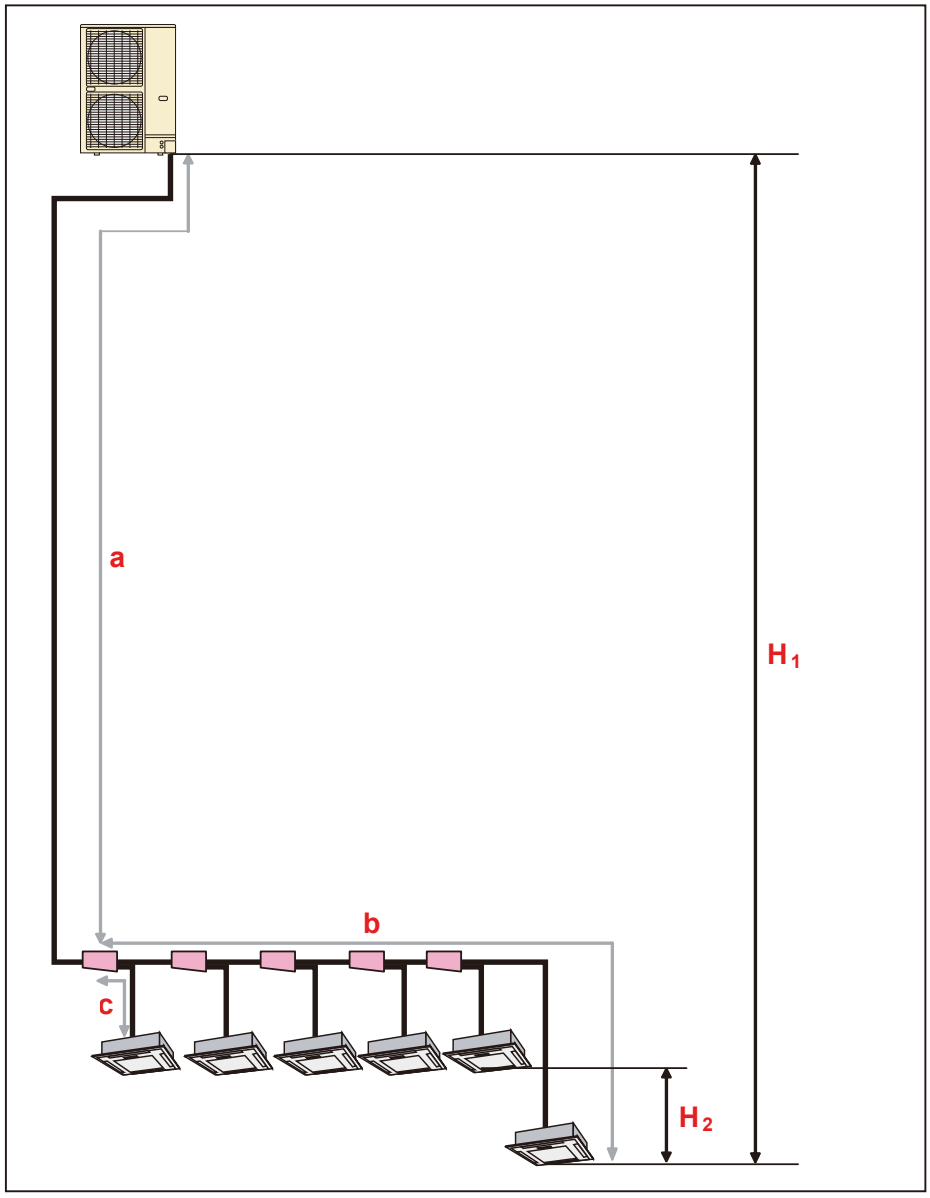
■ WORK FLOW (EXAMPLE)



SYSTEM DESIGN

2-2. PIPING LIMITATION

■ LIMITATION



Limitation				Diagram
Maximum allowable pipe length (actual pipe length)	Total pipe length		400m or less *1	Total
	Between outdoor unit and the farthest indoor unit		120m or less	a + b
	Between the first separation tube and the farthest indoor unit		90m or less	b
	(The farthest indoor unit to the first separation tube) - (The nearest indoor unit to the first separation tube)		60m or less	b - c
	Between outdoor unit and the nearrest indoor unit		5m or more	a + c
	Between outdoor unit and the first seperation tube		3m or more	a
Maximum allowable height difference	Between outdoor unit and indoor unit	Outdoor unit is higher than indoor unit	50m or less	H1
		Outdoor unit is lower than indoor unit *2 O.T. ≥ -5°C	40m or less	
		Outdoor unit is lower than indoor unit *2 O.T. < -5°C	5m or less	
	Between indoor unit *3	Outdoor unit is higher than indoor unit	50m or less	H2
		Outdoor unit is lower than indoor unit	40m or less	
	Between indoor unit		15 m or less	

＊1 : Total pipe length is limited by the condition that total refrigerant amount should not exceed 20.0kg.

＊2: O.T. = Outdoor Temperature for cooling operation.

＊3: When following indoor units connected. ("A＊＊＊＊＊G＊AH" (＊: arbitrary character))

SYSTEM DESIGN

■ CAUTION

Keep the "piping limitation" for correct operation.

● Allowable height difference:

If the height difference between the indoor unit and outdoor unit is larger than the allowable value:

- ∗ The pressure loss will be larger → Insufficient cooling and heating
- ∗ The refrigerant in liquid pipe will flush → Refrigerant flow noise generate at indoor unit
- ∗ The refrigerant oil will not return → Insufficient refrigerant oil resulting in compressor damage

If the height difference between indoor unit is larger than the allowable value:

- ∗ The refrigerant flow balance will be poor → Insufficient cooling and heating (poor balance)
- ∗ Refrigerant oil will collect in the piping or non-operating indoor units
  → Insufficient refrigerant oil resulting in compressor damage

● Pipe length:

If the pipe length is longer than prescribed:

- ∗ The pressure loss will be larger → Insufficient cooling and heating
- ∗ Too much refrigerant will be charged → Liquid backs up resulting in compressor damage
- ∗ The refrigerant oil will not return → Insufficient refrigerant oil resulting in compressor damage

● Pipe size:

If the pipe size is larger than designated size:

- ∗ The refrigerant flow velocity will drop. Refrigerant oil will not return to the outdoor unit.
  → Insufficient refrigerant oil resulting in compressor damage
- ∗ The refrigerant in liquid pipe will flush easily → Insufficient cooling and heating

If the pipe size is smaller than designated size:

- ∗ The refrigerant circulation volume will drop → Insufficient cooling and heating
- ∗ The pressure loss will be larger → Insufficient cooling and heating

● Indoor unit connected capacity:

If the indoor unit connected capacity is larger than the system capable capacity:

- ∗ Insufficient system performance → Insufficient cooling and heating
- ∗ When heating, refrigerant will collect in non-operating indoor units resulting in an insufficient refrigerant circulation volume → Insufficient cooling and heating
- ∗ The refrigerant oil will not return → Compressor damage

If the indoor unit connected capacity is too small compared to the system capacity:

- ∗ The liquid return will be too great → Compressor damage
- ∗ The refrigerant will concentrate in the operating unit

→ Continuous operation will become difficult due to triggering of the protection in response to the pressure high-rise, etc., and noise will be generated by the refrigerant flow when heating

SYSTEM DESIGN

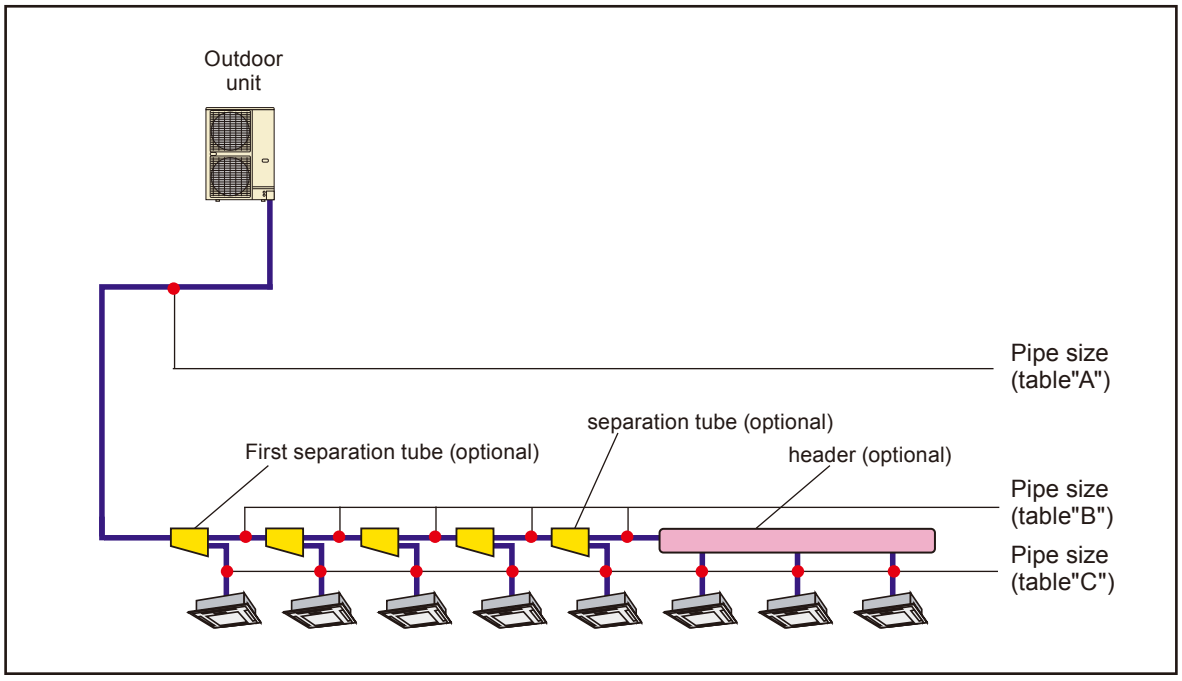
2-3. PIPE SIZE

■ PIPE DIAMETER, RECOMMENDED MATERIAL AND WALL THICKNESS

Nominal Diameter	(in)	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"
Outside Diameter	(mm)	6.35	9.52	12.70	15.88	19.05	22.22	28.58
Material		JIS H3300 C1220T-O or equivalent *1					JIS H3300 C1220T-H or equivalent *2	
Wall Thickness *3	(mm)	0.8	0.8	0.8	1.0	1.2	1.0	1.0

*1: Allowable tensile stress ≥ 33 (N/mm^2)
*2: Allowable tensile stress ≥ 61 (N/mm^2)
*3: Endurance pressure of the pipe must be 4.2 MPa.

Please select the pipe size in accordance with regional standard.



■ PIPE SIZE SELECTION

- **Caution**

After referring to "COOLING CAPACITY TABLE" followed, select each Pipe size, Separation tube and Header from "COOLING CAPACITY TABLE" of outdoor unit and Indoor unit connected in the system.

● Pipe size table "A"

(Between outdoor unit and the first seperation tube (header))

HP	Model code	Outdoor unit cooling capacity (kW)	Outside diameter mm (in)					
			Liquid pipe			Gas pipe		
			Standard	Condition 1	Condition 2	Standard	Condition 1	Condition 2
8	072	22.4	9.52 (3/8")	←	12.70 (1/2")	19.05 (5/8")	←	22.22 (7/8")
10	090	28.0	9.52 (3/8")	12.70 (1/2")	←	22.22 (7/8")	←	←
12	108	33.5	12.70 (1/2")	←	←	28.58 (1-1/8")	←	←

- Condition 1: Total indoor unit capacity ratio > 110%
- Condition 2: Between outdoor unit and first separation tube or header > 70 m

If both conditions 1 and 2 are met, condition 2 is followed.

SYSTEM DESIGN

● Pipe size table "B"

(Between separation tube to separation tube (header))

Total cooling capacity of indoor unit (kW)	Outside diameter mm (in)	
	Liquid pipe	Gas pipe
1.1 to 11.1	9.52 (3/8")	15.88 (5/8")
11.2 to 13.9	9.52 (3/8")	19.05 (3/4")
14.0 to 28.0	12.70 (1/2")	22.22(7/8")
28.1 or more	12.70 (1/2")	28.58 (1-1/8)

∗ If the selected pipe diameter between separation tubes (based on table "B") becomes larger than the pipe diameter between outdoor unit and the first separation tube (based on table "A"), please select the pipe whose diameter is equal to the one between outdoor unit and the first separation tube.

(If pipe diameter B > A, select pipe size from table A)

∗ "Total cooling capacity of indoor unit" is the total value for the cooling capacity of indoor unit connected downstream.

● Pipe size table "C"

(Between separation tube (header) to indoor unit)

Model code	Cooling capacity of indoor unit (kW)	Outside diameter mm (in)	
		Liquid pipe	Gas pipe
04, 07, 09	1.1, 2.2, 2.8	6.35 (1/4")	9.52 (3/8") *1
12, 14, 18	3.6, 4.5, 5.6	6.35 (1/4")	12.70 (1/2")
24, 30, 34, 36, 45, 54, 60	7.1, 9.0, 10.0, 11.2, 12.5, 14.0, 18.0	9.52 (3/8")	15.88 (5/8")
72, 90	22.4, 25.0	9.52 (3/8")	19.05 (3/4")
96	28.0	9.52 (3/8")	22.22 (7/8")

If the selected pipe diameter between separation tube (header) to indoor unit (based on table "C") becomes larger than the pipe diameter between separation tube to separation tube (header) (based on table "B"), please select the pipe whose diameter is equal to the one between separation tube to separation tube (header).

(If pipe diameter C > B, select pipe size from table B)

It is necessary to change a connection pipe diameter using Reducer.

*1: Between separation tube and Indoor unit ＞ 20m → 12.70 (1/2")

SYSTEM DESIGN

■ INDOOR SIDE BRANCH KIT

● Separation tube

Separation tube
UTP-AX054A
UTP-AX090A
UTP-AX180A

● Header

Header	
3-6 Branches	3-8 Branches
UTR-H0906L	UTR-H0908L
UTR-H1806L	UTR-H1808L

● EV kit

These models are used for Wall Mounted Type(EEV external model)

Application model	Model
AS∗E004GTAH AS∗E007GTAH AS∗E009GTAH AG∗E004GCAH AG∗E007GCAH AG∗E009GCAH	UTR-EV09XB
AS∗E12GACH AS∗E14GACH AG∗E012GCAH AG∗E014GCAH	UTR-EV14XB

SYSTEM DESIGN

■ COOLING CAPACITY TABLE

● Outdoor unit

HP	Cooling capacity (kW)	Model name
8	22.4	AJ∗072LELAH
10	28.0	AJ∗090LELAH
12	33.5	AJ∗108LELAH

● Indoor unit

Type	Cooling capacity (kW)	Model name
Compact cassette	1.1	AUXB04GBLH
	2.2	AUXB07GALH
	2.8	AUXB09GALH
	3.6	AUXB12GALH
	4.5	AUXB14GALH
	5.6	AUXB18GALH
	7.1	AUXB24GALH
Cassette	5.6	AUXM018GLAH
	7.1	AUXM024GLAH
	9.0	AUXM030GLAH
	5.6	AUXK018GLAH
	7.1	AUXK024GLAH
	9.0	AUXK030GLAH
	10.0	AUXK034GLAH
	11.2	AUXK036GLAH
	12.5	AUXK045GLAH
	14.0	AUXK054GLAH
	5.6	AUXD18GALH
	7.1	AUXD24GALH
	9.0	AUXA30GALH
	10.0	AUXA34GALH
	11.2	AUXA36GALH
	12.5	AUXA45GALH
	14.0	AUXA54GALH
Mini duct	1.1	ARXK04GCLH
	2.2	ARXK07GCLH
	2.8	ARXK09GCLH
	3.6	ARXK12GCLH
	4.5	ARXK14GCLH
	5.6	ARXK18GCLH
	7.1	ARXK24GCLH
Slim duct / slim concealed floor	2.2	ARXD07GALH
	2.8	ARXD09GALH
	3.6	ARXD12GALH
	4.5	ARXD14GALH
	5.6	ARXD18GALH
	7.1	ARXD24GALH
Medium static pressure duct	7.1	ARXA24GBLH
	9.0	ARXA30GBLH
	11.2	ARXA36GBLH
	12.5	ARXA45GBLH

Type	Cooling capacity (kW)	Model name
High static pressure duct	11.2	ARXC36GBTH
	12.5	ARXC45GATH
	18.0	ARXC60GATH
	22.4	ARXC72GBTH
	25.0	ARXC90GBTH
	28.0	ARXC96GBTH
Compact floor	1.1	AG∗A004GCAH
	2.2	AG∗A007GCAH
	2.8	AG∗A009GCAH
	3.6	AG∗A012GCAH
	4.0	AG∗A014GCAH
Compact floor (EEV external model)	1.1	AG∗E004GCAH
	2.2	AG∗E007GCAH
	2.8	AG∗E009GCAH
	3.6	AG∗E012GCAH
	4.0	AG∗E014GCAH
Floor / ceiling	3.6	AB∗A12GATH
	4.5	AB∗A14GATH
	5.6	AB∗A18GATH
	7.1	AB∗A24GATH
Ceiling	9.0	AB∗A30GATH
	11.2	AB∗A36GATH
	12.5	AB∗A45GATH
	14.0	AB∗A54GATH
Wall mounted	1.1	AS∗A004GTAH
	2.2	AS∗A007GTAH
	2.8	AS∗A009GTAH
	3.6	AS∗A12GACH
	4.5	AS∗A14GACH
	5.6	AS∗A18GBCH
	7.1	AS∗A24GBCH
	9.0	AS∗A030GTAH
	10.0	AS∗A034GTAH
Wall mounted (EEV external model)	1.1	AS∗E004GTAH
	2.2	AS∗E007GTAH
	2.8	AS∗E009GTAH
	3.6	AS∗E12GACH
	4.5	AS∗E14GACH

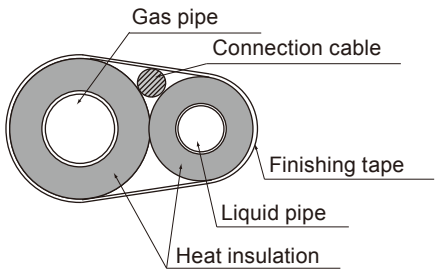
SYSTEM DESIGN

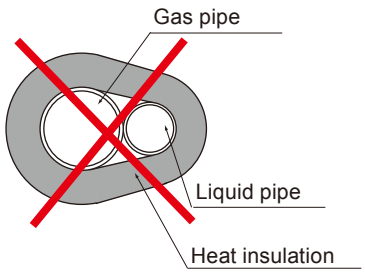
2-4. SELECTION OF PIPE HEAT INSULATING MATERIAL

- Always insulate the refrigerant pipe to prevent condensation and water droplets by the refrigerant pipe.
- Decide the thickness of the heat insulating material by referring to the recommended minimum thickness in Table 1. (For installation condition T=32°C(DB),humidity≤70%, humidity≤75%, humidity≤80%, humidity≤85%)
- When the outdoor unit is installed in a higher position than the indoor unit, fill the connecting part gap with putty, etc. to prevent the dew condensation water of the valve of the outdoor unit from flowing to the indoors from the gap between the pipe and the heat insulating material.
- Liquid pipe and gas pipe should be completely insulated with same specification.
- In case not to insulate and not to seal refrigerant pipe completely, it will become the cause of water leak.
- Table1 Size of refrigerant pipe and recommended minimum thickness of heat insulating material (In case a heat insulating material which thermal conductivity is equal to or less than 0.040 W/(m·k) is used.)

		Recommended minimum thickness for heat insulating material (mm)			
Relative humidity		≤70%	≤75%	≤80%	≤85%
Refrigerant pipe Outside diameter mm (in.)	6.35 (1/4")	8	10	13	17
	9.52 (3/8")	9	11	14	18
	12.70 (1/2")	10	12	15	19
	15.88 (5/8")	10	12	16	20
	19.05 (3/4")	10	13	16	21
	22.22 (7/8")	11	13	17	22
	28.58 (1-1/8")	11	14	18	23

- When an ambient temperature and relative humidity exceed 32°C (DB)and 85% respectively, please strengthen heat insulation of refrigerant pipe. If necessary put a heat insulation on indoor unit casing. When not strengthening heat insulation of refrigerant pipe, the surface of the heat insulation may be dewed.
- Since gas pipe becomes high temperature at heating operation for heatpump type, please select the heat insulating material which heat-resistant temperature is 120°C or more.





- Make sure that pipe is covered completely by the heat insulation,not expoding to air. Inadequate heat insulation may cause condensation.
- Do not cover heat insulation gas and liquid pipes together as above figure. It may cause condensation and capacity drop by heat loss.

SYSTEM DESIGN

2-5. ADDITIONAL CHARGE CALCULATION

- The outdoor unit is charged refrigerant at the factory.
- Additional refrigerant required to be charged on site depending on pipe length.
- The additional refrigerant charge amount is calculated according to the following formula.
- Round up the calculated result to two decimal places.

■ CALCULATION OF ADDITIONAL CHARGE REFRIGERANT

1. Calculation of additional amount for outdoor unit

Model	HP	b Factory charged amount (kg)
AJ∗072LELAH	8	7.0
AJ∗090LELAH	10	7.5
AJ∗108LELAH	12	7.5

Diameter of liquid pipe (mm)	a Additional amount for pipe length (kg/m)
ø6.35	0.021
ø9.52	0.058
ø12.70	0.114

2. Calculation of additional amount for pipe length

A= (Total length of ø12.70mm liquid pipe) m × a : x 0.114 kg/m = kg + (Total length of ø9.52mm liquid pipe) m × a : x 0.058 kg/m = kg + (Total length of ø6.35mm liquid pipe) m × a : x 0.021 kg/m = kg = Total kg

3. Calculation of additional charge refrigerant

A = kg Round up A to 2 decimal place.

4. Factory charged amount

B= b : Outdoor unit factory charged amount kg

5. Total refrigerant amount check

C = A + B = kg

Note : Check the total refrigerant amount under the following conditions.

Condition	Computational formula
Total amount of refrigerant ≤ 20.0 kg	C ≤ 20.0 kg

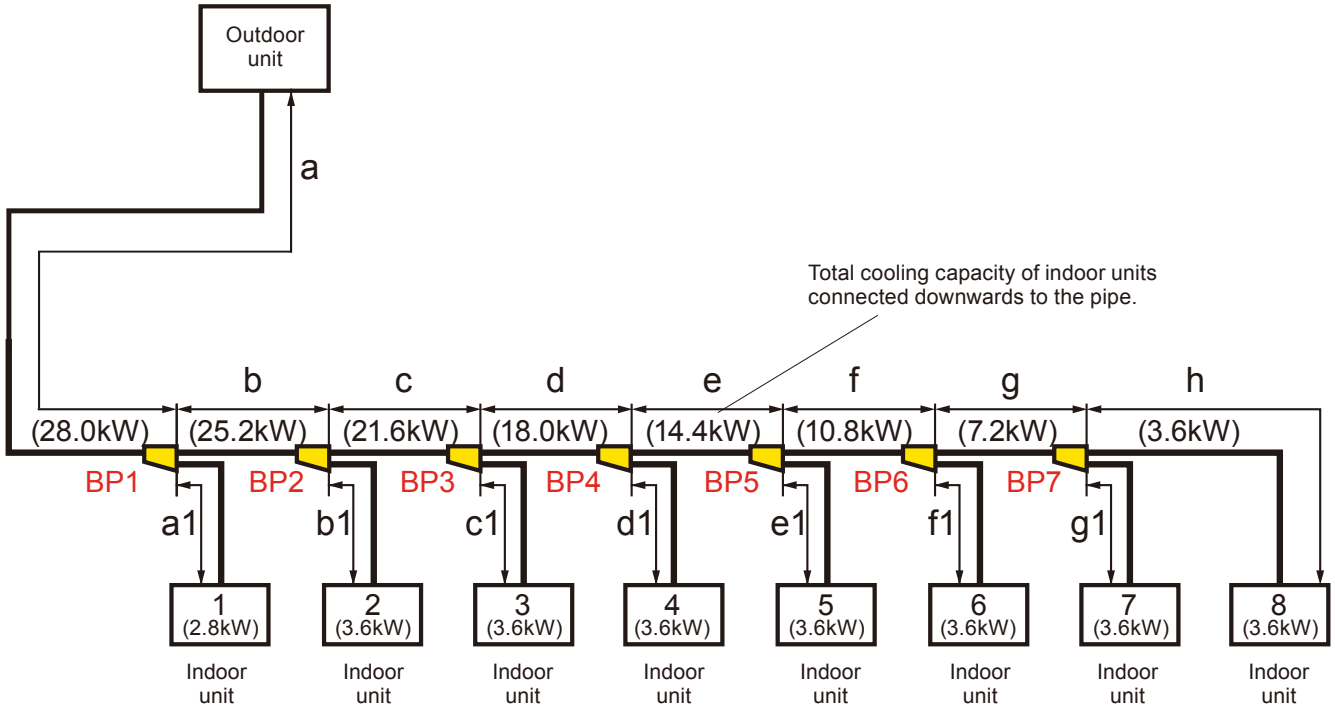
When total refrigerant amount exceed limitation.

- Reduce pipe length for refrigerant system.
- Change the refrigerant system configuration.

SYSTEM DESIGN

2-6. EXAMPLE OF PIPING DESIGN

■ REFRIGERANT SYSTEM 1



● System configuration (Indoor units)

	1	2	3	4	5	6	7	8	Total Capacity (kW)
Model name	ARXD09	ARXD12	ARXD12	ARXD12	ARXD12	ARXD12	ARXD12	ARXD12	28.0
Capacity (kW)	2.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6	

● System configuration (Outdoor unit)

	Outdoor unit
Model name	AJ∗072
Capacity (kW)	22.4

● Capacity ratio

(Total indoor unit capacity) / (Total outdoor unit capacity)

= (28.0) / (22.4) = 125.0% (Within 50% to 150%)

● Selection of branch kit

Branch point No.	Model
BP1	UTP-AX090A
BP2	UTP-AX090A
BP3	UTP-AX090A
BP4	UTP-AX090A
BP5	UTP-AX054A
BP6	UTP-AX054A
BP7	UTP-AX054A

Model	Q'ty
UTP-AX090A	4
UTP-AX054A	3

SYSTEM DESIGN

● Selection of pipe size

	a	a1	b	b1	c	c1	d	d1	e	e1
Liquid pipe	9.52	6.35	9.52	6.35	9.52	6.35	9.52	6.35	9.52	6.35
Gas pipe	19.05	12.70	19.05	12.70	19.05	12.70	15.88	12.70	15.88	12.70
Length (m) Example	40	15	5	10	5	10	5	10	5	10
	f	f1	g	g1	h					
Liquid pipe	9.52	6.35	9.52	6.35	6.35					
Gas pipe	15.88	12.70	15.88	12.70	12.70					
Length (m) Example	5	10	5	10	7					

● Limitation check

	Diagram	Example (m)	Limitation (m)	Judge
Total pipe length	Total	152	400m or less	OK
Between outdoor unit and farthest indoor unit	a+b+c+d+e+f+g+h	77	120m or less	OK
Between the first separation tube and the farthest indoor unit	b+c+d+e+f+g+h	37	90m or less	OK
Between outdoor unit and the nearest indoor unit	a+a1	55	5m or more	OK
Between outdoor unit and the first seperation tube	a	40	3m or more	OK

SYSTEM DESIGN

● Calculation of additional charge refrigerant

1. Calculation of additional amount for pipe length

Liquid pipe size	9.52	6.35
Additional refrigerant (kg/m)	0.058	0.021
Liquid pipe length (m)	70	82

A = (0.058 x 70) + (0.021 x 82) = 5.79 (kg)

2. Factory charged amount

	Model	Factory charged amount (kg)
Outdoor unit	AJ∗072	7.0

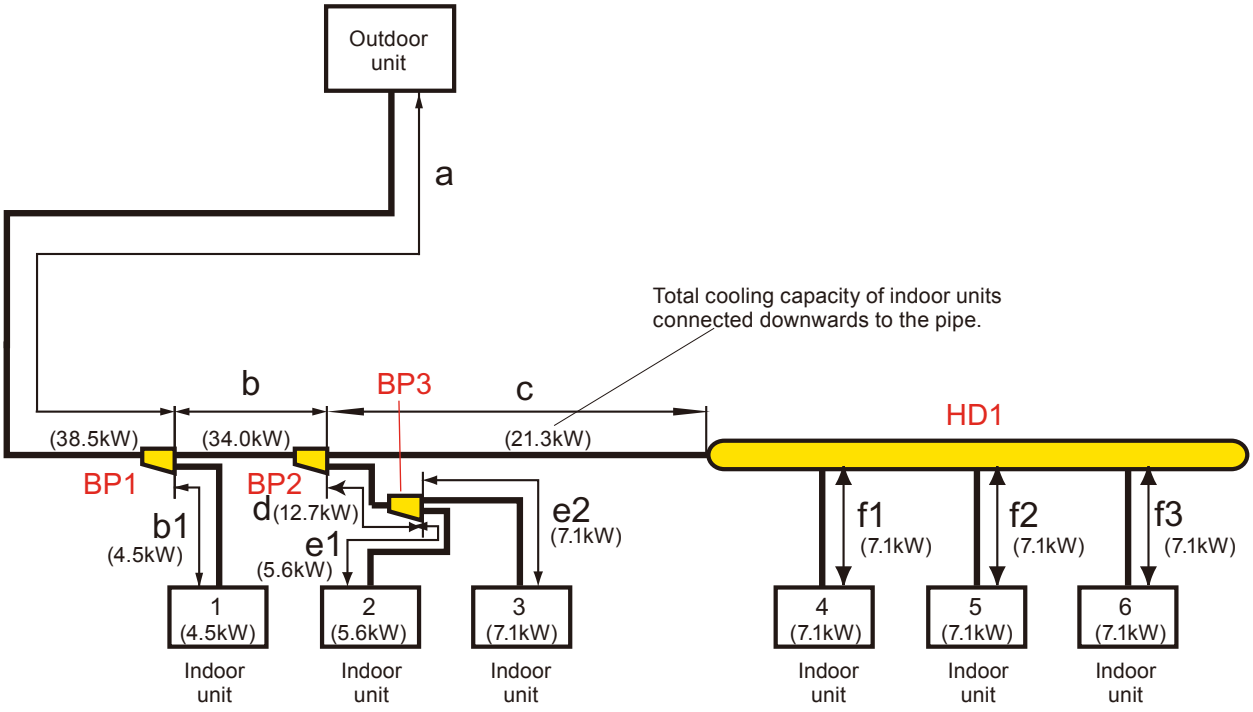
B = 7.0 (kg)

3. Total refrigerant amount check

C = A + B = 5.79 + 7.0 = 12.79(kg) < 20.0 (kg) → OK

Check pipe length and height difference between units by comparing with items shown in "2-2.PIPING LIMITATION".

■ REFRIGERANT SYSTEM 2



● System configuration (Indoor units)

	1	2	3	4	5	6	Total Capacity (kW)
Model name	ARXD14	ARXD18	ARXD24	ARXD24	ARXD24	ARXD24	38.5
Capacity (kW)	4.5	5.6	7.1	7.1	7.1	7.1	

● System configuration (Outdoor unit)

	Outdoor unit 1
Model name	AJ∗090
Capacity (kW)	28.0

● Capacity ratio

(Total indoor unit capacity) / (Total outdoor unit capacity)

= (38.5) / (28.0) = 137.5% (Within 50% to 150%)

● Selection of branch kit

Branch point No.	Model
BP1	UTP-AX090A
BP2	UTP-AX090A
BP3	UTP-AX054A
HD1	UTR-H0906L

Model	Q'ty
UTP-AX090A	2
UTP-AX054A	1
UTR-H0906L	1

SYSTEM DESIGN

● Selection of pipe size

	*a	b	b1	c	d	e1	e2	f1	f2	f3
Liquid pipe	12.70	12.70	9.52	12.70	9.52	9.52	9.52	9.52	9.52	9.52
Gas pipe	22.22	22.22	15.88	22.22	19.05	15.88	15.88	15.88	15.88	15.88
Length (m) Example	75	5	10	5	5	10	5	5	5	5

∗ Pipe size "a" selection : The length that between outdoor unit and first separation tube or header. (Condition 2)

a = 80 > 70 m

Therefore Liquid pipe must be size up from 9.52 mm to 12.70 mm. (Refer 2-3. PIPE SIZE)

● Limitation check

	Diagram	Example (m)	Limitation (m)	Judge
Total pipe length	Total	155	400m or less	OK
Between outdoor unit and farthest indoor unit	a+b+c+f3	110	120m or less	OK
Between the first separation tube and the farthest indoor unit	b+c+f3	30	90m or less	OK
Between outdoor unit and the nearest indoor unit	a+b1	90	5m or more	OK
Between outdoor unit and the first seperation tube	a	80	3m or more	OK

● Calculation of additional charge refrigerant

1. Calculation of additional amount for pipe length

Liquid pipe size	12.70	9.52
Additional refrigerant (kg/m)	0.114	0.058
Liquid pipe length (m)	85	45

A = (0.114 x 85) + (0.058 x 45) = 12.3 (kg)

2. Factory charged amount

	Model	Factory charged amount (kg)
Outdoor unit	AJ∗090	7.5

B = 7.5 (kg)

3. Total refrigerant amount check

C = A + B = 12.3 + 7.5 = 19.8 (kg) < 20.0 (kg) → OK

Check pipe length and height difference between units by comparing with items shown in "2-2.PIPING LIMITATION".

SYSTEM DESIGN

3. PIPING CONNECTION

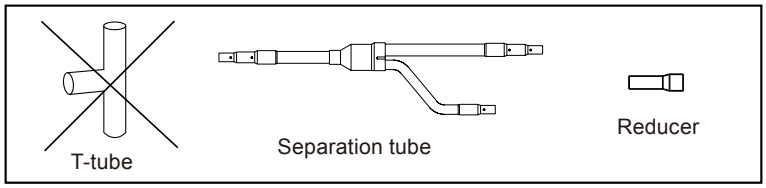
3-1. CAUTION OF PIPING

■ CAUTION

Keep the permissible length of every piping limitation to prevent a defect or cooling/heating failure.

● Piping material

- Use the designated size (Diameter & thickness) of refrigerant pipes.
- Those pipes purchased locally may contain dust inside. Please blow out the dust by dried inert gas when using.
- To process the branch, do not use T-shaped pipe, which causes a uneven refrigerant flow.
  Use the optionally available standard branch kit.



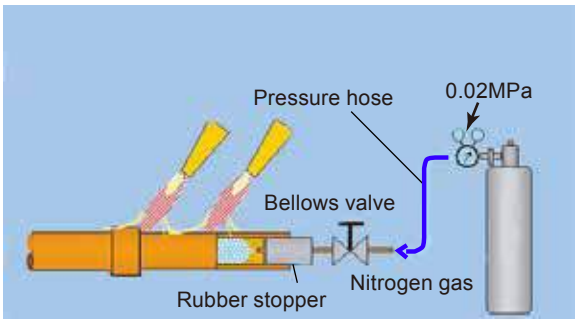
- When replacing the unit, never use piping which has been used for previous installations.
  Only use the new piping.

● Piping process strage

- Be careful to avoid the dust or water falling into the pipe when performing piping process and piping installation.
- When processing the pipe, make the number of bending portion as few as possible, and the bending radius as large as possible.
- If the diameter of the required pipe is different from the branch unit, either cut it out or use the reducer.

● Brazing

- While Brazing the pipes, be sure to blow dry nitrogen gas through them.
- If nitrogen gas is not blown through the pipes while they are being brazed, an oxidized layer may form on the inside of the pipes. If this occurs, the cooling efficiency may decrease and the air conditioner unit (compressor, valves, etc.) cause malfunction.



- When brazing the pipes, do not use flux. If the flux is chlorine-based, the pipes will corrode and when the flux contains fluorine, the refrigerant oil will deteriorate, etc. Using the flux has an adverse affect on the refrigerant piping system.
- For brazing materials, use phosphor copper solder that does not require flux.

● Piping treatment

- The pipes vibrate, expand, and contract during operation, so if loads are concentrated in one area, it could cause cracks in the pipes. Provide the pipe supports every 2 to 3m.
- Make sure to insulate the refrigeration pipes separately with ample thickness of heat-resistant polyethylene form etc. For the connecting portion, apply the enough insulation to avoid any gap.

SYSTEM DESIGN

■ CAUTION

● Brazing

While brazing the pipe, be sure to blow dry nitrogen gas through the pipes.

If not used, it will be caused to damage for compressor and clog the strainer and electronic expansion valve.

Example) Inside state of brazing pipe section

Nitrogen gas used	Nitrogen gas used but not sufficient (Oxygen gas still inside the pipe)	Nitrogen gas does not used
		

SYSTEM DESIGN

3-2. PIPING TO OUTDOOR UNIT

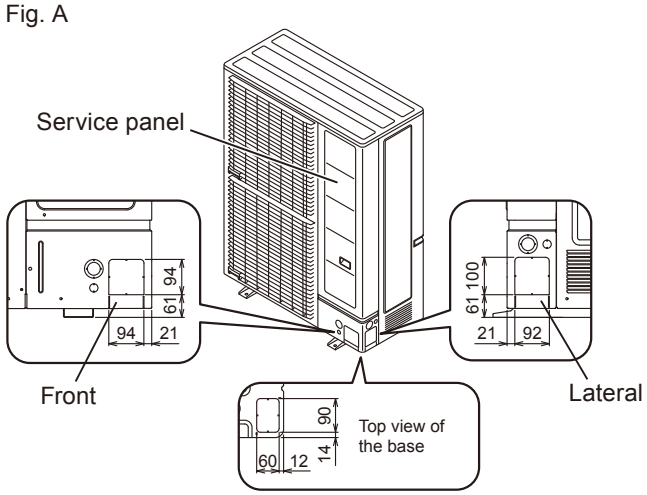
■ OPENING A KNOCKOUT HOLE

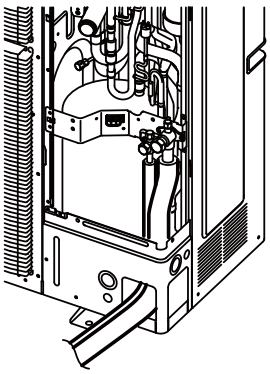
⚠ CAUTION

- Be careful not to deform or scratch the panel while opening the knock out holes.
- To protect the piping insulation after opening a knock out hole, remove any burrs from the edge of the hole.
  It is recommended to apply rust prevention paint to the edge of the hole.

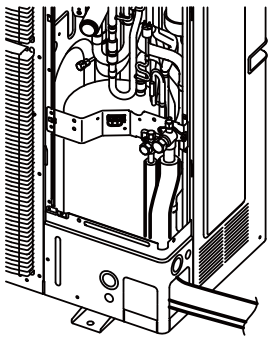
- Pipes can be connected from 3 directions, front, lateral side and bottom. (Fig. A)
- When connecting at the bottom, remove the service panel and piping cover on the front of the outdoor unit, and open the knock out hole provided at the bottom corner of the piping outlet.
- It can be installed as shown on “Fig. B” cutting out the 2 slits as indicated on “Fig. C”. (When cutting slits, use a steel saw.)

Fig. A

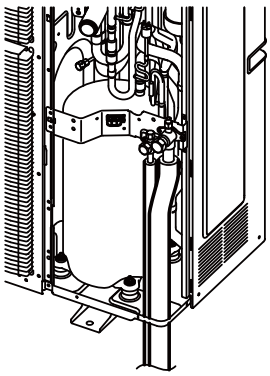




Front connection



Lateral connection



Bottom connection (No.1)

Fig. B

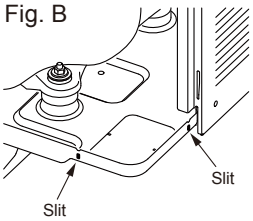
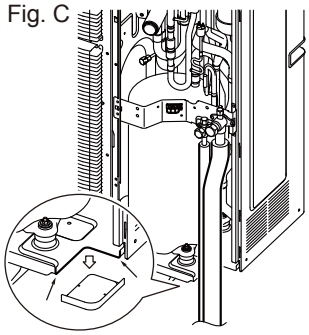


Fig. C



Bottom connection (No.2)

SYSTEM DESIGN

■ REMOVING THE PINCH PIPE

⚠WARNING
● Remove the pinch pipe only when the internal gas is completely drained. ● If gas still remains inside, the piping may crack if you melt the brazing filler metal of the junction area with a burner.

Before connecting the piping, remove the pinch pipe in accordance with the following instructions:

1) Verify that the liquid side and gas side 3-way valves are closed. (Fig. A)
2) Cut the end of the liquid side and gas side pinch pipe and vent the gas inside the pinch pipe. (Fig. B)
3) After all the gas is vented, melt the brazing filter metal on connecting part using a burner and remove the pinch pipe. (Fig. C)

Fig.A

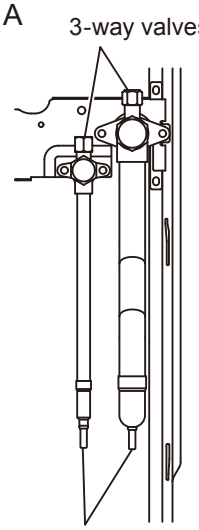


Fig.B

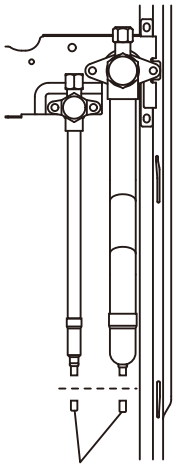
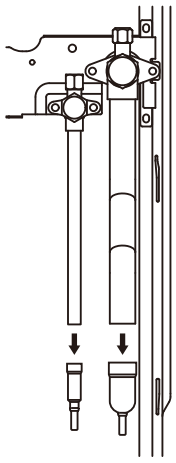


Fig.C



SYSTEM DESIGN

■ PIPE CONNECTION

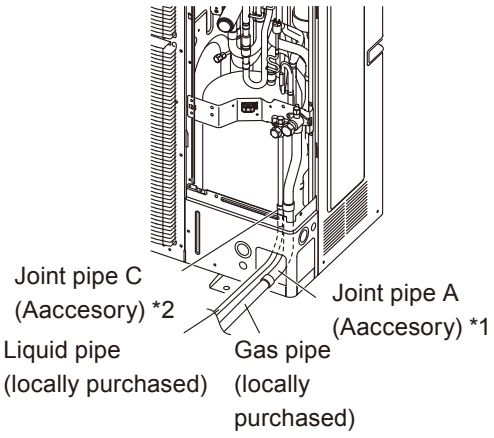
⚠ CAUTION

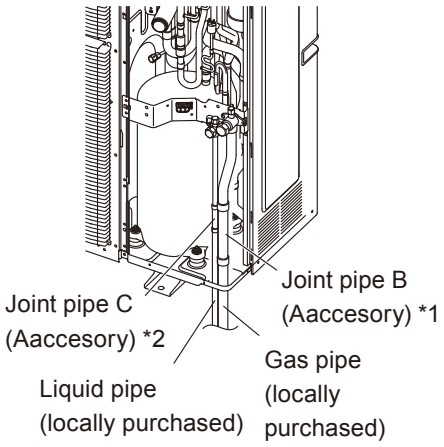
- Seal the pipe route hole with putty (locally purchased) such that there are no gaps. Small insects or animals that are trapped in the outdoor unit may cause a short circuit inthe electrical component box.
- To prevent pipe damage; do not make sharp bends. Bend the pipe at a radius of 70 mm or greater.
- Do not bent pipe many times at same part to prevent break.
- After completing all the pipe connection by brazing, perform the indoor unit pipe connection with a flare joint.
- When removing the pinch pipe or brazing the joint pipe, carry out the work while coolingdown the 3-way valve sufficiently.

(1) Braze the joint pipe onto the 3-way valves at the liquid and gas side. Install the joint pipe appropriately so that it can be connected easily with the main pipe.

(2) Braze the joint pipe at the liquid and gas side with the main pipe.

* Be sure to supply nitrogen when brazing.





*1: 090/108 model only, *2: 090 model only

SYSTEM DESIGN

3-3. SEPARATION TUBE

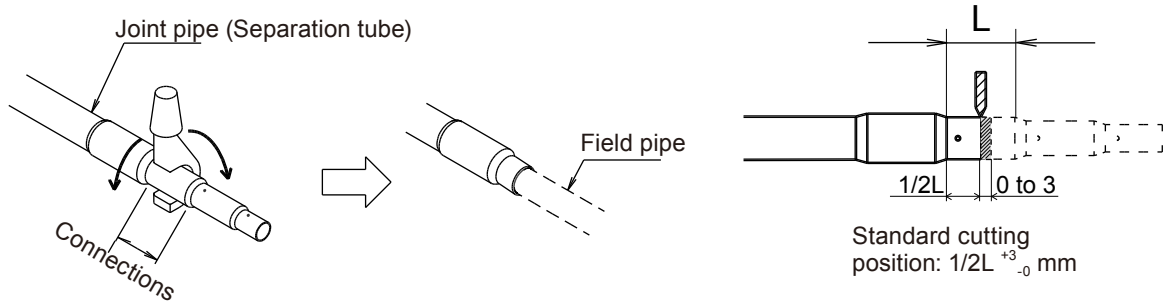
■ INSTALLATION

● Separation tube

Separation tube
UTP-AX054A
UTP-AX090A
UTP-AX180A

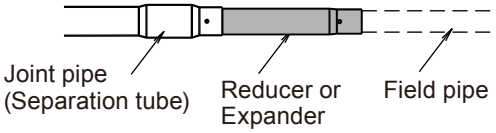
● Installation

Select the connections with the pipe diameters that match the selected pipe sizes from the separation tubes, and cut them with a pipe cutter.



NOTE: Insert the field pipe firmly until it touches the joint pipe (Separation tube).

When the pipe size of the separation tube itself does not match, or when piping sizes differ even if it cuts the pipe, use attached Reducer or attached Expander.



SYSTEM DESIGN

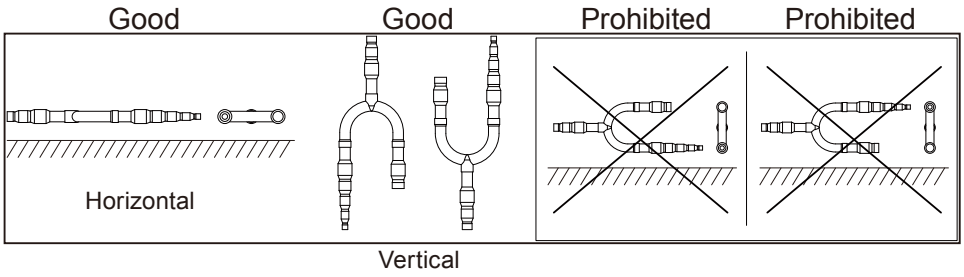
SYSTEM DESIGN

● Restriction when install

Be sure following restriction.

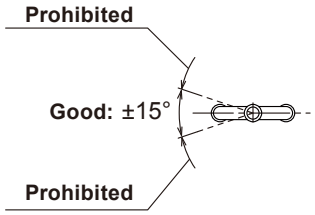
1) Installation angle

Place the separation tubes horizontally or vertically so that the refrigerant separates evenly.



⚠Caution

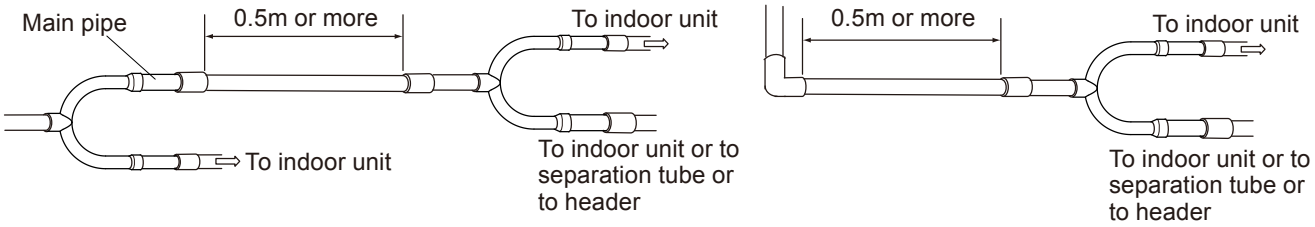
- If it is placed horizontally, keep it within ± 15°. Otherwise, it will not separate the refrigerant evenly, causing a reduction in performance.



- During piping work, apply nitrogen gas while brazing the pipes. If pipes are brazed without applying nitrogen gas, it will create a large amount of oxidation film, which will cause a critical malfunction.
- To prevent moisture or foreign matter from entering during work, do not leave the piping open.
- Refer to the Installation Manual supplied with the outdoor unit for airtightness test and evacuation procedures.

2) Straight pipe length

A straight pipe (minimum length 0.5m) before separation tube is necessary in order to separation the refrigerant exactly.

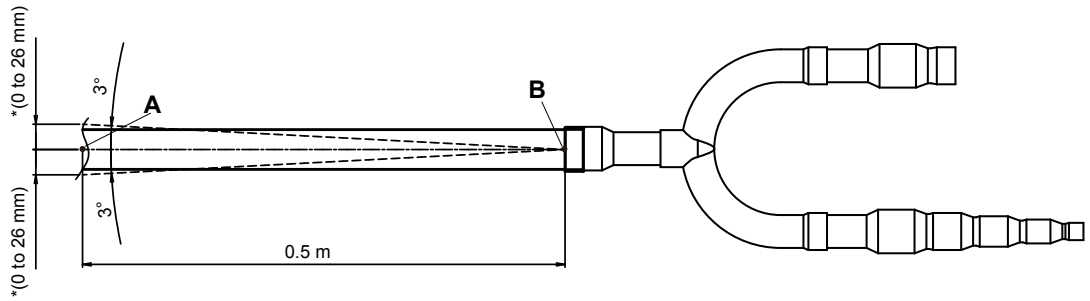


⚠CAUTION

Keep the distance 0.5m or more for straight part to separation tube, in order to prevent the outdoor unit mulfunction and generation of refrigerant noise

About the connecting curvature of field pipe and separation tube:

The field pipe should be connected to the branch kit so that the curved angle on each side is 3 degree or less.



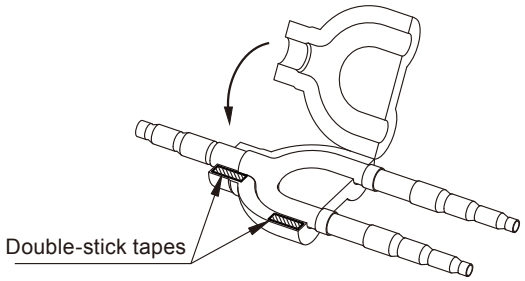
*: Allowed value based on "A" (center of field pipe) at 0.5 m from "B" (junction of the separation tube).

SYSTEM DESIGN

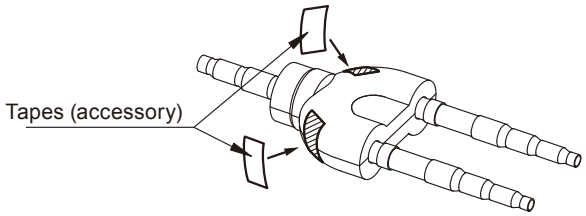
● Heat insulation installation

After brazing the pipes, and leak check use the supplied insulation to insulate them.

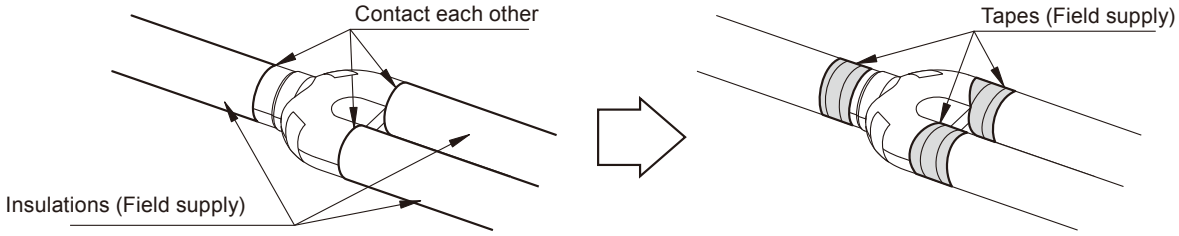
1) Remove the protective sheet from the double-stick tape that is affixed to the heat insulation.



2) Be sure to install the tape (accessory) in each heat insulation to the 2 positions as shown in the following figure.



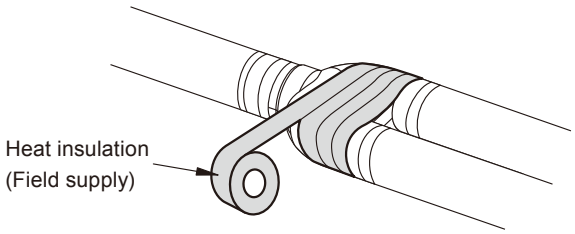
3) Use tape (Field supply) to seal the seam so that there will be no gap at the junction between the aforementioned heat insulation and the heat insulation on the local piping.



⚠Caution

- Insulate the liquid and gas pipe completely. If not, it may cause the water condensation or performance reduction.
- Wrap the heat insulation with tape or pipe cover in order to extend the life time of heat insulation.
- Take proper measurement to strengthen by using another heat insulation at the following installing environment.
  (a) Environment temperature ≥ 35°C and humidity 85%.
  (b) Environment temperature ≥ 25°C and humidity 90%.

Installation example



SYSTEM DESIGN

SYSTEM DESIGN

3-4. HEADER

■ HEADER INSTALLATION

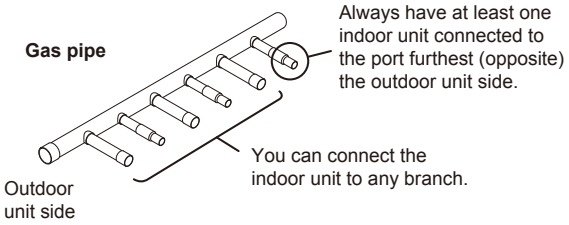
● Header selection

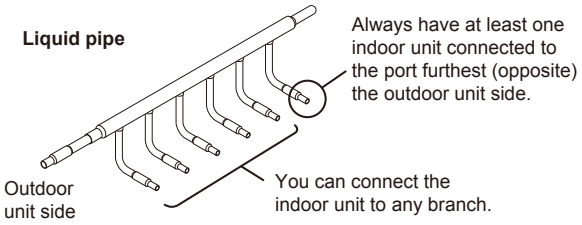
Header	
3 - 6 Branches	3 - 8 Branches
UTR-H0906L	UTR-H0908L
UTR-H1806L	UTR-H1808L

When Separate into two branches, please use a separation tube instead.

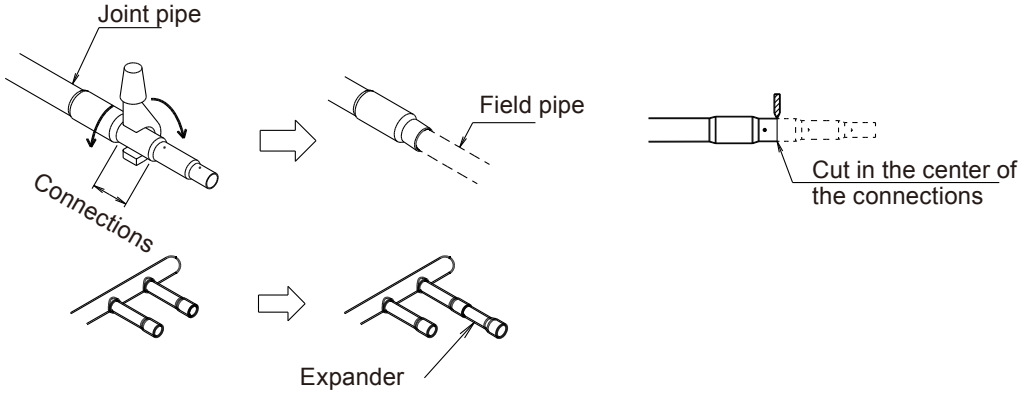
● Installation

(1) Connecting the connection pipes from the indoor units.

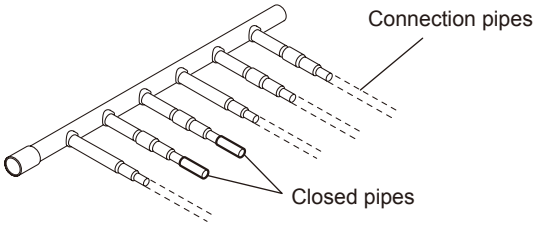




(2) Use a pipe cutter to cut at the location that matches the piping size or use expanders as necessary.

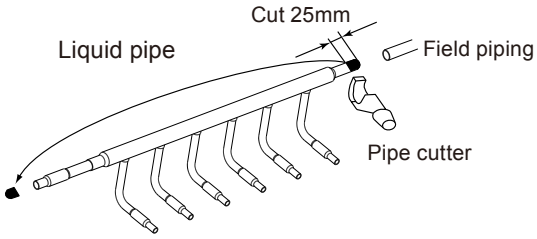


(3) Attach a plugging pipe provided if there is no piping connected at the headers.

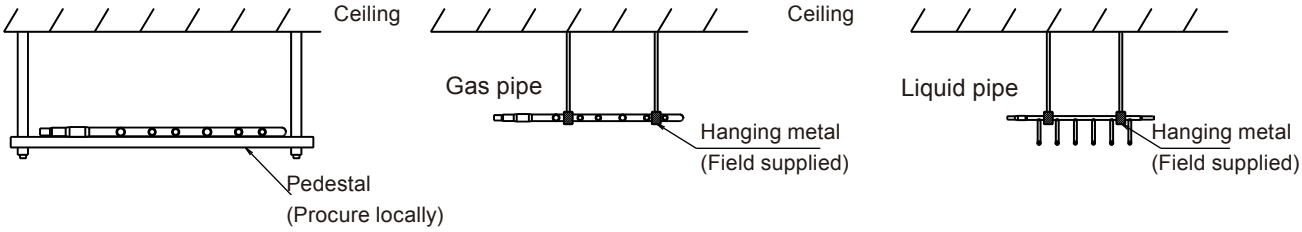


SYSTEM DESIGN

(4) Connecting pipe field supplied from outdoor unit, cut the pipe end to connect the pipe and close the opposite end.



(5) Use header support as necessary.

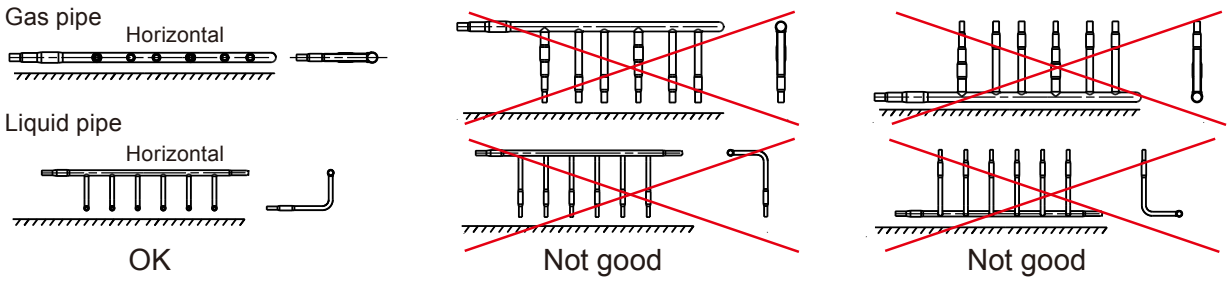


● Restriction when install

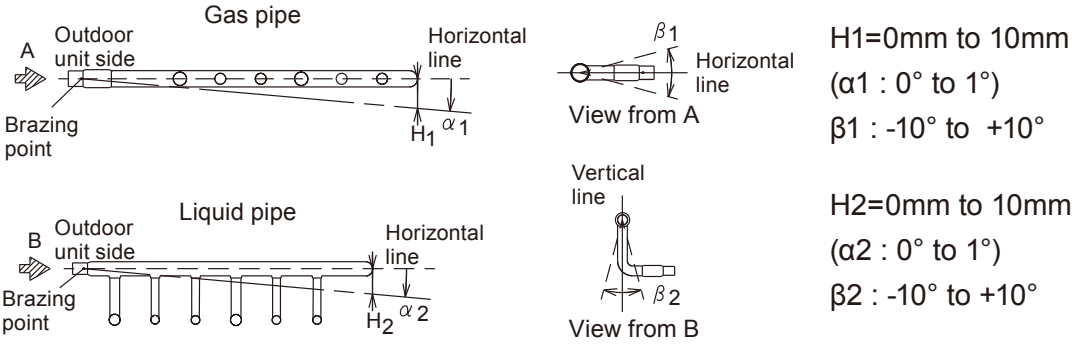
Be sure following restriction.

1) Installation angle

Install the header so that it branches horizontally.



Use a level to make sure that the header is positioned as shown in following figure, and then, secure it in place.



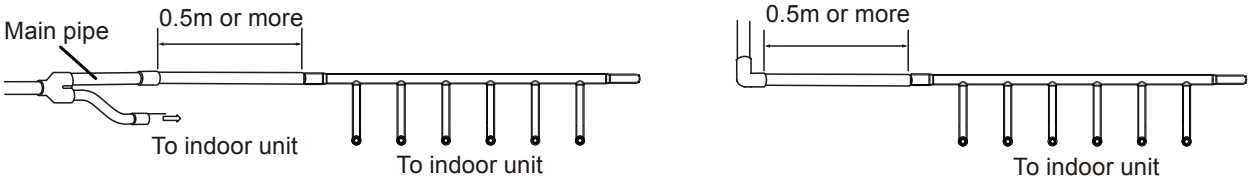
H1=0mm to 10mm
(α1 : 0° to 1°)
β1 : -10° to +10°

H2=0mm to 10mm
(α2 : 0° to 1°)
β2 : -10° to +10°

SYSTEM DESIGN

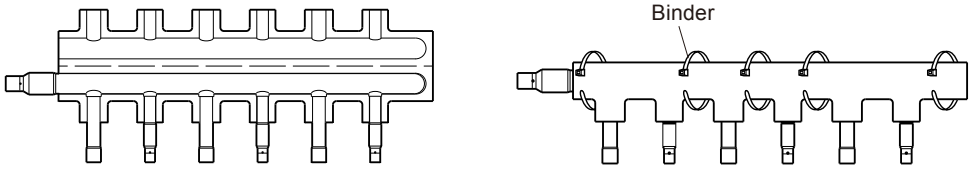
2) Straight tube length

A straight tube (minimum length 0.5m) is necessary before header in order to separate the refrigerant exactly.



● Heat insulation installation

After brazing the piping, attach heat insulation.
Remove the protective paper for the tape on the heat insulation for the header and attach it.
Tighten by using binders at five locations.

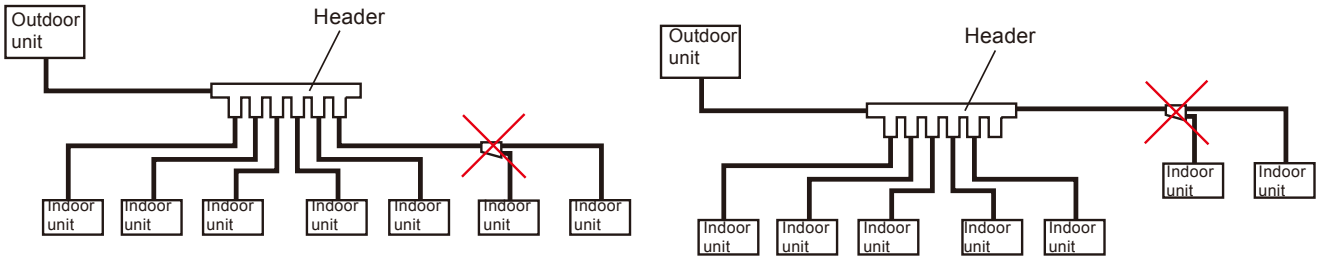


Cover the plugging pipe with heat insulation and seal with tape.



● Caution

Separation tube is not allowed to install header kit.



SYSTEM DESIGN

3-5. EV KIT

An EV kit must be required for the compact wall mounted type (EEV external model) on the liquid pipe side.

■ EV KIT SELECTION

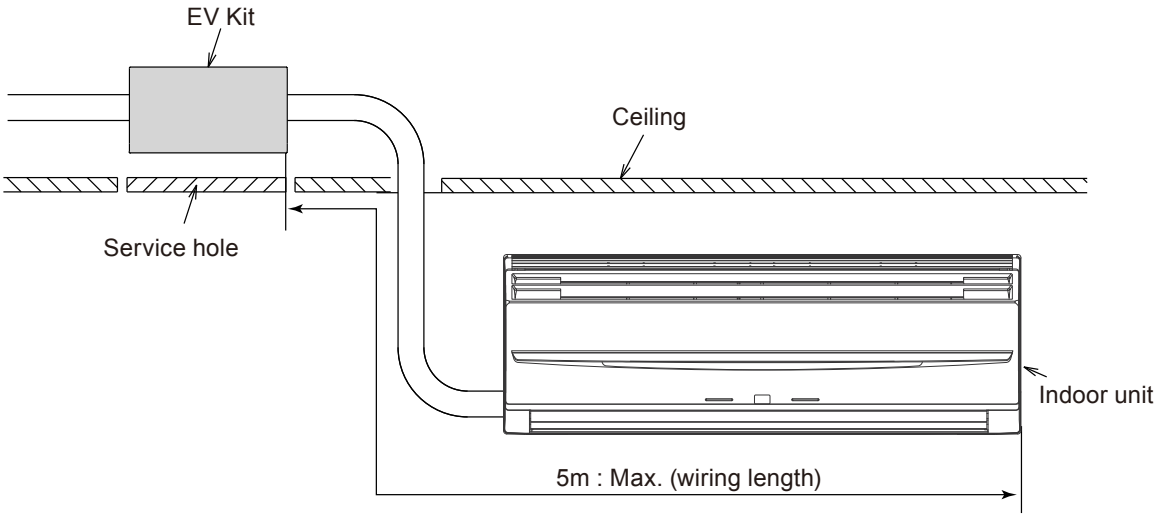
Model name	Application indoor units
UTR-EV09XB	AS∗E004GTAH, AS∗E007GTAH, AS∗E009GTAH AG∗E004GCAH, AG∗E007GCAH, AG∗E009GCAH
UTR-EV14XB	AS∗E12GACH, AS∗E14GACH AG∗E012GCAH, AG∗E014GCAH

A wrong selection could cause improper operation, because the built-in electronic expansion valve is different.

- Select the above indoor unit for use in small and, quiet rooms such as hotel or bedroom, where noise would be a distraction.
- The other indoor units, do not require an EV kit.

■ DECIDING INSTALLATION LOCATION

- Keep the installed piping and wiring length less than 5m.
- EV kit should be considered to install away from the living quarters, such as above the ceiling.
- Install the EV kit where it can be accessed for servicing.



⚠CAUTION

Do not install EV kit in a location with any of the following conditions.

- Do not install the kit outdoor.
- Do not install the kit where the danger of combustible gas leakage.
- Do not install the kit where near a fire place or other heating appartatus.
- Do not install the kit where oily smoke, machine oil (i.e. factory),salty envilopment with direct sea breeze.
- Do not install the kit where too much of dust.
- Do not install the kit where corrosive gas such as sulphurous acid gas is generated.
- Do not install the kit where exposed to rains and direct sunlight.

SYSTEM DESIGN

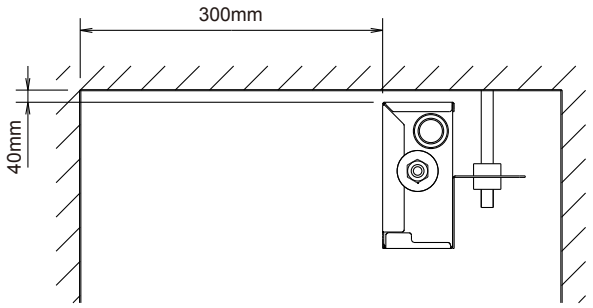
Decide the mounting position with the customer as follows:

(1) Install EV kit level on strong wall, floor, ceiling which is not subject to vibration.

(2) Install EV kit where the connection pipe can be easily installed.

(3) Install EV kit where vibration and noise are not amplified.

(4) Take servicing, etc. into consideration and leave the space as follows.

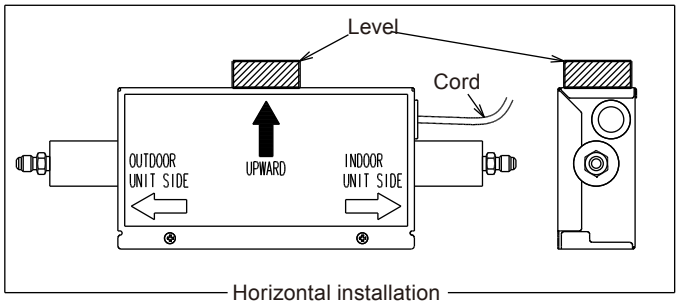


■ INSTALLATION METHOD

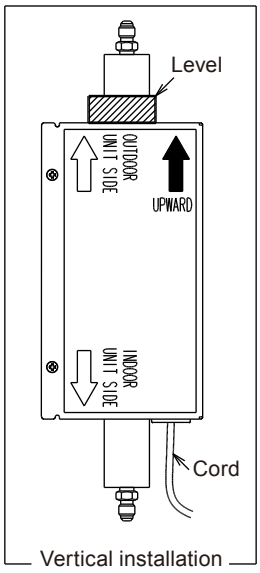
⚠CAUTION

The installation direction can be selected either horizontal (Pattern A) or vertical (Pattern B), but keep the inclination within 5º.

Pattern A



Pattern B

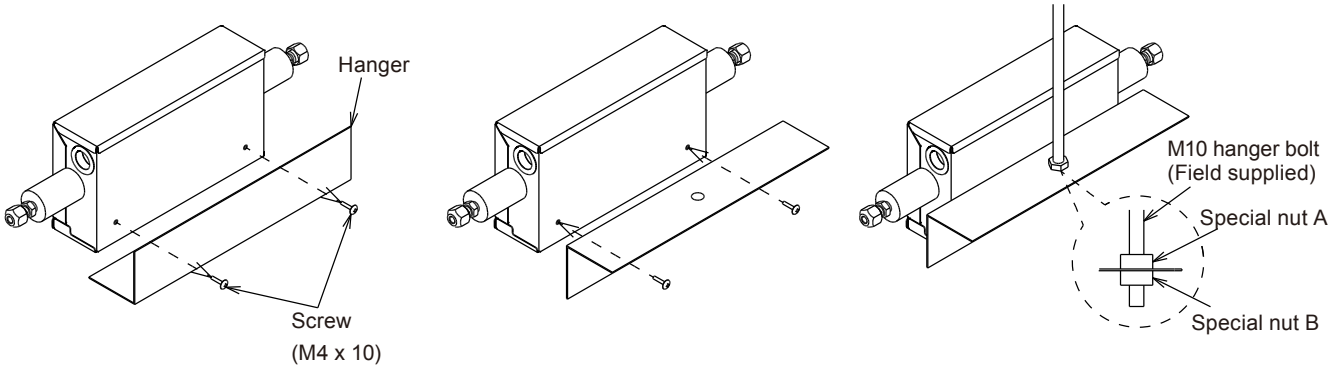


Incorrect installation direction or angle may cause improper operation.

● Suspended installation

(1) Remove the 2 screws (M4x10) and replace them with the hanger.

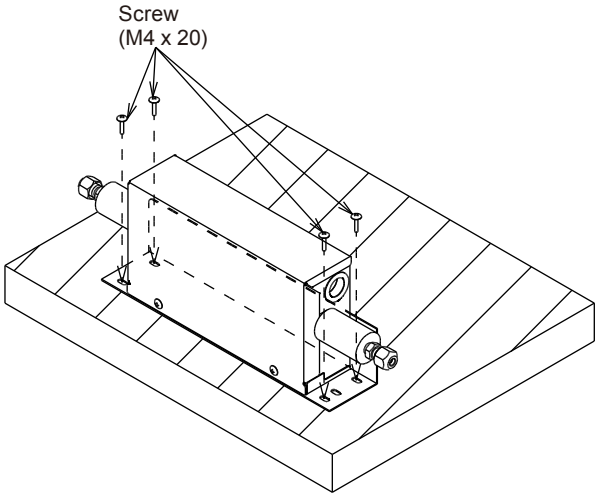
(2) Use the hanger bolts to fasten the hanger.



SYSTEM DESIGN

● Floor installation

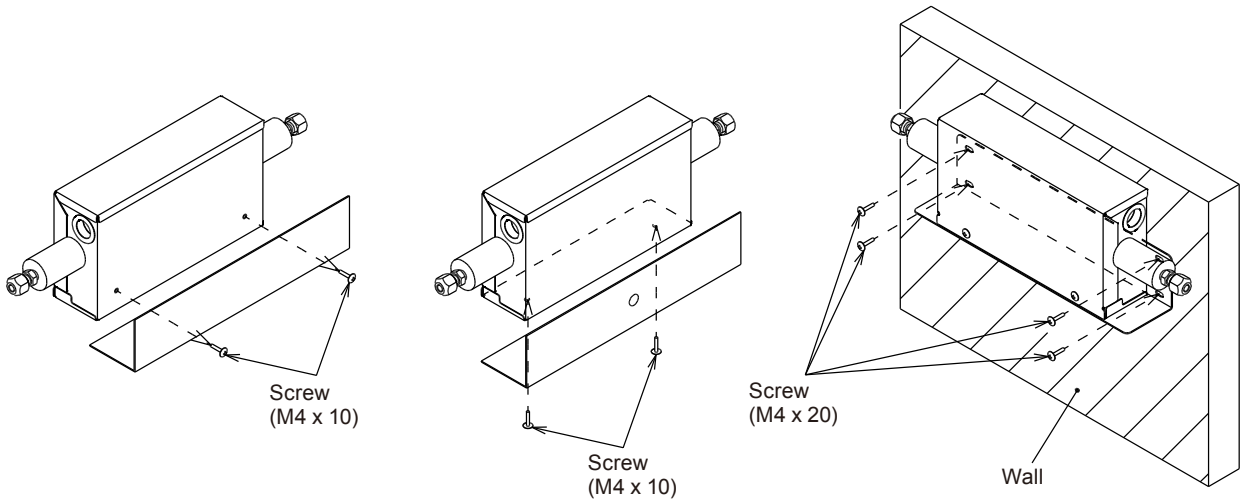
Use the 4 screws to fasten the unit to the floor.



● Wall mounted installation

(1) Remove the 2 screws (M4x10) and replace them with the hanger.

(2) Use the 4 screws (M4x20) to fasten the unit to the wall.



SYSTEM DESIGN

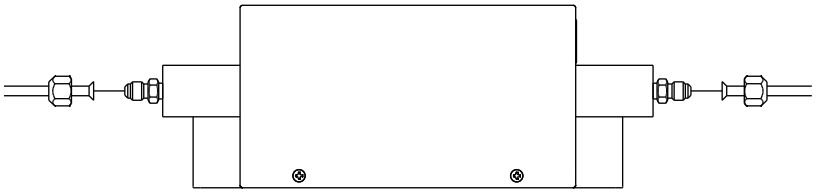
SYSTEM DESIGN

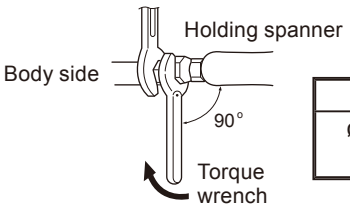
■ CONNECT THE PIPES

Connect EV kit to liquid pipe of compact wall mounted (EEV external model) indoor unit.

Pipe size	Indoor unit side	ø 6.35mm	Flare connection
	Outdoor unit side	ø 6.35mm	

Use a toruque wrench to tighten the flare nut.

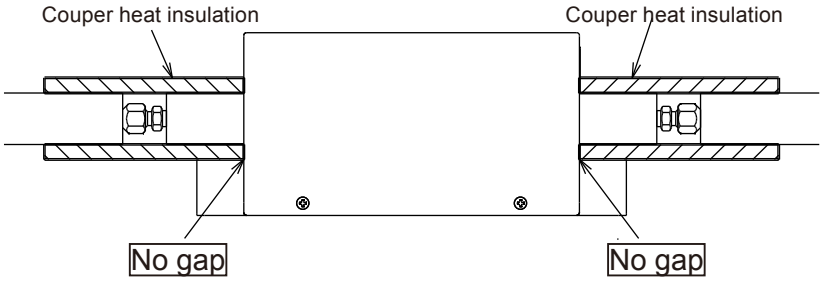




Pipe	Tightening torque
ø 6.35 (1/4")	16.0 to 18.0 N•m

■ ATTACH THE INSULATION MATERIAL

Insulate by the coupler heat insulation arround the pipe.

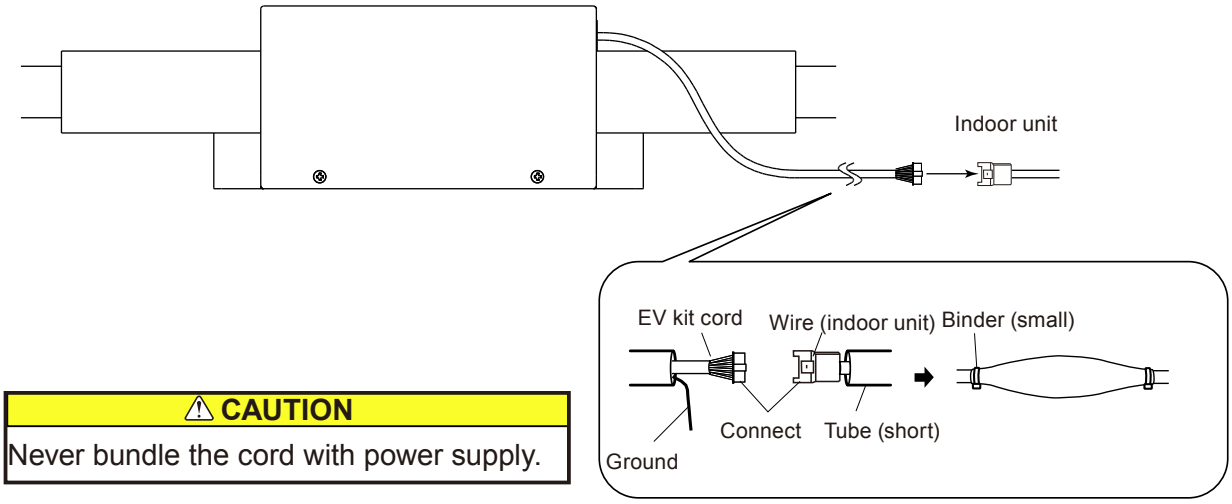


■ WIRING PROCEDURE

(1) Connect the EV kit cord to the indoor unit.

(2) Wrap the tube arround the connection, and fasten both ends binders.

(3) Connect the ground to the indoor unit.



⚠ CAUTION

Never bundle the cord with power supply.

■ SPECIFICATIONS

Model name	UTR-EV09XB	UTR-EV14XB
Dimensions (mm) (H x W x D)	121 x 416 x 65	
Weight (g)	1500	
Connection cord length (m)	5	

SYSTEM DESIGN

4. WIRING DESIGN

4-1. ELECTRICAL WIRING

■ PRECAUTION FOR ELECTRICAL WIRING

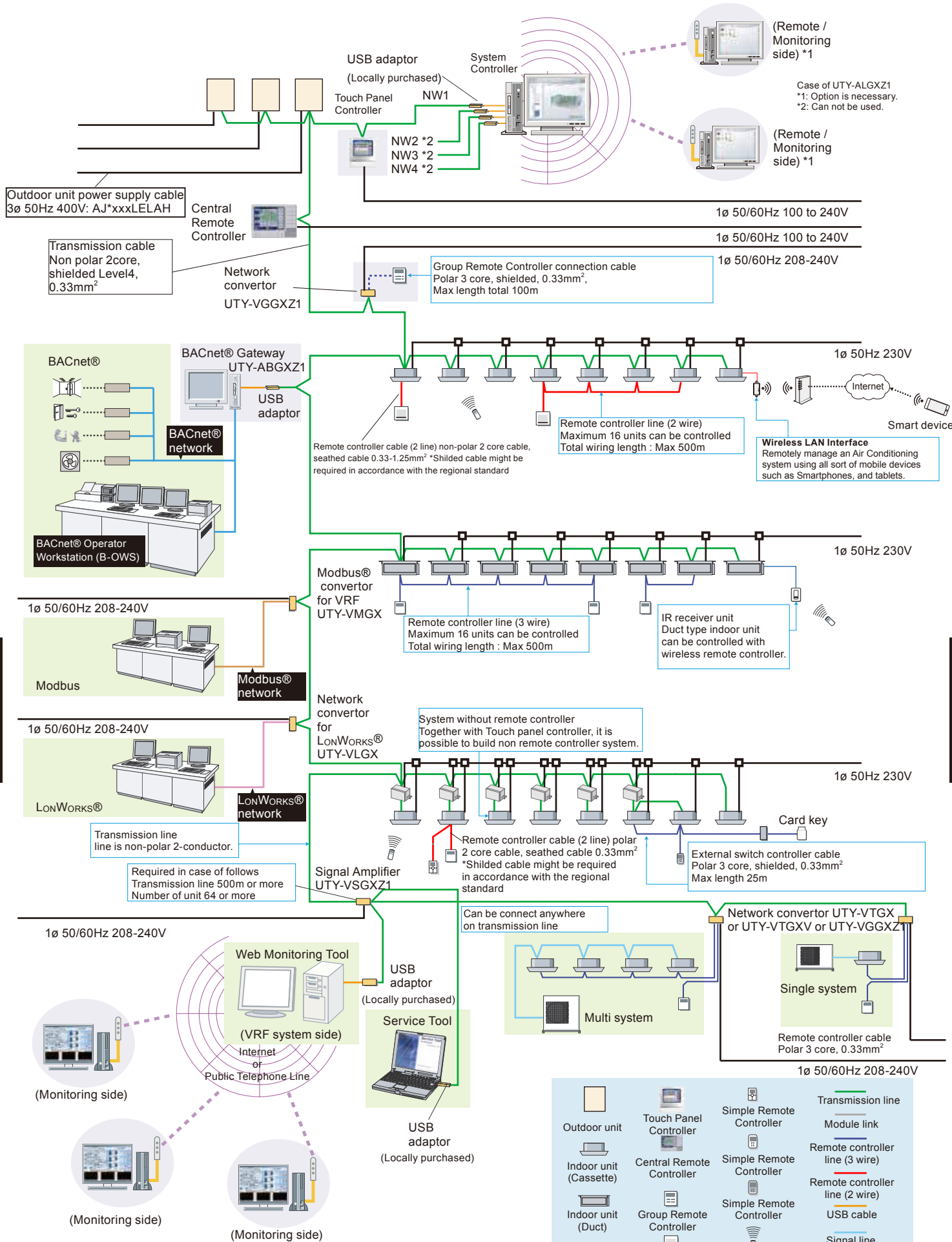
Regulation on wire diameter and selecting circuit braker size differ from locality.

Install in accordance with regional standard.

⚠WARNING
● Do not turn on the power until all installation work is complete.
● Always install a circuit breaker in the power supply cable for the unit. Failure to use a circuit breaker could result in electrical shock or fire.
● Before starting work, check that power is not being supplied to the unit.
● Connect the connection cable firmly to the terminal board. Imperfect installation may cause a fire.
● Always fasten the outside covering of the connection cable with the cord clamp. (If the insulator is chafed, electric leakage may occur.)
● Always connect the ground wire.
● Never install a condenser for improving the power factor. (It will not improve the power factor and the condenser will become abnormally hot.)

SYSTEM DESIGN

■ WIRING SYSTEM OUTLINE



Disconnect switch might be required in accordance with the regional standard.

SYSTEM DESIGN

SYSTEM DESIGN

4-2. POWER SUPPLY CABLE WIRING

■ POWER SUPPLY CABLE SPECIFICATIONS

Use a separate power supply for the outdoor unit and indoor unit.

● Outdoor unit

Model	Recommended cable size (mm^2)		Fuse capacity (A)	Breaker for leakage current	Remarks
	Power cable	Earth cable			
AJ∗072LELAH	6	6	20	100mA 0.1sec or less	
AJ∗090LELAH	6	6	20		
AJ∗108LELAH	6	6	25		

- Select wire size base on the value of MCA and TOCA. In the table of "3.OUTDOOR UNITS",example of wiring specification for outdoor unit is given.
- Select circuit breaker for outdoor unit based on the value of MCA of "3.OUTDOOR UNITS". The breaker should not operate when starting current is generated.

● Indoor unit

Model	Recommended cable size (mm^2)	Fuse capacity (A)	Breaker for leakage current	Remarks
All models	2.5	20	Refer to Table B	230V~ 50Hz 2Wire + ground

Refer to the table for the breaker specifications of each installation condition. Perform the power crossover wiring within the range of the same refrigerant system.When the crossover wiring is done, make a connection for indoor unit to satisfy conditions Table A and Table B below.

Table A. Current breaker requirements

Model	MCA (A)	Fuse capacity (A)
All models	*1	20

MCA : Minimum Circuit Ampacity

*1 : Refer chapter4 3.ELECTRIC CHARACTERISTICS

When the power crossover wiring is done, make it so that the total of the MCA of the connected indoor units does not exceed the 15 A.

If the capacity of connected indoor units exceeds the upper limit, either add breakers or use a breaker with a greater capacity.

Table B. Earth leakage breaker requirements

Breaker capacity	Maximum connectable indoor unit
30 mA, 0.1 sec or less	13 or less

- Select cable size base on the value of total MCA of the indoor units connected. and if necessary divided the system which the total MCA of the indoor units connected must be smaller than 15 (A). The indoor units shall be connected up whthin refrigerant system.
- In order to be influenced of a breaker stop, please divide a power supply circuit for every refrigerant system.
- Please attach at least one breaker per refrigerant system.
- Please design the power supply circuit to keep the voltage drop within 2%.

SYSTEM DESIGN

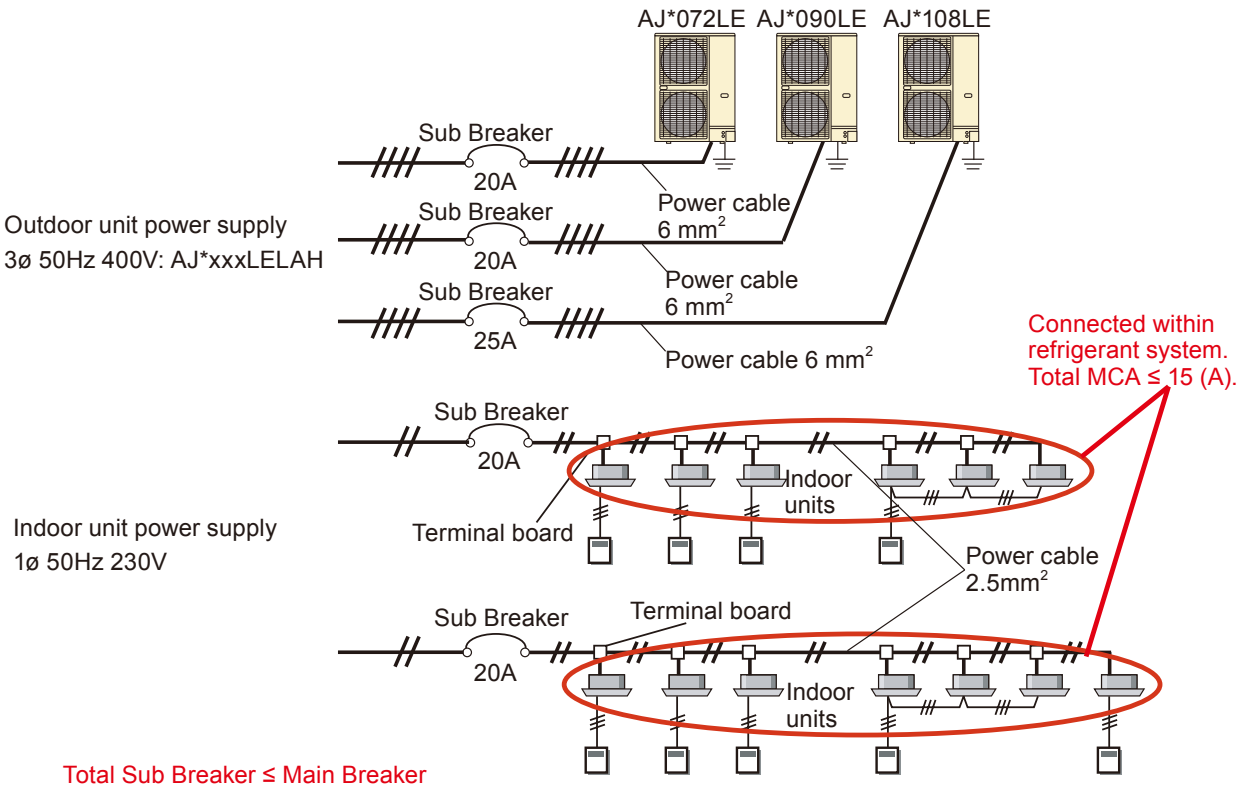
⚠Caution
● Obtain the distribution network operator's agreement about the power capacity of the power supply system, specifi cation of the cable and the harmonic current, and etc. when you connect the outdoor unit with the power supply. ● This product is intended for professional use. Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance. ● Above "Wire size" and "Fuse capacity" are an example. ● Regulation of wire size and circuit breaker differs from each locality, please refer in accordance with the regional standard. ● Specific wiring requirement should be applied Type 60245 IEC66 or equivalent. ● To prevent the electrical noise malufunction and hazards from insulation failure, the unit should be connected to ground. ● A disconnect switch may be required for ease of maintenance in accordance with the regional standard for each unit. Please check the regional standard. Make the wire length between disconnect switch and unit terminal as short as possible. ● When connecting the indoor unit power supply from part of a 3-phase power source, recommend to take the power from each phase uniformly to prevent unbalance. ● All field wiring and components must be provided by a licensed electrician. ● Use copper conductors only.

SYSTEM DESIGN

■ POWER SUPPLY CABLE WIRING

● Example : Power supply cable wiring. (Using terminal board for indoor units)

⚠Caution
● Except for EMERGENCY, never turn off main as well as sub breaker of the indoor units during operation. It will cause compressor failure as well as water leakage. ● First, stop the indoor unit by operating the control unit, converter or external input device and then cut the breaker. ● Make sure to operate through the control unit, converter or external input device. ● When the breaker is designed, locate it at a place where the users cannot start and stop in the daily work. ● Regulation of wire size and circuit breaker differs from each locality, please refer in accordance with regional standard.



SYSTEM DESIGN

4-3. TRANSMISSION LINE

■ TRANSMISSION WIRING SPECIFICATIONS

Use	Size	Wire type	Remarks
Transmission cable	0.33mm^2 (22AWG)	LEVEL 4 (NEMA) non-polar 2core, twisted pair solid core diameter 0.65mm	LONWORKS® compatible cable

Use the shielded wire specified and always ground it both end.

22AWG (0.65mm) Level 4 cable with shielded (National Electrical Manufacturers Association (NEMA) Differs from the Category 4 specification proposed by the Electronic Industries Association / Telecommunication Industry Association (EIA/TIA)

● Reference specifications for transmission cable

No.	Item		Unit	Specifications
1	Wire type		mm	0.65dia (22AWG) Twisted pair with shield
2	Pair (Twisted pair cable) Note 1		-	1P or 2P
3	Loop DC Resistance (20°C)		Ohm/km	Less than 118
4	DC Resistance Unbalancing (20°C)		%	Less than 5
5	Dielectric Voltage (Between conductor to conductor)		V/min	AC 350
6	Insulation Resistance (20°C) (Between conductor to conductor)		Mohm-km	More than 500 (after charging DC500V 1min.)
7	Static Capacitance between Conductors	1KHz	nF/km	Less than 56
8	Unbalanced Static Capacitance (To Ground)	1KHz	nF/km	Less than 3.28
9	Characteristic Impedance	772KHz	Ohm	102+ - 15% (87 to 117)
		1MHz		100+ - 15% (85 to 115)
		4MHz		100+ - 15% (85 to 115)
		8MHz		100+ - 15% (85 to 115)
		10MHz		100+ - 15% (85 to 115)
		16MHz		100+ - 15% (85 to 115)
		20MHz		100+ - 15% (85 to 115)
10	Attenuation	772KHz	dB/km	Less than 15
		1MHz		Less than 18
		4MHz		Less than 36
		8MHz		Less than 49
		10MHz		Less than 56
		16MHz		Less than 72
		20MHz		Less than 79
11	Cross talk attenuation (Note 2)	772KHz	dB/km	Less than 58
		1MHz		Less than 56
		4MHz		Less than 47
		8MHz		Less than 42
		10MHz		Less than 41
		16MHz		Less than 38
		20MHz		Less than 36

Note :

- Number of twist is not specified. However, it shall satisfy the electrical specifications such as characteristic impedance, attenuation, etc. (Example : More than 40times/m)
- Cross talk attenuation is applied when the twisted cable has 2 pairs (2P)
- Material is not specified. However, it shall be selected by considering the operating environment (Temperature, Humidity), and the regional regulation by the environmental condition (ROHS Directive, etc.)
- Mechanical specification is not specified. However, it shall be selected by considering the operating environment.
- Never bundle transmission cable with power supply cable.

SYSTEM DESIGN

■ WIRING RULES

- In the following cases, Signal Amplifier is required.

1) When the total length of the transmission line exceeded 500 m.
   AB+BC+BD+DE+EF > 500 m (Fig. 1)

2) When the total number of units *1 is over 64.

- Transmission line length between each unit*1 : MAX 400 m.
- Total transmission line length: MAX 3600 m

AB+BC+BD+DE+EF+EG+GH < 3600 m (Fig. 2)

Fig. 1

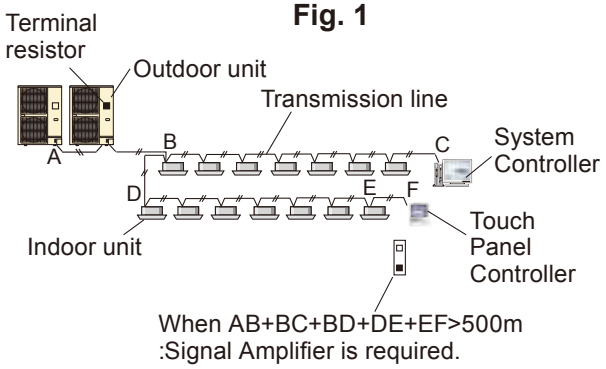
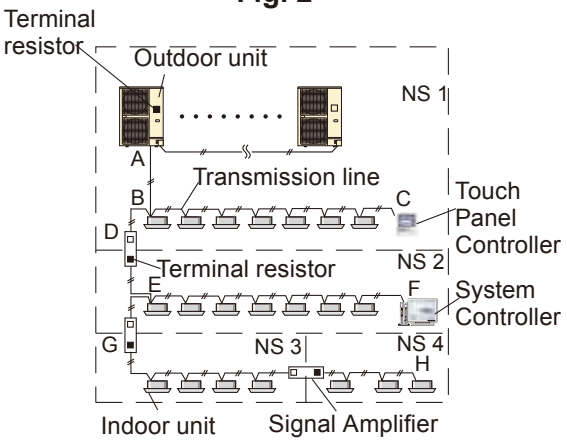


Fig. 2



*1: Refer detail Meaning of unit on 1-2 VRF NETWORK SYSTEM.

SYSTEM DESIGN

■ TRANSMISSION WIRING FLOW

● Step 1 : Decide to use feature of Automatic Address Setting depending on system design

Decide to use Automatic Address Setting or Manual Address Setting.

- Automatic Address Setting → Step 2 (1)
- Manual Address Setting → Step 2 (2)

● Step 2 : Confirm Transmission Wiring

(1) Automatic Address Setting

Connect the transmission cable like as Fig 3-1, 3-2.

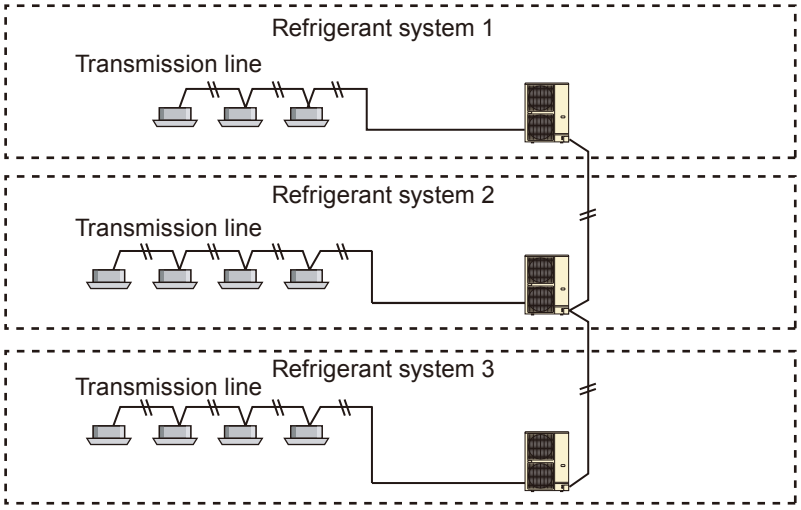


Fig. 3-1

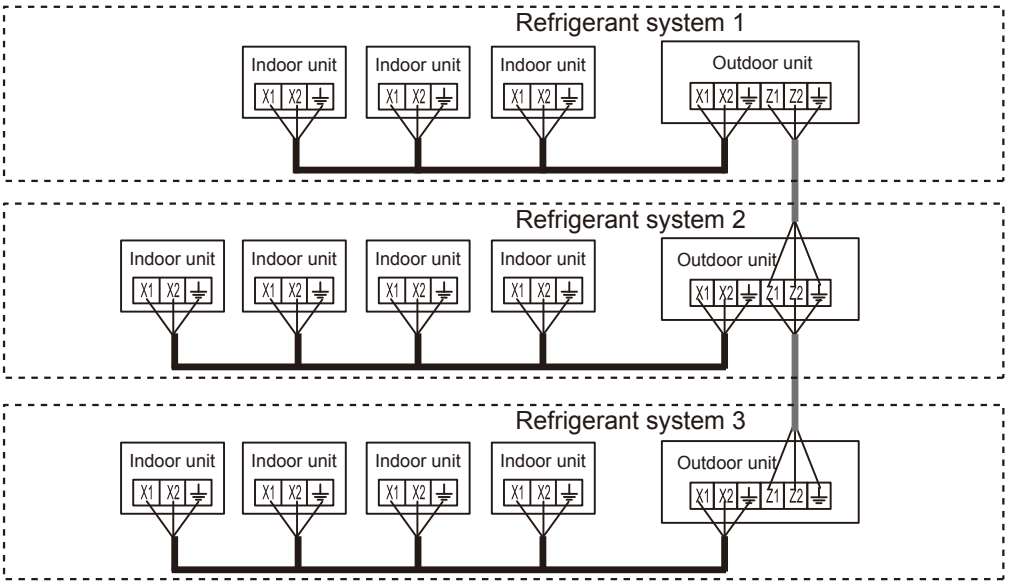


Fig. 3-2

- X1, X2 : Indoor units to outdoor unit
- Z1, Z2 : Connection for different refrigerant circuit of outdoor unit

SYSTEM DESIGN

(2) Manual Address Setting

Connect the transmission cable like as Fig 4-1, 4-2.

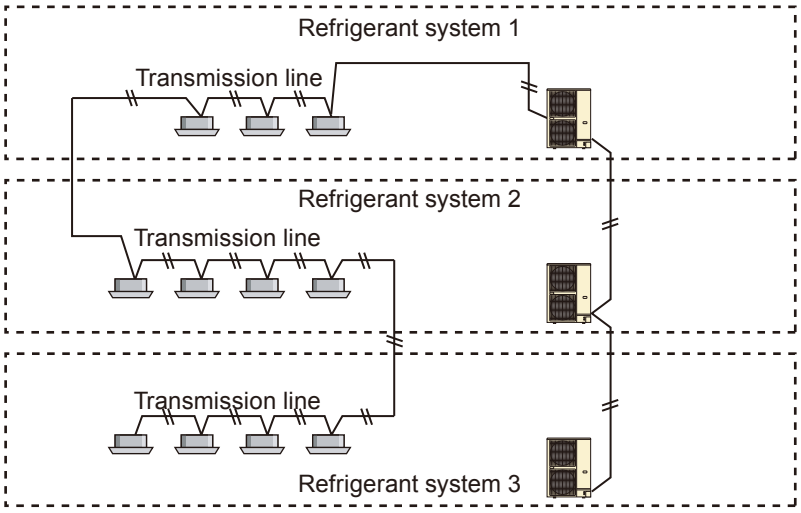


Fig. 4-1

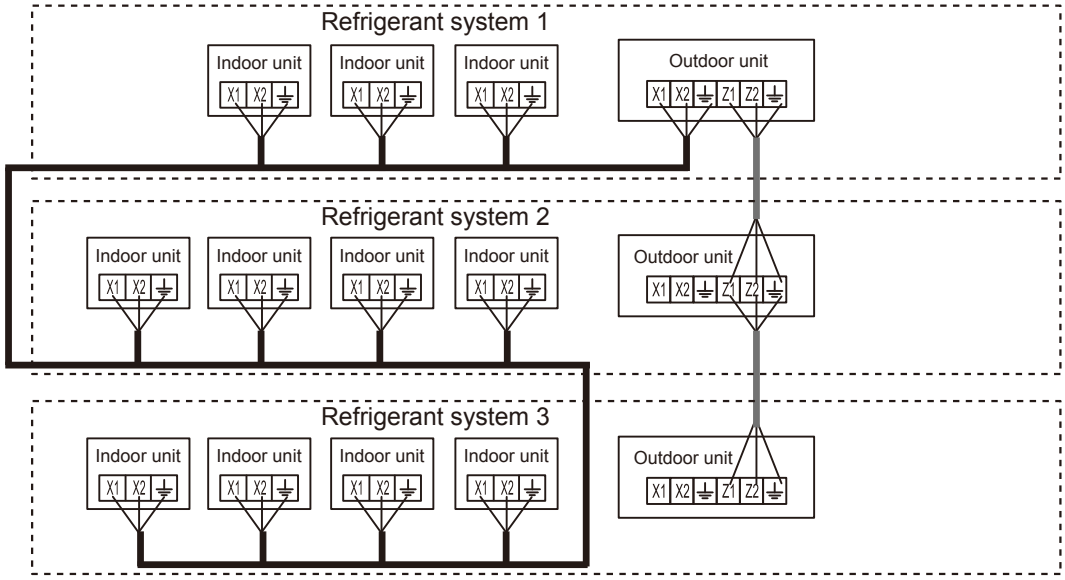


Fig. 4-2

- X1, X2 : Indoor units to outdoor unit
- Z1, Z2 : Connection for different refrigerant circuit of outdoor unit

● Step 3 : Check Transmission wiring rule

Confirm transmission wiring rule above.

SYSTEM DESIGN

● Step 4 : Confirm how to install Signal Amplifier

When Signal Amplifier is installed, network is divided into two network segments.

In a network segment (NS) divided by a Signal Amplifier, it has to keep the following facts.

1)Total transmission line length: MAX 500 m

AB+BC+BD < 500 m (Fig. 2)

2)The total number of units *1 : MAX 64

3)The number of terminal resistor : 1

*1: Refer detail Meaning of unit on 1-2 VRF NETWORK SYSTEM.

Fig. 1

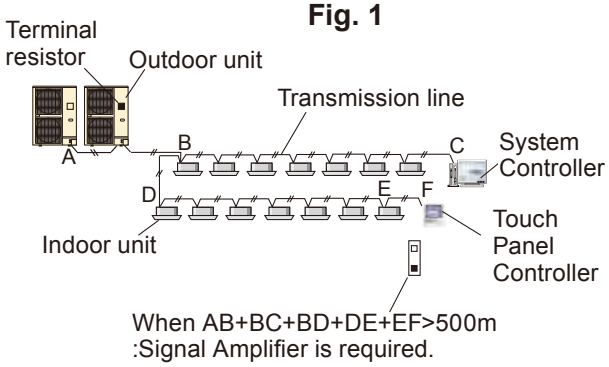
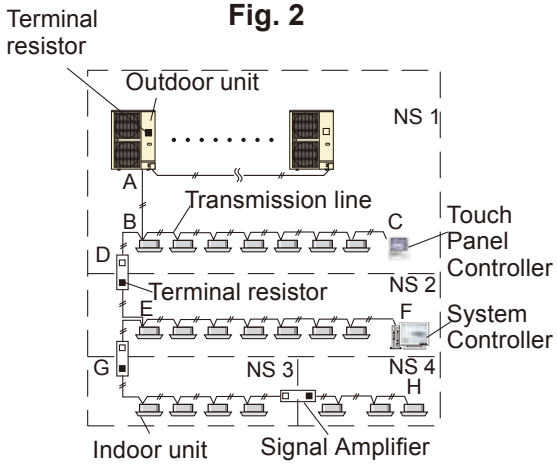


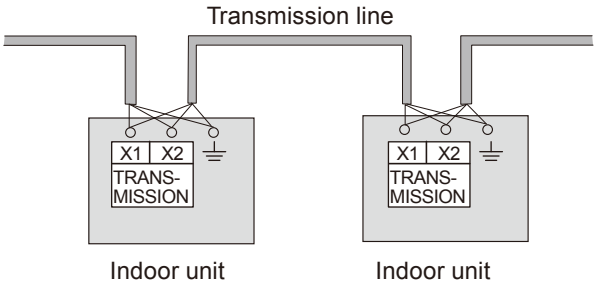
Fig. 2



● Step 5 : Confirm how to wire transmission line

Confirm how to connect transmission line between indoor units.

- Arrange so that there is one terminal resistor for each network segment.
- Always take a ground from both ends of transmission line.



● Step 6 : Confirm transmission wiring system

Check your transmission wiring system if the transmission wiring system is ensured wiring rule.

Check list

□ Total Transmission wiring length

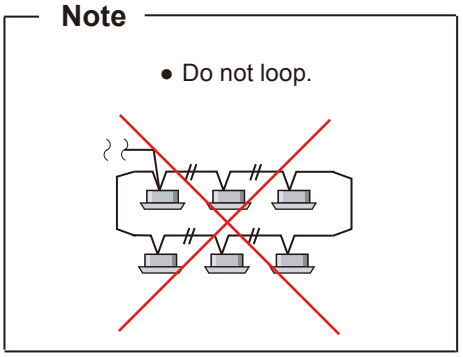
□ Total number of unit *1

*1: Refer detail Meaning of unit on 1-2 VRF NETWORK SYSTEM.

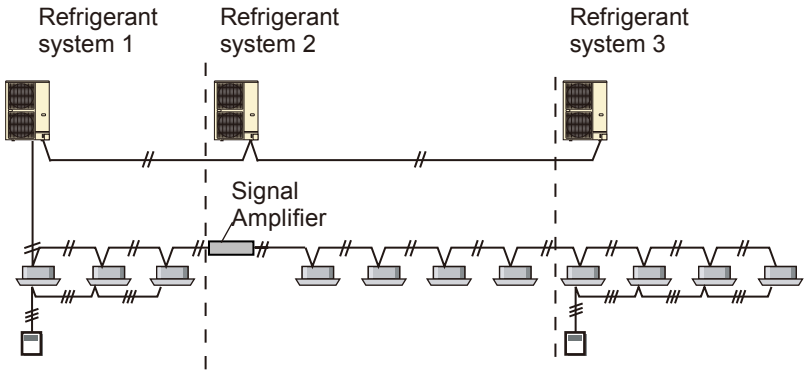
SYSTEM DESIGN

■ TRANSMISSION LINE SEPARATION RULES

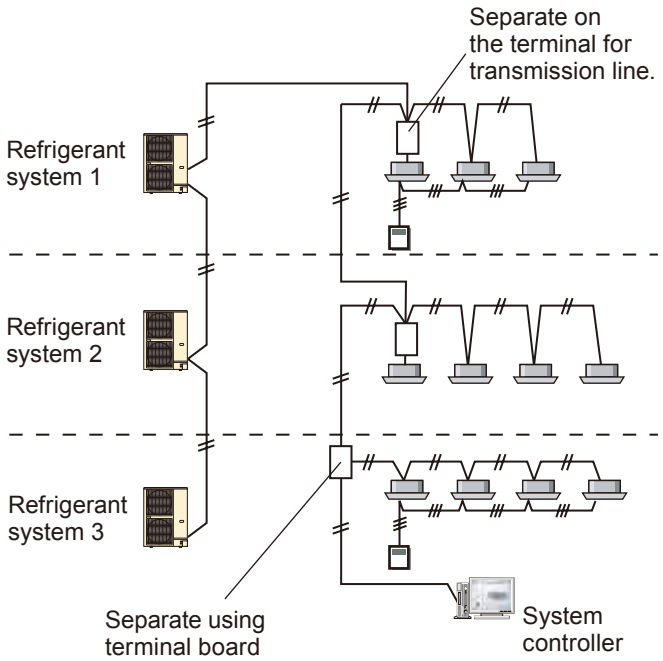
- The transmission line between indoor unit, outdoor unit and controllers can be connected by one cable.
- Terminal board available on the market or the ones inside the indoor unit or outdoor should be used for transmission line separation.
- Connection of three or more lines may cause poor communication for one terminal. In this case, please use a terminal box.



Example 1 : Connecting each outdoor and indoor unit with one connection wiring.

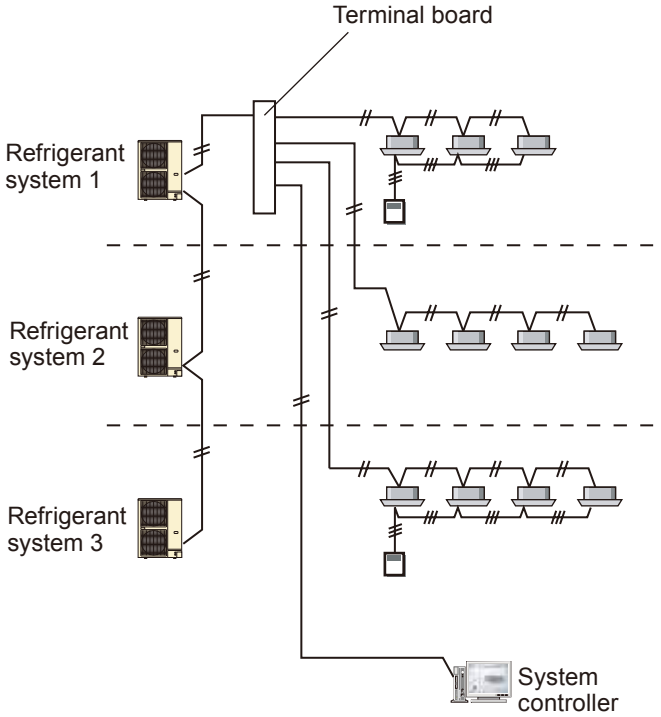


Example 2 : Separating transmission line.

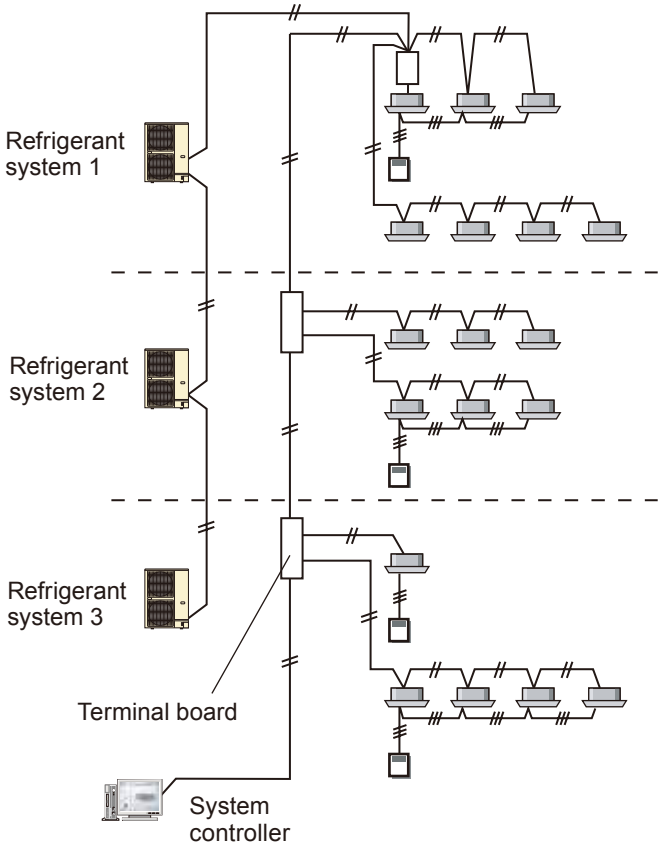


SYSTEM DESIGN

Example 3 : Separation wiring from one terminal board radially.



Example 4 : Combination of example 2 and 3

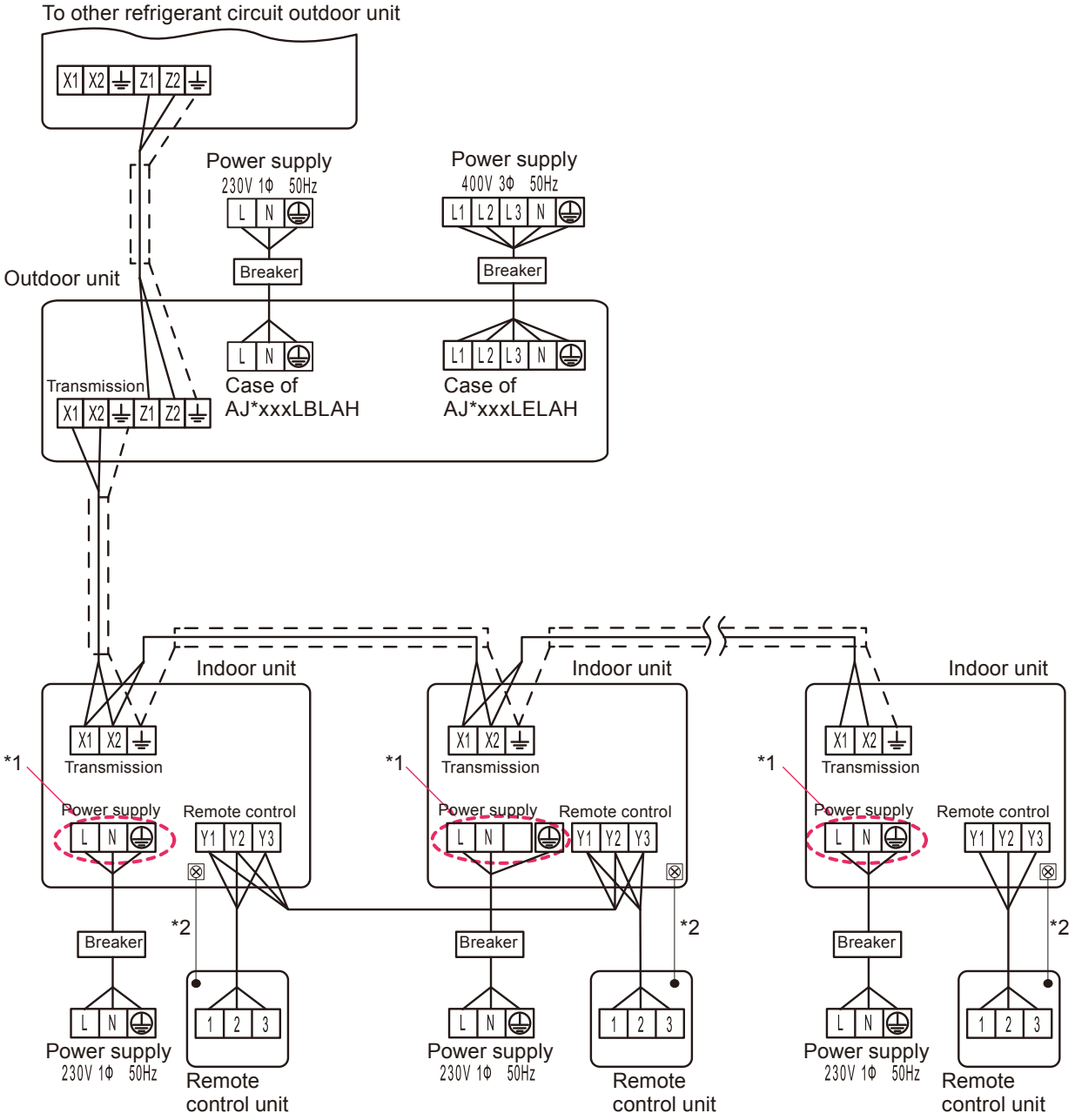


SYSTEM DESIGN

■ WIRING METHOD

Practical transmission wiring method is shown below.

Each terminal has to be connected the following rules.



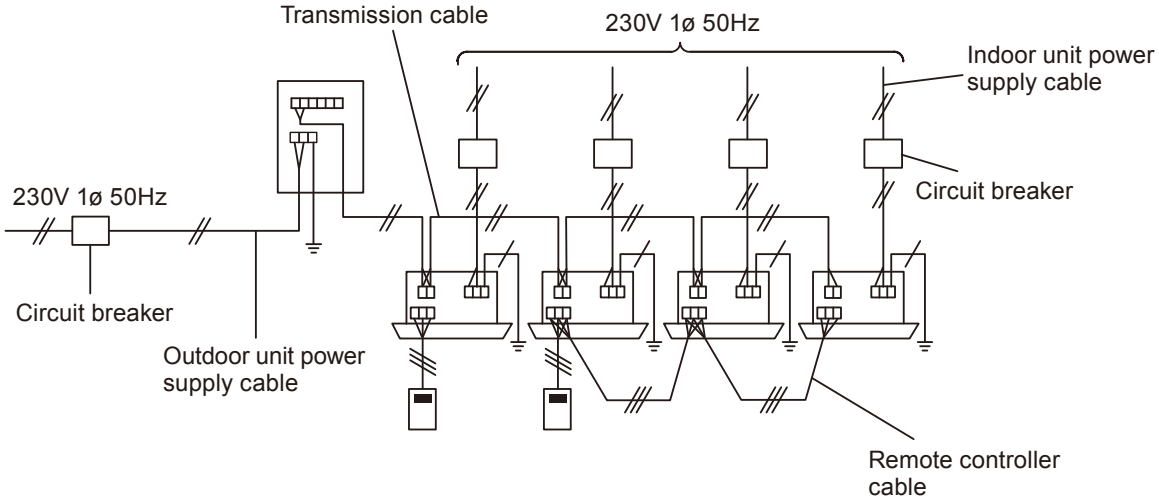
- X1, X2 : Indoor units to outdoor unit
- Z1, Z2 : Connection for different refrigerant circuit of outdoor unit

*1 : The number of power supply terminals is different depending on the indoor unit model.
For the wiring, refer to the indoor unit installation manual.

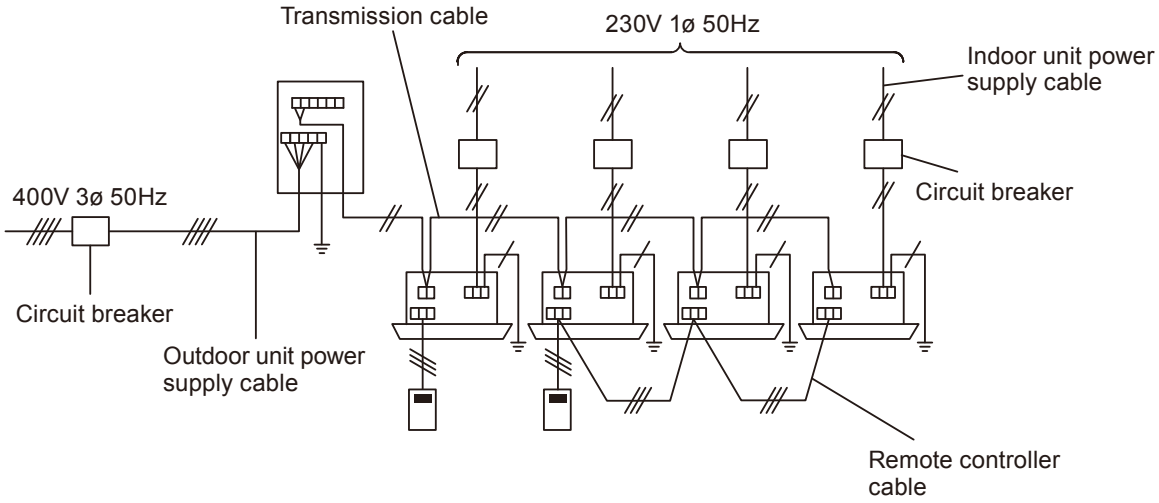
*2 : Ground the remote controller if it has a ground wire.

SYSTEM DESIGN

● Example 1: AJ*xxxLBLAH



● Example 2: AJ*xxxLELAH



SYSTEM DESIGN

4-4. CONTROLLER CABLE WIRING

■ WIRING SPECIFICATIONS

Model type	Connection to	Wire	Size	Specification
System Controller	USB Adaptor	USB cable	-	
System Controller Lite	USB Adaptor	USB cable	-	
Touch Panel Controller	Transmission line			Refer to 6-4-3
Central Remote Controller	Transmission line			Refer to 6-4-3
Group Remote Controller	Network Convertor	Remote controller cable	0.33mm^2	Shielded, Polar 3core
Wired Remote Controller (UTY-RNR∗Z2) *2	Indoor unit	Remote controller cable	0.33mm^2 to 1.25mm^2	Sheathed, Non-polar 2core, Twisted pair *1
Wired Remote Controller (UTY-RLR∗) *2	Indoor unit			
Simple Remote Controller (UTY-RSR*, UTY-RHR∗)	Indoor unit			
Wired Remote Controller (UTY-RNK∗)	Indoor unit		0.33mm^2	Sheathed PVC cable Polar 3core *1
Simple Remote Controller (UTY-RSK∗, UTY-RHK∗)	Indoor unit			
External Switch Controller (UTY-TERX)	Indoor unit	Remote controller cable	0.33mm^2 to 1.25mm^2	Sheathed, Non-polar 2core, Twisted pair *1
	External input		0.33mm^2	Shielded, Polar 2core, Twisted pair
IR Receiver Unit (UTB-*WC)	Indoor unit	Connection cable	-	(5m cable attached)
IR Receiver Unit (UTY-LRH*B1, UTY-LBHXD)	Indoor unit	Connection cable	-	
Human Sensor Kit (UTY-SHZXC)	Indoor unit	Connection cable	-	
Remote Sensor	Indoor unit	Connection cable	-	(10m cable attached)
EV Kit	Indoor unit	Connection cable	-	(5m cable attached)
Drain Pump Unit	Indoor unit	Connection cable	-	

*1 : Use shielded cable (field supplied) in accordance with the regional cable standard.

*2 : Refer to next page

⚠Caution

- Install in accordance with the regional standard.
- Never bundle the power supply cable and controller cable together. Bundling these cords together will cause misoperation.
- Always ground for shilded cable both end.
- For detail specification and connection, please refer to "Chapter 5 CONTROL SYSTEM".
- Controller might be required to connect power supply cable and transmission line. Use separate connection with other units for power suply cable.

SYSTEM DESIGN

■ WIRED REMOTE CONTROLLER (Touch panel) WIRING SPECIFICATION

NOTE: UTY-RNR*Z1, UTY-RNR* and UTY-RLR* only

Maximum connectable number of remote controllers by cable size and the length.

Cable size		Max.connectable number of remote controllers		
AWG	mm^2	*L ≤ 100 m	100 m < *L ≤ 250 m	250 m < *L ≤ 500 m
16	1.25	4	4	4
18	0.75 (1.25 > *S ≥ 0.75)	4	4	2
20	0.5 (0.75 > *S ≥ 0.5)	4	2	2
22	0.3 (0.5 > *S ≥ 0.3)	4	1	1

*L: Total cable length, *S: Cable size

SYSTEM DESIGN

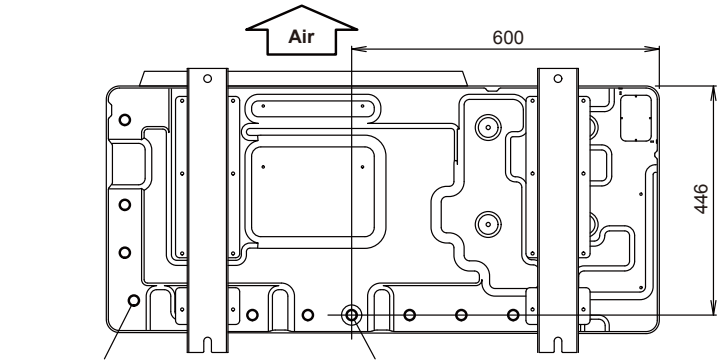
5. DRAIN CONNECTION

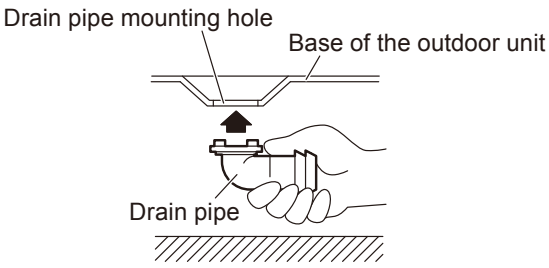
5-1. OUTDOOR UNIT

⚠CAUTION
Perform drain work in accordance with this Manual, and ensure that the drain water is properly drained. If the drain work is not carried out correctly, water may drip down from the unit, wetting the furniture.
When the outdoor temperature is 0 °C or less, do not use the accessory drain pipe and drain cap. If the drain pipe and drain cap are used, the drain water in the pipe may freeze in extremely cold weather.

- As the drain water flows out of the outdoor unit during heating operation, install the drain pipe and connect it to a commercial 16 mm hose.
- When installing the drain pipe, plug all the holes other than the drain pipe mounting hole in the bottom of the outdoor unit with drain cap so there is no water leakage.

Unit: mm





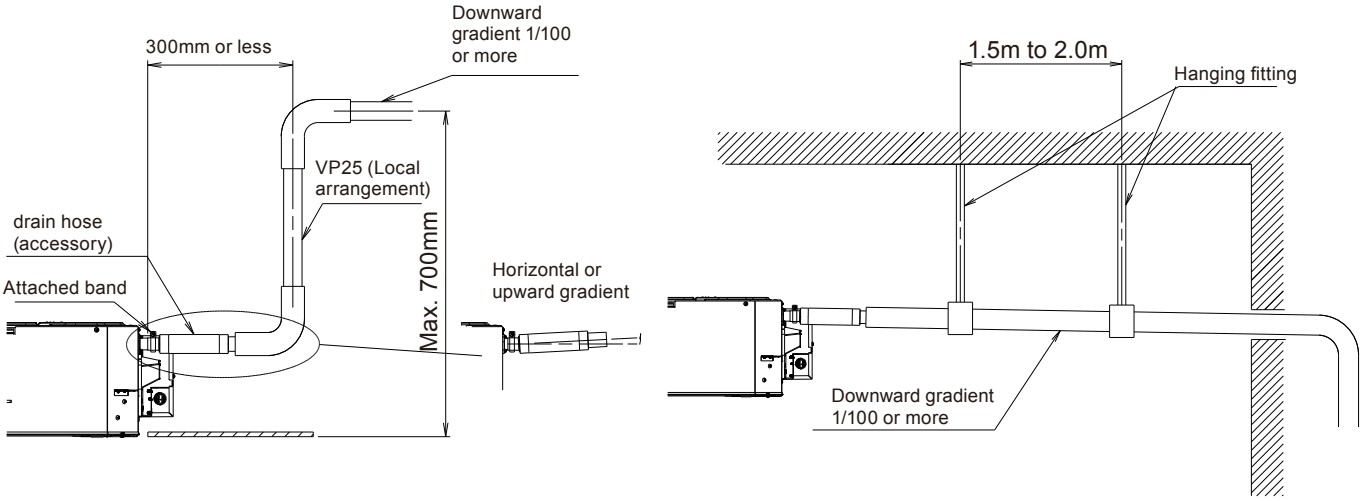
SYSTEM DESIGN

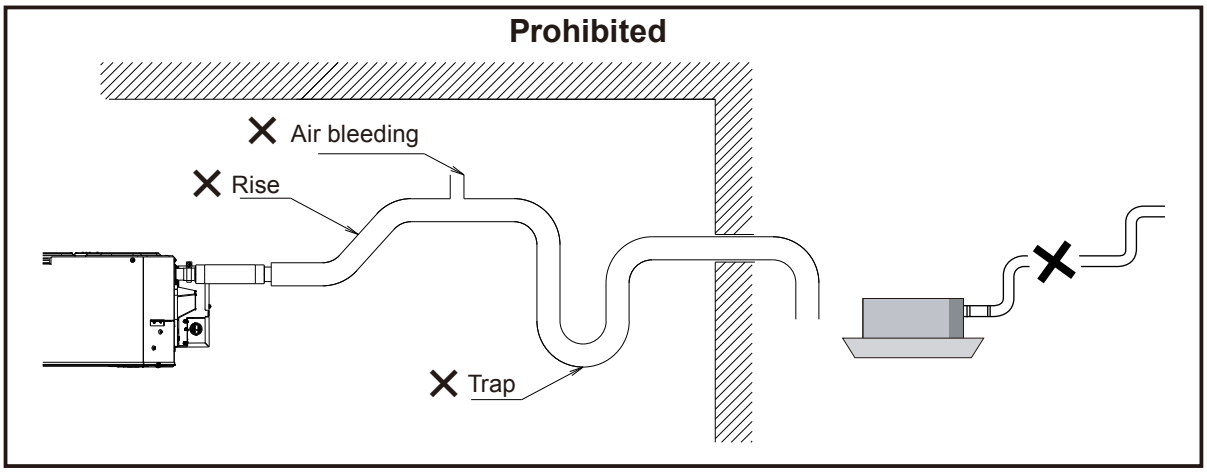
5-2. INDOOR UNIT

■ GENERAL RULES OF DRAIN PROCESS

- Install the drain pipe with downward gradient (1/100 or more) and so there are no rises in the pipe.
- Use general hard polyvinyl chloride pipe (VP25) and connect it with adhesive (polyvinyl chloride) so that there is no leakage.
- Support the drain pipe with supporters each 1.5 to 2m.
- Do not perfrom air bleeding.
- Always heat insulate the indoor side of the drain pipe.
- When connecting the drain hose to the indoor unit, use the accessory band. (Except compact wall mounted type and wall mounted type)

■ COMPACT CASSETTE TYPE





- Drain lift-up pipe restrictions:

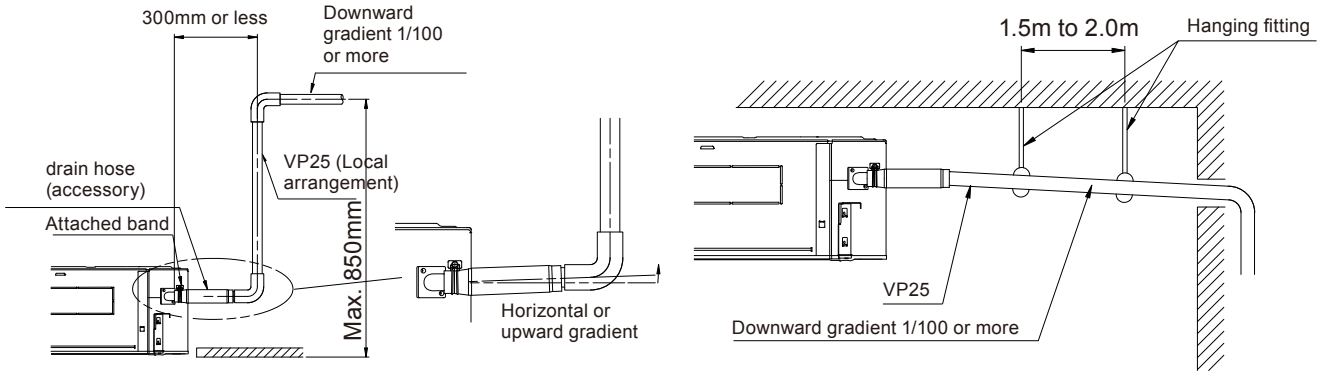
(1) Lift-up height ≤ 700mm (from ceiling)

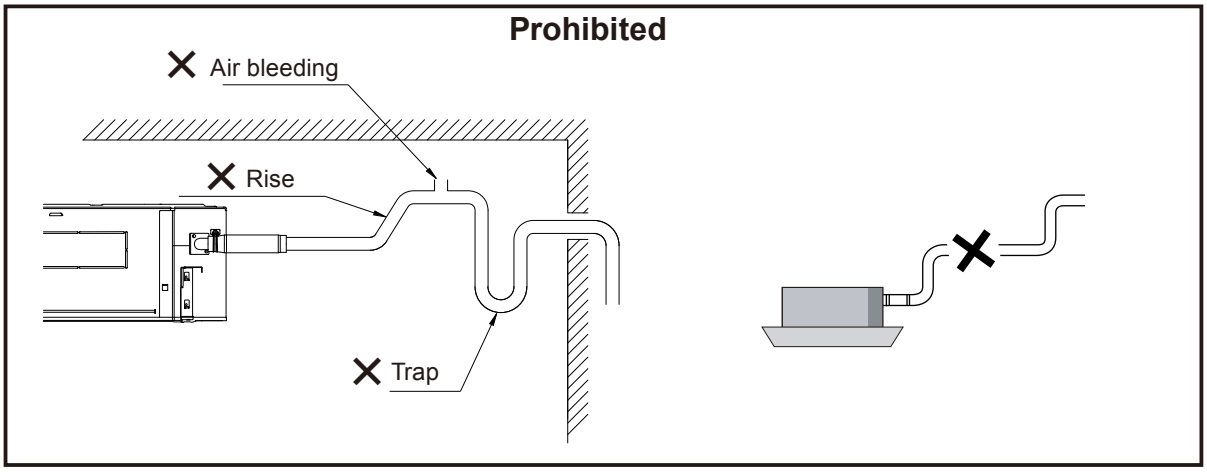
(2) Drain hose (pipe) length ≤ 300mm (between indoor unit and lift-up pipe)

- When a dimensions exceed the above restrictions will cause water leakage.

SYSTEM DESIGN

■ CASSETTE TYPE





- Drain lift-up pipe restrictions:

(1) Lift-up height ≤ 850mm (from ceiling)

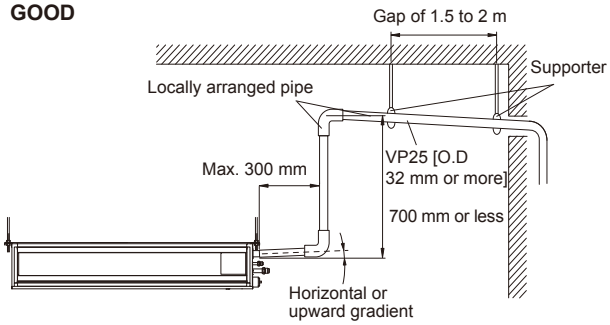
(2) Drain hose (pipe) length ≤ 300mm (between indoor unit and lift-up pipe)

- When a dimensions exceed the above restrictions will cause water leakage.

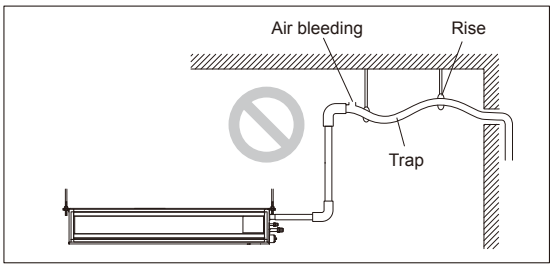
SYSTEM DESIGN

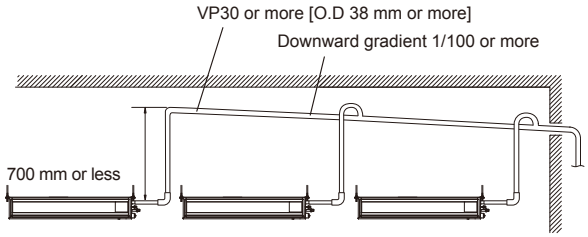
■ MINI DUCT TYPE

GOOD



PROHIBITED



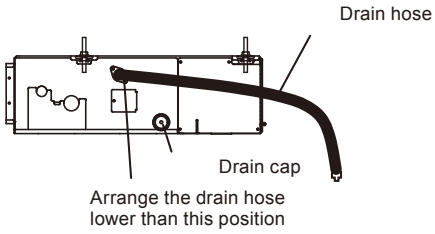


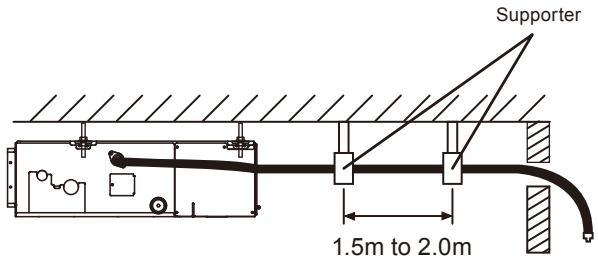
- Use general hard polyvinyl chloride pipe (VP25) [outside diameter 32 mm].
- Do not perform a rise, trap and air bleeding.
- Provide a downward gradient (1/100 or more).
- Provide supporters when long pipes are installed.
- Use an insulation material as needed, to prevent the pipes from freezing.
- Install the pipes in a way that allows for the removal of the control box.

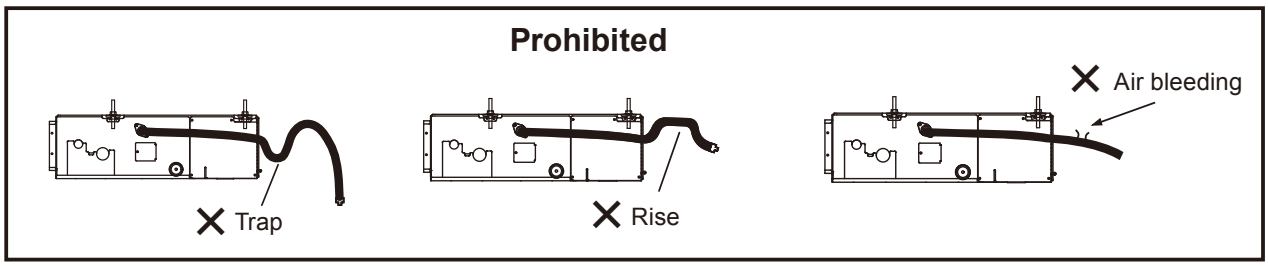
SYSTEM DESIGN

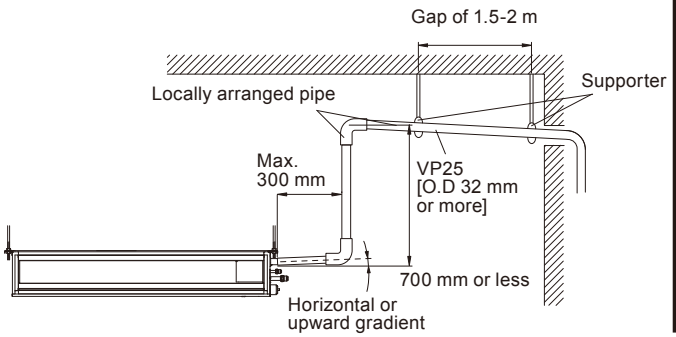
■ SLIM DUCT / SLIM CONCEALED FLOOR TYPE

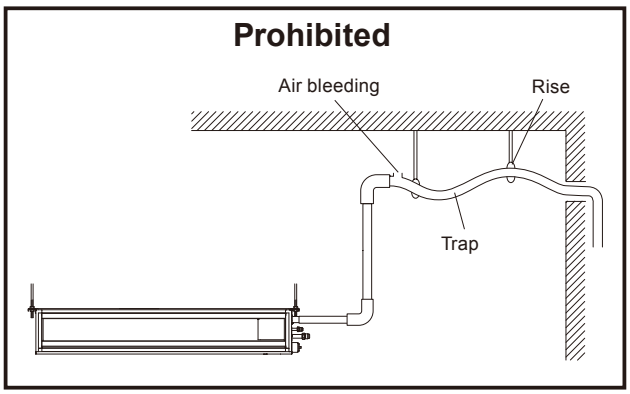
● Ceiling concealed setting



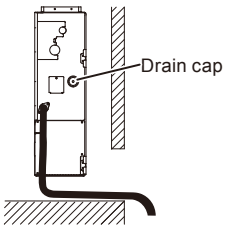


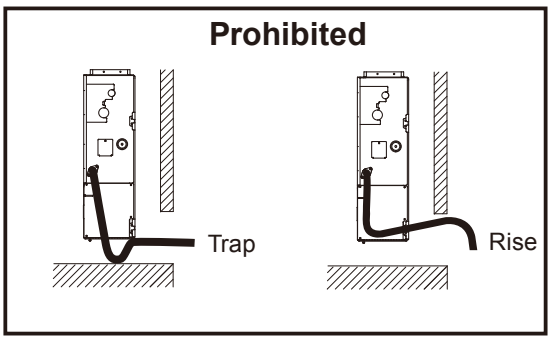






● Floor standing concealed setting

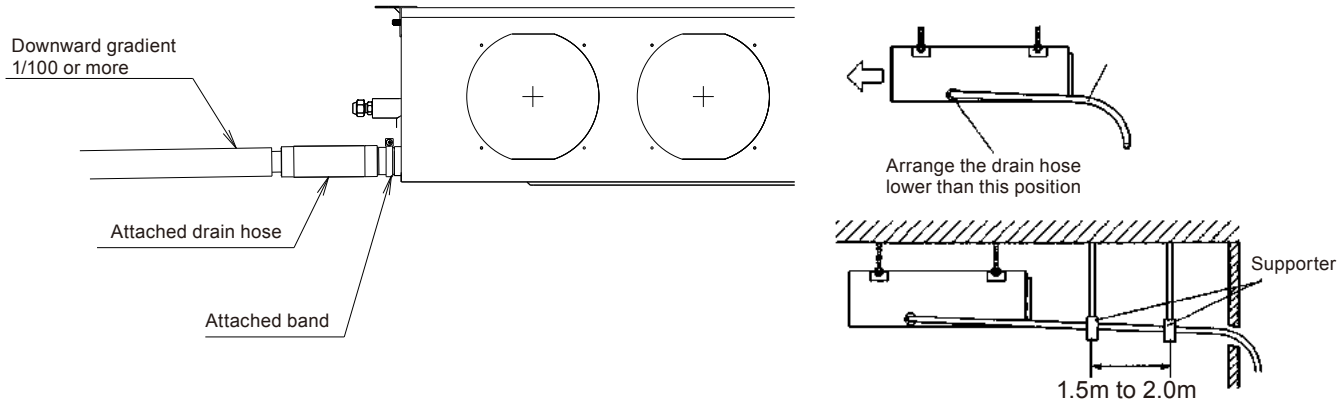


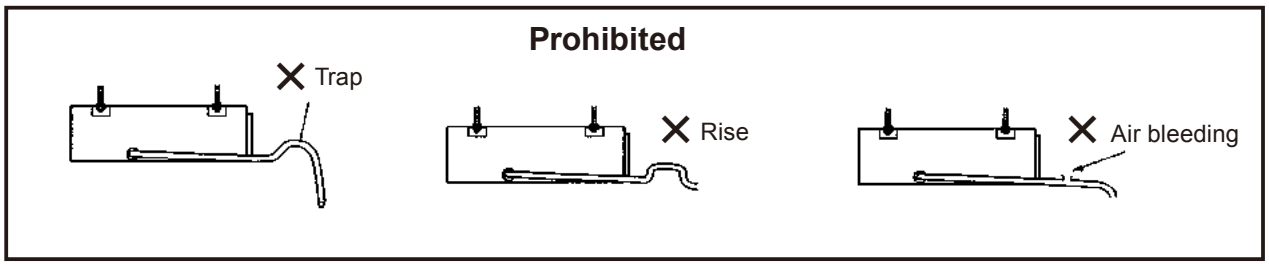


- Install the drain pipe with downward gradient (1/50 to1/100) and so there are no rises or traps in the pipe.
- Use general hard polyvinyl chloride pipe (VP25) [outside diameter 32 mm] and connect it with adhesive (polyvinyl chloride) so that there is no leakage.
- When the pipe is long. Install supporters.
- Do not perform air bleeding.
- Always heat insulate the indoor side of the drain pipe.

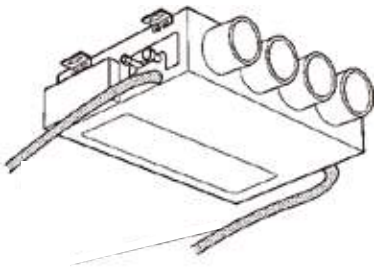
SYSTEM DESIGN

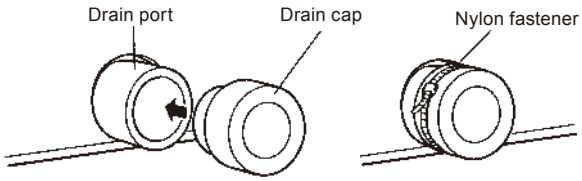
■ MEDIUM STATIC PRESSURE DUCT TYPE





There is a drain port on the left and right sides. Select the drain port to match the local conditions.





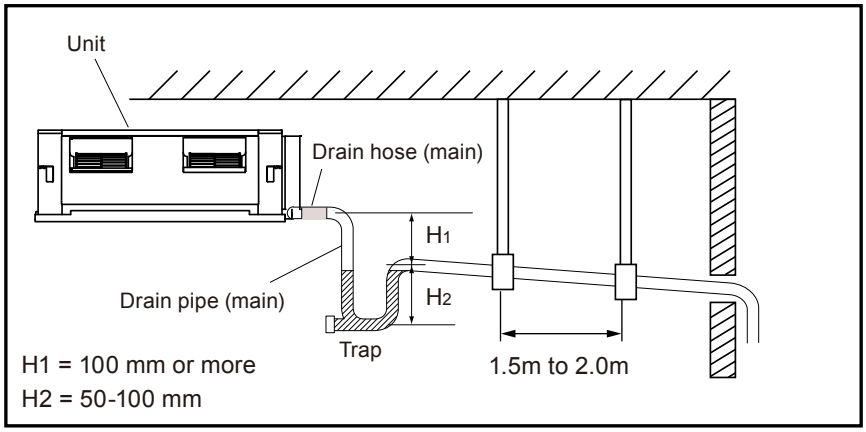
⚠CAUTION

- Always check that the drain cap is installed to the unused drain port and is fastened with the nylon fastener.
- If the drain cap is not installed, or is not sufficiently fastened by the nylon fastener, water may drip during the cooling operation.

SYSTEM DESIGN

■ HIGH STATIC PRESSURE DUCT TYPE

● Main drain pipe

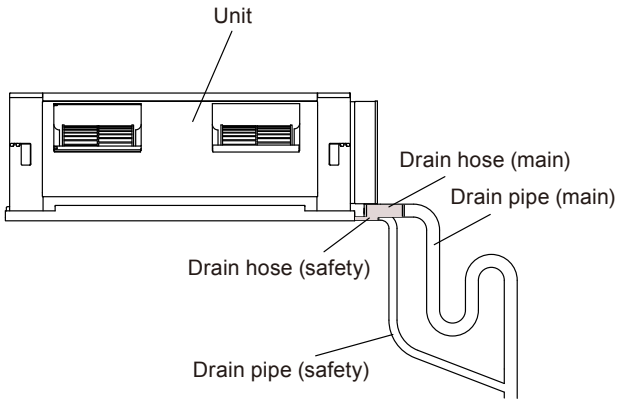


- Be sure to provide a drain trap for each indoor units.
- A trap will have no effect if positioned after the flows from multiple indoor units have joined together.
- The position of the installed drain hose should have a downward gradient of (1/100 or more).
- Make sure that the drain hose is installed without rises.
- Make the trap near to the indoor unit, Position the trap in a location where it can be cleaned.

● Safety drain pipe

There is no need to provide a trap for the safety drain pipe. If the safety drain pipe is connected to the main drain pipe, make the connection below the trap on the main drain pipe.

Once installation is complete, check the flow of the drain water.

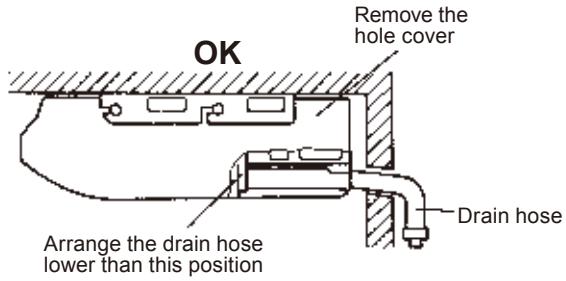


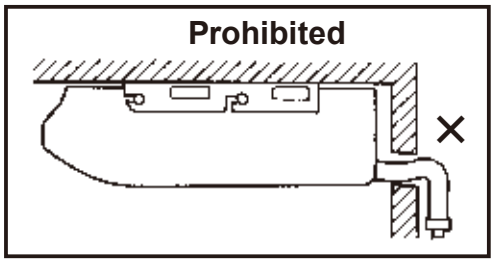
SYSTEM DESIGN

SYSTEM DESIGN

■ FLOOR / CEILING TYPE

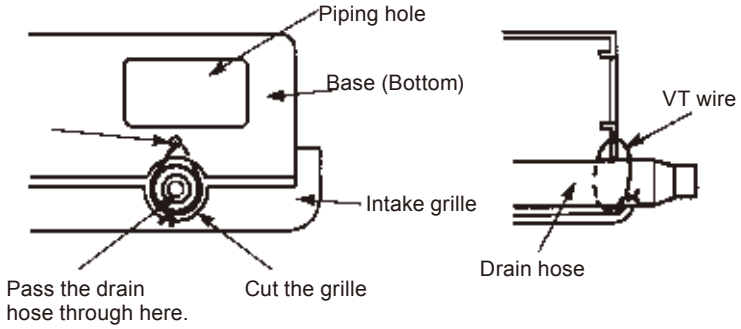
● Under ceiling setting



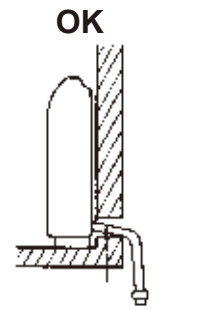


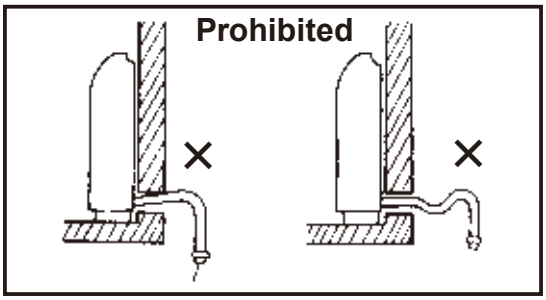
When drain hose is arranged backward.

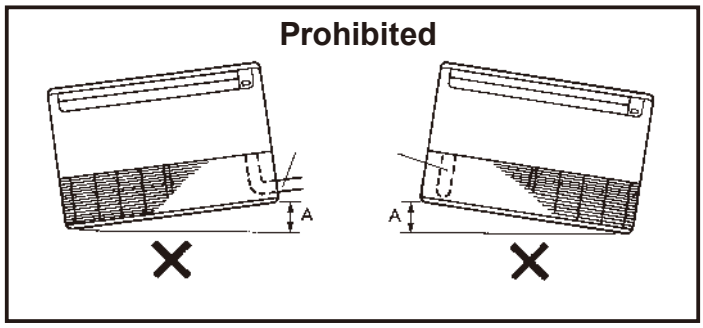
Secure the drain hose with the VT wire.



● Floor console setting



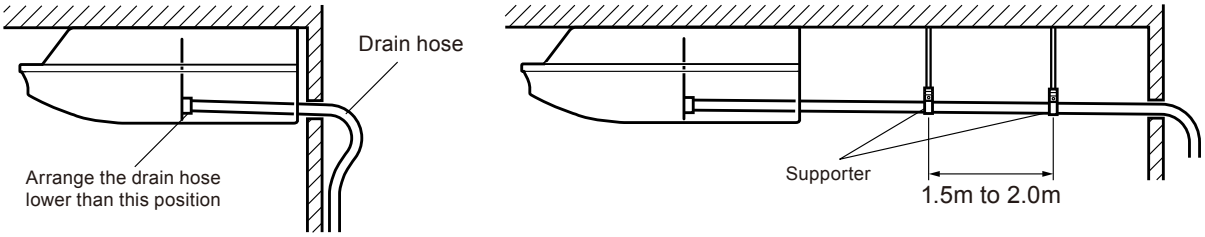


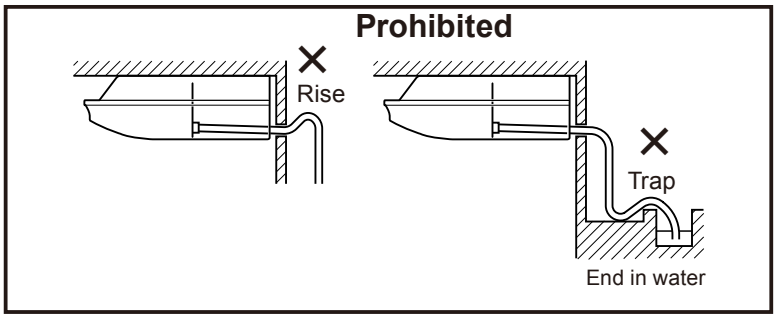


- Do not install the unit so that the drain hose side is too high.
- Height A should be less than 5mm.

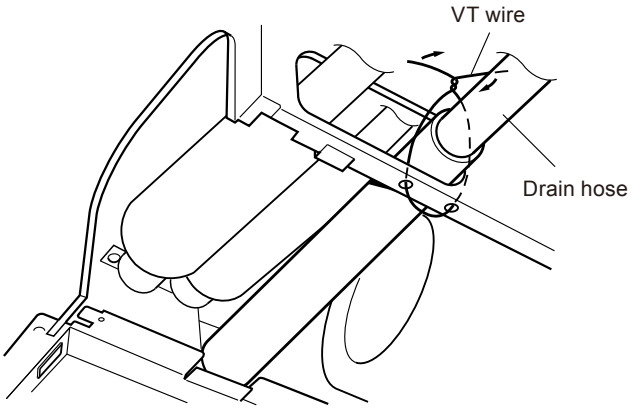
SYSTEM DESIGN

■ CEILING TYPE





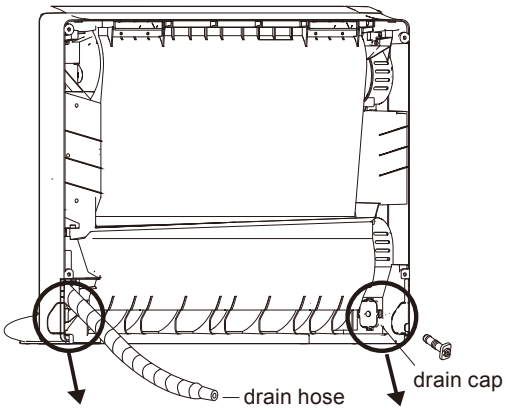
Fasten the drain pipe with VT wire so that the pipe slopes correctly within the indoor unit .



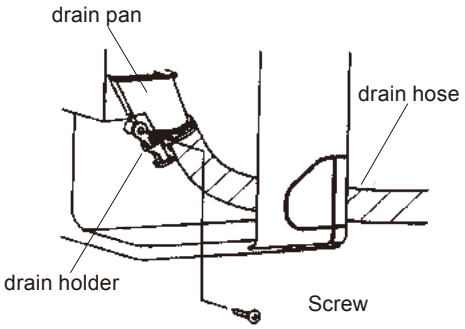
Indoor unit (rear view)

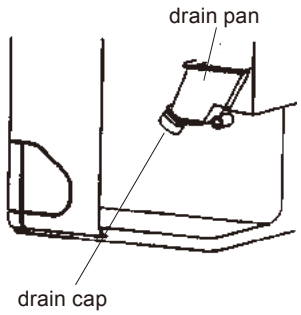
SYSTEM DESIGN

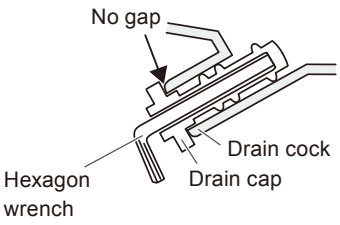
■ COMPACT FLOOR TYPE



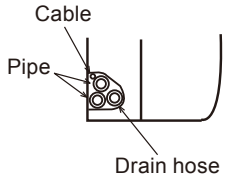
The drain hose can be connected at either side of the indoor unit.



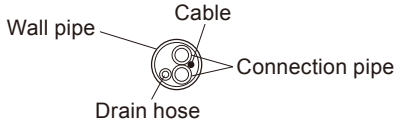


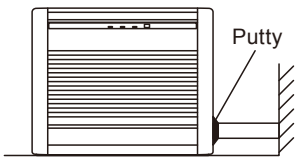


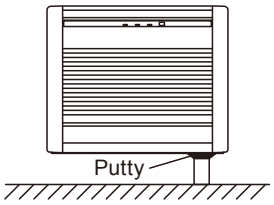
Left piping



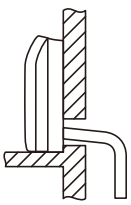
For connection from the left rear



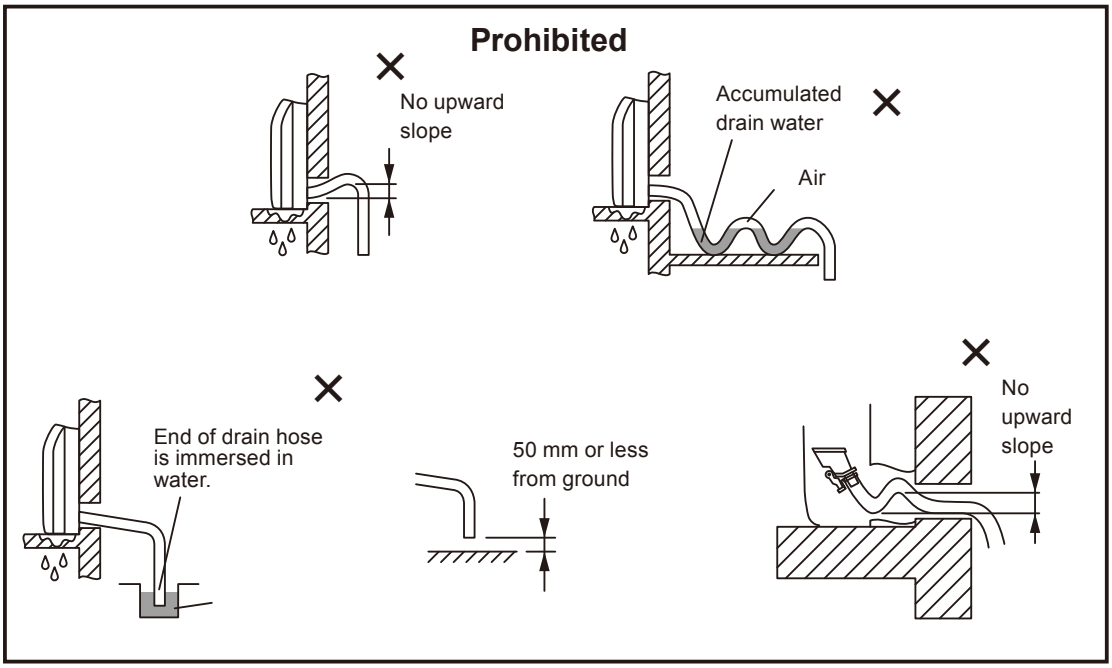




OK

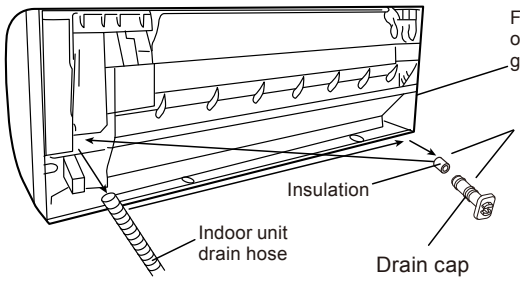


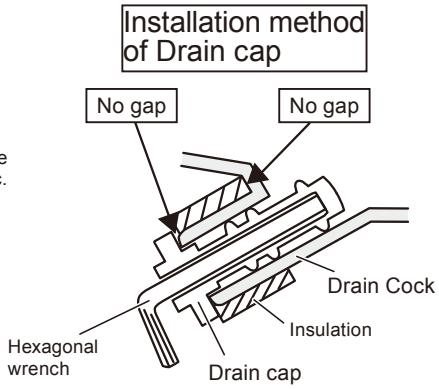
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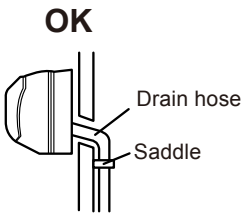


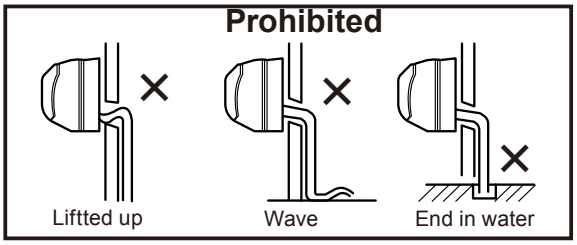
SYSTEM DESIGN

■ WALL MOUNTED TYPE (004-009, 030, 034, 12, 14 Models)

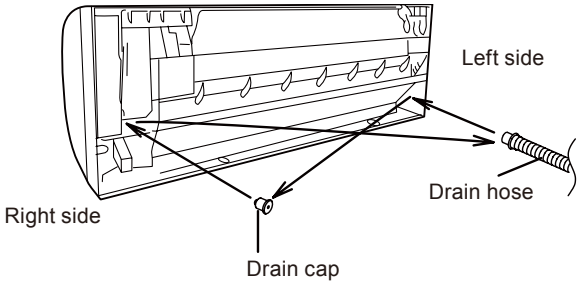


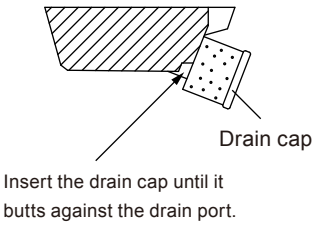


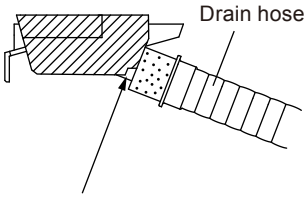


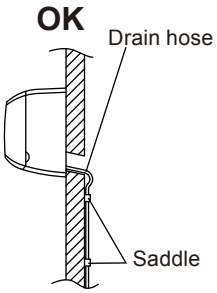


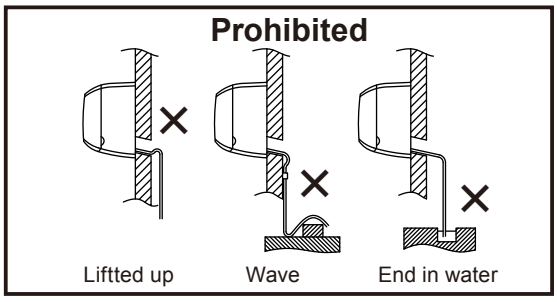
■ WALL MOUNTED TYPE (18, 24 Models)







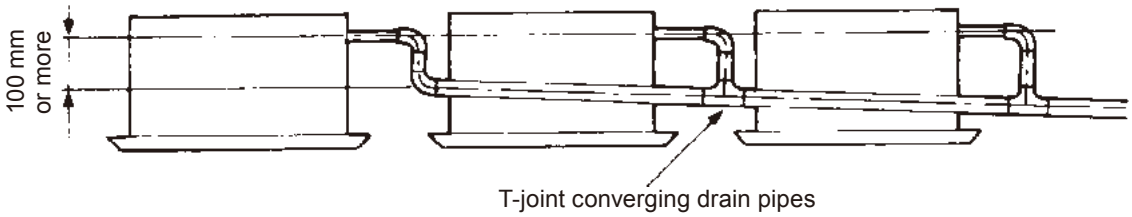


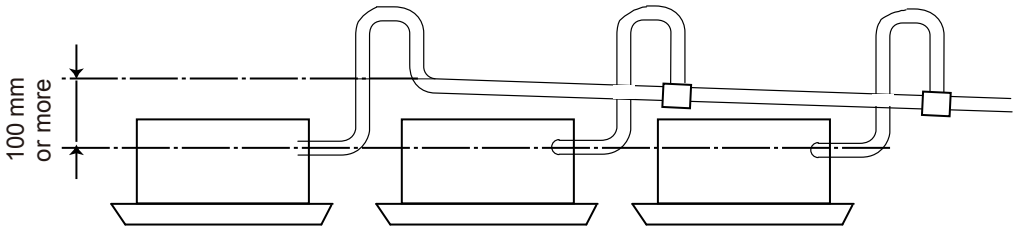


SYSTEM DESIGN

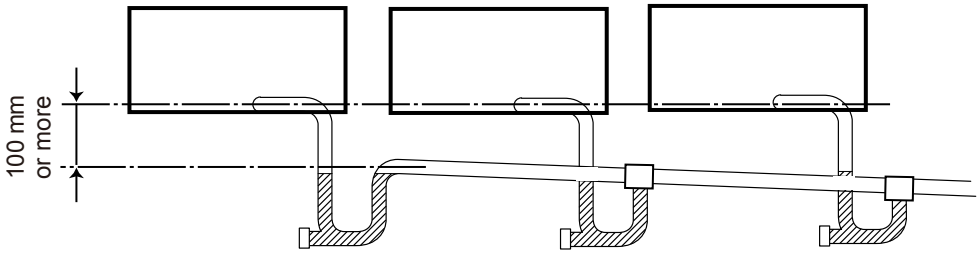
■ CENTRAL DRAIN PROCESS

When converging multiple drain pipes , install according to the procedure shown below.

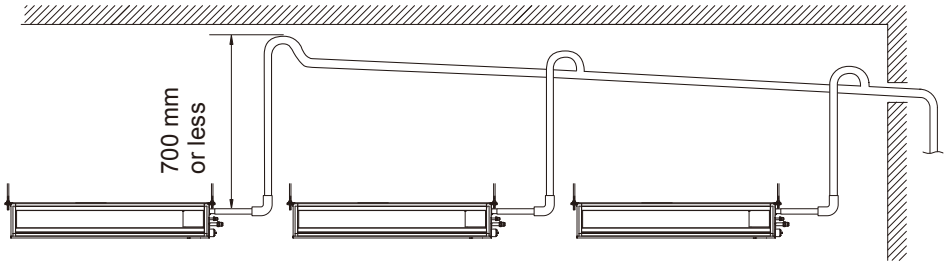




For High static pressure duct type



For Slim duct type

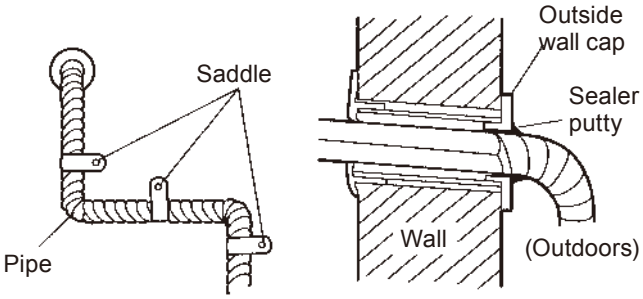


Select converging drain pipes whose diameter is suitable for the operating capacity of the unit.

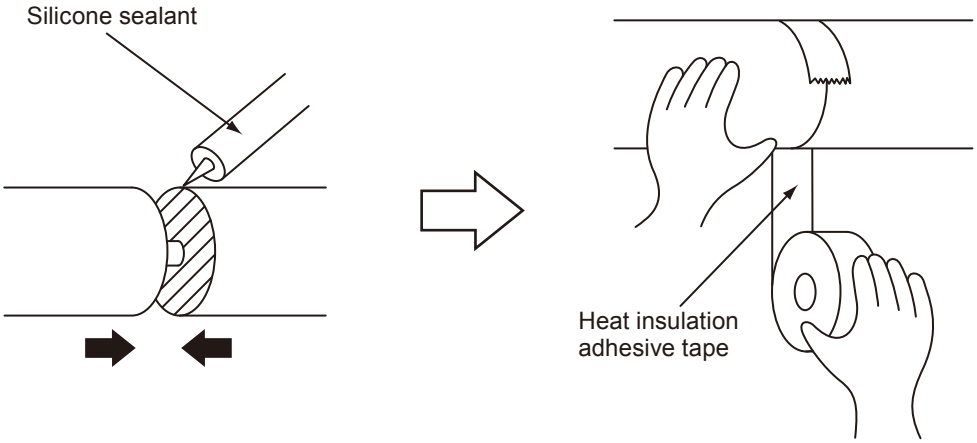
SYSTEM DESIGN

■ DRAIN INSULATION

- Please confirm water flows into Drain pan of the indoor unit, and drain is done normally when the connection of Drain hose is completed.
- Please check whether there is water leak part in the Drain piping.
- Please insulate it from heat by the heat insulator of enough thickness so that there is no dewy when the confirmation ends.
- Fix the drain pipe on to the wall with saddle.



- After put out Drain hose from the wall, please cover the space with the putty etc.



- Be sure to coat the entire end surface.

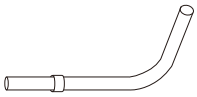
If there is a gap it could cause condensation

SYSTEM DESIGN

6. STANDARD ACCESSORIES

6-1. OUTDOOR UNIT

The following installation parts are supplied. Use them as required.
Do not discard any accessories until the installation work has been completed.

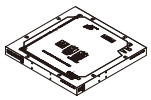
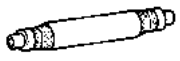
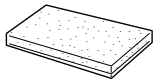
Name and shape	Q'ty	Application
Specifications manual 	1	
Installation manual 	1	
Drain cap 	9	For outdoor unit drain piping work
Drain pipe 	1	For outdoor unit drain piping work
Joint pipe A 	1 (090/108 model only)	For connecting gas pipe (L type)
Joint pipe B 	1 (090/108 model only)	For connecting gas pipe (Straight type)
Joint pipe C 	1 (090 model only)	For connecting liquid pipe (Pipe reducer)
Push mount cable tie 	2	For binding transmission cable
Grommet edging	2	For power supply cable and connection cable installation. Attach to the knockout hole.

SYSTEM DESIGN

6-2. INDOOR UNIT

■ COMPACT CASSETTE TYPE

INDOOR UNIT ACCESSORIES

Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Cable tie (Large) 	4	For fixing the connection pipe (Large and Small)
Cable tie (Medium) 	2	For transmission and remote controller cable binding.
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Gas pipe)
Special nut A (Large flange) 	4	For installing indoor unit
Special nut B (Small flange) 	4	For installing indoor unit
Template (Carton top) 	1	For ceiling openings cutting Also used as packing
Drain hose 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain hose insulation 	1	For installing drain pipe

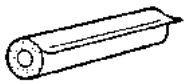
CASSETTE GRILLE ACCESSORIES

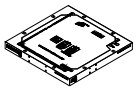
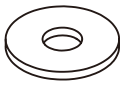
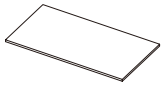
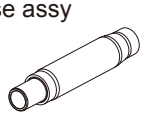
Name and shape	Q'ty	Application
Connector cover 	1	For covering connector
Tapping screw (M5 × 12mm) 	4	For mounting cassette grille
Tapping screw (M4 × 12mm) 	1	For mounting connector cover

SYSTEM DESIGN

SYSTEM DESIGN

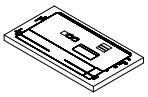
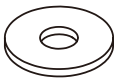
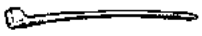
■ CASSETTE TYPE

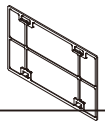
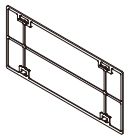
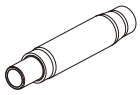
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Cable tie (Large) 	4	For fixing the connection pipe (Large and Small)
Cable tie (Medium) 	2	For transmission and remote controller cable binding.
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Gas pipe)

Name and shape	Q'ty	Application
Template (Carton top) 	1	For installing indoor unit.
Washer 	8	For installing indoor unit
Insulation 	1	For installing drain pipe
Drain hose assy 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain pipe insulation 	1	For installing drain pipe

SYSTEM DESIGN

■ MINI DUCT TYPE

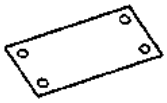
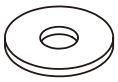
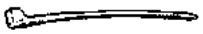
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Template (Carton top) 	1	For ceiling openings cutting Also used as packing
Washer 	8	For installing indoor unit
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Large pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Small pipe)
Cable tie 	Medium 2	For power supply and transmission and remote control cable binding.
	Large 4	For fixing the coupler heat insulation.

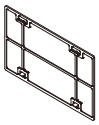
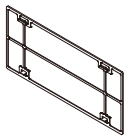
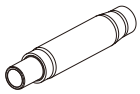
Name and shape	Q'ty	Application
Filter (Small) 	2 (AR07/ 09/12/14 /24)	
Filter (Big) 	2 (AR18)	
	1 (AR24)	
Drain hose 	1	For installing drain pipe
Band 	1	For installing drain hose
Drain hose insulation B 	1	Insulates the drain hose

SYSTEM DESIGN

SYSTEM DESIGN

■ SLIM DUCT / SLIM CONCEALED FLOOR TYPE

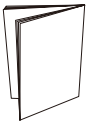
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Installation template 	1	For positioning the indoor unit
Washer 	8	For installing indoor unit
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Large pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Small pipe)
Cable tie 	Medium 2	For transmission and remote controller cable binding.
	Large 4	For fixing the coupler heat insulation.

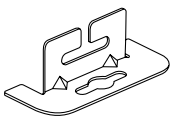
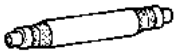
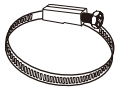
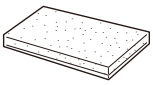
Name and shape	Q'ty	Application
Filter (Small) 	2 (AR04/07/09/12/14/24)	
Filter (Big) 	2 (AR18)	
	1 (AR24)	
Drain hose 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain hose insulation B 	1	Insulates the drain hose

SYSTEM DESIGN

SYSTEM DESIGN

■ MEDIUM STATIC PRESSURE DUCT TYPE

Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Cable tie (Large) 	5	For fixing the connection pipe (Large and Small) and drain cap
Cable tie (Medium) 	3	For transmission and remote controller cable binding.
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Gas pipe)

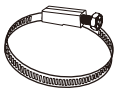
Name and shape	Q'ty	Application
Special nut A (Large flange) 	4	For suspending the indoor unit from ceiling
Special nut B (Small flange) 	4	
Hanger 	4	For suspending the indoor unit from ceiling
Drain hose 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain hose insulation 	2	Insulates the drain hose and drain cap

SYSTEM DESIGN

SYSTEM DESIGN

■ HIGH STATIC PRESSURE DUCT TYPE

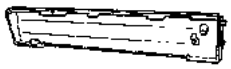
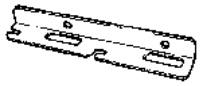
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Cable tie (Large) 	4	For fixing the coupler heat insulation
Cable tie (Medium) 	2	For transmission and remote controller cable binding.
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Gas pipe)

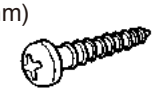
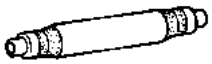
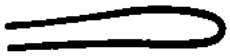
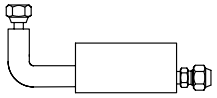
Name and shape	Q'ty	Application
Special nut A (Large flange) 	4	For suspending the indoor unit from ceiling
Special nut B (Small flange) 	4	
Drain hose 	2	For installing drain pipe
Hose band 	2	For installing drain hose
Drain hose insulation 	2	For installing drain hose

SYSTEM DESIGN

SYSTEM DESIGN

■ FLOOR / CEILING TYPE

Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Cover plate (left) 	1	
Cover plate (right) 	1	
Tapping screw (M4 x 10mm) 	2	
Installation template 	1	For positioning the indoor unit For under ceiling type
Bracket (left) 	1	For suspending the indoor unit from ceiling
Bracket (right) 	1	
Special nut 	4	
Wall bracket 	2	For suspending the indoor unit on the wall

Name and shape	Q'ty	Application
Tapping screw (M4 x 20mm) 	6	For fixing the wall bracket
Coupler heat insulation 	2	For indoor side pipe joint
Cable tie 	Large 4	For fixing the coupler heat insulation
	Medium 2	For transmission and remote controller cable binding
Drain hose 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain hose insulation 	1	Adhesive type 100 x 220 (mm)
VT wire 	1	For fixing the drain hose L=280 (mm)
Insulation (pipe) 	1	Adhesive type 160 x 110 (mm)
Silencer pipe 	1	Connect the silencer pipe to the small (Liquid) pipe

OPTIONAL PARTS

Name and shape	Part No.	Application
Auxiliary pipe 	9374714025	For indoor side pipe joint (For AB18, AB24)

SYSTEM DESIGN

SYSTEM DESIGN

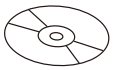
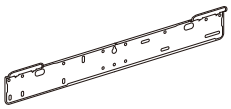
■ CEILING TYPE

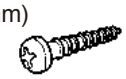
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Drain hose 	1	For installing drain pipe
Hose band 	1	For installing drain hose
Drain hose insulation 	1	Adhesive type 220 x 100 (mm)
VT wire 	1	For fixing the drain hose L=280 (mm)
Coupler heat insulation (Large) 	2	For indoor side pipe joint (Gas pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)

Name and shape	Q'ty	Application
Cable tie 	Extra large 4	For fixing the coupler heat insulation
	Large 2	
	Medium 2	For transmission and remote controller cable binding
Special nut A (Large flange) 	4	For installing indoor unit
Special nut B (Small flange) 	4	For installing indoor unit
Installation template 	1	For positioning the indoor unit
Auxiliary pipe assembly 	1	For connecting the piping

SYSTEM DESIGN

■ COMPACT FLOOR TYPE

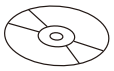
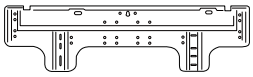
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Operating Manual (CD-ROM) 	1	
Wall hook bracket 	1	For indoor unit installation

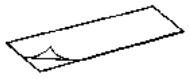
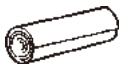
Name and shape	Q'ty	Application
Tapping screw (M4 x 25mm) 	8	For wall hook bracket installation
Cloth tape 	1	For indoor unit installation
Push mount cable tie 	1	For transmission and remote controller cable binding
Air cleaning filter 	2	For installation, refer to the “CLEANING AND CARE” in the operating manual.

SYSTEM DESIGN

■ WALL MOUNTED TYPE

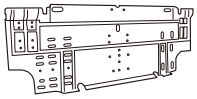
● Models : AS*A004, 007, 009GTAH, AS*E004, 007, 009GTAH

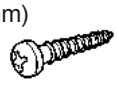
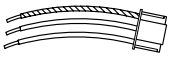
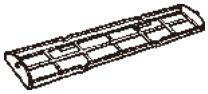
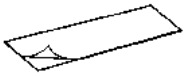
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Operating Manual (CD-ROM) 	1	
Wall hook bracket 	1	For indoor unit installation

Name and shape	Q'ty	Application
Tapping screw (M4 x 25mm) 	5	For wall hook bracket installation
Drain hose Insulation 	1	For drain hose installation
Cloth tape 	1	For indoor unit installation

■ WALL MOUNTED TYPE

● Models : AS*A12, 14GACH, AS*E12, 14GACH

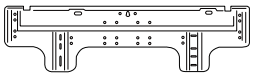
Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Wall hook bracket 	1	For indoor unit installation
Cable tie 	1	For remote control cable binding
Cloth tape 	1	For indoor unit installation

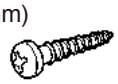
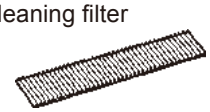
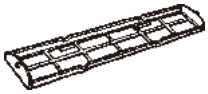
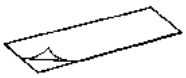
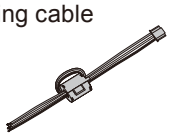
Name and shape	Q'ty	Application
Tapping screw (M4 x 25mm) 	8	For wall hook bracket installation
Connecting cable 	1	For wired remote controller installation
Air cleaning filter 	2	For installation, refer to the "CLEANING AND CARE" in the operating manual.
Air cleaning filter frame 	2	
Seal A 	1	For indoor unit installation

SYSTEM DESIGN

■ WALL MOUNTED TYPE

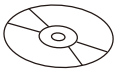
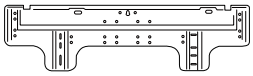
● Models : AS*A18, 24GBCH

Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Wall hook bracket 	1	For indoor unit installation
Cable tie 	1	For transmission and remote controller cable binding
Cloth tape 	1	For indoor unit installation

Name and shape	Q'ty	Application
Tapping screw (M4 x 25mm) 	8	For wall hook bracket installation
Air cleaning filter 	2	For installation, refer to the "CLEANING AND CARE" in the operating manual.
Air cleaning filter frame 	2	
Drain hose Insulation 	1	For drain hose installation
Connecting cable 	1	For wired remote controller installation

■ WALL MOUNTED TYPE

● Models : AS*A30, 34GTAH

Name and shape	Q'ty	Application
Operating manual 	1	
Installation manual 	1	
Wall hook bracket 	1	
Wall hook bracket 	1	For indoor unit installation
Tapping screw (M4 x 25mm) 	8	For wall hook bracket installation

Name and shape	Q'ty	Application
Drain hose Insulation 	1	For installing drain hose
Cloth tape 	1	For indoor unit installation
Cable tie 	2	For transmission and remote controller cable binding
Air cleaning filter 	2	For installation, refer to the "CLEANING AND CARE" in the operating manual.
Air cleaning filter frame 	2	

SYSTEM DESIGN

Refrigerant R410A
INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

7. FUNCTION SETTING

DTV_VR2E018E_12--CHAPTER07
2017.03.31

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1. SYSTEM SETTING

1-1. SYSTEM TYPE SETTING

Set the DIP switch to the corresponding system type as shown in the table.

Do not use a nonexistent switch combination.

Note
＊Perform the system setting and address setting , before turning on the power.
＊For the air conditioner to operate properly, perform the correct setting.

■ OUTDOOR UNIT SETTING

(◆. . . Factory Setting)

<step 1>

Set the outdoor unit address setting

(This function is available VR-II, V-II and V-III series)

SETTING FOR MASTER UNIT & SLAVE UNIT.

Set the DIP SW SET3-1 & 3-2
Master : SET3-1 OFF, SET3-2 OFF ◆
Slave 1 : SET3-1 OFF, SET3-2 ON
Slave 2 : SET3-1 ON , SET3-2 OFF

<step 2>

Set the number of slave unit

(This function is available VR-II, V-II and V-III series)

SETTING FOR MASTER UNIT ONLY.

Set the DIP SW SET3-3 & 3-4
1 : SET3-3 OFF, SET3-4 OFF : Master x 1 ◆
2 : SET3-3 OFF, SET3-4 ON : Master x 1 Slave x 1
3 : SET3-3 ON , SET3-4 OFF : Mater x 1, Slave x 2

<step 3>

Set the number of outdoor units installed

(This function is available VR-II, V-II and V-III series)

SETTING FOR MASTER UNIT & SLAVE UNIT.

Set the DIP SW SET5-1 & 5-2
1 : SET5-1 OFF, SET5-2 OFF : Number of 1 ◆
2 : SET5-1 OFF, SET5-2 ON : Number of 2
3 : SET5-1 ON , SET5-2 OFF : Number of 3

<step 4>

Refrigerant circuit address setting

SETTING FOR MASTER UNIT & SLAVE UNIT.

Set the Rotary SW REF AD x10 & x1
See the switch detail for "1-2. Address setting"

<step 5>

Terminal resistor setting

SETTING FOR MASTER UNIT & SLAVE UNIT.

Set the DIP SW SET5-4
See the switch detail for "1-6. Terminal resistor setting"

<step 6>

Indoor unit connection check

(This function is available J-III, J-II and J-IIS series)

See the detail for "1-7 Indoor unit connection check"

<step 7>

Function setting

FUNCTION SETTING

■ INDOOR UNIT SETTING

Please refer to the correct SW position for 2. Function Setting.

<step 1>
Refrigerant circuit address setting
Set the Rotary SW REF AD x10 & x1
See the detail for "1-2. Address setting"

<step 2>
Indoor unit address setting
Set the Rotary SW IU AD x10 & x1
See the detail for "1-2. Address setting"

<step 3>
Remote controller address setting
Set the Rotary SW RC AD
See the detail for "1-2. Address setting"

<step 4>
Function setting

■ RB UNIT SETTING

Please refer to the correct SW position for 2. Function Setting.

(This function is available VR-II series)

<step 1>
Refrigerant circuit address setting
Set the Rotary SW REF AD x10 & x1
See the detail for "1-2. Address setting"

<step 2>
RB unit address setting
Set the Rotary SW RB AD x10 & x1
See the detail for "1-2. Address setting"

■ REMOTE CONTROLLER SETTING

In case of Wired remote controller, Simple remote controller.

Dual remote control setting
Set the SW 2 of DIP Switch 1
See the detail for "2. Function setting"

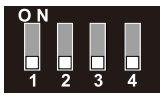
∗ Other than above unit , Please refer the 2. Function setting and installation manual.

FUNCTION SETTING

1-2. ADDRESS SETTING

For this system, each address should be preset before operation.
Please refer following table for outdoor unit, indoor unit, RB unit and each remote controller.

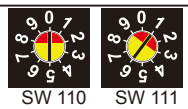
■ KINDS OF ADDRESS AND SETTING RANGE

UNIT		SETTING	SETTING RANGE	TYPE OF SWITCH	REMARKS
Outdoor unit	A	Refrigerant circuit address	00 ~ 99	Setting example 01 	Arbitrary numbers can be set in range of 00-99
	B	Outdoor unit address *1	0 ~ 2	 SET3	DIP SW SET3-1 DIP SW SET3-2
	C	Number of slave unit *1	0 ~ 2		DIP SW SET3-3 DIP SW SET3-4 (Master unit only)
	L	Number of outdoor units installed *1	1 ~ 3	 SET5	DIP SW SET5-1 DIP SW SET5-2
		Terminal resistor	ON/OFF		DIP SW SET5-4 See the setting method 1-6
Indoor unit	D	Refrigerant circuit address	00 ~ 99	**■ Manual address setting** Setting example 01 	Arbitrary numbers can be set in range of 00-99
				■ Wireless R.C. Set this switch to 00 at factory setting.	See the setting method 1-4-1
				■ Wired R.C. (3-wire type) Set this switch to 00 at factory setting.	See the setting method 1-4-2
				■ Simple R.C. Set this switch to 00 at factory setting.	See the setting method 1-4-3
				■ Wired R.C. (2-wire type) Set this switch to 00 at factory setting.	See the setting method 1-4-4
				■ Automatic address setting Set this switch to 00 at factory setting.	See the setting method 1-5-2
	E	Indoor unit address	00 ~ 63	**■ Manual address setting** Setting example 12 	Arbitrary numbers can be set in range of 00-63
				■ Wireless R.C. Set this switch to 00 at factory setting.	See the setting method 1-4-1
				■ Wired R.C. (3-wire type) Set this switch to 00 at factory setting.	See the setting method 1-4-2
				■ Simple R.C. Set this switch to 00 at factory setting.	See the setting method 1-4-3
				■ Wired R.C. (2-wire type) Set this switch to 00 at factory setting.	See the setting method 1-4-4
				■ Automatic address setting Set this switch to 00 at factory setting.	See the setting method 1-5-2
	F	Remote controller address	0 ~ 15	**■ Manual address setting** Setting example 10 	3-wire type R.C. can be set in range of 0-15
				■ Automatic address setting Set this switch to 0 at factory setting.	2-wire type only

*Set up after confirming the details of each unit.
*1: This function is available VR-II, V-II and V-III series

FUNCTION SETTING

■ KINDS OF ADDRESS AND SETTING RANGE

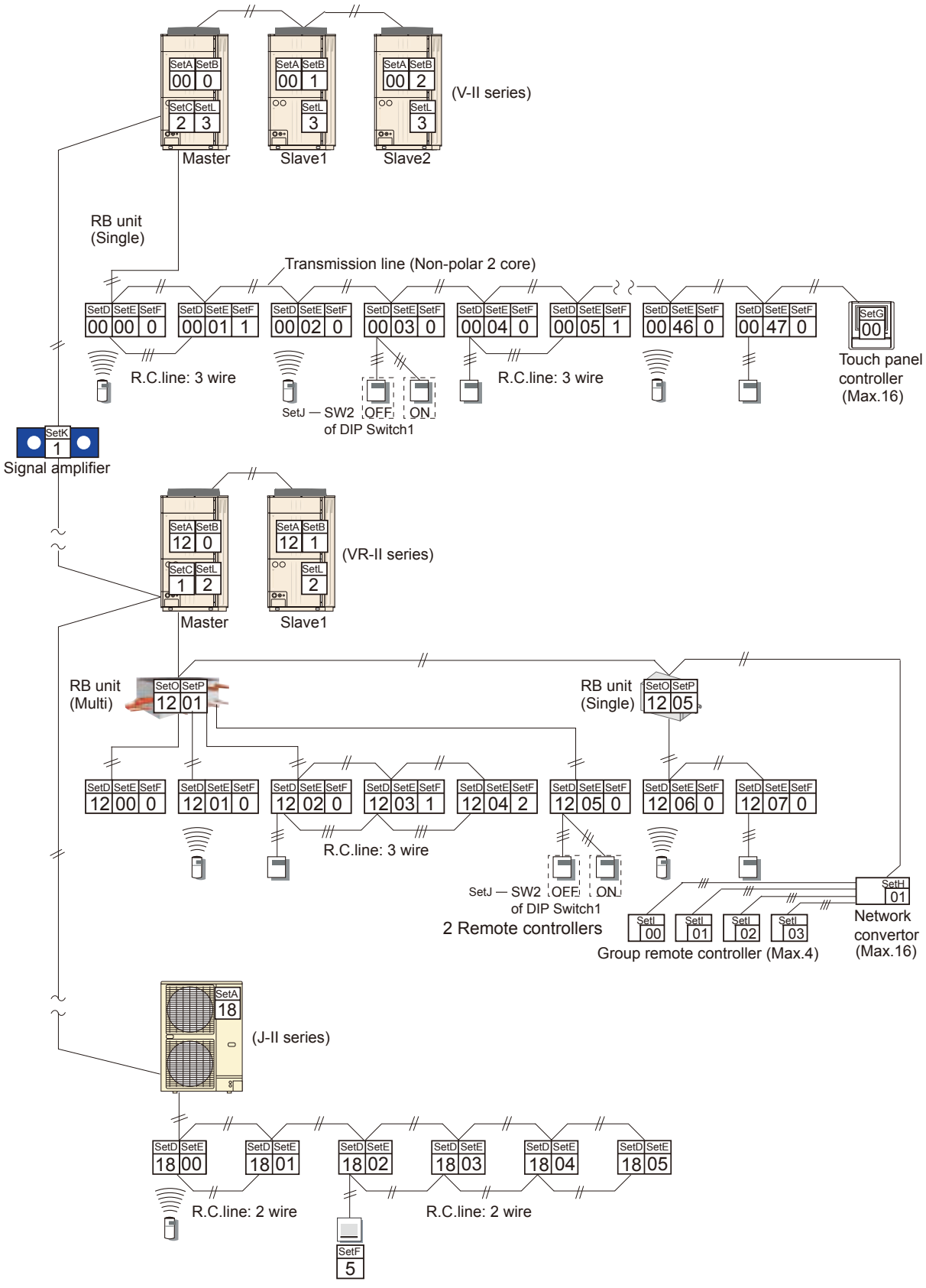
UNIT	SETTING		SETTING RANGE	TYPE OF SWITCH	REMARKS
RB unit	O	Refrigerant circuit address	00 ~ 99	**■ Manual address setting** Setting example 01  REF AD x10 REF AD x1	Arbitrary numbers can be set in range of 00-99
				■ Automatic address setting Set this switch to 00 at factory setting.	See the setting method 1-5-3.
	P	RB unit address	00 ~ 63	**■ Manual address setting** Setting example 12  RB AD x10 RB AD x1	Arbitrary numbers can be set in range of 00-63
				■ Automatic address setting Set this switch to 00 at factory setting.	See the setting method 1-5-3.
Touch panel controller	G	Controller / Convertor address	00 ~ 15 *1		See the setting method 2-12
Network convertor	H	Controller / Convertor address	00 ~ 15 *1	Setting example 01  SW 110 (10 digit) SW 111 (1 digit)	See the setting method 2-16, 2-17
		Refrigerant circuit address	00 ~ 99		
Group remote controller	I	Group remote controller address	00 ~ 03		See the setting method 2-11
Wired, simple remote controller (3-wire type)	J	Dual remote control	ON/OFF	SW 2 of DIP Switch 1	See the setting method 2-10
Signal amplifier	K	Signal amplifier address	1 ~ 8	**■ Manual address setting**	See the setting method 2-18
				■ Automatic address setting Set to 1 at factory setting.	See the setting method 1-5-1
Modbus convertor	Q	Controller / Convertor address	00 ~ 15 *1		See the setting method 2-19
Network convertor for LonWorks®	M				See the setting method 2-20
Central remote controller	N				See the setting method 2-13
Wired remote controller (2-wire type)	F	Remote controller address	0 ~ 15	**■ Automatic address setting**	See the setting method 2-14, 2-15
		Dual remote control	ON/OFF		

*Set up after confirming the details of each unit.

*1: The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller , Modbus convertor and Network convertor for LonWorks® is a maximum of 16.
Note: Address of the Touch panel controller, Central remote controller, Network convertor for Group remote controller, Modbus convertor and Network convertor for LonWorks® must not be same.

FUNCTION SETTING

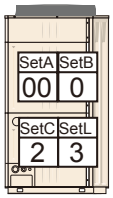
■ SETTING EXAMPLE



FUNCTION SETTING

■ SETTING EXAMPLE

● Outdoor unit setting



SetA: Refrigerant circuit address
(Rotary SW REF AD x10, x1)
SetB: Outdoor unit address
(DIP SW SET3-1, 3-2)
SetC: Number of slave unit
(DIP SW SET3-3, 3-4)
<Master unit only>
SetL: Number of outdoor units installed
(DIP SW SET5-1, 5-2)

● Touch panel controller setting

SetG: Controller address (Max.16)

● Network convertor setting

SetH: Convertor address
(for Group remote controller:Max.16)

Refrigerant circuit address
(for Single split AC:Max.100)

● Central remote controller setting

SetN: Controller address (Max.16)

● Group remote controller setting

SetI: Group remote controller address (Max.4)

● Signal amplifier setting

SetK: Signal amplifier address

● Indoor unit setting

SetD	SetE	SetF
63	06	0

SetD		SetE		SetF
Refrigerant circuit address		Indoor unit address		Remote controller address
REF AD X10	REF AD X1	IU AD X10	IU AD X1	RC AD

● RB unit setting

SetO	SetP
63	06

SetO		SetP	
Refrigerant circuit address		RB unit address	
REF AD X10	REF AD X1	RB AD X10	RB AD X1

● Wired, Simple remote controller (3-wire) setting

SetJ: Dual remote control
(SW2 of DIP Switch1)

● Network convertor for LonWorks® setting

SetM: Convertor address

● Wired remote controller (2-wire) setting

SetF: 0(fixed)

＊Instructions for setting up the address

1. The refrigerant circuit address of the indoor units, outdoor units and RB units can be set to arbitrary numbers in the range of 0 to 99.
2. The Indoor unit address and RB unit address can be set to arbitrary numbers in the range of 0 to 63.
3. In case of 3-wire type of R.C., set the remote controller address in the order of 0,1,2, . . . ,15.(Blank is not allowed)
4. In case of 2-wire type of R.C.(Automatic address setting), set the remote controller address in the 0.
5. Touch panel controller address can be set to arbitrary numbers in the range of 0 to 15.
6 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller , Modbus convertor and Network convertor for LonWorks® is a maximum of 16.
7. Keep Address No. of Touch Panel Controller from overlapping the controller (Central remote controller, Network convertor for Group remote controller and Network convertor for LonWorks®) connected to the same VRF Network system.

FUNCTION SETTING

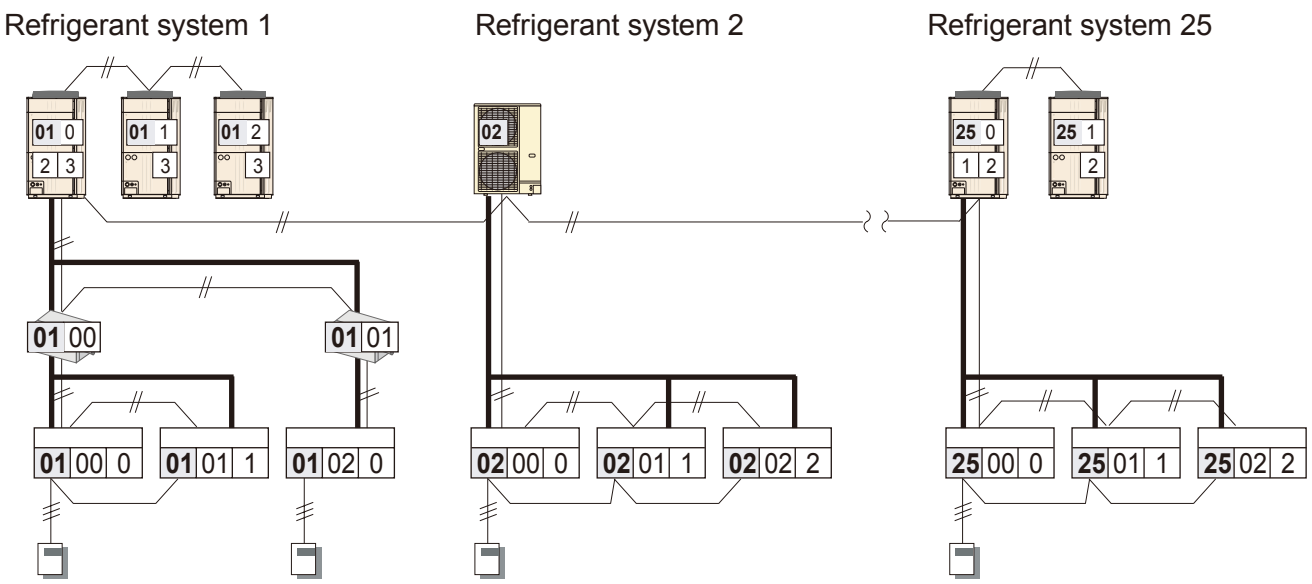
1-3. MANUAL ADDRESS SETTING METHOD

■ ADDRESS SETTING DESCRIPTION

● Refrigerant circuit address (Set A, Set D and Set O)

In case of 2 or more refrigerant system in VRF network system, each refrigerant system should be set an exclusive refrigerant circuit address.

Refrigerant system : It means same refrigerant circuit which has connected between outdoor unit and indoor unit by piping.



● Example

Outdoor unit (Set A), Indoor unit (Set D),
RB unit (Set O)

Refrigerant circuit address	Rotary SW setting	
	REF AD x10	REF AD x1
01	 0	 1
11	 1	 1
25	 2	 5
50	 5	 0

Setting range 00 - 99(Arbitrary numbers can be set)

All the indoor unit, all the RB unit and outdoor unit in same refrigerant circuit should be set same address.

FUNCTION SETTING

● Outdoor unit address (Set B)

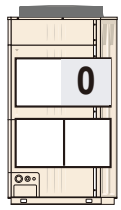
This function is available VR-II, V-II and V-III series.

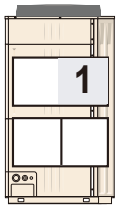
Please set the outdoor unit address for each outdoor unit.

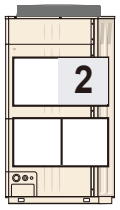
Outdoor unit is preset "0" , at factory setting.

So that 1 outdoor unit system is not required for the field setting.

In case of 2 or 3 outdoor units connected in same refrigerant circuit, set the slave unit which has installed farther from master unit to Slave2 setting "2".







	Master	Slave1	Slave2
Outdoor unit address	0	1	2
	SW SET3-1 OFF SW SET3-2 OFF	SW SET3-1 OFF SW SET3-2 ON	SW SET3-1 ON SW SET3-2 OFF

Outdoor unit address		0 ◆	1	2
DIP SW	SET3-1	OFF	OFF	ON
	SET3-2	OFF	ON	OFF

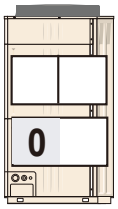
(◆. . . Factory Setting)

● Number of slave unit (Set C)

This function is available VR-II, V-II and V-III series.

(Set at Master unit PCB only)

Please set the number of slave unit on Master unit PCB.

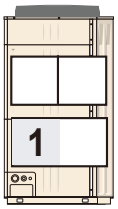


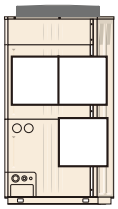
Number of slave unit

0

SW SET3-3 OFF
SW SET3-4 OFF

Master



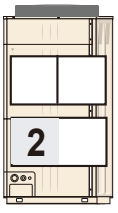


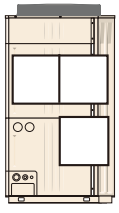
Number of slave unit

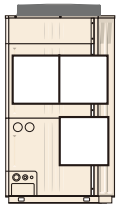
1

SW SET3-3 OFF
SW SET3-4 ON

Master **Slave 1**







Number of slave unit

2

SW SET3-3 ON
SW SET3-4 OFF

Master **Slave 1** **Slave 2**

Number of slave unit		0 ◆	1	2
DIP SW	SET3-3	OFF	OFF	ON
	SET3-4	OFF	ON	OFF

(◆. . . Factory Setting)

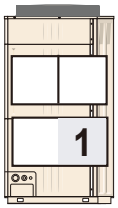
FUNCTION SETTING

● Number of outdoor units installed (Set L)

This function is available VR-II, V-II and V-III series.

The number of outdoor units installed in one refrigerant system must be set.

Set for all outdoor units.



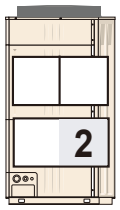
Master

Number of outdoor unit

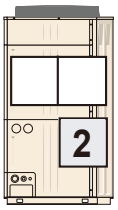
1

SW SET5-1 OFF

SW SET5-2 OFF



Master



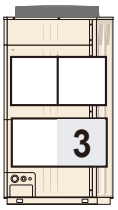
Slave 1

Number of outdoor unit

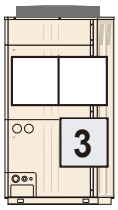
2

SW SET5-1 OFF

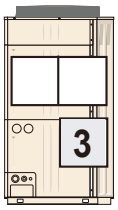
SW SET5-2 ON



Master



Slave 1



Slave 2

Number of outdoor unit

3

SW SET5-1 ON

SW SET5-2 OFF

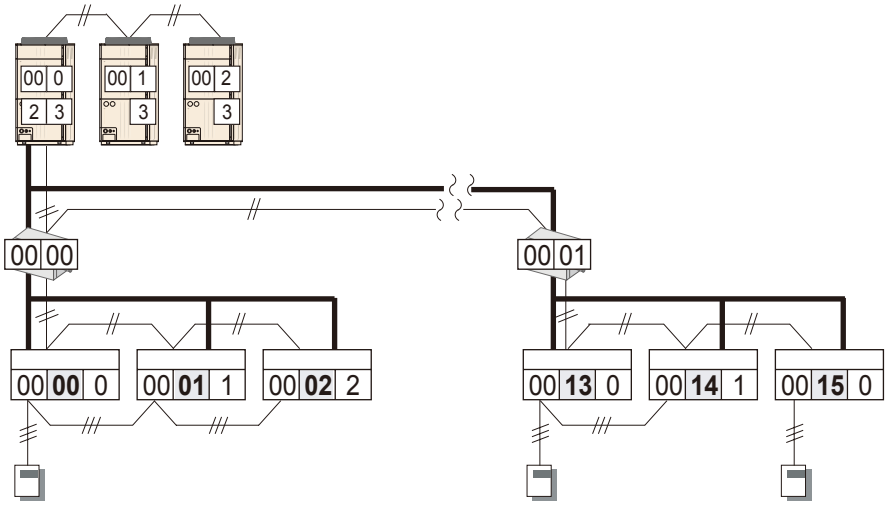
Number of outdoor unit		1 ◆	2	3
DIP SW	SET5-1	OFF	OFF	ON
	SET5-2	OFF	ON	OFF

(◆. . . Factory Setting)

FUNCTION SETTING

● Indoor unit address (Set E)

Each indoor unit in same refrigerant system should be set an exclusive indoor unit address.



Indoor unit address	Rotary SW setting	
	IU AD x10	IU AD x1
03	 0	 3
11	 1	 1
30	 3	 0
47	 4	 7

*Setting range 00 - 63(Arbitrary numbers can be set)

*Do not set indoor unit address to the range of 64 from 99.

*Do not set the same address number to two or more indoor units.

FUNCTION SETTING

● Remote controller address (Set F)

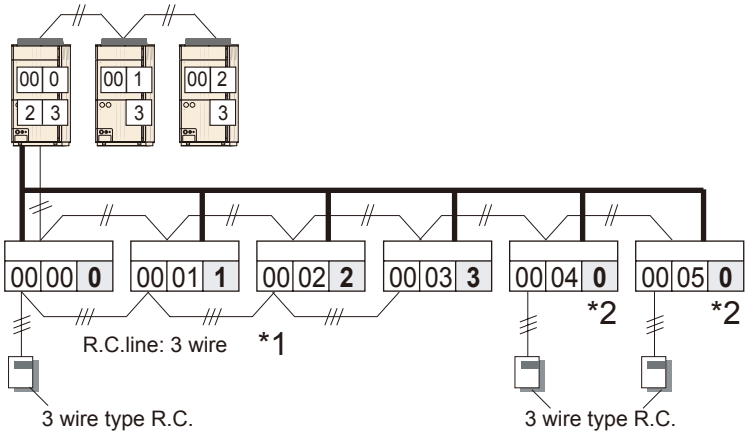
1 individual remote controller can be controlled Max.16 indoor unit with connecting remote controller cable.

These units connecting by remote controller cable regards as remote controller group.

Even 1 indoor unit as 1 or no remote controller connection regards 1 remote controller group.

i) 3-wire type

Only for manual address setting



Remote controller address	Rotary SW setting
	RC AD
0	 0
1	 1
11	 B
15	 F

Remote controller address	Rotary SW setting
	RC AD
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A
11	B
12	C
13	D
14	E
15	F

*1 : Set the remote controller address in the order of 0,1,2, . . . ,15.(Blank is not allowed)

*2 : When remote controller group is not constructed (1:1 connection of indoor unit and remote controller), be sure to set the remote controller address to "0" (factory setting).

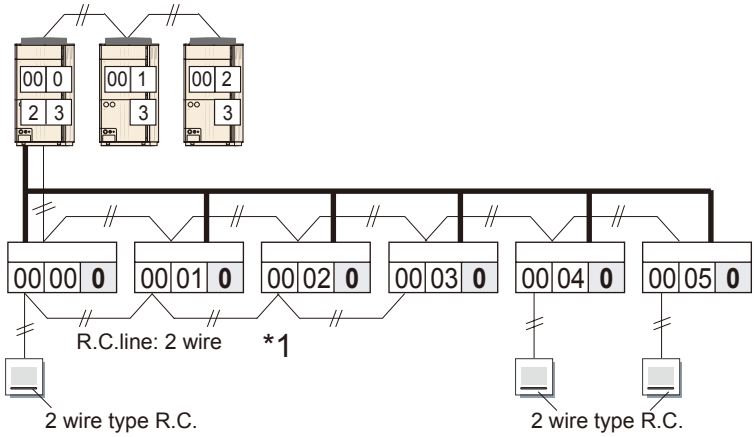
FUNCTION SETTING

ii) 2-wire type

It can choose either automatic address setting.

① When setting the automatic address.

Set the remote controller address in the "0" only. (Factory setting is "0")

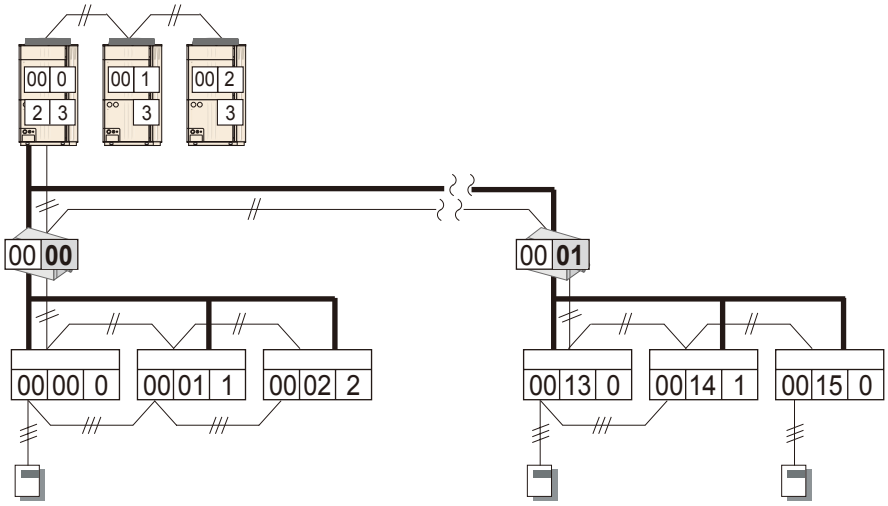


*1 : Set the remote controller address in the "0" only
Address is automatically assigned from Remote controller.

FUNCTION SETTING

● RB unit address (Set P)

Each RB unit in same refrigerant system should be set an exclusive RB unit address.



RB unit address	Rotary SW setting	
	RB AD x10	RB AD x1
03	 0	 3
11	 1	 1
30	 3	 0
47	 4	 7

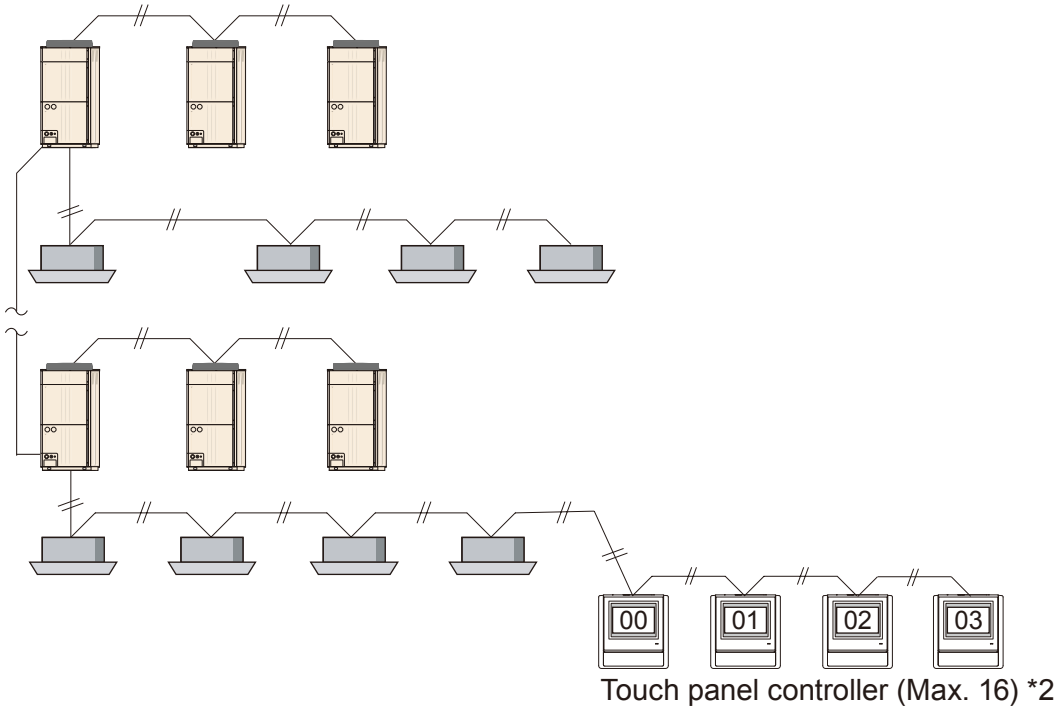
*Setting range 00 - 63(Arbitrary numbers can be set)

*Do not set RB unit address to the range of 64 from 99.

*Do not set the same address number to two or more RB units.

FUNCTION SETTING

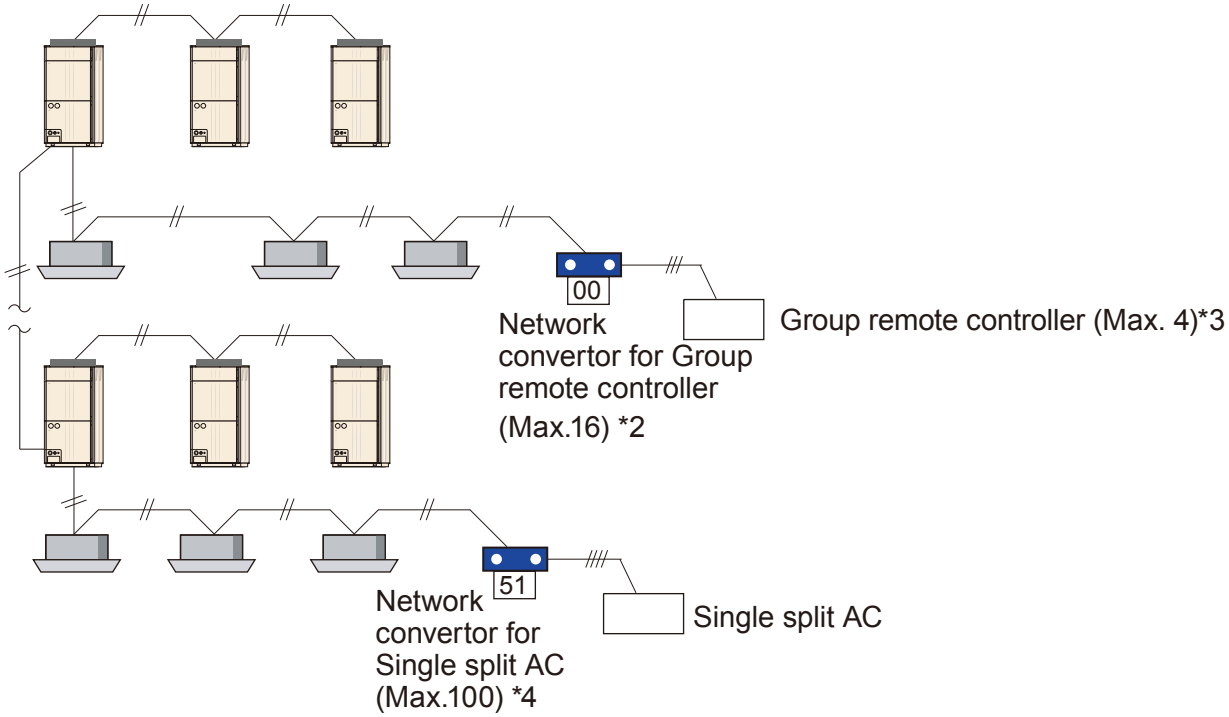
● Touch panel controller setting (Set G)



*1 : Set Touch panel controller address first, to conduct the initial setting of it.
Refer to the "setting manual" for details.

*2 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LONWORKS® is a maximum of 16.

● Network convertor setting (Set H)



*1 : Set the Rotary SW 110 and SW 111 on network convertor PCB.

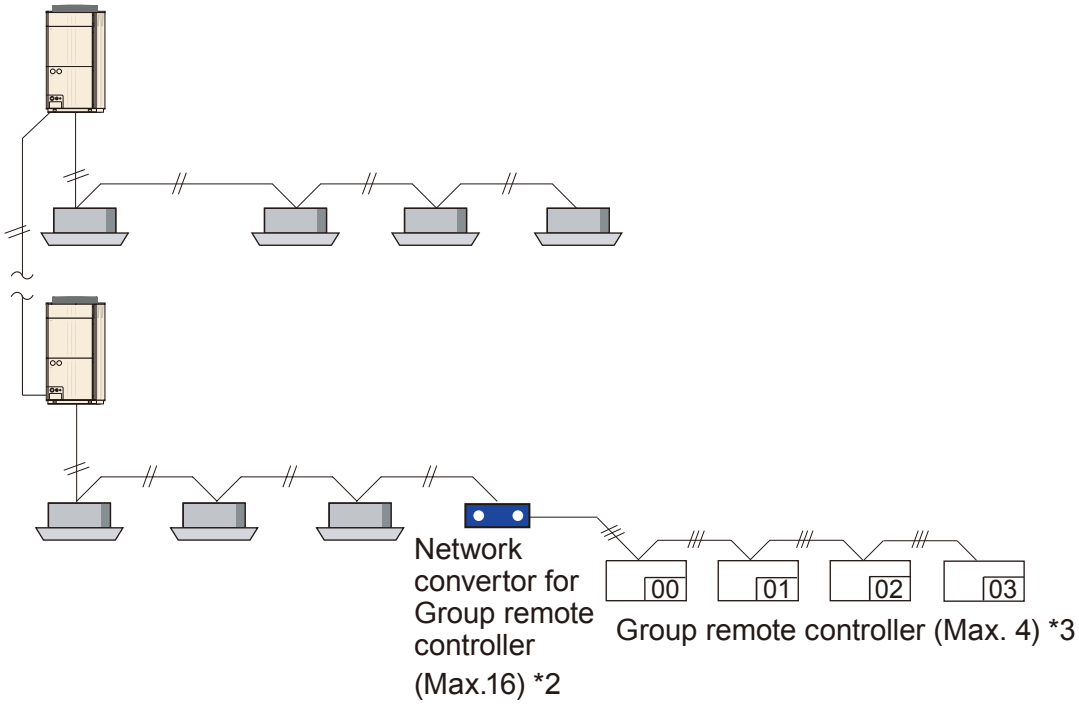
*2 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LONWORKS® is a maximum of 16.

*3 : Up to 64 Group remote controllers are able to connect with one VRF Network system.

*4 : When connecting the Network convertor for Single split AC , set up the number so that the Refrigerant circuit address number of outdoor unit and indoor unit does not overlap .
And the sum total of the Refrigerant circuit address of Network convertor for Single split AC and the Refrigerant circuit address of the outdoor unit and the indoor unit is a maximum of 100.

FUNCTION SETTING

● Group remote controller setting (Set I)



*1 : Set group remote controller address first, to conduct the initial setting of it.

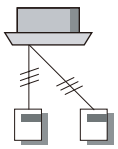
*2 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LONWORKS® is a maximum of 16.

*3 : Up to 64 Group remote controllers are able to connect with one VRF Network system.

● Dual remote control switch (Set J)

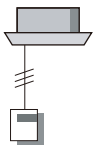
When 2 wired remote controllers are connected to the remote control group, turn the SW 2 of DIP Switch 1 of Slave Remote Controller ON.

- Slave remote controller will not be valid for timer setting.
- Last command is priority.



[Master] [Slave]
SW2 OFF ON
of DIP Switch 1

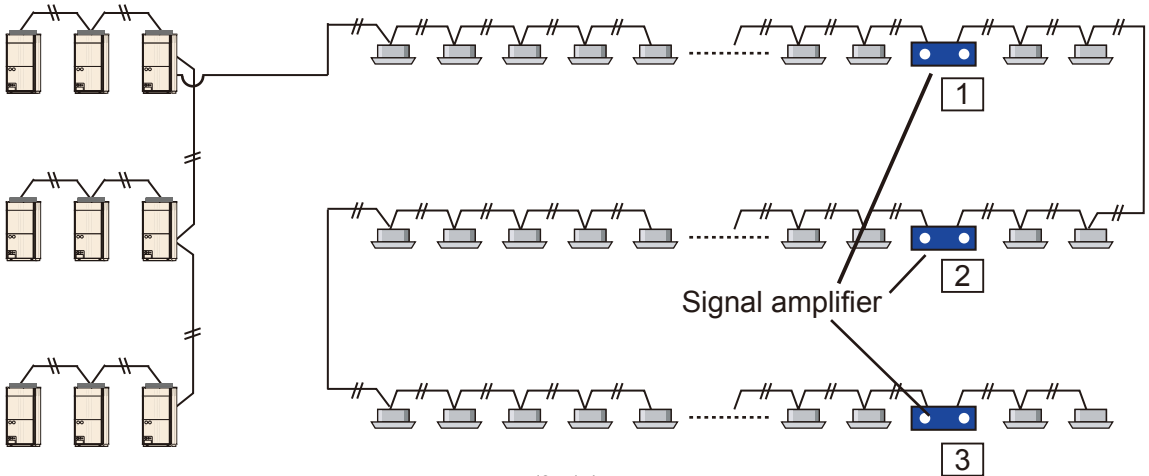
Remote controller unit PCB
Setting by SW 2 of DIP Switch 1



[Master]
SW2 OFF
of DIP Switch 1

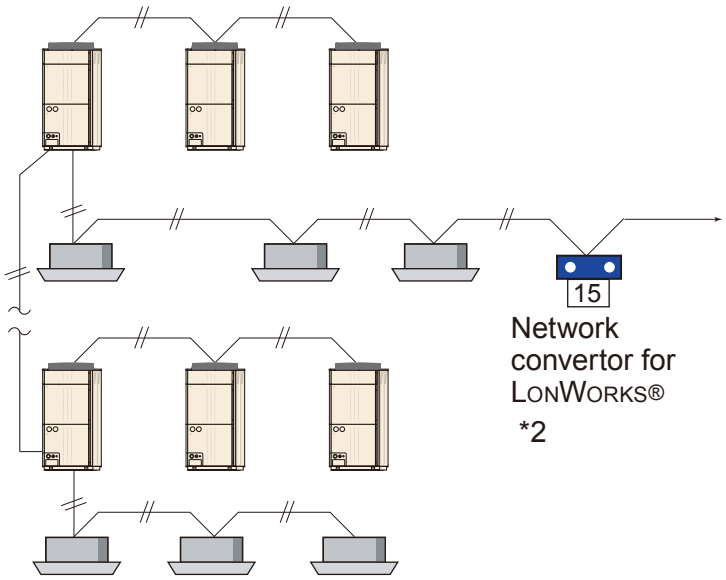
When only 1 remote controller will connect, this SW 2 of DIP Switch 1 must be set OFF.

● Signal amplifier address (Set K)



FUNCTION SETTING

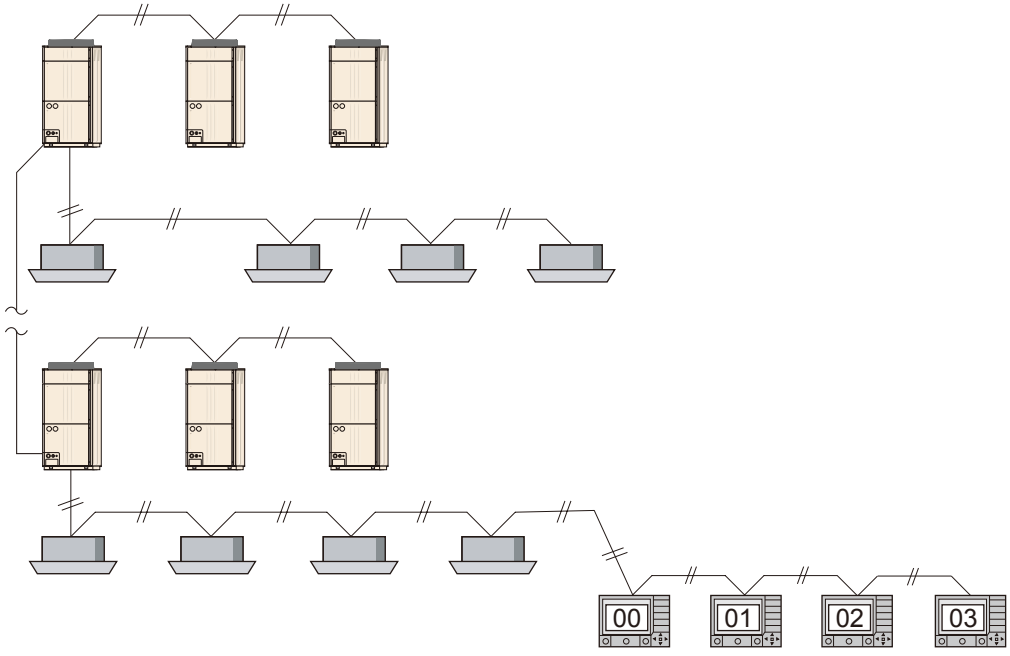
● Network convertor for LonWorks® setting (Set M)



*1 : Setting up more than one Network Convertor in one VRF network system is prohibited.

*2 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LONWORKS® is a maximum of 16.

● Central remote controller setting (Set N)



*1 : Set Central remote controller address first, to conduct the initial setting of it.
Refer to the "setting manual" for details.

*2 : The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LONWORKS® is a maximum of 16.

FUNCTION SETTING

1-4. ADDRESS SETTING BY REMOTE CONTROLLER

1-4-1. WIRELESS REMOTE CONTROLLER

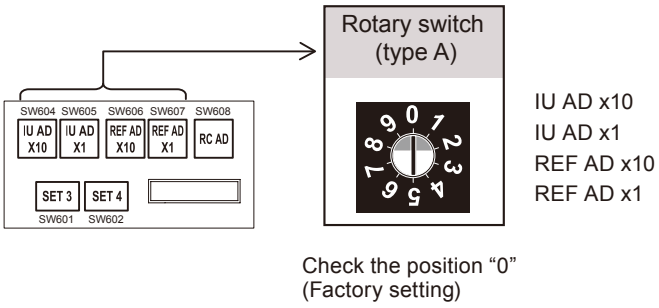
- A wireless remote controller is required to set the infrared address setting.
- This function is available in all indoor unit with infrared signal receiver.
- Infrared address setting for duct type and cassette type models can be made possible by using the optional IR receiver unit.

  Note : Since Beeping sound generate from indoor unit PCB installed far away (not from IR Receiver unit), sound might not be heard.
- The indoor unit's refrigerant circuit address and indoor unit address can be set performing the infrared address setting.
- When remote controller address setting is required, set by the rotary switch on the indoor unit's PCB.

■ PREPARATION

(1) Set the switch on the indoor unit's PCB that is used for manual address setting is set to "00" at factory setting.

(This process is unnecessary for newly installed and not yet set the SW.)



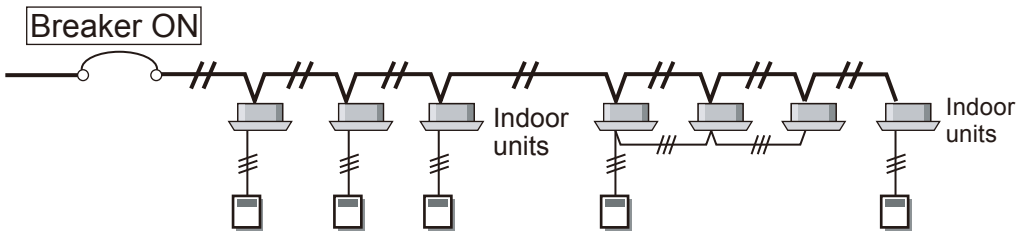
Check the position "0"
(Factory setting)

- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

(2) Turn on the power to the indoor unit.

* By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.

* Also check again to make sure no wiring mistakes were made before turning on the power.

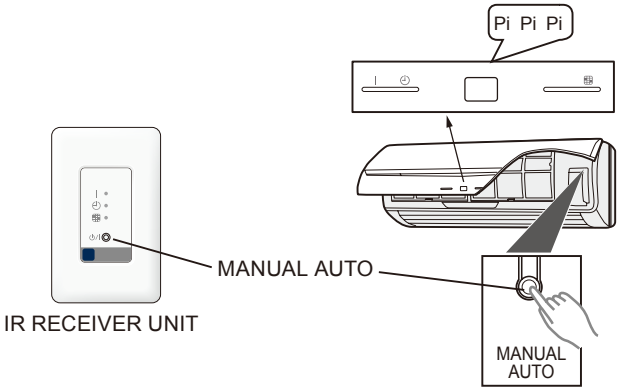


FUNCTION SETTING

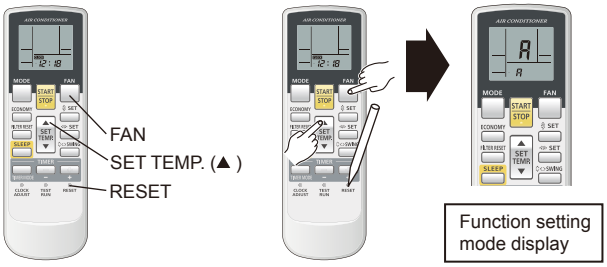
FUNCTION SETTING

■ SWITCHING SELECTION OF ADDRESS SETTING MODE

(3) Press and hold the “MANUAL/AUTO” button for 3 seconds.



(4) Press and hold the “FAN” and the “ SET TEMP. ▲ ” buttons. Whilst holding these 2 buttons, press the "RESET" button.



- The position of the “MANUAL/AUTO” button varies depending on the model. Refer to the operation manual for the position that is included with the unit.
- The error will be displayed by continuously pressing the "MANUAL/AUTO" for 10 sec or more. In this case release the button or turn off the power.
- An explanation of the displayed information as shown below.

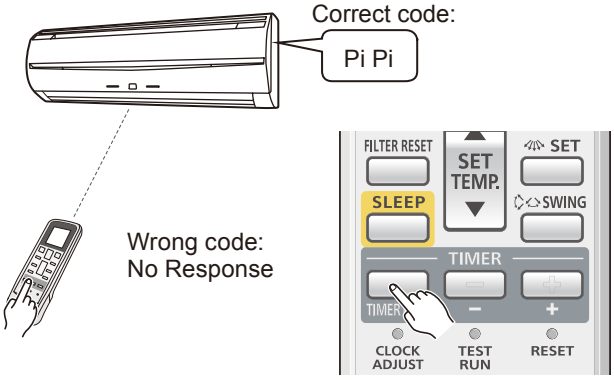
■ SELECTION AND CONFIRMATION OF CUSTOM CODE

(5) Press the “ SET TEMP. ▲ ” or “ SET TEMP. ▼ ” buttons to select the custom code that matches the setting with the indoor unit.By selecting the appropriate custom code, the communication between the indoor unit and the wireless RC become possible.



The initial setting is "A"

(6) Press the “TIMER MODE" button to send the code to the indoor unit.

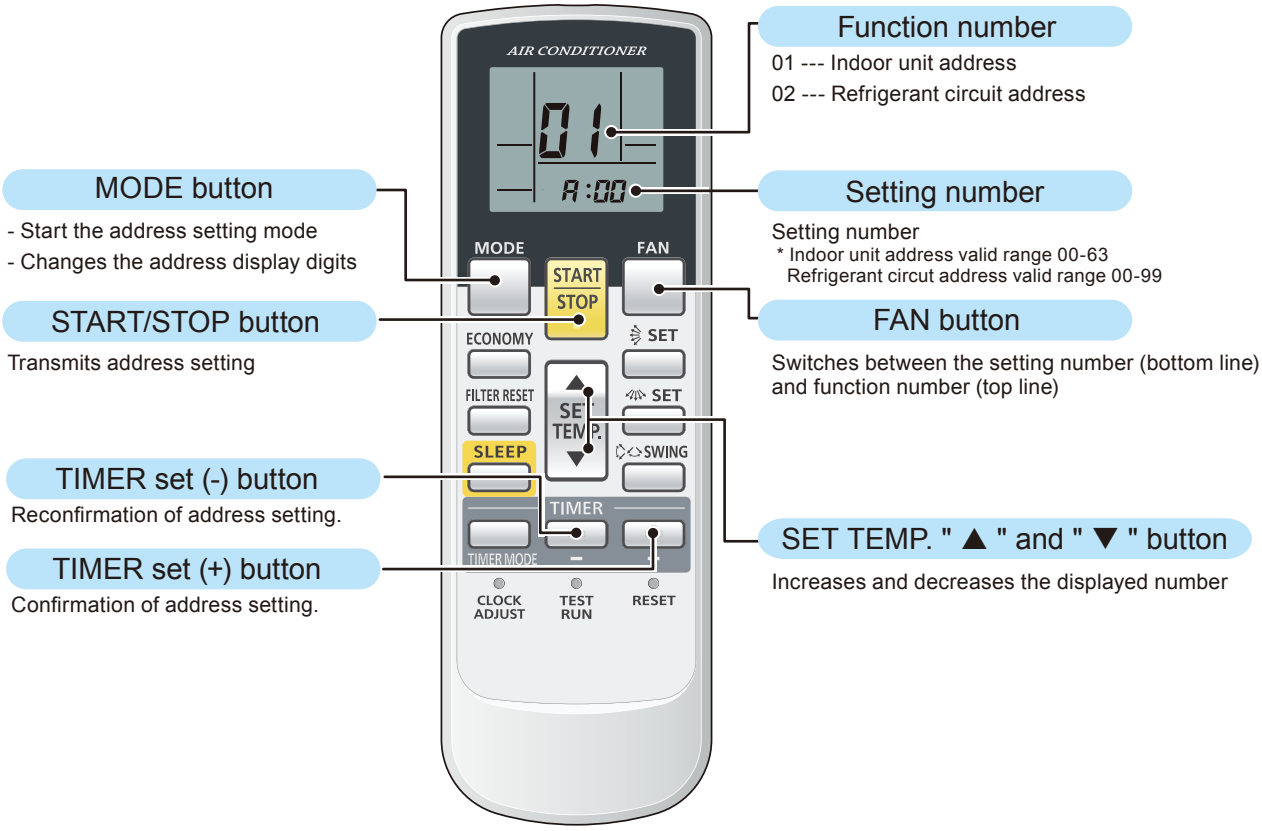


FUNCTION SETTING

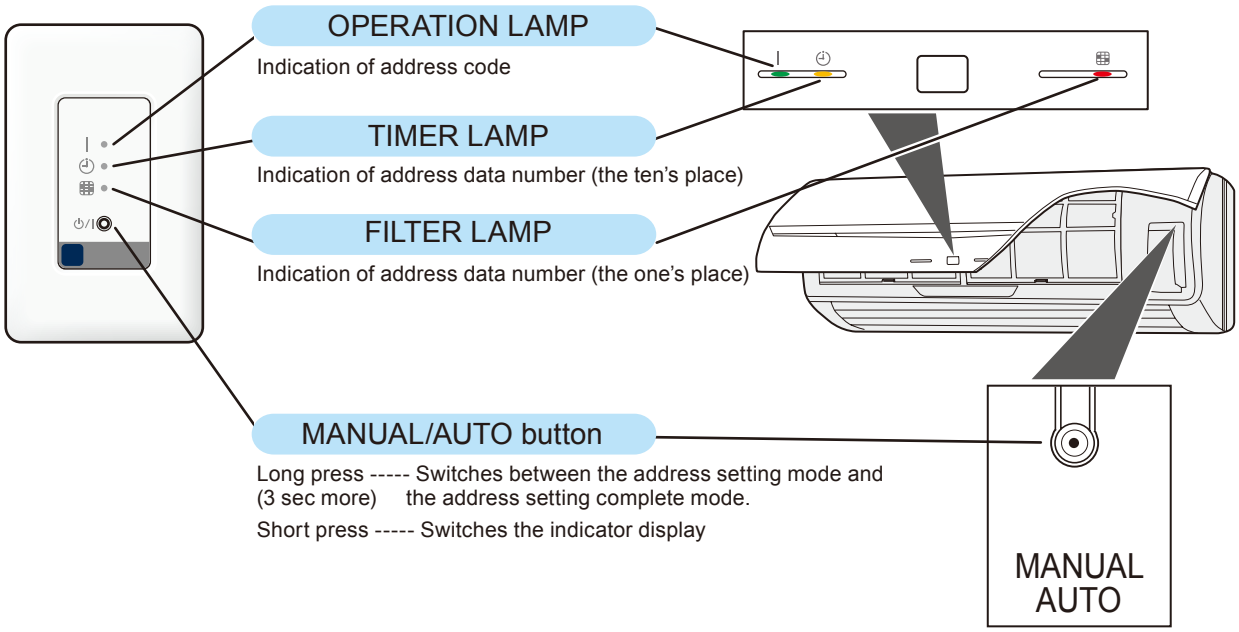
■ BUTTON NAME AND FUNCTION

- Refer to “1-2" for an outline of the address setting.
- It does not matter whether the refrigerant circuit address or indoor unit address is set first. (The method shown here sets the indoor unit address first.)
- During address setting mode, indoor unit reject the any operation command from remote controller.

Note : Address code display is as follows (operation lamp display)



IR RECEIVER UNIT



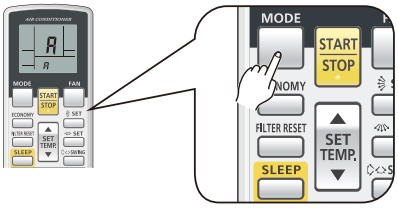
	INDOOR UNIT ADDRESS DISPLAY	REFRIGERANT CIRCUIT ADDRESS DISPLAY
OPERATION LAMP	ON / OFF (Light continuously)	ON / OFF (Light 1 sec ON / 1 sec OFF)

FUNCTION SETTING

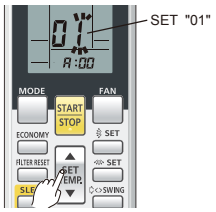
■ ADDRESS SETTING

● Indoor unit address setting

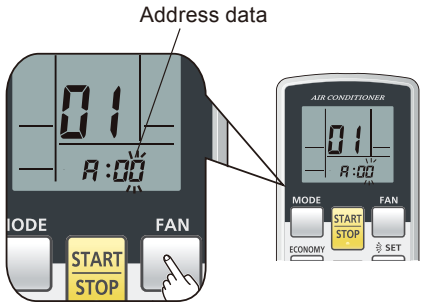
(7) Press the “MODE” button to access the address setting mode.



(8) Make sure the function number is ‘01’. If the number is other than ‘01’, press the “ ▲ ” or the “ ▼ ” buttons to alter.

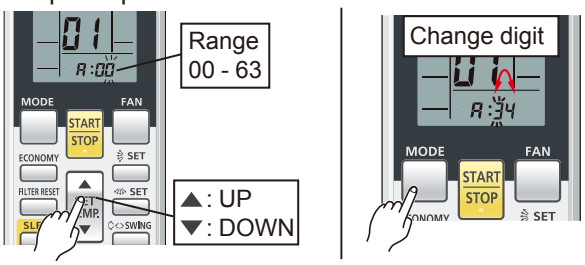


(9) Press the “FAN” button to access the address data setting mode. The address data will flash once this button is pressed.

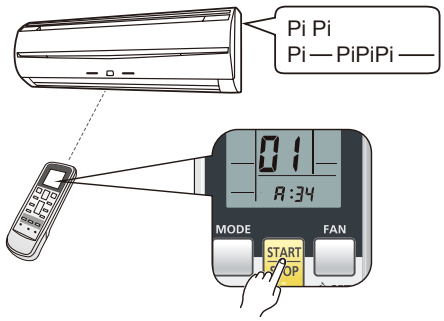


(10) Press the “ ▲ ” or the “ ▼ ” buttons to adjust the address data. The indoor unit address range is between 00 and 63.

Each time the “MODE” button is pressed, it switches between the one' place and the ten's place positions.



(11) Press the “START/STOP” button once to send the information. A beeping noise will be heard if the command is accepted.

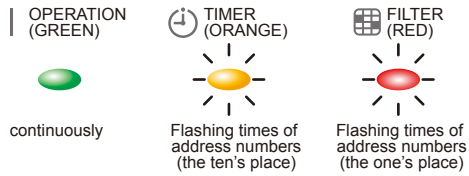


∗In the following cases the setting signal is not read and a buzzer sounds.

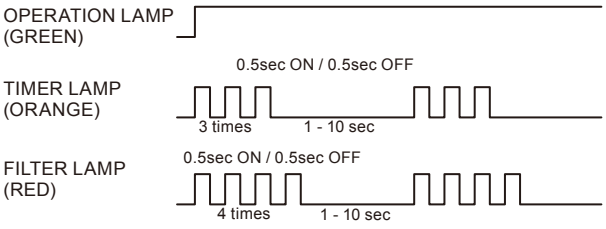
The indoor unit address No. is set out of range (64 or more) : Pi Pi Pi Pi Pi

The setting of the rotary switch on the PCB is not "00" : Pi Pi Pi Pi Pi

(12) Indoor unit will display the indoor unit address data number on "TIMER ◴ "(ORANGE) and "FILTER ▦ "(RED) light.



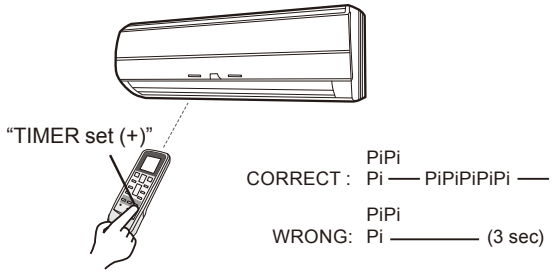
(Example) ADDRESS : 34



∗ ADDRESS 0 setting will not indicate TIMER LAMP and FILTER LAMP.

● Confirmation of address setting

(13) Press the “TIMER set (+)” button.



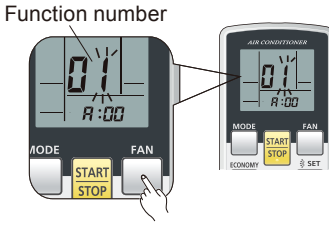
FUNCTION SETTING

FUNCTION SETTING

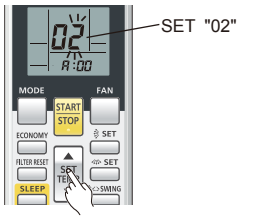
● Refrigerant circuit address setting

Note : The refrigerant circuit address is displayed when the following operations are performed even while indoor unit address is displayed on LED display of indoor unit.

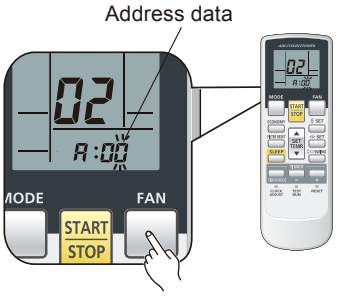
(14) Press the “FAN” button to select the function number.



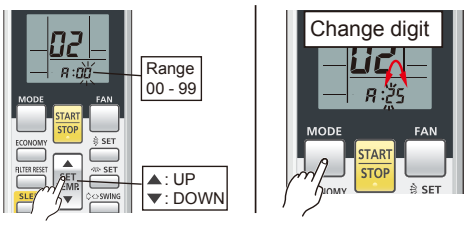
(15) Press the " ▲ " or the " ▼ " button to adjust function number 02.



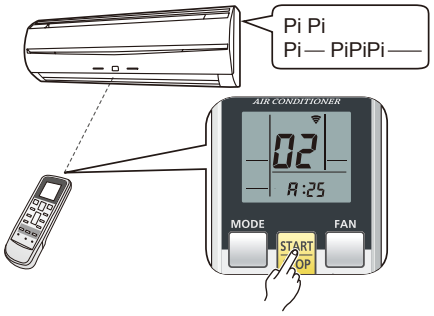
(16) Press the “FAN” button to access the address data setting mode. The address data will flash once this button is pressed.



(17) Press the " ▲ " or the " ▼ " buttons to adjust the address data. The refrigerant circuit address range is between 00 and 99. Each time the "MODE" button is pressed, it switches between the one's place and the ten's place positions.

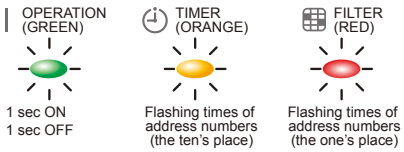


(18) Press the “START/STOP” button once to send the information. A beeping noise will be heard if the command is accepted.

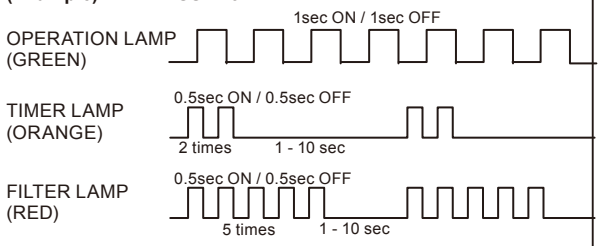


* In the following cases the setting signal is not read and a buzzer sounds.
  The setting of the rotary switch on the PCB is not "00" : Pi Pi Pi Pi Pi

(19) Indoor unit will display the refrigerant circuit address data number on "TIMER ◴ "(ORANGE) and "FILTER ▦ "(RED) light.



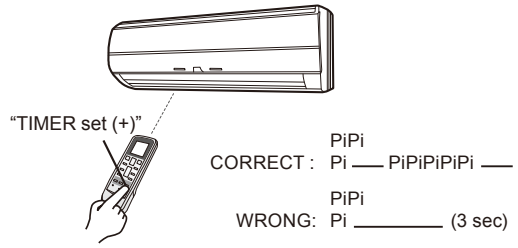
(Example) ADDRESS : 25



* ADDRESS 0 setting will not indicate TIMER LAMP and FILTER LAMP.
* ADDRESS display will automatically switched from indoor unit address to refrigerant circuit address.

● Confirmation of address setting

(20) Press the “TIMER set (+)” button.

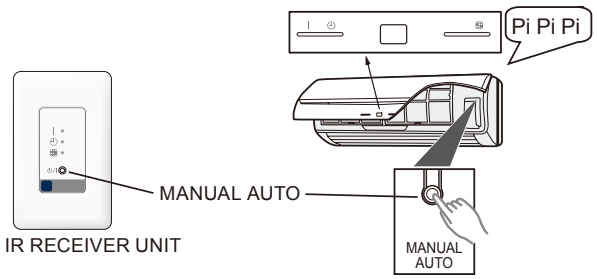


FUNCTION SETTING

FUNCTION SETTING

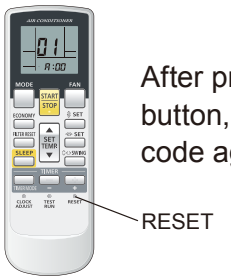
■ COMPLETION OF ADDRESS SETTING MODE

(21) Press and hold the “MANUAL/AUTO ⏽” button for 3 seconds.



∗ Each LED light brightness is darkening though the content of the display doesn't change.

(22) Press the “RESET” button.

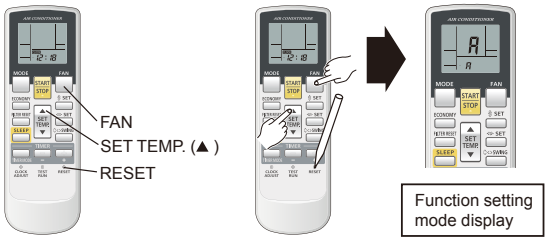


After pressing the RESET button, please set the custom code again if b,c,d setting.

∗ The address setting signal is not received after switched address setting completion mode. (Pi Pi Pi Pi Pi)
∗ Press the "MANUAL/AUTO ⏽" button again for 3 sec to return to if required to return the address setting mode.

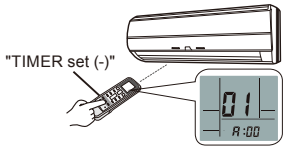
■ RECONFIRMATION OF ADDRESS SETTING

(23) Press and hold the “FAN” and the “ SET TEMP. ▲ ” buttons. Whilst holding these 2 buttons, press the "RESET" button.

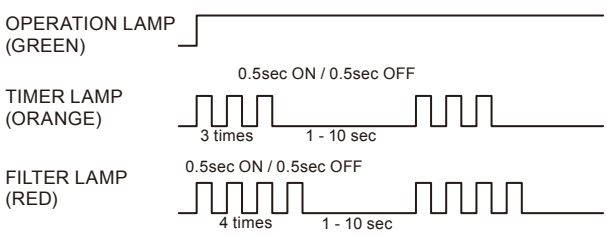


● Indoor unit address setting

(24) Make sure the function number is "01"
Refer to (8)
Press the “TIMER set (-)” button.

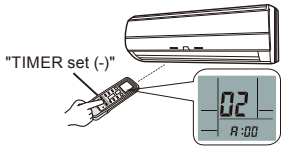


(Example) ADDRESS : 34

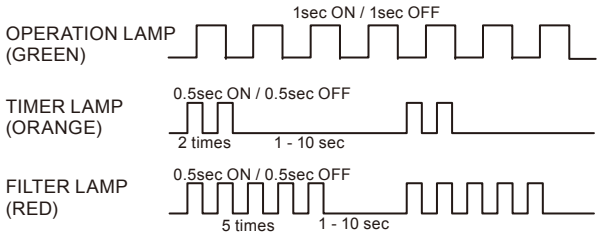


● Refrigerant circuit address setting

(25) Make sure the function number is "02"
Refer to (15)
Press the “TIMER set (-)” button.

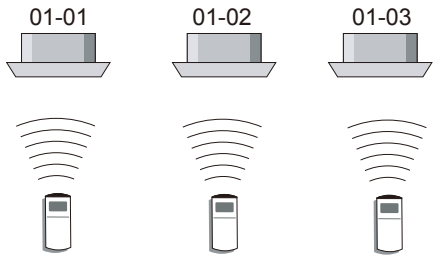


(Example) ADDRESS : 25



FUNCTION SETTING

■ SETTING UP EACH INDOOR UNIT



Repeat steps (1) through to (25). Steps (1) through to (6) and (21) to (25) only need to carried out if the custom code is different to the factory setting of “A”.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

- **If the reset is not performed, address can not be read in normally.**
- **After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.**

After the 2 minutes has passed, power can be restored.

- **The set address is stored in the PCB and will remain in memory even when the power is turned off.**

However setting address is effective after power reset.

Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

∗ Address 0 setting will not indicate TIMER LAMP and FILTER LAMP.

∗ Once the "RESET" button is pressed on the remote controller, the OPERATION MODE will be set in the "AUTO MODE".
Please adjust the OPERATION MODE to either "COOLING" or "HEATING" before trying to operate the air conditioner.

∗ Note : If CUSTOM CODE is set to anything other than "A" ,the remote control must be set accordingly to the INDOOR UNIT setting.

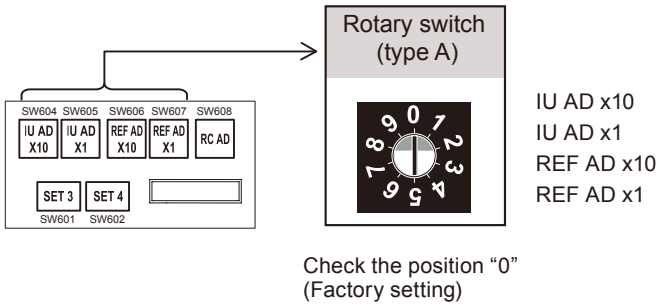
FUNCTION SETTING

1-4-2. WIRED REMOTE CONTROLLER (UTY-RNK*)

- Indoor unit addresses and refrigerant circuit addresses can be set up using wired remote controllers.
- This function allows setting the addresses of all indoor units to which a wired remote controller is being connected.
- This function cannot be used to set up remote controller addresses.
  Be sure to set them up using the rotary switches on the PCB of each indoor unit. (Refer to 1-3.)
- This function cannot be used on the slave units.
- This device is not connectable to 3-wire type remote controller incompatible models.
  As for the compatible models, refer to 5-1-3.

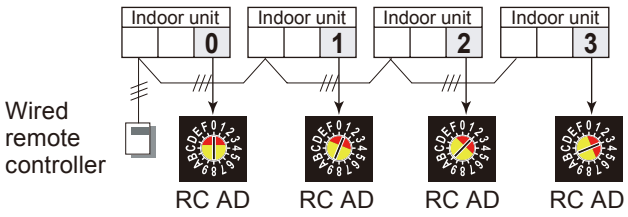
■ PREPARATION

1) Make sure that all indoor unit address switches (IU AD x10, IU AD x1) and refrigerant circuit address switches (REF AD x10, REF AD x1) on the PCB of each indoor unit are set at 0 (factory setting).



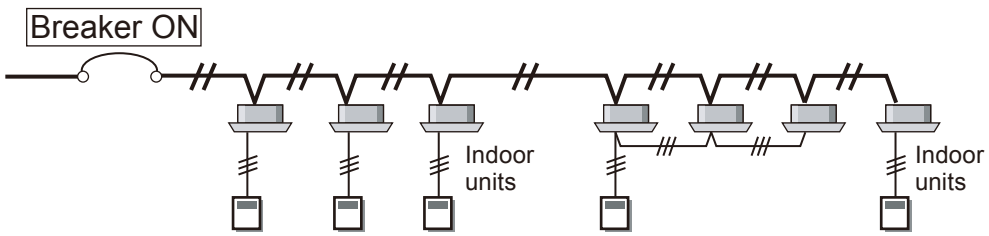
- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

2) If multiple indoor units are connected to a single wired remote controller, make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units. (Refer to 1-3.)
   Ex.) When four indoor units are connected



3) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

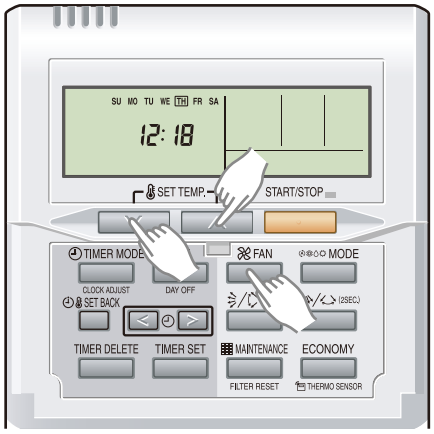


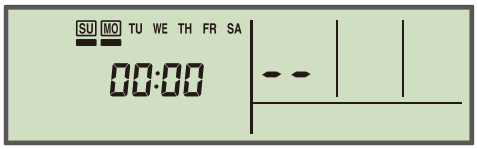
FUNCTION SETTING

FUNCTION SETTING

■ SWITCHING SELECTION OF ADDRESS SETTING MODE

4) To activate the address setting mode, hold down the three buttons of SET TEMP. V, SET TEMP. Λ and FAN at the same time for 5 seconds or longer.

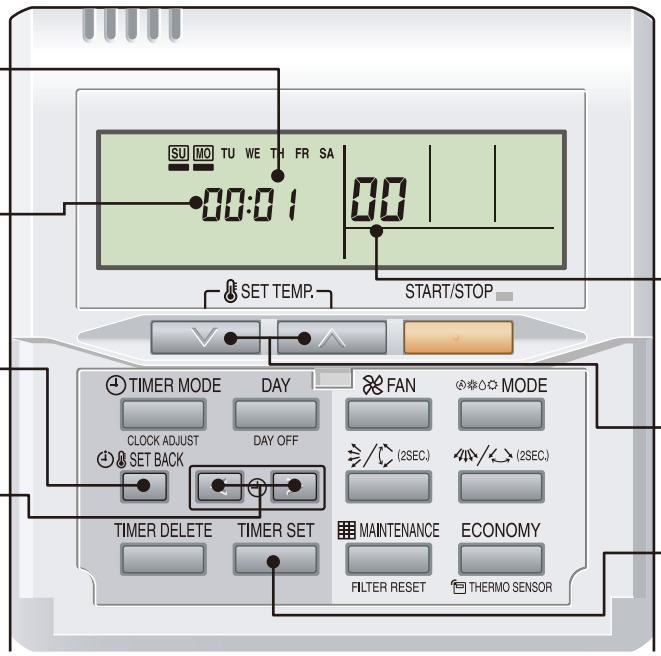




Address setting mode initial display

■ BUTTON NAME AND FUNCTION

- Refer to “1-2” for an outline of the address setting.
- It does not matter whether the refrigerant circuit address or indoor unit address is set first. (The method shown here sets the indoor unit address first.)
- During address setting mode, indoor unit reject the any operation command from remote controller.



Function number

01---Indoor unit address
02---Refrigerant circuit address

Remote controller address

Remote controller address setting number 00-15

SET BACK button

Switches the remote controller address setting number.

SET TIME “<” and “>” button

Switches the function number.

Setting number

Setting number
- Indoor unit address valid range (
- Refrigerant circuit address valid 00-99

SET TEMP. “V” and “Λ” button

Switches the setting number.

TIMER SET button

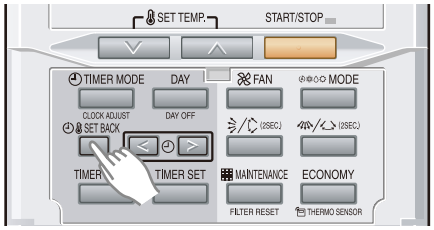
Transmits address setting

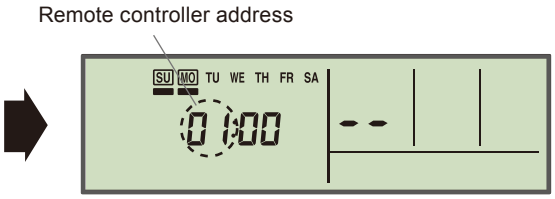
FUNCTION SETTING

■ ADDRESS SETTING

● Indoor unit address setting

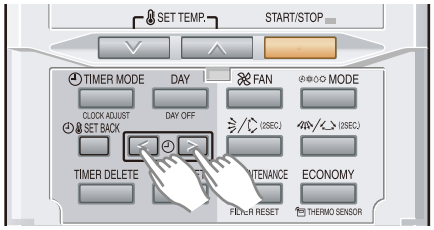
5) Pressing the SET BACK button, select a remote controller address (select the indoor unit you want to operate).

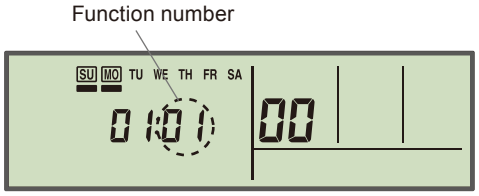




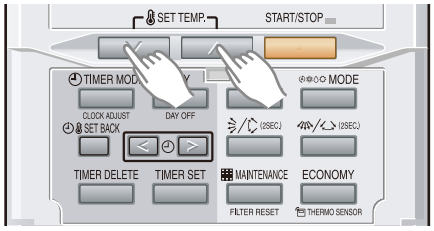
Ex.) When remote controller address “01” is selected

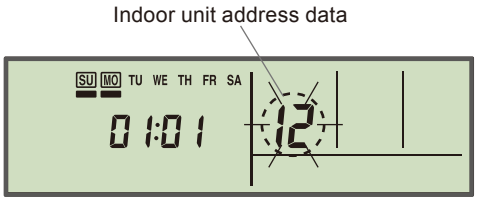
6) Pressing the SET TIME < button or the SET TIME > button, display function number 01.





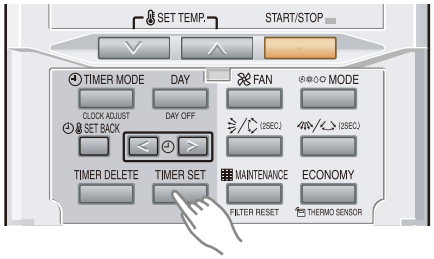
7) Pressing the SET TEMP. V button or the SET TEMP. Λ button, set up the indoor unit address. (The setting range is from 00 to 63.)

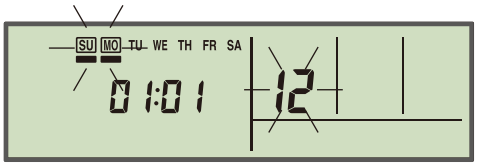




Ex.) When indoor unit address data “12” is set up

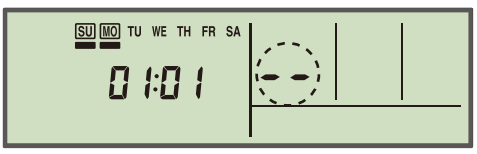
8) Pressing the TIMER SET button, confirm the selected indoor unit address data. (The data will be transferred to the indoor unit.)

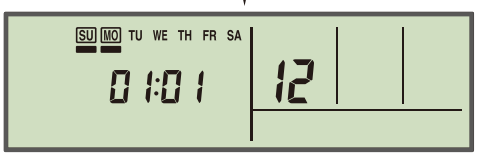




ERROR

GOOD





- When indoor unit address data was not set up on the indoor unit (-- is displayed.)
- Set up indoor unit address data again according to the procedure in step 7) above.

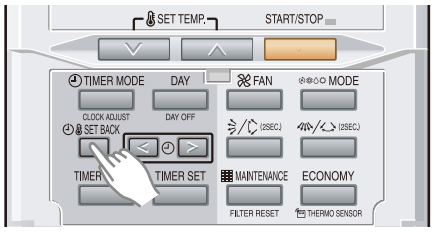
When indoor unit address data was normally set up on the indoor unit
(Flashing display changes to illuminated display.)

FUNCTION SETTING

FUNCTION SETTING

● Refrigerant circuit address setting

9) Pressing the SET BACK button, select a remote controller address (select the indoor unit you want to operate).

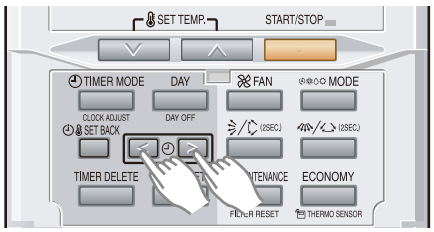


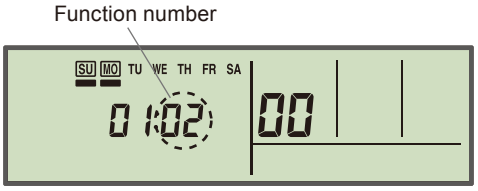


Ex.) When remote controller address “01” is selected

*If the indoor unit you want to operate has already been selected, skip step 9)

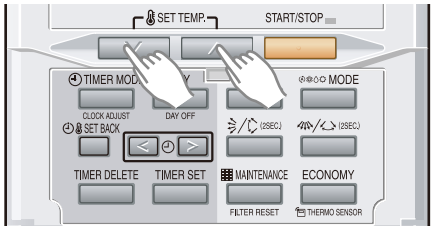
10) Pressing the SET TIME < button or the SET TIME > button, display function number 02.

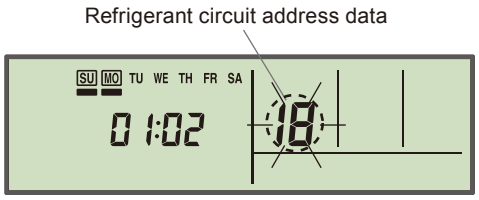




< : Down button
> : Up button

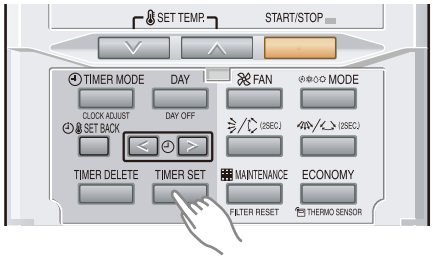
11) Pressing the SET TEMP. V button or the SET TEMP. Λ button, set up the refrigerant circuit address data. (The setting range is from 00 to 99.)

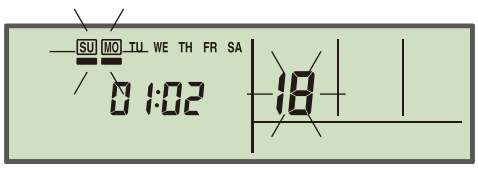




Ex.) When refrigerant circuit address data “18” is set up

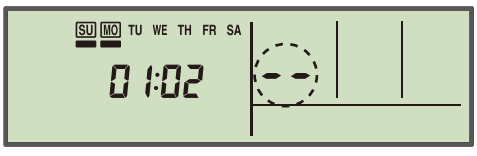
12) Pressing the TIMER SET button, confirm the selected refrigerant circuit address data. (The data will be transferred to the indoor unit.)

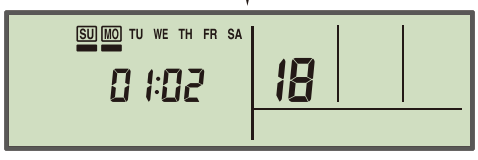




ERROR

GOOD





- When refrigerant circuit address data was not set up on the indoor unit (-- is displayed.)
- Set up refrigerant circuit address data again according to the procedure in step 11) above.

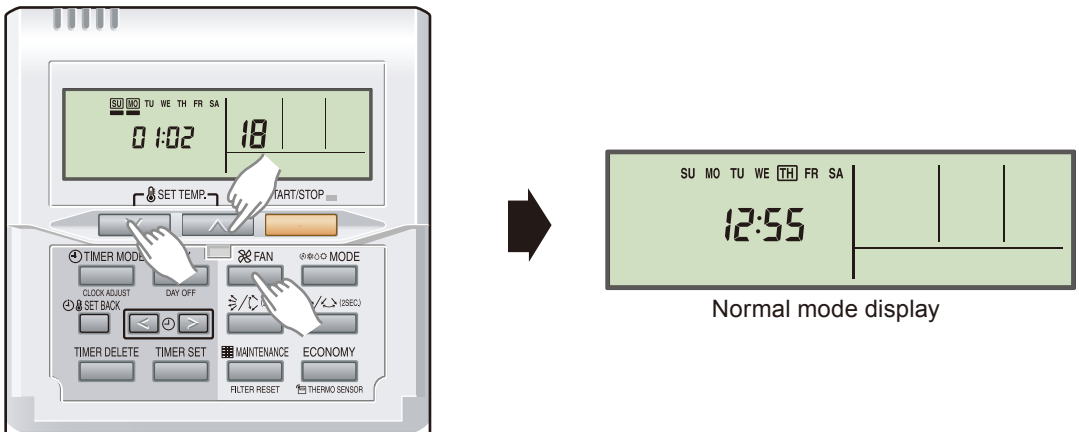
When refrigerant circuit address data was normally set up on the indoor unit (Flashing display changes to illuminated display.)

FUNCTION SETTING

FUNCTION SETTING

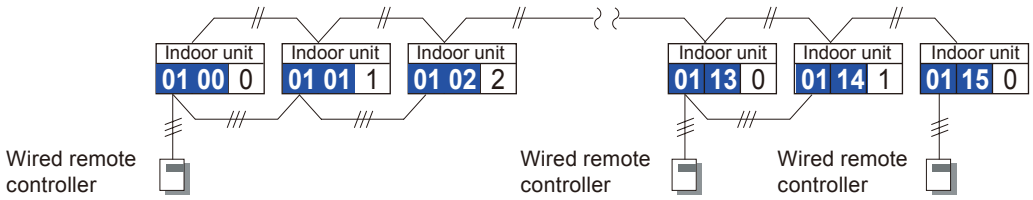
■ COMPLETION OF ADDRESS SETTING MODE

13) To clear the address setting mode and return to the normal mode display, hold down the three buttons of SET TEMP. V, SET TEMP. Λ and FAN at the same time.



∗ If no key entry is made for 60 seconds, even though none of the above buttons is pressed, the address setting mode will automatically be cleared.
(If the address setting mode is automatically cleared while setting addresses, activate the mode again according to the procedure in step 4) above.)

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 13), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

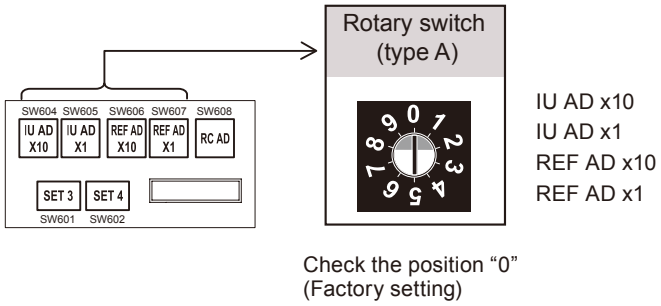
FUNCTION SETTING

1-4-3. SIMPLE REMOTE CONTROLLER (UTY-RSR*, UTY-RHR*)

- Indoor unit addresses and refrigerant circuit addresses can be set up using simple remote controllers.
- This function allows setting the addresses of all indoor units to which a simple remote controller is being connected.
- This function cannot be used to set up remote controller addresses.
  Be sure to set them up using the rotary switches on the PCB of each indoor unit. (Refer to 1-3.)
- This function can be set up on both UTY-RSK*(With operation mode) and UTY-RHK*(Without operation mode) types.
- This function cannot be used on the slave units.

■ PREPARATION

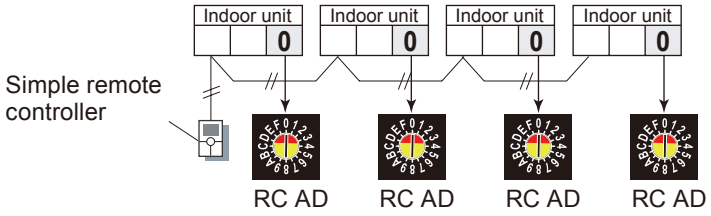
1) Make sure that all indoor unit address switches (IU AD x10, IU AD x1) and refrigerant circuit address switches (REF AD x10, REF AD x1) on the PCB of each indoor unit are set at 0 (factory setting).



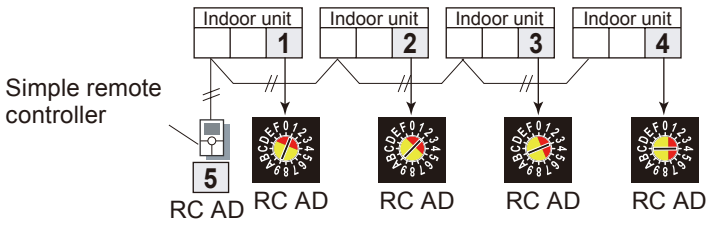
- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

2) When multiple indoor units are connected to a single wired remote controller.

2-1) When setting of Remote controller address in "Automatic address setting"



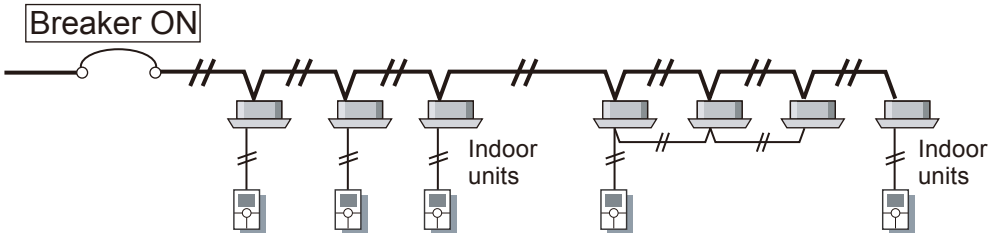
2-2) When setting of Remote controller address in "Manual address setting", make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units and Wired remote controller. (Refer to 1-3.)



FUNCTION SETTING

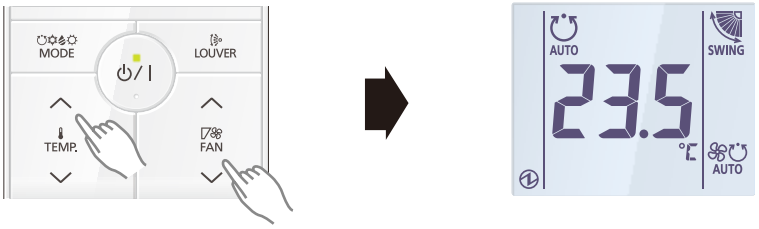
3) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

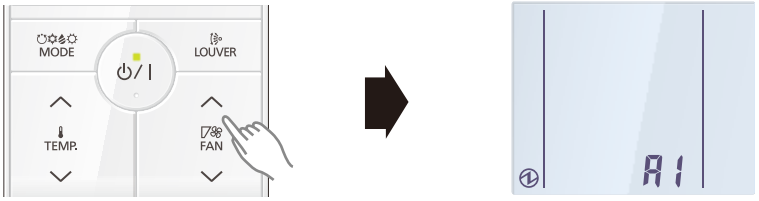


■ SWITCHING SELECTION OF ADDRESS SETTING MODE

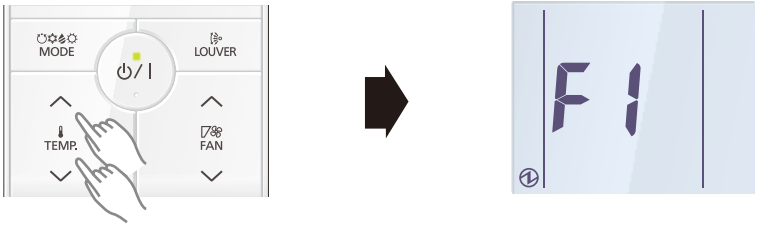
4) With “Monitor Mode” screen displayed, press and hold the SET TEMP. “∧” button and FAN “∨” button simultaneously for at least 2 seconds.



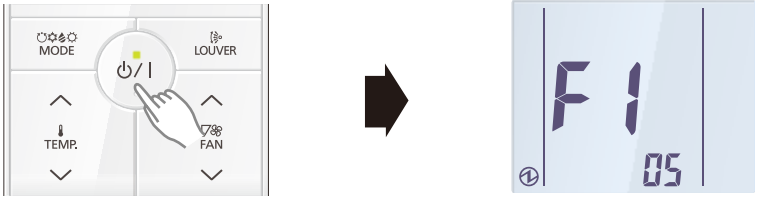
5) The Menu 1 screen is displayed. Press and hold the FAN “∧” button for at least 2 seconds. Setting mode selection screen is displayed.



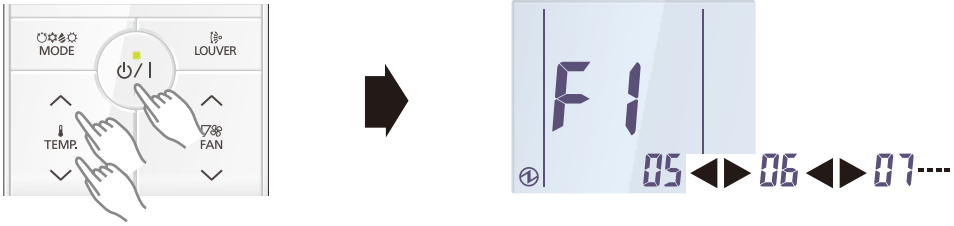
6) Press the SET TEMP. “∧” or SET TEMP. “∨” button to select F1 (Menu 2-F1) settings mode or F2 (Menu 2-F2) settings mode.
F1: Initial settings mode F2: Maintenance settings mode



7) Press the “⏻/I” button. Setting item selection screen is displayed. (Item No. is displayed.)

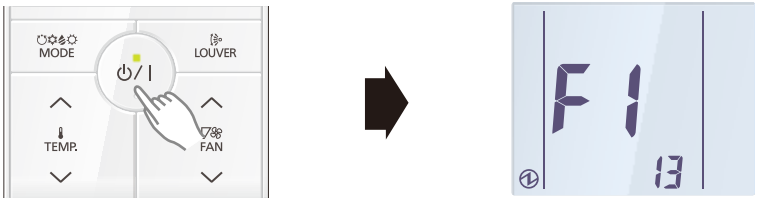


8) Select the item number to be set with the SET TEMP. “∧” or SET TEMP. “∨” button, and press the “⏻/I” button to switch to thesetting screen.



FUNCTION SETTING

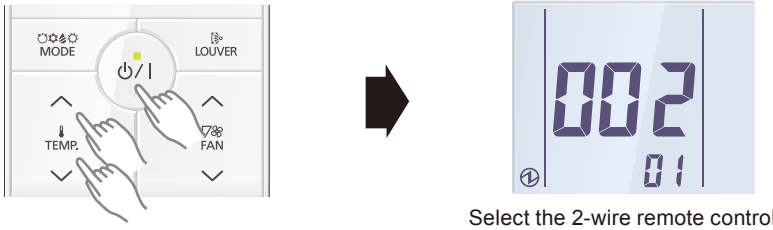
9) Select the “13” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



■ ADDRESS SETTING

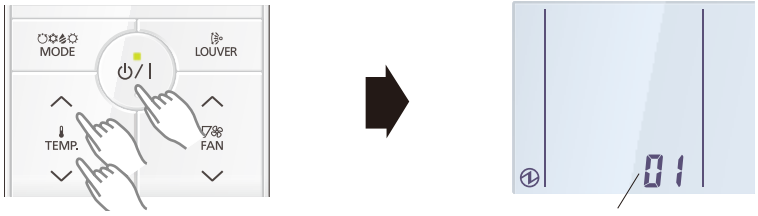
● INDOOR UNIT ADDRESS SETTING

10) Select the 2-wire remote controller address with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/❙” button.



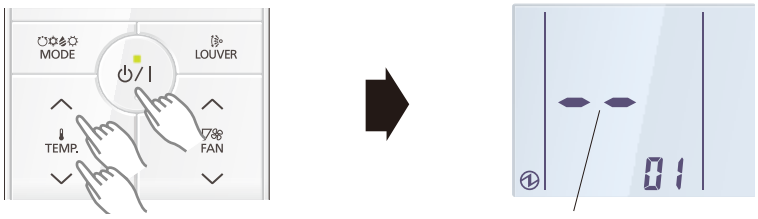
Select the 2-wire remote controller address (Ex. Select the 002-01)

11) Set the function number with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/❙” button.



Function number

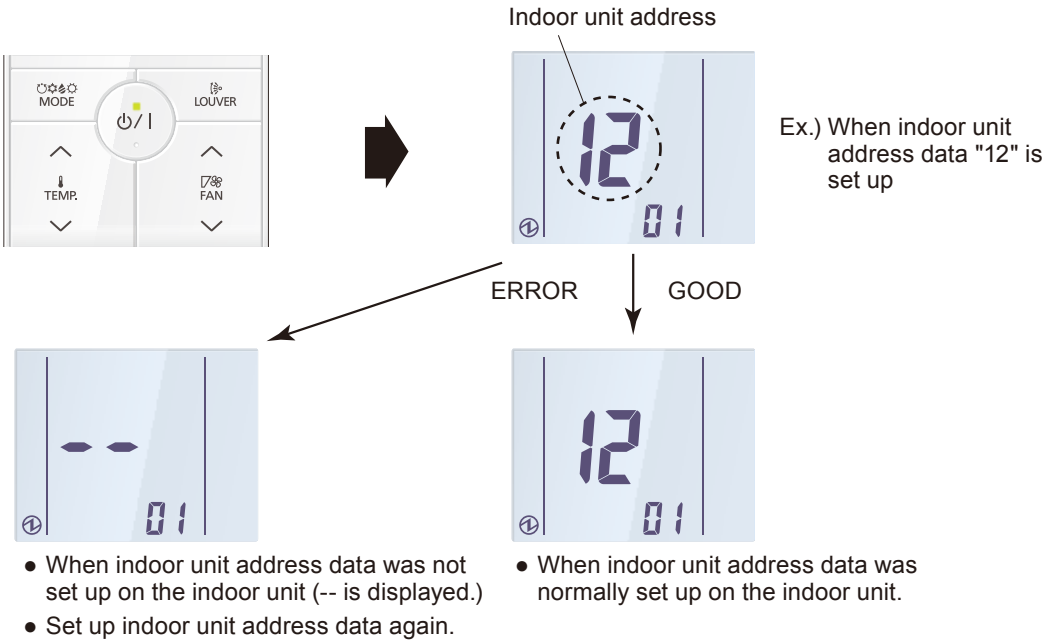
12) Set the setting number with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/❙” button.



Indoor unit address

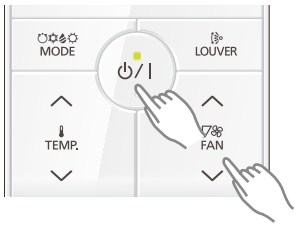
FUNCTION SETTING

13) Setting results are displayed after data transmission.



- When indoor unit address data was not set up on the indoor unit (-- is displayed.)
- Set up indoor unit address data again.
- When indoor unit address data was normally set up on the indoor unit.

14) Press the "⏻/❙" button to return to the 2-wire remote controller address selection screen of (2). If setting has been completed, press the FAN "﹀" button to return to the Menu 2-F1 item selection screen.



Note:

- **This item cannot be set from slave remote controllers.**

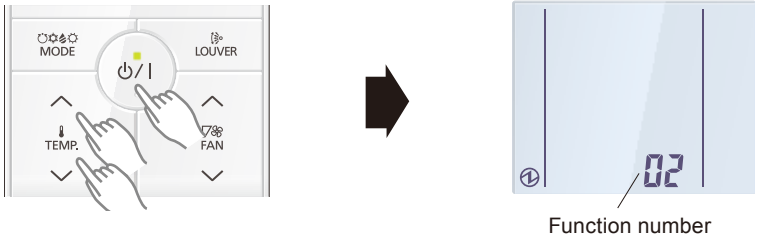
● Refrigerant circuit address setting

15) Select the 2-wire remote controller address with the SET TEMP. "∧" or SET TEMP. "﹀" button. Then press the "⏻/❙" button.



Select all

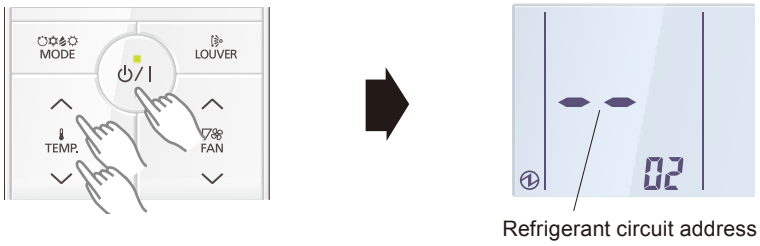
16) Set the function number with the SET TEMP. "∧" or SET TEMP. "﹀" button. Then press the "⏻/❙" button.



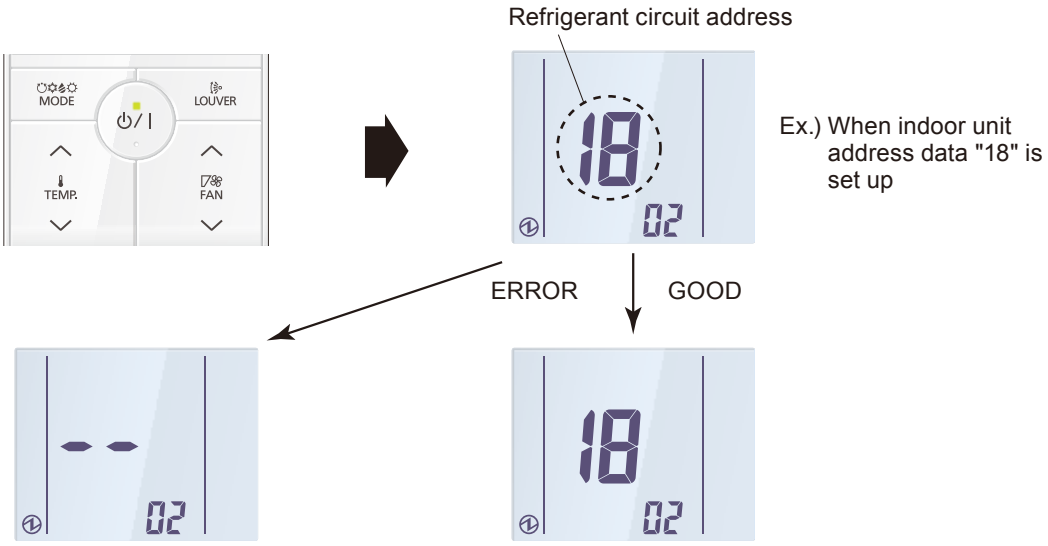
Function number

FUNCTION SETTING

17) Set the setting number with the SET TEMP. "∧" or SET TEMP. "∨" button. Then press the "⏻/ I" button.



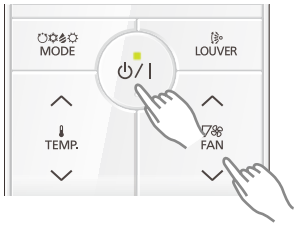
18) Setting results are displayed after data transmission.



- When refrigerant circuit address data was not set up on the indoor unit (-- is displayed.)
- Set up refrigerant circuit address data again.

- When refrigerant circuit address data was normally set up on the indoor unit.

19) Press the "⏻/ I" button to return to the 2-wire remote controller address selection screen of (2). If setting has been completed, press the FAN "∨" button to return to the Menu 2-F1 item selection screen.



Note:

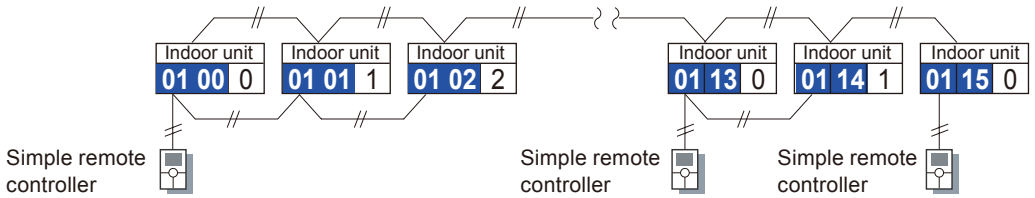
- **This item cannot be set from slave remote controllers.**

■ COMPLETION OF ADDRESS SETTING MODE

20) Press and hold the FAN "∧" button for at least 2 seconds to return to the Menu 1 item selection screen. Then, press and hold the SET TEMP. "∧" and FAN "∨" button for at least 2 seconds at the same time to return to the "Monitor Mode" screen.

FUNCTION SETTING

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 13), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

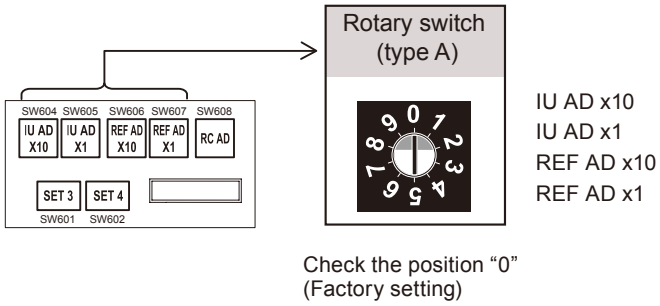
FUNCTION SETTING

1-4-4. SIMPLE REMOTE CONTROLLER (UTY-RSK*, UTY-RHK*)

- Indoor unit addresses and refrigerant circuit addresses can be set up using simple remote controllers.
- This function allows setting the addresses of all indoor units to which a simple remote controller is being connected.
- This function cannot be used to set up remote controller addresses.
  Be sure to set them up using the rotary switches on the PCB of each indoor unit. (Refer to 1-3.)
- This function can be set up on both UTY-RSK*(With operation mode) and UTY-RHK*(Without operation mode) types.
- This function cannot be used on the slave units.

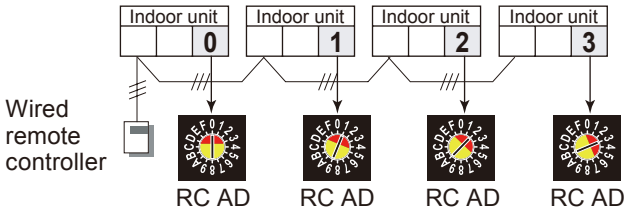
■ PREPARATION

1) Make sure that all indoor unit address switches (IU AD x10, IU AD x1) and refrigerant circuit address switches (REF AD x10, REF AD x1) on the PCB of each indoor unit are set at 0 (factory setting).



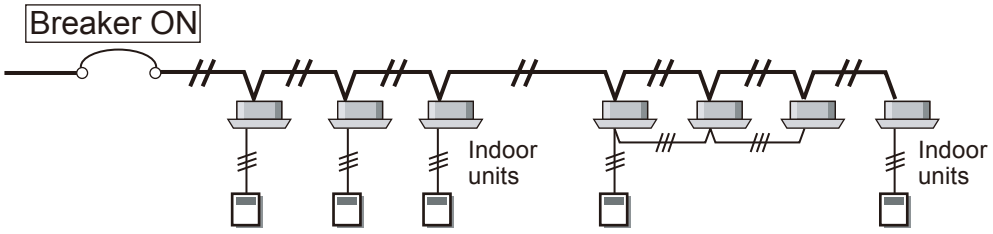
- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

2) If multiple indoor units are connected to a single simple remote controller, make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units. (Refer to 1-3.)
   Ex.) When four indoor units are connected



3) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

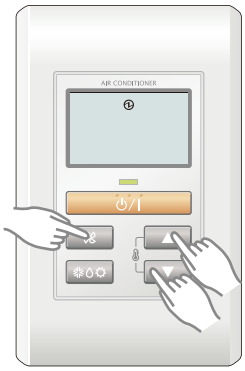


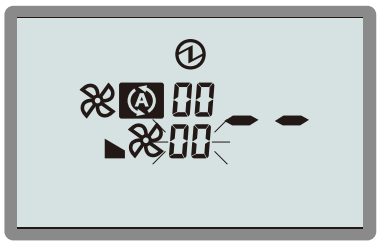
FUNCTION SETTING

FUNCTION SETTING

■ SWITCHING SELECTION OF ADDRESS SETTING MODE

4) To activate the address setting mode, hold down the three buttons of SET TEMP. ▼, SET TEMP. ▲ and FAN at the same time for 5 seconds or longer.





Address setting mode initial display

■ BUTTON NAME AND FUNCTION

- Refer to “1-2” for an outline of the address setting.
- It does not matter whether the refrigerant circuit address or indoor unit address is set first. (The method shown here sets the indoor unit address first.)
- During address setting mode, indoor unit reject the any operation command from remote controller.

Function number

01---Indoor unit address

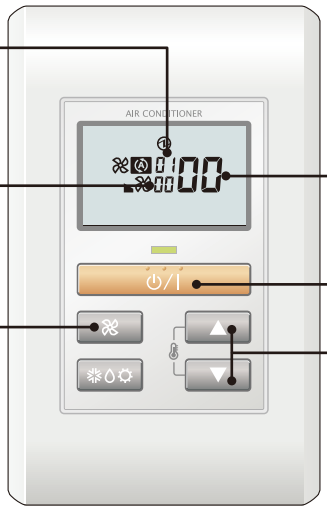
02---Refrigerant circuit address

Remote controller address

Remote controller address setting number 00-15

FAN button

Each time this button is pressed, the fan setting changes among “Remote controller address,” “Function number” and “Setting number.”



Setting number

Setting number

- Indoor unit address valid range 00-63
- Refrigerant circuit address valid range 00-99

START/STOP button

Transmits address setting

SET TEMP. “▲” and “▼” button

Switches the various numbers.

UTY-RSK* (With operation mode)

Function number

01---Indoor unit address

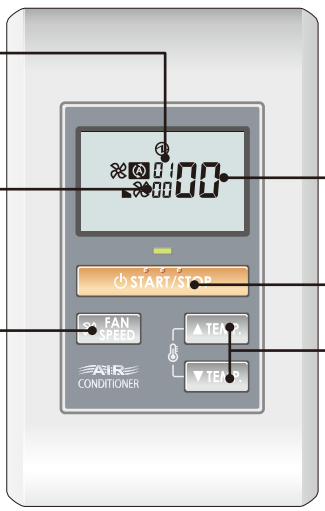
02---Refrigerant circuit address

Remote controller address

Remote controller address setting number 00-15

FAN button

Each time this button is pressed, the fan setting changes among “Remote controller address,” “Function number” and “Setting number.”



Setting number

Setting number

- Indoor unit address valid range 00-63
- Refrigerant circuit address valid range 00-99

START/STOP button

Transmits address setting

SET TEMP. “▲” and “▼” button

Switches the various numbers.

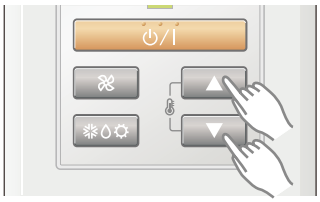
UTY-RHK* (Without operation mode)

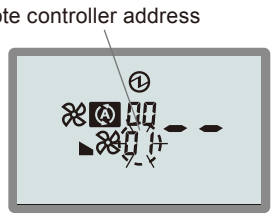
FUNCTION SETTING

■ ADDRESS SETTING

● Indoor unit address setting

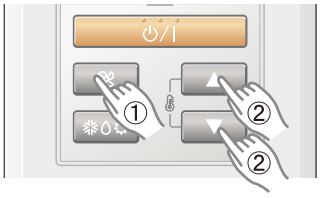
5) Pressing the SET TEMP. ▲ button or SET TEMP. ▼ button, select a remote controller address (select the indoor unit you want to operate).

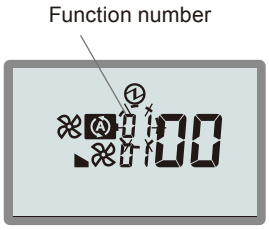




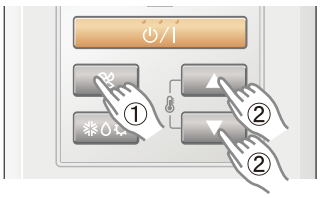
Ex.) When remote controller address “01” is selected

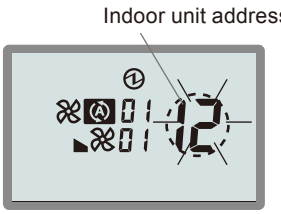
6) Press the FAN button so that the “Function number” display flashes. Then, press either the SET TEMP. ▲ button or the SET TEMP. ▼ button to display function number “01.”





7) Press the FAN button so that the “Setting number” display flashes. Then, press either the SET TEMP. p button or the SET TEMP. q button to set up the indoor unit address data. (The setting range is from 00 to 63.)





Ex.) When indoor unit address data “12” is set up

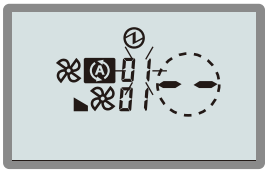
8) Pressing the START/STOP button, confirm the selected indoor unit address data. (The data will be transferred to the indoor unit.)





ERROR

GOOD





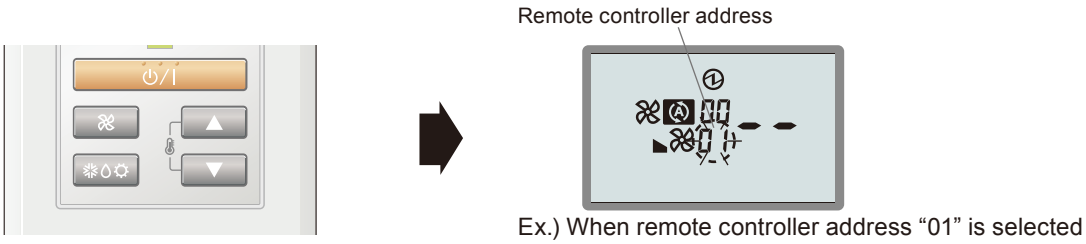
- When indoor unit address data was not set up on the indoor unit (-- is displayed.)
- Set up indoor unit address data again according to the procedure in step 7) above.

When indoor unit address data was normally set up on the indoor unit.

FUNCTION SETTING

● Refrigerant circuit address setting

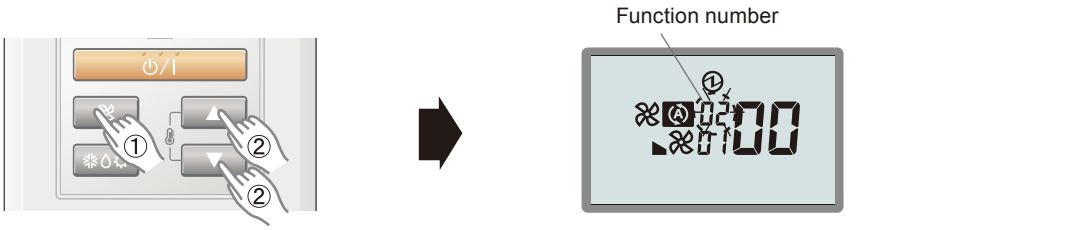
9) Pressing the SET TEMP. ▲ button or SET TEMP. ▼ button, select a remote controller address (select the indoor unit you want to operate).



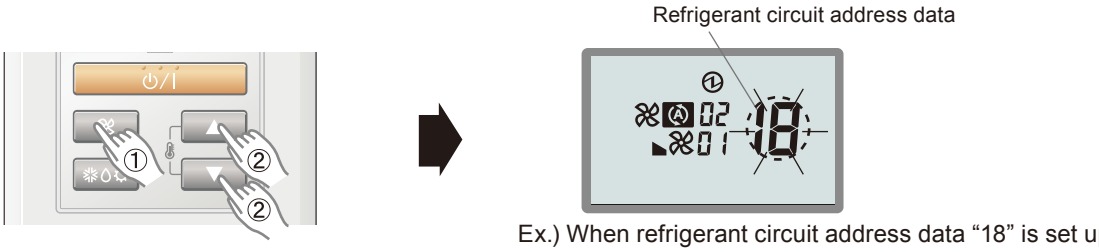
Ex.) When remote controller address “01” is selected

*If the indoor unit you want to operate has already been selected, skip step 9).

10) Press the FAN button so that the “Function number” display flashes. Then, press either the SET TEMP. ▲ button or the SET TEMP. ▼ button to display function number “02.”

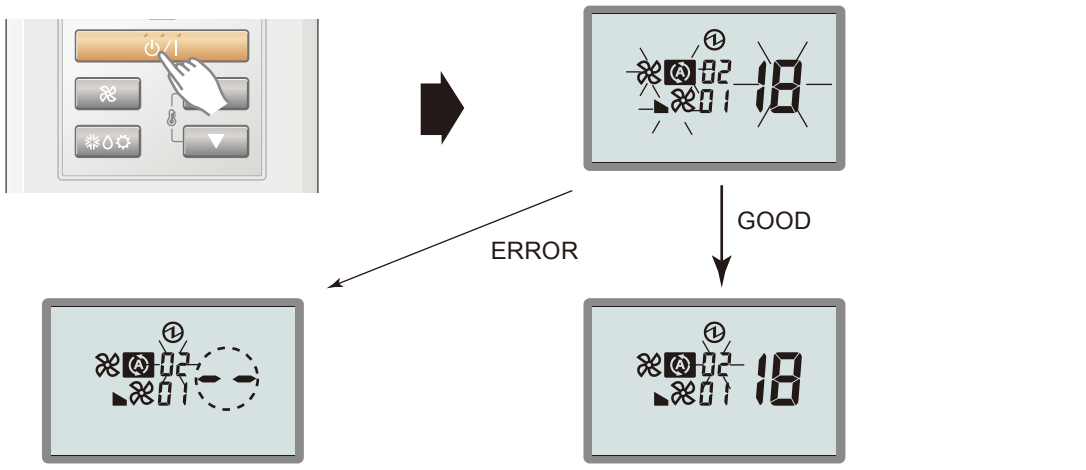


11) Press the FAN button so that the “Setting number” display flashes. Then, press either the SET TEMP. ▲ button or the SET TEMP. ▼ button to set up the refrigerant circuit address data. (The setting range is from 00 to 99.)



Ex.) When refrigerant circuit address data “18” is set up

12) Pressing the START/STOP button, confirm the selected refrigerant circuit address data. (The data will be transferred to the indoor unit.)



- When refrigerant circuit address data was not set up on the indoor unit (-- is displayed.)
- Set up refrigerant circuit address data again according to the procedure in step 11) above.

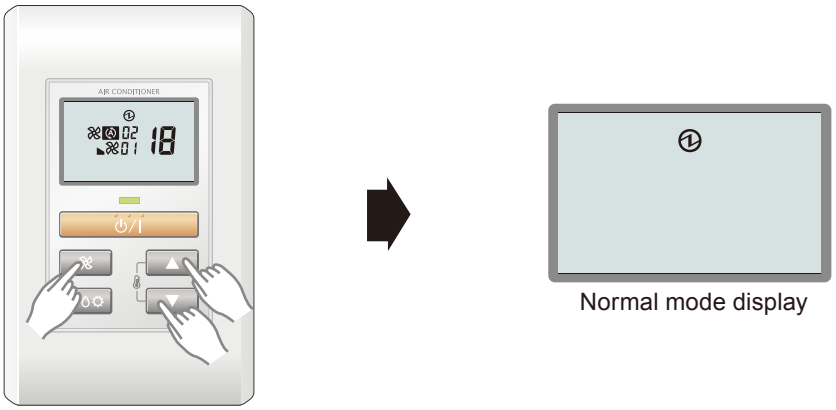
When refrigerant circuit address data was normally set up on the indoor unit.

FUNCTION SETTING

FUNCTION SETTING

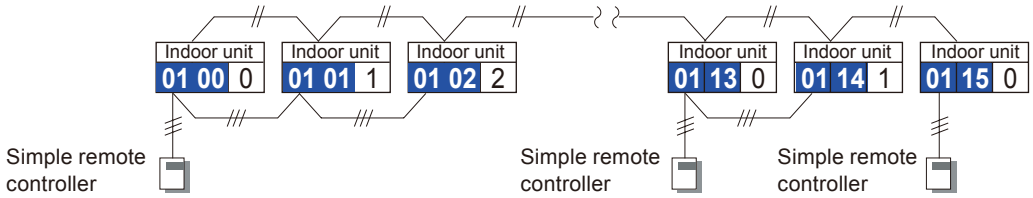
■ COMPLETION OF ADDRESS SETTING MODE

13) Press the three buttons of SET TEMP. ▲, SET TEMP. ▼ and FAN at the same time for 5 seconds or longer. The address setting mode will be cleared and the normal mode display will be restored.



∗ If no key entry is made for 60 seconds, even though none of the above buttons is pressed, the address setting mode will automatically be cleared.
(If the address setting mode is automatically cleared while setting addresses, activate the mode again according to the procedure in step 4) above.)

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 13), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

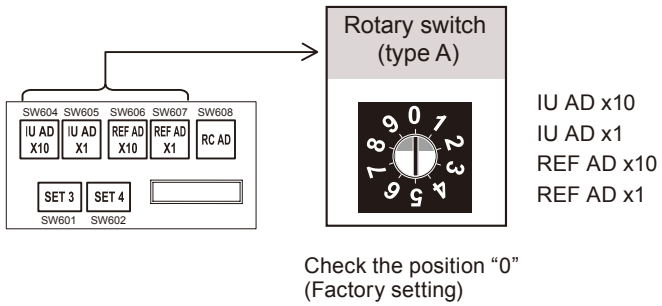
FUNCTION SETTING

1-4-5. WIRED REMOTE CONTROLLER (UTY-RNR*Z1, UTY-RNR*)

- Indoor unit addresses and refrigerant circuit addresses can be set up using wired remote controllers.
- This function allows setting the addresses of all indoor units to which a wired remote controller is being connected.
- This function cannot be used on the slave units.

■ PREPARATION

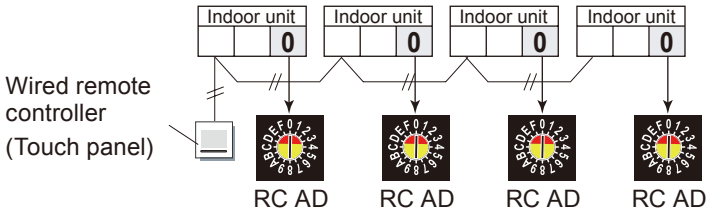
1) Make sure that all indoor unit address switches (IU AD x10, IU AD x1) and refrigerant circuit address switches (REF AD x10, REF AD x1) on the PCB of each indoor unit are set at 0 (factory setting).



Check the position “0” (Factory setting)

- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

2) When multiple indoor units are connected to a single wired remote controller.
When setting of Remote controller address in "Automatic address setting"



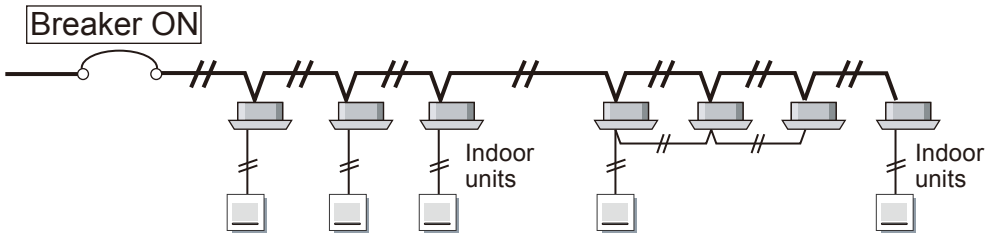
FUNCTION SETTING

FUNCTION SETTING

■ PREPARATION

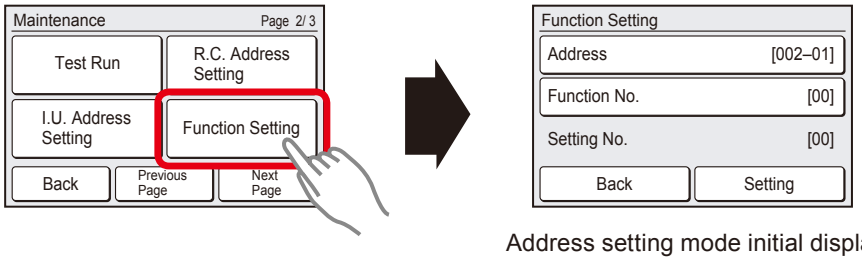
3) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.



■ SWITCHING SELECTION OF ADDRESS SETTING MODE

4) When the [Function Setting] on the “Maintenance” screen is touched, the “Installer Password Verification” screen is displayed.
Enter the Installer Password, and touch the [OK]. “Function Setting” screen is displayed.



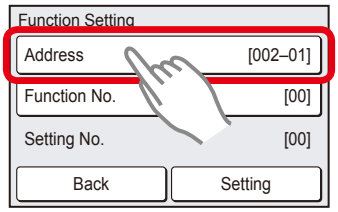
Address setting mode initial display

FUNCTION SETTING

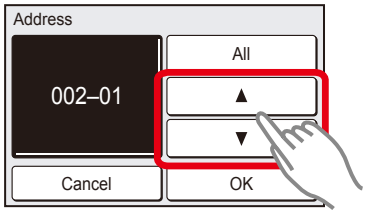
■ ADDRESS SETTING

● Indoor unit address setting

5) Touch the [Address] on the “Function Setting” screen.

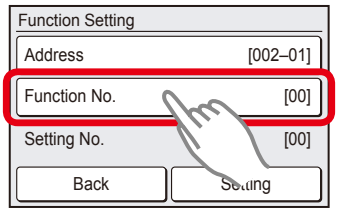


6) “Address” screen is displayed. Select the address of the indoor unit whose function number is to be set by touching [▲] or [▼].

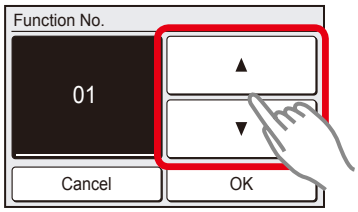


When the [OK] is touched, the display returns to the “Function Setting” screen.

7) Touch the [Function No.] on the “Function Setting” screen.

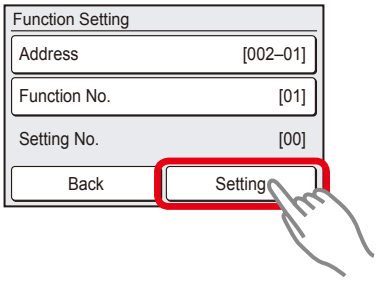


8) “Function No.” screen is displayed. Set the Function No"01". with the [▲] or [▼].

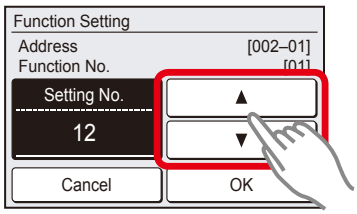


When the [OK] is touched, the display returns to the “Function Setting” screen.

9) Touch the [Setting] on the “Function Setting” screen.

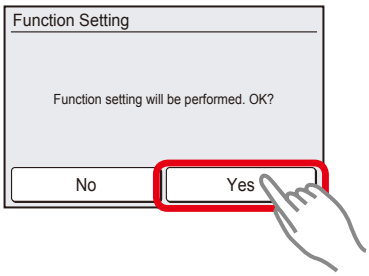


10) Setting screen of “Setting No.” is displayed. Set the Setting No. with the [▲] or [▼]. (The setting range is from 00 to 63.)



Ex.) When indoor unit address data "12" is set up
When the [OK] is touched, the “Function Setting” verification screen is displayed.

11) Touch the [YES] of the verification screen.



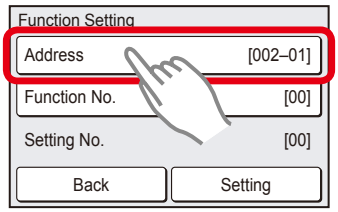
After the “Setting” screen was displayed, the display returns to the “Function Setting” screen.

FUNCTION SETTING

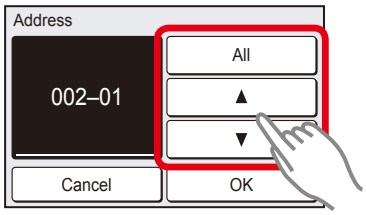
FUNCTION SETTING

● Refrigerant circuit address setting

12) Touch the [Address] on the “Function Setting” screen.

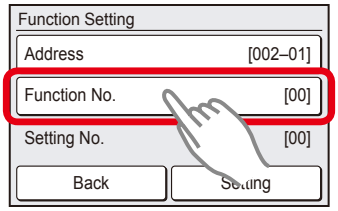


13) “Address” screen is displayed. Select the address of the indoor unit whose function number is to be set by touching [▲] or [▼]. When setting at all the indoor units, touch [All].

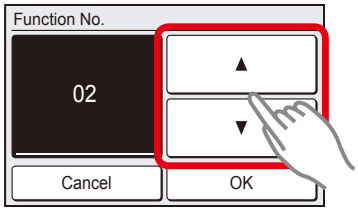


When the [OK] is touched, the display returns to the “Function Setting” screen.

14) Touch the [Function No.] on the “Function Setting” screen.

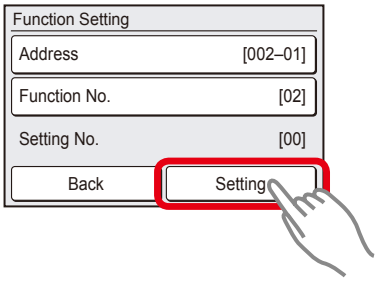


15) “Function No.” screen is displayed. Set the Function No"02". with the [▲] or [▼].

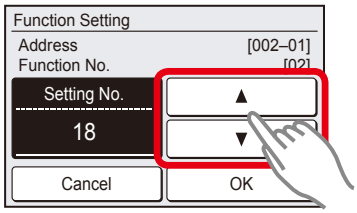


When the [OK] is touched, the display returns to the “Function Setting” screen.

16)Touch the [Setting] on the “Function Setting” screen.

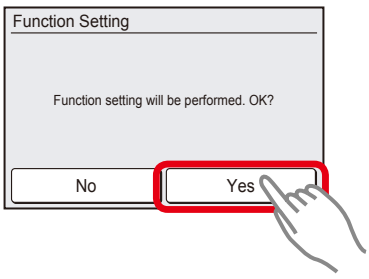


17) Setting screen of “Setting No.” is displayed. Set the Setting No. with the [▲] or [▼]. (The setting range is from 00 to 99.)



Ex.) When refrigerant circuit address data "18" is set up
When the [OK] is touched, the “Function Setting” verification screen is displayed.

18) Touch the [YES] of the verification screen.

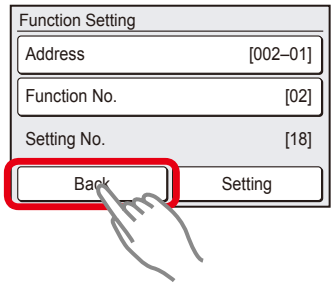


After the “Setting” screen was displayed, the display returns to the “Function Setting” screen.

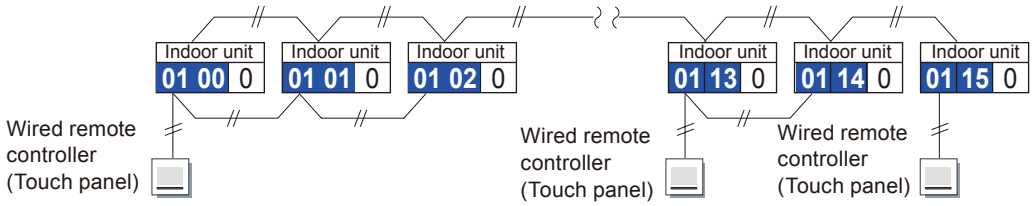
FUNCTION SETTING

■ COMPLETION OF ADDRESS SETTING MODE

19) When the [Back] on the “Function Setting” screen is touched, the display returns to the “Maintenance” screen.



■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 19), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

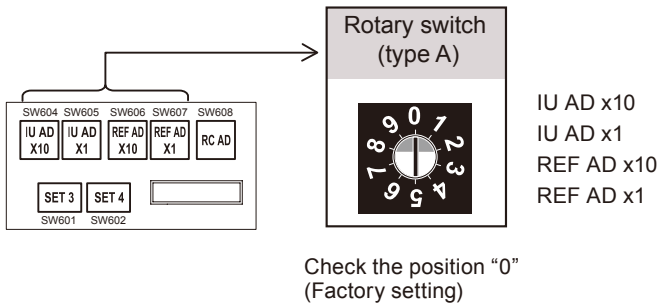
FUNCTION SETTING

1-4-6. WIRED REMOTE CONTROLLER (UTY-RLR*)

- Indoor unit addresses and refrigerant circuit addresses can be set up using wired remote controllers.
- This function allows setting the addresses of all indoor units to which a wired remote controller is being connected.
- This function cannot be used to set up remote controller addresses.
  When setting of Remote controller address in "Manual address setting" , Be sure to set them up using the rotary switches on the PCB of each indoor unit. (Refer to 1-3.)
- This function cannot be used on the slave units.

■ PREPARATION

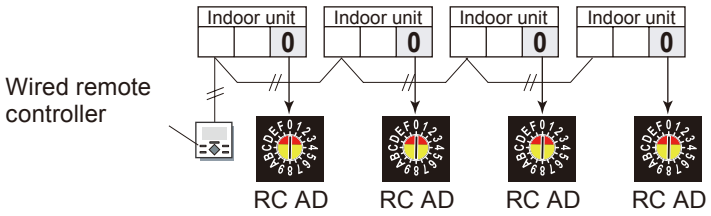
1) Make sure that all indoor unit address switches (IU AD x10, IU AD x1) and refrigerant circuit address switches (REF AD x10, REF AD x1) on the PCB of each indoor unit are set at 0 (factory setting).



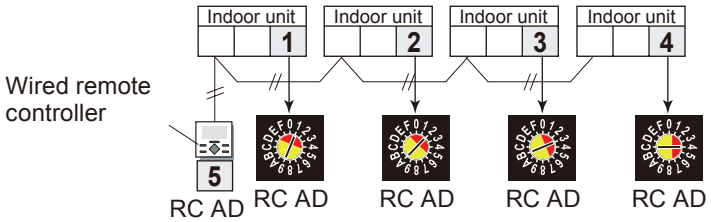
- If any of the switches is positioned at a value other than 0, this function will not activate.
- The layout of the switches differs depending on the type of the indoor unit. (Refer to 2-2.)

2) When multiple indoor units are connected to a single wired remote controller.

2-1) When setting of Remote controller address in "Automatic address setting"



2-2) When setting of Remote controller address in "Manual address setting", make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units and Wired remote controller. (Refer to 1-3.)

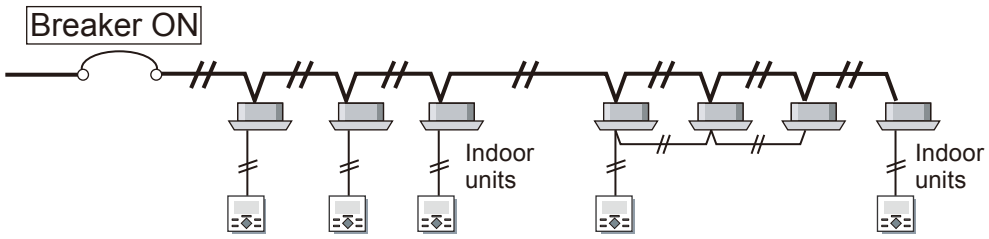


FUNCTION SETTING

■ PREPARATION

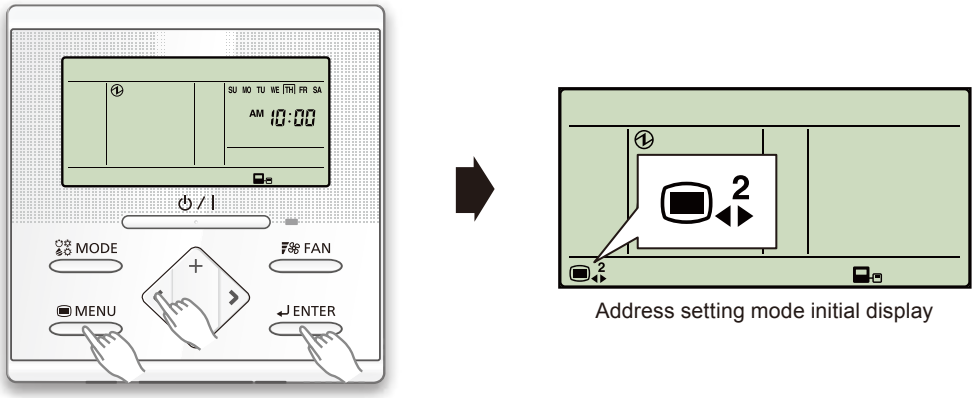
3) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.



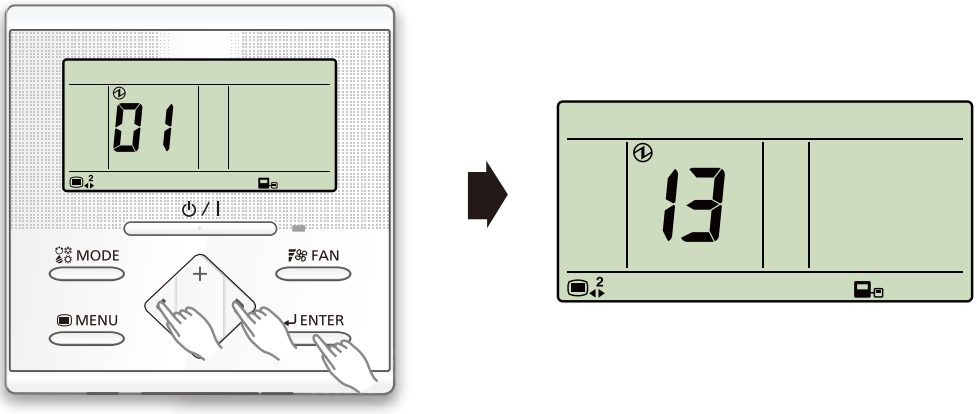
■ SWITCHING SELECTION OF ADDRESS SETTING MODE

4) To activate the address setting mode, hold down the three buttons of "MENU", "<" and "ENTER" at the same time for 2 seconds or longer.



Address setting mode initial display

5) Select the “13” in Menu 2 Settings. Then press the "ENTER" button.



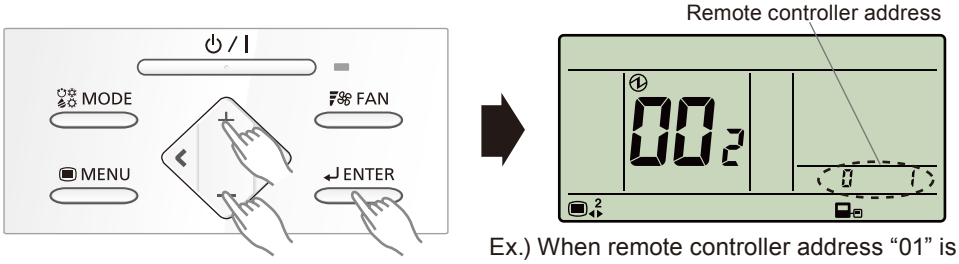
FUNCTION SETTING

FUNCTION SETTING

■ ADDRESS SETTING

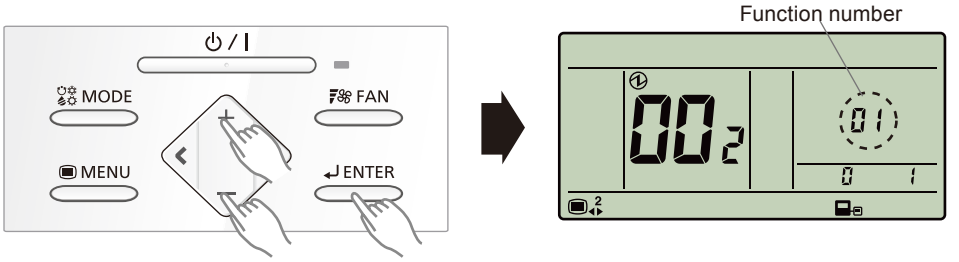
● Indoor unit address setting

6) Pressing the "+" or "-" button, select a remote controller address (select the indoor unit you want to operate). Then press the "ENTER" button.

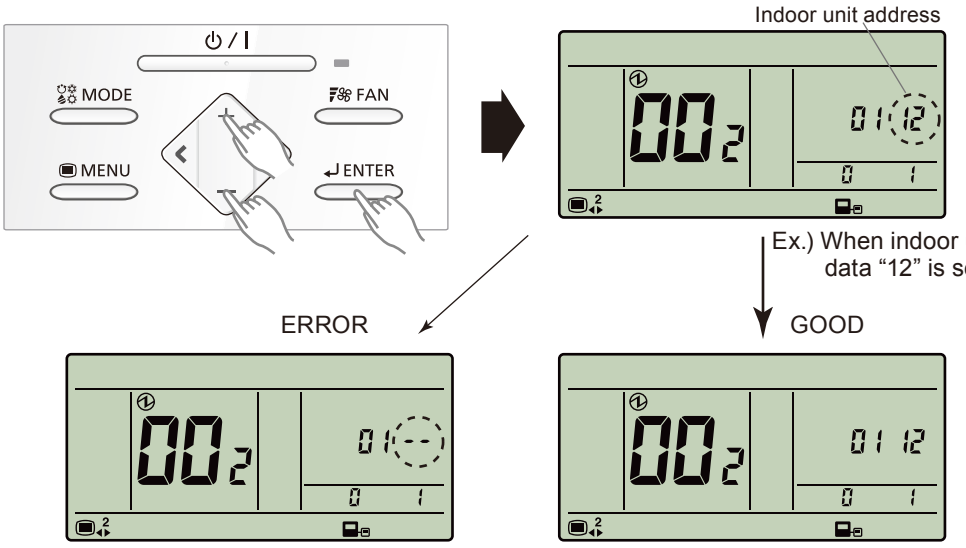


Ex.) When remote controller address “01” is selected

7) Pressing the "+" or "-" button, display function number 01. Then press the "ENTER" button.



8) Pressing the "+" or "-" button, set up the indoor unit address. (The setting range is from 00 to 63.)



- When indoor unit address data was not set up on the indoor unit (-- is displayed.)
- Set up indoor unit address data again.

- When indoor unit address data was normally set up on the indoor unit.

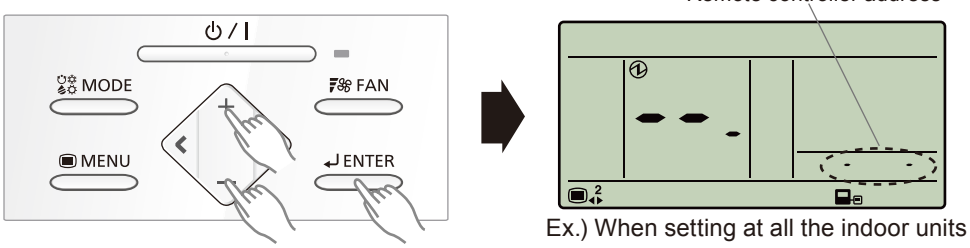
9) Pressing the "ENTER" button to return to the address selection screen. If setting has been completed, pressing the "MENU" button to return to the Menu 2 item selection screen.

FUNCTION SETTING

FUNCTION SETTING

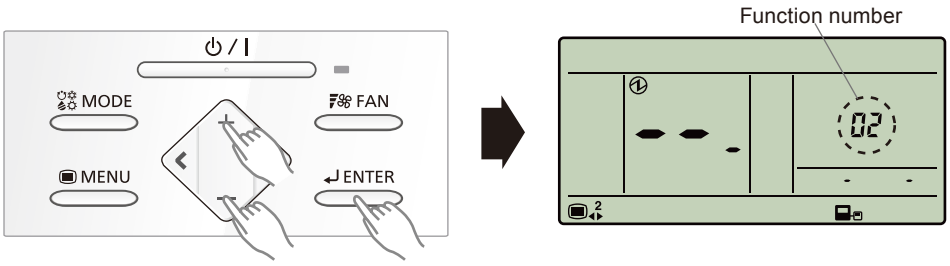
● Refrigerant circuit address setting

10) Pressing the "+" or "-" button, select a remote controller address (select the indoor unit you want to operate). Then press the "ENTER" button.

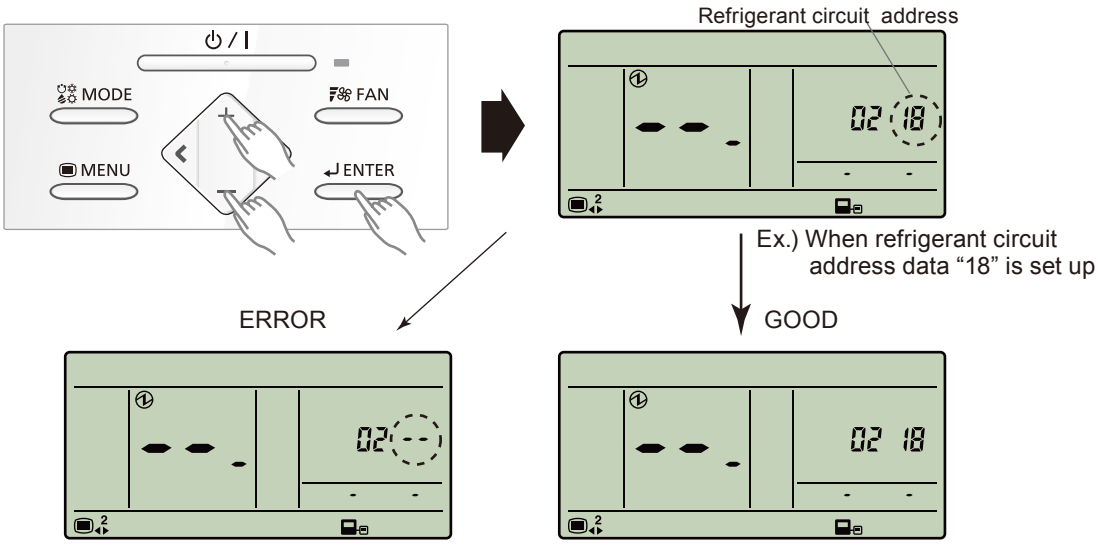


Ex.) When setting at all the indoor units

11) Pressing the "+" or "-" button, display function number 02. Then press the "ENTER" button.



12) Pressing the "+" or "-" button, set up the refrigerant circuit address. (The setting range is from 00 to 99.)



- When refrigerant circuit address data was not set up on the indoor unit (-- is displayed.)
- Set up refrigerant circuit address data again.

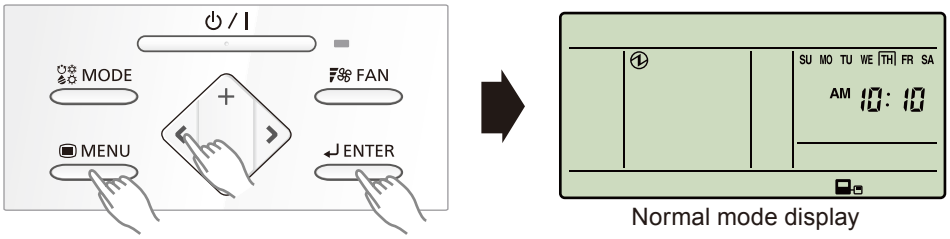
- When refrigerant circuit address data was normally set up on the indoor unit.

13) Pressing the "ENTER" button to return to the address selection screen. If setting has been completed, pressing the "MENU" button to return to the Menu 2 item selection screen.

FUNCTION SETTING

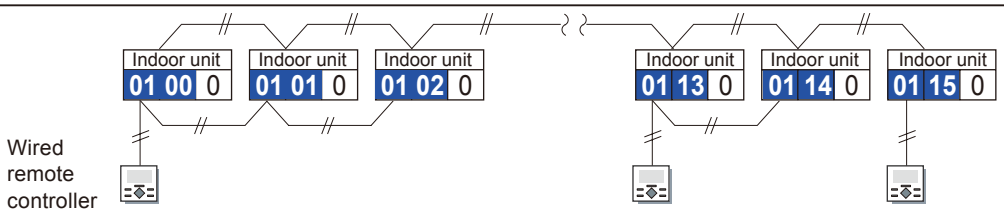
■ COMPLETION OF ADDRESS SETTING MODE

14) To clear the address setting mode and return to the normal mode display, hold down the three buttons of "MENU", "<" and "ENTER" at the same time for 2 seconds or longer.



Normal mode display

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 14), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

FUNCTION SETTING

1-5. AUTOMATIC ADDRESS SETTING

The addresses of signal amplifiers, indoor units and RB units can be set automatically.

⚠Caution
Following are cautions when performing AUTOMATIC ADDRESS SETTING. 1.The Controller cannot be used. 2.AUTOMATIC ADDRESS SETTING may take about 30 minutes. 3.Emergency stop signal is not accepted. Refer to Chapter 8. EXTERNAL INPUT & OUTPUT for design related to emergency stop.
When setting addresses of signal amplifiers, indoor units and RB units automatically, be sure to always set the addresses of signal amplifiers first, set the addresses of indoor units second, set the addresses of RB units last.

■ AUTOMATIC ADDRESS SETTING METHOD

<Step 1>

Manual setting of Outdoor unit

Please set up 1-3 (Set A, Set B, Set C, Set L) and 1-8(terminal resister setting)

<Step 2>

Turn Power ON of all units

<Step 3>

Automatic address setting of Signal Amplifier (1-5-1)

<Step 4>

Automatic address setting of Indoor unit (1-5-2)

<Step 5>

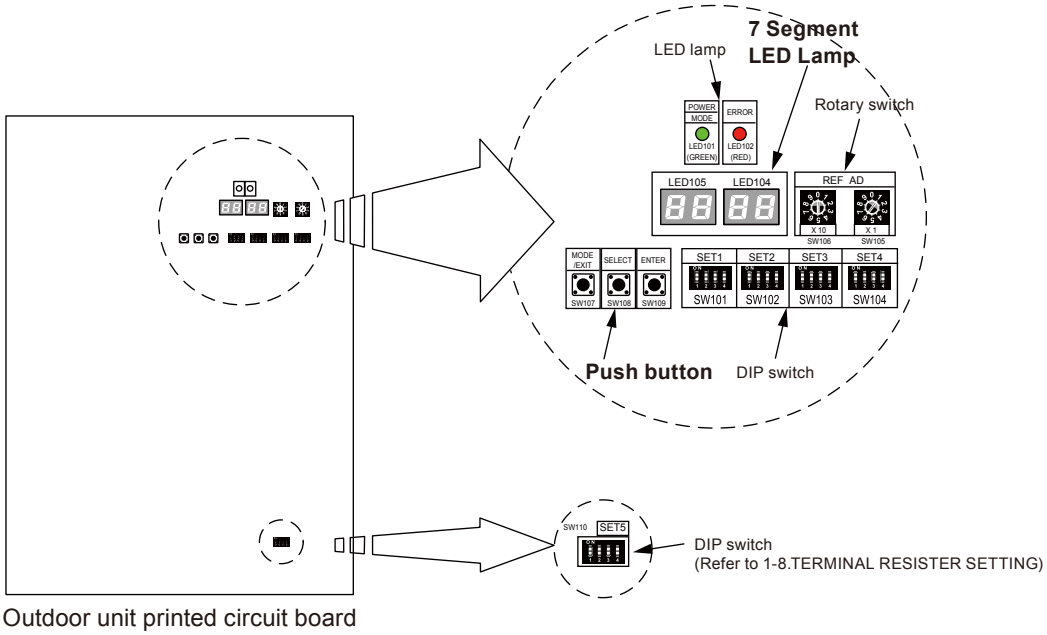
Automatic address setting of RB unit (1-5-3)

This function is available VR-II series

Note: Do not change an order of step1 to step5.

FUNCTION SETTING

■ SWITCH POSITION

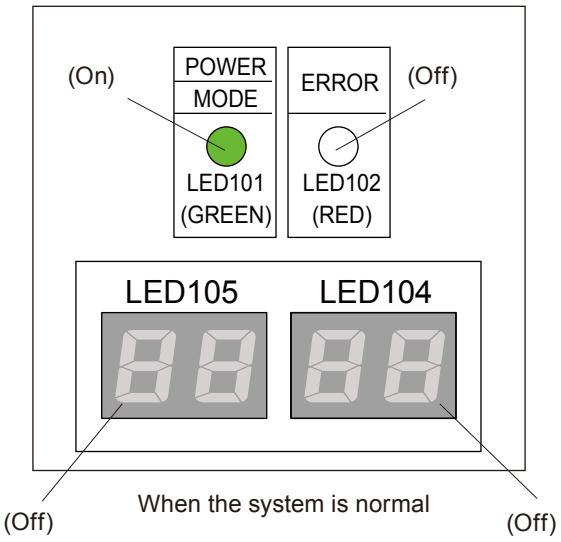


Switch position differs depending on outdoor unit.

- Set the functions of an outdoor unit with the push buttons (SW107, SW108 and SW109) while observing the 7-segment LED lamps (LED105 and LED104) on the printed circuit board.

■ PREPARATION

1) Be sure to check that the operation of the outdoor unit has stopped (be sure to stop the operation if it is still running), and turn off the power.
2) Remove the front panel of the outdoor unit, and remove the lid of the electrical component box in order to expose the printed circuit board.
3) Turn on the power of the outdoor unit.



- As shown in the above figure, make sure that the POWER/MODE indicator lamp (LED101) is on and the ERROR indicator lamp (LED102) is off.
- If the ERROR indicator lamp (LED102) flashes, it indicates that an error has occurred. Check wiring and power supply. After making sure that the ERROR indicator lamp (LED102) has turned off, proceed to the next step.

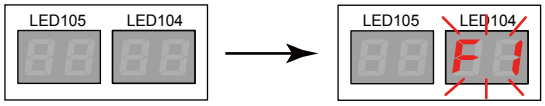
FUNCTION SETTING

1-5-1. SIGNAL AMPLIFIER AUTOMATIC ADDRESS SETTING

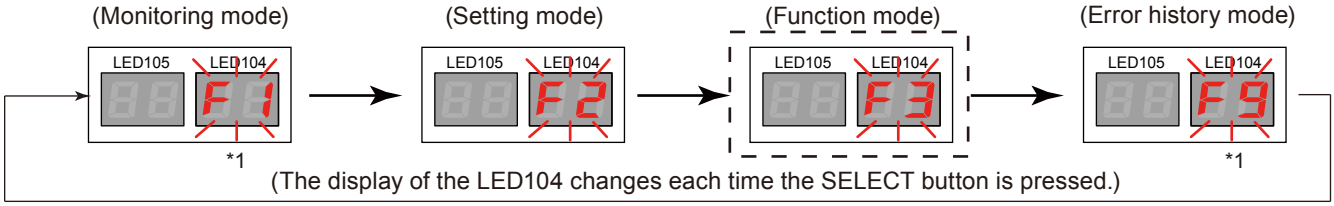
⚠Caution

- The Signal Amplifier Automatic Address Setting function can be used for a maximum of 40 signal amplifiers installed within the same network.
- Perform the automatic address setting of signal amplifiers on only one outdoor unit (master unit) within the same network. (Do not set them again from other outdoor unit.)
- When setting the address of a signal amplifier automatically, be sure to always set the address on the printed circuit board of the Signal amplifier to “1”(factory setting).
- Please perform automatic address setting after checking that filter mode setting of Signal amplifier is completed.

1) After verifying that the system is normally, press the MODE/EXIT button (SW107) once.

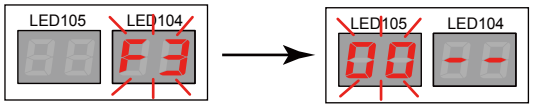


2) Press the SELECT button (SW108) to display “F3” on the LED104.



*1 : The “F1” and “F9” modes are used for maintenance, so do not set them in regular

3) When “F3” appears on the LED104, press the ENTER button (SW109).



A flashing display appears on the LED105.

4) Press the SELECT button (SW108) to display “10” on the LED105.



5) When “10” appears on the LED105, hold down the ENTER button (SW109) for at least 3 seconds. (Unless it is held down for at least 3 seconds, the selection will not be confirmed.)



When the Automatic Address Setting function is activated, the display changes to “run.”

FUNCTION SETTING

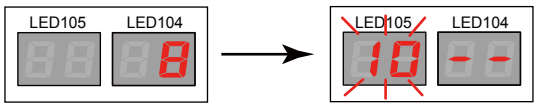
FUNCTION SETTING

6) When automatic address setting is completed, the number of signal amplifier is displayed on the LED104. Verify that the count matches the number of signal amplifiers being installed.

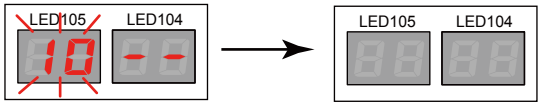


Ex.) When eight signal amplifiers are being connected

7) To exit automatic address setting, press the ENTER button (SW109) in the setting completed status shown in step 6) above.



Next, press the MODE/EXIT button (SW107) to exit the Function mode.



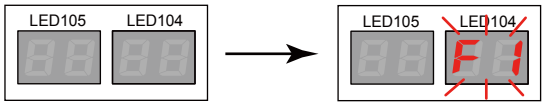
FUNCTION SETTING

1-5-2. INDOOR UNIT AUTOMATIC ADDRESS SETTING

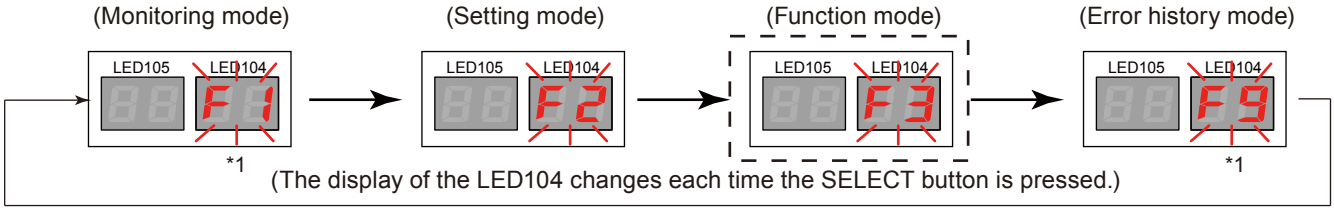
⚠Caution

- The Indoor Unit Automatic Address Setting function can be used for a maximum of 64 indoor units installed within the same refrigerant system.
- The Indoor Unit Automatic Address Setting function cannot be used for indoor units being connected to other refrigerant systems via the network.
  (Refer to "■transmission wiring flow" in "Chapter 6. 4-3. transmission line.")
- When setting addresses automatically, be sure to position "IU AD x10" (SW6), "IU AD x1" (SW7), "REF AD x10" (SW8) and "REF AD x1" (SW9) at 0 (Factory setting).
- When an indoor unit address is set up, a refrigerant circuit address is also set up at the same time. (The refrigerant circuit address of an outdoor unit being connected within the same refrigerant system is set up.)

1) After verifying that the system is operating normally, press the MODE/EXIT button (SW107) once.

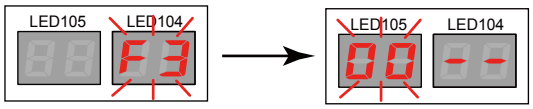


2) Press the SELECT button (SW108) to display "F3" on the LED104.



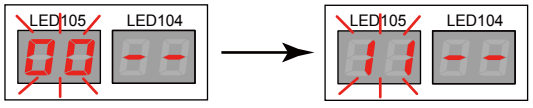
*1 : The "F1" and "F9" modes are used for maintenance, so do not set them in regular

3) When "F3" appears on the LED104, press the ENTER button (SW109).



A flashing display appears on the LED105.

4) Press the SELECT button (SW108) to display "11" on the LED105.



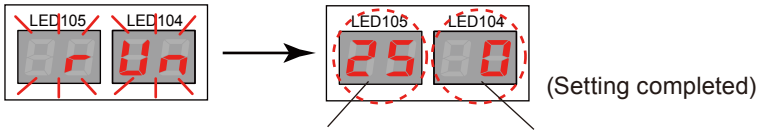
FUNCTION SETTING

5) When “11” appears on the LED105, hold down the ENTER button (SW109) for at least 3 seconds.(Unless it is held down for at least 3 seconds, the selection will not be confirmed.)



When the Automatic Address Setting function is activated, the display changes to “run.”

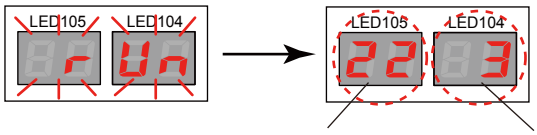
6) When automatic address setting is completed, the number of indoor units of which automatic address setting succeeded is displayed on the LED105, and the number of indoor units of which automatic address setting failed is displayed on the LED104.
Ex.) When 25 indoor units are connected, and the automatic setting of the addresses of all indoor units ended normally



LED105: The number of indoor units of which automatic address setting succeeded

LED104: The number of indoor units of which automatic address setting failed

Ex.) When 25 indoor units are connected, and the automatic setting of the addresses of three indoor units failed

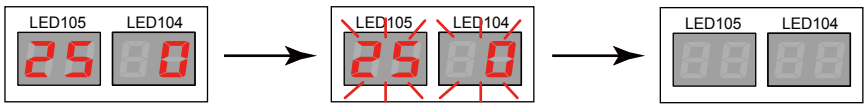


LED105: The number of indoor units of which automatic address setting succeeded

LED104: The number of indoor units of which automatic address setting failed

If automatic address setting failed, make sure that all of the rotary switches SW6 to SW9 on the PCBs of the failed indoor units are positioned at 0 and that wiring and power supply are correct, and then perform automatic address setting again.

7) When the ENTER button (SW109) is pressed, it takes about 30 seconds for end processing. During that time, the LED display blinks.
Setting is complete when the LED display goes off.



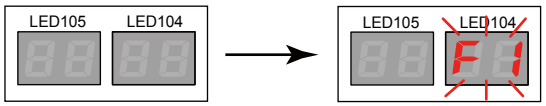
FUNCTION SETTING

1-5-3. RB UNIT AUTOMATIC ADDRESS SETTING

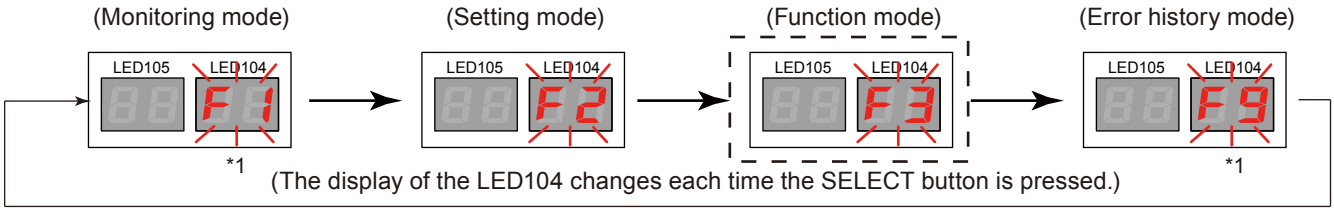
This function is available VR-II series.

⚠Caution
● Please be sure to finish address setting of outdoor unit and indoor unit before performing the automatic address setting of RB unit. ● The RB Unit Automatic Address Setting function can be used for a maximum of 64 RB units installed within the same refrigerant system. ● When setting addresses automatically, be sure to position “RB AD x10” (SW11), “RB AD x1” (SW14), “REF AD x10” (SW13) and “REF AD x1” (SW12) at 0 (Factory setting). ● When a RB unit address is set up, a refrigerant circuit address is also set up at the same time. (The refrigerant circuit address of an outdoor unit being connected within the same refrigerant system is set up.)

1) After verifying that the system is operating normally, press the MODE/EXIT button (SW107) once.

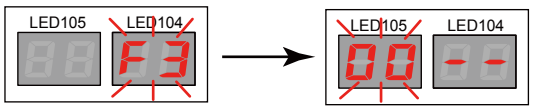


2) Press the SELECT button (SW108) to display “F3” on the LED104.



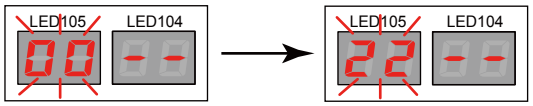
*1 : The “F1” and “F9” modes are used for maintenance, so do not set them in regular

3) When “F3” appears on the LED104, press the ENTER button (SW109).



A flashing display appears on the LED105.

4) Press the SELECT button (SW108) to display “22” on the LED105.



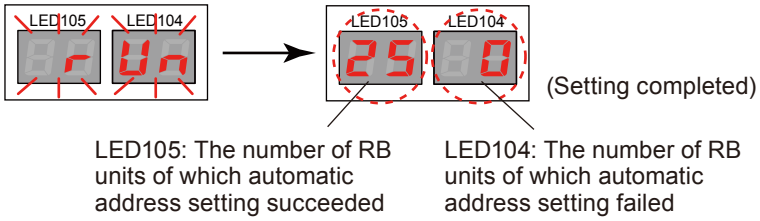
FUNCTION SETTING

5) When “22” appears on the LED105, hold down the ENTER button (SW109) for at least 3 seconds.(Unless it is held down for at least 3 seconds, the selection will not be confirmed.)

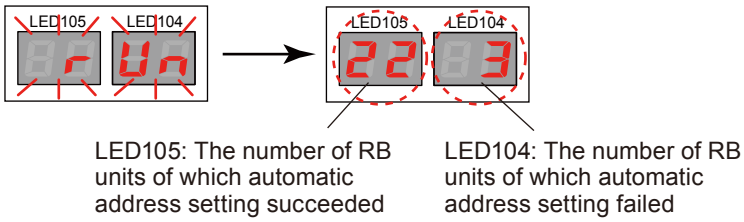


When the Automatic Address Setting function is activated, the display changes to “run.”

6) When automatic address setting is completed, the number of RB units of which automatic address setting succeeded is displayed on the LED105, and the number of RB units of which automatic address setting failed is displayed on the LED104.
Ex.) When 25 RB units are connected, and the automatic setting of the addresses of all RB units ended normally

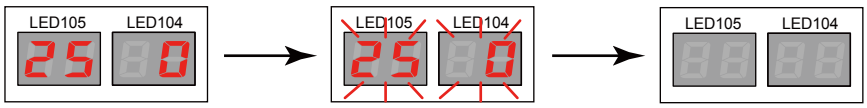


Ex.) When 25 RB units are connected, and the automatic setting of the addresses of three RB units failed



If automatic address setting failed, make sure that all of the rotary switches SW11 to SW14 on the PCBs of the failed RB units are positioned at 0 and that wiring and power supply are correct, and then perform automatic address setting again.

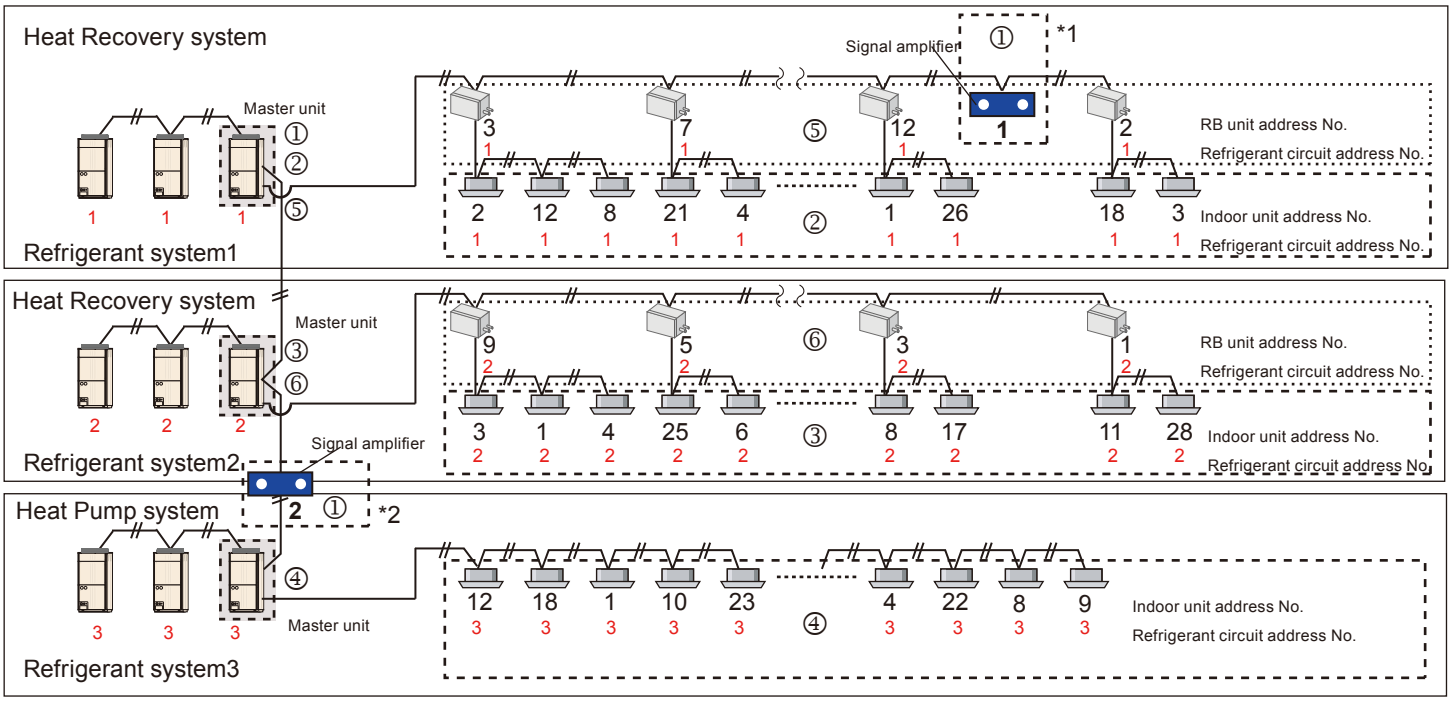
7) When the ENTER button (SW109) is pressed, it takes about 30 seconds for end processing. During that time, the LED display blinks.
Setting is complete when the LED display goes off.



FUNCTION SETTING

1-5-4. EXAMPLE FLOW

● Example 1 : To automatically set the addresses of signal amplifiers, indoor units and RB units Follow the step below



Step 1: ① Activate the Signal Amplifier Automatic Address Setting function on the master unit of Refrigerant System 1.

→An address is automatically assigned to all signal amplifiers on the network. (Because an address is also assigned to the signal amplifiers being connected in Refrigerant Systems 2 and 3, it is not necessary to perform the automatic address setting of these signal amplifiers again on the master units of Refrigerant Systems 2 and 3.)

Step 2: ② Activate the Indoor Unit Automatic Address Setting function on the master unit of Refrigerant System 1.

→An indoor unit address and a refrigerant circuit address are automatically set up for all indoor units being connected in Refrigerant System 1.

Step 3: ③ Activate the Indoor Unit Automatic Address Setting function on the master unit of Refrigerant System 2.

→An indoor unit address and a refrigerant circuit address are automatically set up for all indoor units being connected in Refrigerant System 2.

Step 4: ④ Activate the Indoor Unit Automatic Address Setting function on the master unit of Refrigerant System 3.

→An indoor unit address and a refrigerant circuit address are automatically set up for all indoor units being connected in Refrigerant System 3.

Step 5: ⑤ Activate the RB Unit Automatic Address Setting function on the master unit of Refrigerant System 1.

→A RB unit address and a refrigerant circuit address are automatically set up for all RB units being connected in Refrigerant System 1.

Step 6: ⑥ Activate the RB Unit Automatic Address Setting function on the master unit of Refrigerant System 2.

→A RB unit address and a refrigerant circuit address are automatically set up for all RB units being connected in Refrigerant System 2.

FUNCTION SETTING

⚠Caution

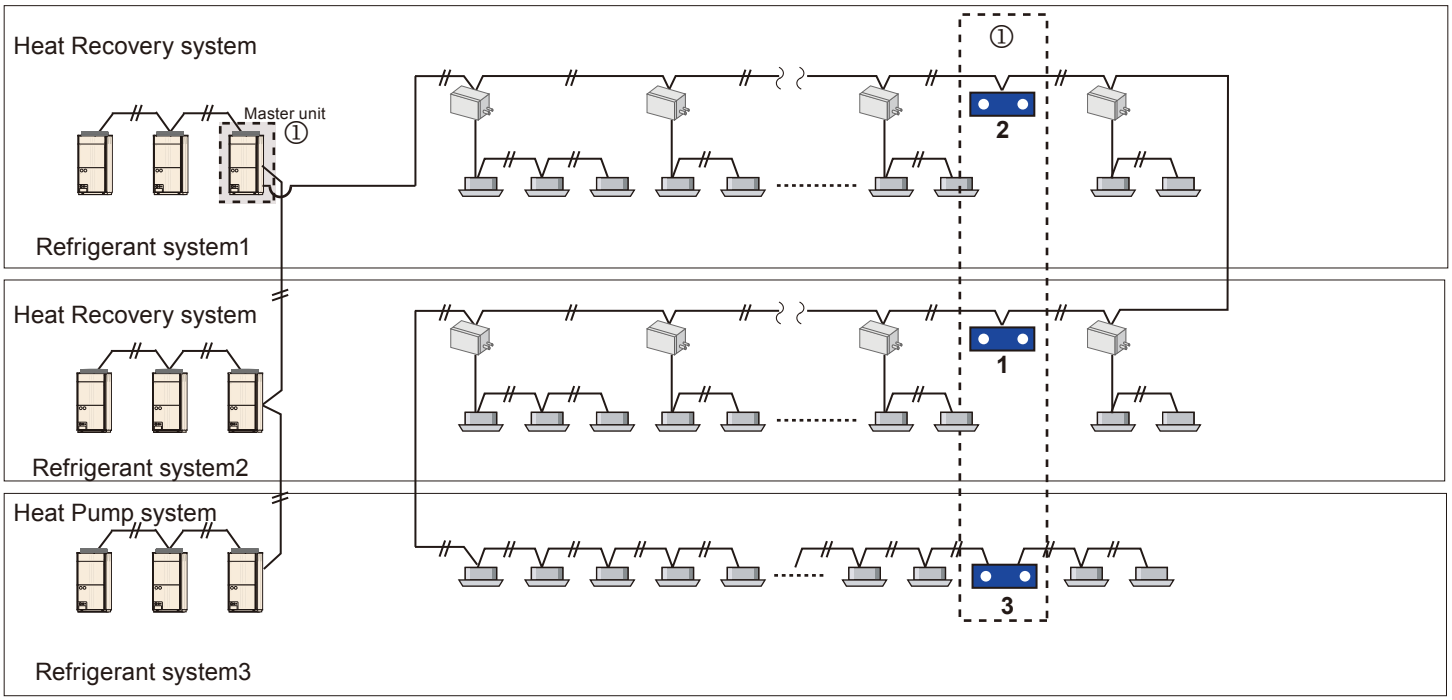
- Before activating the Automatic Address Setting function, be sure to finish setting the refrigerant circuit addresses of outdoor units.
- Setting the addresses of indoor units automatically does not necessary mean that addresses are assigned sequentially starting from the indoor unit which is located the closest to the outdoor units (instead, addresses are assigned randomly).
  With respect to the setting of refrigerant circuit addresses, the same address numbers of the refrigerant circuit addresses of the outdoor units being connected within the same refrigerant system are assigned.
- To find out what addresses have been assigned to individual indoor units, it is necessary to perform a separate address check operation.
- When setting addresses of signal amplifiers, indoor units and RB units automatically, be sure to always set the addresses of signal amplifiers first, set the addresses of indoor units second, set the addresses of RB units last.
- Please be sure to finish address setting of outdoor unit and indoor unit before performing the automatic address setting of RB unit.

∗1: If the total wiring length within a segment is expected to exceed 500 m, insert a signal amplifier (Refer to Chapter 5.).

∗2: If the number of nodes (the number of units of indoor units, outdoor units, controllers and others) is expected to exceed 64 (including signal amplifiers), insert a signal amplifier (Refer to Chapter 5.).

FUNCTION SETTING

● Example 2 : To automatically set the addresses of signal amplifiers only (When the addresses of indoor units and RB units will be set manually) Follow the step below



Step 1: ① Activate the Signal Amplifier Automatic Address Setting function on the master unit of Refrigerant System 1.

→An address is automatically assigned to all signal amplifiers on the network.

⚠Caution
● When indoor units are being connected via different refrigerant systems, never activate the Indoor Unit Automatic Address Setting function.
● As long as master units are on the same network, any master unit can set the addresses of signal amplifiers automatically.Perform the automatic address setting of signal amplifiers on only one outdoor unit (master unit) within the same network. (Do not set them again from other outdoor unit.)

FUNCTION SETTING

1-6. TERMINAL RESISTOR SETTING

⚠Caution
Be sure to set the terminal resistor according to specifications. Set the terminal resistor for every network segment (NS). ● If terminal resistor is set in multiple devices, the overall communication system may be damaged. ● If terminal resistor is not set in a device, abnormal communication may occur.

- Be sure to set one terminal resistor in a network segment. You can set the terminal resistor at the outdoor unit or signal amplifier.
- When setting the terminal resistor of a signal amplifier, refer to the installation manual of the signal amplifier.
- When setting multiple terminal resistors, take note of the following items.

①How many network segments are there in a VRF system?

②Where will you set the terminal resistors in a network segment?

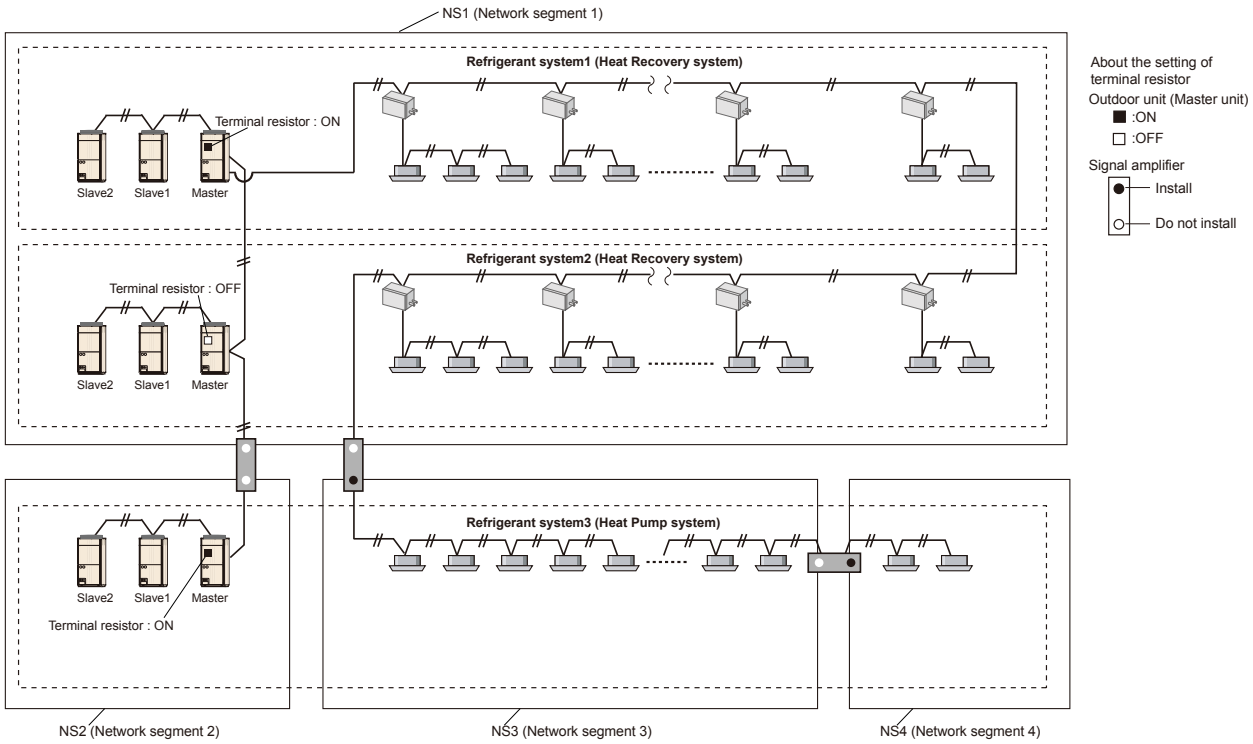
(Condition for 1 segment: Total number of outdoor and indoor units and signal amplifiers is less than 64, or the total length of the transmission line is less than 500m)

③How many outdoor units are connected in 1 Refrigerant system?

- From conditions①-③, set outdoor unit DIP switch SET5-4 in accordance with the table below.

DIP SW SET5-4	Terminal resistor	Remarks
OFF	Disable	(Factory setting)
ON	Enable	-

■ SETTING EXAMPLE



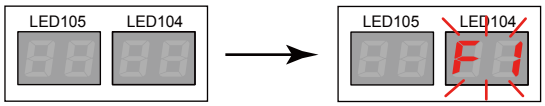
FUNCTION SETTING

1-7. INDOOR UNIT CONNECTION CHECK

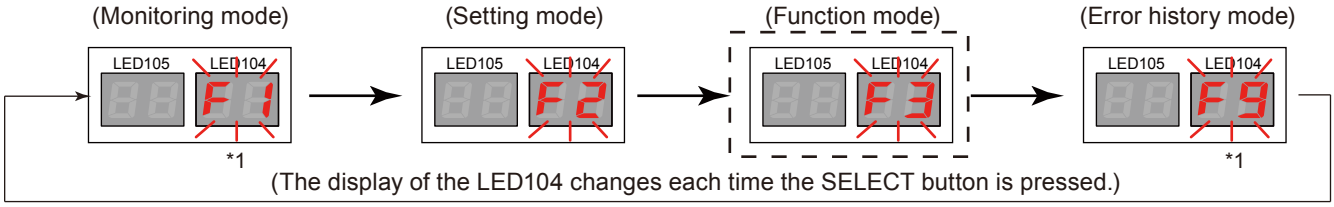
This function is available J-III, J-II and J-IIS series.

Note
● It is necessary to stop SERVICE TOOL (UTY-ASGX) and WEB MONITORING TOOL (UTY-AMGX), when you will carry out indoor unit connection check.

1) After verifying that the system is normally, press the MODE/EXIT button (SW107) once.

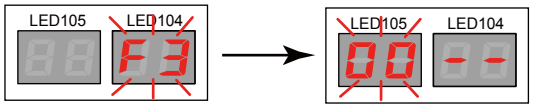


2) Press the SELECT button (SW108) to display “F3” on the LED104.



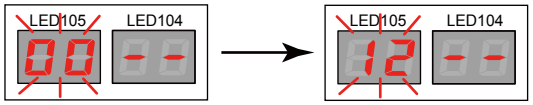
*1 : The “F1” and “F9” modes are used for maintenance, so do not set them in regular

3) When “F3” appears on the LED104, press the ENTER button (SW109).



A flashing display appears on the LED105.

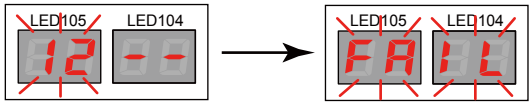
4) Press the SELECT button (SW108) to display “12” on the LED105.



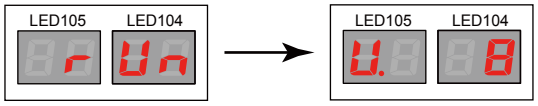
5) When “12” appears on the LED105, hold down the ENTER button (SW109) for at least 3 seconds. (Unless it is held down for at least 3 seconds, the selection will not be confirmed.)
When the Indoor Unit Connection Check function is activated, the display changes to “run”.



- When the Indoor Unit Connection Check function is not activated (during maintenance), the display changes to “FAIL”.



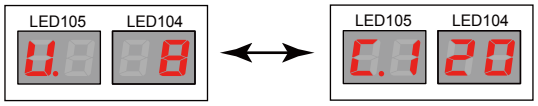
6) When Indoor Unit Connection Check is completed, the number of indoor unit is displayed on the LED104, LED105. Verify that the count matches the number of indoor units being installed.



Ex.) When eight indoor units are being connected

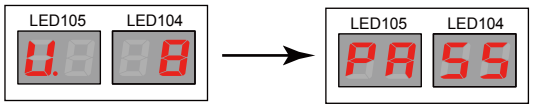
FUNCTION SETTING

7) When the number of indoor units appear on the LED104, LED105, press the SELECT button (SW108), the display changes to volume ratio of the indoor units.

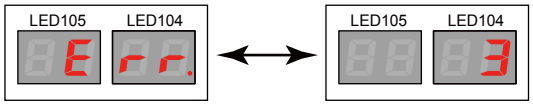


Ex.) When volume ratio of the indoor units is 120 %.
When 1.1 kW cooling capacity indoor unit is connected, refer to next page "●Note"

8) When “the number of indoor units” or “volume ratio of the indoor units connection” appears on the LED104, LED105, press the ENTER button (SW109). When Indoor Unit Connection Check is completed, the display changes to “PASS”.



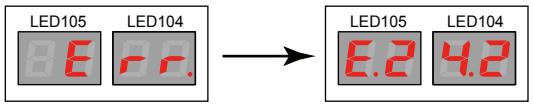
When Indoor Unit Connection Check is error, the display changes to “Err.” or “number of error” every one second.



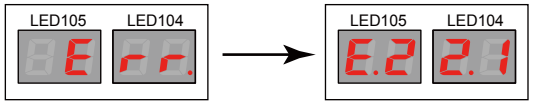
Ex.) Shown numbers of error are three.

When confirm the contents of the error , push the ENTER button (SW109). When there are some errors, display change by push the SELECT button (SW108).

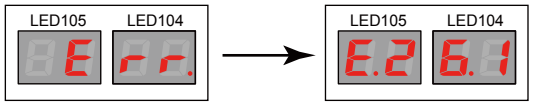
●Number of indoor unit connection is error.



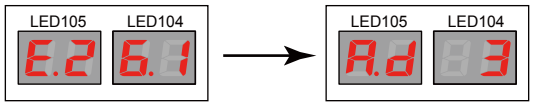
● Volume ratio of the indoor units connection is error.



● Overlap address of the indoor unit is error.

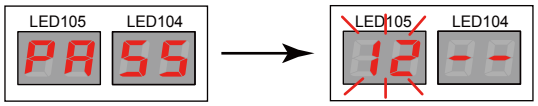


Display the address of the overlap indoor unit, hold down the ENTER button (SW109).

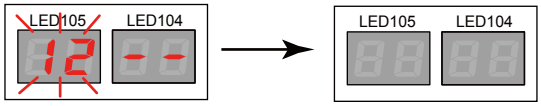


Ex.) Shown that overlap address to indoor unit address 3.

9) To exit the Indoor Unit Connection Check , press the ENTER button (SW109) in the setting completed status shown in step 8) above.



Next, press the MODE/EXIT button (SW107) to exit the Function mode.



FUNCTION SETTING

■ CONNECTABLE INDOOR UNIT

		Number of the indoor unit connection	Volume ratio of the indoor unit connection
J-IIIL	8HP	1 to 20	50 to 150 %
	10HP	1 to 25	
	12HP	1 to 30	
J-III	4HP	1 to 9	50 to 150 %
	5HP	1 to 10	
	6HP	1 to 13	
J-II	4HP	2 to 7	46 to 130 %
	5HP	2 to 8	50 to 130 %
	6HP	2 to 9	
J-IIS	4HP	2 to 7	50 to 130 %
	5HP	2 to 8	
	6HP		

● Note

If indoor unit whose cooling capacity is 1.1 kW is connected, calculate the value according to the following restrictions.

volume ratio of the indoor unit connection.

		1.1 kW cooling capacity indoor unit is NOT connected	1.1 kW cooling capacity indoor unit is connected	
			9.0 kW or larger cooling capacity AU or AR is NOT connected	9.0 kW or larger cooling capacity AU or AR is connected
J-IIIL	8HP	**50 to 150%**		
	10HP			
	12HP			
J-III	4HP	**50 to 150%**		
	5HP			
	6HP			
J-II	4HP	**46% to 130%**	**46% to 120% *1**	**46% to 110% *1**
	5HP	**50% to 130%**	**50% to 120% *1**	**50% to 110% *1**
	6HP			
J-IIS	4HP	**50% to 130%**	**50% to 117% *1**	**50% to 110% *1**
	5HP			
	6HP			

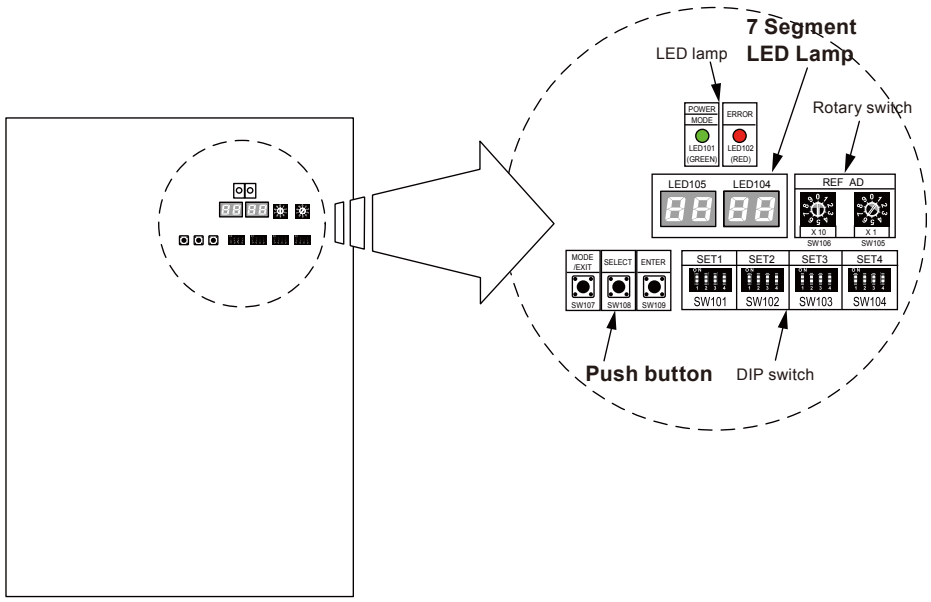
*1: Keep the volume ratio within the specified value above.
When 1.1 kW cooling capacity indoor unit is connected, "PASS" is displayed if the volume ratio is 130 % or less, even if it is over 110 % or 120 %.
If the estimated volume ratio is over specified value mentioned above, reconsider the connecting capacity of the indoor units.

FUNCTION SETTING

2. FUNCTION SETTING

2-1. OUTDOOR UNIT

■ SWITCH POSITION



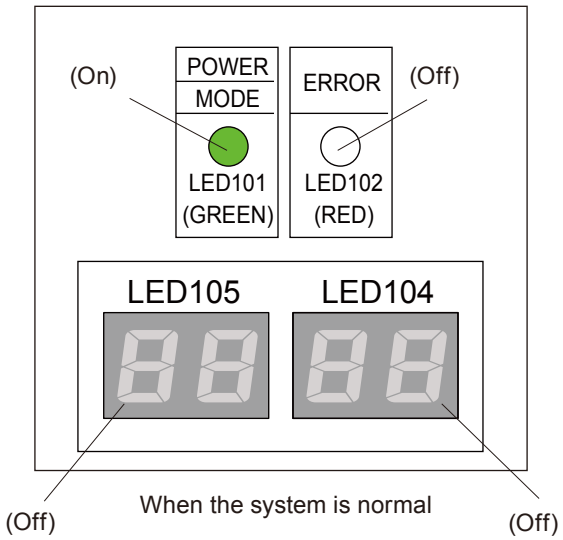
Outdoor unit printed circuit board

Switch position differs depending on outdoor unit.

- Set the functions of an outdoor unit with the push buttons (SW107, SW108 and SW109) while observing the 7-segment LED lamps (LED105 and LED104) on the printed circuit board.

■ PREPARATION

1) Be sure to check that the operation of the outdoor unit has stopped (be sure to stop the operation if it is still running), and turn off the power.
2) Remove the front panel of the outdoor unit, and remove the lid of the electrical component box in order to expose the printed circuit board.
3) Turn on the power of the outdoor unit.



- As shown in the above figure, make sure that the POWER/MODE indicator lamp (LED101) is on and the ERROR indicator lamp (LED102) is off.
- If the ERROR indicator lamp (LED102) flashes, it indicates that an error has occurred. Check wiring and power supply. After making sure that the ERROR indicator lamp (LED102) has turned off, proceed to the next step.

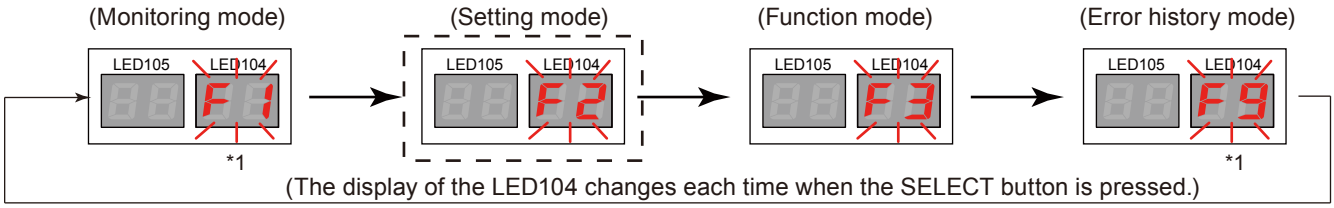
FUNCTION SETTING

■ FUNCTION SETTING

1) After verifying that the system is normally, press the MODE/EXIT button (SW107) once.

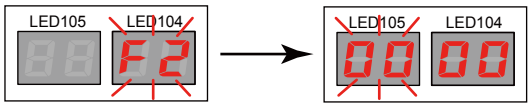


2) Press the SELECT button (SW108), and display “F2” on the LED104.

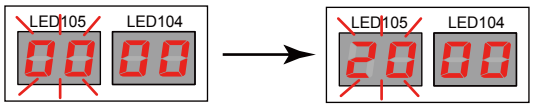


*1:The “F1”and “F9” modes are used for maintenance, so do not set them in regular operation.

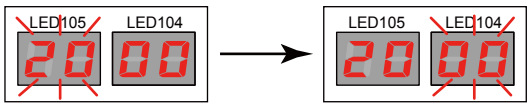
3) When “F2” appears on the LED104, press the ENTER button (SW109).
A flashing display appears on the LED105, and the flashing display of “F2” on the LED104 changes to the illuminated display of a number.



4) Referring to the Settings List shown below, press the SELECT button (SW108) and display the code number of the mode you want to set on the LED105.
Ex.) To select switching between Batch Stop and Emergency Stop



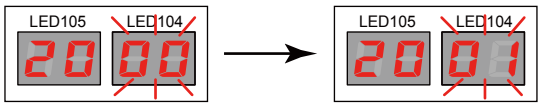
Next, press the ENTER button (SW109), and confirm the selection of the mode you want to set.



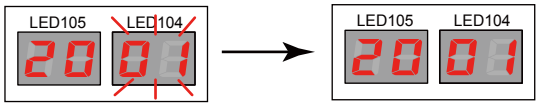
A flashing display on the LED105 changes to an illuminated display, and an illuminated display on the LED104 changes to a flashing display.

FUNCTION SETTING

5) Again, referring to the Settings List shown below, press the SELECT button (SW108), and display the code number of the function you want to set on the LED104.
Ex.) To select the Emergency Stop function

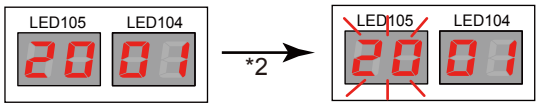


Next, press the ENTER button (SW109), and confirm the selection of the function you want to set.



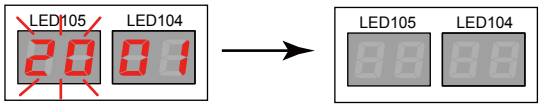
A flashing display on the LED104 changes to an illuminated display.
This completes FUNCTION SETTING.

6) To exit FUNCTION SETTING, press the ENTER button (SW109) in the setting completed status shown in step 5) above.



*2 : 5 seconds after, even if ENTER button(SW109) is not pressed , LED105 changes to a flashing display automatically.

Then, press the MODE/EXIT button (SW107) to exit FUNCTION SETTING MODE.



7) To set another function, press the ENTER button (SW109) in the setting completed status shown in step 5) above.



Repeat steps 4) and 5) above to set other functions.
When all settings are complete, perform the operation described in step 6) above to exit.

FUNCTION SETTING

2-1-1. VR-II series

■ SETTINGS LIST

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
0	0	Pipe length setting	0	0	Standard (40 to 65m)	●	○	- *1	Pipe length means the length between master outdoor unit and the nearest indoor unit.
			0	1	Short (less than 40m)				
			0	2	Medium (65 to 90m)				
			0	3	Long 1 (90 to 120m)				
			0	4	Long 2 (120 to 150m)				
1	0	Sequential start shift	0	0	Normal	●	○	- *1	The start-up timing of outdoor unit (compressor) can be set up so that it can delay several seconds. This feature is useful when multiple number of outdoor units are installed and turned on at the same time to limit the starting current.
			0	1	21sec. Delay				
			0	2	42sec. Delay				
			0	3	63sec. Delay				
1	1	Cooling capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode 1				
			0	2	High power mode 1				
			0	3	High power mode 2				
			0	4	Prohibited				
1	2	Heating capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode				
			0	2	High power mode 1				
			0	3	High power mode 2				
1	3	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
1	4	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
			0	2	Prohibited				
			0	3	Prohibited				
			0	4	Prohibited				
1	5	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
			0	2	Prohibited				
			0	3	Prohibited				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
2	0	Switching between batch stop or emergency stop	0	0	Batch stop	●	○	- *1	This mode selects the pattern of the stop function to be operated by the external input terminal (CN134). •Batch stop: The stop of all indoor units connected to same refrigerant system due to input signal coming from CN134. •Emergency stop: When emergency stop is actuated, the indoor unit does not accept the operation command from the remote controller. On the other hand, when the emergency stop is released (no input from CN134), the air conditioner does not return to the original operation until operate indoor unit by the remote controller.
			0	1	Emergency stop				
2	2	Snow falling protection fan mode	0	0	Valid	●	○	- *1	This mode operates the fans of outdoor units in order to prevent the units from stopping operation when they are covered by snow.
			0	1	Invalid				
2	3	Interval setting for snow falling protection fan mode	0	0	Standard (30minutes)	●	○	- *1	When the snow falling protection fan mode is set, the operation interval of the fans of outdoor units can be selected.
			0	1	Short1 (5minutes)				
			0	2	Short2 (10minutes)				
			0	3	Short3 (20minutes)				
2	4	High static pressure mode	0	0	Standard	●	○	○	When installing a duct to the blow-off outlet of an outdoor unit, set the high static pressure mode according to the static pressure of the duct to be installed. Furthermore, use this setting if the air blow of an outdoor unit is poor, such as when installed in a place with a low ceiling.
			0	1	High static pressure 1 (equivalent to 30Pa)				
			0	2	High static pressure 2 (equivalent to 80Pa)				
			0	3	Prohibited				
2	5	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	6	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	7	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
2	8	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	9	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
3	0	Energy saving level setting	0	0	Level 1 (stop)	●	○	- *1	The capacity limit can be selected by the external input terminal (CN133) when operating with the “Energy Saving Peak Cut function.” The lower the level, the more the effect of energy saving, but the cooling/heating performance will also drop.
			0	1	Level 2 (operated at 40% capacity)				
			0	2	Level 3 (operated at 60% capacity)				
			0	3	Level 4 (operated at 80% capacity)				
			0	4	Level 5 (operated at 100% capacity)				
3	2	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
			0	2	Prohibited				
3	3	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
4	0	Capacity priority setting (in low noise mode)	0	0	Off (quiet priority)	●	○	- *1	If the cooling/heating performance becomes insufficient when the low noise mode is set, it is possible to set “capacity priority” that automatically cancels the low noise mode (once performance is restored, the mode will automatically return to the low noise mode).
			0	1	On (capacity priority)				
4	1	Low noise mode setting	0	0	Off (Normal)	●	○	- *1	
			0	1	On (Low noise mode)				
4	2	Low noise mode operation level setting	0	0	Level 1	●	○	- *1	Level1: The operating sound lowers from about 3 to 5 dB(A) more than the rated value Level2: The operating sound lowers from about 3 to 5 dB(A) more than the Level1
			0	1	Level 2				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
6	0	Recovery operation	0	0	On	●	○	- *1	
			0	1	Off				
6	1	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				
6	2	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				
6	3	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
7	0	Electricity meter No. setting 1 *2	0	0	Setting number x00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number x01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number x98				
			9	9	Setting number x99				
7	1	Electricity meter No. setting 2 *2"	0	0	Setting number 0xx	●	○	○	Set the hundreds digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number 1xx				
			0	2	Setting number 2xx				
7	2	Electricity meter pulse setting 1 *3"	0	0	Setting number xx00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter pulse setting connected to CN135.
			0	1	Setting number xx01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number xx98				
			9	9	Setting number xx99				
7	3	Electricity meter pulse setting 2 *3"	0	0	Setting number 00xx	●	○	○	Set the hundreds digit and thousands digit of the electricity meter pulse setting connected to CN135.
			0	1	Setting number 01xx				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number 98xx				
			9	9	Setting number 99xx				

*2: When electricity meter No. is set to “000” and “201 to 299”, the pulses input to CN135 become ineffective. Available setting number is "001" to "200"

*3: When the electricity meter pulse setting is set to “0000”, the pulses input to CN135 become ineffective. Available setting number is "0001" to "9999"

FUNCTION SETTING

2-1-2. V-III series

■ SETTINGS LIST

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
0	0	Pipe length setting	0	0	Standard (40 to 65m)	●	○	- *1	Pipe length means the length between master outdoor unit and the nearest indoor unit.
			0	1	Short (less than 40m)				
			0	2	Medium (65 to 90m)				
			0	3	Long 1 (90 to 120m)				
			0	4	Long 2 (120 to 165m)				
1	0	Sequential start shift	0	0	Normal	●	○	- *1	The start-up timing of outdoor unit (compressor) can be set up so that it can delay several seconds. This feature is useful when multiple number of outdoor units are installed and turned on at the same time to limit the starting current.
			0	1	21sec. Delay				
			0	2	42sec. Delay				
			0	3	63sec. Delay				
1	1	Cooling capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode 1				
			0	2	High power mode 1				
			0	3	High power mode 2				
			0	4	Prohibited				
1	2	Heating capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode				
			0	2	High power mode 1				
			0	3	High power mode 2				
1	3	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
1	7	Height difference between indoor units	0	0	Standard	●	○	- *1	If installing the indoor units (even only one set) to a lower floor than the outdoor unit, and the height difference between the indoor units is 3m or greater (i.e., if installing the indoor units on separate floors), set "02 (height difference)".
			0	1	Prohibited				
			0	2	Height difference				
			0	3	Prohibited				
			0	4	Prohibited				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
2	0	Switching between batch stop or emergency stop	0	0	Batch stop	●	○	- *1	This mode selects the pattern of the stop function to be operated by the external input terminal (CN134). •Batch stop: The stop of all indoor units connected to same refrigerant system due to input signal coming from CN134. •Emergency stop: When emergency stop is actuated, the indoor unit does not accept the operation command from the remote controller. On the other hand, when the emergency stop is released (no input from CN134), the air conditioner does not return to the original operation until operate indoor unit by the remote controller.
			0	1	Emergency stop				
2	1	Operation mode selecting method	0	0	Priority given to the first command	●	○	- *1	Select the priority setting of the operation mode. •Priority given to the first command: Priority is given to the operation mode which is set first. •Priority given to external input of outdoor unit: Priority is given to the operation mode which is set by the external input terminal (CN132). •Priority given to administrative indoor unit: Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller.
			0	1	Priority given to external input of outdoor unit				
			0	2	Priority given to administrative indoor unit				
2	2	Snow falling protection fan mode	0	0	Valid	●	○	- *1	This mode operates the fans of outdoor units in order to prevent the units from stopping operation when they are covered by snow.
			0	1	Invalid				
2	3	Interval setting for snow falling protection fan mode	0	0	Standard (30minutes)	●	○	- *1	When the snow falling protection fan mode is set, the operation interval of the fans of outdoor units can be selected.
			0	1	Short1 (5minutes)				
			0	2	Short2 (10minutes)				
			0	3	Short3 (20minutes)				
2	4	High static pressure mode	0	0	Standard	●	○	○	When installing a duct to the blow-off outlet of an outdoor unit, set the high static pressure mode according to the static pressure of the duct to be installed. Furthermore, use this setting if the air blow of an outdoor unit is poor, such as when installed in a place with a low ceiling.
			0	1	High static pressure 1 (equivalent to 30Pa)				
			0	2	High static pressure 2 (equivalent to 82Pa)				
			0	3	Prohibited				
2	5	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
2	6	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	7	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	8	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	9	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
3	0	Energy saving level setting	0	0	Level 1 (stop)	●	○	- *1	The capacity limit can be selected by the external input terminal (CN133) when operating with the “Energy Saving Peak Cut function.” The lower the level, the more the effect of energy saving, but the cooling/heating performance will also drop.
			0	1	Level 2 (operated at 40% capacity)				
			0	2	Level 3 (operated at 60% capacity)				
			0	3	Level 4 (operated at 80% capacity)				
			0	4	Level 5 (operated at 100% capacity)				
3	2	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
			0	2	Prohibited				
3	3	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
4	0	Capacity priority setting (in low noise mode)	0	0	Off (quiet priority)	●	○	- *1	If the cooling/heating performance becomes insufficient when the low noise mode is set, it is possible to set “capacity priority” that automatically cancels the low noise mode (once performance is restored, the mode will automatically return to the low noise mode).
			0	1	On (capacity priority)				
4	1	Low noise mode setting	0	0	Off (Normal)	●	○	- *1	
			0	1	On (Low noise mode)				
4	2	Low noise mode operation level setting	0	0	Level 1	●	○	- *1	Level1: The operating sound lowers from about 3 to 5 dB(A) more than the rated value Level2: The operating sound lowers from about 3 to 5 dB(A) more than the Level1
			0	1	Level 2				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
6	1	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				
6	2	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				
6	3	Prohibited	0	0	On	●	○	- *1	Setting prohibited
			0	1	Off				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
7	0	Electricity meter No. setting 1 *2	0	0	Setting number x00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number x01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number x98				
			9	9	Setting number x99				
7	1	Electricity meter No. setting 2 *2"	0	0	Setting number 0xx	●	○	○	Set the hundreds digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number 1xx				
			0	2	Setting number 2xx				
7	2	Electricity meter pulse setting 1 *3"	0	0	Setting number xx00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter pulse setting connected to CN135.
			0	1	Setting number xx01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number xx98				
			9	9	Setting number xx99				
7	3	Electricity meter pulse setting 2 *3"	0	0	Setting number 00xx	●	○	○	Set the hundreds digit and thousands digit of the electricity meter pulse setting connected to CN135.
			0	1	Setting number 01xx				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number 98xx				
			9	9	Setting number 99xx				

*2: When electricity meter No. is set to “000” and “201 to 299”, the pulses input to CN135 become ineffective. Available setting number is "001" to "200"

*3: When the electricity meter pulse setting is set to “0000”, the pulses input to CN135 become ineffective. Available setting number is "0001" to "9999"

FUNCTION SETTING

2-1-3. V-II series

■ SETTINGS LIST

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
0	0	Pipe length setting	0	0	Standard (40 to 65m)	●	○	- *1	Pipe length means the length between master outdoor unit and the nearest indoor unit.
			0	1	Short (less than 40m)				
			0	2	Medium (65 to 90m)				
			0	3	Long 1 (90 to 120m)				
			0	4	Long 2 (120 to 150m)				
1	0	Sequential start shift	0	0	Normal	●	○	- *1	The start-up timing of outdoor unit (compressor) can be set up so that it can delay several seconds. This feature is useful when multiple number of outdoor units are installed and turned on at the same time to limit the starting current.
			0	1	21sec. Delay				
			0	2	42sec. Delay				
			0	3	63sec. Delay				
1	1	Cooling capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode 1				
			0	2	High power mode 1				
			0	3	High power mode 2				
			0	4	Prohibited				
1	2	Heating capacity shift	0	0	Normal mode	●	○	- *1	
			0	1	Save energy mode				
			0	2	High power mode 1				
			0	3	High power mode 2				
1	3	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	0	Switching between batch stop or emergency stop	0	0	Batch stop	●	○	- *1	This mode selects the pattern of the stop function to be operated by the external input terminal (CN134). •Batch stop: The stop of all indoor units connected to same refrigerant system due to input signal coming from CN134. •Emergency stop: When emergency stop is actuated, the indoor unit does not accept the operation command from the remote controller. On the other hand, when the emergency stop is released (no input from CN134), the air conditioner does not return to the original operation until operate indoor unit by the remote controller.
			0	1	Emergency stop				

*1: Do not set this for outdoor units with Slave setting.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
2	1	Operation mode selecting method	0	0	Priority given to the first command	●	○	- *1	Select the priority setting of the operation mode. •Priority given to the first command: Priority is given to the operation mode which is set first. •Priority given to external input of outdoor unit: Priority is given to the operation mode which is set by the external input terminal (CN132). •Priority given to administrative indoor unit: Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller.
			0	1	Priority given to external input of outdoor unit				
			0	2	Priority given to administrative indoor unit				
2	2	Snow falling protection fan mode	0	0	Normal mode	●	○	- *1	This mode operates the fans of outdoor units in order to prevent the units from stopping operation when they are covered by snow.
			0	1	Snow falling protection fan mode				
2	3	Interval setting for snow falling protection fan mode	0	0	Standard (30minutes)	●	○	- *1	When the snow falling protection fan mode is set, the operation interval of the fans of outdoor units can be selected.
			0	1	Short1 (5minutes)				
			0	2	Short2 (10minutes)				
			0	3	Short3 (20minutes)				
2	4	High static pressure mode	0	0	Standard	●	○	○	When installing a duct to the blow-off outlet of an outdoor unit, set the high static pressure mode according to the static pressure of the duct to be installed. Furthermore, use this setting if the air blow of an outdoor unit is poor, such as when installed in a place with a low ceiling.
			0	1	High static pressure 1 (equivalent to 30Pa)				
			0	2	High static pressure 2 (equivalent to 80Pa)				
			0	3	Prohibited				
2	5	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	6	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	7	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	8	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
2	9	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				

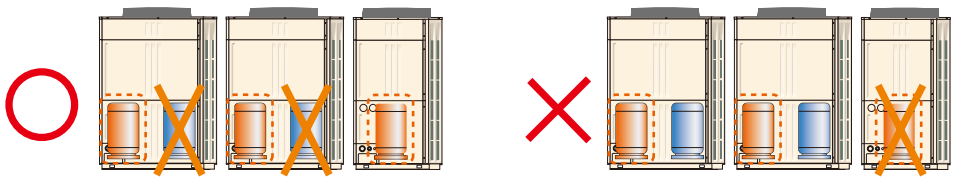
*1: Do not set this for outdoor units with Slave setting.

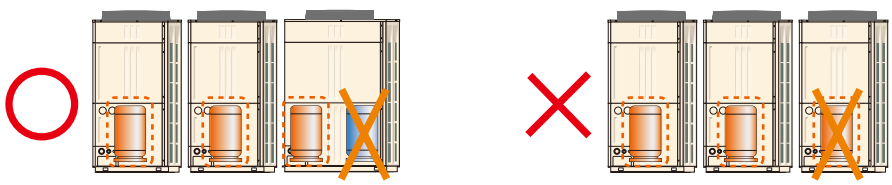
FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
3	0	Energy saving level setting	0	0	Level 1 (stop)	●	○	- *1	The capacity limit can be selected by the external input terminal (CN133) when operating with the “Energy Saving Peak Cut function.” The lower the level, the more the effect of energy saving, but the cooling/heating performance will also drop.
			0	1	Level 2 (operated at 40% capacity)				
			0	2	Level 3 (operated at 60% capacity)				
			0	3	Level 4 (operated at 80% capacity)				
			0	4	Level 5 (operated at 100% capacity)				
4	0	Capacity priority setting (in low noise mode)	0	0	Off (quiet priority)	●	○	- *1	If the cooling/heating performance becomes insufficient when the low noise mode is set, it is possible to set “capacity priority” that automatically cancels the low noise mode (once performance is restored, the mode will automatically return to the low noise mode).
			0	1	On (capacity priority)				
4	1	Low noise mode setting	0	0	Off (Normal)	●	○	- *1	
			0	1	On (Low noise mode)				
4	2	Low noise mode operation level setting	0	0	Level 1 (55dB)	●	○	- *1	The noise level when operating in the low noise mode can be set.
			0	1	Level 2 (50dB)				
6	0	Recovery operation	0	0	On	●	○	- *1	If one of compressor fails, backup operation will be performed by the remaining compressors as emergency. *2
			0	1	Off				

*1: Do not set this for outdoor units with Slave setting.

*2: Applicable only for the outdoor unit that has 2 compressors.
Recovery operation is operable when the outdoor unit has 2 compressors within a same system.







NOTE:
In the VRF system with multiple outdoor units, the recovery operation is unable to activate if any one of the outdoor units, in which all compressors are malfunctioned, breakdowns due to the uncontrollable pressure equalization between the outdoor units.
If in the event that the recovery operation were to operate under the malfunctioned condition, it will lead to accumulation of refrigerant in the faulty outdoor unit.

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Outdoor unit		Remarks
							Master	Slave	
7	0	Electricity meter No. setting 1 *2	0	0	Setting number x00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number x01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number x98				
			9	9	Setting number x99				
7	1	Electricity meter No. setting 2 *2"	0	0	Setting number 0xx	●	○	○	Set the hundreds digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number 1xx				
			0	2	Setting number 2xx				
7	2	Electricity meter pulse setting 1 *3"	0	0	Setting number xx00	●	○	○	Set the ones digit and tens digit of the No. of the electricity meter pulse setting connected to CN135.
			0	1	Setting number xx01				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number xx98				
			9	9	Setting number xx99				
7	3	Electricity meter pulse setting 2 *3"	0	0	Setting number 00xx	●	○	○	Set the hundreds digit and thousands digit of the electricity meter pulse setting connected to CN135.
			0	1	Setting number 01xx				
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪				
			9	8	Setting number 98xx				
			9	9	Setting number 99xx				
9	0	Prohibited	0	0	Prohibited	●			Setting prohibited
			0	1	Prohibited				
			0	2	Prohibited				
			0	3	Prohibited				
			0	4	Prohibited				
			0	5	Prohibited				
			0	6	Prohibited				
			0	7	Prohibited				
			0	8	Prohibited				
			0	9	Prohibited				
			1	0	Prohibited				
			1	1	Prohibited				

*2: When electricity meter No. is set to “000” and “201 to 299”, the pulses input to CN135 become ineffective.
Available setting number is "001" to "200"

*3: When the electricity meter pulse setting is set to “0000”, the pulses input to CN135 become ineffective.
Available setting number is "0001" to "9999"

FUNCTION SETTING

2-1-4. J-IIIL, J-III, J-II series

■ SETTINGS LIST

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
0	0	Pipe length setting	0	0	Standard (40 to 65m)	●	Pipe length means the length between outdoor unit and the nearest indoor unit.
			0	1	Short (less than 40m)		
			0	2	Medium (65 to 90m)		
			0	3	Long 1 (90 to 120m)		
			0	4	Prohibited		
1	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
1	1	Cooling capacity shift	0	0	Normal mode	●	
			0	1	Save energy mode 1		
			0	2	High power mode 1		
			0	3	High power mode 2		
			0	4	Prohibited		
1	2	Heating capacity shift	0	0	Normal mode	●	
			0	1	Save energy mode		
			0	2	High power mode 1		
			0	3	High power mode 2		
1	3	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
1	4	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
2	0	Switching between batch stop or emergency stop	0	0	Batch stop	●	This mode selects the pattern of the stop function to be operated by the external input terminal (CN134). •Batch stop: The stop of all indoor units connected to same refrigerant system due to input signal coming from CN134. •Emergency stop: When emergency stop is actuated, the indoor unit does not accept the operation command from the remote controller. On the other hand, when the emergency stop is released (no input from CN134), the air conditioner does not return to the original operation until operate indoor unit by the remote controller.
			0	1	Emergency stop		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
2	1	Operation mode selecting method	0	0	Priority given to the first command	●	Select the priority setting of the operation mode. •Priority given to the first command: Priority is given to the operation mode which is set first. •Priority given to external input of outdoor unit: Priority is given to the operation mode which is set by the external input terminal (CN132). •Priority given to administrative indoor unit: Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller.
			0	1	Priority given to external input of outdoor unit		
			0	2	Priority given to administrative indoor unit		
2	2	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	3	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
2	4	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
2	5	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
2	6	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	7	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	8	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	9	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
3	0	Outdoor unit capacity save setting	0	0	Level 1 (stop)	●	The capacity limit can be selected by the external input terminal (CN133) when operating with the “Outdoor unit capacity save function.” The lower the level, the more the effect of energy saving, but the cooling/heating performance will also drop.
			0	1	Level 2		
			0	2	Level 3		
			0	3	Level 4		
			0	4	Level 5		
3	1	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
4	0	Capacity priority setting (in low noise mode)	0	0	Off (quiet priority)	●	If the cooling/heating performance becomes insufficient when the low noise mode is set, it is possible to set “capacity priority” that automatically cancels the low noise mode (once performance is restored, the mode will automatically return to the low noise mode).
			0	1	On (capacity priority)		
4	1	Low noise mode setting	0	0	Off (Normal)	●	
			0	1	On (Low noise mode)		
4	2	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
6	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
7	0	Electricity meter No. setting 1 *1	0	0	Setting number x00	●	Set the ones digit and tens digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number x01		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number x98		
			9	9	Setting number x99		
7	1	Electricity meter No. setting 2 *1	0	0	Setting number 0xx	●	Set the hundreds digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number 1xx		
			0	2	Setting number 2xx		
7	2	Electricity meter pulse setting 1 *2	0	0	Setting number xx00	●	Set the ones digit and tens digit of the No. of the electricity meter pulse setting connected to CN135.
			0	1	Setting number xx01		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number xx98		
			9	9	Setting number xx99		
7	3	Electricity meter pulse setting 2 *2	0	0	Setting number 00xx	●	Set the hundreds digit and thousands digit of the electricity meter pulse setting connected to CN135.
			0	1	Setting number 01xx		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number 98xx		
			9	9	Setting number 99xx		
9	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
			0	5	Prohibited		
			0	6	Prohibited		
			0	7	Prohibited		
			0	8	Prohibited		
			0	9	Prohibited		
			1	0	Prohibited		
			1	1	Prohibited		

*1: When electricity meter No. is set to “000” and “201 to 299”, the pulses input to CN135 become ineffective.
Available setting number is "001" to "200"

*2: When the electricity meter pulse setting is set to “0000”, the pulses input to CN135 become ineffective.
Available setting number is "0001" to "9999"

FUNCTION SETTING

2-1-5. J-IIS series

■ SETTINGS LIST

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
0	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
1	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
1	1	Cooling capacity shift	0	0	Normal mode	●	
			0	1	Save energy mode 1		
			0	2	High power mode 1		
			0	3	High power mode 2		
			0	4	Prohibited		
1	2	Heating capacity shift	0	0	Normal mode	●	
			0	1	Save energy mode		
			0	2	High power mode 1		
			0	3	High power mode 2		
1	3	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
1	4	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
1	6	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
1	7	Height difference between indoor units	0	0	Standard	●	If installing the indoor units (even only one set) to a lower floor than the outdoor unit, and the height difference between the indoor units is 3m or greater (i.e., if installing the indoor units on separate floors), set "02 (height difference)".
			0	1	Prohibited		
			0	2	Height difference		
			0	3	Prohibited		
			0	4	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
2	0	Switching between batch stop or emergency stop	0	0	Batch stop	●	This mode selects the pattern of the stop function to be operated by the external input terminal (CN134). •Batch stop: The stop of all indoor units connected to same refrigerant system due to input signal coming from CN134. •Emergency stop: When emergency stop is actuated, the indoor unit does not accept the operation command from the remote controller. On the other hand, when the emergency stop is released (no input from CN134), the air conditioner does not return to the original operation until operate indoor unit by the remote controller.
			0	1	Emergency stop		
2	1	Operation mode selecting method	0	0	Priority given to the first command	●	Select the priority setting of the operation mode. •Priority given to the first command: Priority is given to the operation mode which is set first. •Priority given to external input of outdoor unit: Priority is given to the operation mode which is set by the external input terminal (CN132). •Priority given to administrative indoor unit: Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller.
			0	1	Priority given to external input of outdoor unit		
			0	2	Priority given to administrative indoor unit		
2	2	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	3	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
2	4	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
2	5	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
2	6	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	7	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	8	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
2	9	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
3	0	Outdoor unit capacity save setting	0	0	Level 1 (stop)	●	The capacity limit can be selected by the external input terminal (CN133) when operating with the “Outdoor unit capacity save function.” The lower the level, the more the effect of energy saving, but the cooling/heating performance will also drop.
			0	1	Level 2		
			0	2	Level 3		
			0	3	Level 4		
			0	4	Level 5		
3	1	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
4	0	Capacity priority setting (in low noise mode)	0	0	Off (quiet priority)	●	If the cooling/heating performance becomes insufficient when the low noise mode is set, it is possible to set “capacity priority” that automatically cancels the low noise mode (once performance is restored, the mode will automatically return to the low noise mode).
			0	1	On (capacity priority)		
4	1	Low noise mode setting	0	0	Off (Normal)	●	
			0	1	On (Low noise mode)		
4	2	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
6	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
6	1	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		

FUNCTION SETTING

LED105 CODE No.		Setting Mode	LED104 CODE No.		Setting Function	Factory setting	Remarks
7	0	Electricity meter No. setting 1 *1	0	0	Setting number x00	●	Set the ones digit and tens digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number x01		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number x98		
			9	9	Setting number x99		
7	1	Electricity meter No. setting 2 *1	0	0	Setting number 0xx	●	Set the hundreds digit of the No. of the electricity meter connected to CN135.
			0	1	Setting number 1xx		
			0	2	Setting number 2xx		
7	2	Electricity meter pulse setting 1 *2	0	0	Setting number xx00	●	Set the ones digit and tens digit of the No. of the electricity meter pulse setting connected to CN135.
			0	1	Setting number xx01		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number xx98		
			9	9	Setting number xx99		
7	3	Electricity meter pulse setting 2 *2	0	0	Setting number 00xx	●	Set the hundreds digit and thousands digit of the electricity meter pulse setting connected to CN135.
			0	1	Setting number 01xx		
			▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪		
			9	8	Setting number 98xx		
			9	9	Setting number 99xx		
9	0	Prohibited	0	0	Prohibited	●	Setting prohibited
			0	1	Prohibited		
			0	2	Prohibited		
			0	3	Prohibited		
			0	4	Prohibited		
			0	5	Prohibited		
			0	6	Prohibited		
			0	7	Prohibited		
			0	8	Prohibited		
			0	9	Prohibited		
			1	0	Prohibited		
			1	1	Prohibited		

*1: When electricity meter No. is set to “000” and “201 to 299”, the pulses input to CN135 become ineffective.
Available setting number is "001" to "200"

*2: When the electricity meter pulse setting is set to “0000”, the pulses input to CN135 become ineffective.
Available setting number is "0001" to "9999"

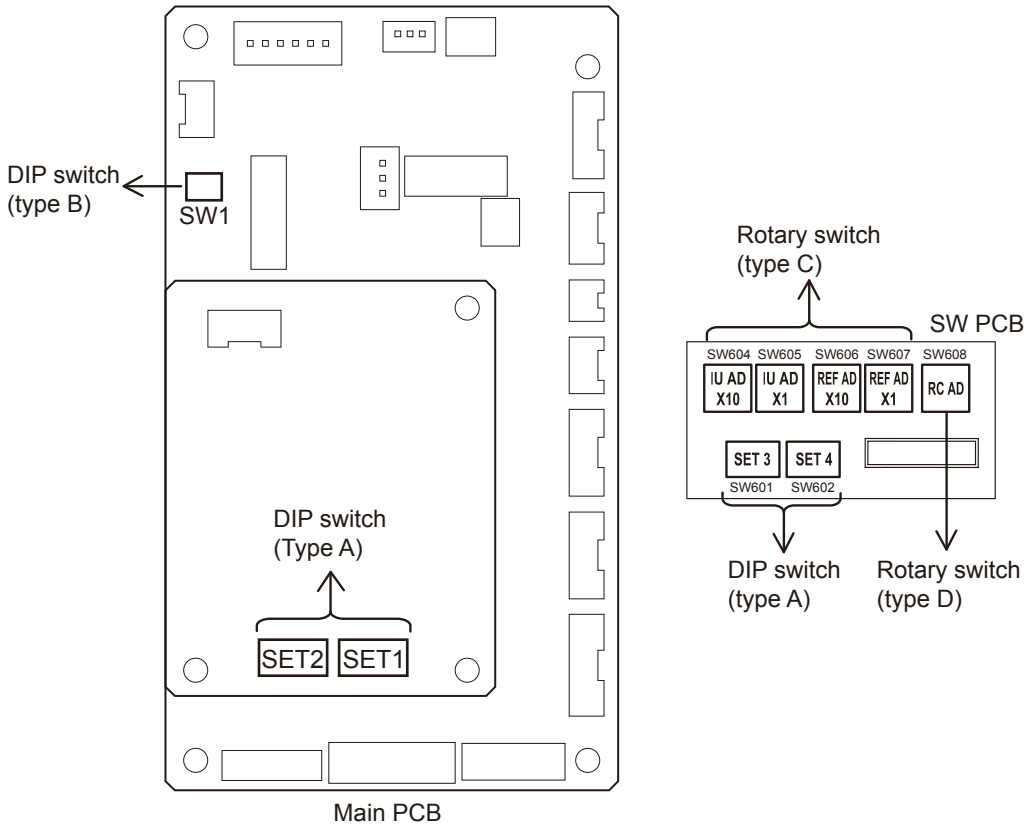
FUNCTION SETTING

2-2. INDOOR UNIT (setting by switch)

■ SWITCH POSITION

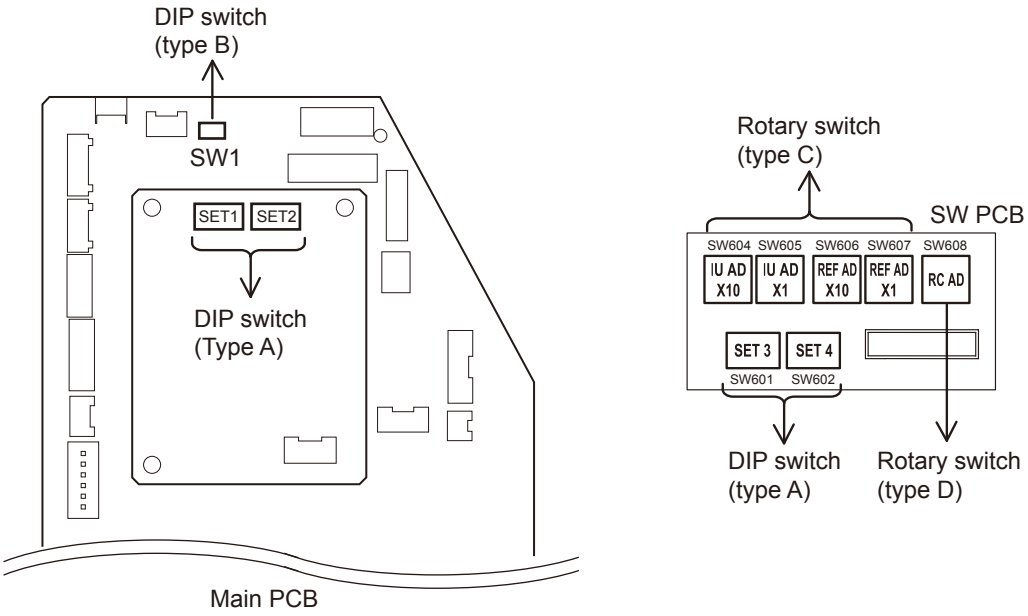
Type of PCB	Type of Indoor unit
Type 1	Compact cassette, Cassette, Low static pressure duct/Concealed floor, Mini duct, Slim duct/Slim concealed floor, Medium static pressure duct, High static pressure duct, Floor/ceiling, Ceiling
Type 2	Wall mounted (AS∗A18, 24, 30)
Type 3	Wall mounted (AS∗A04, 07, 09, 12, 14, AS∗E04, 07, 09, 12, 14)
Type 4	Circular flow (AUXM018, 024, 030, AUXK018, 024, 030, 034, 036, 045, 054)
Type 5	Wall mounted (AS∗A004, 007, 009, AS∗E004, 007, 009)
Type 6	Wall mounted (AS∗A030, 034)
Type 7	Compact floor (AG∗A004, 007, 009, 012, 014, AG∗E004, 007, 009, 012, 014)

● Type 1

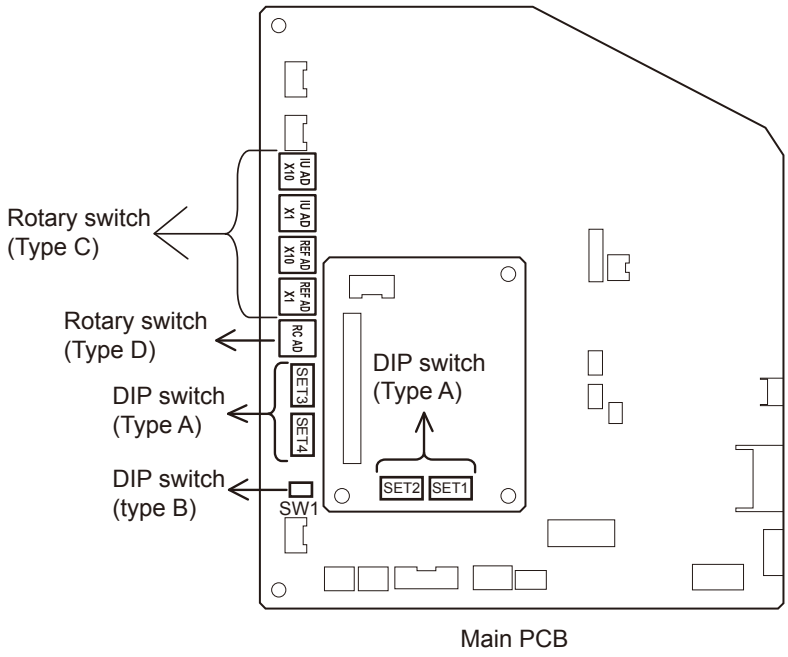


FUNCTION SETTING

● Type 2

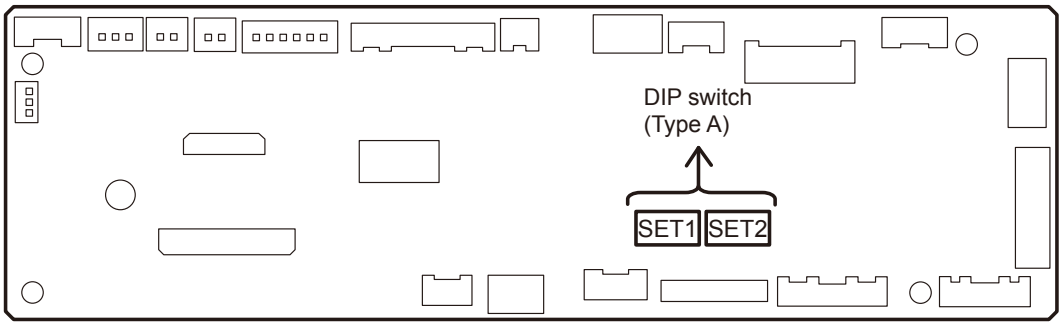


● Type 3

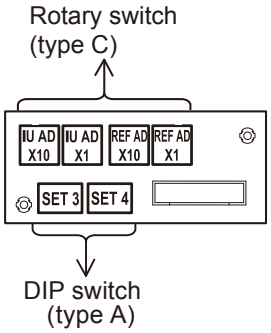


FUNCTION SETTING

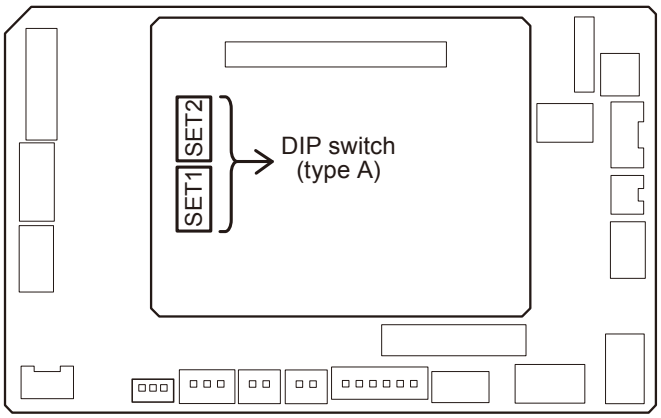
● Type 4

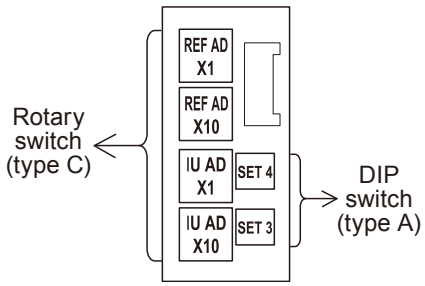


Main PCB

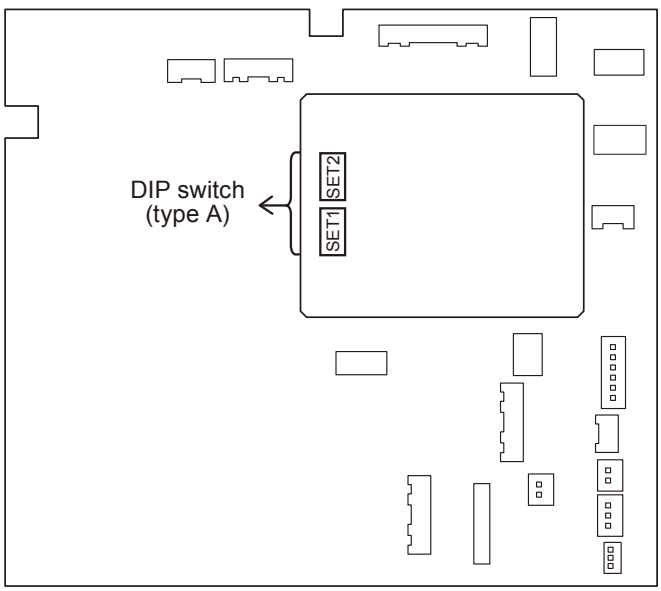


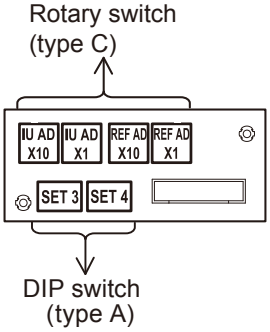
● Type 5





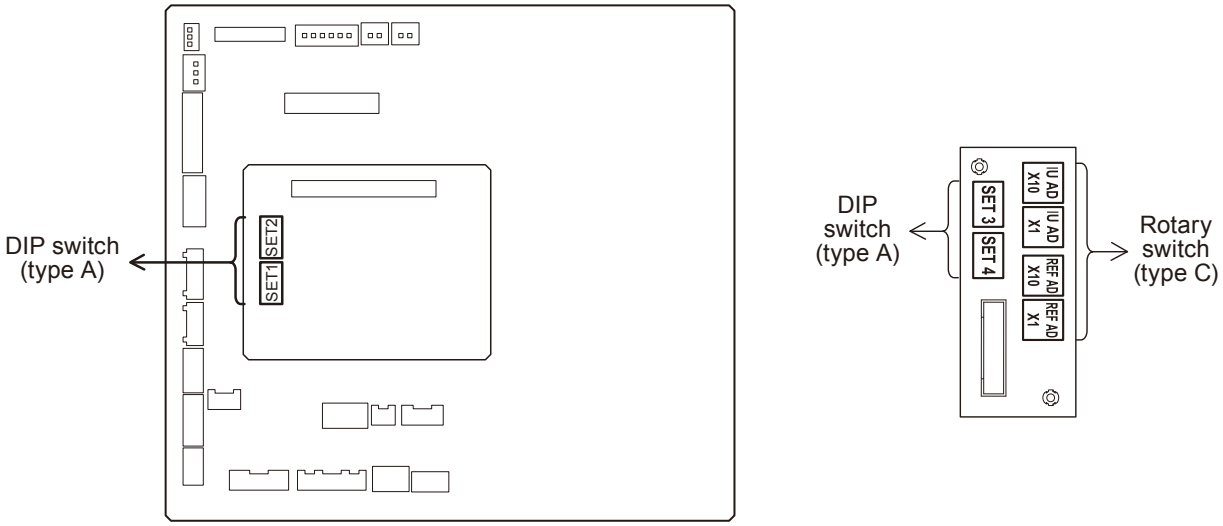
● Type 6



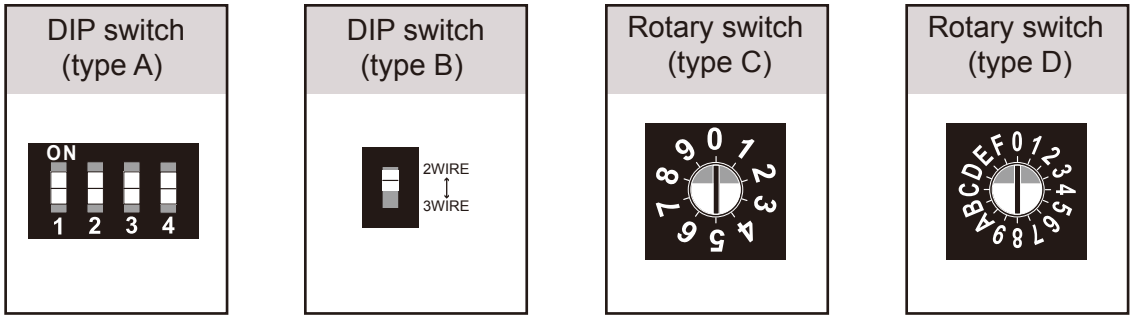


FUNCTION SETTING

● Type 7



■ SWITCH TYPE



FUNCTION SETTING

■ SWITCH TABLE

DIP-SW	type A	SET1	1	Prohibited (Indoor unit capacity setting)
			2	Prohibited (Indoor unit capacity setting)
			3	Prohibited (Indoor unit capacity setting)
			4	Prohibited (Indoor unit capacity setting)
		SET2	1	Prohibited (Indoor unit capacity setting)
			2	External input select "edge/pulse"
			3	Fan delay switch
			4	Prohibited
		SET3	1	Wireless remote controller custom code switch 1
			2	Wireless remote controller custom code switch 2
			3	Prohibited
			4	Prohibited
		SET4	1	Drainage function switch (Slim Duct type only)
			2	Auto louver grille setting switch (Mini duct type and Slim duct type only)
			3	Prohibited
			4	Prohibited
	type B	SW1		Remote controller wire type switch
Rotary SW	type C	IU AD x 1		Indoor unit address switch 1
		IU AD x 10		Indoor unit address switch 2
		REF AD x1		Refrigerant circuit address switch 1
		REF AD x10		Refrigerant circuit address switch 2
	type D	RC AD		Remote controller address switch

FUNCTION SETTING

■ DIP SWITCH SETTING

● SET1 and SET2-1 setting (Never change at the site)

●Indoor unit capacity (Setting prohibited)

SET1-1	SET1-2	SET1-3	SET1-4	SET2-1	Indoor unit capacity
OFF	OFF	OFF	OFF	ON	1.1kW
OFF	OFF	OFF	OFF	OFF	2.2kW
ON	OFF	OFF	OFF	OFF	2.8kW
OFF	ON	OFF	OFF	OFF	3.6kW
ON	ON	OFF	OFF	OFF	4.0kW
OFF	OFF	ON	OFF	OFF	4.5kW
ON	OFF	ON	OFF	OFF	5.6kW
OFF	ON	ON	OFF	OFF	7.1kW
ON	ON	ON	OFF	OFF	8.0kW
OFF	OFF	OFF	ON	OFF	9.0kW
OFF	ON	ON	OFF	ON	10.0kW
ON	OFF	OFF	ON	OFF	11.2kW
OFF	ON	OFF	ON	OFF	12.5kW
ON	ON	OFF	ON	OFF	14.0kW
OFF	OFF	ON	ON	OFF	18.0kW
ON	OFF	ON	ON	OFF	22.4kW
OFF	ON	ON	ON	OFF	25.0kW

FUNCTION SETTING

● SET2 setting

●External input select “edge/pulse”

(◆...Factory setting)

	SET2-2	External input select
◆	OFF	Edge
	ON	pulse

●Fan delay switch

It is a function to delay the stop of cooling fan when the air conditioner is stopped.
When auxiliary heater is connected, please turn "ON" this switch.
When you connect auxiliary heater, be careful enough.

(◆...Factory setting)

	SET2-3	Fan delay
◆	OFF	Invalid
	ON	Valid

●SET2-4 setting prohibited

(◆...Factory setting)

	SET2-4	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

FUNCTION SETTING

● SET3 setting

●Wireless remote controller custom code switch

This DIP switch sets the custom code of the wireless remote controller of an indoor unit.

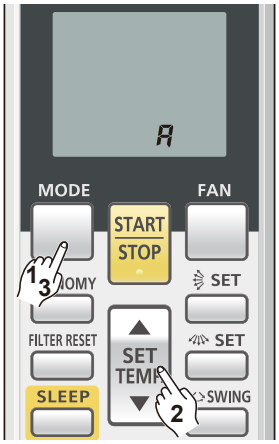
If multiple indoor units are being installed in the same room, switch the custom codes of the corresponding wireless remote controllers in order to prevent their signals from being mixed.

When switching the custom code of the wireless remote controller of an indoor unit, be sure to also switch the code setting on the paired wireless remote controller side at the same time.

(◆...Factory setting)

	SET3-1	SET3-2	Custom code
◆	OFF	OFF	Type A
	ON	OFF	Type B
	OFF	ON	Type C
	ON	ON	Type D

How to switch the code on the wireless remote controller side



1) Press the MODE button for more than five seconds to start the code change.
2) Press the SET TEMP. (▲) or (▼) button to select the desired code.
   ↱ A → B → C → D ↰
3) Press the MODE button again to end the code change.

●SET3-3, SET3-4 setting prohibited

(◆...Factory setting)

	SET3-3	SET3-4	
◆	OFF	OFF	Fixed at OFF
	ON	ON	Setting prohibited

FUNCTION SETTING

● SET4 setting

●Drainage function switch (Slim Duct type only)

If contained drain pump is not used, set the drainage function to "Invalid" in the drainage function switching.

(◆...Factory setting)

	SET4-1	Drainage function
◆	OFF	Valid
	ON	Invalid

*Note: Pls. be sure about water leakage from the indoor unit while changing setting.

●Auto louver grille setting switch (Mini duct type and Slim duct type only)

When Auto louver grille kit (optional parts) is attached, set the Auto louver grille setting "Valid".

(◆...Factory setting)

	SET4-2	Auto louver grille setting
◆	OFF	Invalid
	ON	Valid

●SET4-3 setting prohibited

(◆...Factory setting)

	SET4-3	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

●SET4-4 setting prohibited

(◆...Factory setting)

	SET4-4	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

FUNCTION SETTING

● SW1 setting

●Remote controller wire type setting switch

(◆...Factory setting)

	SW1	Remote controller wire type
◆	2WIRE	2-wire type
	3WIRE	3-wire type

■ ROTARY SWITCH SETTING

● IU AD setting

●Indoor unit address switch

Sets the indoor unit addresses.

Please see "1-3 address setting" for indoor unit address conversion table.

INDOOR UNIT ADDRESS SWITCH (Factory setting IU AD x 1: 0, IU AD x 10: 0)

Rotary SW	Description	Remarks
IU AD x 1	Indoor unit address Switch 1	Indoor unit address (the first digit)
IU AD x 10	Indoor unit address Switch 2	Indoor unit address (the second digit)

● REF AD setting

●Refrigerant circuit address switch

Sets the refrigerant circuit address.

Please see "1-3 address setting" for refrigerant circuit address conversion table.

REFRIGERANT CIRCUIT ADDRESS SWITCH (Factory setting REF AD x 1: 0, REF AD x 10: 0)

Rotary SW	Description	Remarks
REF AD x 1	Refrigerant circuit address Switch 1	Refrigerant circuit address (the first digit)
REF AD x 10	Refrigerant circuit address Switch 2	Refrigerant circuit address (the second digit)

FUNCTION SETTING

● RC AD setting

●Remote controller address switch

When the indoor unit is wired by remote controller group, to identity the indoor unit in the remote controller group, the number (remote controller address) in the remote controller group is set.

3-wire type

Only for manual address setting

Set the remote controller address in the 0.1.2,~,15 order (Blank is not allowed)

REMOTE CONTROLLER ADDRESS SWITCH (Factory setting : 0)

Rotary SW	Description	Remarks
RC AD	Remote controller address	Remote controller address

FUNCTION SETTING

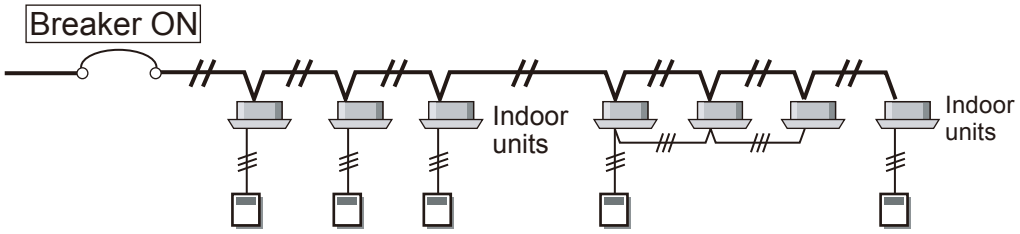
2-3. INDOOR UNIT (setting by wireless remote controller)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.

■ PREPARATION

(1) Turn on the power to the indoor unit.

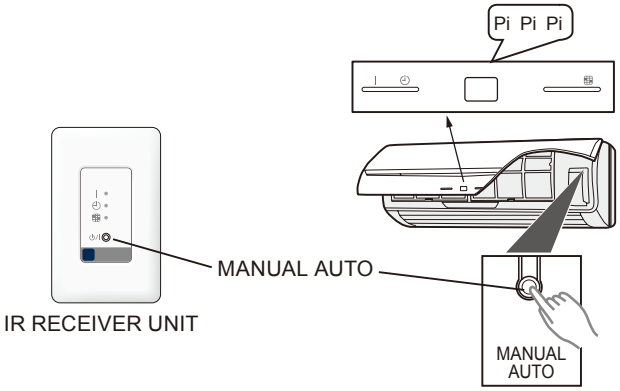
* By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
* Also check again to make sure no wiring mistakes were made before turning on the power.



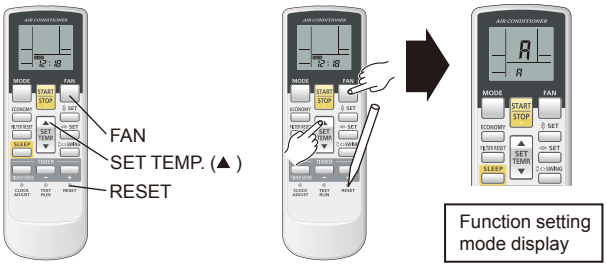
FUNCTION SETTING

■ SWITCHING SELECTION OF FUNCTION SETTING MODE

(2) Press and hold the “MANUAL/AUTO” button for 3 seconds.



(3) Press and hold the “FAN” and the “ SET TEMP. ▲ ” buttons. Whilst holding these 2 buttons, press the "RESET" button.



- The position of the “MANUAL/AUTO” button varies depending on the model. Refer to the operation manual for the position that is included with the unit.
- The error will be displayed by continuously pressing the "MANUAL/AUTO" for 10 sec or more. In this case release the button or turn off the power.
- An explanation of the displayed information as shown below.

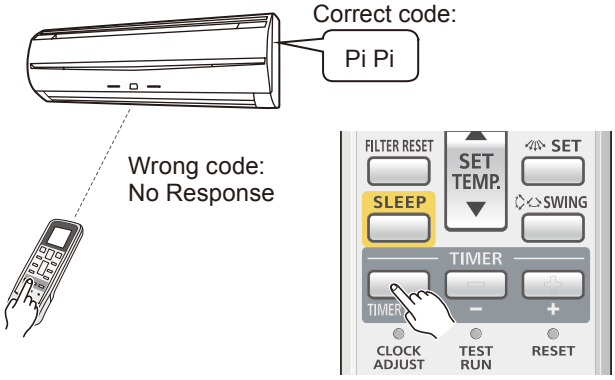
■ SELECTION AND CONFIRMATION OF CUSTOM CODE

(4) Press the “ SET TEMP. ▲ ” or “ SET TEMP. ▼ ” buttons to select the custom code that matches the setting with the indoor unit.By selecting the appropriate custom code, the communication between the indoor unit and the wireless RC become possible.



The initial setting is "A"

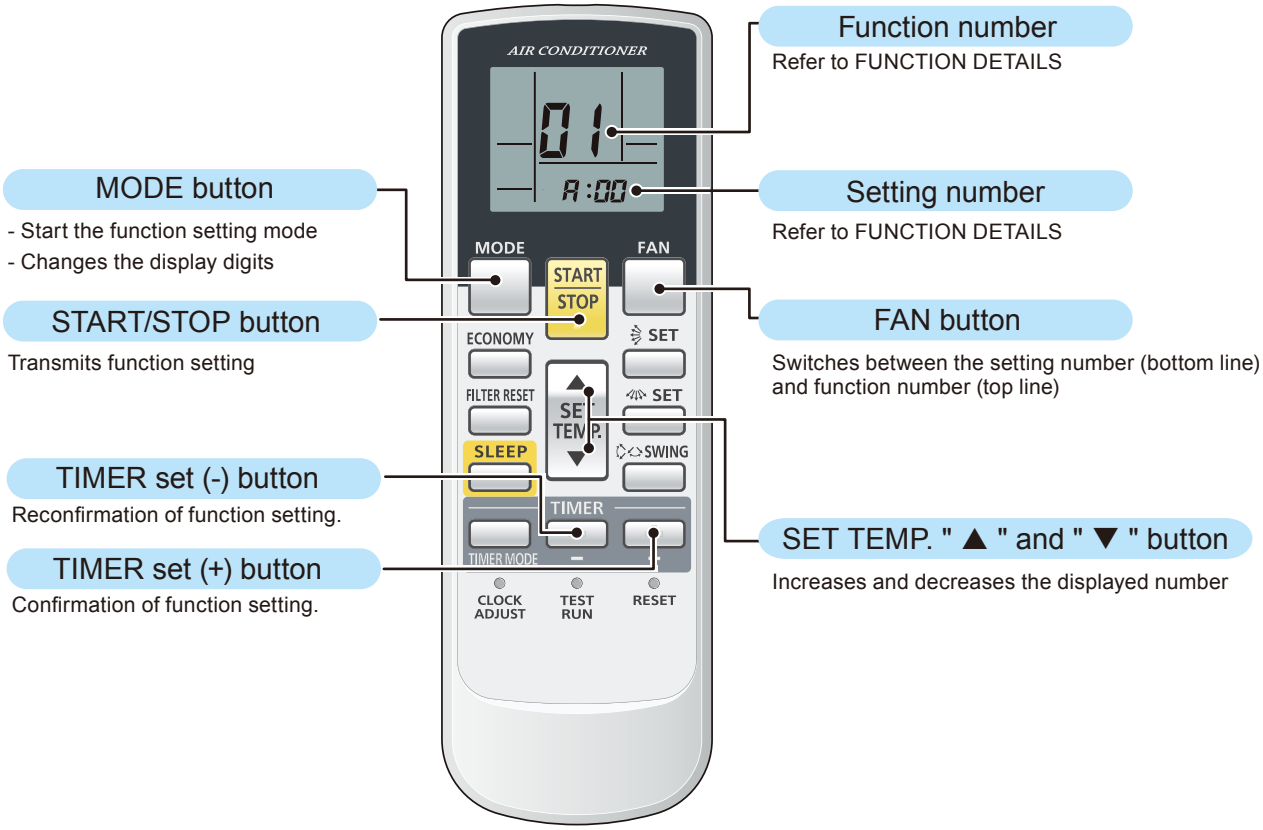
(5) Press the “TIMER MODE" button to send the code to the indoor unit.



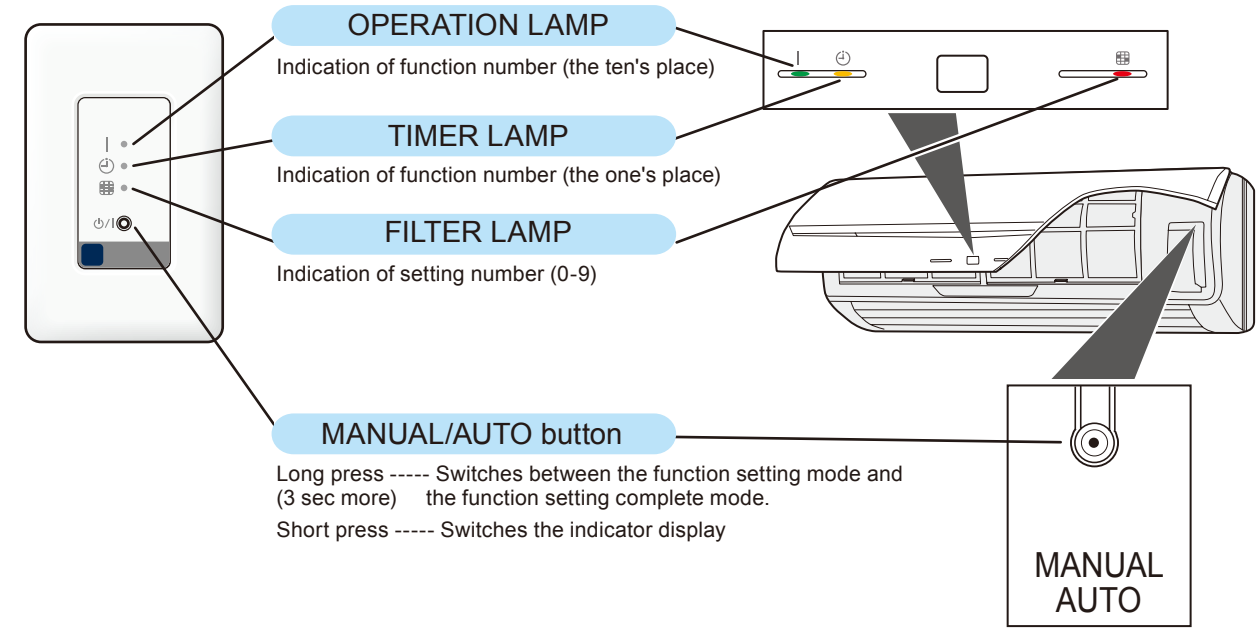
FUNCTION SETTING

■ BUTTON NAME AND FUNCTION

● During address setting mode, indoor unit reject the any operation command from remote controller.



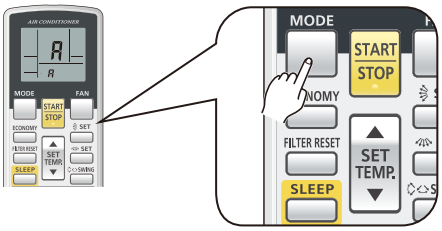
IR RECEIVER UNIT



FUNCTION SETTING

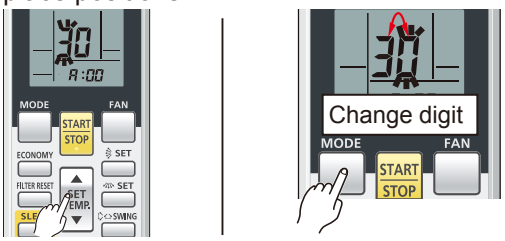
■ FUNCTION SETTING

(6) Press the “MODE” button to access the function setting mode.



(7) Press the “ ▲ ” or the “ ▼ ” buttons to select the function number.

Each time the “MODE” button is pressed, it switches between the one's place and the ten's place positions.

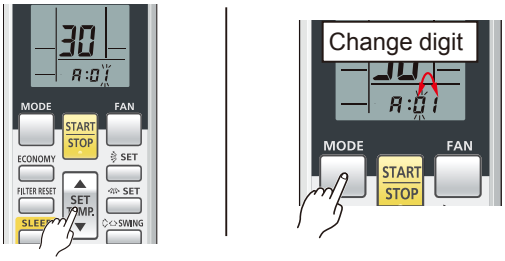


(8) Press the "FAN" button to proceed to setting the number. (Press the "FAN" button again to return to the function number selection.)

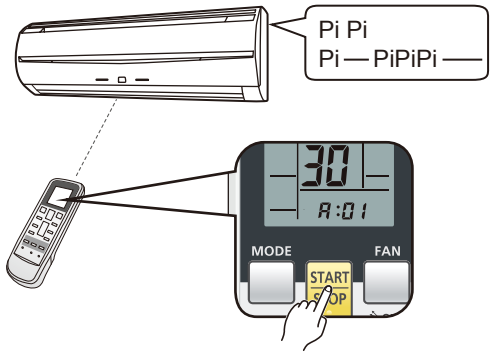


(9) Press the “ ▲ ” or the “ ▼ ” buttons to select the setting number.

Each time the “MODE” button is pressed, it switches between the one's place and the ten's place positions.



(10) Press the “START/STOP” button once to send the information. A beeping sound will be heard if the command is accepted.

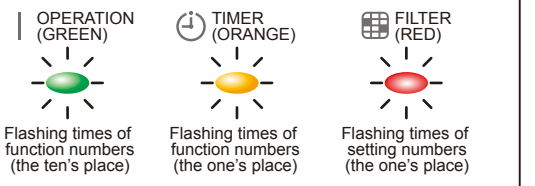


＊In the following cases the setting signal is not read and a buzzer sounds.

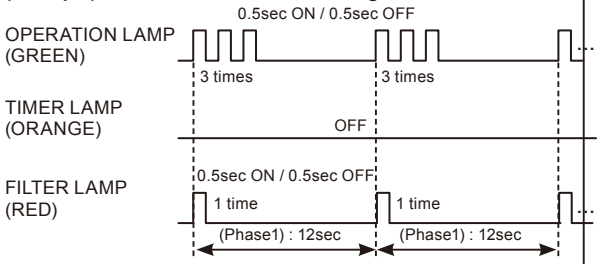
The function setting No. is set out of range
: Pi Pi Pi Pi Pi

Case1 : When setting number is one digit.

(11-1) Indoor unit will display the function setting number on "OPERATION"(GREEN), "TIMER ◴ "(ORANGE) and "FILTER ▦ "(RED) light.



(Example) Function number : 30, Setting number : 01



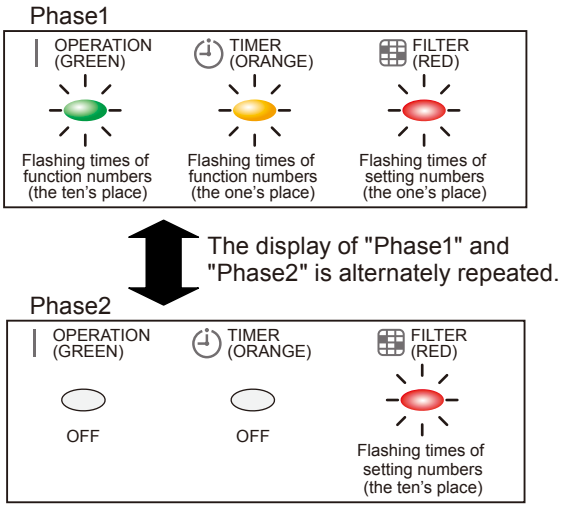
＊ Number 0 setting will not indicate TIMER LAMP and FILTER LAMP.

FUNCTION SETTING

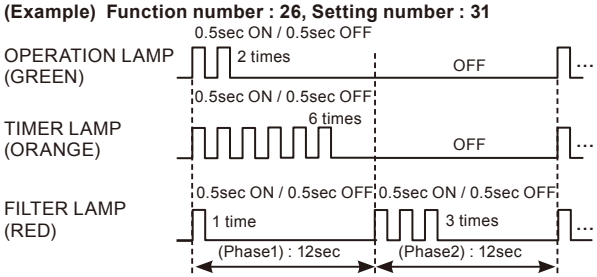
FUNCTION SETTING

Case2 : When setting number is two digits.

(11-2) Indoor unit will display the function setting number on "OPERATION"(GREEN), "TIMER" "(ORANGE) and "FILTER" "(RED) light.



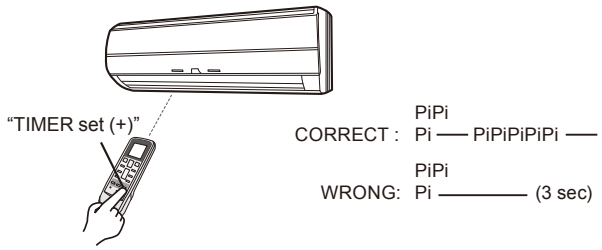
(Example) Function number : 26, Setting number : 31



∗ Number 0 setting will not indicate TIMER LAMP and FILTER LAMP.

● Confirmation of function setting

(12) Press the "TIMER set (+)" button.



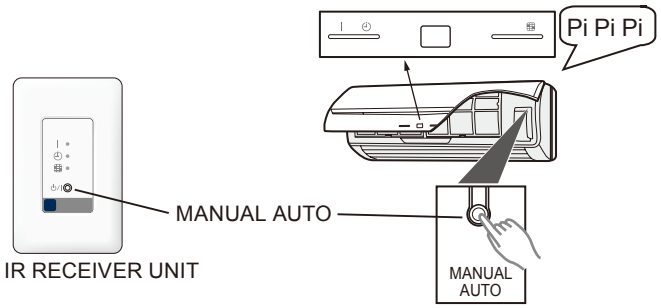
■ FUNCTION DETAILS

Refer to 2-9. FUNCTION DETAILS.

FUNCTION SETTING

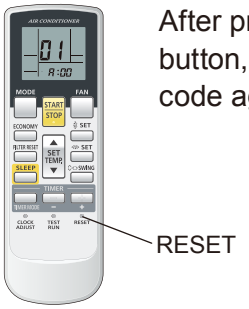
■ COMPLETION OF FUNCTION SETTING MODE

(13) Press and hold the “MANUAL/AUTO ｜／○” button for 3 seconds.



∗ Each LED light brightness is darkening though the content of the display doesn't change.

(14) Press the “RESET” button.

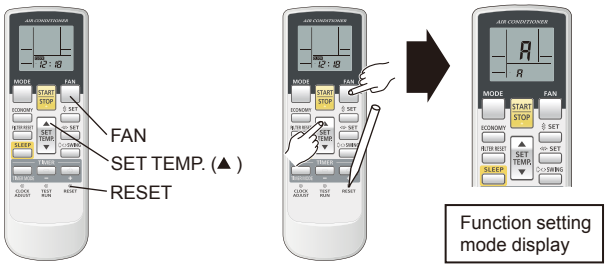


After pressing the RESET button, please set the custom code again if b,c,d setting.

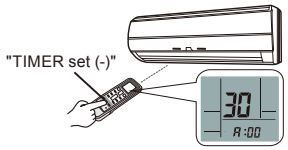
∗ The function setting signal is not received after switched function setting completion mode. (Pi Pi Pi Pi Pi)
∗ Press the "MANUAL/AUTO ｜／○" button again for 3 sec to return to if required to return the function setting mode.

■ RECONFIRMATION OF FUNCTION SETTING

(15) Press and hold the “FAN” and the “ SET TEMP. ▲ ” buttons. Whilst holding these 2 buttons, press the "RESET" button.

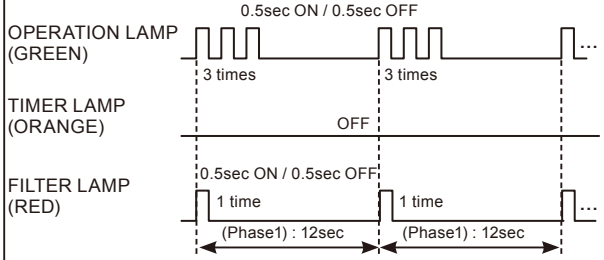


(16) Function number to be confirmed is displayed.
Refer to (7).
Press the “TIMER set (-)” button.



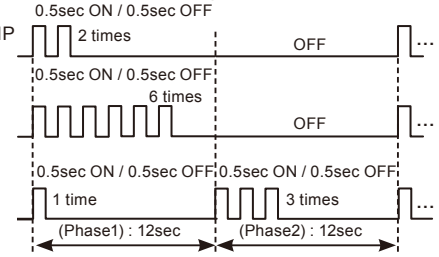
Case1 : When setting number is one digit.

(Example) Function number : 30, Setting number : 01



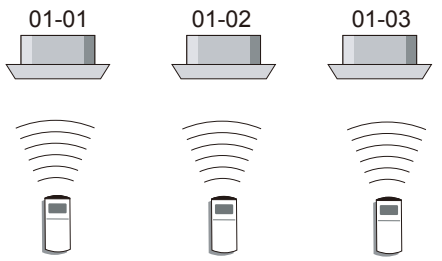
Case2 : When setting number is two digits.

(Example) Function number : 26, Setting number : 31



FUNCTION SETTING

■ SETTING UP EACH INDOOR UNIT



Repeat steps (1) through to (16). Steps (1) through to (5) and (13) to (16) only need to carried out if the custom code is different to the factory setting of “A”.

■ RESET THE POWER AFTER SETTING UP FUNCTION OF ALL INDOOR UNITS

Important

- **If the reset is not performed, function can not be read in normally.**
- **After all the functions have been set, the circuit breaker needs to be switched off for at least 2 minutes.**
  After the 2 minutes has passed, power can be restored.
- **The set function is stored in the PCB and will remain in memory even when the power is turned off.**
  However setting function is effective after power reset.
  Record the function set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

∗ Number 0 setting will not indicate TIMER LAMP and FILTER LAMP.

∗ Once the "RESET" button is pressed on the remote controller, the OPERATION MODE will be set in the "AUTO MODE".
Please adjust the OPERATION MODE to either "COOLING" or "HEATING" before trying to operate the air conditioner.

∗ Note : If CUSTOM CODE is set to anything other than "A" ,the remote control must be set accordingly to the INDOOR UNIT setting.

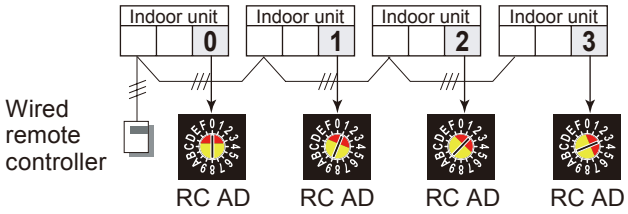
FUNCTION SETTING

2-4. INDOOR UNIT (setting by UTY-RNK*)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.
- This function cannot be used on the slave units.

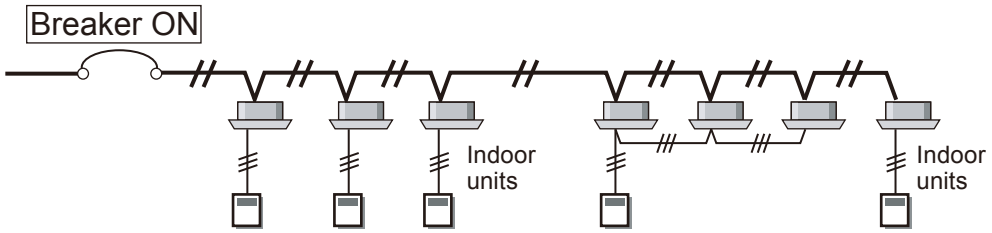
■ PREPARATION

1) If multiple indoor units are connected to a single wired remote controller, make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units. (Refer to 1-3.)
Ex.) When four indoor units are connected



2) Turn on the power to the indoor unit.

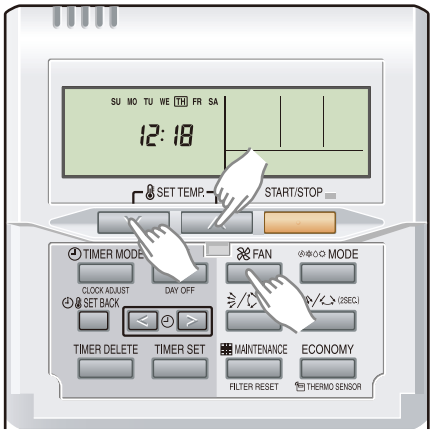
- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

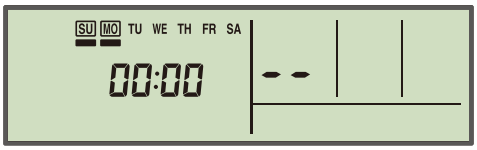


FUNCTION SETTING

■ SWITCHING SELECTION OF FUNCTION SETTING MODE

3) To activate the function setting mode, hold down the three buttons of SET TEMP. V, SET TEMP. Λ and FAN at the same time for 5 seconds or longer.

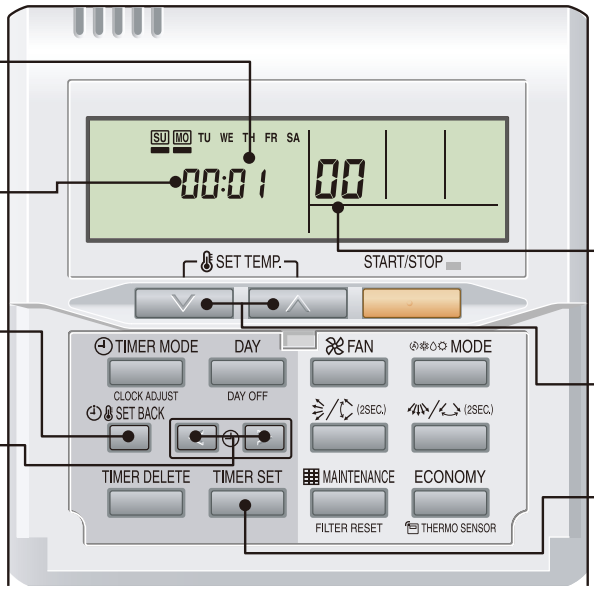




Address setting mode initial display

■ BUTTON NAME AND FUNCTION

- During address setting mode, indoor unit reject the any operation command from remote controller.



Function number

Refer to FUNCTION DETAILS

Remote controller address

Remote controller address setting number 00-15

SET BACK button

Switches the remote controller address setting number.

SET TIME “<” and “>” button

Switches the function number.

Setting number

Refer to FUNCTION DETAILS

SET TEMP. “V” and “Λ” button

Switches the setting number.

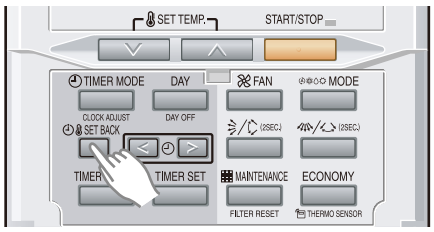
TIMER SET button

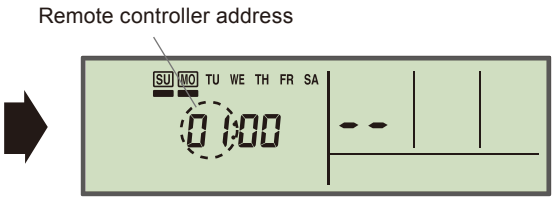
Transmits function setting

FUNCTION SETTING

■ FUNCTION SETTING

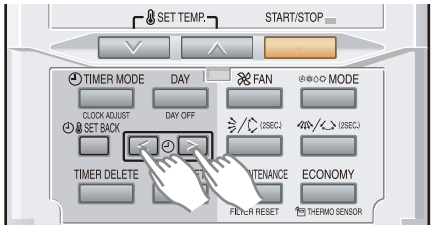
4) Pressing the SET BACK button, select a remote controller address (select the indoor unit you want to operate)

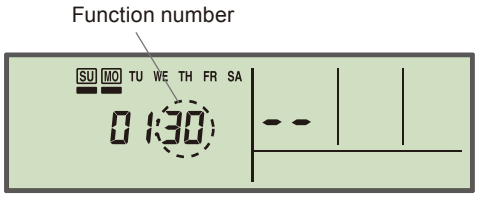




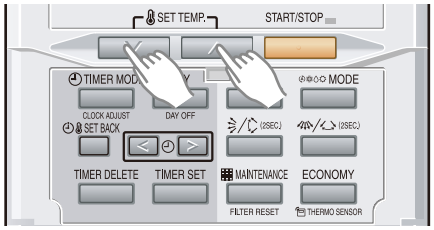
Ex.) When remote controller address “01” is selected

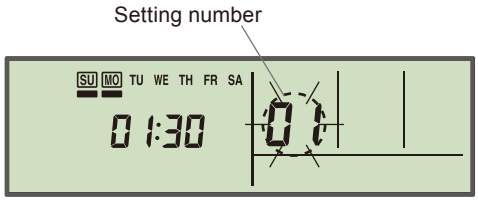
5) Pressing the SET TIME < button or the SET TIME > button, to select the function number.





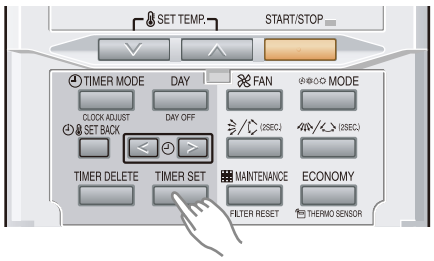
6) Pressing the SET TEMP. V button or the SET TEMP. Λ button, to select the setting number. The display flashes during setting number selection.

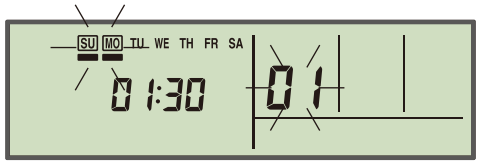




Ex.) Function number : 30, Setting number : 01

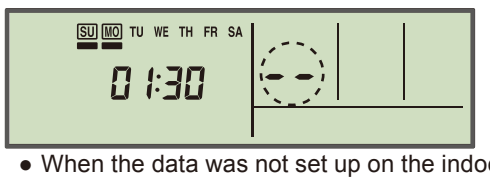
7) Pressing the TIMER SET button, confirm the setting.
(The data will be transferred to the indoor unit.)



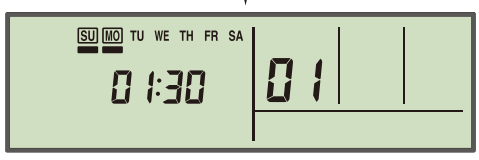


ERROR

GOOD



- When the data was not set up on the indoor unit (-- is displayed.)
- Set up the data again according to the procedure in step 5), 6) above.



When the data was normally set up on the indoor unit
(Flashing display changes to illuminated display.)

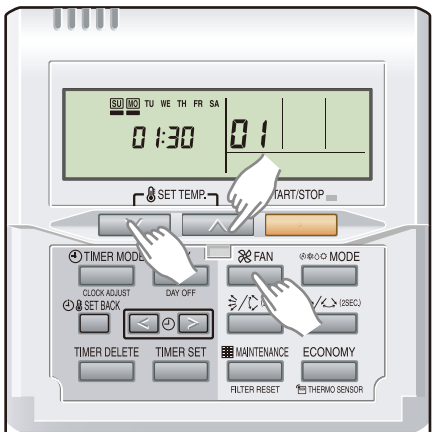
■ FUNCTION DETAILS

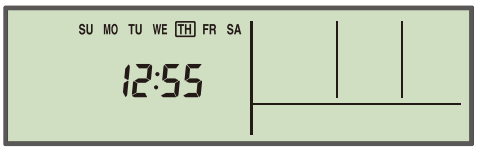
Refer to 2-9. FUNCTION DETAILS.

FUNCTION SETTING

■ COMPLETION OF FUNCTION SETTING MODE

8) To clear the function setting mode and return to the regular display, hold down the three buttons of SET TEMP. V, SET TEMP. Λ and FAN at the same time.

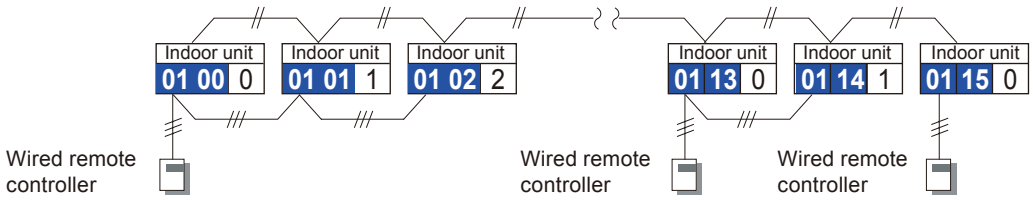




Normal mode display

∗ If no key entry is made for 60 seconds, even though none of the above buttons is pressed, the function setting mode will automatically be cleared.
(If the function setting mode is automatically cleared while setting addresses, activate the mode again according to the procedure in step 3) above.)

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 8), and set up the indoor units requiring function setting.

■ RESET THE POWER AFTER SETTING UP FUNCTION OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, function can not be read in normally.
∗ After all the functions have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set function is stored in the PCB and will remain in memory even when the power is turned off.
However setting function is effective after power reset.
Record the function set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

FUNCTION SETTING

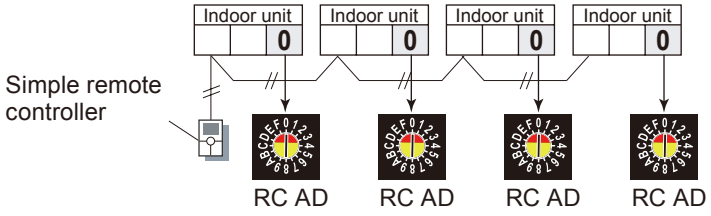
2-5. INDOOR UNIT (setting by UTY-RSR*, UTY-RHR*)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.
- This function cannot be used on the slave units.

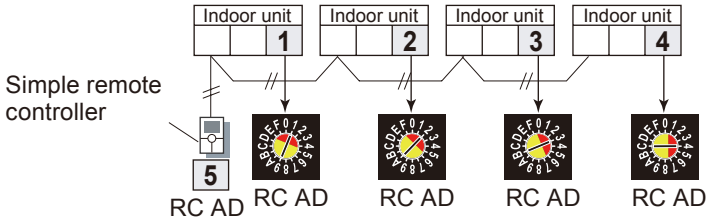
■ PREPARATION

1) When multiple indoor units are connected to a single wired remote controller.

1-1) When setting of Remote controller address in "Automatic address setting"

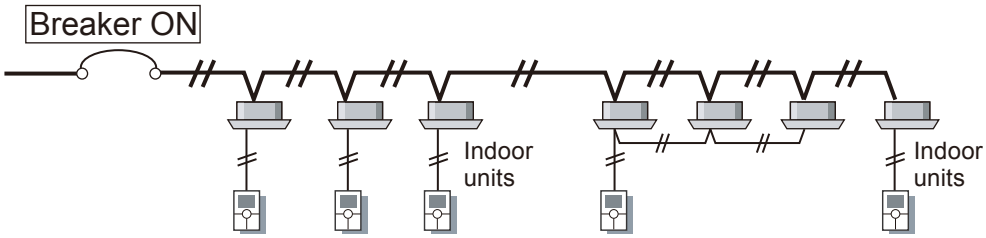


1-2) When setting of Remote controller address in "Manual address setting", make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units and Wired remote controller. (Refer to 1-3.)



2) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

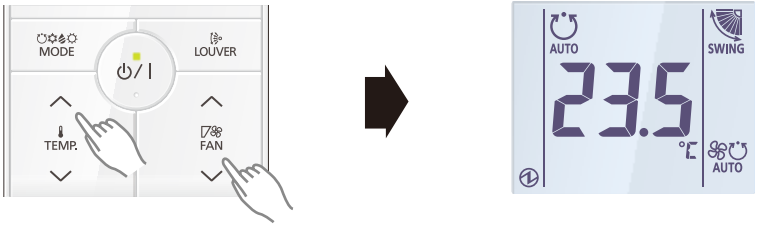


FUNCTION SETTING

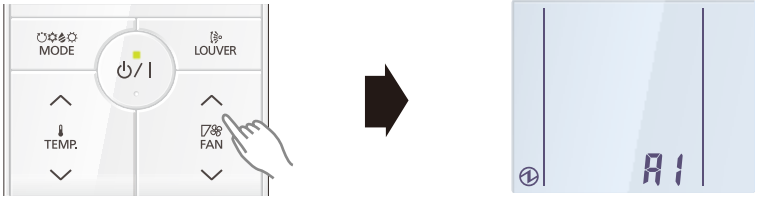
FUNCTION SETTING

■ SWITCHING SELECTION OF ADDRESS SETTING MODE

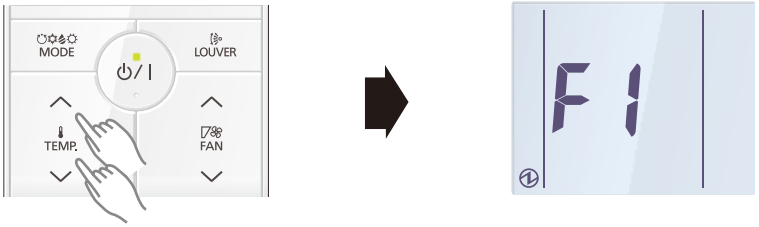
3) With “Monitor Mode” screen displayed, press and hold the SET TEMP. “∧” button and FAN “∨” button simultaneously for at least 2 seconds.



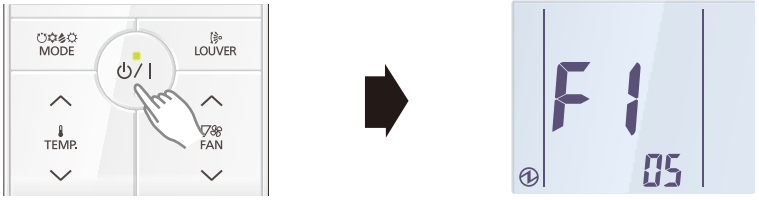
4) The Menu 1 screen is displayed. Press and hold the FAN “∧” button for at least 2 seconds. Setting mode selection screen is displayed.



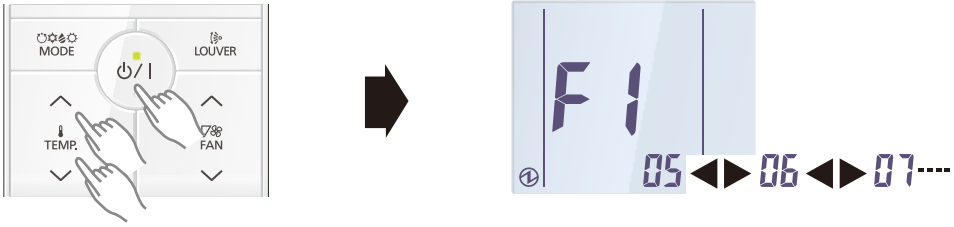
5) Press the SET TEMP. “∧” or SET TEMP. “∨” button to select F1 (Menu 2-F1) settings mode or F2 (Menu 2-F2) settings mode.
F1: Initial settings mode F2: Maintenance settings mode



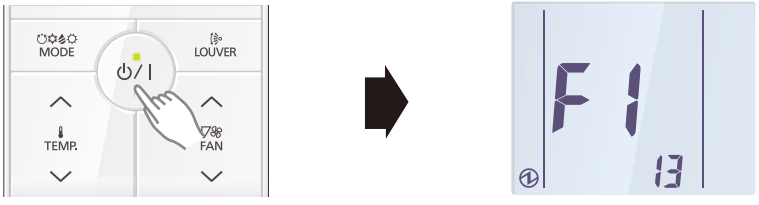
6) Press the “⏻/❙” button. Setting item selection screen is displayed. (Item No. is displayed.)



7) Select the item number to be set with the SET TEMP. “∧” or SET TEMP. “∨” button, and press the “⏻/❙” button to switch to thesetting screen.



8) Select the “13” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



FUNCTION SETTING

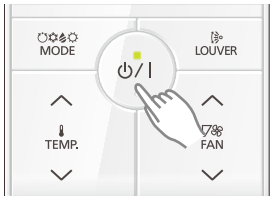
FUNCTION SETTING

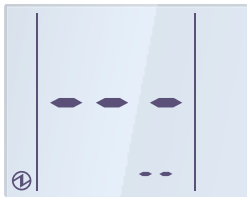
■ FUNCTION SETTING

This procedure changes the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the system to malfunction. Perform the “Function setting” according to the installation conditions using the remote controller.

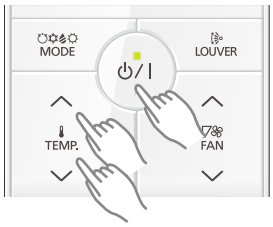
- Prepare for setting of indoor unit referring to installation manual of indoor unit before start of function setting.
- Refer to the indoor unit installation manual for details on the function numbers and setting numbers.

9) Select the 2-wire remote controller address with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/I” button.





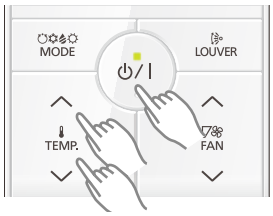
Select all

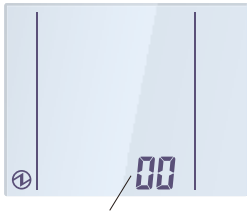




Select the 2-wire remote controller address (Ex. Select the 002-03)

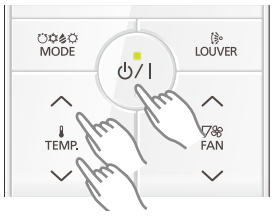
10) Set the function number with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/I” button.





Function number

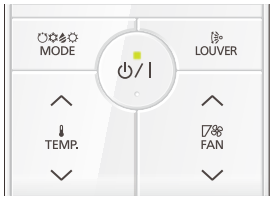
11) Set the setting number with the SET TEMP. “∧” or SET TEMP. “∨” button. Then press the “⏻/I” button.





Setting number

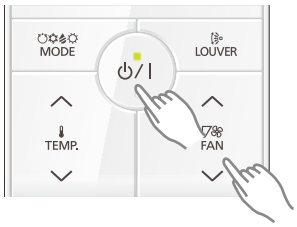
12) Setting results are displayed after data transmission.





FUNCTION SETTING

13) Press the "⏻/I" button to return to the 2-wire remote controller address selection screen of (2). If setting has been completed, press the FAN "﹀" button to return to the Menu 2-F1 item selection screen.



Note:

- **This item cannot be set from slave remote controllers.**

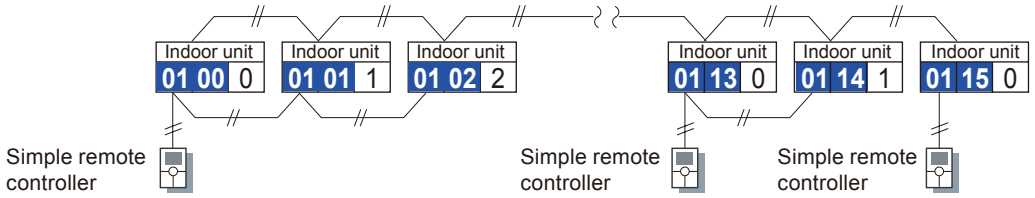
■ FUNCTION DETAILS

Refer to 2-9. FUNCTION DETAILS.

■ COMPLETION OF FUNCTION SETTING MODE

15) Press and hold the FAN "∧" button for at least 2 seconds to return to the Menu 1 item selection screen. Then, press and hold the SET TEMP. "∧" and FAN "﹀" button for at least 2 seconds at the same time to return to the "Monitor Mode" screen.

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 8), and set up the indoor units requiring function setting.

■ RESET THE POWER AFTER SETTING UP FUNCTION OF ALL INDOOR UNITS

Important

- **If the reset is not performed, function can not be read in normally.**
- **After all the functions have been set, the circuit breaker needs to be switched off for at least 2 minutes.**
  After the 2 minutes has passed, power can be restored.
- **The set function is stored in the PCB and will remain in memory even when the power is turned off.**
  However setting function is effective after power reset.
  Record the function set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

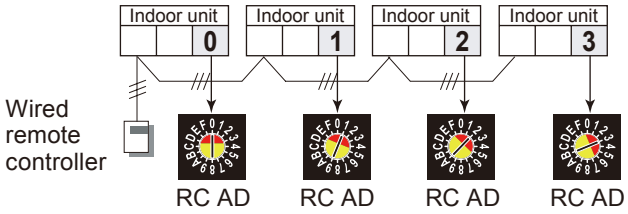
FUNCTION SETTING

2-6. INDOOR UNIT (setting by UTY-RSK*, UTY-RHK*)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.
- This function cannot be used on the slave units.

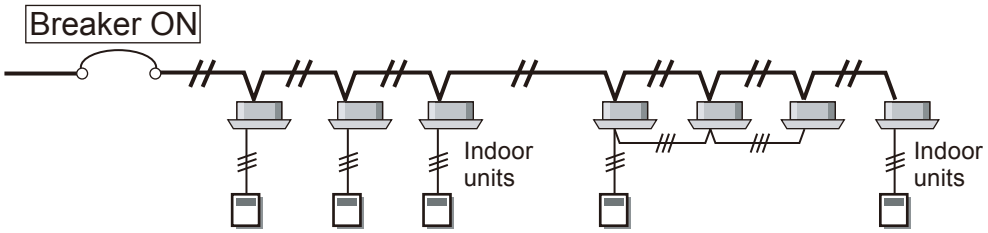
■ PREPARATION

1) If multiple indoor units are connected to a single simple remote controller, make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units. (Refer to 1-3.)
Ex.) When four indoor units are connected



2) Turn on the power to the indoor unit.

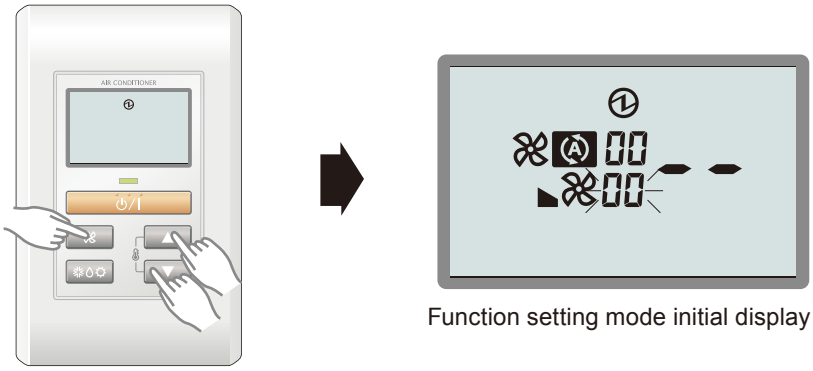
- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.



FUNCTION SETTING

■ SWITCHING SELECTION OF FUNCTION SETTING MODE

3) To activate the function setting mode, hold down the three buttons of SET TEMP. ▼, SET TEMP. ▲ and FAN at the same time for 5 seconds or longer.



Function setting mode initial display

■ BUTTON NAME AND FUNCTION

- During function setting mode, indoor unit reject the any operation command from remote controller.

Function number

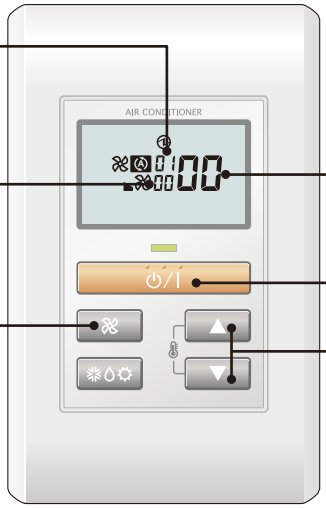
Refer to FUNCTION DETAILS

Remote controller address

Remote controller address setting number 00-15

FAN button

Each time this button is pressed, the fan setting changes among “Remote controller address,” “Function number” and “Setting number.”



Setting number

Refer to FUNCTION DETAILS

START/STOP button

Transmits function setting

SET TEMP. “▲” and “▼” button

Switches the various numbers.

UTY-RSK* (With operation mode)

Function number

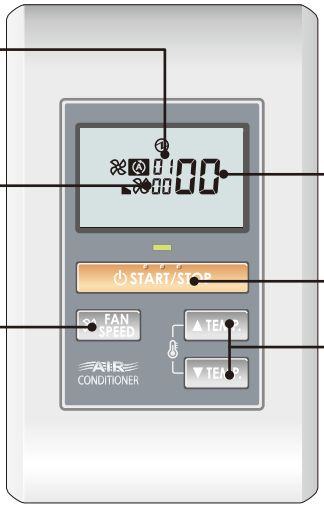
Refer to FUNCTION DETAILS

Remote controller address

Remote controller address setting number 00-15

FAN button

Each time this button is pressed, the fan setting changes among “Remote controller address,” “Function number” and “Setting number.”



Setting number

Refer to FUNCTION DETAILS

START/STOP button

Transmits function setting

SET TEMP. “▲” and “▼” button

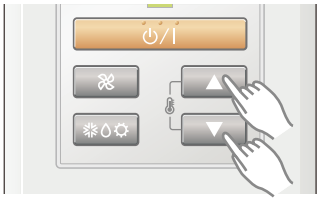
Switches the various numbers.

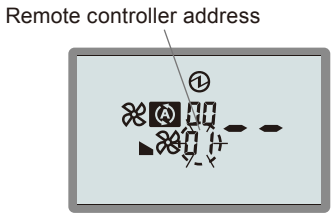
UTY-RHK* (Without operation mode)

FUNCTION SETTING

■ FUNCTION SETTING

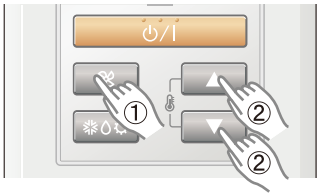
4) Pressing the SET TEMP. ▲ button or SET TEMP. ▼ button, select a remote controller address (select the indoor unit you want to operate).

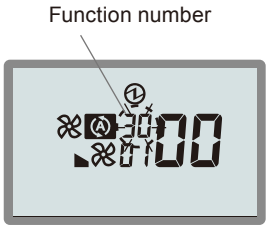




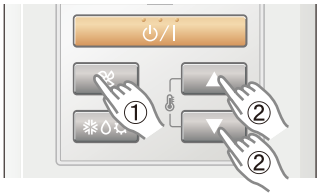
Ex.) When remote controller address “01” is selected

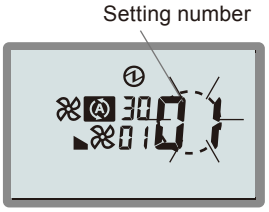
5) Press the FAN button so that the “Function number” display flashes. Then, press either the SET TEMP. ▲ button or the SET TEMP. ▼ button to set up the function number.





6) Press the FAN button so that the “Setting number” display flashes. Then, press either the SET TEMP. ▲ button or the SET TEMP. ▼ button to set up the setting number.





Ex.) Function number : 30, Setting number : 01

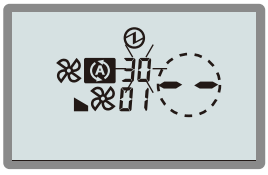
7) Pressing the START/STOP button, confirm the setting.
(The data will be transferred to the indoor unit.)





ERROR

GOOD





- When the data was not set up on the indoor unit (-- is displayed.)
- Set up the data again according to the procedure in step 5), 6) above.

When the data was normally set up on the indoor unit.

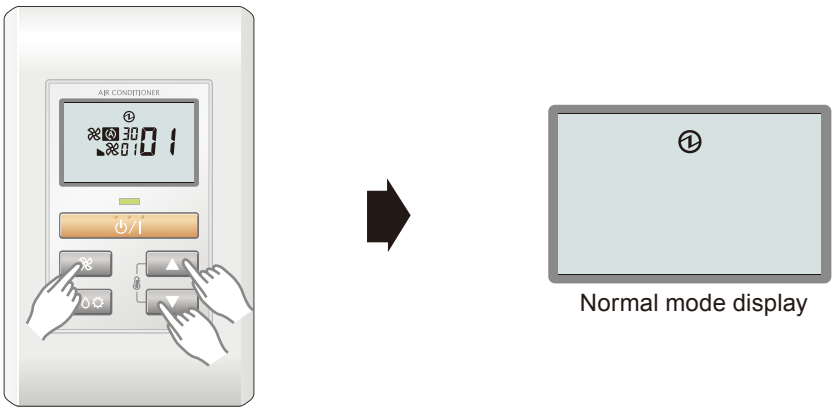
■ FUNCTION DETAILS

Refer to 2-9. FUNCTION DETAILS.

FUNCTION SETTING

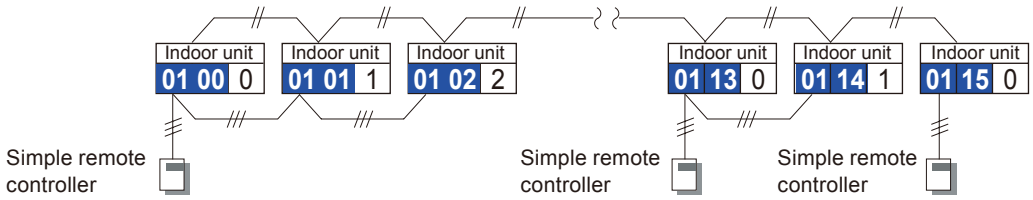
■ COMPLETION OF FUNCTION SETTING MODE

8) Press the three buttons of SET TEMP. ▲, SET TEMP. ▼ and FAN at the same time for 5 seconds or longer. The function setting mode will be cleared and the regular display will be restored.



∗ If no key entry is made for 60 seconds, even though none of the above buttons is pressed, the function setting mode will automatically be cleared.
(If the function setting mode is automatically cleared while setting addresses, activate the mode again according to the procedure in step 3) above.)

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 8), and set up the indoor units requiring function setting.

■ RESET THE POWER AFTER SETTING UP FUNCTION OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, function can not be read in normally.
∗ After all the functions have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set function is stored in the PCB and will remain in memory even when the power is turned off.
However setting function is effective after power reset.
Record the function set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

FUNCTION SETTING

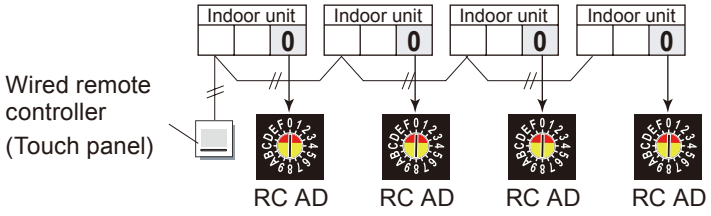
2-7. INDOOR UNIT (setting by UTY-RNR*)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.
- This function cannot be used on the slave units.

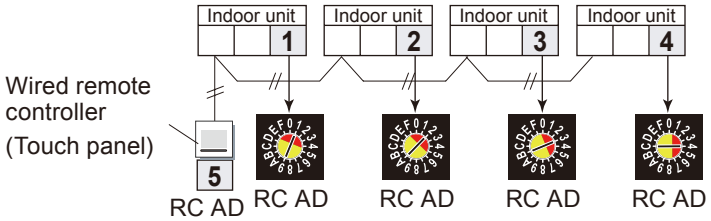
■ PREPARATION

1) When multiple indoor units are connected to a single wired remote controller.

1-1) When setting of Remote controller address in "Automatic address setting"

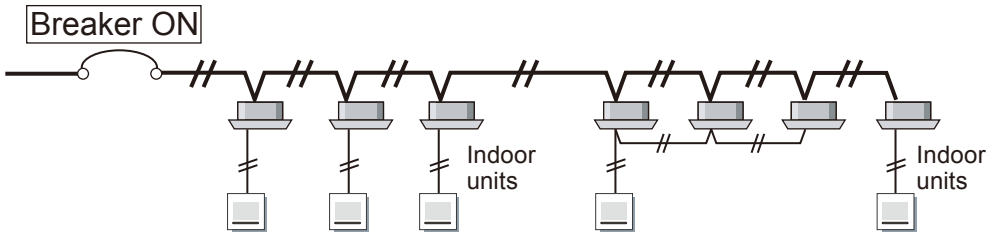


1-2) When setting of Remote controller address in "Manual address setting", make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units and Wired remote controller (Touch panel). (Refer to 1-3.)



2) Turn on the power to the indoor unit.

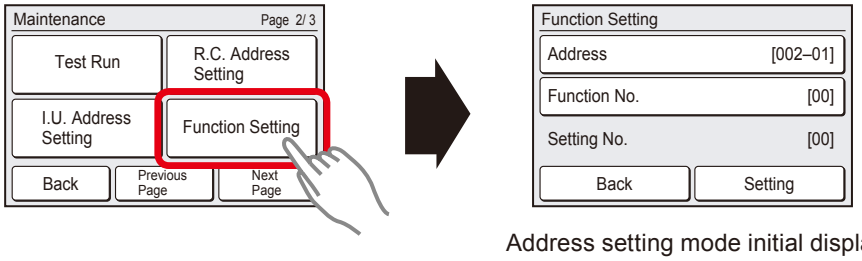
- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.



FUNCTION SETTING

■ SWITCHING SELECTION OF FUNCTION SETTING MODE

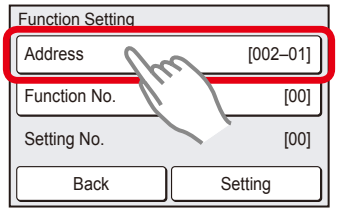
3) When the [Function Setting] on the “Maintenance” screen is touched, the “Installer Password Verification” screen is displayed.
Enter the Installer Password, and touch the [OK]. “Function Setting” screen is displayed.



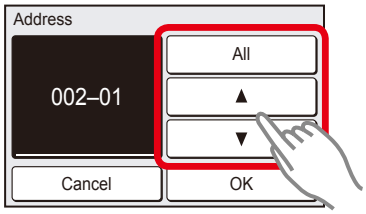
Address setting mode initial display

■ FUNCTION SETTING

4) Touch the [Address] on the “Function Setting” screen.

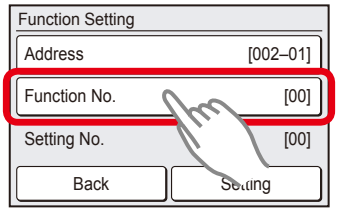


5) “Address” screen is displayed. Select the address of the indoor unit whose function number is to be set by touching [▲] or [▼]. When setting at all the indoor units, touch [All].

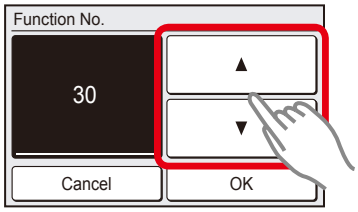


When the [OK] is touched, the display returns to the “Function Setting” screen.

6) Touch the [Function No.] on the “Function Setting” screen.



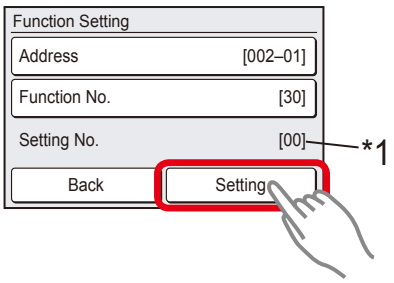
7) “Function No.” screen is displayed. Set the Function No. with the [▲] or [▼].



When the [OK] is touched, the display returns to the “Function Setting” screen.

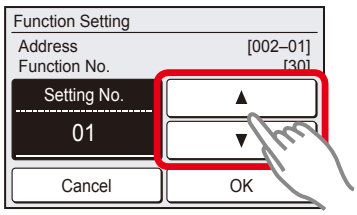
FUNCTION SETTING

8)Touch the [Setting] on the “Function Setting” screen.



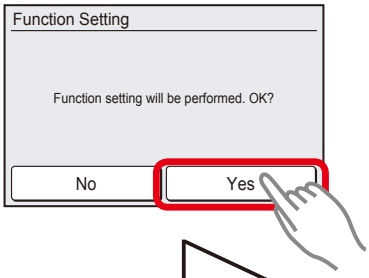
Note: *1 When All is chosen by 5), and different set up "Setting No." from two or more indoor units, [-] is displayed on "Setting No."

9) Setting screen of “Setting No.” is displayed. Set the Setting No. with the [▲] or [▼].

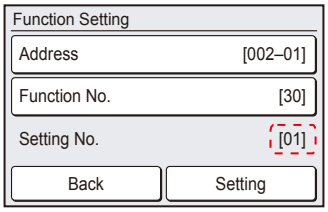


Ex.) Function number: 30, Setting number: 01
When the [OK] is touched, the “Function Setting” verification screen is displayed.

10) Touch the [YES] of the verification screen.

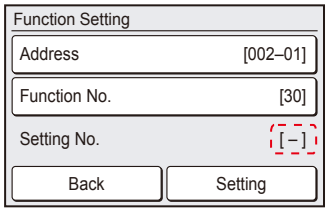


In case of OK



When the data was normally set up on the indoor unit

In case of ERROR



- When the data was not set up on the indoor unit ([-] is displayed.)
- Set up the data again according to the procedure in step 6) to 9) above

FUNCTION SETTING

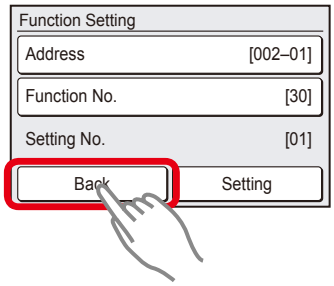
FUNCTION SETTING

■ FUNCTION DETAILS

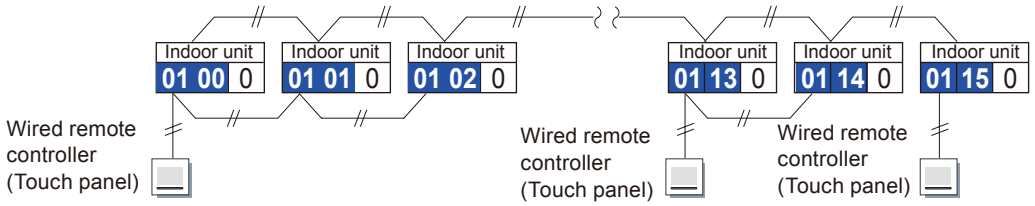
Refer to 2-9. FUNCTION DETAILS.

■ COMPLETION OF ADDRESS SETTING MODE

11) When the [Back] on the “Function Setting” screen is touched, the display returns to the “Maintenance” screen.



■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 11), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

FUNCTION SETTING

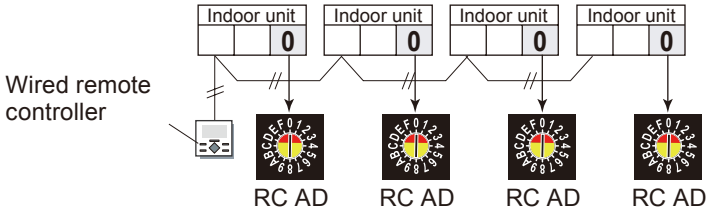
2-8. INDOOR UNIT (setting by UTY-RLR*)

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the “FUNCTION SETTING” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Number.
- Settings will not be changed if invalid numbers or setting numbers are selected.
- This function cannot be used on the slave units.

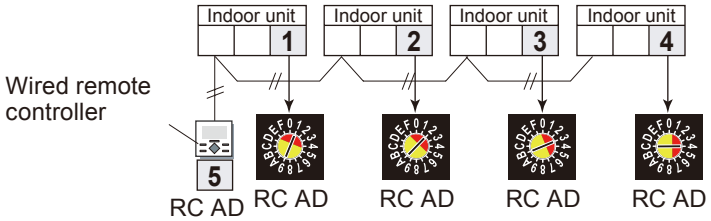
■ PREPARATION

1) When multiple indoor units are connected to a single wired remote controller.

1-1) When setting of Remote controller address in "Automatic address setting"

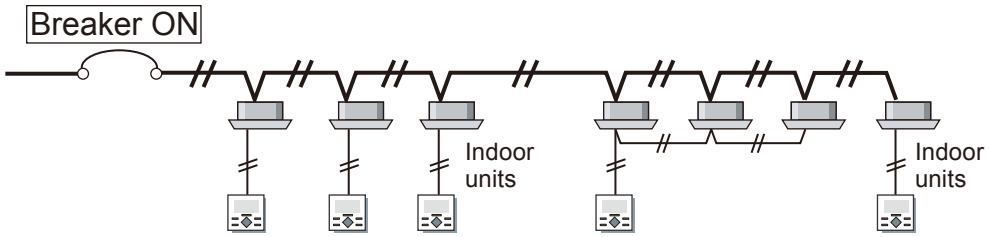


1-2) When setting of Remote controller address in "Manual address setting", make sure to manually set up the remote controller address (RC AD) on the PCBs of the indoor units and Wired remote controller. (Refer to 1-3.)



2) Turn on the power to the indoor unit.

- By turning on the power indoor units initializes EEV, so make sure the piping air-tight test and vacuuming have been conducted before turning on the power.
- Also check again to make sure no wiring mistakes were made before turning on the power.

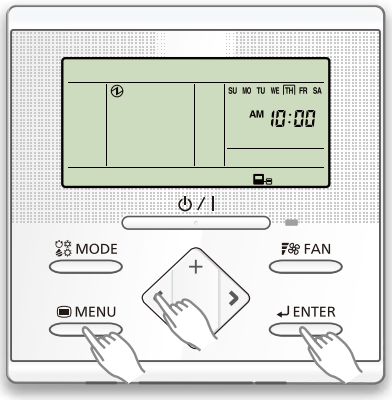


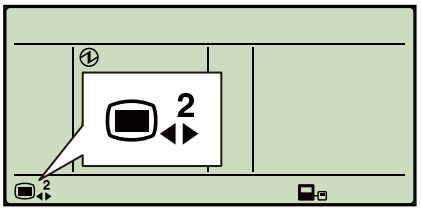
FUNCTION SETTING

FUNCTION SETTING

■ SWITCHING SELECTION OF ADDRESS SETTING MODE

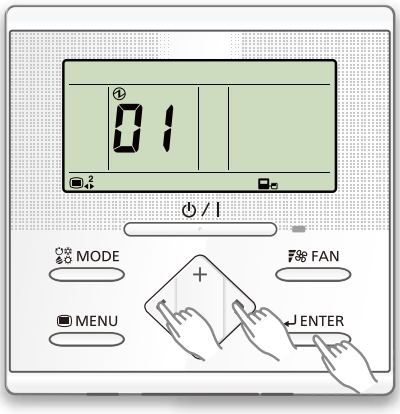
3) To activate the address setting mode, hold down the three buttons of "MENU", "<" and "ENTER" at the same time for 2 seconds or longer.

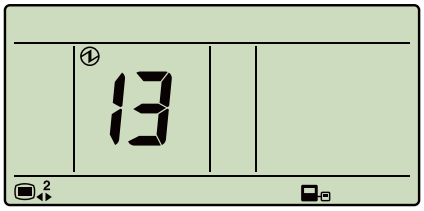




Address setting mode initial display

4) Select the “13” in Menu 2 Settings. Then press the "ENTER" button.

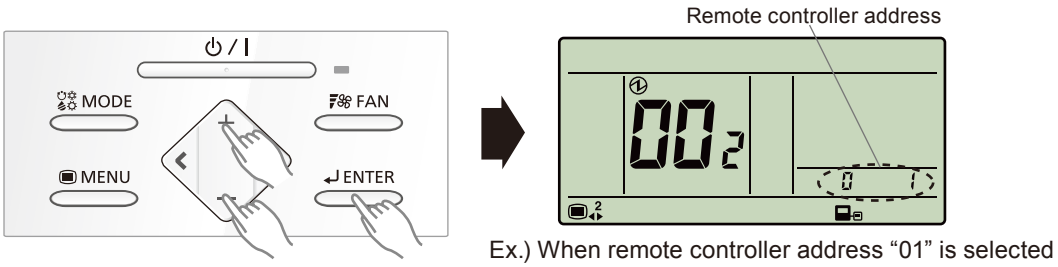




FUNCTION SETTING

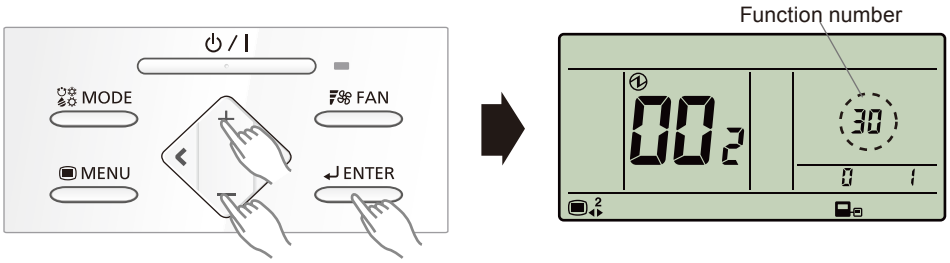
■ FUNCTION SETTING

5) Pressing the "+" or "-" button, select a remote controller address (select the indoor unit you want to operate). Then press the "ENTER" button.

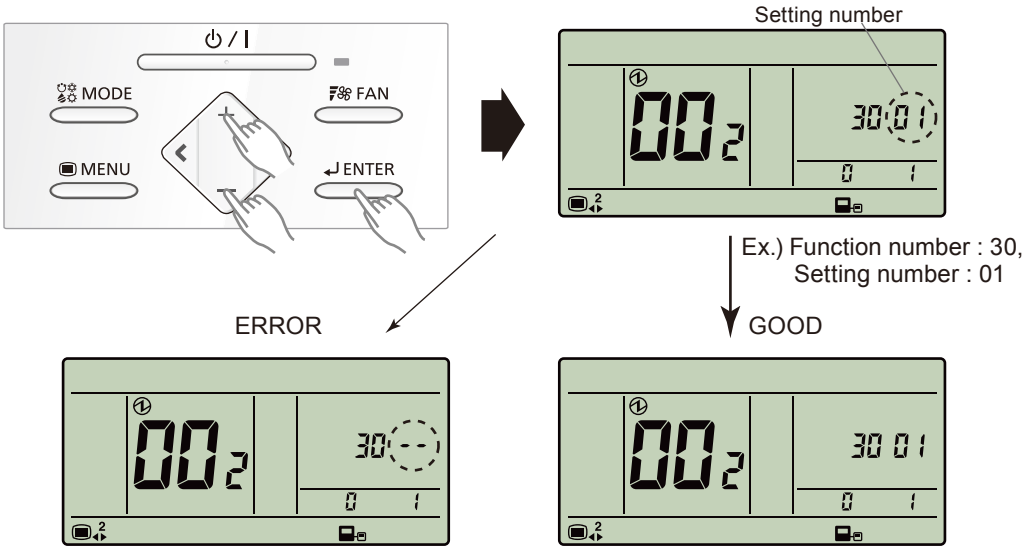


Ex.) When remote controller address “01” is selected

6) Pressing the "+" or "-" button, to select the function number. Then press the "ENTER" button.



7) Pressing the "+" or "-" button, to select the setting number. Then press the "ENTER" button.



- When the data was not set up on the indoor unit (-- is displayed.)
- Set up the data again.

- When the data was normally set up on the indoor unit.

8) Pressing the "ENTER" button to return to the address selection screen. If setting has been completed, pressing the "MENU" button to return to the Menu 2 item selection screen.

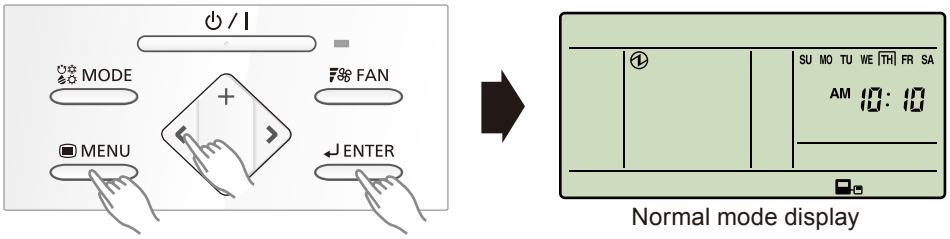
■ FUNCTION DETAILS

Refer to 2-9. FUNCTION DETAILS.

FUNCTION SETTING

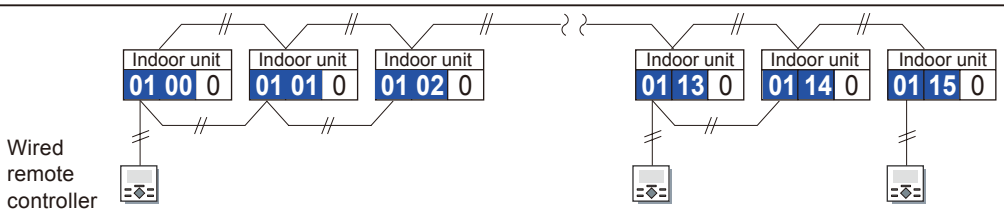
■ COMPLETION OF ADDRESS SETTING MODE

9) To clear the address setting mode and return to the normal mode display, hold down the three buttons of "MENU", "<" and "ENTER" at the same time for 2 seconds or longer.



Normal mode display

■ SETTING UP EACH INDOOR UNIT



Repeat the procedures in steps 1) through 14), and set up the indoor units requiring address setting.

■ RESET THE POWER AFTER SETTING UP ADDRESS OF ALL INDOOR UNITS

Important

∗ If the reset is not performed, address can not be read in normally.
∗ After all the addresses have been set, the circuit breaker needs to be switched off for at least 2 minutes.
After the 2 minutes has passed, power can be restored.
∗ The set address is stored in the PCB and will remain in memory even when the power is turned off.
However setting address is effective after power reset.
Record the address set in the indoor unit on a label, etc., and affix the label to the unit so it can be used for after-sales service operations.

FUNCTION SETTING

2-9. FUNCTION DETAILS

<table>
<tr><th>Function</th><th>Function number</th><th colspan="2">Setting number</th><th>Default</th><th>Details</th></tr>
<tr><td rowspan="3">Filter indicator interval</td><td rowspan="3">11</td><td>00</td><td>Standard</td><td>●</td><td rowspan="3">Adjust the filter cleaning interval notification. If the notification is too early, change to setting 01. If the notification is too late, change to setting 02.</td></tr>
<tr><td>01</td><td>Longer</td><td></td></tr>
<tr><td>02</td><td>Shorter</td><td></td></tr>
<tr><td rowspan="3">Filter indicator action</td><td rowspan="3">13</td><td>00</td><td>Enable</td><td>●</td><td rowspan="3">Enable or disable the filter indicator.
Setting 02 is for use with a central remote control.</td></tr>
<tr><td>01</td><td>Disable</td><td></td></tr>
<tr><td>02</td><td>Display only on central remote control</td><td></td></tr>
<tr><td rowspan="2">Ceiling airflow</td><td rowspan="2">20</td><td>00</td><td>Standard</td><td>●</td><td rowspan="2">Regulate the airfl ow according to the needs of the installation location. When set to 01, the air flow will be stronger. (Cassette type only)</td></tr>
<tr><td>01</td><td>High Ceiling</td><td></td></tr>
<tr><td rowspan="2">Vertical airflow direction</td><td rowspan="2">23</td><td>00</td><td>Standard</td><td>●</td><td rowspan="2">Adjust the vertical airflow direction. All airflow direction louvers are adjusted together.
(Cassette type only)</td></tr>
<tr><td>01</td><td>Raise</td><td></td></tr>
<tr><td rowspan="3">Horizontal swing airflow direction</td><td rowspan="3">24</td><td>00</td><td>Standard</td><td>●</td><td rowspan="3">Adjust the horizontal swing airflow direction.
(For horizontal swing equipped models)</td></tr>
<tr><td>01</td><td>Left half</td><td></td></tr>
<tr><td>02</td><td>Right half</td><td></td></tr>
<tr><td rowspan="32">Static pressure</td><td rowspan="32">26</td><td>00</td><td>SP mode 00</td><td></td><td rowspan="32">
<table>
<tr><th>Model name</th><th>Range of static pressure</th><th>Normal static pressure</th></tr>
<tr><td>ARXK07GCLH</td><td rowspan="3">SP mode 00 to 03</td><td rowspan="3">10 Pa</td></tr>
<tr><td>ARXK09GCLH</td></tr>
<tr><td>ARXK12GCLH</td></tr>
<tr><td>ARXK14GCLH</td><td rowspan="3">SP mode 00 to 05</td><td rowspan="3">15 Pa</td></tr>
<tr><td>ARXK18GCLH</td></tr>
<tr><td>ARXK24GCLH</td></tr>
<tr><td>ARXD04GALH</td><td rowspan="6">SP mode 00 to 09
(0 to 90 Pa)</td><td rowspan="7">25Pa</td></tr>
<tr><td>ARXD07GALH</td></tr>
<tr><td>ARXD09GALH</td></tr>
<tr><td>ARXD12GALH</td></tr>
<tr><td>ARXD14GALH</td></tr>
<tr><td>ARXD18GALH</td></tr>
<tr><td>ARXD24GALH</td><td>SP mode 00 to 05
(0 to 50 Pa)</td></tr>
<tr><td>ARXA24GBLH</td><td rowspan="2">SP mode 00 to 14</td><td>40Pa</td></tr>
<tr><td>ARXA30GBLH</td><td rowspan="2">50Pa</td></tr>
<tr><td>ARXA36GBLH</td><td>SP mode 00 to 12</td></tr>
<tr><td>ARXA45GBLH</td><td>SP mode 00 to 11</td><td>60Pa</td></tr>
<tr><td>ARXC36GBTH</td><td>SP mode 02 to 16</td><td>100Pa</td></tr>
<tr><td>ARXC72GBTH</td><td>SP mode 04 to 27</td><td rowspan="3">150Pa</td></tr>
<tr><td>ARXC90GBTH</td><td>SP mode 05 to 24</td></tr>
<tr><td>ARXC96GATH</td><td>SP mode 05 to 29</td></tr>
<tr><td>ARXN18GATH</td><td>SP mode 05 to 10</td><td rowspan="3">50Pa</td></tr>
<tr><td>ARXN24GATH</td><td>SP mode 05 to 15</td></tr>
<tr><td>ARXN30GATH</td><td rowspan="3">SP mode 05 to 25</td></tr>
<tr><td>ARXN34GATH</td><td rowspan="2">60Pa</td></tr>
<tr><td>ARXN36GATH</td></tr>
<tr><td>ARXN45GATH</td><td></td></tr>
</table>
Please refer to "Chapter04 7.FAN PERFORMANCE CURVE" for the characteristics of each indoor unit.
</td></tr>
<tr><td>01</td><td>SP mode 01</td><td></td></tr>
<tr><td>02</td><td>SP mode 02</td><td></td></tr>
<tr><td>03</td><td>SP mode 03</td><td></td></tr>
<tr><td>04</td><td>SP mode 04</td><td></td></tr>
<tr><td>05</td><td>SP mode 05</td><td></td></tr>
<tr><td>06</td><td>SP mode 06</td><td></td></tr>
<tr><td>07</td><td>SP mode 07</td><td></td></tr>
<tr><td>08</td><td>SP mode 08</td><td></td></tr>
<tr><td>09</td><td>SP mode 09</td><td></td></tr>
<tr><td>10</td><td>SP mode 10</td><td></td></tr>
<tr><td>11</td><td>SP mode 11</td><td></td></tr>
<tr><td>12</td><td>SP mode 12</td><td></td></tr>
<tr><td>13</td><td>SP mode 13</td><td></td></tr>
<tr><td>14</td><td>SP mode 14</td><td></td></tr>
<tr><td>15</td><td>SP mode 15</td><td></td></tr>
<tr><td>16</td><td>SP mode 16</td><td></td></tr>
<tr><td>17</td><td>SP mode 17</td><td></td></tr>
<tr><td>18</td><td>SP mode 18</td><td></td></tr>
<tr><td>19</td><td>SP mode 19</td><td></td></tr>
<tr><td>20</td><td>SP mode 20</td><td></td></tr>
<tr><td>21</td><td>SP mode 21</td><td></td></tr>
<tr><td>22</td><td>SP mode 22</td><td></td></tr>
<tr><td>23</td><td>SP mode 23</td><td></td></tr>
<tr><td>24</td><td>SP mode 24</td><td></td></tr>
<tr><td>25</td><td>SP mode 25</td><td></td></tr>
<tr><td>26</td><td>SP mode 26</td><td></td></tr>
<tr><td>27</td><td>SP mode 27</td><td></td></tr>
<tr><td>28</td><td>SP mode 28</td><td></td></tr>
<tr><td>29</td><td>SP mode 29</td><td></td></tr>
<tr><td>31</td><td>Normal SP</td><td>●</td></tr>
<tr><td rowspan="3">Cool air temperature trigger</td><td rowspan="3">30</td><td>00</td><td>Standard</td><td>●</td><td rowspan="3">Adjust the cool air trigger temperature. To lower the trigger temperature, use setting 01. To raise the trigger temperature, use setting 02.</td></tr>
<tr><td>01</td><td>Adjust (1)</td><td></td></tr>
<tr><td>02</td><td>Adjust (2)</td><td></td></tr>
<tr><td rowspan="4">Heat air temperature trigger</td><td rowspan="4">31</td><td>00</td><td>Standard</td><td>●</td><td rowspan="4">Adjust the heat air trigger temperature. To lower the trigger temperature by 6 degrees C, use setting 01. To lower the trigger temperature by 4 degrees C, use setting 02. To raise the trigger temperature, use setting 03.</td></tr>
<tr><td>01</td><td>Adjust (1)</td><td></td></tr>
<tr><td>02</td><td>Adjust (2)</td><td></td></tr>
<tr><td>03</td><td>Adjust (3)</td><td></td></tr>
</table>

FUNCTION SETTING

FUNCTION SETTING

Function	Function number	Setting number		Default	Details
*1 Auto restart	**40**	**00**	Enable		Enable or disable automatic system restart after a power outage.
		01	Disable	●	
Cool Air Prevention	**43**	**00**	Super low	●	Restrain the cold airflow with making the airflow lower when starting heating operation. To correspond to the ventilation, set to 01.
		01	Follow the setting on the remote controller		
External control	**46**	**00**	Start/Stop	●	Allow an external controller to start or stop the system, or to perform an emergency stop, or to perform a forced stop. * If an emergency stop is performed from an external controller, same refrigerant system will be disabled. *If forced stop is set,indoor unit stops by the input to the external input terminals,and Start/Stop by a remote controller is restricted.
		01	Emergency stop		
		02	Forced stop		
Error report target	**47**	**00**	All	●	Change the target for reporting errors. Errors can either be reported in all locations, or only on the wired remote.
		01	Display only on central remote control		
Fan setting when cooling thermostat OFF	**49**	**00**	Follow the setting on the remote controller	●	When set 00, Indoor unit is continued operation based upon Central remote controller or individual controller set. Once indoor unit received signal from External controller, Indoor unit changed Fan mode forcibly. When set 01, Indoor unit is continued operation based upon Central remote controller or individual controller set. Once indoor unit received signal from External controller, Indoor unit stop forcibly. Connection of the wired remote controller (2-wire type or 3-wire type) and switching its thermistor are necessary.
		01	Stop		
*2 Auto mode type	**68**	**00**	Single setpoint auto mode (traditional)	●	Switch the setting method of auto mode to single or dual (cooling/heating). For heat pump systems, it is necessary to set the master indoor unit (by wired remote controller).
		01	Dual setpoint auto mode		
*2 Deadband value	**69**	**00**	0°C	●	Choose the minimum temperature between cooling and heating settings (deadband) for Dual setpoint auto mode (set in No. 68).
		01	0.5°C		
		02	1.0°C		
		03	1.5°C		
		04	2.0°C		
		05	2.5°C		
		06	3.0°C		
		07	3.5°C		
		08	4.0°C		
		09	4.5°C		

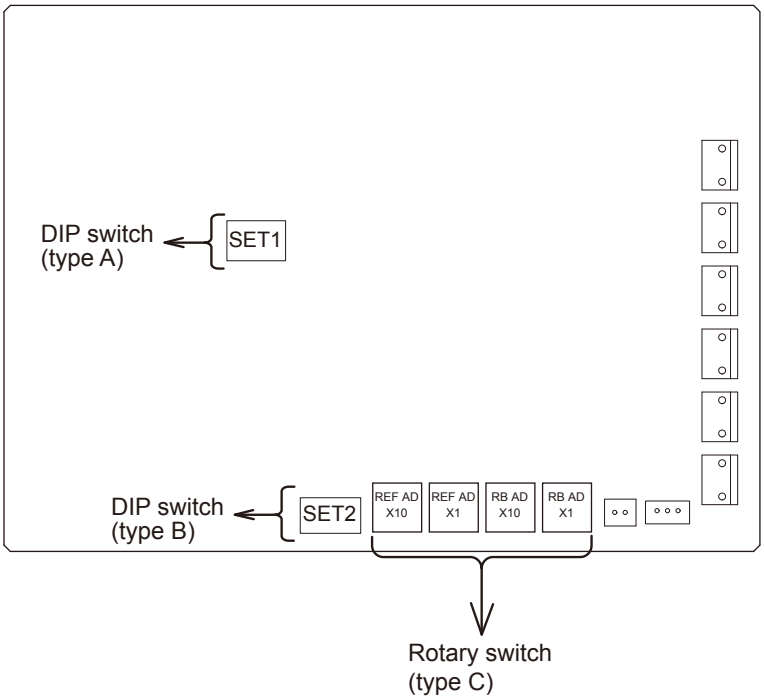
*1 : Auto restart is an emergency function such as for power failure etc.
Do not start and stop the indoor unit by this function in normal operation.
Be sure to operate by the control unit, converter or external input device.

*2 : Function number 68 and 69 will be usable provided that the corresponding operating device is connected.

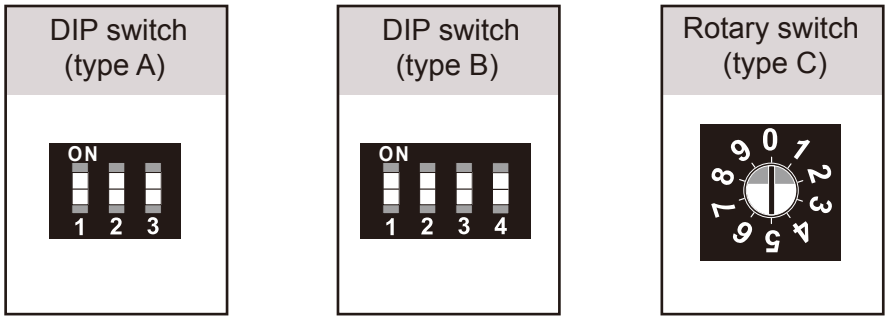
FUNCTION SETTING

2-10. RB UNIT

■ SWITCH POSITION



■ SWITCH TYPE



FUNCTION SETTING

■ SWITCH TABLE

DIP-SW	type A	SET1	1	Prohibited
			2	Prohibited
			3	Prohibited
	type B	SET2	1	Operation mode selecting switch 1
			2	Operation mode selecting switch 2
			3	Cool/heat selection control time switch 1
			4	Cool/heat selection control time switch 2
Rotary SW	type C	RB AD x 1		RB unit address switch 1
		RB AD x 10		RB unit address switch 2
		REF AD x1		Refrigerant circuit address switch 1
		REF AD x10		Refrigerant circuit address switch 2

■ DIP SWITCH SETTING

● SET1 setting

●SET1-1, SET1-2, SET1-3 setting prohibited

(◆...Factory setting)

	SET1-1	SET1-2	SET1-3	
◆	OFF	OFF	OFF	Fixed at OFF
	ON	ON	ON	Setting prohibited

● SET2 setting

●Operation mode selecting switch

(◆...Factory setting)

	SET2-1	SET2-2	Description	Remarks
◆	OFF	OFF	Priority given to the first command	Priority is given to the operation mode which is set first.
	ON	OFF	Priority given to external input of RB unit	Priority is given to the operation mode which is set by the external input terminal (CNA01 or CNA02).
	OFF	ON	Priority given to administrative indoor unit	Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller
	ON	ON	Setting prohibited	

FUNCTION SETTING

●Cool/heat selection control time switch

This switch is set up to shorten Cool/heat selection control time by RB unit.
If the Cool/heat selection control time is short, the sound of passing refrigerant may be loud during the Cool/heat selection control process.
Please check that there is no influence on use.

(◆...Factory setting)

	SET2-3	SET2-4	Cool/heat selection control time
◆	OFF	OFF	6 min.
	ON	OFF	3 min.
	OFF	ON	Setting prohibited
	ON	ON	Setting prohibited

■ ROTARY SWITCH SETTING

● RB AD setting

●RB unit address switch

Sets the RB unit addresses.

Please see "1-3 address setting" for RB unit address conversion table.

RB UNIT ADDRESS SWITCH (Factory setting RB AD x 1: 0, RB AD x 10: 0)

Rotary SW	Description	Remarks
RB AD x 1	RB unit address Switch 1	RB unit address (the first digit)
RB AD x 10	RB unit address Switch 2	RB unit address (the second digit)

● REF AD setting

●Refrigerant circuit address switch

Sets the refrigerant circuit address.

Please see "1-3 address setting" for refrigerant circuit address conversion table.

REFRIGERANT CIRCUIT ADDRESS SWITCH (Factory setting REF AD x 1: 0, REF AD x 10: 0)

Rotary SW	Description	Remarks
REF AD x 1	Refrigerant circuit address Switch 1	Refrigerant circuit address (the first digit)
REF AD x 10	Refrigerant circuit address Switch 2	Refrigerant circuit address (the second digit)

FUNCTION SETTING

2-11. WIRED, SIMPLE REMOTE CONTROLLER

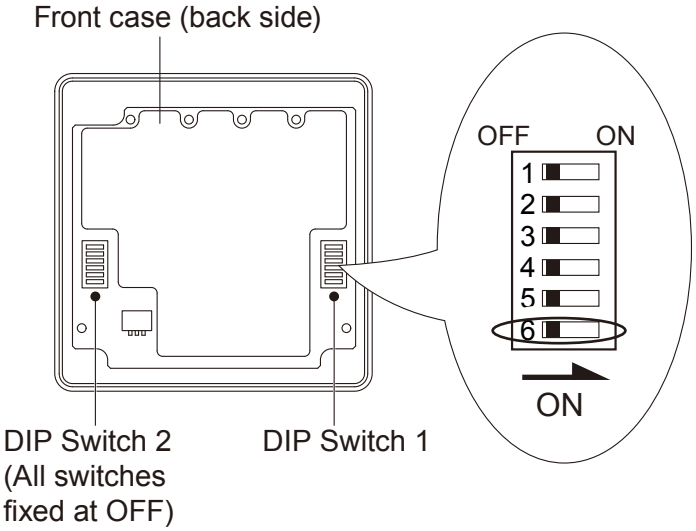
DIP Switch 1	SW1	Prohibited
	SW2	Dual remote controller setting
	SW3	Prohibited
	SW4	Prohibited
	SW5	Prohibited
	SW6	Memory backup setting (Wired remote controller only)

* Do not use DIP Switch 2 (Wired remote controller)

■ SWITCH POSITION

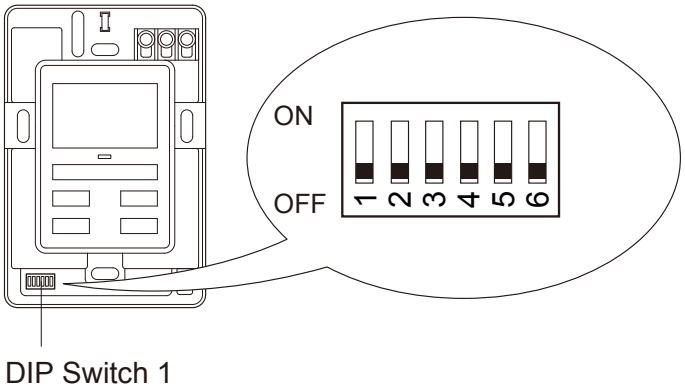
● Wired remote controller

Model : UTY-RNK∗

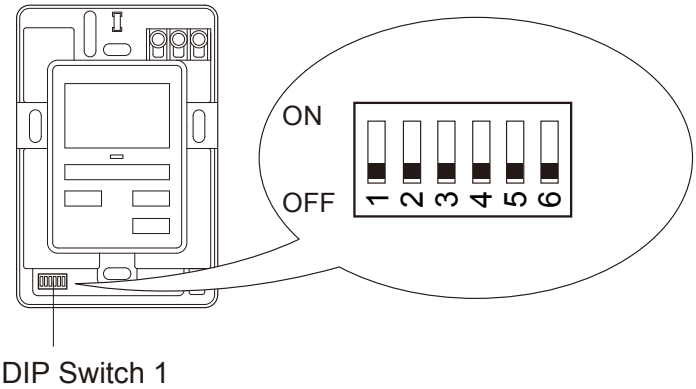


● Simple remote controller

Model : UTY-RSK∗



Model : UTY-RHK∗



FUNCTION SETTING

■ DIP SWITCH 1 SETTING

● SW1 setting prohibited

(◆...Factory setting)

	SW1	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

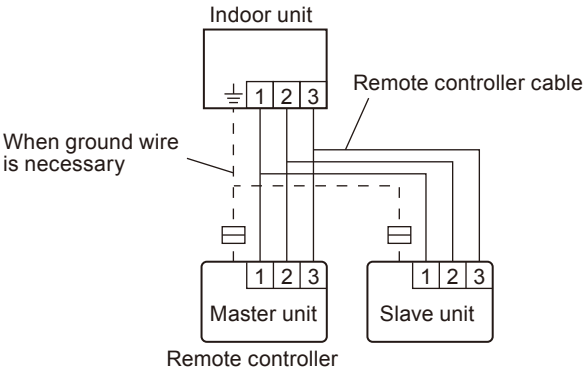
● SW2 setting

●Dual remote controller setting

Set the remote controller SW2 according to the following table.

(◆...Factory setting)

	Number of remote controller	Master unit	Slave unit
		SW2	SW2
◆	1 (Normal)	OFF	-
	2 (Dual)	OFF	ON



● SW3 setting prohibited

(◆...Factory setting)

	SW3	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

● SW4 setting prohibited

(◆...Factory setting)

	SW4	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

● SW5 setting prohibited

(◆...Factory setting)

	SW5	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

● SW6 setting

●Memory backup setting (Wired remote controller only)

Set to ON to use batteries for the memory backup.

If batteries are not used, all of settings stored in memory will be delete if there is a power failure.

(◆...Factory setting)

	SW6	Memory backup
◆	OFF	Invalidity
	ON	Validity

Never turn it ON in the case of simple remote controller.

FUNCTION SETTING

2-12. GROUP REMOTE CONTROLLER

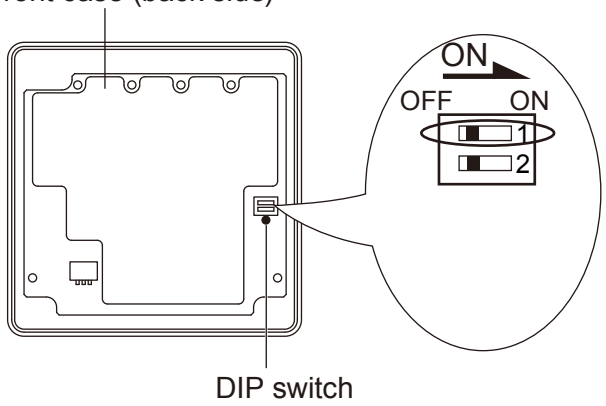
DIP Switch	SW1	Memory backup setting
	SW2	Prohibited

■ SWITCH POSITION

● Group remote controller

Model : UTY-CGG∗

Front case (back side)



■ DIP SWITCH SETTING

● SW1 setting

●Memory backup setting

If there is a power failure when the memory backup is enabled, the setting stored in the memory will be saved.

(◆...Factory setting)

	SW1	Memory backup
◆	OFF	Invalidity
	ON	Validity

● SW2 setting prohibited

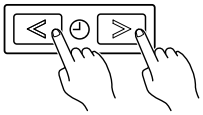
(◆...Factory setting)

	SW2	
◆	OFF	Fixed at OFF
	ON	Setting prohibited

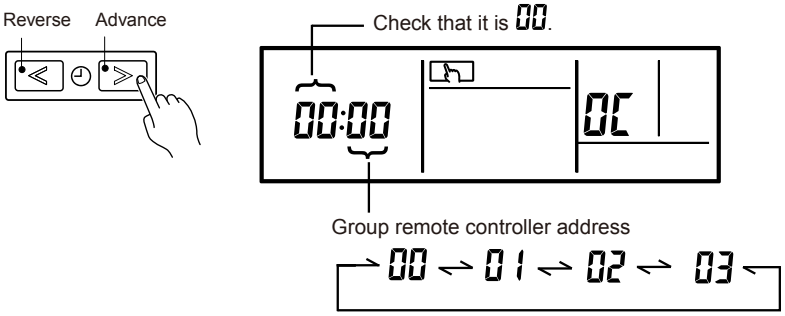
FUNCTION SETTING

■ GROUP REMOTE CONTROLLER ADDRESS SETTING

- Hold down the set time buttons ⩽ and ⩾ simultaneously for two seconds or more to start the setting.



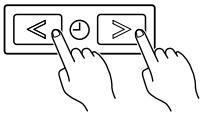
- Press the set time buttons to set the Group remote controller address.



- Press the ENTER button.

Check the ((•)) and 0C flash for two seconds.

- Hold down again the set time buttons ⩽ and ⩾ simultaneously for two seconds or more to complete setting.

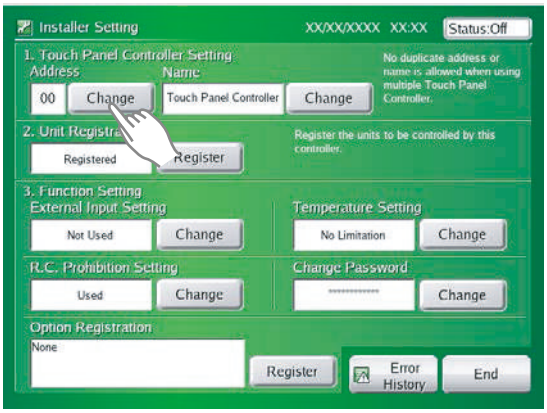


FUNCTION SETTING

2-13. TOUCH PANEL CONTROLLER

■ ADDRESS SETTING

- Display the Installer Setting screen and press "Change" button of "1. Touch panel controller address setting".



- Select “Address” from 00 to 15 on the screen and click the button. At the end of setting, click “OK” button.



Note:

- **Address No. can be set between "00" and "15". (Up to maximum 16 Touch Panel Controller can be installed to 1 system).**
- **When installing two or more Touch Panel Controller, set up so that Address No. does not overlap.**
- **Please refer to the OPERATING MANUAL of Touch Panel Controller for details.**
- **Please keep Address No. of Touch Panel Controller from overlapping the controller (Central Remote Controller, Network Convertor for LonWorks, Modbus convertor and Network Convertor for Group Remote Controller) connected to the same VRF Network system**

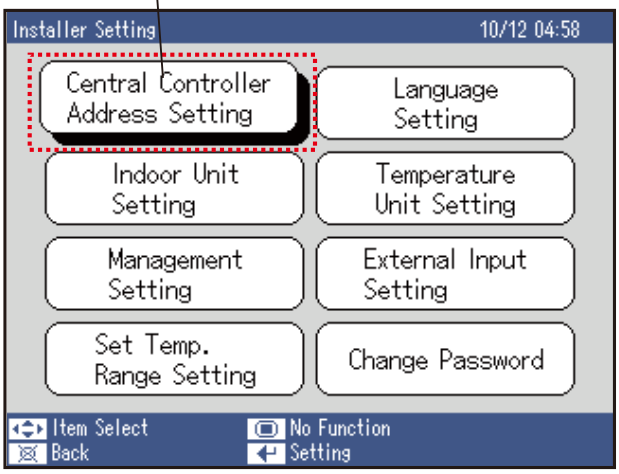
FUNCTION SETTING

2-14. CENTRAL REMOTE CONTROLLER

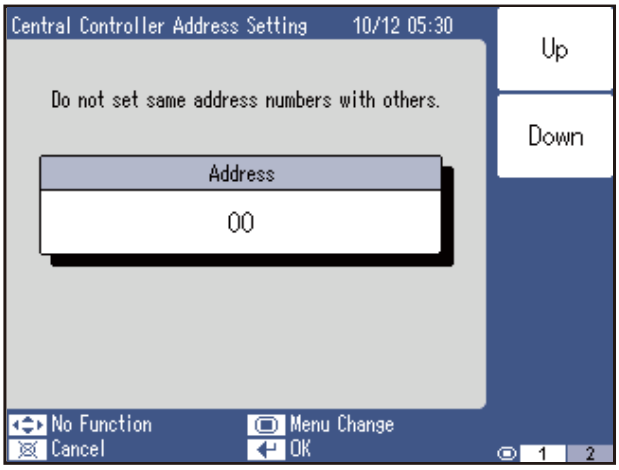
■ ADDRESS SETTING

- Display the Installer Setting screen and Press the [ ] button and move the cursor to "Central Controller Address Setting".
- Press the [ ] button.

Central remote controller address setting



- Press the [UP] button or [Down] button.
- Set the Address value.
  The Address value can be set from 00 to 15.
- When the [ ] button is pressed, setting is complete.



Note:

- **Address No. can be set between "00" and "15". (Up to maximum 16 Central Remote Controller can be installed to 1 system).**
- **When installing two or more Central Remote Controller, set up so that Address No. does not overlap.**
- **Please refer to the OPERATING MANUAL of Central Remote Controller for details.**
- **Please keep Address No. of Central Remote Controller from overlapping the controller (Touch Panel Controller, Network Convertor for LonWorks, and Network Convertor for Group Remote Controller) connected to the same VRF Network system**

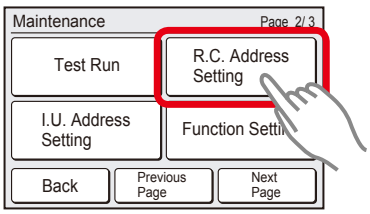
FUNCTION SETTING

2-15. WIRED REMOTE CONTROLLER (Touch panel)

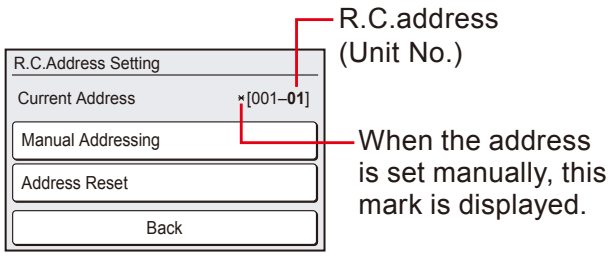
2-15-1. REMOTE CONTROLLER ADDRESS SETTING

■ CONFIRM THE REMOTE CONTROLLER ADDRESS

1) When the [RC Address Setting] on the "Maintenance" screen is touched, the "Installer Password Verification" screen is displayed.



2) Enter the Installer Password, and touch the [OK]. "R.C.Address Setting" screen is displayed. The address of this unit is displayed on the "R.C.Address Setting" screen.

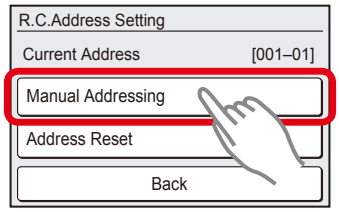


When the [Back] is touched, the display returns to the "Maintenance" screen.

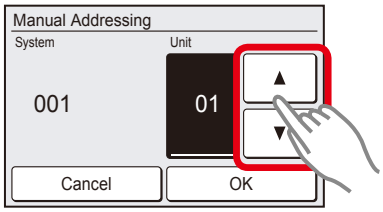
Note:
The address of this unit is set automatically. Do not change the indoor unit remote controller address from the factory setting "0". (Verify that the address is "0".)

■ IF MANUALLY SETTING THE REMOTE CONTROLLER ADDRESS

1) Touch the [Manual Addressing] on the "R.C.Address Setting" screen.

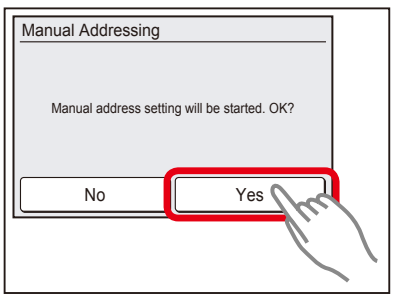


2) "Manual Addressing" screen is displayed. Set the address with [▲] or [▼].

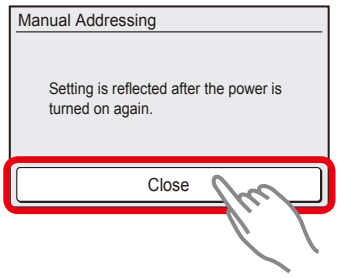


When the [OK] is touched, a verification screen is displayed.

3) When the [Yes] on the verification screen is touched, a message screen is displayed.



4) When the [Close] on the message screen is touched, the display returns to the "R.C.Address Setting" screen. Turn on the power again.

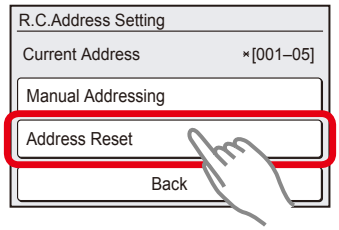


Note:
- Perform manual address setting only when setting the address with an arbitrary number. Indoor unit remote controller address setting is necessary. Set the remote controller address of indoor units connected by the same remote controller cable within a range of 1 to 9 and A (10) to F(15) so that there is no duplication. (Do not set to "0".)
- The address of this unit is set within a range of 1 to 32, but set it so that it does not duplicate the remote controller address of an indoor unit connected by the same remote controller cable.

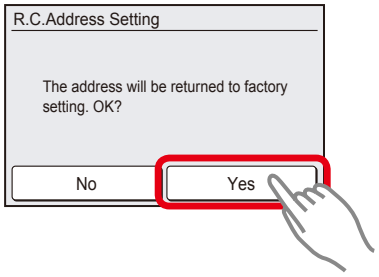
FUNCTION SETTING

■ WHEN MANUAL ADDRESS SETTING NUMBER IS RESET

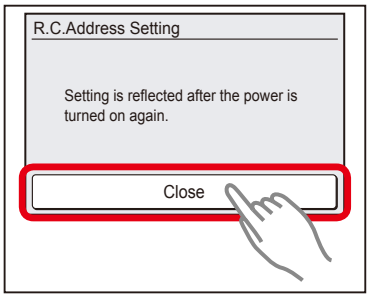
1) Touch the [Address Reset] on the "R.C.Address Setting" screen.



2) A verification screen is displayed. When the [Yes] is touched, a verification screen is displayed.

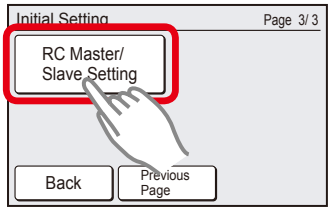


3) When the [Close] on the message screen is touched, the display returns to the "R.C.Address Setting" screen. Turn on the power again.



FUNCTION SETTING

2-15-2. REMOTE CONTROLLER MASTER/SLAVE SETTING

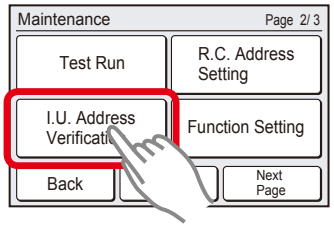
1) Touch the [RC Master/Slave Setting] on the “Initial Setting” screen.  	2) “RC Master/Slave Setting” screen is displayed. Select the [Master] or [Slave].  When the [OK] is touched, the display returns to the “Initial Setting” screen.

Note:
Please set only one Master remote controller. Units other than Master are set to Slave automatically. Do not perform “RC Mater/Slave Setting” during setting or operating from the Master unit.

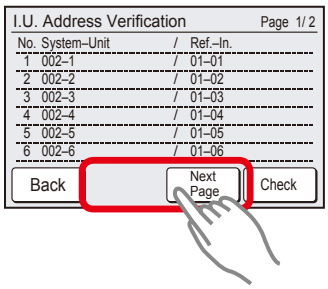
FUNCTION SETTING

2-15-3. INDOOR UNIT ADDRESS VERIFICATION

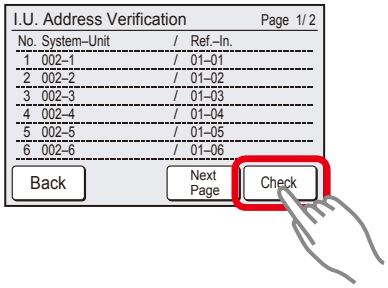
1) Touch the [I.U. Address Verification] on the "Maintenance" screen. "Installer Password Verification" screen is displayed.



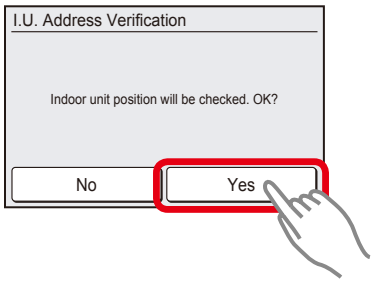
2) Enter the Installer Password and touch the [OK]. "I.U. Address Verification" screen is displayed. Enter the Installer Password and touch the [OK]. "I.U. Address Verification" screen is displayed. When the screen has multiple pages, they can be switched by touching the [Next Page] or [Previous Page].



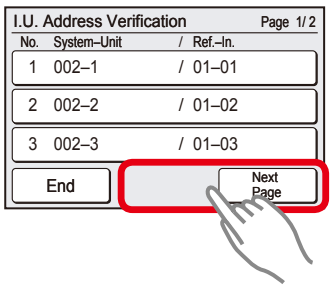
3) Touch the [Check] on the "I.U. Address Verification" screen.



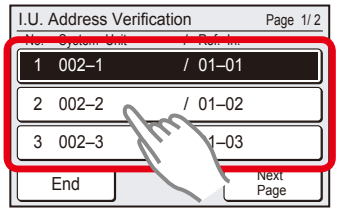
4) When the [YES] on the verification screen of indoor unit verification is touched, all indoor units will stop, verification mode starts.



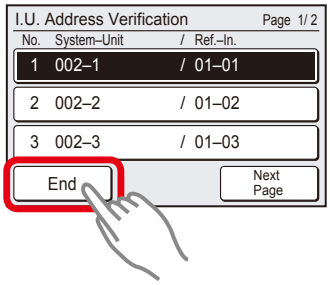
5) When indoor unit position verification ends, a screen displaying the indoor units in a list is displayed. When the screen has multiple pages, they can be switched by touching the [Next Page] or [Previous Page].



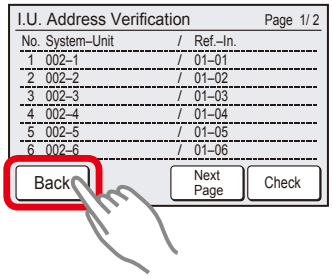
When the indoor unit address to be verified is touched, the appropriate indoor unit performs the air blow and LED lamps blink*. (*Only when the indoor unit has that function.)



6) When the [End] is touched, the display returns to the screen of (2).



When the [Back] on the screen of (2) is touched, the display returns to the "Maintenance" screen.



FUNCTION SETTING

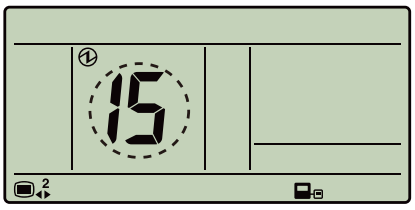
FUNCTION SETTING

2-16. WIRED REMOTE CONTROLLER (UTY-RLR*)

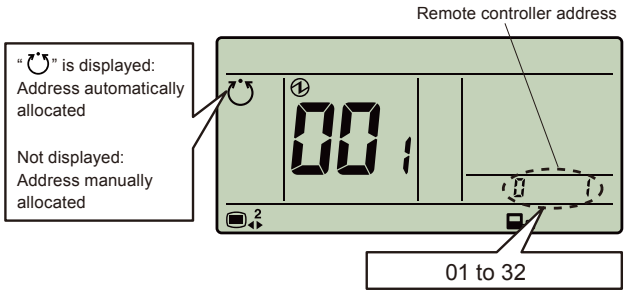
2-16-1. REMOTE CONTROLLER ADDRESS SETTING

■ CONFIRM THE REMOTE CONTROLLER ADDRESS

1) Select the “15” in Menu 2 Settings. Then press the [ENTER] button.



2) The address of this unit is displayed on the screen.

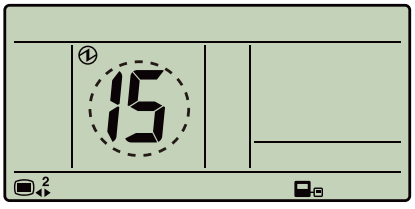


Press the [ENTER] button to return to the Menu 2 item selection screen.

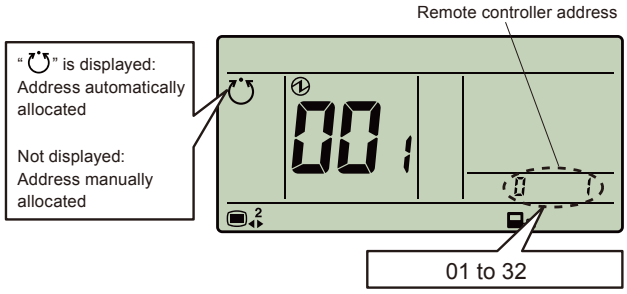
Note:
The address of this unit is set automatically. Do not change the indoor unit remote controller address from the factory setting "0". (Verify that the address is "0".)

■ IF MANUALLY SETTING THE REMOTE CONTROLLER ADDRESS

1) Select the “15” in Menu 2 Settings. Then press the [ENTER] button.



2) The address of this unit is displayed on the screen.
Set the Unit Number with the [+] or [-] buttons.
System Number cannot be changed.



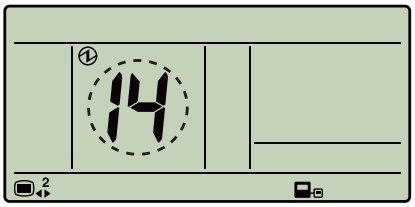
Press the [ENTER] button to return to the Menu 2 item selection screen.

Note:
- Perform manual address setting only when setting the address with an arbitrary number. Indoor unit remote controller address setting is necessary. Set the remote controller address of indoor units connected by the same remote controller cable within a range of 1 to 9 and A (10) to F(15) so that there is no duplication. (Do not set to "0".)
- The address of this unit is set within a range of 1 to 32, but set it so that it does not duplicate the remote controller address of an indoor unit connected by the same remote controller cable.

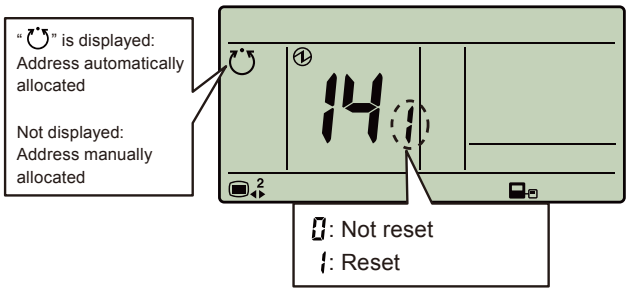
FUNCTION SETTING

■ WHEN MANUAL ADDRESS SETTING NUMBER IS RESET

1) Select the “14” in Menu 2 Settings. Then press the [ENTER] button.



2) To reset address, select “1: Reset” with the [+] or [-] buttons. If not resetting, press the [MENU] button to return to the Menu 2 item selection screen.

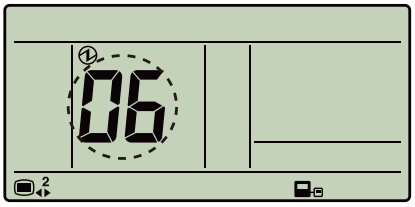


Press the [ENTER] button to return to the Menu 2 item selection screen.

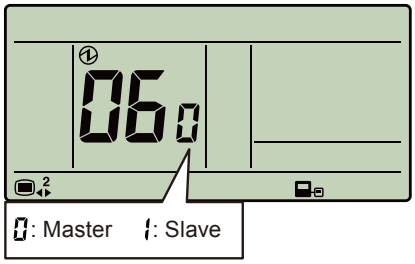
FUNCTION SETTING

2-16-2. REMOTE CONTROLLER MASTER/SLAVE SETTING

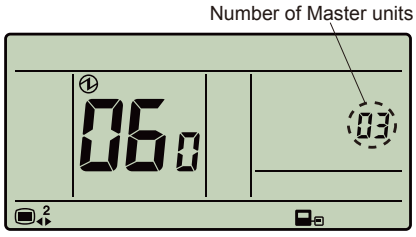
1) Select the “06” in Menu 2 Settings. Then press the [ENTER] button.



2) Select the “0: Master” or the “1: Slave” with the [+] or [-] buttons.



3) Press the [ENTER] button. If there is no problem, return to Menu 2 items selection screen.
In the case of settings at initial booting, display “Monitor mode screen”.
If there's 0 or more than 2 “Master” units, the number will be displayed.
If “Master” is 0, press the [ENTER] button to return to the Menu 2 item selection screen.
If “Master” is more than 2, press the [ENTER] button to return to the screen of (2).
If “Master” is 0 or more than 2, press the [MENU] button to return to the Menu 2 item selection screen.

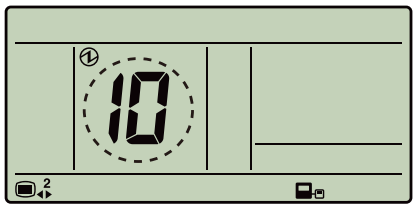


Note:
Please set only one Master remote controller.

FUNCTION SETTING

2-16-3. INDOOR UNIT ADDRESS VERIFICATION

1) Select the “10” in Menu 2 Settings. Then press the [ENTER] button.



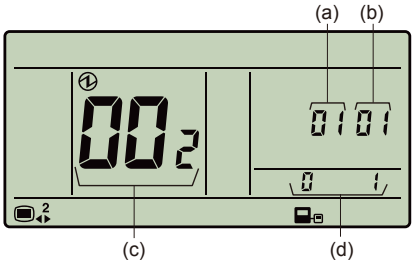
2) Displayed from remote controller with smallest 2-wire remote controller address of the remote controller group.
Indoor units displayed can be switched by [+] or [-] button.

(a) Refrigerant circuit address (00 to 99)

(b) Indoor Unit address (00 to 63)

(c) System Number (002: Indoor unit)

(d) Remote controller address (01 to 32)



3) Press the [MENU] button to return to the Menu 2 item selection screen.

FUNCTION SETTING

2-17. SIMPLE REMOTE CONTROLLER (UTY-RSR*, UTY-RHR*)

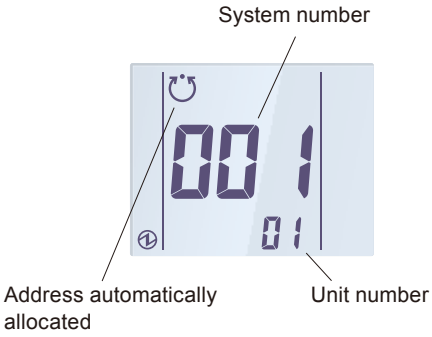
2-17-1. REMOTE CONTROLLER ADDRESS SETTING

■ CONFIRM THE REMOTE CONTROLLER ADDRESS

1) Select the “15” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



2) You can check current allocation of 2-wire remote controller address (system number and unit number).



Press the “⏻/❙” button to return to the Menu 2-F1 item selection screen.

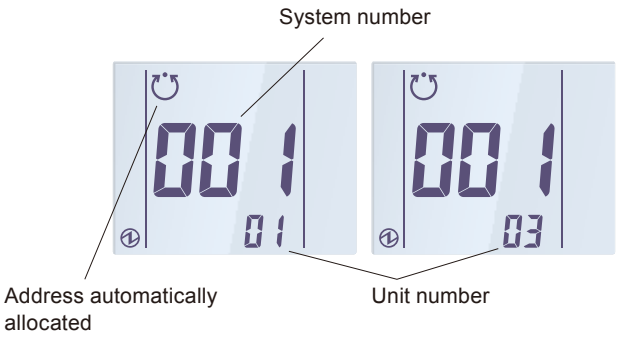
Note:
In the case of automatic address settings, do not change the remote controller address for the indoor unit, and keep it at the initial setting of 0. Addresses will be automatically set when initially starting up this unit.

■ IF MANUALLY SETTING THE REMOTE CONTROLLER ADDRESS

1) Select the “15” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



2) You can check current allocation of 2-wire remote controller address (system number and unit number). Set the unit number with the SET TEMP. “∧” or SET TEMP. “∨” button. System number cannot be changed.



Press the “⏻/❙” button to return to the Menu 2-F1 item selection screen.

Note:
- Only set addresses manually when using different numbers for addresses. A remote controller address for the indoor unit needs to be set. Set the remote controller addresses for the indoor units which are connected using the same remote controller cable with a range from 1 to 9 and from A (10) to F(15), without any duplicates. (Do not use “0” for confi guration).) For how to confi gure the remote controller addresses for the indoor unit, refer to its installation manual.
- The address for this unit can be set from 1 to 32. However, do not set the same number as that for the remote controller address of an indoor unit, remote controller, or other unit connected using the same remote controller cable.

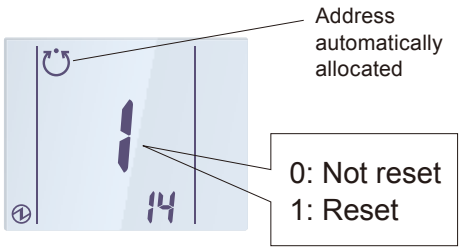
FUNCTION SETTING

■ WHEN MANUAL ADDRESS SETTING NUMBER IS RESET

1) Select the “14” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



2) To reset the 2-wire remote controller address, select “1: Reset” with the SET TEMP. “∧” or SET TEMP. “∨” button. If not resetting, select “0:Not reset” with the SET TEMP. “∧” or SET TEMP. “∨” button.



Press the “⏻/❙” button to return to the Menu 2-F1 item selection screen.

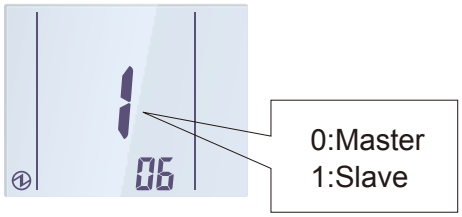
FUNCTION SETTING

2-17-2. REMOTE CONTROLLER MASTER/SLAVE SETTING

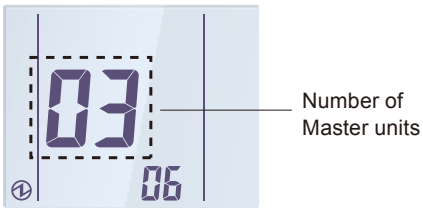
1) Select the “06” in Menu 2-F1 Settings. Then press the “⏻/❙” button.



2) Select the “0: Master” or the “1: Slave” with the SET TEMP. “∧” or SET TEMP. “∨” button.



3) Press the “⏻/❙” button. If there is no problem, return to Menu 2-F1 items selection screen.
In the case of settings at initial booting, display “Monitor mode” screen.
If there's 0 or more than 2 “Master” units, the number will be displayed.
If “Master” is 0, press the “⏻/❙” button to return to the Menu 2-F1 item selection screen.
If “Master” is more than 2, press the “⏻/❙” button to return to the screen of (2).
To suspend the settings part way through, press the FAN “∨” button. Return to the Menu 2-F1 item selection screen.



Note:
Please set only one Master remote controller.

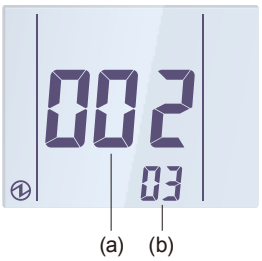
FUNCTION SETTING

2-17-3. INDOOR UNIT ADDRESS VERIFICATION

1) Select the “10” in Menu 2-F2 Settings. Then press the “⏻/I” button.



2-1) Display the smallest 2-wire remote controller address of indoor unit (system number and unit number) of the remote controller group. This address displayed can be switched by the SET TEMP. “∧” or SET TEMP. “∨” button.
If an indoor unit other than VRF is connected, “-” is displayed.



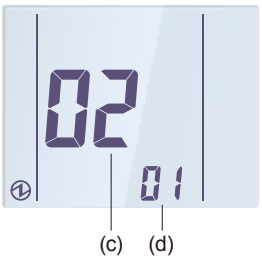
2-2) Press the “⏻/I” button to display the Refrigerant system address and Indoor unit address.

(a) System number (002: Indoor unit)

(b) Unit number (01 to 32)

(c) Refrigerant system address (00 to 99)

(d) Indoor unit address (00 to 63)



3) Press the FAN “∨” button to return to the Menu 2-F2 item selection screen.

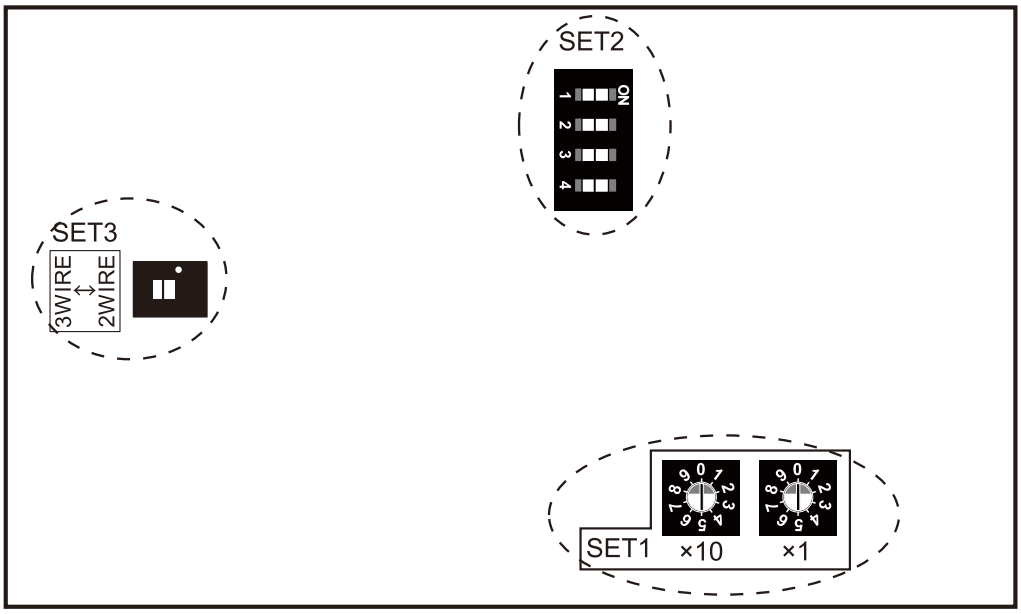
FUNCTION SETTING

2-18. NETWORK CONVERTOR

■ MODELS: UTY-VTGX / UTY-VTGXV

■ SWITCH POSITION

- Set network convertor rotary switch SET1, and Dip switch SET2, SET3.



■ REFRIGERANT CIRCUIT ADDRESS SETTING (SET 1)

● Example

Refrigerant circuit address	SW setting	
	SET1 (x10) (10 digit)	SET1 (x1) (1 digit)
01	0	1
99	9	9

*Setting range 00 - 99 (Arbitrary numbers can be set)

*When connecting the Network convertor for Single split AC , set up the number so that the Refrigerant circuit address number of outdoor unit and indoor unit does not overlap .

And the sum total of the Refrigerant circuit address of Network convertor for Single split AC and the Refrigerant circuit address of the outdoor unit and the indoor unit is a maximum of 100.

■ TERMINAL RESISTER SETTING (SET 2)

Set to "ON" when there is no termination resistance in the segment separated by the signal amplifier.

(Default: OFF)

■ REMOTE CONTROLLER 2WIRE/3WIRE SWITCHING (SET 3)

Match with the setting of the used indoor unit.

Set matched with the connection method of the remote controller cable to be connected.

(Default: 2WIRE)

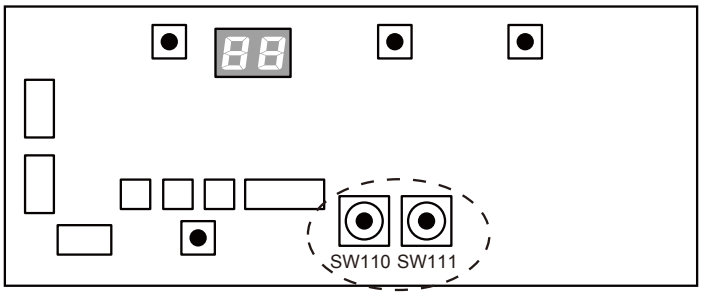
FUNCTION SETTING

2-19. NETWORK CONVERTOR

■ MODEL: UTY-VGGXZ1

■ SWITCH POSITION

- Set network convertor rotary switch 110 and 111.



Network convertor PCB

■ CONVERTOR ADDRESS SETTING

For Group remote controller

● Example

Convertor address	SW setting	
	Rotary SW110 (10 digit)	Rotary SW111 (1 digit)
01	 0	 1
15	 1	 5

*Setting range 00 - 15 (Arbitrary numbers can be set)

*The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LonWorks® is a maximum of 16

*Address of the Touch panel controller, Central remote controller, Network convertor for Group remote controller and Network convertor for LonWorks® must not be same.

■ REFRIGERANT CIRCUIT ADDRESS SETTING

For Single split AC

● Example

Refrigerant circuit address	SW setting	
	Rotary SW110 (10 digit)	Rotary SW111 (1 digit)
01	 0	 1
99	 9	 9

*Setting range 00 - 99 (Arbitrary numbers can be set)

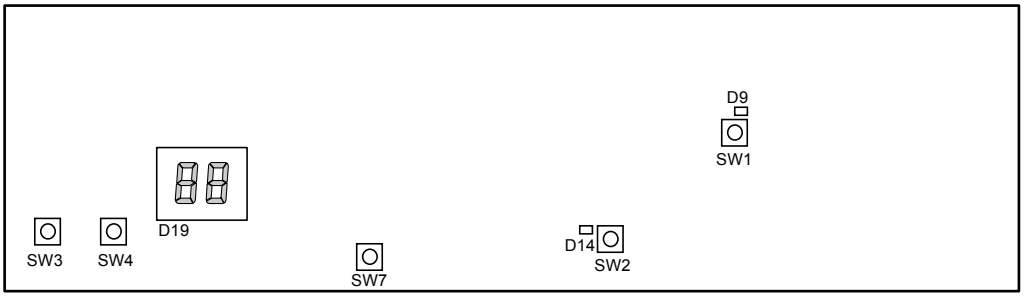
*When connecting the Network convertor for Single split AC , set up the number so that the Refrigerant circuit address number of outdoor unit and indoor unit does not overlap .

And the sum total of the Refrigerant circuit address of Network convertor for Single split AC and the Refrigerant circuit address of the outdoor unit and the indoor unit is a maximum of 100.

FUNCTION SETTING

2-20. SIGNAL AMPLIFIER

■ SWITCH POSITION

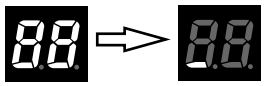


■ AUTOMATIC ADDRESS SETTING

- Refer to 1-7

■ MANUAL ADDRESS SETTING

1) Turn on the power for the signal amplifier.



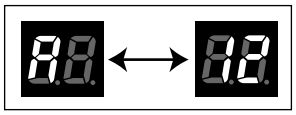
2) While holding down SW4 (the set button), press and release SW7 (the reset button) to enter the address setting mode. The address setting mode is activated only if the set button is held down when SW7 released.



3) Press SW4 (the set button) to display the current address.
The address is set to A1 at the factory.



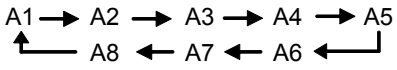
Example 1)
When A1 is set



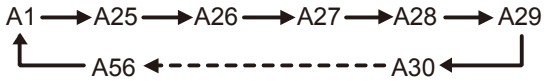
Example 2) When A12 is set

4) Press SW3 (the mode button) to select the address. The displayed address changes as follows each SW3 button is pressed. When the manual setting is selected, the indicators change as follows:

Filter mode: OFF



Filter mode: ON





Ex.) Address No.5 is selected.

- Press the SW3 when A9-A16 or A57-A88 is displayed, then A1 will be displayed.
- If connecting multiple signal amplifiers, be sure to select a different address for each amplifier.
- If the same address is used for different signal amplifiers, normal communication cannot be done.

FUNCTION SETTING

5) Press SW4 (the set button) to set the selected address.


D19

Ex.) Address No.5 is set.

6) Turn the power off and on or press SW7 (the reset button) to exit the address setting mode and return to the normal mode.
If an address setting error occurs (“26 ” is displayed on the D19-indicator), the address will not be set. Perform address setting again.


D19

Normal mode


D19

Address setting error

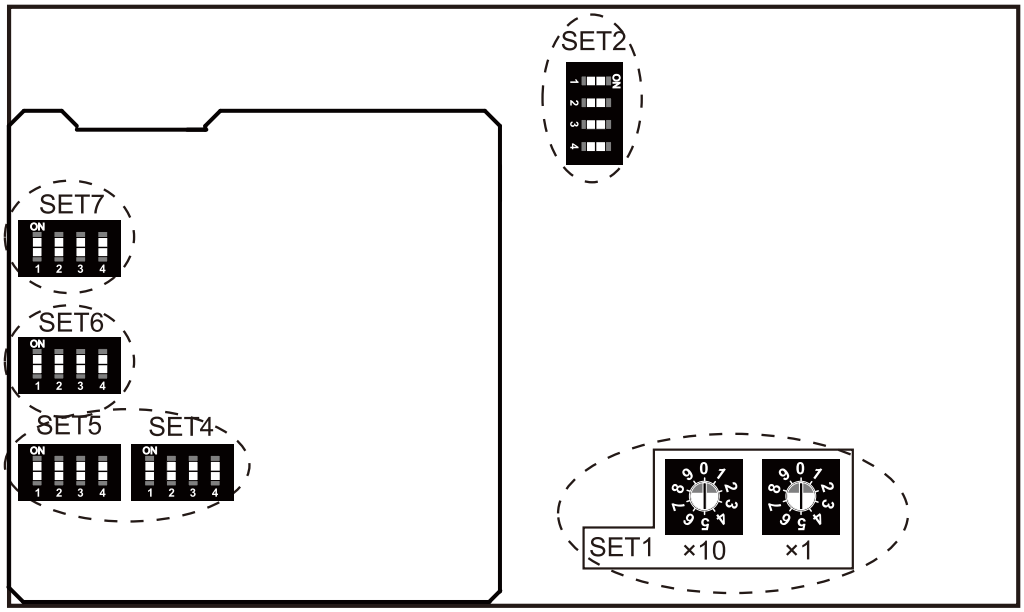
FUNCTION SETTING

2-21. MODBUS CONVERTOR FOR VRF

■ MODEL: UTY-VMGX

■ SWITCH POSITION

- Set MODBUS convertor rotary switch SET1 and Dip switch SET2, SET4, SET5, SET6, SET7.



■ MODBUS CONVERTOR REMOTE CONTROLLER ADDRESS SETTING (SET 1)

● Example

Refrigerant circuit address	SW setting	
	SET1 (x10) (10 digit)	SET1 (x1) (1 digit)
01	 0	 1
15	 1	 5

factory setting is "00"

*Setting range 00 - 15 (Arbitrary numbers can be set).

*When the Rotary switch is set to 16 or more, MODBUS convertor Remote Controller Address setting is 15.

*The sum total of the Touch panel controller, Central remote controller, Network convertor for Group remote controller ,Network convertor for LonWorks® and Modbus convertor is a maximum of 16.

*Address of the Touch panel controller, Central remote controller, Network convertor for Group remote controller, Network convertor for LonWorks® and Modbus convertor must not be same.

*Modbus convertor is connectable a maximum of 9 in 1 VRF network system.

FUNCTION SETTING

■ VRF TERMINAL RESISTER SETTING (SET 2-1)

When there is no outdoor unit or signal amplifier in the VRF network segment to which the converter is connected, set to “ON.”

ON: Terminal resistance valid

OFF: Terminal resistance invalid (Default)

■ TEST RUN SETTING (SET 2-3)

Test run start and reset can be set.

ON: Test run starts

OFF: Test run resets (Default)

■ SCAN SETTING (SET 2-4)

SCAN start and reset can be set.

ON: SCAN starts

OFF: SCAN resets (Default)

■ MODBUS SLAVE ADDRESS SETTING (SET 4, SET 5)

Setting range 1 - 247 (Arbitrary numbers can be set).

Refer to "installation manual"

■ MODBUS COMMUNICATION BAUD RATE SETTING (SET 6-4)

ON: 19200bps

OFF: 9600bps (Default)

■ MODBUS COMMUNICATION PARITY SETTING (SET 6-3)

ON: odd

OFF: even (Default)

* When the STOP bit setting is “2bit,” parity is set to “None” regardless of the setting of this switch.

■ MODBUS COMMUNICATION STOP BIT SETTING (SET 6-2)

Stop bit can be set (1 bit or 2 bit).

ON: 2bit

OFF: 1bit (Default)

■ MODBUS TERMINAL RESISTER SETTING (SET 7-4)

MODBUS communication terminal resistance can be set (Valid or invalid).

Terminal resistance: 120Ω

In case of circuit terminal resistance, set the terminal resistance to be valid

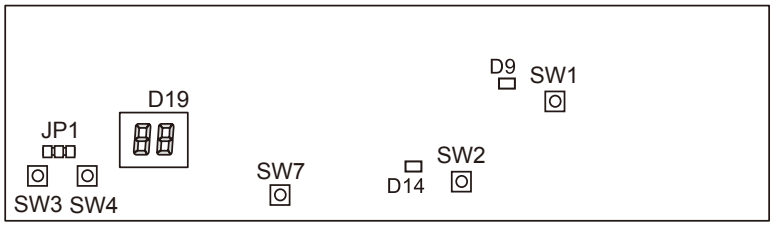
ON: Terminal resistance valid

OFF: Terminal resistance invalid (Default)

FUNCTION SETTING

2-22. NETWORK CONVERTOR FOR LONWORKS®

■ SWITCH POSITION



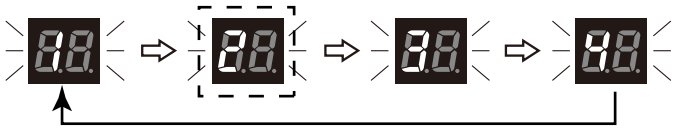
■ ADDRESS SETTING

When setting address, please be sure that the address of Network Convertor for LONWORKS® is not overlap the address of other controller like, Touch Panel Controller, Central Remote Controller & Network Convertor for Group Remote Controller.

Following steps are necessary for setting address of Network Convertor.

1) Turn on the power of network convertor.

2) Select the special mode by pressing and releasing SW7 (reset button) while holding down SW4 (set button) until special mode “1” is displayed.



Special mode changes from ‘1’ to ‘4’ as shown in the above mentioned way.

3) Press SW3 (mode button) to set special mode “2”. Special mode “2” is the address setting mode.

4) Press SW4 (set button). Present address is displayed.



Ex.) Address No. 15 is factory setting.

5) Press SW3 (mode button) to select the address. The displayed address changes as follows each time the mode button is pressed.





Ex.) Address No. 3 is selected.

6) Press SW4 (set button) to set the selected address.



Ex.) Address No. 3 is set.

7) Turn the power off and on or press SW7 (reset button) to exit from address setting mode. Anyone of the following indication will disappear:

: VRF Network address allocation is not registered by using Tool for Network Convertor

: Binding and Commissioning is not executed

: Normal Mode (Ready for operation)

: Others (Please check Installation Manual for more detail)

FUNCTION SETTING

FUNCTION SETTING

2-23. DUCT STATIC PRESSURE SETTING

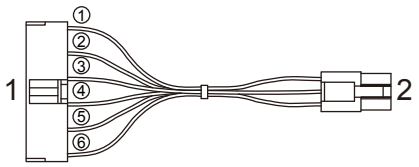
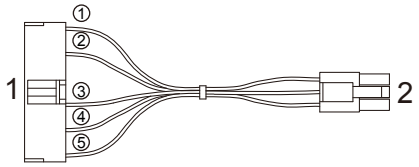
■ MODELS : ARXB07GALH, ARXB09GALH, ARXB12GALH, ARXB14GALH, ARXB18GALH

Change a setting of air flow, when external static pressure is less than 25 Pa.

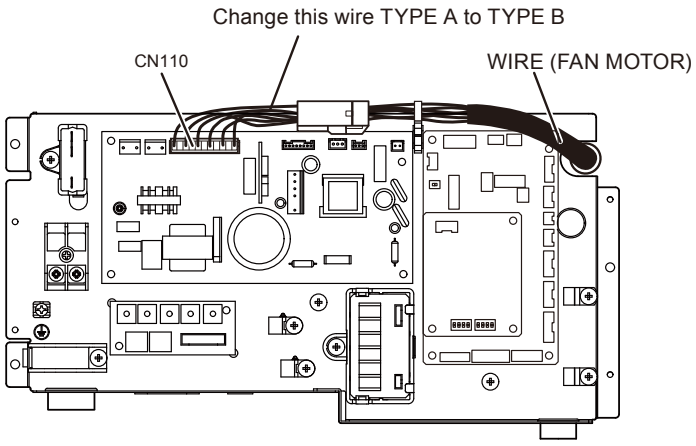
A setting of air flow can be changed by exchanging wires for B type from A type. (Refer to following table)

How to set air flow

Connect "1" of "B type" wire to "CN110" on circuit board and "2" to the connector connected to the fan motor.

TYPE	EXTERNAL STATIC PRESSURE	WIRE		REMARK
A	25 - 50 Pa		①PURPLE ②PINK ③BLUE ④RED ⑤WHITE ⑥BLACK	Factory setting (Standard static pressure)
B	0 - 25 Pa		①BLUE ②PURPLE ③PINK ④WHITE ⑤BLACK	Accessories (Low static pressure)

● Layout of control box



Be sure to connect the wire with connector.

If connection is improper, it will not operate properly.

Note
● Setting of static pressure must be fall within the static pressure setting range described in "Chapter 4. FAN PERFORMANCE CURVE". ● Static pressure setting out of the static pressure setting range may cause product malfunction such as capacity degradation or water leakage.

FUNCTION SETTING

■ MODELS: ARXK07GCLH, ARXK09GCLH, ARXK12GCLH, ARXK14GCLH, ARXK18GCLH, ARXK24GCLH

■ MODELS: ARXD04GALH, ARXD07GALH, ARXD09GALH, ARXD12GALH, ARXD14GALH, ARXD18GALH, ARXD24GALH

■ MODELS: ARXA24GBLH, ARXA30GBLH, ARXA36GBLH, ARXA45GBLH

■ MODELS: ARXC36GBTH, ARXC72GBTH, ARXC90GBTH, ARXC96GATH

■ MODELS: ARXN18GATH, ARXN24GATH, ARXN30GATH, ARXN34GATH, ARXN36GATH, ARXN45GATH

Change the air flow setting depending on the external static pressure is different from Normal static pressure.

Setting of air flow can be changed by exchanged by wireless remote controller, wired remote controller, and simple remote controller.

How to set air flow (external static pressure)

- Wireless remote controller

  Air flow is set by function number 26 (static pressure).

  Refer to "BUTTON NANE AND FUNCTION", "FUNCTION SETTING" and "FUNCTION DETAILS" in 2-3 INDOOR UNIT (setting by wireless remote controller).

- Wired remote controller

  Air flow is set by function number 26 (static pressure).

  Refer to "BUTTON NANE AND FUNCTION", "FUNCTION SETTING" and "FUNCTION DETAILS" in 2-4. INDOOR UNIT (setting by wired remote controller).

- Simple remote controller

  Air flow is set by function number 26 (static pressure).

  Refer to "BUTTON NANE AND FUNCTION", "FUNCTION SETTING" and "FUNCTION DETAILS" in 2-5 INDOOR UNIT (setting by simple remote controller).

- Wired remote controller (Touch panel)

  Air flow is set by function number 26 (static pressure).

  Refer to "FUNCTION SETTING" and "FUNCTION DETAILS" in 2-6. INDOOR UNIT (setting by wired remote controller [Touch panel]).

Note
● Setting of static pressure must be fall within the static pressure setting range described in "Chapter 4. FAN PERFORMANCE CURVE". ● Static pressure setting out of the static pressure setting range may cause product malfunction such as capacity degradation or water leakage.

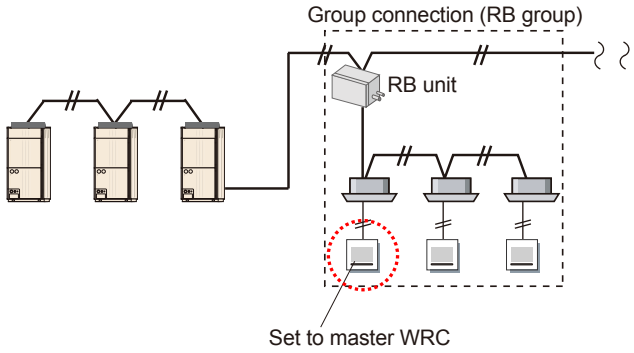
FUNCTION SETTING

2-24. ADMINISTRATIVE INDOOR UNIT SETTING

- When multiple indoor units with separate wired remote controller are connected to one branch port of RB unit (group connection), it is possible to give the cool / heat mode selection authority to one particular wired remote controller (called master wired remote controller).
- When the master wired remote controller setting is not performed, mode(cool/ heat) selection priority goes to wired remote controller which executed first.

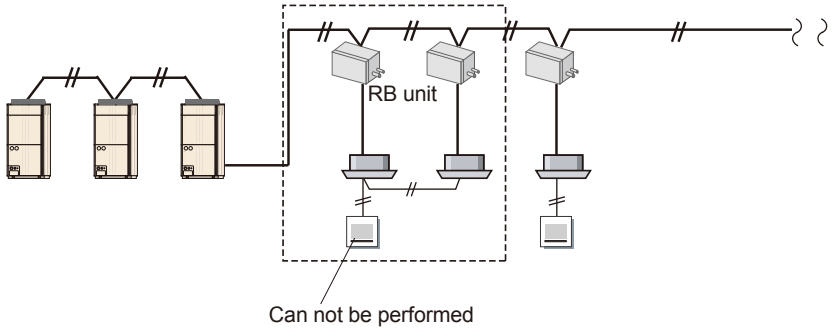
■ EXAMPLE

● Example 1 (OK)



● Example 2 (Prohibited)

When indoor units which connected to different RB units are operated by one wired remote controller, administrative indoor unit setting can not be performed.



FUNCTION SETTING

2-24-1. SETTING METHOD

■ WIRED R.C.(Touch panel)

● Step1: RB unit function setting (Case of VR-II series)

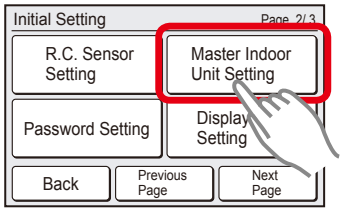
Please set SET2 of DIP switch to "Priority given to administrative indoor unit" with function setting of RB unit. (SET2-1:OFF, SET2-2:ON)
→Refer to 2-7.RB UNIT

● Step1: Outdoor unit function setting (Case of V-III or V-II or J-III or J-II or J-IIS series)

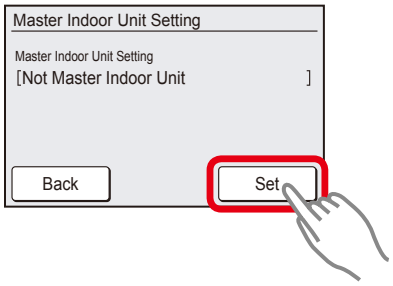
Please set to "Priority given to administrative indoor unit" with function setting of outdoor unit.
→Refer to 6-1.OUTDOOR UNIT

● Step2: Wired remote controller setting

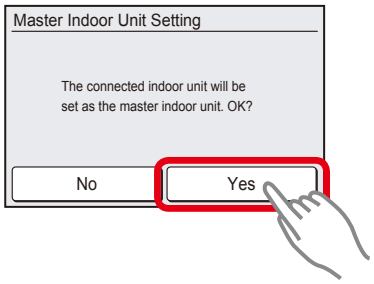
1) Touch the [Master Indoor Unit Setting] on the "Initial Setting" screen.



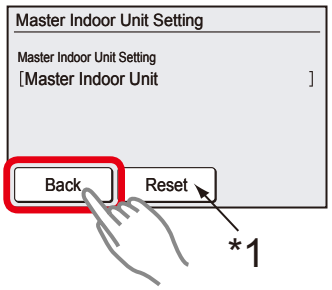
2) "Master Indoor Unit Setting" screen is displayed. When the [Set] is touched, a verification screen is displayed.



3) When the [Yes] is touched, after the data is transmitted to the indoor unit, the display returns to the "Master Indoor Unit Setting" screen.



4) When the [Back] on the "Master Indoor Unit Setting" screen is touched, the display returns to the "Initial Setting" screen.



*1: To clear a master indoor unit, touch [Reset]. ("Reset" cannot be performed while the indoor unit is operating.)

Note:
●When changing the Master Indoor Unit, first cancel the setting of the indoor unit currently set as the Master Indoor Unit. Otherwise, an other indoor unit cannot be registered as the Master Indoor Unit newly..

FUNCTION SETTING

■ WIRED R.C.

● Step1: RB unit function setting (Case of VR-II series)

Please set SET2 of DIP switch to "Priority given to administrative indoor unit" with function setting of RB unit. (SET2-1:OFF, SET2-2:ON)
→Refer to 2-7.RB UNIT

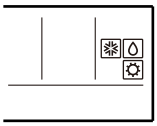
● Step1: Outdoor unit function setting (Case of V-III or V-II or J-III or J-II or J-IIS series)

Please set to "Priority given to administrative indoor unit" with function setting of outdoor unit.
→Refer to 6-1.OUTDOOR UNIT

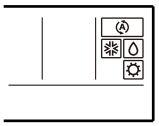
● Step2: Wired remote controller setting

(1) After the indoor unit stops operation, press the “MODE” button of wired remote controller for 5 seconds continuously.
The operating mode of the wired remote controller display lights on after 5 seconds as follows.

(1)-a) The indication not set as "Administrative indoor unit"



(1)-b) The indication set as "Administrative indoor unit"



Note

● “MODE ” button is locked by below reasons while the marking lights on.
In such case, “Administrative Indoor Unit” cannot be set or released.



● “Priority on Administrative Indoor Unit” is not selected in the setting of priority mode of outdoor unit.
→Set “Administrative Indoor Unit” in the wired remote controller after selecting “Priority on Administrative Indoor Unit” in setting of priority mode of outdoor unit.

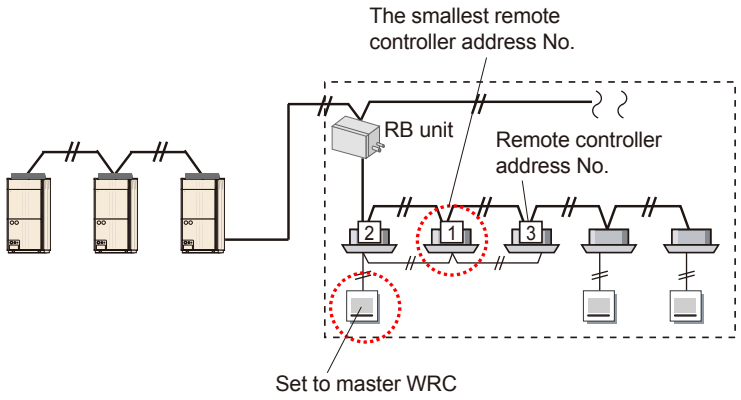
● Another indoor unit was set to “Administrative Indoor Unit” already.
→Release the setting “Administrative Indoor Unit” of another indoor unit.

(2) Press the “MODE ” button.
Display (1)-b) when setting, and display (1)-a) when releasing.
→The display blinks when the “MODE ” button is pressed, and the display of (1)-a) and (1)-b) alters whenever the “MODE ” button is pressed.
→The contents set in the wired remote controller are transferred to the indoor unit immediately after the display is selected. It may take 10 seconds depending on communication conditions. While this period, the button operation will be suspended.
→It returns to the normal display after 20 seconds automatically if the operation button is not pressed.
→When setting or releasing is completed, the indication on wired remote controller changes to the normal indication from blinking.

(3) Complete the setting or releasing of “Administrative Indoor Unit”.
Press the “MODE ” button of the wired remote controller again for 5 seconds continuously.
→The indication returns to normal display if the “MODE” button is pressed for 5 seconds continuously.
(It returns to normal indication after 20 seconds even if the “MODE ” button is not pressed.)

FUNCTION SETTING

■ NOTE



Note: In remote controller group, the cool/heat mode is changed over according to a detected room temperature of an indoor unit with the smallest remote controller address number.

FUNCTION SETTING

2-25. ENERGY SAVING SETTING (SYSTEM CONTROLLER)

In this section, an energy saving function which uses electricity meters is explained. System Controller (UTY-APGX, UTY-PEGX) or System Controller Lite (UTY-ALGX, UTY-PLGXE1) is required to perform these functions.

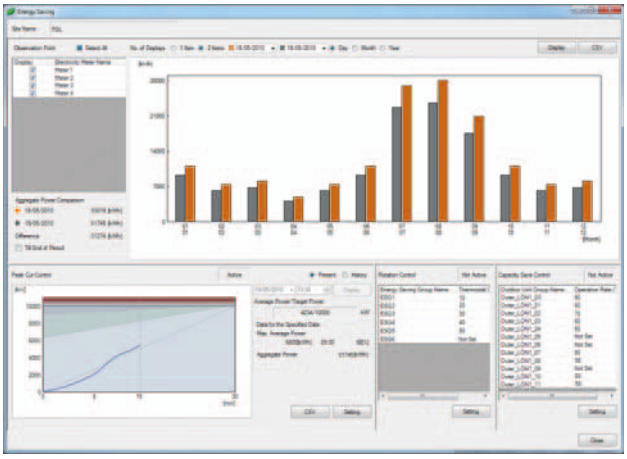
■ FEATURES OF ENERGY SAVING FUNCTION

● Power consumption graph function

Displays by bar graph the power consumption measured by the electricity meter connected to the air conditioner. Use it to grasp the power consumption usage conditions.

The power consumption for 3 years is saved and the past history can be referenced.

In addition, the data of an arbitrary 2 periods can be displayed for comparison.



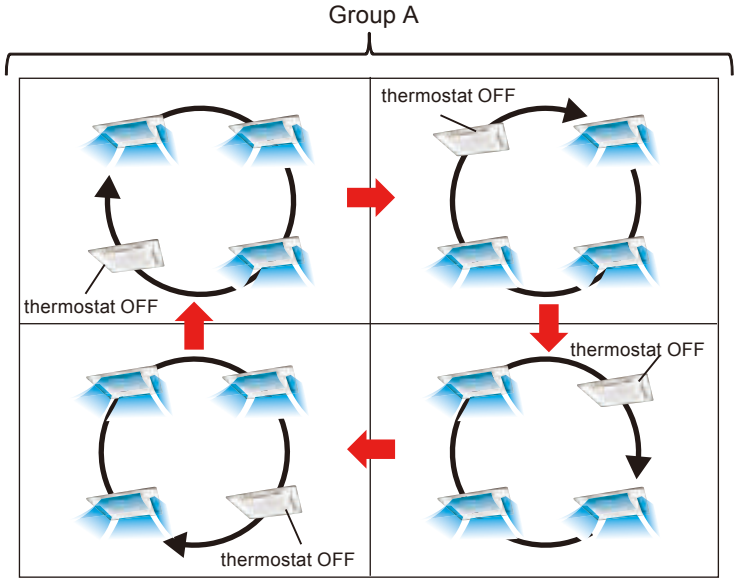
● Indoor unit rotation operation function

Reduces the power consumption by rotating the indoor units which are set to forced thermostat OFF.

Operating the air conditioner even in the spring and autumn when the heat load is comparatively light may have an energy saving effect.

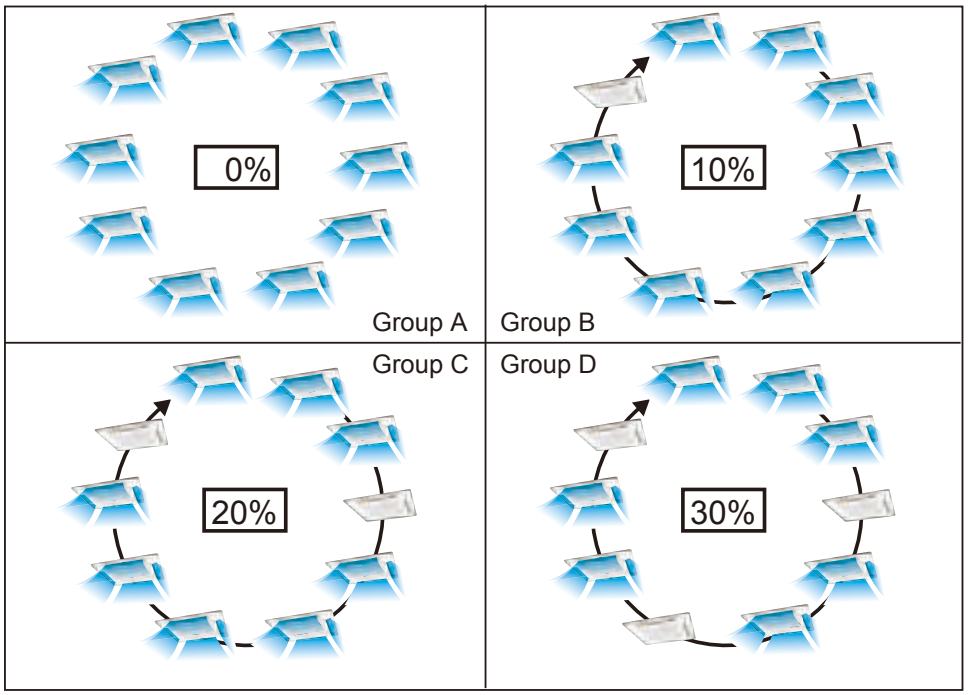
Because it is an intermittent operation, it does not loose much comfort, and is a control which is difficult for the user of the room to sense its operation.

- The electric power consumed in the arbitrarily defined group is reduced by rotating indoor units which are set to forced thermostat OFF.

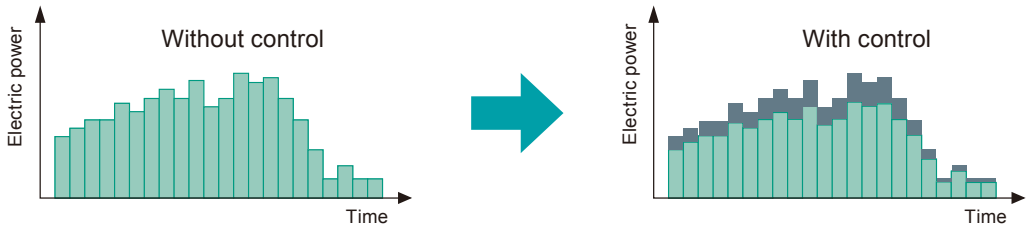


FUNCTION SETTING

- Indoor units can be rotated according to the stoppage rate set for each group.



*The indoor unit operation stoppage rate can be selected from 10% to 30%.



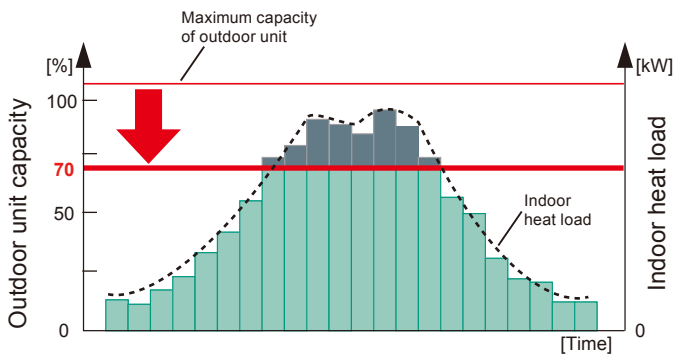
● Outdoor unit capacity save function

The power consumption is reduced by limiting the upper limit of the outdoor unit capacity for each refrigerant system.

This has a reducing effect especially in the summer, winter and other times when the heat load is high.

In addition, because the upper limit capacity of the outdoor unit is limited directly, it is a control which easily exhibits an energy saving effect compared to rotation control. However, because the outdoor unit does not operate above the limited capacity, there may be a loss of comfort, depending on the indoor heat load.

*The operation capacity upper limit rate [%] of the outdoor unit is specified for each refrigerant system.



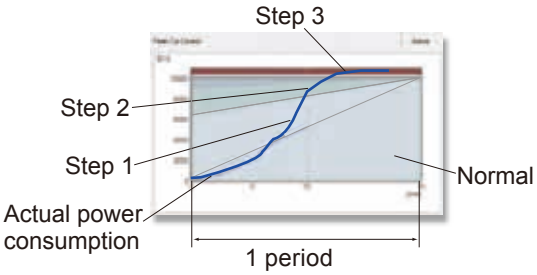
FUNCTION SETTING

● Peak cut operation function

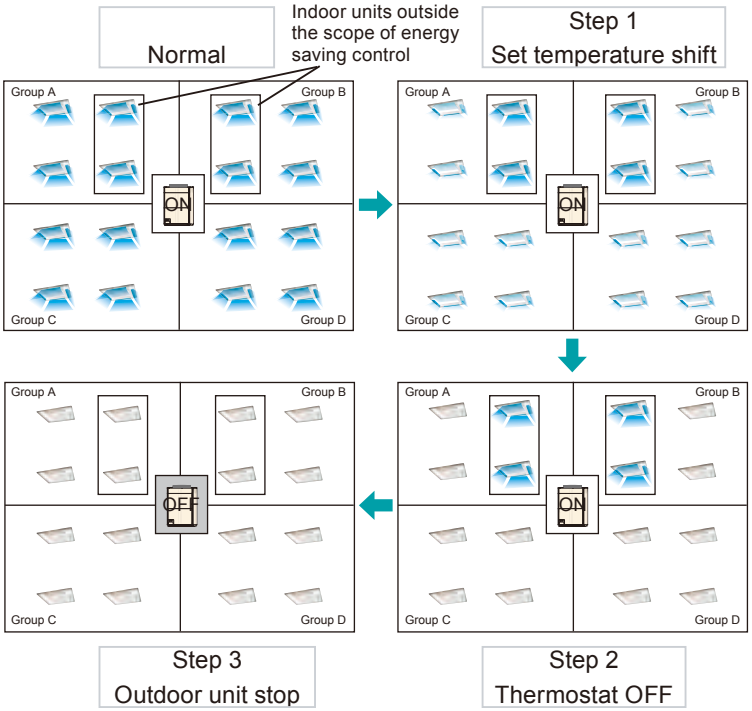
Reduces the power consumption by setting a specific target value (maximum average power [kW]) for all the air conditioners and controlling operation so that this value is not exceeded.

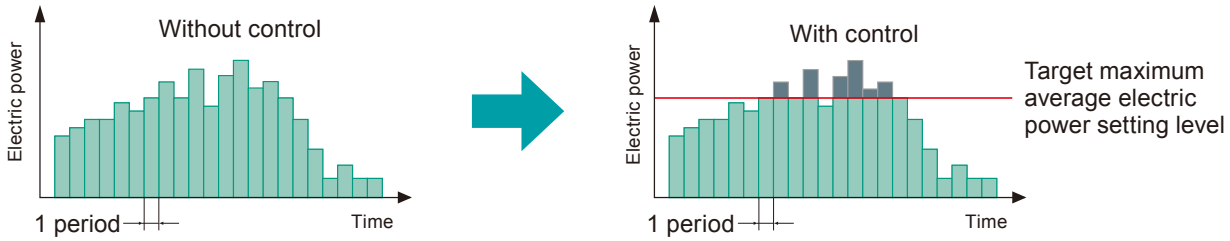
Limit control is performed in 3 steps of “Step 1: Set temperature shift” → “Step 2: Thermostat OFF” → “Step 3: Outdoor unit stop”.

To perform this control, an electricity meter must be installed.



*Specifies the maximum average electric power [kW] for the entire air conditioning system.





FUNCTION SETTING

■ GENERAL SETTING FLOW FOR ENERGY SAVING AND ELECTRICITY CHARGE APPORTIONMENT USING ELECTRICITY METER

The general setting flow for realizing an energy saving function and an electricity charge apportionment function using an electricity meter is shown as an example in the table below.

	Flow	Reference item
1	Overview of the energy saving function and electricity charge apportionment function using an electricity meter and an understanding of the usage method and restrictions, etc.	■Features of Energy Saving Function ■Operation Example ■Notes on Energy Saving Function ■Installation Restriction of Energy Saving Units ■Electricity Charge Apportionment and Electricity Meter
2	Deciding the power source supply system. Deciding the electricity meter installation sites, number and the outdoor units which are connected. Deciding the appropriate VT/CT specifications.	■Electrical Wiring ■Installation Restriction of Electricity Meter ■Electricity Meter System
3	Procuring the electricity meters and related hardware and materials.	■Electrical Wiring
4	Electricity meters and related hardware and materials installation work.	■Electrical Wiring
5	Electricity meter setting.	■Setting of Outdoor Unit and System Controller
6	Outdoor unit setting.	■Setting of Outdoor Unit and System Controller Refer also to "6-6-1.OUTDOOR UNIT"
7	System controller setting.	■Setting of Outdoor Unit and System Controller Refer also to "System Controller Instruction Manual"

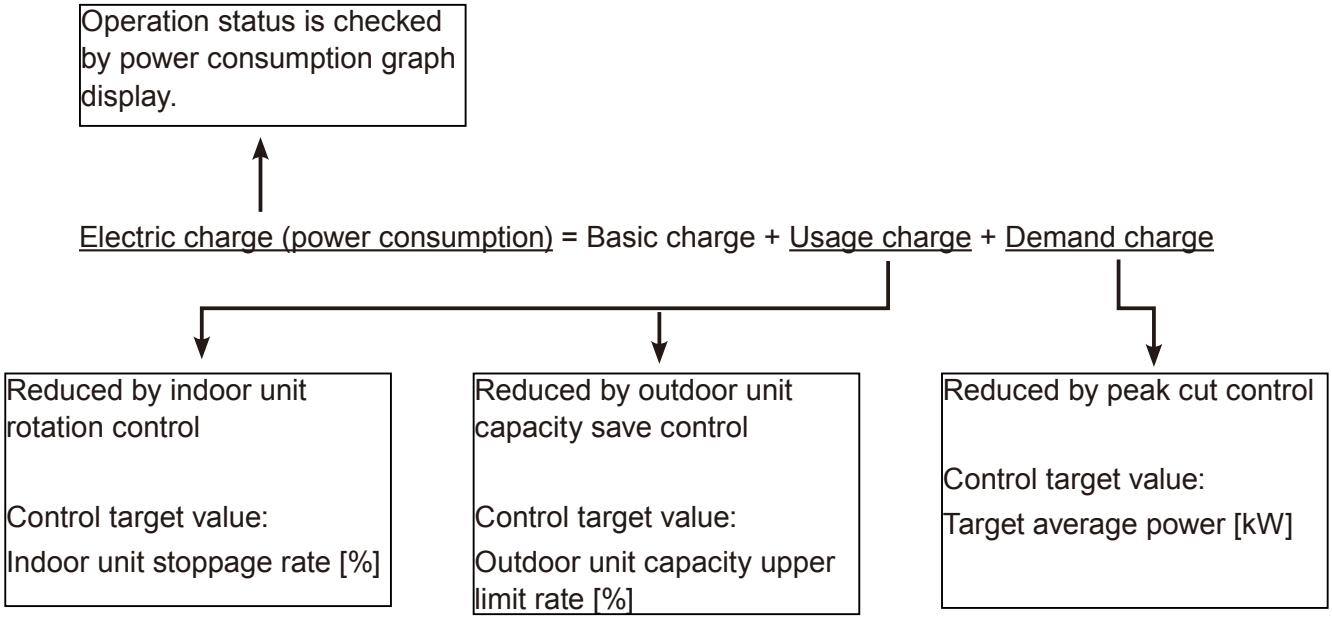
Note: Outdoor units and indoor units layout, remote controller group combination method, and other design shall be performed separately.

FUNCTION SETTING

■ OPERATION EXAMPLE

Electric charges usually consist of the following elements.

With the energy saving function, operation for each element is as follows.



*Basic charge: Charge billed according to contract with the electric power company. Includes meter reading cost and billing cost.

*Usage charge: Charge billed according the power consumed.

*Demand charge: Charge billed according to the scale of the contract with the electric power company

FUNCTION SETTING

■ NOTES ON ENERGY SAVING FUNCTION

Energy saving function precautions and scope of guarantee

The effect of the energy saving function depends on the units used, usage environment, installation environment, and so forth. Each energy saving function is not guaranteed to display a fixed effect and function for operation by specific setting. Reading and understanding the following precautions is requested before using the function.

(1) How to use the energy saving function

Since the effect of the energy saving function depends on the units used, usage environment, installation environment, and so forth, a different effect may appear according to the building and operating period even when operated with the same settings and schedule. Try to gain an understanding of the features of each energy saving function and confirm the actual effect through operation and apply appropriate settings, etc. as required.

(2) Target electric power of peak cut function

These are values used as target values when performing peak cut control. These values do not always guarantee that the consumed power is within the target value. For example, even if forced thermostat off and outdoor unit stoppage are activated, the control become ineffective if the outdoor unit is performing a protective operation (oil recovery and defrosting). As a result, the electric power consumed may exceed the target electric power.

(3) Relationship between unit protection and energy saving function

For VRF, there are operations and restrictions for protecting units. The energy saving function operates within the range of these protective operations and restrictions. When the energy saving function performs control against these protective operations and restrictions, the protective operations and restrictions have priority and the energy saving function is either restricted or may not operate. As protective operations of units, there are oil recovery, defrosting, etc. which are automatically performed periodically or under specified conditions.

(4) Failure, etc.

An energy saving function operates only when the related units are operating normally. When the power of the electricity meter and the outdoor units connected to an electricity meter and the SYSTEM CONTROLLER is turned off due to a failure, etc. the energy saving function will not operate normally.

(5) Explaining to the building tenants

During energy saving function operation, control from the remote controller may be overrided by the energy saving control. For this reason, it is recommended that the building tenants be informed of this beforehand.

FUNCTION SETTING

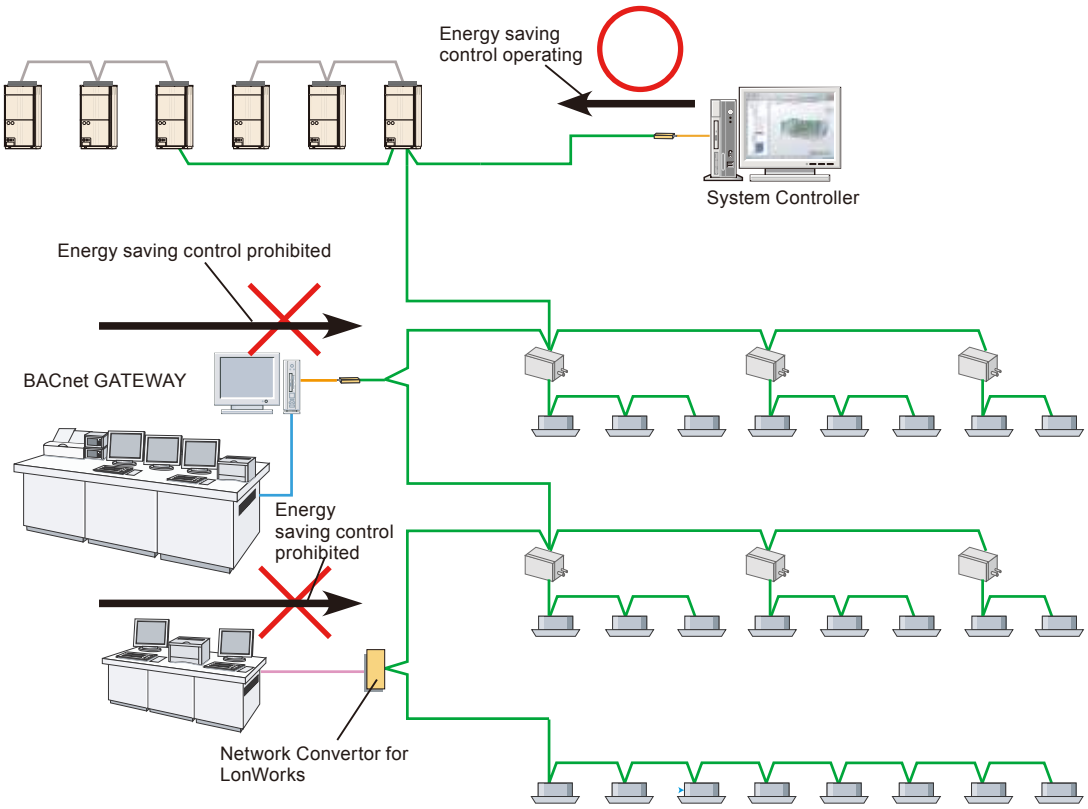
■ INSTALLATION RESTRICTION OF ENERGY SAVING UNITS

(1) Only 1 unit may perform energy saving control at a time. When energy saving control is performed by SYSTEM CONTROLLER (UTY-APGX/PEGX), stop energy saving control *1 from the building management system through the following units.

- BACnet GATEWAY (UTY-ABGX)
- NETWORK CONVERTOR for LonWorks (UTY-VLGX)

When energy saving control is performed from multiple points, trouble may occur.

*1: Forced thermostat OFF, outdoor unit forced OFF and outdoor unit capacity save.



(2) Electricity meter installation

Among energy saving control, there are functions which require installation of an electricity meter.

- Power consumption graph display function
- Peak cut control

When performing these functions, refer to the installation rules and install an electricity meter in advance.

FUNCTION SETTING

2-26. ELECTRICITY CHARGE APPORTIONMENT SETTING (SYSTEM CONTROLLER, TOUCH PANEL CONTROLLER)

In this section, an electricity charge apportionment function which uses electricity meters is explained. System Controller (UTY-APGX, UTY-PEGX) or System Controller Lite (UTY-ALGX, UTY-PLGXA1) or Touch panel controller (UTY-DTG*Z1, UTY-PTGXA) is required to perform these functions.

■ ELECTRICITY CHARGE APPORTIONMENT AND ELECTRICITY METER

When implementing the electricity charge apportionment function in a VRF System, a configuration which does not use electricity meters or a configuration which uses electricity meters can be selected. The differences between these two configurations are explained below.

The electricity charge apportionment function apportions the power consumption to each block (tenant indoor unit) defined in advance according to the usage record, after the power consumption (electricity charge) of the air conditioners is input to the System Controller. Electricity charge apportionment calculation becomes possible only after inputting the power consumption (or electricity charge).

[Electricity charge apportionment when electricity meter not used]

Only after the electricity bill is received from the electric power company and the billed amount is input into the System Controller, can electricity charge apportionment for the billed period be calculated.

[Electricity charge apportionment when electricity meter used]

Since the power consumption data is sent from the electricity meter to the System Controller at any time, basically electricity charge apportionment calculation can be performed at any time. Because an actual System Controller calculate power charge apportionment data in one day units, electricity charge apportionment calculation can be performed at an arbitrary day in one day units.

FUNCTION SETTING

Example (1)

When the tenants of a tenant building, etc. are billed for their air conditioning electricity charge once a month, if the electricity bill arrives from the electric power company each month, the electricity charge apportionment function can be used without electricity meters because electricity charge apportionment can be performed based on that bill and the tenants can be billed. Even if there are tenants moving in and out within a month, appropriate billing can be performed after the bill was received from the electric power company. However, when the electricity bill is received from the electric power company once every 3 months, electricity charge apportionment for 3 months cannot be calculated until the bill is received. In this case, building owner can only bill the building tenants for air conditioning electricity charges every 3 months. However, if electricity meters are installed, billing at an arbitrary interval, for example, once a month, is possible.

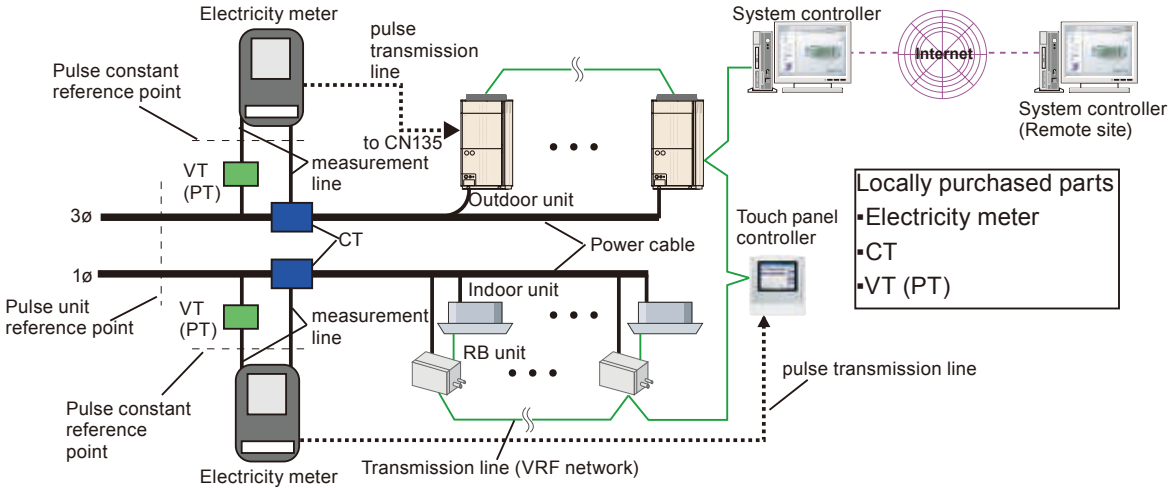
Example (2)

When air conditioning electricity charge is billed based on the electricity charge apportionment function for each room in hotels etc., because guests leave and arrive daily and the electricity charge is calculated each time, you cannot wait for the electricity bill to arrive from the electric power company. In such cases, it must be possible to be able to calculate electricity charge apportionment at any time using electricity meter.

■ ELECTRICAL WIRING

● Electricity meter connection composition

To perform energy saving peak cut control, basically, electricity meters with pulse transmission function measuring all the power consumed by the air conditioner are necessary. Multiple meters installations are also possible as long as the number of electricity meters is within the specified limit. A general electricity meter installation configuration is shown below.



Item	Description	Remarks
Electricity meter	Measures the voltage and current of the power cable to which measurement line is connected and finds the power consumption from these. In addition, pulses corresponding to the measured value are output to the transmission line.	
VT(PT)	Voltage Transformer (Power Transformer) Transform the power source voltage to a measurable voltage. Transformation ratio is indicated by VT (PT) ratio. Normally unnecessary for the voltage value level used by outdoor units and indoor units.	
CT	Current Transformer Transform the power line current value to a current measurable by an electricity meter. Transformation ratio is indicated by CT ratio. There are types which is inserted between power cables and types which are coupled to the power cables.	
Pulse unit	Pulse unit indicates the relationship between electricity meter output pulse and measured power. The value specified in pulse unit indicates the power in kWh consumed on the power cable for 1 pulse. Units: [kWh/pulse] The value specified by pulse unit takes into account the VT and CT ratio used and corresponds to the actual power consumption itself.	
Pulse unit reference point	Indicates the measurement point of the power consumption specified in pulse units.	
Pulse constant	Pulse constant indicates the relationship between electricity meter measured power and output pulses. The value specified by pulse constant indicates how many pulses are equivalent to 1kWh of power consumption input to an electricity meter. Units: [pulse/kWh] Because the ratio of VT and CT used is not taken into account in the value specified by pulse constant, to find the actual power consumption on the power cable, the pulse constant value must be multiplied by both the VT and CT ratio.	
Pulse constant reference point	Indicates the measurement point of power consumption specified by pulse constant.	

FUNCTION SETTING

● Selection of Electricity meter, CT, and VT

Select the electricity meter, CT, and VT by considering the following items.

(1) Install electricity meters for each refrigerant system, if circumstances allow.

(2) Select VT/CT with a small VT/CT ratio.

(3) When using an electricity meter which is specified in pulse units (kWh/pulse), usually select a meter with a 1kWh/pulse output.

● Outdoor unit connection interface (CN135) or touch panel controller connection interface (TM201 CH1) to electricity meter

Item		Specifications	Remarks
Interface		Dry contact “a” contacts	“a” contacts: ON when shorted *1
Pulse	Specifi-cations	Width: 50ms or more Interval: 50ms or more	
	Units	1kWh/pulse (pulse units) recommended	
	Constant	Considering the electricity meters available in some countries, use of electricity meters with 3200 pulse/kWh (pulse constant) or less pulses are possible.	
Line length restriction		150m or less	Between Electricity meter to Outdoor unit
Wiring specifications		Control and instrumentation cable CVV-S (Control-use Vinyl insulated Vinyl sheathed cable – Shielding) *2 2-conductor 1.25mm^2	
Line length restriction		25m or less	Between Electricity meter to Touch panel controller
Wiring specifications		2 core, twisted pair, 0.33mm^2 (22AWG) *3	

*1: Pulse signal: normally OFF (open), ON (closed) when shorted

*2: When affected by interference by induction, select shielded CVV cable (CVV-S cable). This is because copper shielding tape is wrapped around CVV cable and induction interference from adjacent power cables is alleviated and normal communication is maintained.
In addition, when the wiring is outdoors, select weather resistance cable.

*3: Use cable in accordance with local rules for cable.

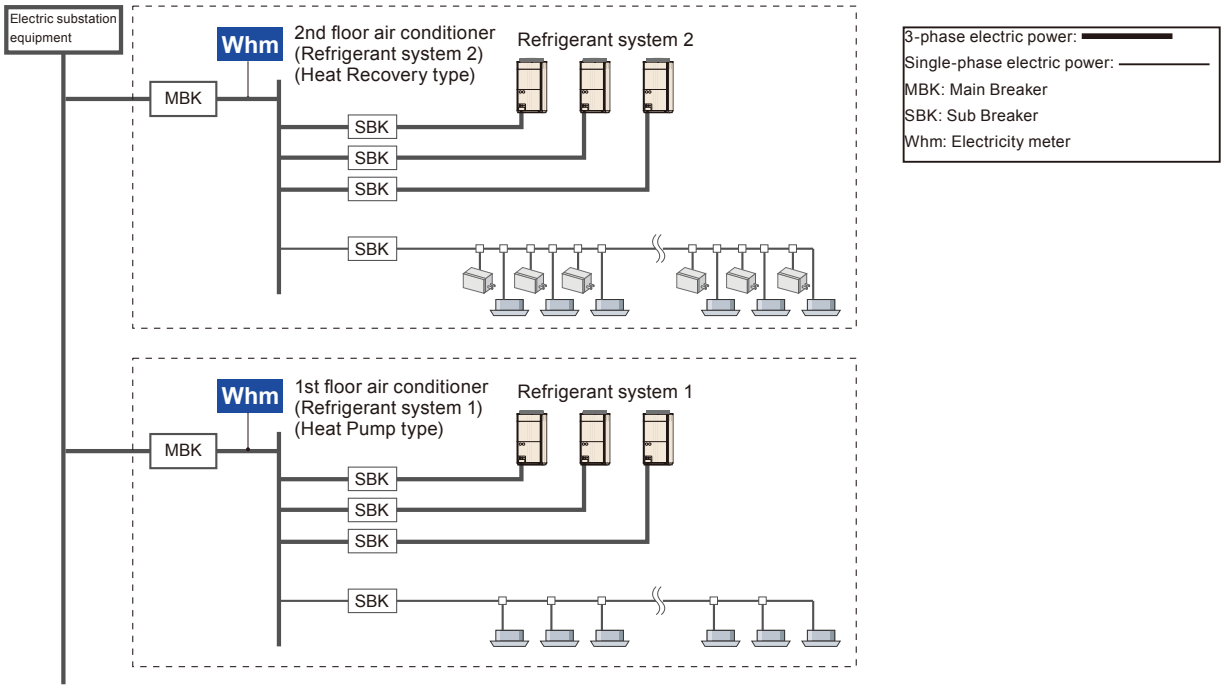
● Number of electricity meters installed

Item	Specifications	Remarks
Number of electricity meters installed	Max.200	Per Site (include Max. 4 VRF systems)

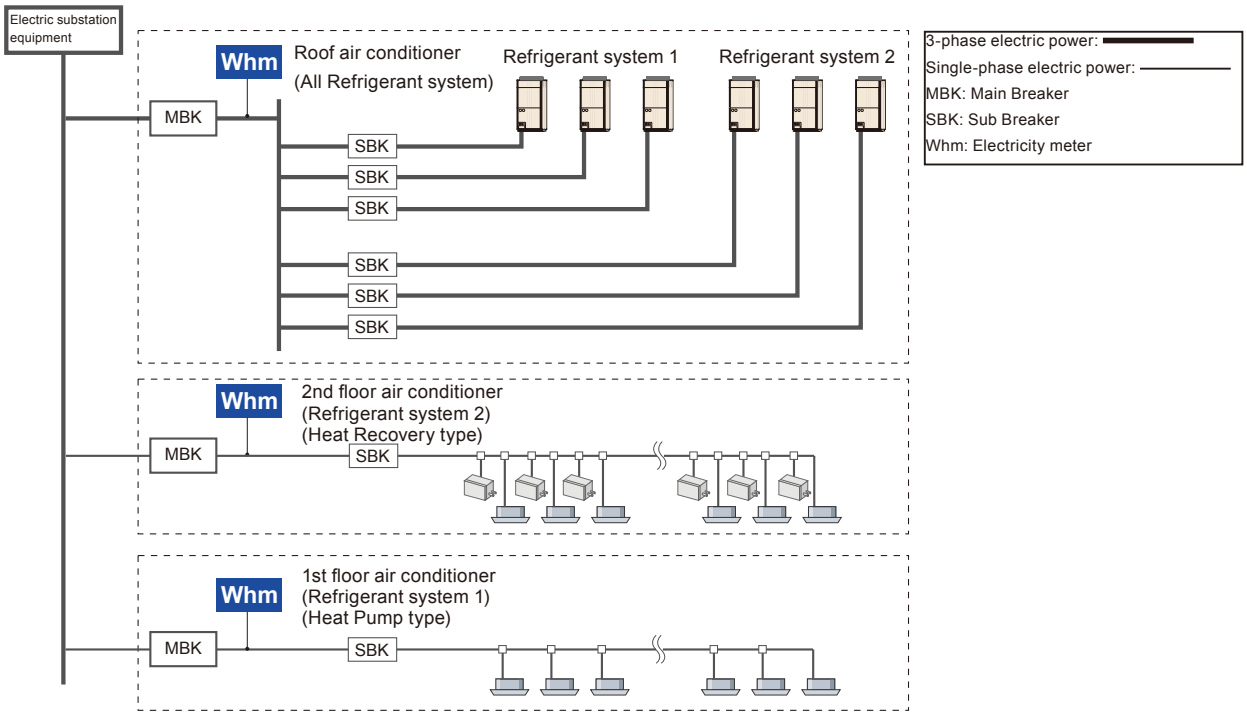
FUNCTION SETTING

● Installation example of Electricity meter

• Example of installation for each refrigerant system

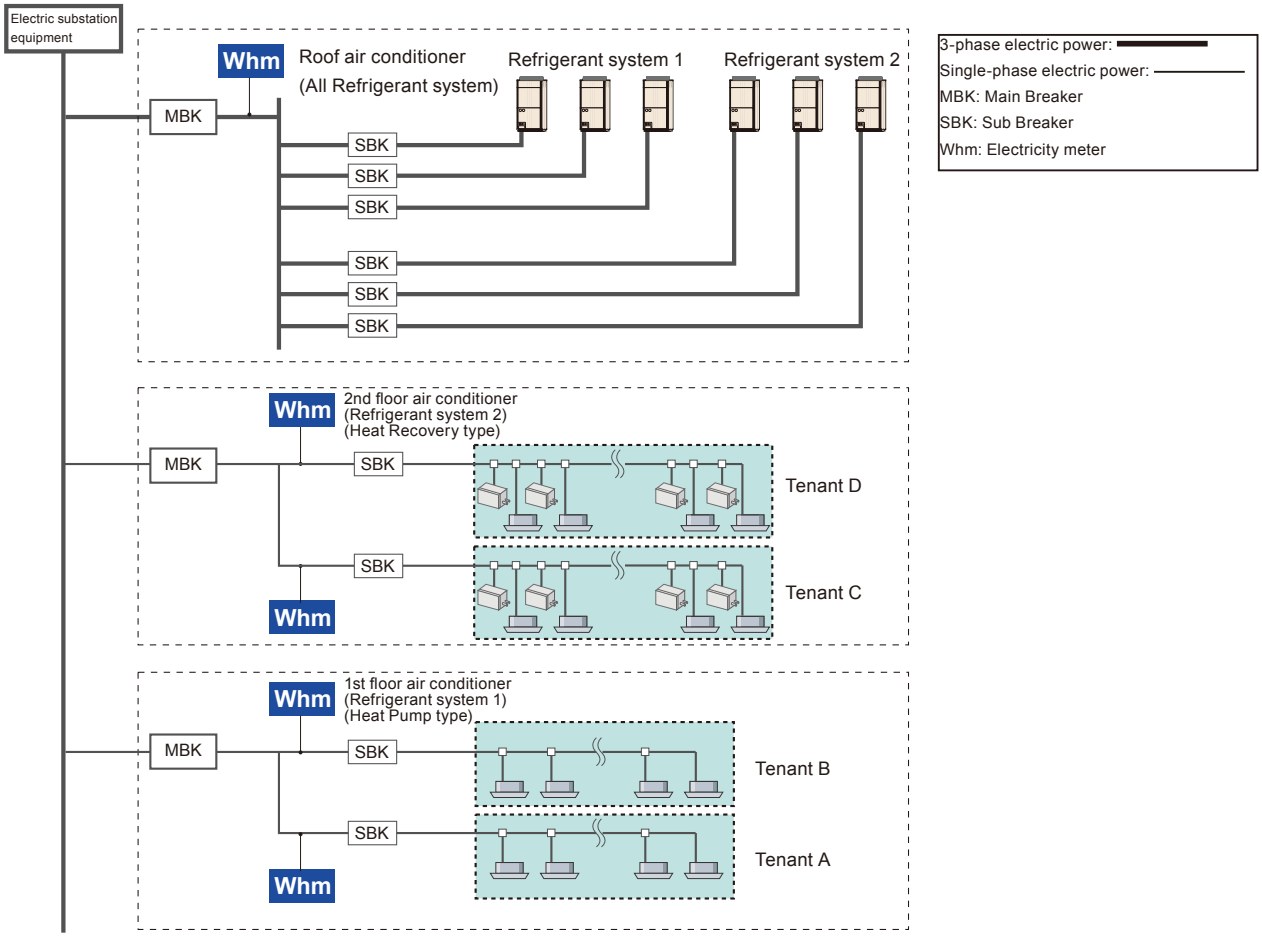


• Example of installation for indoor units and outdoor units



FUNCTION SETTING

• Example of installation for each tenant



FUNCTION SETTING

■ INSTALLATION RESTRICTION OF ELECTRICITY METER

● Functions that requires installation of electricity meter

Use an electricity meter having the following functions:

・Electricity charge apportionment function

Install for operation using an electricity meter. (Operation without an electricity meter is also possible.)

When using an electricity meter, an electricity meter must be installed for all the units which perform apportionment calculation.

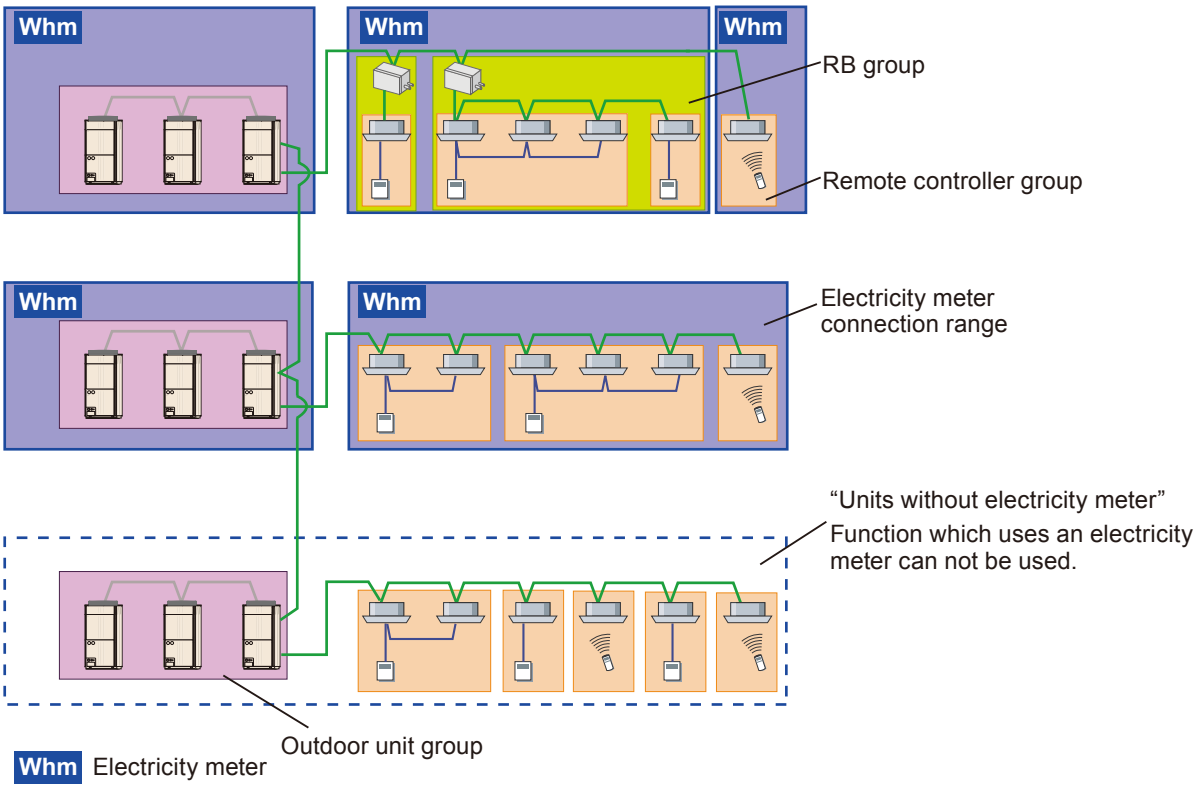
・Peak cut control function (Only for System controller)

Installation of an electricity meter is essential.

・Power consumption graph display function (Only for System controller)

Installation of an electricity meter is essential.

[Installation example]



FUNCTION SETTING

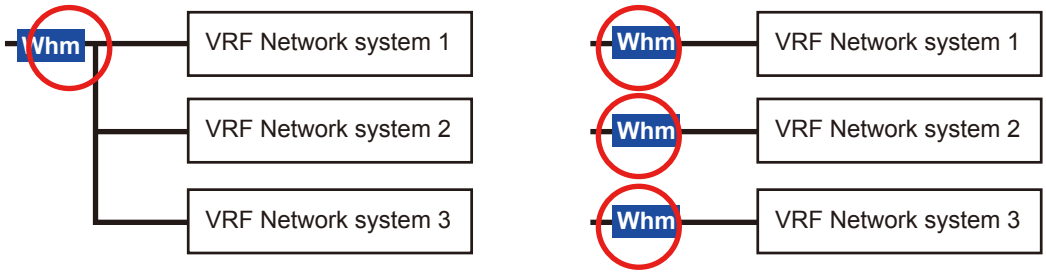
● Installation abstract

Note

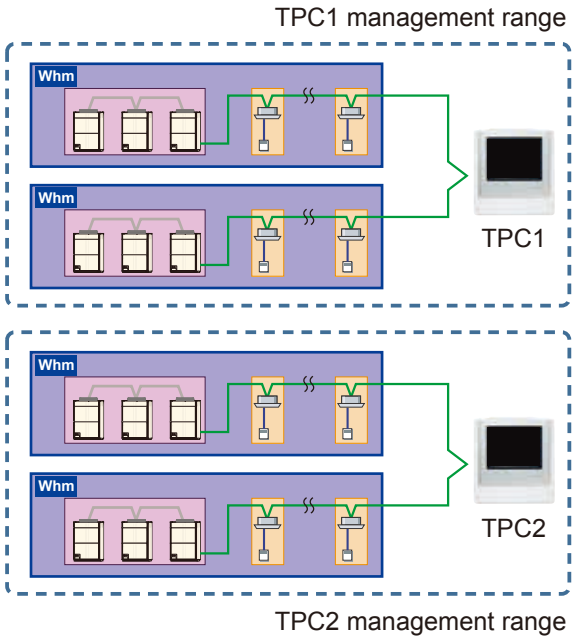
The belows are electricity meter connection methods which can be adapted by the System Controller and TPC (Touch panel controller). However, the following mentioned setting restrictions must be observed.

(1) Multiple VRF Networks can connect to 1 electricity meter. (with network crossover)

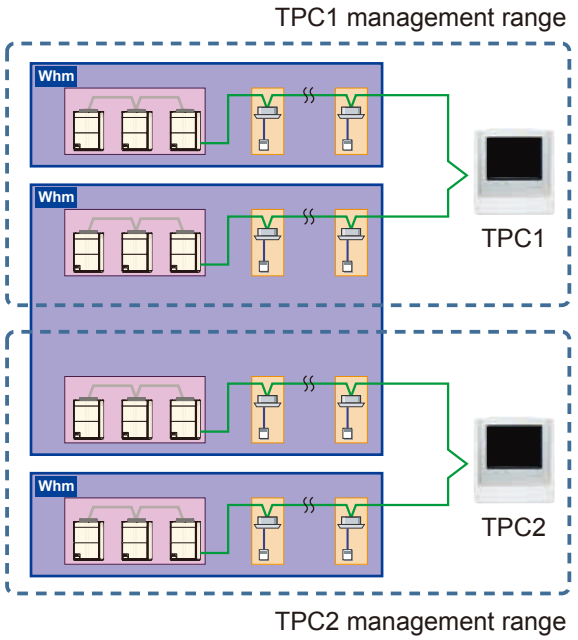
Note: UTY-ALGX (+UTY-PLGXE1) does not support multiple VRF Networks



(2) With the electricity charge apportionment function, an electricity meter system cannot span TPC.

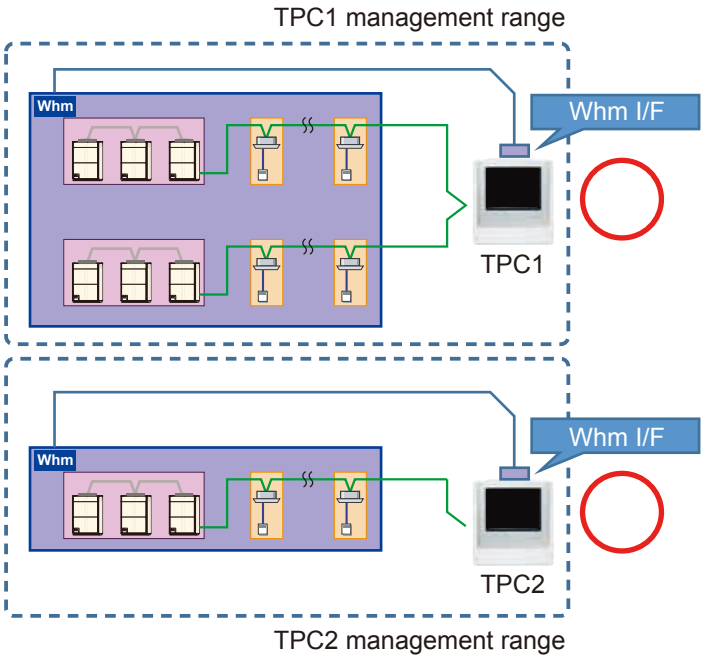


Create an electricity meter system within the range of the units managed by each TPC.

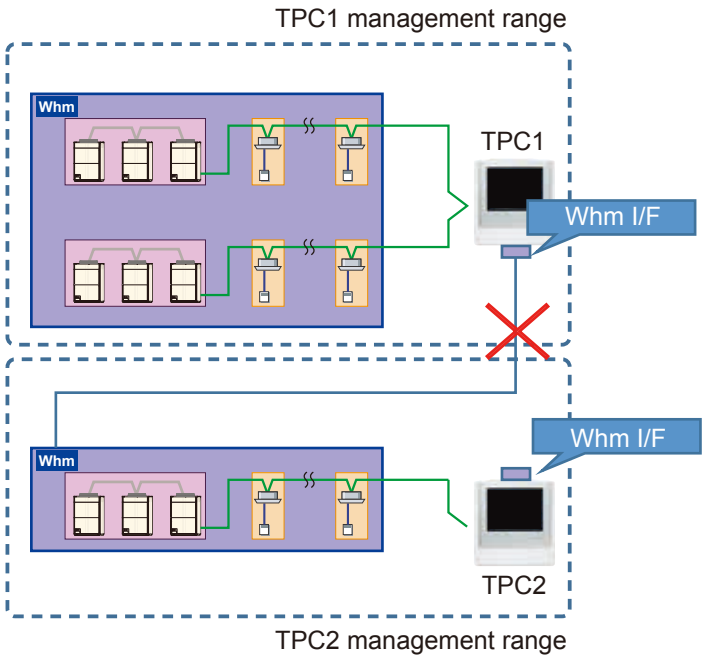


An electricity meter system spanning units managed by TPC cannot be created.

FUNCTION SETTING

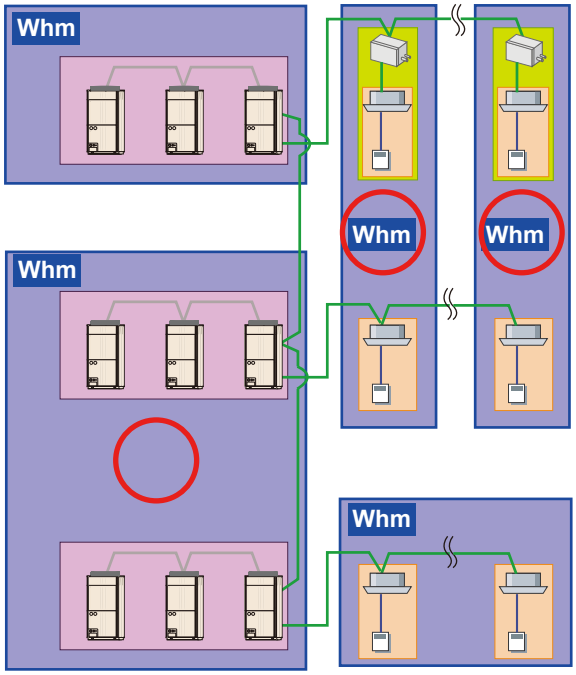


Connect the electricity meter that measures the units managed by the appropriate TPC to the electricity meter I/F belonging to the TPC main unit.

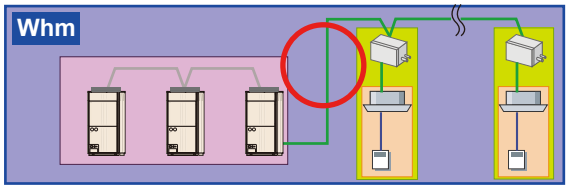


FUNCTION SETTING

(3) Installation crossing over refrigerant systems is possible.



(4) Outdoor unit/indoor unit/RB unit mixed in 1 meter is possible.



(5) There are no restrictions on outdoor units which connect an electricity meter.
An arbitrary electricity meter can be connected to an arbitrary outdoor unit.

FUNCTION SETTING

● Installation restriction

Install electricity meters in accordance with the following restrictions:

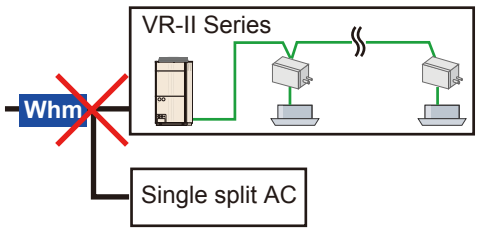
(1) Install an electricity meter only to air conditioners which are the target of the function.
When electric lights and other OA equipment are connected to the electricity meter, also their power consumptions are calculated.
Connect electricity meters to only the necessary air conditioners.

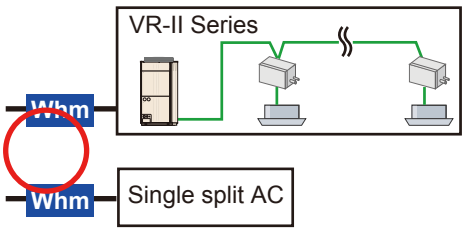
(2) An electricity meter can be connected to VR-II Series air conditioners
An electricity meter can only be installed to the VR-II Series, V-II Series*1, J-II Series.
An electricity meter cannot be connected to S Series and V Series units because they are not electricity meter supported.

*1: Indoor units and outdoor units with revision code B or later is required.

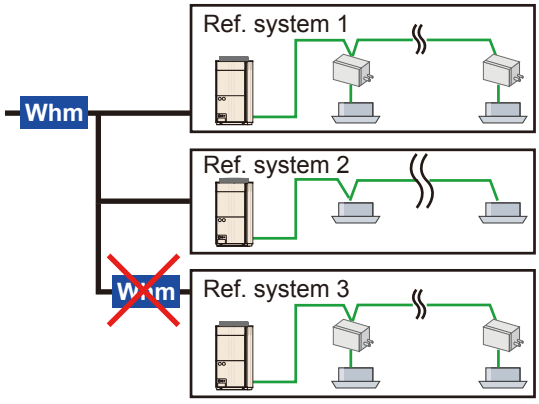
(3) Electricity meter supported/unsupported units cannot be mixed under one electricity meter. (Because the available functions are different)
When connecting single type air conditioners via VR-II Series network converter (UTY-VGGXZ1), separately connect the electricity meter to VR-II Series VRF air conditioners because there are some functions *2 that are electricity meter unsupported.
However, UTY-VGGXZ1 which connects a group remote controller is an exception.

*2: [Electricity charge apportionment function]
The electricity charge apportionment function cannot be used with single types air conditioners which are connected to a network converter.
[Energy saving function]
In the peak cut control, though the power will be included in the target power, the actual control will not be performed.





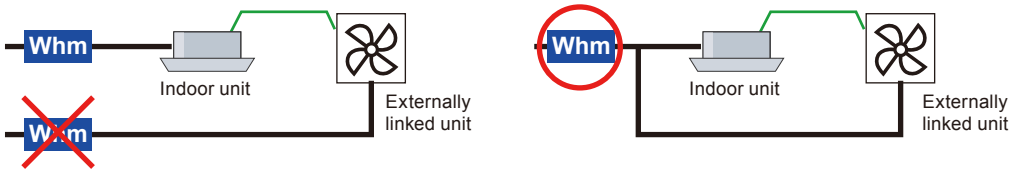
(4) Electricity power meters cannot be nested
Installation of the meters themselves is possible, but use only one electricity meter for the System Controller . (If both are used, the power consumption will be measured twice.)



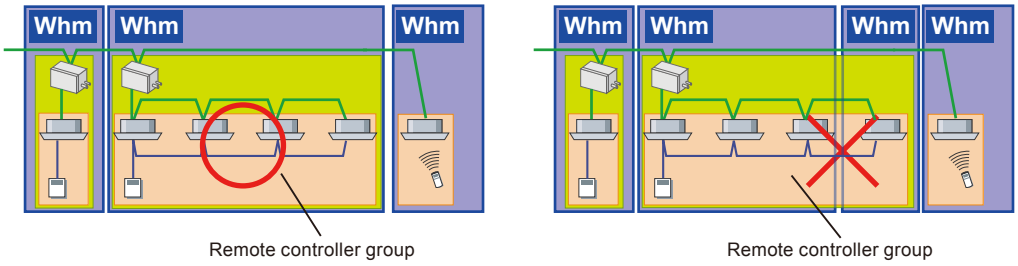
FUNCTION SETTING

(5) The externally linked units* shall be connected to the same electricity meter as the air conditioner to which they are connected.

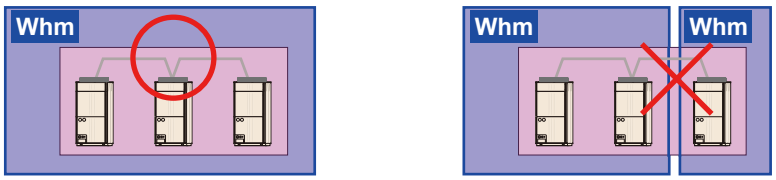
*General-purpose unit which performs calculation as an externally linked unit by electricity charge apportionment function.



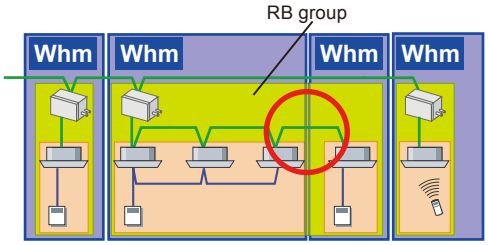
(6) Installation of electricity meter which divides remote control groups is prohibited.



(7) Installation of electricity meter which divides outdoor unit groups is prohibited.

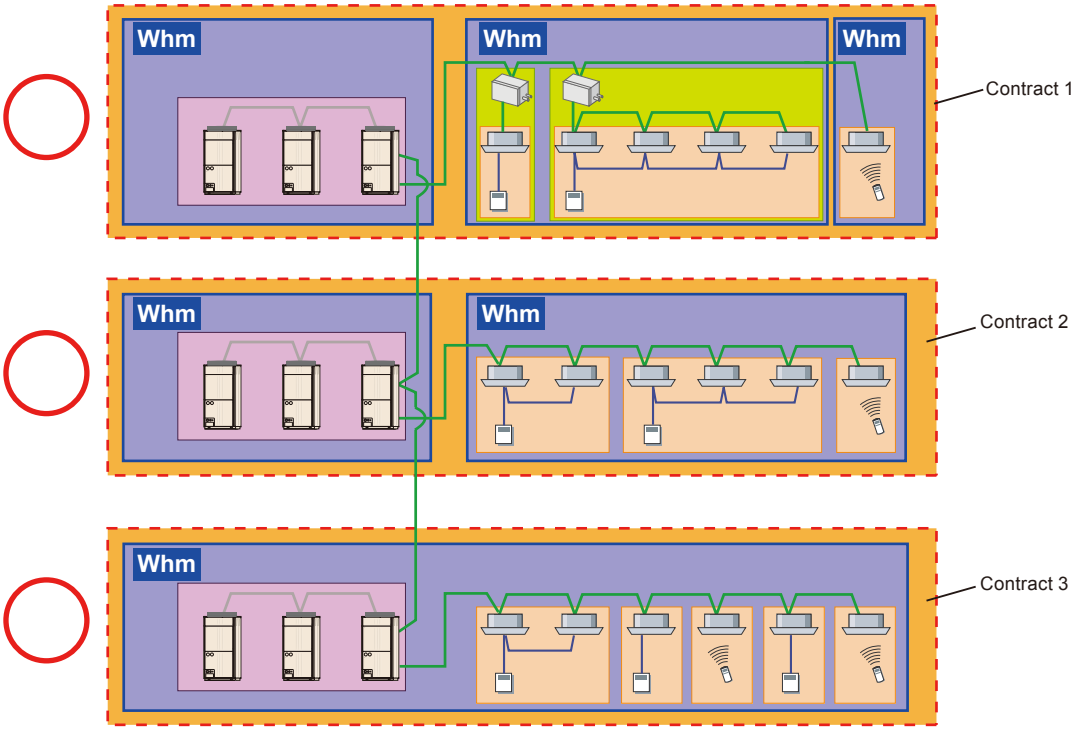


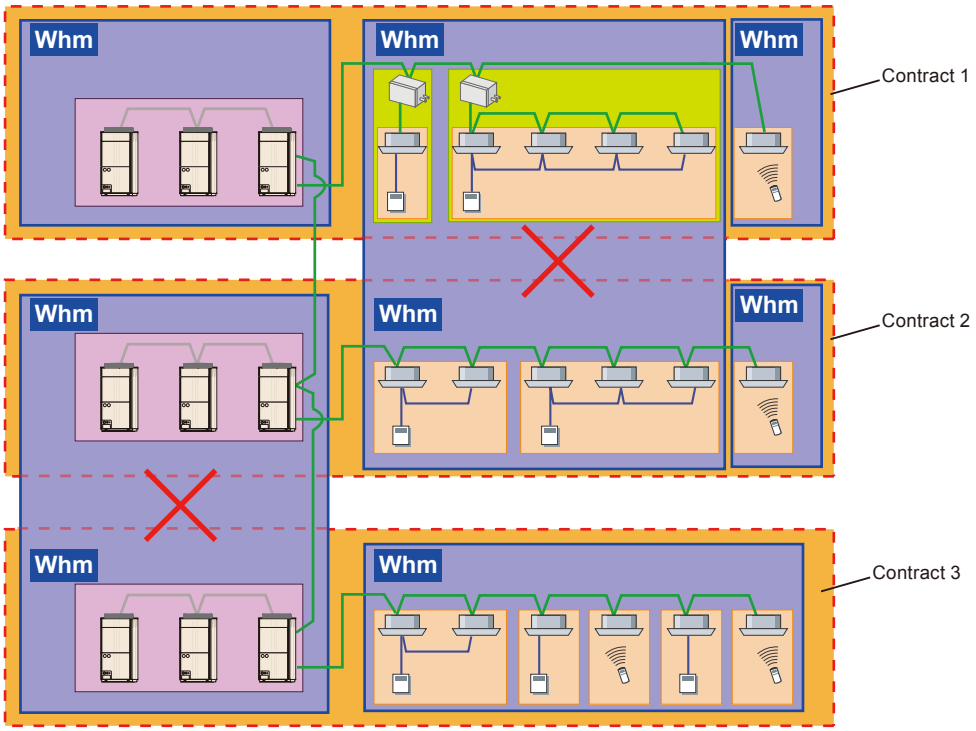
(8) Installation of electricity meter which divides RB groups is OK.



FUNCTION SETTING

(9) Installation of electricity meter which crosses the contract is prohibited.
When an electricity meter is used by electricity charge apportionment function, install the electricity meter so that it does not cross over the “contract setting” set by electricity charge apportionment.





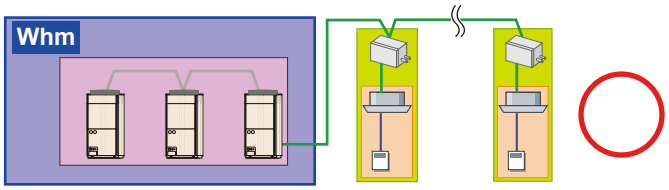
FUNCTION SETTING

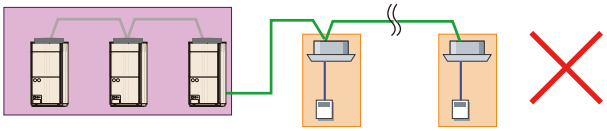
(10) When performing apportionment calculation using electricity meter

The electricity meter shall be connected to the necessary air conditioners which are the target of calculation by the electricity charge apportionment function.

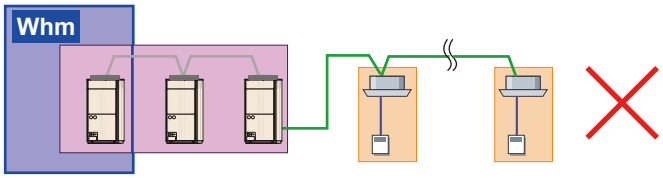
When an electricity meter is not connected, electricity charge apportionment calculation using an electricity meter may not be possible.

<<Electricity charge apportionment with outdoor unit only>> → Connect the electricity meter to the outdoor unit.



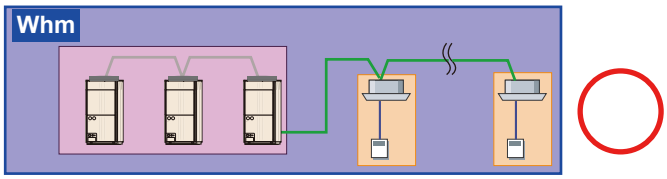


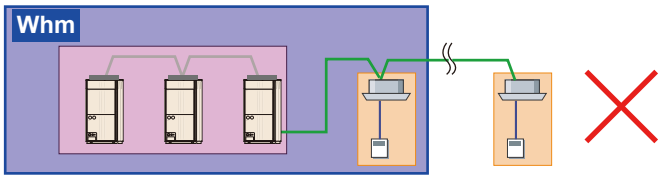
Electricity meter is not connected to outdoor unit



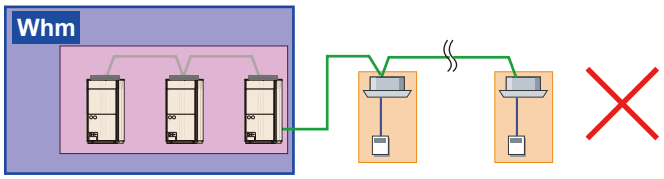
Electricity meter is not connected to only some outdoor units

<<Outdoor unit + indoor unit electricity charge apportionment>> → Connection of an electricity meter to the outdoor unit and indoor unit is necessary.





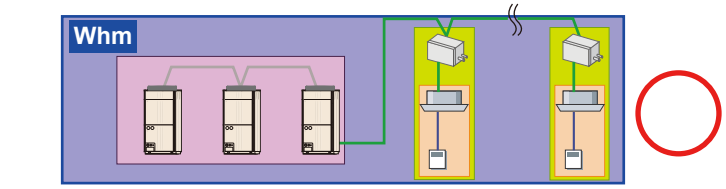
Electricity meter is not connected to some indoor units

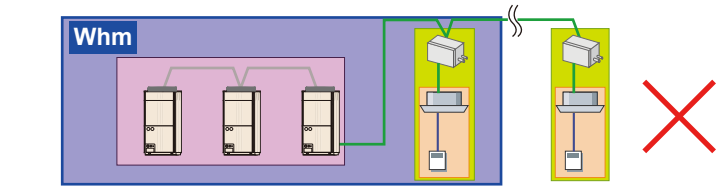


Electricity meter is connected to outdoor unit only even though outdoor unit + indoor unit electricity charge apportionment is performed.

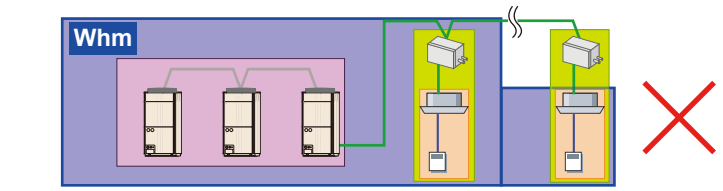
FUNCTION SETTING

<<Outdoor unit + indoor unit + RB unit electricity charge apportionment>> → Connection of an electricity meter to the outdoor unit, indoor unit and RB unit is necessary.





Electricity meter is not connected to some indoor units and RB units

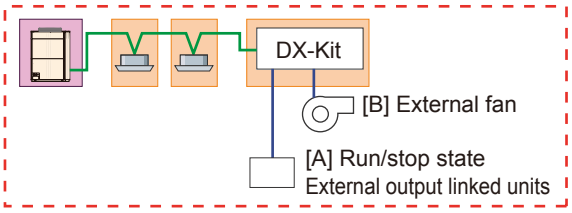


Electricity meter is not connected to some RB units

(11) Electricity apportionment for DX-Kit

- When electricity meter not connected

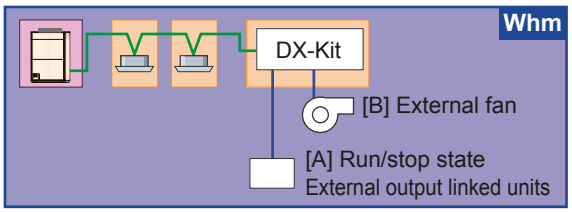
The following units can be linked to the DX-Kit, by using external output terminals.
[A]: External fan
[B]: Units linked to run/stop state external output
At electricity apportionment, the DX-Kit itself and units [A] and [B] mentioned above can be handled. Set the electricity value at ON beforehand for the units [A] and [B] from the “Parameter Setting” screen. The input value is included in the calculation as a constant value when the external output terminal is ON.



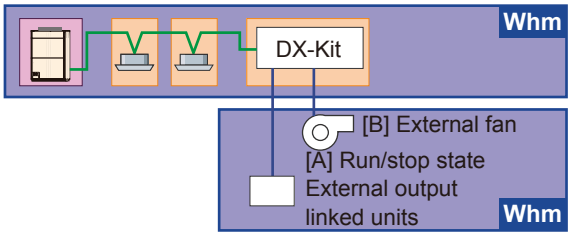
FUNCTION SETTING

- When electricity meter is connected

At electricity apportionment, the DX-Kit itself and units [A] and [B] mentioned above can be handled the same as when an electricity meter is not connected. Set the electricity value at ON beforehand for the units [A] and [B] from the “Parameter Setting” screen and install the electricity meter so that the units [A] and [B] are included. The input value in the calculation as a constant value when the external output value is ON is included.

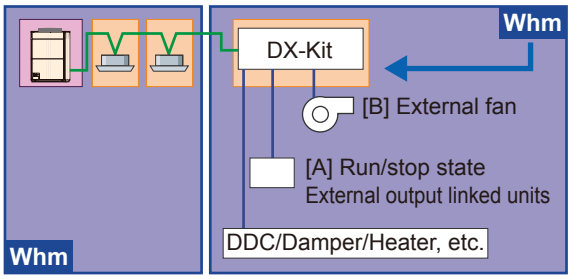


The electricity meter is installed so that the units [A] and [B] are included.



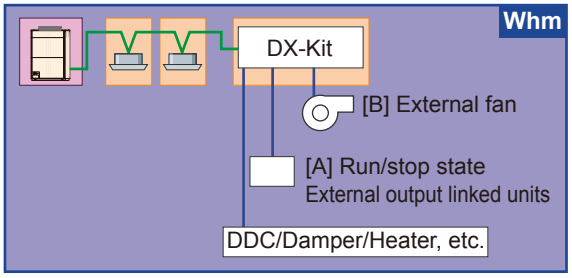
The electricity meter is installed independently from the units [A] and [B].

If there is a unit related to the DX-Kit other than [A] and [B], if the DX-Kit is connected as an independent electricity meter system and installed so that other units are included, it may be included in electricity charge apportionment. (All the value of that electricity meter is charged to the DX-Kit.)



The electricity meter is installed so that [A], [B], and other units are included.

Units other than [A] and [B] must not be connected to an electricity meter together with other indoor units. If connected, the electricity amount of DDC, damper and heater is also charged to the other indoor units.



The electricity meter is installed so that the units other than [A], [B] and indoor units are included.

FUNCTION SETTING

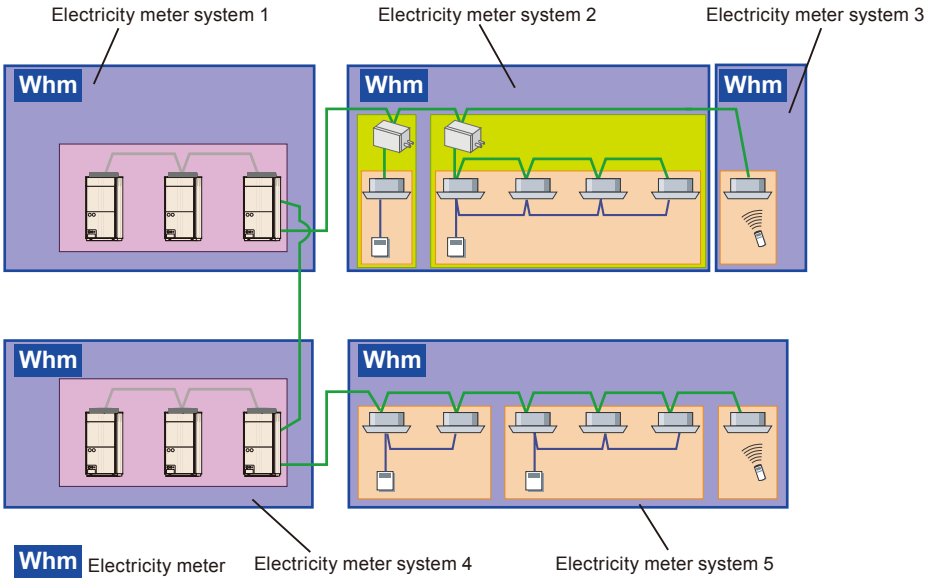
■ ELECTRICITY METER SYSTEM

Electricity meter system is the connection configuration of one electricity meter and the air conditioner units which are connected to the power line under it. This is set on the System Controller.

Set the System Controller to match the actual electricity meter installation configuration.

Since the electricity charge apportionment function/energy saving function perform control using the power consumption data from an electricity meter, it is necessary to set an electricity meter system on the System Controller.

When installing electricity meters as shown below, 5 electricity meters systems are set.



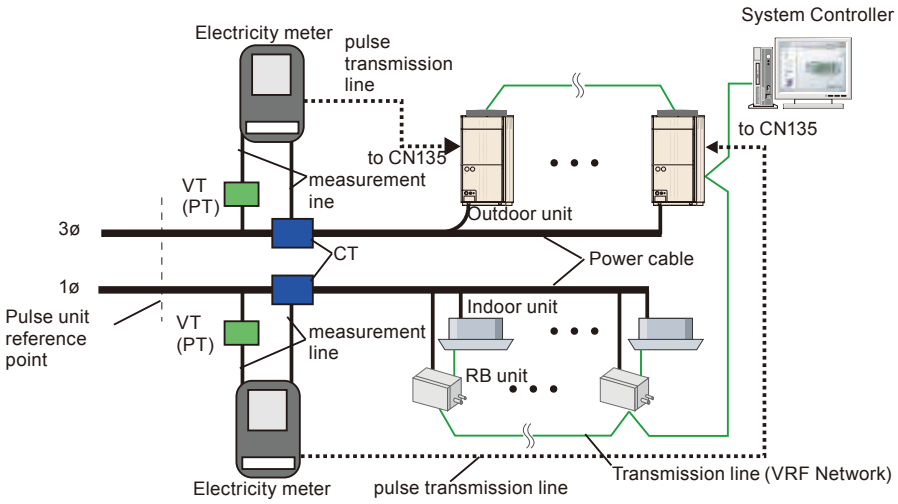
FUNCTION SETTING

■ SETTING OF OUTDOOR UNIT AND SYSTEM CONTROLLER

To obtain the appropriate power consumption by System Controller, the power value measured by an electricity meter must be properly conveyed. To do this, appropriate setting at the electricity meter, outdoor unit, and System Controller is necessary. The method of setting the pulse from the electricity meter received by an outdoor unit and the method of setting the pulse value set by system controller are described here. When electricity meter setting is necessary, perform it in accordance with the instruction manual supplied with the electricity meter.

Below, the setting method of electricity meters specified in pulse units and that specified in pulse constant are described.

(1) When electricity meter used is specified in pulse units
The connection configuration is shown below.



For the electricity meter specified in pulse units, the output pulses are normalized in advance (normally 1kWh/pulse) and is output. In this case, the settings are as follows:

Set point	Set item	Set value	Description	Remarks
Electricity meter	Set in accordance with the product manual.	-	When there is a product unique setting, setting is performed in accordance with the product manual. (Pulse units value, VT/CT ratio, output coefficient, etc.)	
Outdoor unit	Meter No. setting	Arbitrary	Set an unique electricity meter No. for electricity meter identification.	The information will become necessary when setting System Controller later. Refer also to 6-6-1 OUTDOOR UNIT.
	Electricity meter pulse setting	1	Fixed to “1”. When 1 pulse comes from the electricity meter, the outdoor unit communicates “1” to the System Controller.	
System Controller	Electricity meter system setting	Units measured by electricity meter	Set the outdoor unit and indoor unit, measured by the electricity meter of the meter No. set at the outdoor unit.	The value set by each outdoor unit is used.
	Pulse setting	Electricity meter pulse units value (Usually either of 1, 10, or 100 [kWh/ pulse])	Set the pulse units specified by the electricity meter as they are. Set the number of kWh that corresponds to the “1” communicated from the outdoor unit.	Refer to the value set by each outdoor unit.

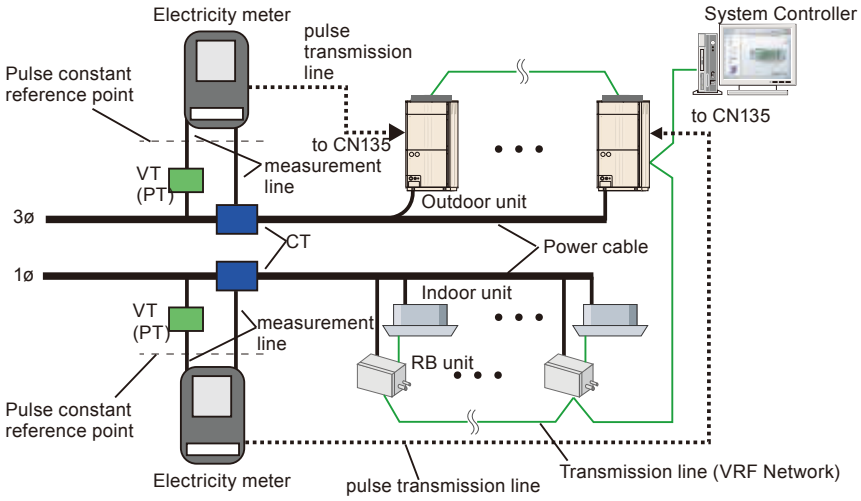
[Setting example]

Equipment conditions: VT ratio=1 (not used), CT ratio=50(250/5A), electricity meter=1kWh/pulse

Set value: Electricity meter pulse setting=1(fixed), pulse setting=1(corresponds to electricity meter used)

FUNCTION SETTING

(2) When electricity meter used is specified by pulse constant
The connection configuration is shown below.



For the electricity meter specified by pulse constant, the power consumption indicated by output pulse must be corrected by VT/CT ratio. In this case, the settings are as follows:

Set point	Set item	Set value	Description	Remarks
Electricity meter	Set in accordance with the product manual.	-	When there is a product unique setting, setting is performed in accordance with the product manual. (Pulse constant value, output coefficient, etc.)	
Outdoor unit	Meter No. setting	Arbitrary	Set an unique electricity meter No. for electricity meter identification.	The information will become necessary when setting System Controller later. Refer also to Chapter 6. 2-1. OUTDOOR UNIT
	Electricity meter pulse setting	The pulse constant value / (VT ratio x CT ratio). However, truncated after the decimal point	Set the approximate number of power meter pulses that are equivalent to 1kWh. When set number of pulses come from the electricity meter, the outdoor unit communicates “1” to the system controller.	
System controller	Electricity meter system setting	Unit to be measured by electricity meter	Sets the outdoor unit and indoor unit, measured by the electricity meter of the meter No. set at the outdoor unit.	The value set by each outdoor unit is used.
	Pulse setting	(Electricity meter pulse setting value) x (VT ratio x CT ratio)/pulse constant Values after the decimal point must be also input. *1	Set the standard number of kWh for the value communicated from the outdoor unit. Set the number of kWh that corresponds to the “1” communicated from the outdoor unit.	Refer to the value set by each outdoor unit.

*1: Input up to 6 decimal digits

[Setting example]

Equipment conditions: VT ratio=1 (not used), CT ratio=500(2500/5A), electricity meter=3200 pulse/kWh

Set value: Electricity meter pulse setting=6 (3200/ (1x500)),
Pulse setting=0.9375 (6x (1x500)/3200) ---Refer to the calculating formula of the table above.

FUNCTION SETTING

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

8. EXTERNAL INPUT & OUTPUT

DTV_VR2E018_10--CHAPTER08
2017.03.31

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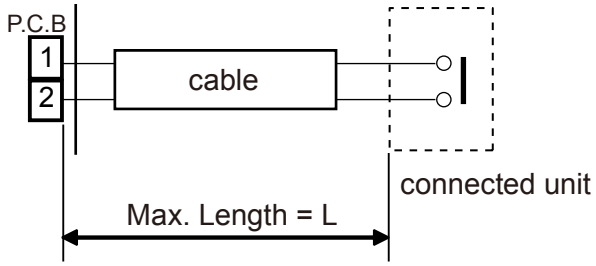
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1. EXTERNAL INPUT & OUTPUT

Note :

The length regulations of the cable are as shown in the following figures.



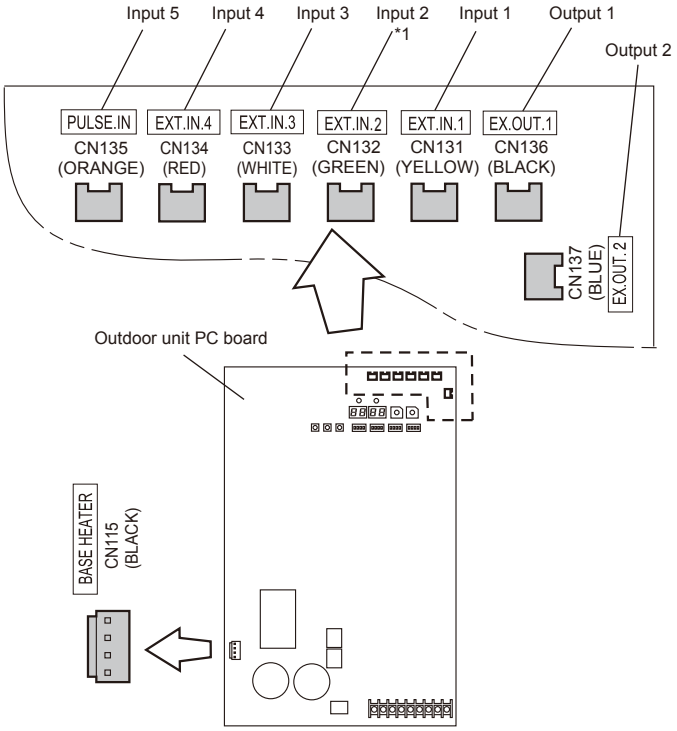
Type	L (m) Input / Output
Outdoor unit	150 / 150
Indoor unit	150 / 25
RB unit	150 / -
Touch Panel Controller	25 / 25
Central Remote Controller	

1-1. OUTDOOR UNIT

External input	External output	Connector	VR-II	V-III	V-II	J-IIIL	J-III	J-II	J-IIS	External connect kit (Optional parts)
Low noise mode	-	CN131	○	○	○	○	○	○	○	UTY-XWZXZ6
Cooling/Heating priority	-	CN132	×	○	○	○	○	○	○	
Outdoor unit operation peak control	-	CN133	○	○	○	○	○	○	○	
Emergency/batch stop	-	CN134	○	○	○	○	○	○	○	
Electricity meter pulse	-	CN135	○	○	○	○	○	○	○	UTY-XWZXZF
-	Error status	CN136	○	○	○	○	○	○	○	UTY-XWZXZ6
-	Operation status	CN137	○	○	○	○	○	○	○	
-	Base heater	CN115	○	○	○	○	○	○	○	UTY-XWZXZ9

■ TERMINAL POSITION

● VR-II series and V-III series

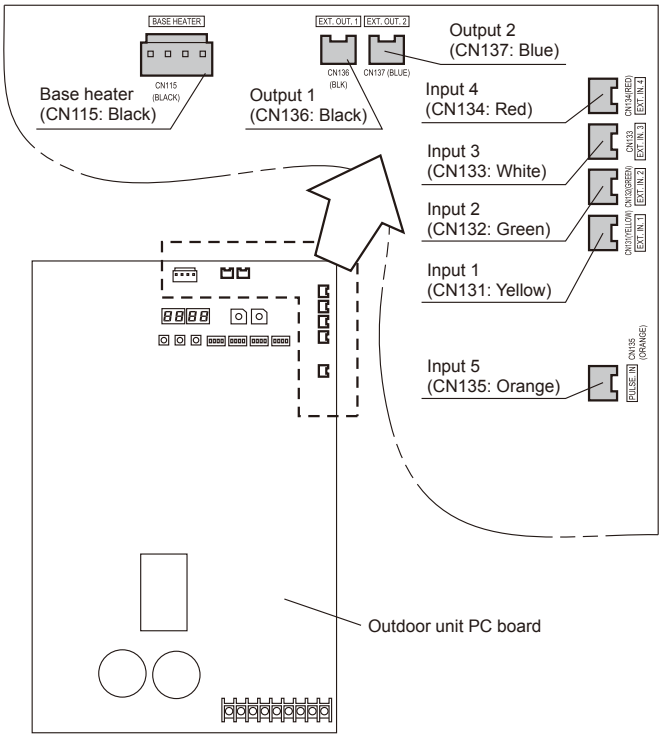


*1: Input 2 Terminal(CN132) is not in VR-II series.

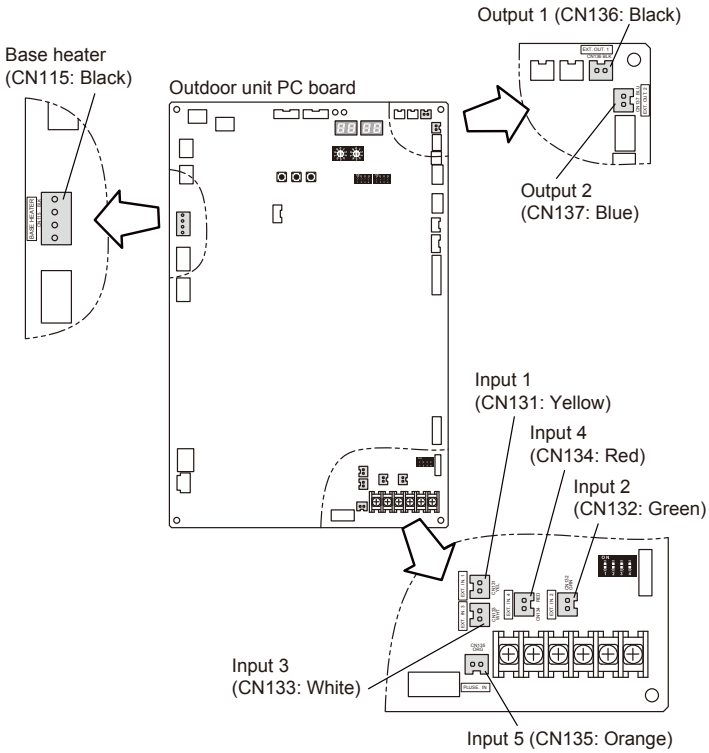
EXTERNAL INPUT & OUTPUT

■ TERMINAL POSITION

● V-II series



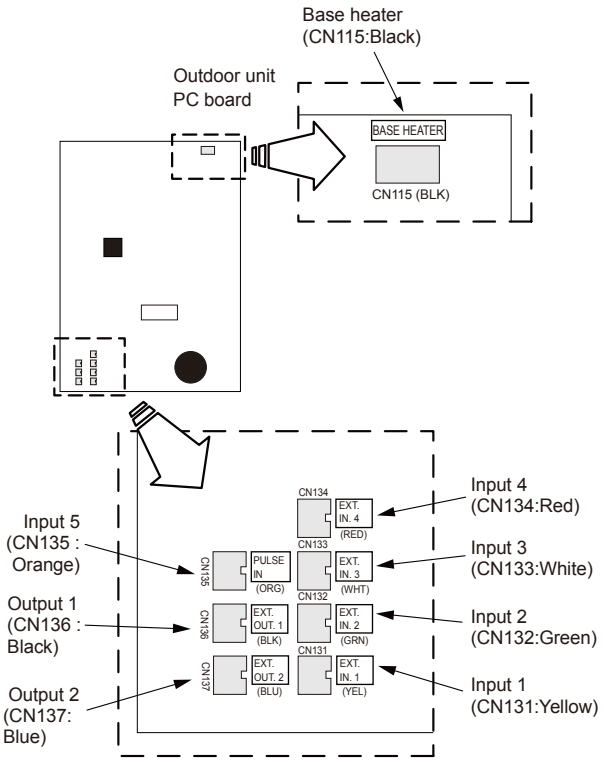
● J-IIIL series



EXTERNAL INPUT & OUTPUT

■ TERMINAL POSITION

● J-III series, J-II series and J-IIS series



EXTERNAL INPUT
& OUTPUT

1-1-1. EXTERNAL INPUT

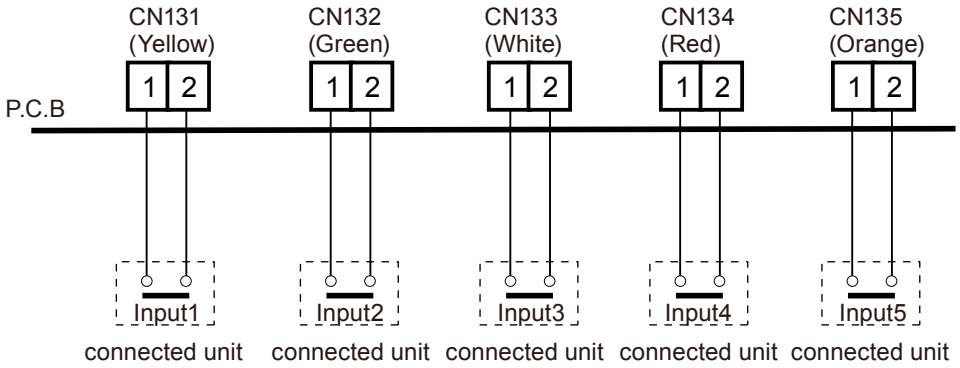
Setting to "Low noise mode", "Cooling priority/heating priority selection", "Outdoor unit operation peak control", "Emergency/batch stop" and "Electricity meter pulse" are possible from the outside.

■ WIRING METHOD AND SPECIFICATIONS

*A twisted pair cable (22AWG) should be used. Maximum length of cable is 150m.

*Use an external input and output cable with appropriate external dimension, depending on the number of cables to be installed

*For each input, pin No.1 is of positive polarity and pin No.2 is of ground level.



■ OPERATION BEHAVIOR

Connector	Input signal	Status	Outdoor unit	
			Master	Slave
CN131 (Yellow)	OFF	Normal operation	○	×
	ON	Low noise mode operation		
CN132 (Green) *1	OFF	Cooling priority	○	×
	ON	Heating priority		
CN133 (White)	OFF	Normal operation	○	×
	ON	Outdoor unit operation peak control		
CN134 (Red)	OFF	Normal operation	○	×
	ON	Batch stop or Emergency stop operation *2, *3		
CN135 (Orange) *4	No pulse	No information from electricity meter	○	○
	Pulse	Power usage information from electricity meter		

Slave unit can connect only input5 (CN135).

Note :

*1: The "external input priority mode" must be set by pressing push button on PC board of outdoor unit.

*2: Batch stop or Emergency stop pattern can be selected by outdoor unit PC board push button.

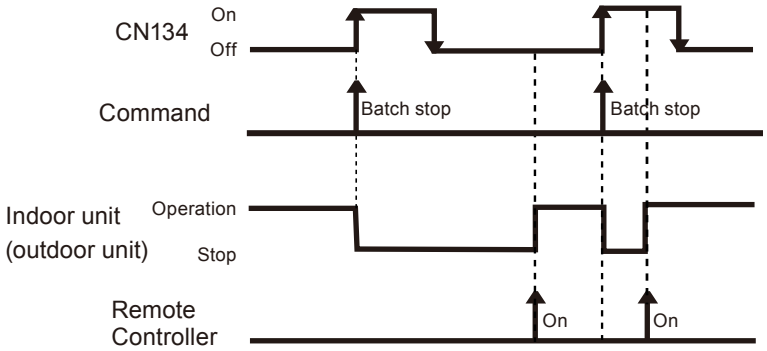
*3: The emergency stop function mounted in the equipment does not guarantee the regulations of each country. For this reason, sufficient checking is necessary regarding use.
Especially, since the fact that the equipment may not be emergency-stopped in the case of breaking of the wiring to the external input terminals and communication line, communication error due to noise, VRF external input circuit trouble, etc. must be considered, the provision of double measures that add direct interruption of the power supply by switch, etc. is recommended as a precaution.

*4: Pulse input to CN135 must be width 50ms or more, and must be interval 50ms or more.

EXTERNAL INPUT & OUTPUT

● When function setting is "Batch stop" mode

Connector	Input signal	Command
CN134	OFF → ON	Batch stop
	ON → OFF	-

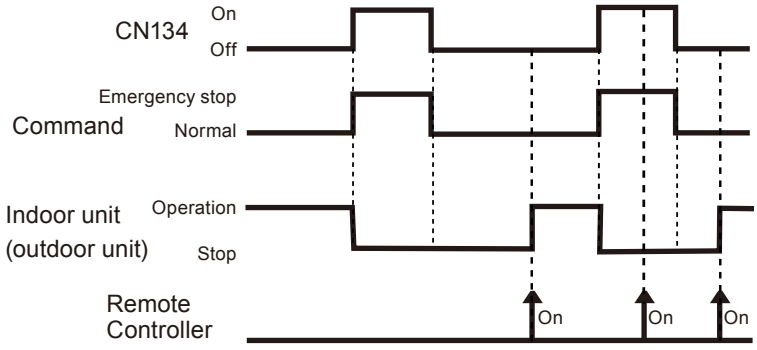


NOTE :

- All indoor units of same refrigerant system stops when Batch stop operates.
- After batch stop operates, the operation by remote controller is possible.

● When function setting is "Emergency stop" mode

Connector	Input signal	Command
CN134	ON	Emergency stop
	OFF	Normal



NOTE :

- All indoor units of same refrigerant system stops when Emergency stop operates.
- When the Emergency stop is triggered, indoor unit stops and Start/Stop operation by a remote controller is restricted.

EXTERNAL INPUT & OUTPUT

1-1-2. EXTERNAL OUTPUT

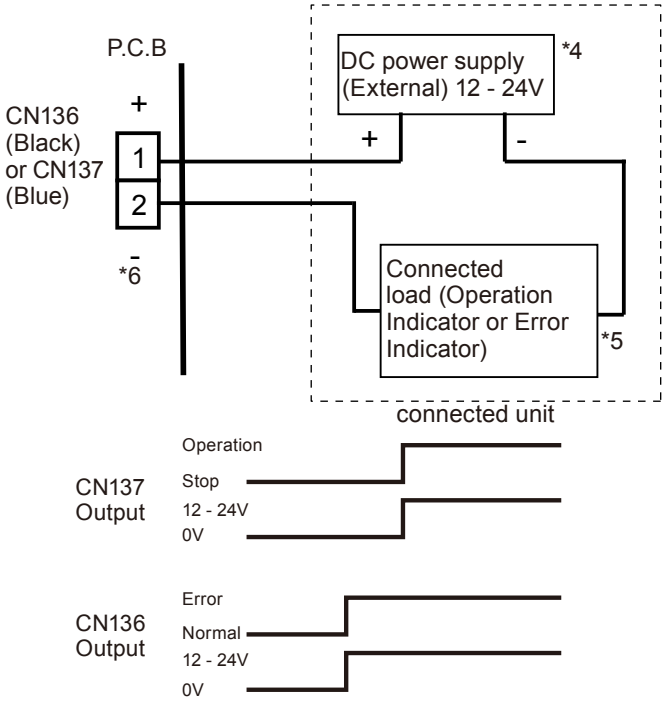
Connector	Output voltage	Status
CN136 (Black)	0V	Normal
	DC 12-24 V *4	Error
CN137 (Blue)	0V	Stop
	DC 12-24 V *4	Operation

■ ERROR STATUS (Master unit only)

This output indicates the outdoor unit and connected indoor unit's "Normal" or "Error" status.

■ OPERATION STATUS (Master unit only)

This output indicates the outdoor unit's "Operation" status.



*4: Provide a DC12 to 24V power supply. Select a power supply capacity with an ample surplus for the connected load.

*5: The allowable current is 30mA or less. Provide a load resistance such that the current becomes 30mA or less.

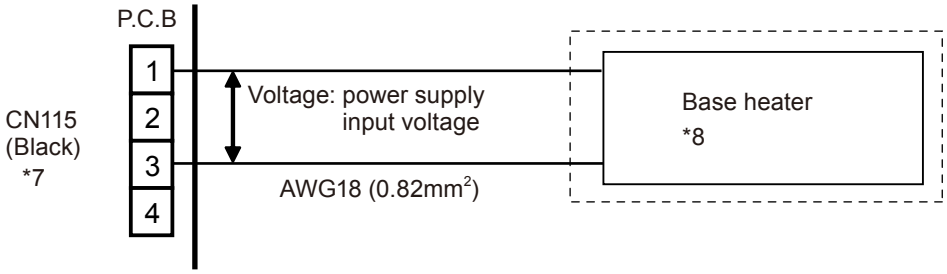
*6: Polarity is [+] for pin 1 and [-] for pin 2. Connect correctly.
Do not impress a voltage exceeding 24V across pins 1-2.

*A twisted pair cable (22AWG) should be used. Maximum length of cable is 150m.

*Use an external input and output cable with appropriate external dimension, depending on the number of cables to be installed.

■ BASE HEATER

This is the output signal for base heater. Output signal ON, when the outdoor temperature goes down below 2°C, and signal OFF at the outdoor temperature 4°C.

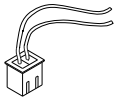
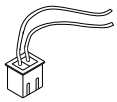
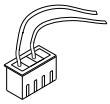


*7: Connect to pin 1 and pin 3. No connection pin2 and pin4.

*8: The allowable current is 1A or less.

EXTERNAL INPUT & OUTPUT

1-1-3. OPTIONAL PARTS

Usage	Name and shapes	Q'ty	Models
For external input (Low noise mode, Cooling/ Heating priority, Outdoor unit operation peak control, Emergency/batch stop) For external output (Error display, Operation display)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZ6
For external input (Electricity meter pulse)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZF
For external output (Base heater)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZ9

EXTERNAL INPUT & OUTPUT

1-1-4. OUTDOOR UNIT EXTERNAL INPUT / OUTPUT FUNCTION SUMMARY

■ OUTDOOR UNIT EXTERNAL INPUT FUNCTION

Item	Dry contact / Apply voltage	Function						Specifications	
		Emergency stop	Low noise mode operation	Cooling/ Heating priority	Outdoor unit operation peak control	Batch stop	Power usage information from electricity meter	Terminal	Signal type
Outdoor unit input function specification	Dry contact DC12[V]	-	● *2	-	-	-	-	CN 131 (PIN 1-2)	Edge
		-	-	●	-	-	-	CN 132 (PIN 1-2)	
		-	-	-	● *1	-	-	CN 133 PIN 1-2)	
		● (20-01)	-	-	-	● (20-00)	-	CN 134 (PIN 1-2)	
	-	-	-	-	-	-	●	CN 135 (PIN 1-2)	Pulse

*1 : If you use Outdoor unit operation peak control, select energy saving level from below.
30-00 Energy saving level 1 (Stop)
30-01 Energy saving level 2 (Operated at 40% capacity)
30-02 Energy saving level 3 (Operated at 60% capacity)
30-03 Energy saving level 4 (Operated at 80% capacity)
30-03 Energy saving level 5 (Operated at 100% capacity)

*2 : If you use Low noise mode operation, select low noise level from below.
42-00 Low noise level 1 (lower than rated value)
42-01 Low noise level 2 (lower than level 1)

NOTE :
- For selecting relay, minimum permissible load must be less than 1(mA).
- When you use Apply voltage, Take "+" polarity for PIN 1
- Number inside bracket "()" indicates function number and setting number.
- Expression "●" is equipping function.

■ OUTDOOR UNIT EXTERNAL OUTPUT FUNCTION

Item	Dry contact / Apply voltage	Function			Specifications			
		Operation status	Error status	Base heater	Terminal	Terminal output voltage	External power supply	
							Allowable voltage	Allowable current
Outdoor unit output function specification	Apply voltage	-	●	-	CN 136 (PIN 1-2)	-	DC12-24 [V]	30 mA or less
		●	-	-	CN 137 (PIN 1-2)			
	Dry contact	-	-	●	CN 115 (PIN 1-3)	AC240 [V]	-	1 A or less

NOTE :
- When you use Apply voltage, Take "+" porarity for PIN 1
- Expression "●" is equipping function.

EXTERNAL INPUT & OUTPUT

1-2. INDOOR UNIT

External input	External output	Input select	Connector	External connect kit (Optional parts)
Control input	-	Apply voltage	CNA01	UTY-XWZXZB
		Dry contact	CNA02	UTY-XWZXZD
Forced thermostat off	-	Apply voltage	CNA03	UTY-XWZXZ7
		Dry contact	CNA04	UTY-XWZXZE
-	Operation status	-	CNB01	UTY-XWZXZC
-	Error status			
-	Indoor unit status			
-	Auxiliary heater output			

1-2-1. EXTERNAL INPUT

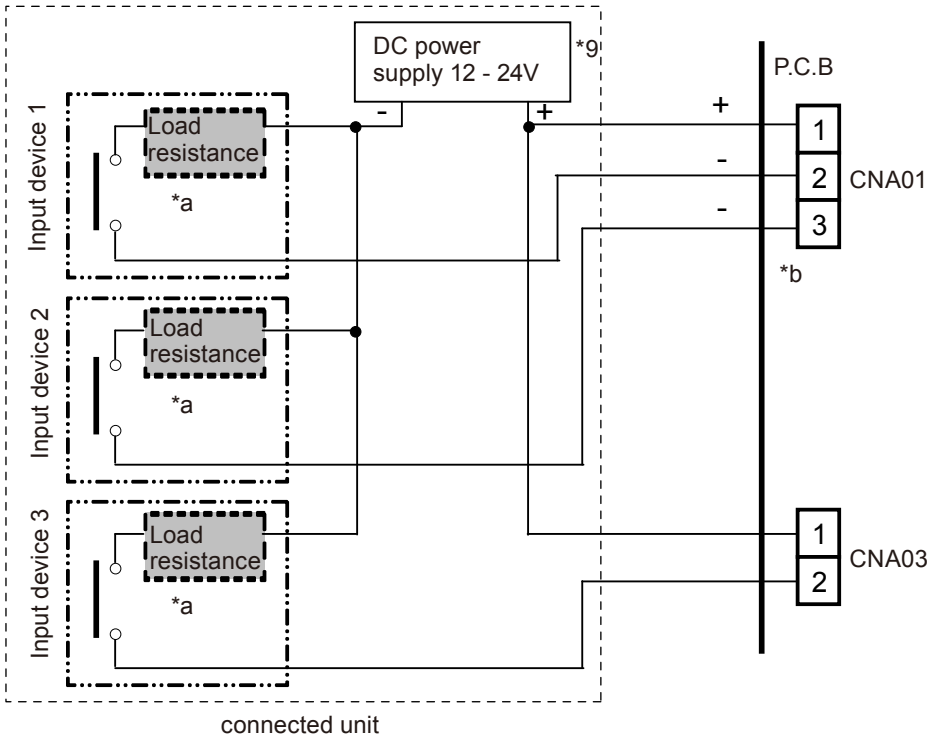
- Indoor unit can be Operation/Stop or Emergency stop or Forced stop by using indoor unit PCB CNA01 or CNA02.
- "Start/Stop" mode or "Emergency stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.
- Indoor unit can be Forced thermostat off by using indoor unit PCB CNA03 or CNA04.
- A twisted pair cable (22AWG) should be used. Maximum length of cable is 150m.
- Use an external input and output cable with appropriate external dimension, depending on the number of cables to be installed.
- The wire connection should be separate from the power cable line.

■ INPUT SELECT

Use either one of these types of terminal according to the application. (Both types of terminals cannot be used simultaneously.)

● Apply voltage terminal ([CNA01], [CNA03])

When a power supply must be provided at the input device you want to connect, use the Apply voltage terminal ([CNA01], [CNA03])



*9: Make the power supply DC12 to 24V. Select a power supply capacity with an ample surplus for the connected load.

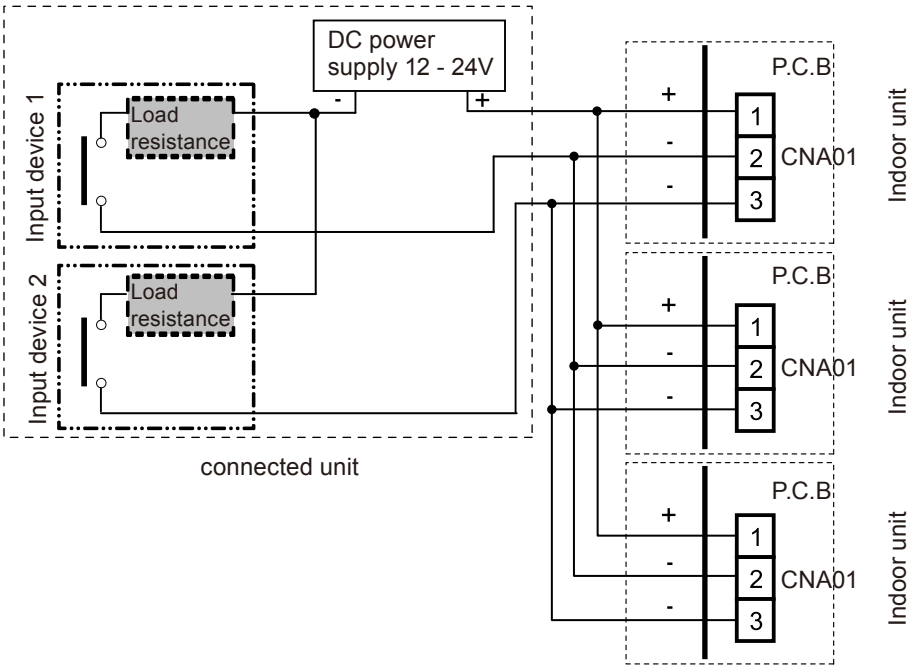
Do not impress a voltage exceeding 24V across pins 1-2, and 1-3.

*a: The allowable current is DC 5mA to 10mA. (Recommended: DC5mA)
Provide a load resistance such that the current becomes DC10mA or less.
Select very low current use contacts (usable at DC12V, DC1mA or less).

*b: The polarity is [+] for pin 1 and [-] for pin 2 and 3. Connect correctly.

EXTERNAL INPUT & OUTPUT

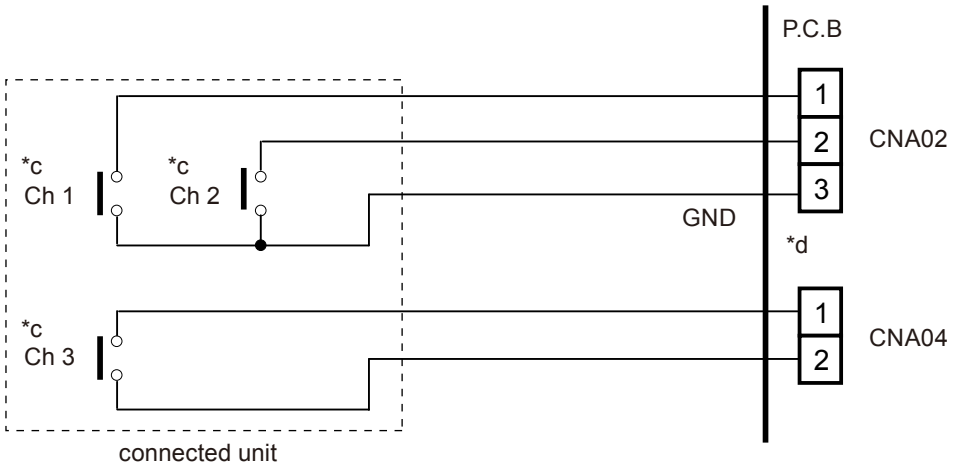
When connected to Apply voltage terminals of multiple indoor units with a connected unit, be sure to make a branch outside the indoor unit using a pull box, etc. as shown on below example.



EXTERNAL INPUT & OUTPUT

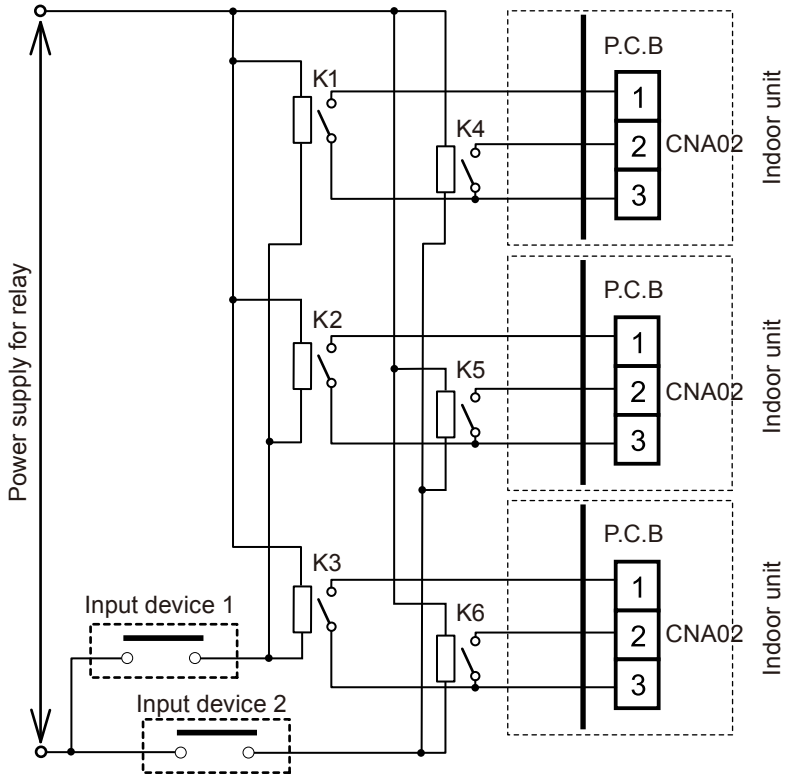
● Dry contact terminal ([CNA02], [CNA04])

When a power supply is unnecessary at the input device you want to connect, use the Dry contact terminal ([CNA02], [CNA04]).



*c: Select very low current use contacts (usable at DC12V, DC1mA or less).
*d: The wiring is different from Apply voltage terminals. Be sufficiently careful when wiring.

When connected to Dry contact terminals of multiple indoor units with a connected unit, insulate each indoor unit with relay, etc. as shown on below example.



K1 - K6 : Relay
(Device for DC Current)

NOTE :

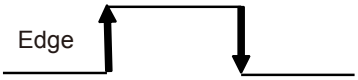
● When connected to multiple indoor units directly, it will cause breakdown.

EXTERNAL INPUT & OUTPUT

■ INPUT SIGNAL TYPE

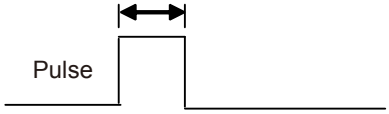
The input signal type can be selected.

It is switched by Dip-Sw on the indoor unit PCB.



(◆...Factory setting)

	Dip-sw [Set 2-2]	Input signal type
◆	OFF	Edge
	ON	Pulse



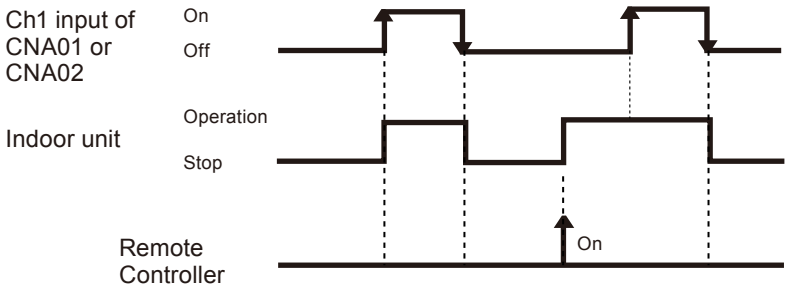
Note: input signal type of Ch3 (Forced thermostat off) is only "Edge".

■ CONTROL INPUT FUNCTION

● When function setting is "Operation/Stop" mode

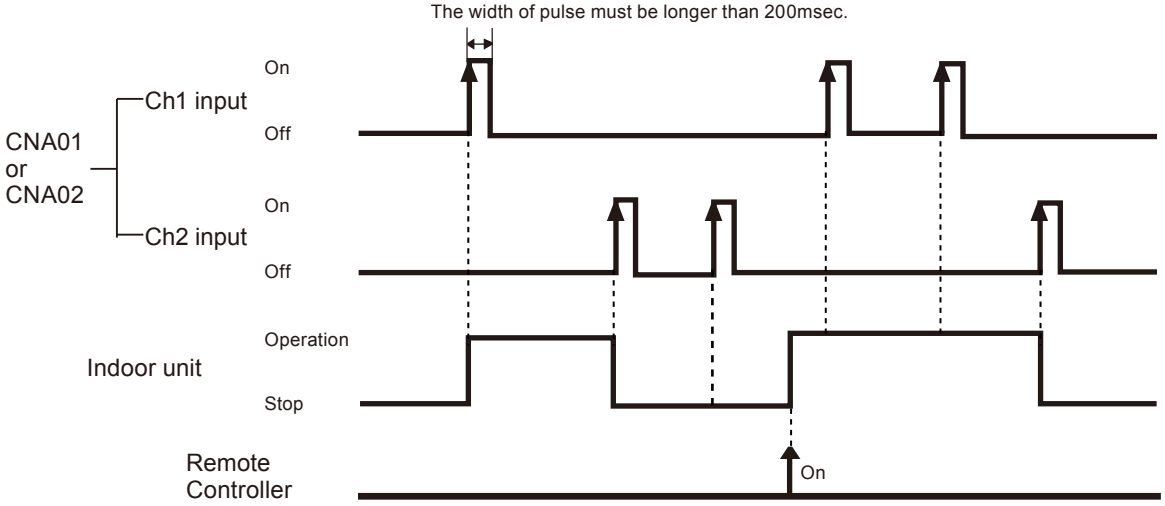
●In the case of "Edge" input

Connector	Input signal	Command
Ch1 of CNA01 or CNA02	OFF → ON	Operation
	ON → OFF	Stop



●In the case of "Pulse" input

Connector		Input signal	Command
CNA01 or CNA02	Ch1	OFF → ON	Operation
	Ch2	OFF → ON	Stop



NOTE :

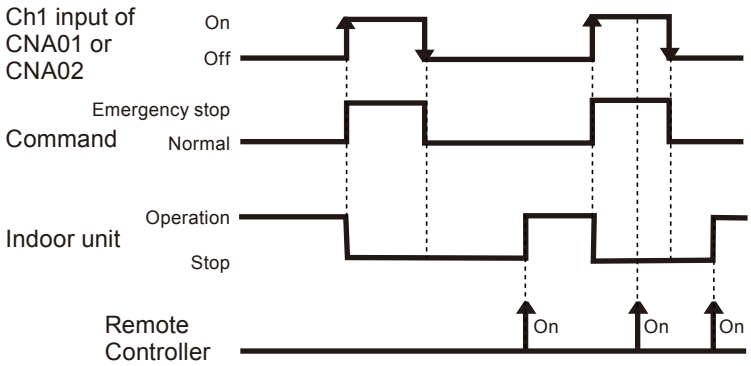
- The last command has priority.
- The indoor units within the same remote controller group operates in the same mode.

EXTERNAL INPUT & OUTPUT

● When function setting is "Emergency stop" mode

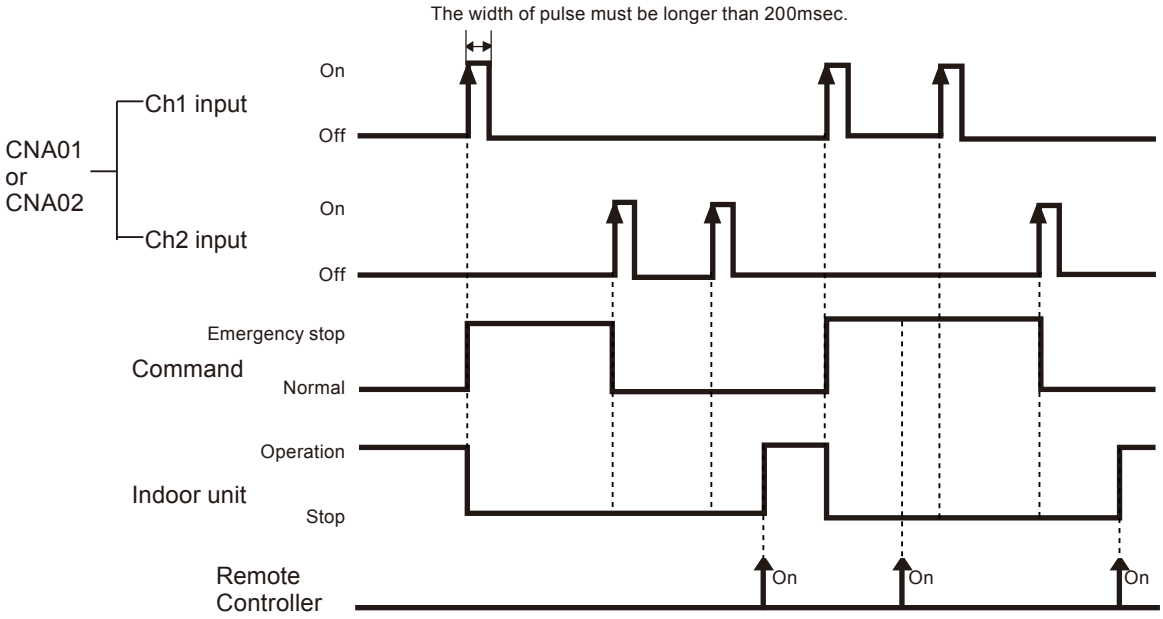
●In the case of "Edge" input

Connector	Input signal	Command
Ch1 of	OFF → ON	Emergency stop
CNA01 or CNA02	ON → OFF	Normal



●In the case of "Pulse" input

Connector		Input signal	Command
CNA01 or CNA02	Ch1	OFF → ON	Emergency stop
	Ch2	OFF → ON	Normal



NOTE :

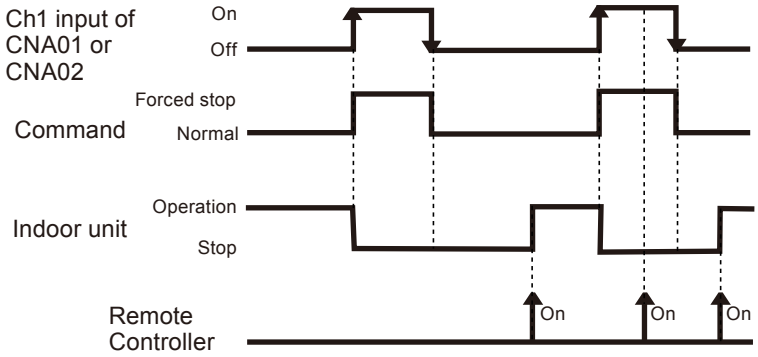
● All indoor units of same refrigerant system stops when Emergency stop operates.

EXTERNAL INPUT & OUTPUT

● When function setting is "Forced stop" mode

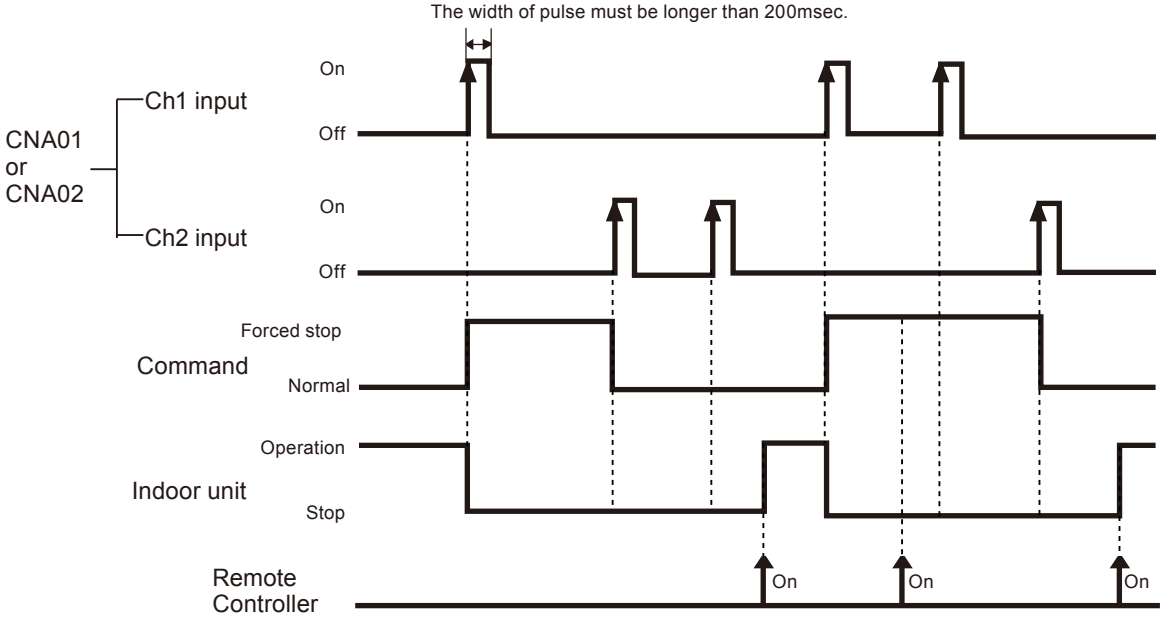
●In the case of "Edge" input

Connector	Input signal	Command
Ch1 of CNA01 or CNA02	OFF → ON	Forced stop
	ON → OFF	Normal



●In the case of "Pulse" input

Connector		Input signal	Command
CNA01 or CNA02	Ch1	OFF → ON	Forced stop
	Ch2	OFF → ON	Normal



NOTE :

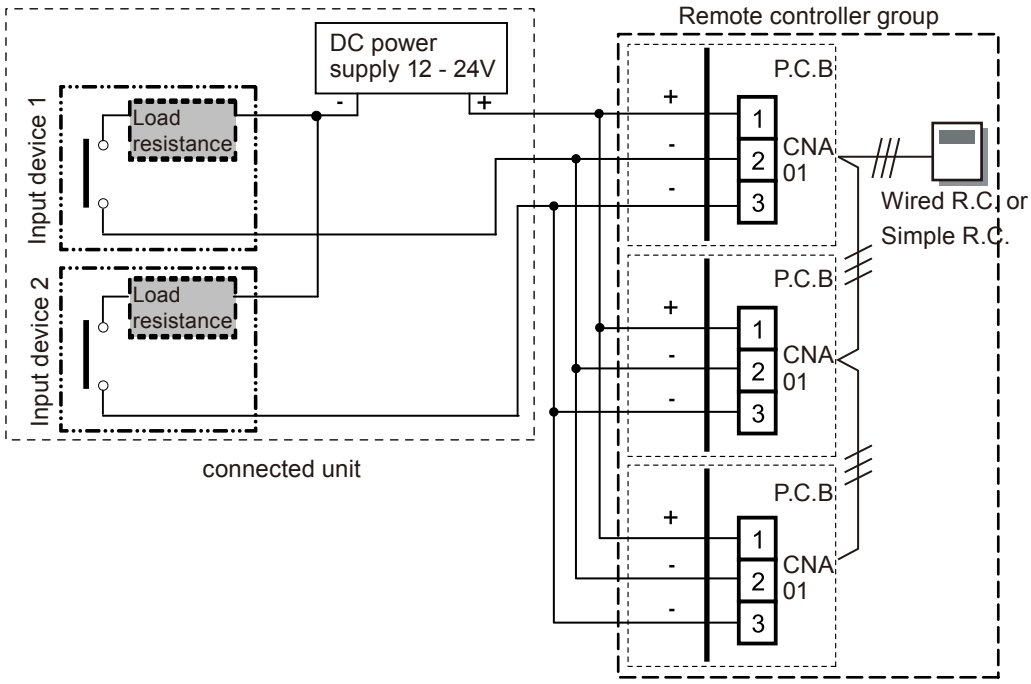
- When the forced stop is triggered, indoor unit stops and Operation/Stop operation by a remote controller is restricted.

EXTERNAL INPUT & OUTPUT

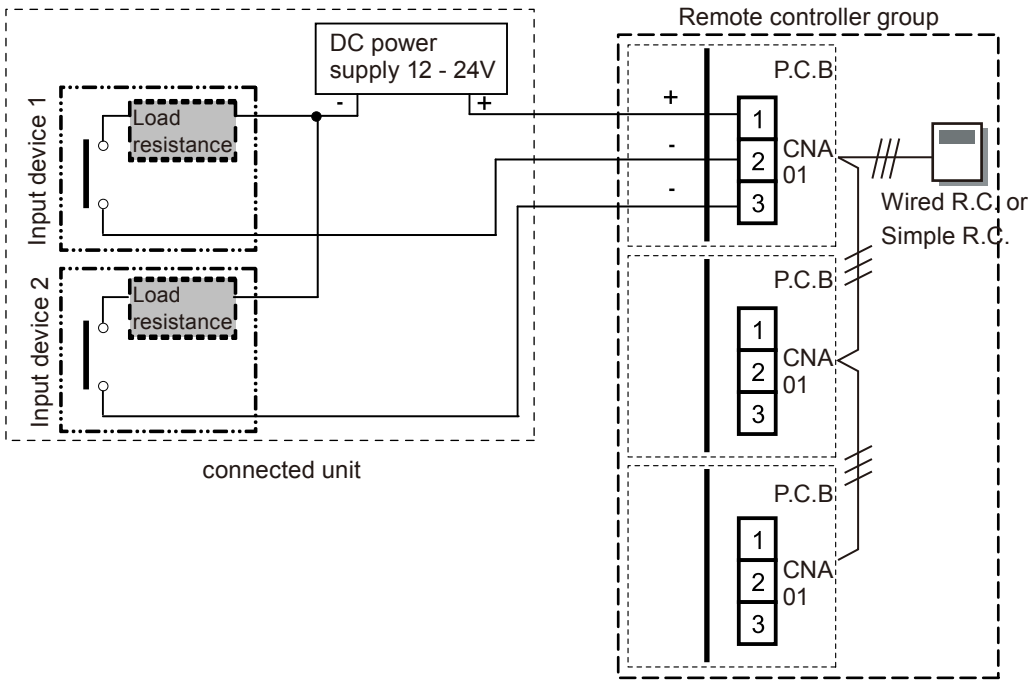
●Considerations when setting forced stop

⚠CAUTION
When forced stop function is used with forming a remote controller group, connect the same equipment to each indoor unit within the group.

Example 1 : OK



Example 2 : Prohibited



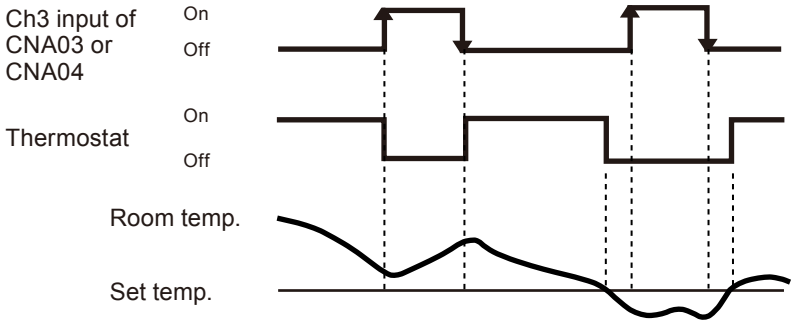
EXTERNAL INPUT & OUTPUT

■ FORCED THERMOSTAT OFF FUNCTION

●"Edge" input only

Connector	Input signal	Command
Ch3 of CNA03 or CNA04	OFF → ON	Thermostat off
	ON → OFF	Normal

Example of cooling mode

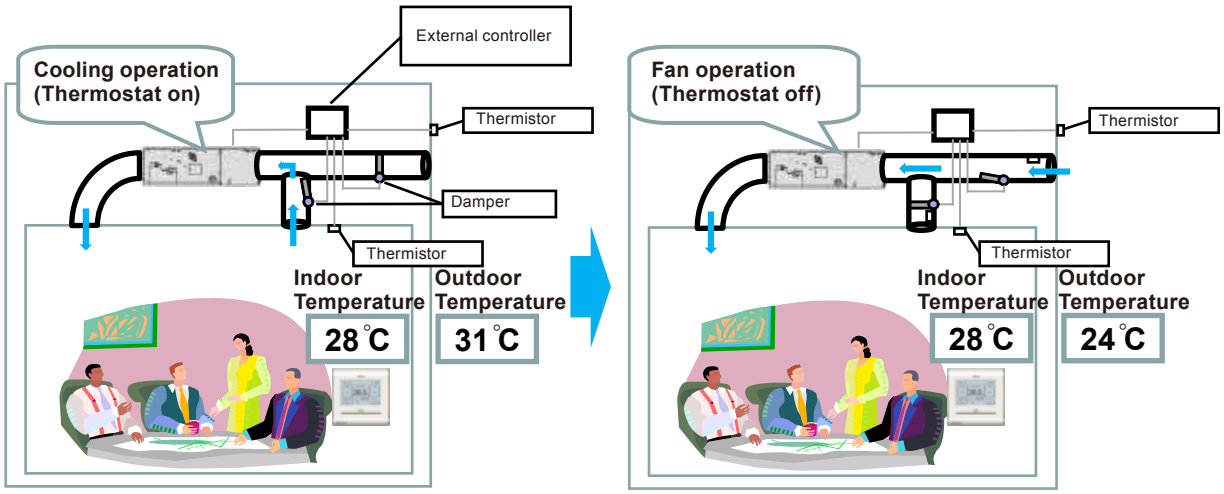


NOTE :

- Indoor unit may not do thermostat off promptly even if receive signal by operating conditions of other indoor unit of same refrigerant system.

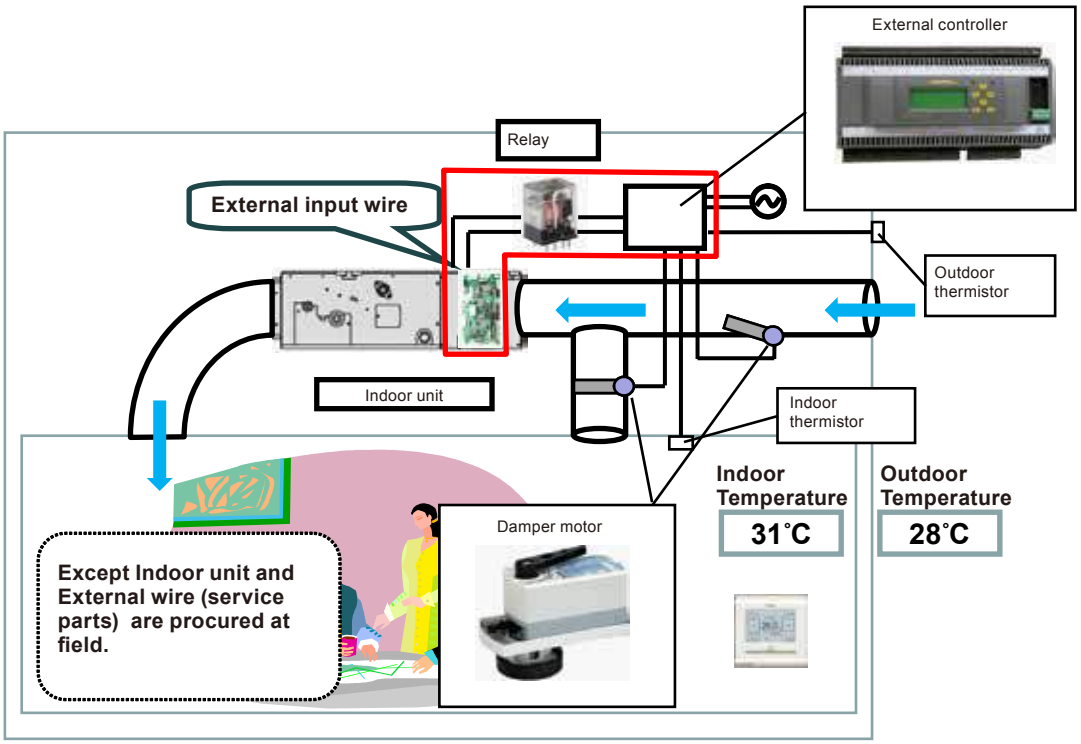
● Example 1

Forced thermostat off is one of the function to save energy. For example, case of outdoor temperature is lower than Indoor temperature, Indoor unit of air conditioner worked as Fan operation based upon receiving signal from external controller. (Cooling Only)

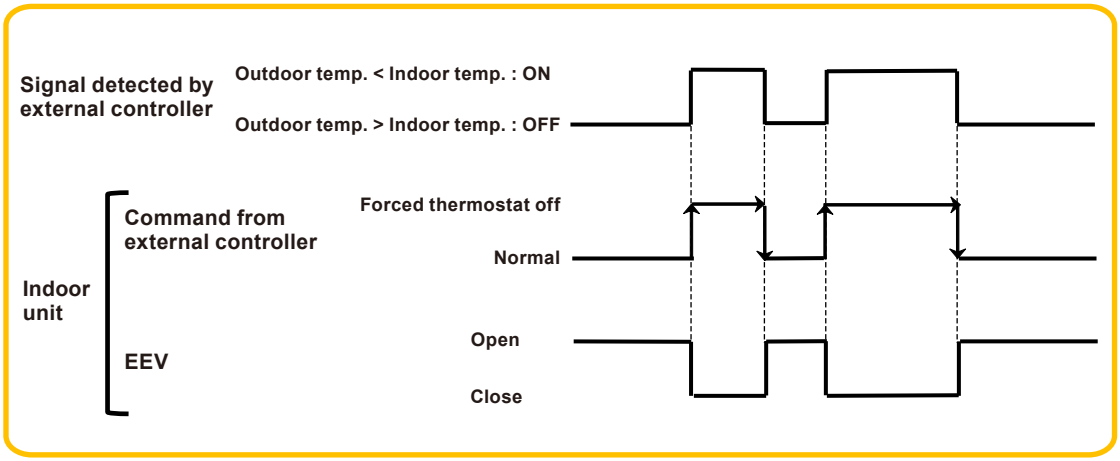


EXTERNAL INPUT & OUTPUT

●System figure example



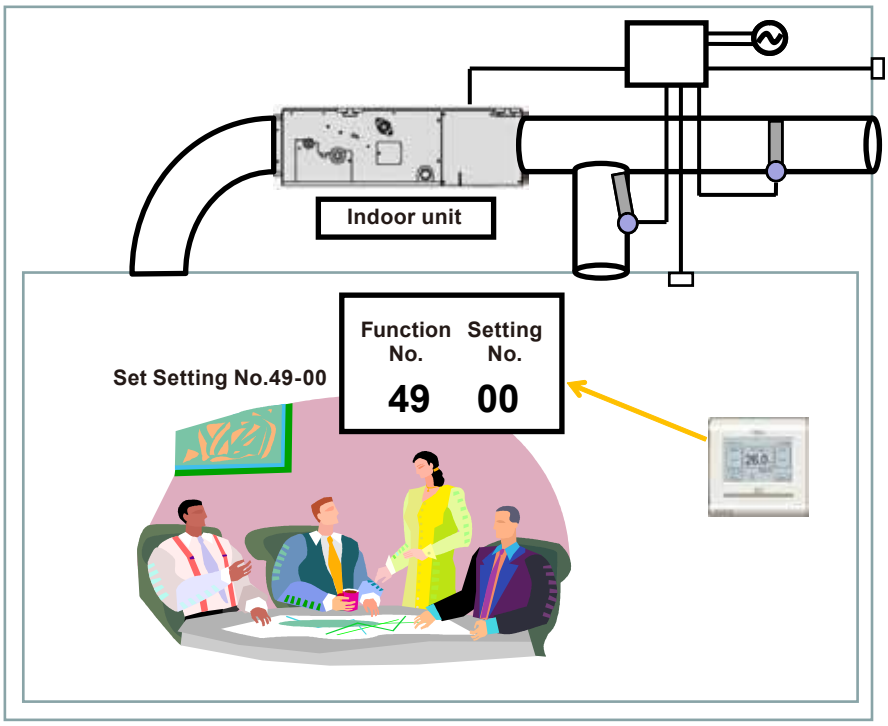
●Operation status



Normal means that Indoor unit is continued appropriate operation until [Forced thermostat off] signal received, at condition which are set by central and individual controller or detected by thermo sensors of indoor unit.

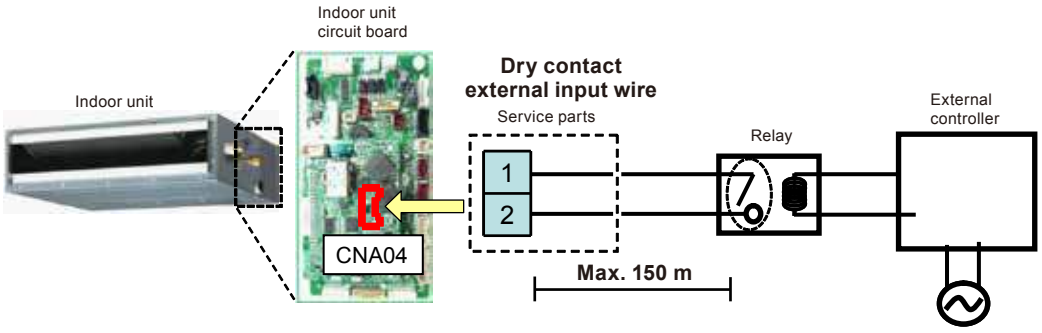
EXTERNAL INPUT & OUTPUT

●Function setting of indoor unit



Indoor unit is continued appropriate operation until [Forced thermostat off] signal received, at condition which are set by central and individual controller or detected by thermo sensors of indoor unit. Once received [Forced thermostat off] signal received, Indoor unit start operation under Fan mode.

●Example of Electrical circuit



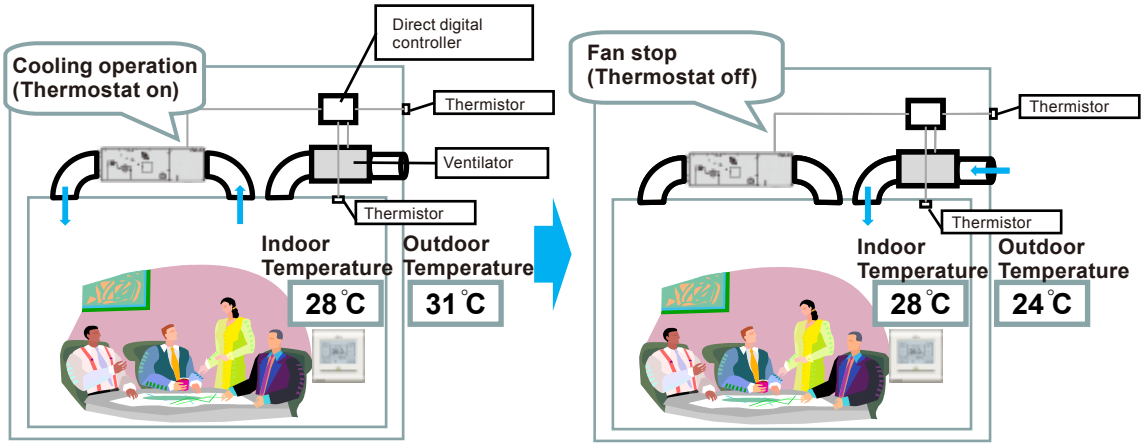
Specification of external input	
Item	Spec
Terminal	CNA04
Output voltage	DC 12V
Wire diameter	AWG22 Twist (0.33mm^2)
Service parts No.	9368778019

Requirement for relay switch	
Item	Spec
Min. permissible load	1mA or less

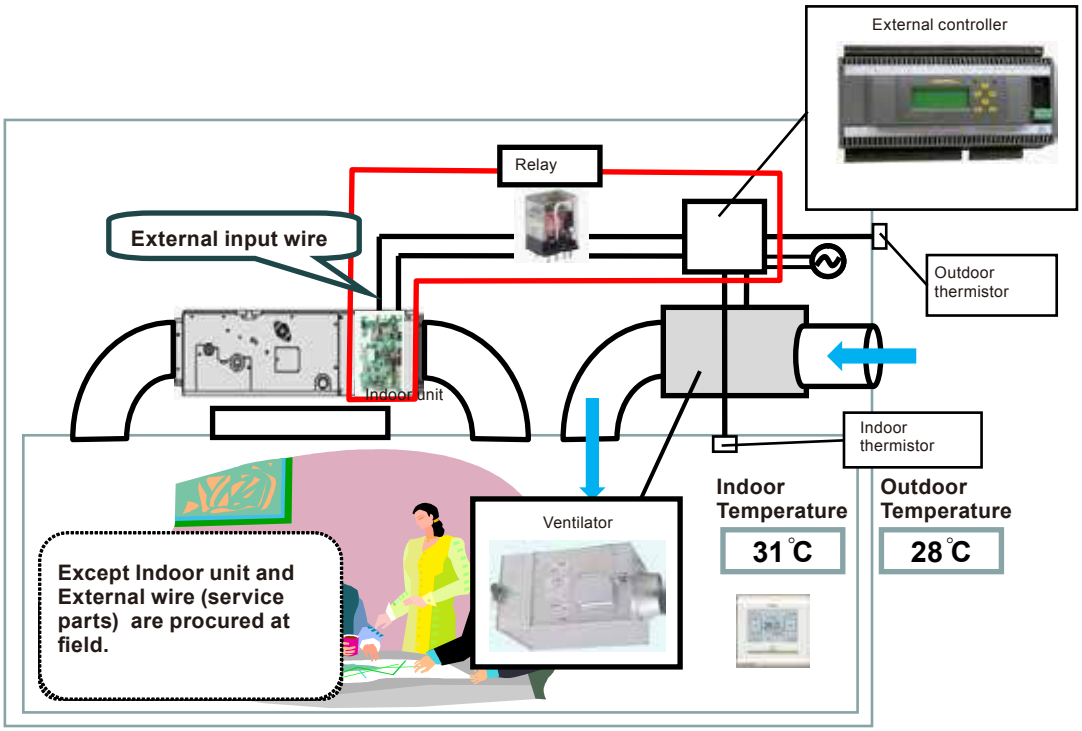
EXTERNAL INPUT & OUTPUT

● Example 2

Forced thermostat off is one of the function to save energy. For example, case of using ventilator at condition with outdoor temperature is lower than Indoor temperature, Indoor unit of air conditioner stop based upon receiving signal from external controller. (Cooling Only)

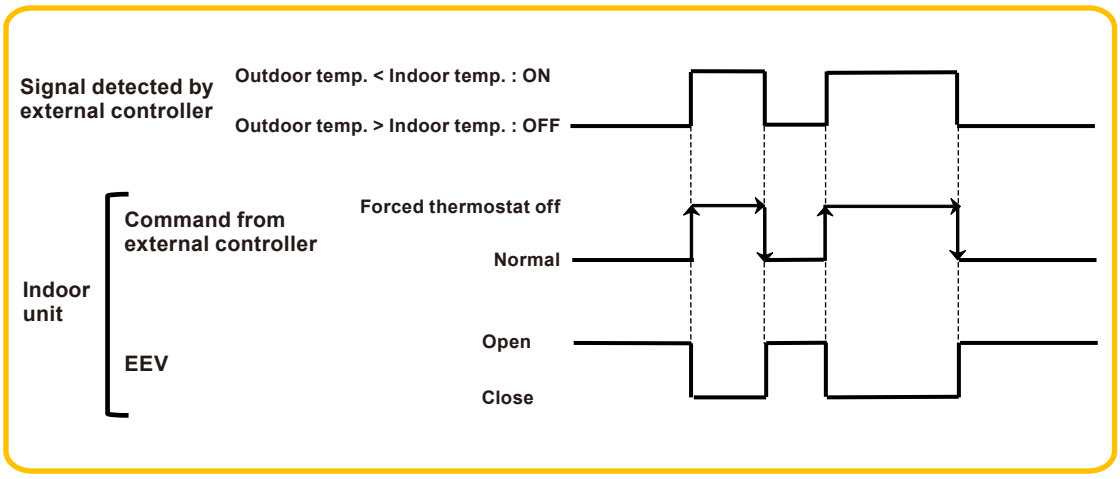


●System figure example



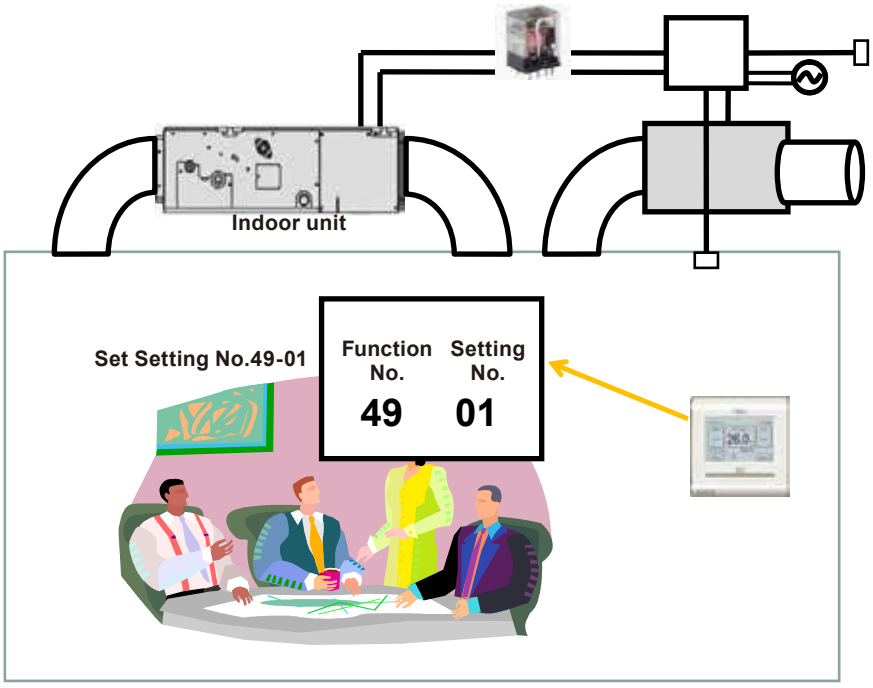
EXTERNAL INPUT & OUTPUT

●Operation status



Normal means that Indoor unit is continued appropriate operation until [Forced thermostat off] signal received, at condition which are set by central and individual controller or detected by thermo sensors of indoor unit.

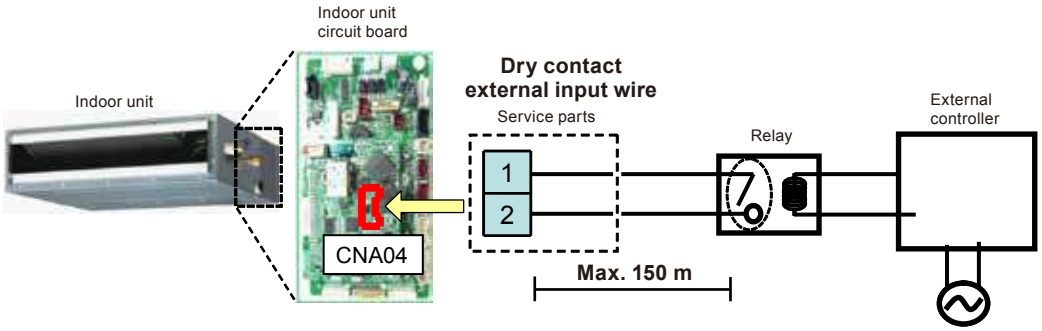
●Function setting of indoor unit



Indoor unit is continued appropriate operation until [Forced thermostat off] signal received, at condition which are set by central and individual controller or detected by thermo sensors of indoor unit. Once received [Forced thermostat off] signal received, Indoor unit stop operation.

EXTERNAL INPUT & OUTPUT

●Example of Electrical circuit



Specification of external input	
Item	Spec
Terminal	CNA04
Output voltage	DC 12V
Wire diameter	AWG22 Twist (0.33mm^2)
Service parts No.	9368778019

Requirement for relay switch	
Item	Spec
Min. permissible load	1mA or less

EXTERNAL INPUT & OUTPUT

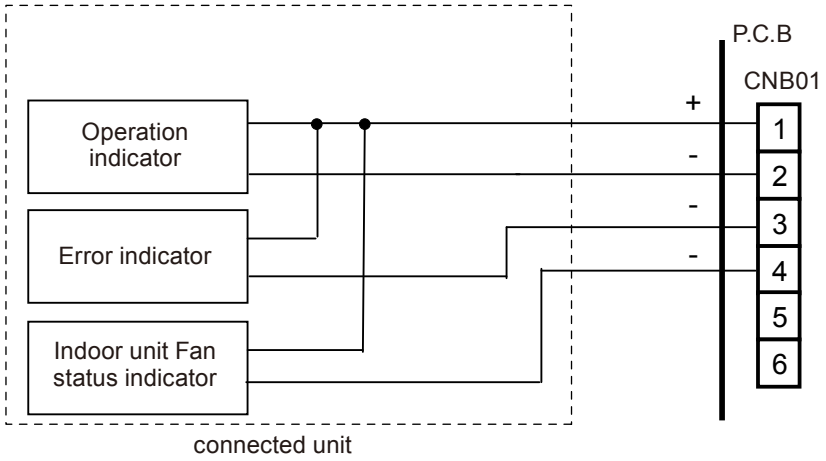
1-2-2. EXTERNAL OUTPUT

- A twisted pair cable (22AWG) should be used. Maximum length of cable is 25m.
- Use an external input and output cable with appropriate external dimension, depending on the number of cables to be installed.
- Output voltage: Hi DC12V±2V, Lo 0V.
- Permissible current: 50mA

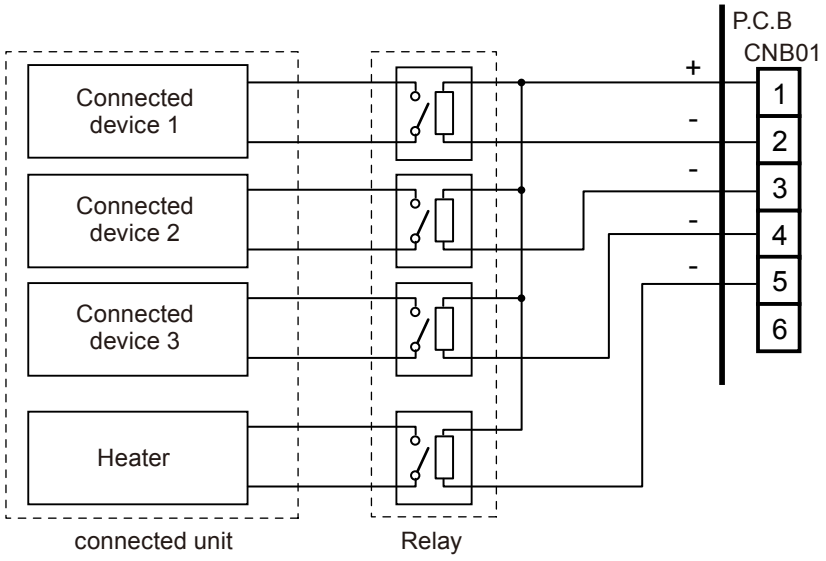
Connector		Output voltage	Status
CNB01	External output1	0V	Stop
	Pins 1-2	DC 12V	Operation
	External output2	0V	Normal
	Pins 1-3	DC 12V	Error
	External output3	0V	Indoor unit fan stop
	Pins 1-4	DC 12V	Indoor unit fan operation
	External output4	0V	Auxiliary heater OFF
	Pins 1-5	DC 12V	Auxiliary heater ON

■ OUTPUT SELECT

● When indicator etc. are connected directly



● When connecting with unit equipped with a power supply

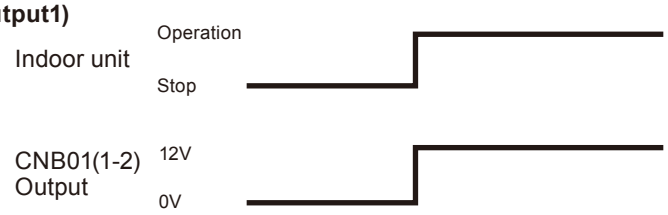


EXTERNAL INPUT & OUTPUT

■ OPERATION STATUS (External output1)

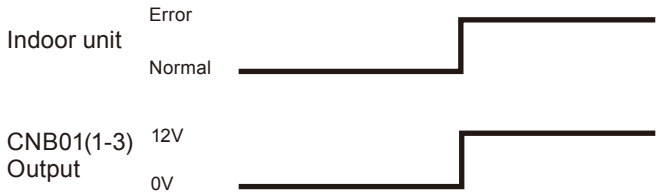
The output for CNB01 (1-2) is ON when the indoor unit is operating.

The output is off when the unit is stopped.



■ ERROR STATUS (External output2)

The output for CNB01 (1-3) is ON when an error is generated for the indoor unit.



■ INDOOR UNIT STATUS (External output3)

The output for CNB01 (1-4) is ON when the indoor unit fan is operating.

The output is off when the fan is stopped or during cold air prevention.

The output for CNB01 (1-4) is OFF during thermostat OFF when DRY mode operation.



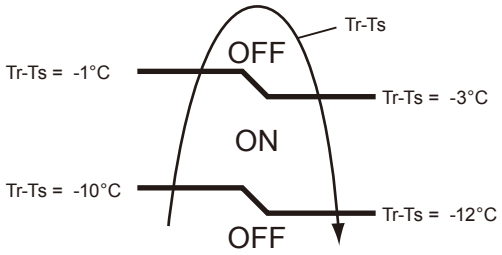
Ex) Used for inter lock energize for exhaust fan.

■ AUXILIARY HEATER OUTPUT (External output4)

Corresponding indoor units: All duct type.

A signal is outputted from Connector when indoor fan and thermostat ON under heating operation.

*Signal output performance specifications are as shown on the right



Ex. When Set Temperature(Ts) is 22°C

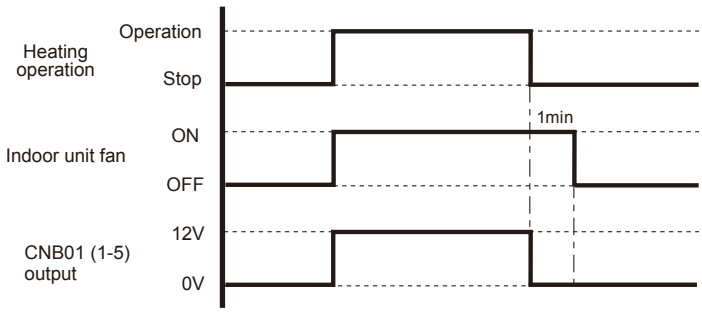
- and Room Temperature(Tr) increase above 12°C, signal output is on.
- and Room Temperature(Tr) increase above 21°C, signal output is off.
- and Room Temperature(Tr) decrease below 19°C, signal output is on.
- and Room Temperature(Tr) decrease below 10°C, signal output is off.

The output also turns OFF on defrost operation and oil recovery operation.

● Fan delay switch (Indoor Unit)

This is used to continue indoor unit fan operation for 1 minute after thermo OFF in heating mode.

1 minute delay control set by Dip sw2-3 on PCB is ON.

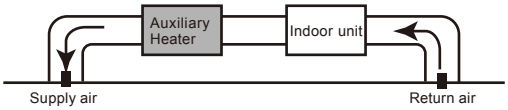


⚠CAUTION

Please install auxiliary heater between the indoor unit and the outlet side.

Please be sure to use delay control of a fan.

Please design and install auxiliary properly considering protection by auxiliary itself.



If auxiliary does not design and install properly, it may cause fire by auxiliary's heat.

In case of auxiliary does not design and install properly, our company cannot take responsibility.

EXTERNAL INPUT & OUTPUT

1-2-3. OPTIONAL PARTS

Usage	Name and shapes	Q'ty	Models
For output port	EXTERNAL CONNECT KIT 	1	UTY-XWZXZC
For control input port (Apply voltage terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZB
For control input port (Dry contact terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZD
For forced thermostat off port (Apply voltage terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZ7
For forced thermostat off port (Dry contact terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZE

EXTERNAL INPUT & OUTPUT

1-2-4. INDOOR UNIT EXTERNAL INPUT / OUTPUT FUNCTION SUMMARY

■ INDOOR UNIT EXTERNAL INPUT FUNCTION

Item	Dry contact/ Apply voltage	Function				Specifications				
		Operation / Stop	Emergency stop	Forced Stop	Forced thermostat off	Terminal	Signal type	External power supply		Wire size / length
								Allowable voltage	Allowable current	
Indoor unit input function specification	Dry contact DC12[V]	● (46-00)	● (46-01)	● (46-02)	-	CNA02 (PIN1-3)	Edge	-	-	AWG22 Twist / Max. Cable length 150 [m]
						CNA02 (Ch1:PIN1-3) (Ch2:PIN2-3)	Pulse *1			
		-	-	-	●	CNA04 (PIN1-2)	Edge			
	Apply voltage	● (46-00)	● (46-01)	● (46-02)	-	CNA01 (PIN1-2)	Edge	DC12-24 [V]	10 [mA] or less	
						CNA01 (Ch1:PIN1-2) (Ch2:PIN1-3)	Pulse *1			
		-	-	-	●	CNA03 (PIN1-2)	Edge			

*1 : Default setting is Edge signal, if you use pulse signal, must be set Dip SW2-2 to ON position.

■ INDOOR UNIT EXTERNAL OUTPUT FUNCTION

Item	Dry contact / Apply voltage	Function				Specifications			
		Operation status	Error status	Indoor unit fan operation status	Auxiliary heater output	Terminal	Terminal output voltage	Wire size	Maximum length of cable
Indoor unit output function specification	Dry contact	●	-	-	-	CNB01 (PIN1-2)	DC12 [V]	AWG22 Twist	25 [m]
		-	●	-	-	CNB01 (PIN1-3)			
		-	-	●	-	CNB01 (PIN1-4)			
		-	-	-	● *	CNB01 (PIN1-5)			

* : Auxilary heater is only available for duct type indoor unit.
If you use Auxiliary heater output, must be set Dip SW2-3 to ON position.

EXTERNAL INPUT & OUTPUT

1-3. RB UNIT

External input	External output	Input select	Connector	External connect kit (Optional parts)
Cooling priority/ Heating priority	-	Dry contact	CNA01	UTY-XWZXZ6
		Apply voltage	CNA02	UTY-XWZXZB

1-3-1. EXTERNAL INPUT

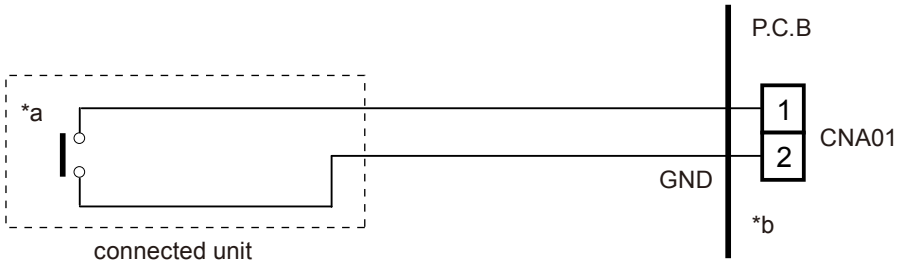
- RB unit can be cooling priority/heating priority selection by using RB unit PCB CNA01 or CNA02.
- The "external input priority mode" must be set by changing DIP SW on PC board of RB unit.
- A twisted pair cable (22AWG) should be used. Maximum length of cable is 150m.
- Use an external input cable with appropriate external dimension, depending on the number of cables to be installed.
- The wire connection should be separate from the power cable line.

■ INPUT SELECT

Use either one of these types of terminal according to the application. (Both types of terminals cannot be used simultaneously.)

● Dry contact terminal ([CNA01])

When a power supply is unnecessary at the input device you want to connect, use the Dry contact terminal ([CNA01]).

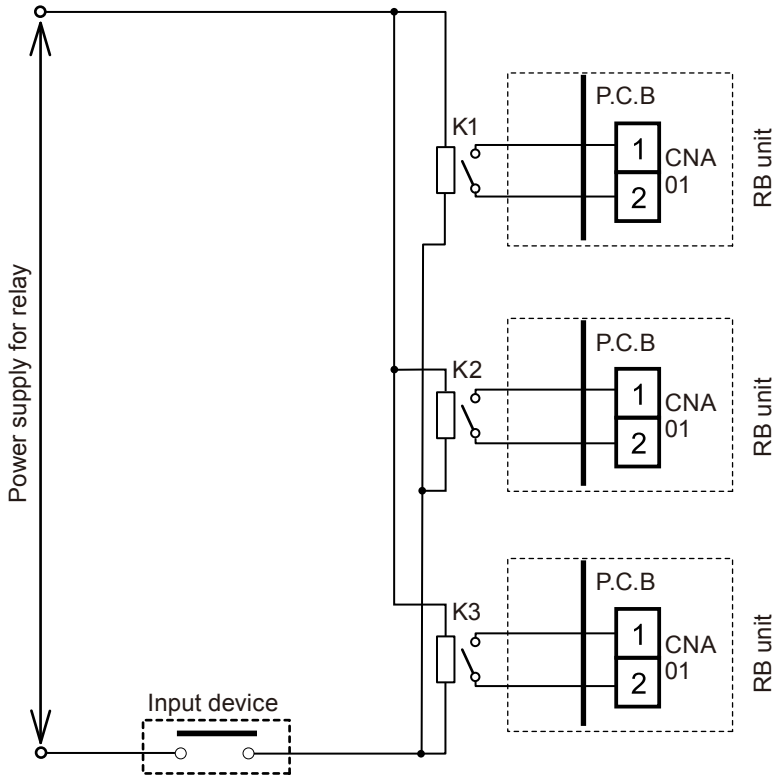


*a: Select very low current use contacts (usable at DC12V, DC1mA or less).

*b: The wiring is different from Apply voltage terminals. Be sufficiently careful when wiring.

EXTERNAL INPUT & OUTPUT

When connected to Dry contact terminals of multiple RB units with a connected unit, insulate each RB unit with relay, etc. as shown on below example.



K1 - K3 : Relay
(Device for DC Current)

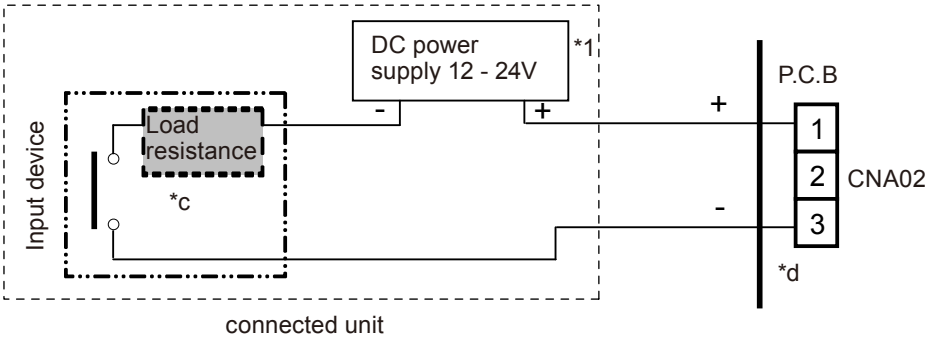
NOTE :

● When connected to multiple RB units directly, it will cause breakdown.

EXTERNAL INPUT & OUTPUT

● Apply voltage terminal ([CNA02])

When a power supply must be provided at the input device you want to connect, use the Apply voltage terminal ([CNA02])

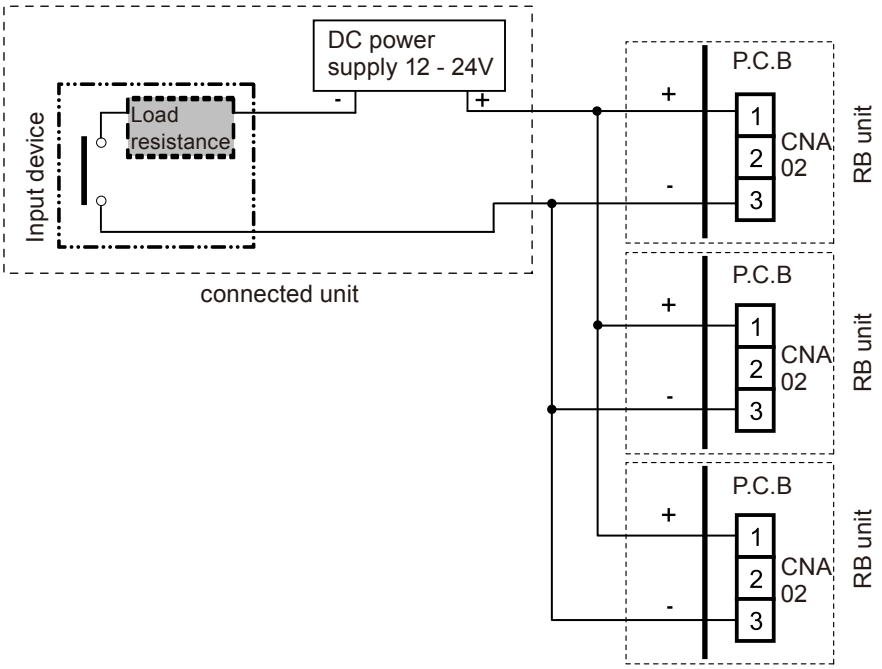


*1: Make the power supply DC12 to 24V. Select a power supply capacity with an ample surplus for the connected load.
Do not impress a voltage exceeding 24V across pins 1-3.

*c: The allowable current is DC 5mA to 10mA. (Recommended: DC5mA)
Provide a load resistance such that the current becomes DC10mA or less.
Select very low current use contacts (usable at DC12V, DC1mA or less).

*d: The polarity is [+] for pin 1 and [-] for pin 3. Connect correctly.

When connected to Apply voltage terminals of multiple RB units with a connected unit, be sure to make a branch outside the RB unit using a pull box, etc. as shown on below example.

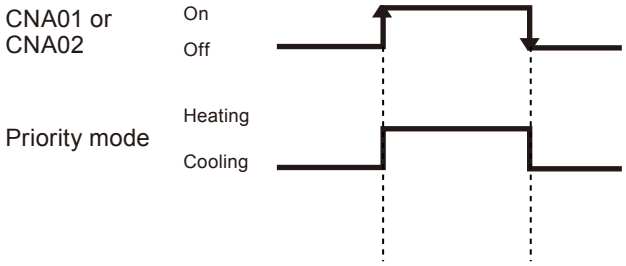


EXTERNAL INPUT & OUTPUT

■ COOLING/HEATING PRIORITY FUNCTION

●"Edge" input only

Connector	Input signal	Command
CNA01 or CNA02	OFF → ON	Heating priority
	ON → OFF	Cooling priority



1-3-2. OPTIONAL PARTS

Usage	Name and shapes	Q'ty	Models
For control input port (Dry contact terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZ6
For control input port (Apply voltage terminal)	EXTERNAL CONNECT KIT 	1	UTY-XWZXZB

EXTERNAL INPUT & OUTPUT

1-4. TOUCH PANEL CONTROLLER

External input	External output	Connector	External connect kit (Optional parts)
Control input	-	TM201 (CN411 or CN412)	-
Electricity meter	-		-
-	Operation status	CN410	UTY-XWZXZA
-	Error status		

1-4-1. EXTERNAL INPUT

- This function performs “Emergency stop” or “All On / All Off” by using the signal to be input externally at external input terminals.

■ INPUT SELECT

Use either one of these types of terminal according to the application. (Both types of terminals cannot be used simultaneously.)

Please see more detail of selection setting by operation manual of Touch Panel Controller.

It is possible to switch to the Dry contact terminal or the Apply voltage terminal by connecting the CN201 on the TM201 printed circuit board to the CN411 or the CN412 on the printed circuit board of the panel side.

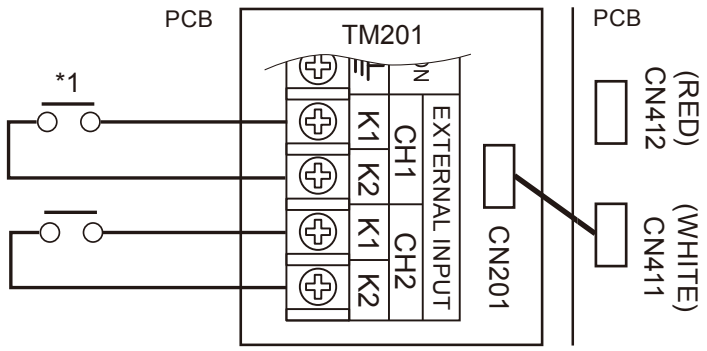
* The Dry contact terminal (connected to the CN411) is set when shipped from the factory.

TM201 - K1, K2	Connect with the CN201
Dry contact terminal	CN411
Apply voltage terminal	CN412

● Dry contact terminal TM201 (CN411)

When a power supply is unnecessary at the input device you want to connect, use the Dry contact terminal TM201 (CN411).

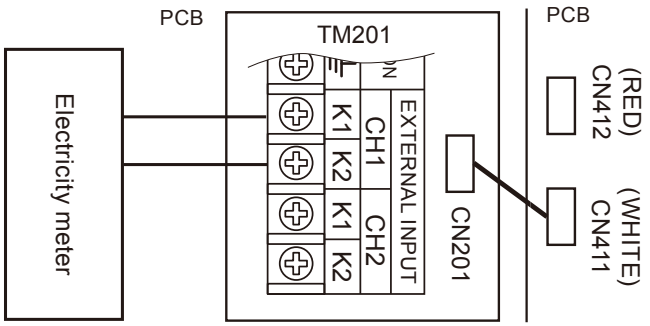
Connection example 1: When the switch is connected



*1 : Short circuit detection resistance (R_{ON}) : ≤ 500 (ohm).
Open circuit detection resistance (R_{OFF}) : ≥ 100 (kilo-ohm).
A twisted pair cable(22AWG) should be used. Maximum length of cable is 25m.

EXTERNAL INPUT & OUTPUT

Connection example 2: When the electricity meter is connected

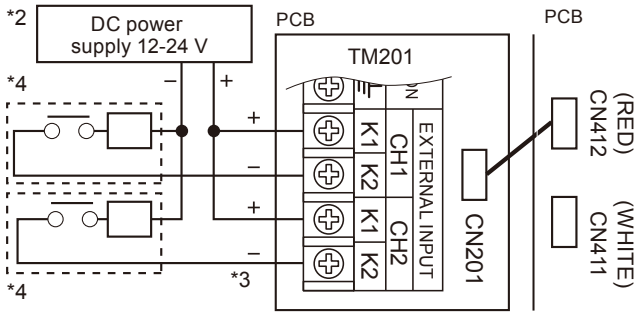


Connect the electricity meter to CH1. In this case, the use of CH2 is prohibited.

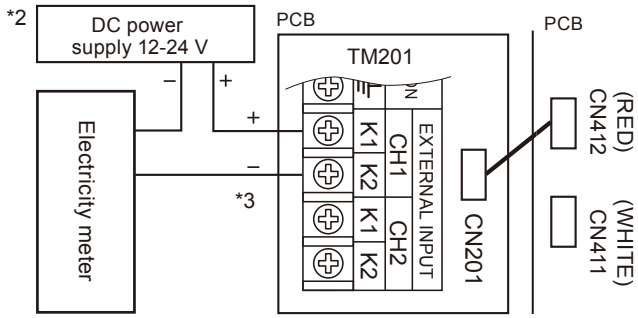
● Apply voltage terminal TM201 (CN412)

When a power supply must be provided at the input device you want to connect, use the Apply voltage terminal TM201 (CN412).

Connection example 1: When the switch is connected



Connection example 2: When the electricity meter is connected



*2: Make the power supply DC 12 to 24 V. Select a power supply capacity with an ample surplus for the connected load.

*3: Do not impress a voltage exceeding 24 V across K1-K2.

*4: The allowable current is DC 10 mA or less. (Recommended DC 5 mA) Provide a load resistance such that the current becomes DC 10 mA or less. Select very low current use contacts (usable at DC 12 V, DC 1 mA or less). A twisted pair cable 0.33 mm2 (22AWG) should be used. Maximum length of cable is 25 m (82 ft).

EXTERNAL INPUT & OUTPUT

■ SELECTING THE FUNCTION

The function of the external input terminals is disabled at the factory.

Select the function to be used (following table) by installer setting of application.

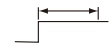
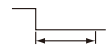
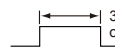
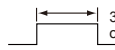
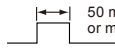
* Turn on the power and select by installer setting after starting the application.

Emergency stop
Batch start/stop
Electricity meter

Edge
Pulse

■ INPUT SIGNAL TYPE

The input signal type can be selected.

Edge	Emergency stop or batch start	CH1	
	Emergency stop reset or batch stop	CH1	
Pulse	Emergency stop or batch start	CH1	
	Emergency stop reset or batch stop	CH2	
	Electricity meter signal	CH1	

H: Energized state L: Shutoff state

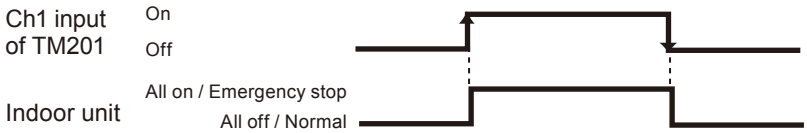
When Edge was selected, only CH1 can be used. CH2 cannot be used.

EXTERNAL INPUT & OUTPUT

■ CONTROL INPUT FUNCTION

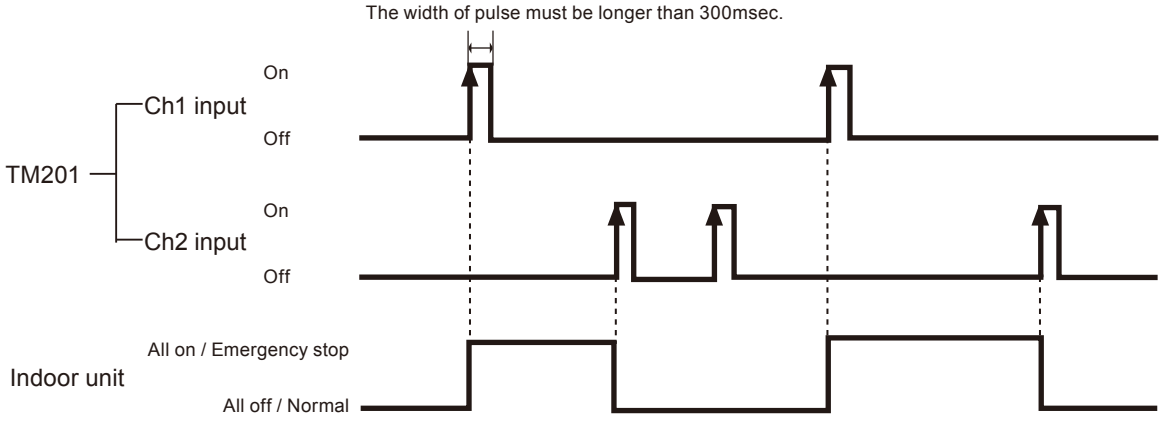
●In the case of "Edge" input

Connector	Input signal	Command
Ch1 of TM201	OFF → ON	All on / Emergency stop
	ON → OFF	All off / Normal



●In the case of "Pulse" input

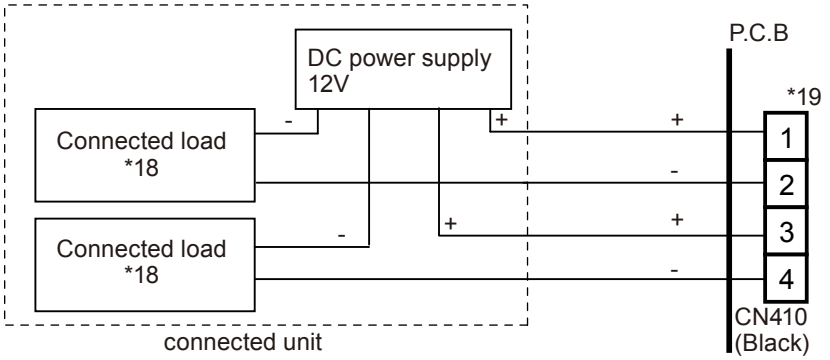
Connector		Input signal	Command
TM201	Ch1	OFF → ON	All on / Emergency stop
	Ch2	OFF → ON	All off / Normal



EXTERNAL INPUT & OUTPUT

1-4-2. EXTERNAL OUTPUT

Connector		Output voltage	Status
CN410 (Black)	Ch1	0V	All of indoor units "Stop"
	Pins1-2	DC12V *17	At least one more indoor units "Operation"
	Ch2	0V	Normal
	Pins3-4	DC12V *17	Error



*17: Provide a DC12V power supply. Select a power supply capacity with an ample surplus for the connected load.

Do not impress a voltage exceeding 12V across pins 1-2, and 3-4

*18: The allowable current is DC15mA or less. Provide a load resistance such that the current becomes DC15mA or less.

*19: Polarity is [+] for pins 1,3 and [-] for pins 2,4.

■ OPERATION STATUS (External output1)

The output for CN410(1-2) is ON when at least one more indoor units is operating.

The output is OFF when all of indoor units is stopped.



■ ERROR STATUS (External output2)

The output for CN410(3-4) is ON when Error of at least one more indoor unit or outdoor unit or Touch panel controller is generated.



1-4-3. OPTIONAL PARTS

Name and shapes	Q'ty	Model
EXTERNAL CONNECT KIT 	1	UTY-XWZXZA

EXTERNAL INPUT & OUTPUT

1-5. CENTRAL REMOTE CONTROLLER

External input	External output	Input select	Connector	External connect kit (Optional parts)
Control input	-	Dry contact	CN6 (and CN7)	UTY-XWZXZ7
		Apply voltage	CN11 (and CN12)	UTY-XWZXZ8
-	Operation status	-	CN9	UTY-XWZXZA
-	Error status			

1-5-1. EXTERNAL INPUT

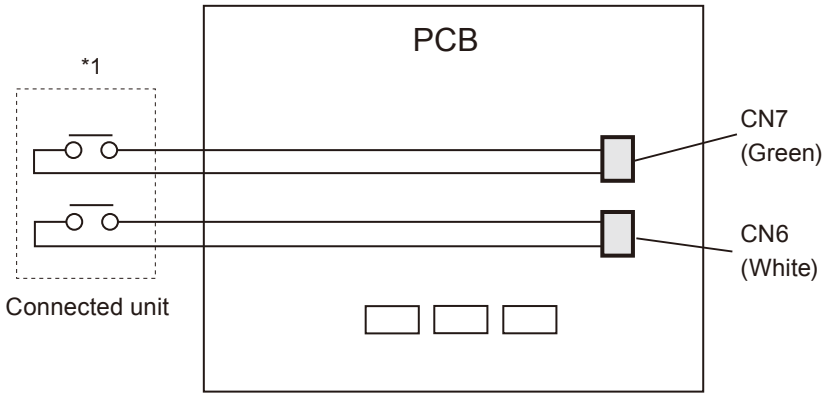
- This function performs “Emergency stop” or “All On / All Off” by using the signal to be input externally at external input terminals.

■ INPUT SELECT

There are 2 kinds of input method of External input terminal: “Dry contact” or “Apply voltage contact”.

● Dry contact

When a power supply is unnecessary at the input device you want to connect, connect to CN6 and CN7.



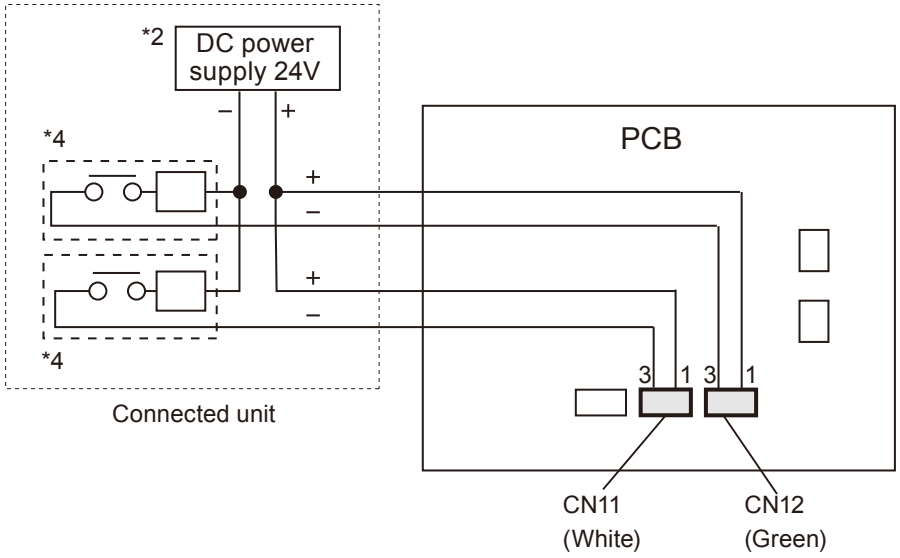
*1 : Short circuit detection resistance (R_{ON}) : ≤ 500 (ohm).
Open circuit detection resistance (R_{OFF}) : ≥ 100 (kilo-ohm).

* A twisted pair cable(22AWG) should be used. Maximum length of cable is 25m.

EXTERNAL INPUT & OUTPUT

● Apply voltage contact

When a power supply must be provided at the input device, connect to CN11 and CN12.

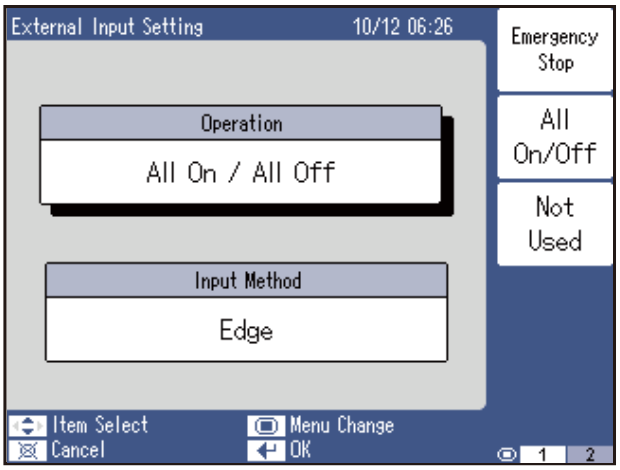


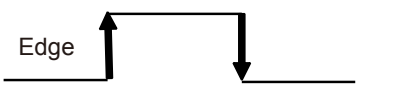
*2 : Make the power supply 24V. Select a power supply capacity with an ample surplus for the connected load.
*3 : Do not impress a voltage exceeding 24V across pin 1, 3.
*4 : The allowable current is DC5mA or less. (Recommended DC5mA)
Provide a load resistance such that the current becomes DC5mA or less.

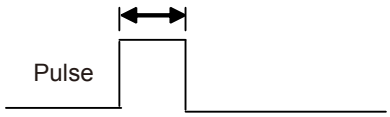
* A twisted pair cable(22AWG) should be used. Maximum length of cable is 25m.

■ INPUT SIGNAL TYPE

The input signal type can be selected.







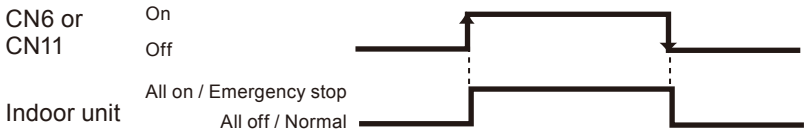
- Press the [ ] button and move the cursor to the “Operation” menu.
  [Emergency Stop] button : Enables Emergency stop by external input.
  [All On/All Off] button : Enables batch operation On/Off by external input.
  [Not Used] button : Does not receive external input signals.
- Press the [ ] button and move the cursor to the “Input Method” menu.
  [Edge] button : Detects the signal rise and fall.
  [Pulse] button : Detects the signal level.
- When the [ ] button is pressed, setting is complete.

EXTERNAL INPUT & OUTPUT

■ CONTROL INPUT FUNCTION

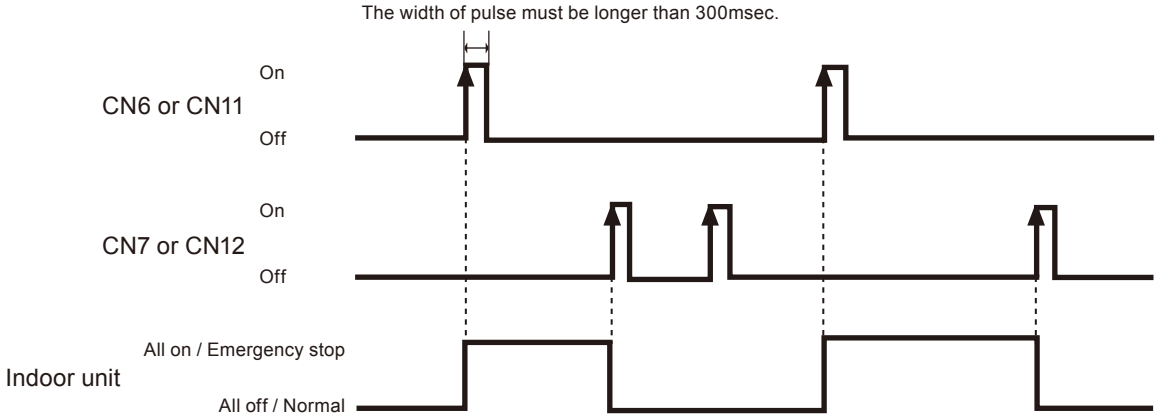
●In the case of "Edge" input

Connector	Input signal	Command
CN6 or CN11	OFF → ON	All on / Emergency stop
	ON → OFF	All off / Normal



●In the case of "Pulse" input

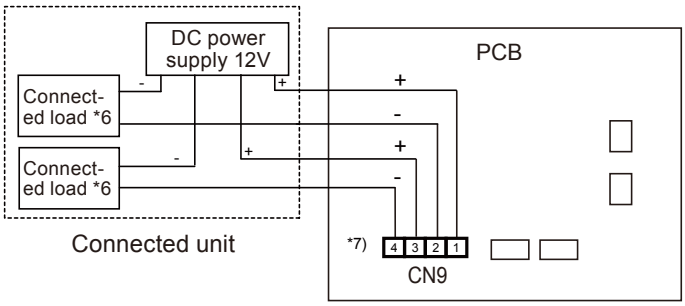
Connector	Input signal	Command
CN6 or CN11	OFF → ON	All on / Emergency stop
CN7 or CN12	OFF → ON	All off / Normal



EXTERNAL INPUT & OUTPUT

1-5-2. EXTERNAL OUTPUT

Connector		Output voltage	Status
CN9 (Black)	Ch1	0V	All of indoor units "Stop"
	Pins3-4	DC12V *5	At least one more indoor units "Operation"
	Ch2	0V	Normal
	Pins1-2	DC12V *5	Error



*5: Provide a DC12V power supply. Select a power supply capacity with an ample surplus for the connected load.
Do not impress a voltage exceeding 12V across pins 1-2, and 3-4

*6: The allowable current is DC15mA or less. Provide a load resistance such that the current becomes DC15mA or less.

*7: Polarity is [+] for pins 1,3 and [-] for pins 2,4.

■ OPERATION STATUS (External output1)

The output for CN9 (3-4) is ON when at least one more indoor units is operating.

The output is OFF when all of indoor units is stopped.



■ ERROR STATUS (External output2)

The output for CN9 (1-2) is ON when Error of at least one more indoor unit or outdoor unit or Central remote controller is generated.



1-5-3. OPTIONAL PARTS

Usage	Name and shapes	Q'ty		Models
For control input port (Dry contact terminal)	External CONNECT KIT 	Edge	Pulse	UTY-XWZXZ7
		2	1	
For control input port (Apply voltage terminal)	External CONNECT KIT 	Edge	Pulse	UTY-XWZXZ8
		2	1	
For output port	External CONNECT KIT 	1		UTY-XWZXZA

EXTERNAL INPUT & OUTPUT

1-5-4. CONTROLLER EXTERNAL INPUT / OUTPUT FUNCTION SUMMARY

■ CONTROLLER EXTERNAL INPUT FUNCTION

Central controller (Input function)	Dry contact / Apply voltage	Function		Specifications				
		Emergency stop	All on / All off	Terminal	Signal type	External power supply		Wire size / length
						Allowable voltage	Allowable current	
Touch Panel Controller	Dry contact	● (Screen icon)	● (Screen icon)	TM201 (CH1-K1,K2) [CN201 ↔ CN411]	Edge	-	-	AWG22 Twist / 25 [m]
				TM201 (CH1-K1,K2) (CH2-K1,K2) [CN201 ↔ CN411]	Pulse *1			
	Apply voltage	● (Screen icon)	● (Screen icon)	TM201 (CH1-K1,K2) [CN201 ↔ CN412]	Edge	DC12 [V]	10mA or less	
				TM201 (CH1-K1,K2) (CH2-K1,K2) [CN201 ↔ CN412]	Pulse *1			
Central Remote Controller	Dry contact	● (Screen icon)	● (Screen icon)	CN6 (PIN1-2)	Edge	-	-	
				CN6 (Ch1:PIN1-2) CN7 (Ch2:PIN1-2)	Pulse *1			
	Apply voltage	● (Screen icon)	● (Screen icon)	CN11 (PIN1-3)	Edge	DC24 [V]	5mA or less	
				CN11 (Ch1:PIN1-3) CN12 (Ch2:PIN1-3)	Pulse *1			

*1 : Default setting is Edge signal, if you use pulse signal, must be set pulse signal from screen icon.

■ CONTROLLER EXTERNAL OUTPUT FUNCTION

Central Controller (Output Function)	Dry contact / Apply voltage	Function		Specifications			
		Operation status	Error status	Terminal	External power supply		Wire size/ length
					Allowable voltage	Allowable current	
Touch Panel Controller	Apply voltage	●	-	CN410 (PIN1-2)	DC12 [V]	15mA or less	AWG22 Twist / Max. 25 [m]
		-	●	CN410 (PIN3-4)			
Central Remote Controller	Apply voltage	●	-	CN9 (PIN3-4)			
		-	●	CN9 (PIN1-2)			

EXTERNAL INPUT & OUTPUT

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

9. NOTES

CONTENTS

9. NOTES

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2. INSTALLATION PRECAUTIONS ..... 09 - 04
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1. REFRIGERANT LEAKAGE CAUTION

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

1-1. INTRODUCTION

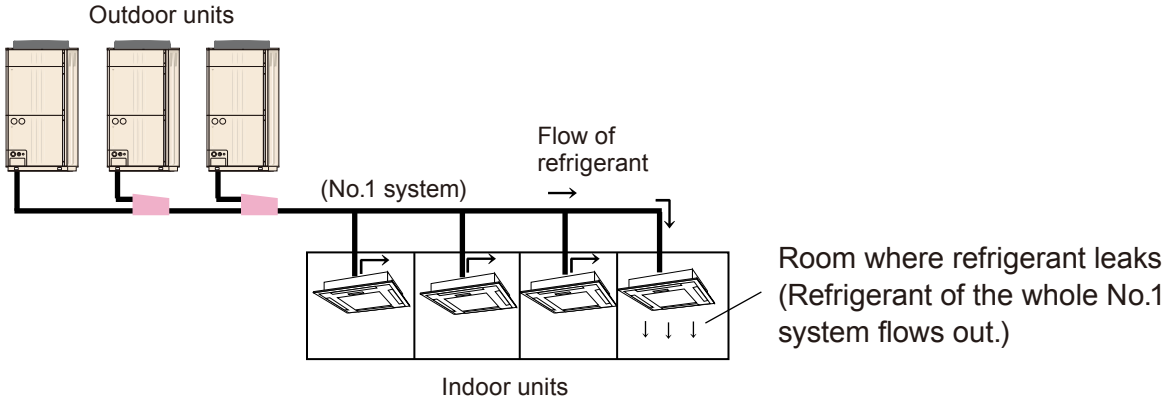
This air conditioners use R410A as refrigerant. Though R410A is harmless and incombustible in itself, the room in which the air conditioner is installed should be large enough that the refrigerant gas will not exceed the concentration limit even if the refrigerant gas leaks.

● Concentration limit

Concentration limit is the limit of Freon gas concentration where immediate measures can be taken without hurting the human body when refrigerant leaks in to the air.

The concentration limit shall be described in units of Kg/m^3 (Freon gas weight in per m^3 air) to facilite calculation.

Concentration limit : $0.42kg/m^3$



NOTES

NOTES

1-2. CHECKING CONCENTRATION LIMIT

Check concentration limit following steps ①②, and take appropriate measures depending on the situation.

① Calculate amount of all replenished refrigerant (kg) per refrigerant system.

Amount of replenished refrigerant per refrigerant system	+	Amount of additional replenished refrigerant	=	Total amount of replenished refrigerant in refrigerant system (kg)

Amount of replenished refrigerant at factory shipment

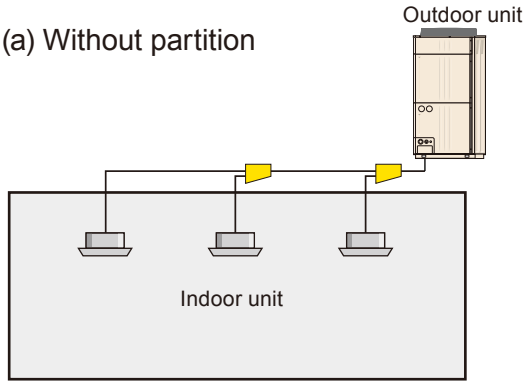
Amount of additionally replenished refrigerant depending on piping length , piping diameter and indoorunit model at customer.

Note : When one refrigerant system is divided into 2 or more refrigerant systems and each system is independent, total amount of replenished refrigerant of each system shall be adopted.

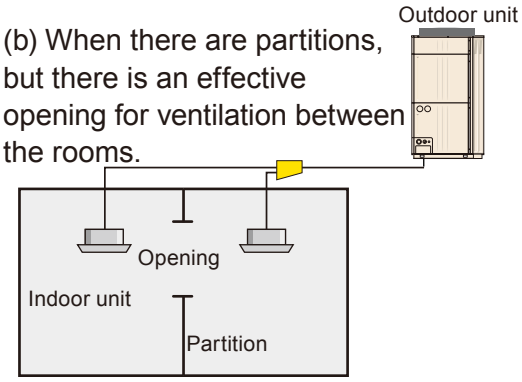
② Smallest room volume.

Calculate room volume by regarding ▭ portion as one room or the smallest room.

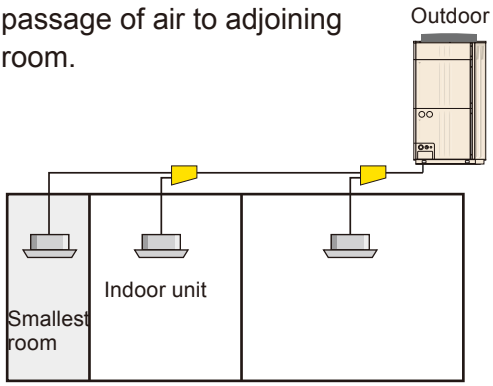
(a) Without partition



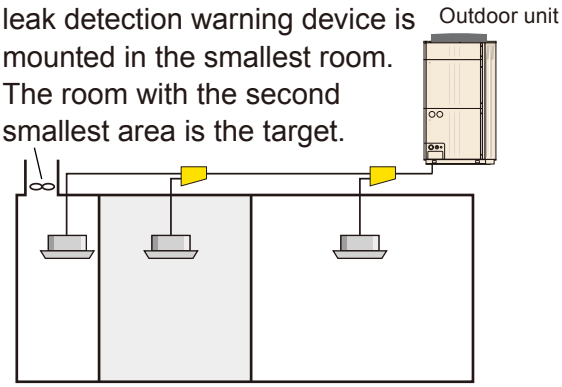
(b) When there are partitions, but there is an effective opening for ventilation between the rooms.



(c) With partition and without opening which serve as passage of air to adjoining room.



(d) When a mechanical ventilation device linked to a gas leak detection warning device is mounted in the smallest room. The room with the second smallest area is the target.



③ Calculate refrigerant concentration from the results of ① and ②

$$\frac{\text{Total amount of replenished refrigerant in refrigerant facility (kg)}}{\text{Capacity of smallest room where indoor unit is installed (m}^3\text{)}} \leq \text{Refrigerant concentration (kg/m}^3\text{)}$$

(R410A)

When the result of calculation exceeds the limiting concentration,perform the same calculations by shifting to the second smallest,and the third smallest rooms until the final result is below the limiting concentration.

NOTES

NOTES

When concentration limit is exceeded

When the concentration limit is exceeded,change the original plan or take one of the countermeasures shown below.

● Countermeasure 1

Provide opening for ventilation.

Provide 0.15% or more opening to floor space both above and below or provide opening without door.

● Countermeasure 2

Reduce the total refrigerant charging amount of the refrigerant equipment

(1) Shorten the length of the refrigerant pipes

Move the location of the outdoor unit closer to the indoor unit, and reduce the total refrigerant charging amount by shortening the length of the refrigerant pipes.

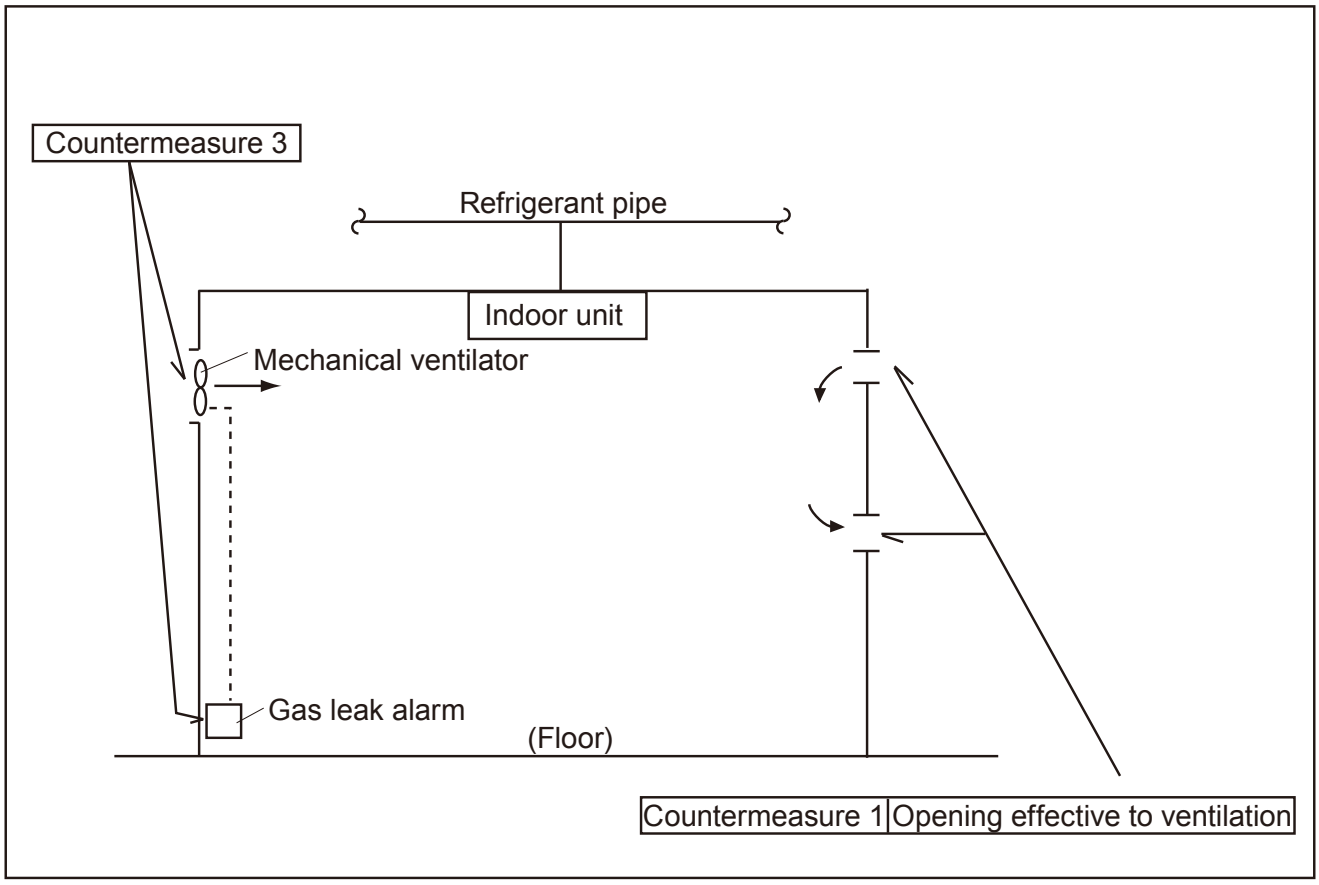
(2) Lower the capacity of the outdoor unit.

Separate the outdoor unit into multiple units to lower the outdoor unit capacity for each refrigerant system and reduce the refrigerant charging amount.

For example, by changing a 20HP × 1 unit system to a 10HP × 2 units system, the refrigerant amount for each refrigerant system can be reduced by about half.

● Countermeasure 3

Provide gas leak alarm linked with mechanical ventilator.



Pay special attention to the place, such as a basement, etc. When refrigerant can accummalate, since refrigerant is heavier than air.

NOTES

NOTES

2. INSTALLATION PRECAUTIONS

2-1. INDOOR UNIT INSTALLATION PRECAUTIONS

Note: The information listed below are general precautions. Some models also include items that do not apply.

■ PLACES WHERE USE PROHIBITED

- Places where there is the danger of combustible gas leakage.
- Places where sulfur gas, chlorine gas, acid, alkali, or other matter which effects equipment is generated
- Places where there is a lot of oil splash and steam (kitchen, machinery room, etc.)
- Places where machinery which generates high frequencies is used
- Ocean beaches and other areas where there is a lot of salt
- Places where carbon fibers and metal powder, powder, etc. suspended in the air
- Installation in vehicles, ships, and other conveyances
- Factory, etc. where voltage fluctuations are large

■ POINTS TO REMEMBER WHEN INSTALLING

1) The set shall be installed at a place which can withstand the weight and vibration of the indoor unit

2) To allow maintenance after refrigerant piping, drain piping, and electric wiring connection and installation, provide an installation service space and an inspection port, as required.

*Installation service space is shown on " DIMENSIONS ".

3) Be careful when installing the set at the following places.

[Installation precautions]

	Contents	Countermeasures (Reference)
When the ceiling is high	If the indoor unit is installed where the installation height given in the installation manual is exceeded, the temperature difference between the floor and ceiling of the room will be large and the heating effect will be poor. Moreover, even if the indoor unit is installed within the installation height, a similar phenomena will occur when installed in a room in which the doors are opened and closed frequently and hot air circulation is obstructed by desks, chairs, etc.	1) Switch the setting to the high ceiling mode. 2) Install a circulator. 3) Arrange the furniture in the room so that it does not obstruct the hot air.
When lower level directly contacts the outside air.	When the lower level of the shop and office is a warehouse, parking lot, etc., the surface temperature of the flooring will become low and the radiation of cold from the floor will increase. In this case, your feet will feel cold even if the room temperature is suitable.	
When the air flow distribution is poor	When an indoor unit is installed in a position where the outlet air flow will directly contact people, a draft may be felt. In addition, when there are obstructions in the path of the intake and outlet air flow, the air distribution may become extremely bad.	1) Adjust the louver fins or take other measures matched to the site. 2) Change the indoor unit outlet.

NOTES

NOTES

[Installation precautions]

	Contents	Countermeasures (Reference)
When inside the ceiling is high temperature and high humidity	When the indoor unit is installed where the inside of the ceiling is 30°C (86°F) RH80% or greater, the dew point temperature of the outer perimeter may become higher than the cabinet surface temperature and moisture will condense on the surface of the cabinet and water drops may fall inside the room. →Refer to Fig.A In addition, the humidity may vary considerably the same as when the inside of the ceiling is close to hermetically sealed and used as the outside air intake path.	1) Add heat insulating material to the outside of the indoor unit cabinet. *Regarding the cassette type, use of the “high humidity correspondence kit (option)” is recommended. 2) Strengthen the heat insulating material of the refrigerant piping and drain piping also →Refer to Fig.B 3) When the humidity inside the ceiling changes considerably, install a ventilation port

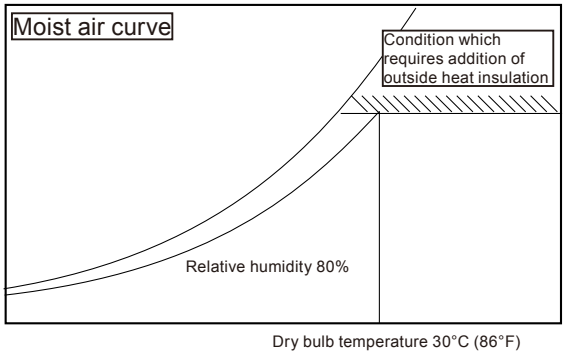


Fig.A

Work method when reinforcing the heat insulation of on-site piping

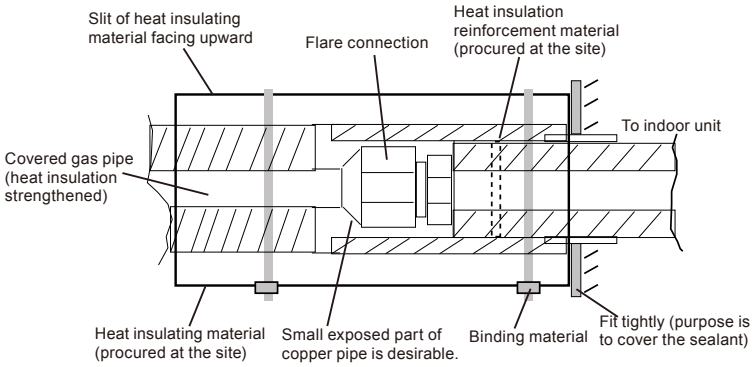


Fig.B

	Contents	Countermeasures (Reference)
When using an external duct	When using an external duct to take in new fresh air, etc., condensation may form on the surface of the duct due to the effect of the outside air temperature and the humidity inside the ceiling.	1) Always perform heat insulation processing. (Heat insulating material: Glass wool 25mm (31/32in) thick or more.)
When the remote controller installation site is bad	If the cold or warm air blown out from the air conditioner directly contacts the thermostat section of the remote controller, the outlet temperature of the air conditioner may be sensed and room temperature control will be different from the room temperature and “not cooled” or “not heated” or other trouble may occur. In addition, there is the possbility that the same kind of trouble may also occur when the remote controller is effected by direct sunlight.	1) Install the remote controller where it will not be directly exposed to the cold or hot air. 2) Install the remote controller where it will not be directly exposed to sunlight or strong lighting

NOTES

NOTES

[Installation precautions]

	Contents	Countermeasures (Reference)
When installation environment is quiet	When the wall mounting type was installed in a bedroom, living room, or other quiet place, the sound of the refrigerant flow may be sensed as noise and must be taken into accunt.	1) Plan installation of a model with external expansion valve. 2) Plan installation of a branch box farther from indoor unit. 3) Plan installation using another air conditioner.
When installing duct type in ceiling chamber system	In the case of the ceiling chamber system (duct is not installed at indoor unit inlet side and room air is sucked into the indoor unit through the inside of the ceiling), the thermistor inside the indoor unit may not correctly detect the room temperature. Heating operation: Room is not heated because the indoor unit is easily turned off by the thermostat. Cooling operation: Room is too cold because the indoor unit is difficult to turn off by the thermostat.	1) Replace the indoor unit thermistor with a Remote sensor unit (optional parts) and install the sensor where the room temperature can be correctly detected
When the outlet air is sucked in at duct type	Cooling operation does not cool the room and heating operation does not heat the room because the short circuited indoor unit is not turned on by the thermostat.	1) Reconsider the ventilation port construction 2) Replace the indoor unit thermistor with a Remote sensor unit (optional parts) and install the sensor where the room temperature can be correctly detected.
When using the wireless remote controller	Signals may not be received when using it in a room illuminated by an inverter fluorescent lamp.	1) Turn on the fluorescent lamp and check if the indoor unitreceives the signals from the remote controller. If the indoor unit does notreceive the signals, consult an authorized service personnel.
When installing the inverter type	It may generate noise in TV sets, stereos and PCs.	1) The inverter type should be installed at a sufficient distance from these equipments.

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2-2. OUTDOOR UNIT INSTALLATION PRECAUTIONS

Note: The information listed below are general precautions. Some models also include items that do not apply.

■ PLACES WHERE USE PROHIBITED

- Places where there is the danger of combustible gas leakage
- Places where sulfur gas, chlorine gas, acid, alkali, or other matter which effects equipment is generated
- Places not affected by heat radiation from other heat sources
- Places where the air is not stagnant
- Places where machinery which generates high frequencies is used
- Ocean beaches and other areas where there is a lot of salt
- Installation in vehicles, ships, and other conveyances
- Factory, etc. where voltage fluctuations are large

■ POINTS TO REMEMBER WHEN INSTALLING

1) The set shall be installed at a place which can withstand the weight and vibration of the outdoor unit

2) To allow maintenance after refrigerant piping, drain piping, and electric wiring connection and installation, provide an installation service space.

*Installation service space is shown on "3-3.INSTALLATION SPACE"

3) Be careful when installing the set at the following places.

[Installation precautions]

	Contents	Countermeasures (Reference)
When installed near adjacent houses	Perform installation work so that operating sound does not disturb the neighbors.	1) Install a soundproof barrier 2) Change the installation site
When there is the possibility of strong wind	1) If the outdoor unit is exposed to strong wind, capacity may drop, frost may form during heating, and operation may be stopped by high pressure rise. In addition, when a very strong wind blows, the fan may be damaged. 2) When a very strong wind blows, there is the possibility of the outdoor unit being toppled over if held only by foundation bolts	1) Install with the outlet side keep a sufficient distance away from a facing wall or fence. 2) Make the outlet direction and wind direction perpendicular. 3) Fasten the outdoor unit using toppling prevention hardware (procured at the site).
When snow accumulates	If the outdoor unit is covered by accumulated snow, it may not be able to operate.	1) Make the foundation as high as possible. 2) Perform snow prevention work.
When installing the inverter type	It may generate noise in TV sets, stereos and PCs.	1) The inverter type should beinstalled at a sufficient distance from these equipments.

NOTES

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3. COMPATIBILITY OF VRF SYSTEM

■ COMPATIBILITY OF OUTDOOR UNIT AND INDOOR UNIT

● Outdoor unit and indoor unit

Compatibility of outdoor unit and indoor unit in refrigerant system as follows.

		Indoor unit	
		A∗∗∗∗∗GA∗H or A∗∗∗∗∗GB∗H or A∗∗∗∗∗GC∗H *1	A∗∗∗∗∗LA∗H or A∗∗∗∗∗LB∗H *2
Outdoor unit	VR- II series	○ *4 OK	× Prohibited
	V- III series	○ OK	○ OK
	V- II series	○ *4 OK	○ OK
	J- III L series	○ *4 OK	○ OK
	J- III series	○ *3 *4 OK	○ *3 OK
	J- II S series	○ *3 *4 OK	○ *3 OK
	J- II series	○ *3 *4 OK	○ *3 OK

*1, *2: ∗: arbitrary character

*3: Following indoor units cannot be connected. (ARXC60 / 72 / 90 / 96)

*4: Large airflow duct (ARXN18-45) can be connected to V-III series only.

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NOTES

● Example cases for compatibility

	Outdoor unit	Indoor unit	Judgement
Case 1	 VR- II series	 ARXD18GALH	○ OK
Case 2		 ARXD18LATH	× Prohibited
Case 3	 V- III series	 ARXD18GALH	○ OK
Case 4		 ARXD18LATH	○ OK
Case 5	 V- II series	 ARXD18GALH	○ OK
Case 6		 ARXD18LATH	○ OK
Case 7	 J- III L series	 ARXD18GALH	○ OK
Case 8		 ARXD18LATH	○ OK
Case 9	 J- III series	 ARXD18GALH	○ OK
Case 10		 ARXD18LATH	○ OK
Case 11	 J- II S series	 ARXD18GALH	○ OK
Case 12		 ARXD18LATH	○ OK
Case 13	 J- II series	 ARXD18GALH	○ OK
Case 14		 ARXD18LATH	○ OK

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■ COMPATIBILITY OF CONTROLLER SYSTEM

				Model	VR- II series	V- III series V- II series J- III L series J- III series J- II S series J- II series
Controller	Central Controller	System Controller		UTY-APGXZ1 UTY-APGX	○ *1 OK	○ *1 OK
		System Controller Lite		UTY-ALGXZ1 UTY-ALGX	○ OK	○ OK
		Touch Panel Controller		UTY-DTG∗Z1 UTY-DTG∗	○ OK	○ OK
		Central Remote Controller		UTY-DCG∗	○ OK	○ OK
		Group Remote Controller		UTY-CGG∗	○ OK	○ OK
	Individual Controller	Wired Remote Controller (Touch panel)		UTY-RNR∗Z2 UTY-RNR∗Z1 UTY-RNR∗	○ OK	○ *2 OK
		Wired Remote Controller (2-wire)		UTY-RLR∗	○ OK	○ *2 OK
		Wired Remote Controller		UTY-RNK∗	○ OK	○ OK
		Simple Remote Controller (with master control)		UTY-RSR∗*2 UTY-RSK∗	○ OK	○ OK
		Simple Remote Controller (without master control)		UTY-RHR∗ *2 UTY-RHK∗	○ OK	○ OK
		Wireless Remote Controller		UTY-LNH∗	○ OK	○ *3 OK

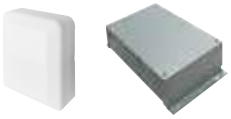
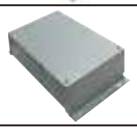
*1: Different VRF series may be connected for each of the 4 VRF networks supported by the unit.

*2: It is not connectable with indoor unit ("A∗∗∗∗∗LA∗H" or "A∗∗∗∗∗LB∗H" (∗: arbitrary character)) of the previous model.

*3: It is not connectable with Large airflow duct type (ARXN18-45).

NOTES

NOTES

			Model	VR- II series	V- III series V- II series J- III L series J- III series J- II S series J- II series
Adaptor / Convertor	External Switch Controller		UTY-TERX UTY-TEKX	○ OK	○ OK
	IR Receiver unit (for all Duct type)		UTB-∗WB UTB-∗WC	○ OK	○ *3 OK
	IR Receiver unit (for Cassette type)		UTY-LRH∗B1	○ OK	○ OK
	IR Receiver unit [for Cassette (circular flow type)]		UTY-LBHXD	○ *4 OK	○ *4 OK
	Human Sensor Kit [for Cassette (circular flow type)]		UTY-SHZXC	○ *4 OK	○ *4 OK
	Signal amplifier		UTY-VSGXZ1	○ OK	○ OK
	Signal amplifier		UTY-VSGX	○ *1 OK	○ *1 OK
	Network Convertor		UTY-VTGX UTY-VTGXV	○ OK	○ OK
	Network Convertor		UTY-VGGXZ1 UTY-VGGX	○ OK	○ OK
	Network Convertor for LonWorks®		UTY-VLGX	○ OK	○ OK
	Modbus® Convertor		UTY-VMGX	○ OK	○ OK
	BACnet® Gateway		UTY-ABGXZ1 UTY-ABGX	○ *2 OK	○ *2 OK
	Wireless LAN adapter		UTY-TFSXZ1	○ *4 OK	○ *4 OK
Service and Maintenance	Service Tool		UTY-ASGXZ1 UTY-ASGX	○ OK	○ OK
	Web Monitoring Tool		UTY-AMGXZ1 UTY-AMGX	○ *2 OK	○ *2 OK

NOTES

NOTES

*1: Since Signal filter mode is not contained, please use "UTY-VSGXZ1", when use Signal filter mode.

*2: Different VRF series may be connected for each of the 4 VRF networks supported by the unit, but different series may not coexist within the same network.

*3: It is not connectable with Large airflow duct type (ARXN18-45).

*4: Following indoor units can be connected. ("A∗∗∗∗∗G∗AH" (∗: arbitrary character))

NOTES

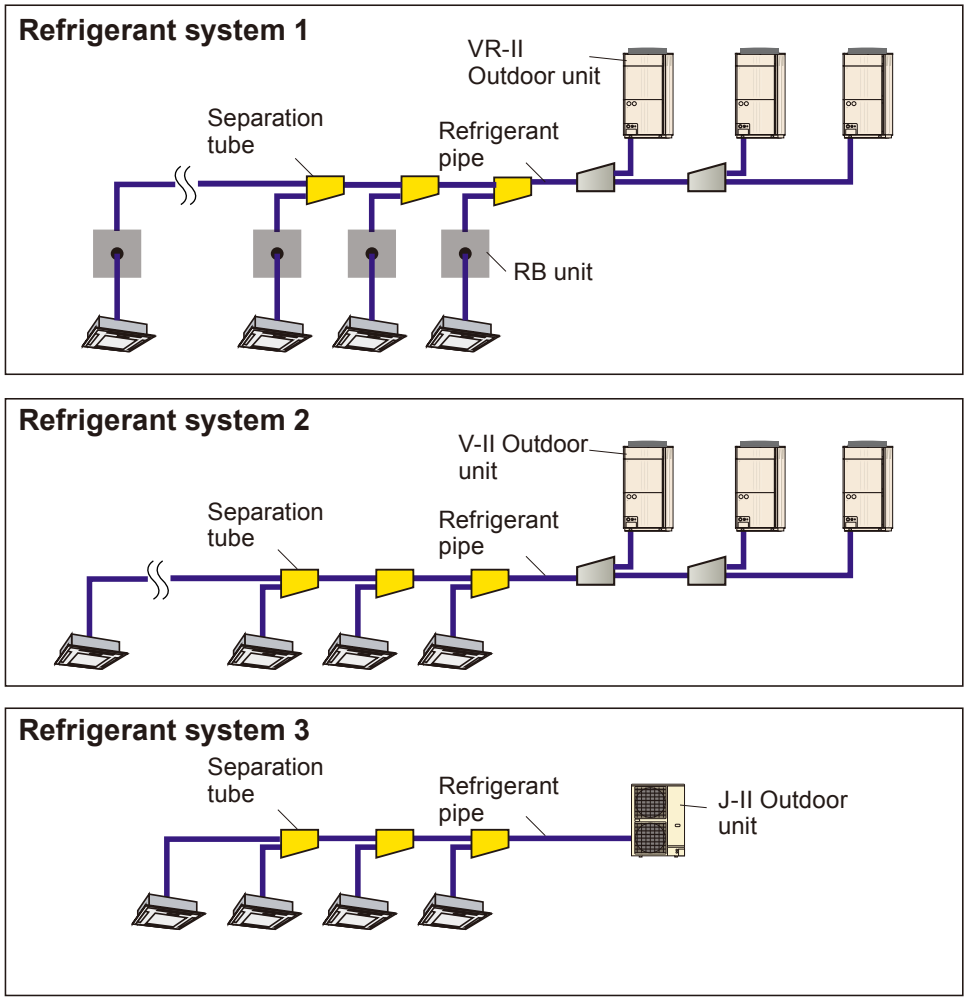
NOTES

4. ABOUT CONNECTION BETWEEN SERIES

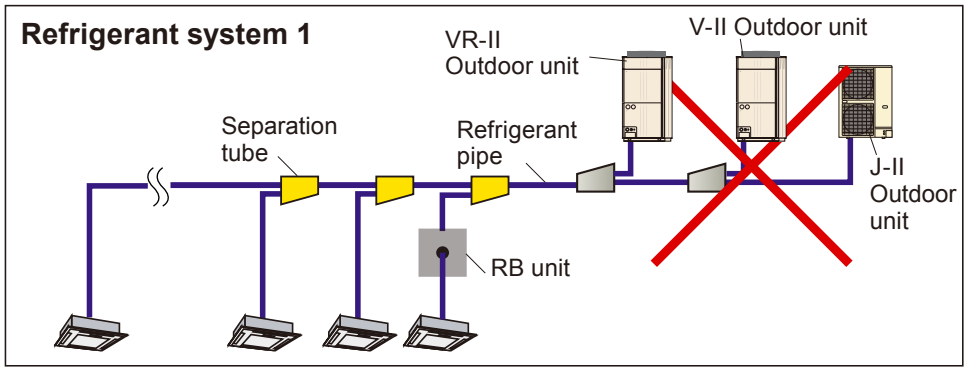
4-1. PIPING CONNECTION

NOTE: Piping connection of VR-II, V-III, V-II, J-IIIL, J-III, J-IIS and J-II in the same refrigerant system is prohibited.

■ EXAMPLE1 (OK)



■ EXAMPLE2 (Prohibited)



NOTES

NOTES

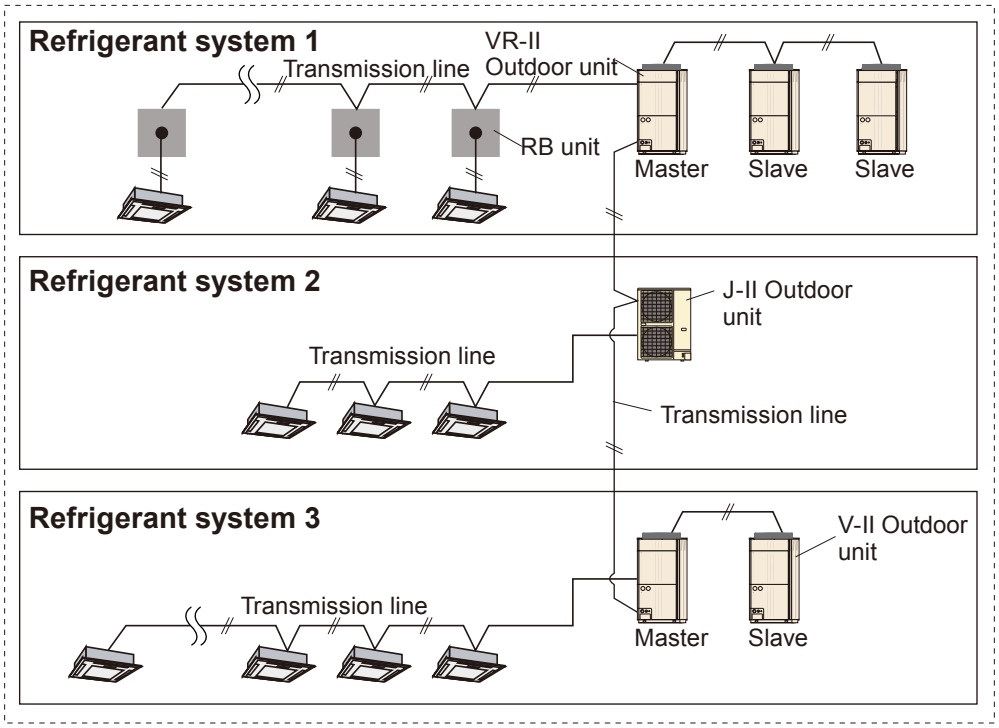
4-2. WIRING CONNECTION

NOTE: Wiring connection of VR-II, V-III, V-II, J-IIIL, J-III, J-IIS and J-II in the same VRF network system is possible.

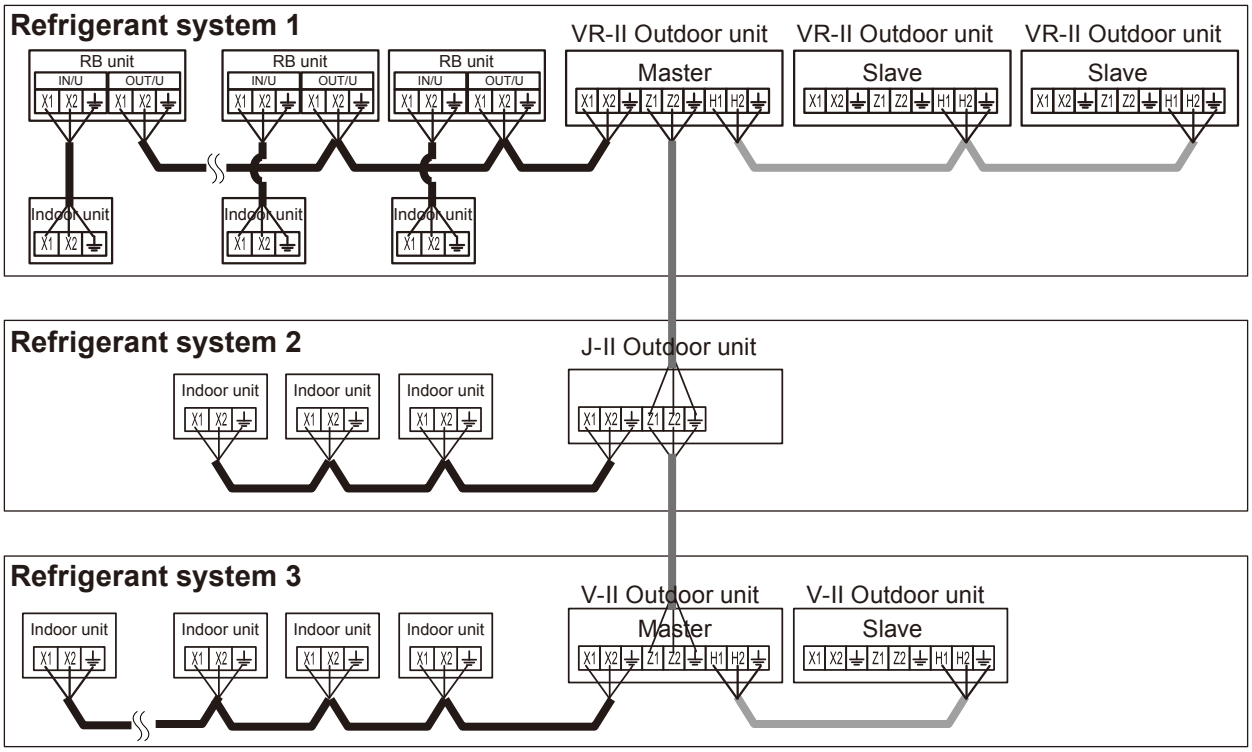
■ EXAMPLE1 (OK)

When wiring to each refrigerant system

VRF network system



● Connection method to terminal



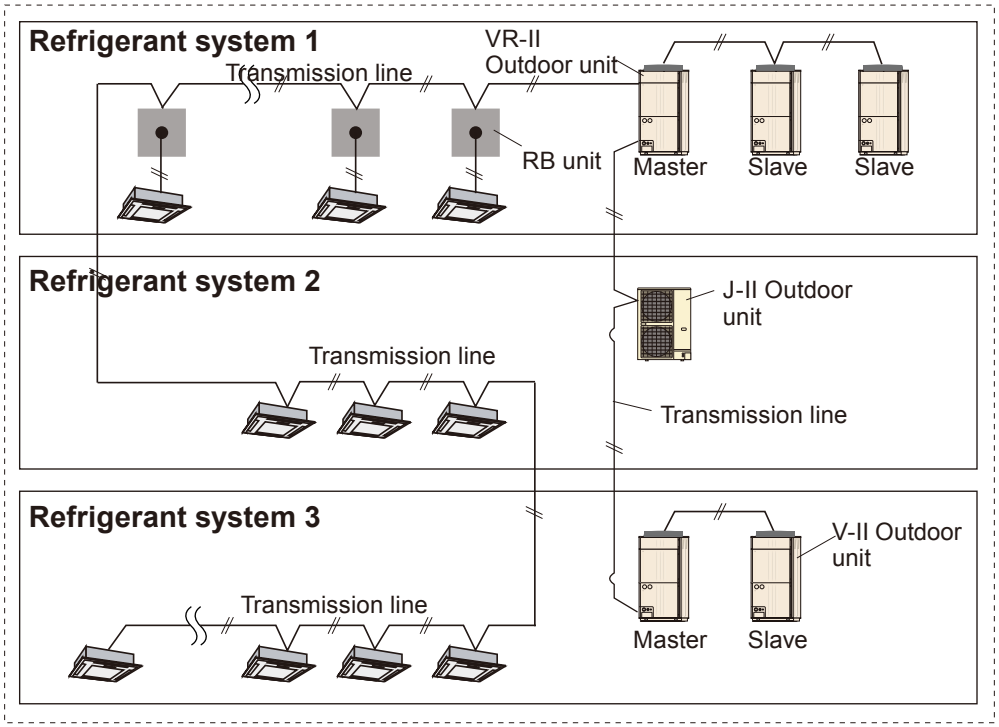
NOTES

NOTES

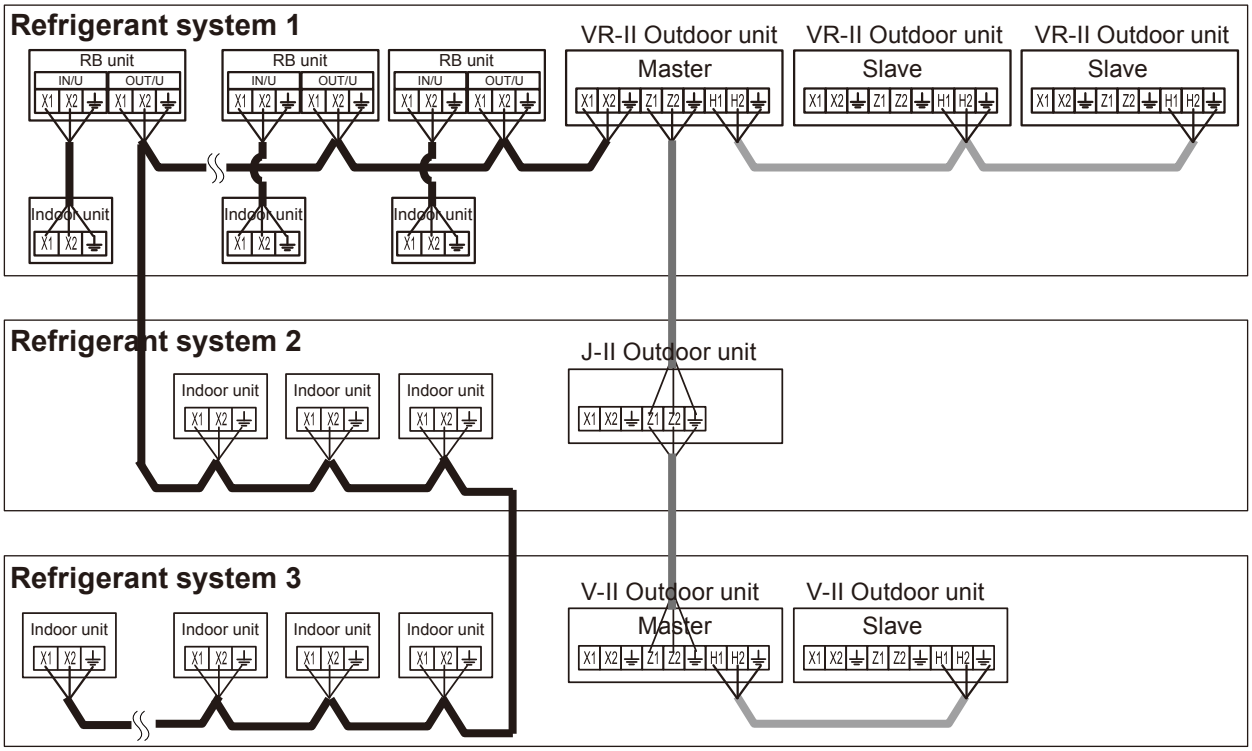
■ EXAMPLE2 (OK)

When stepping over, and wiring to the refrigerant system

VRF network system



● Connection method to terminal



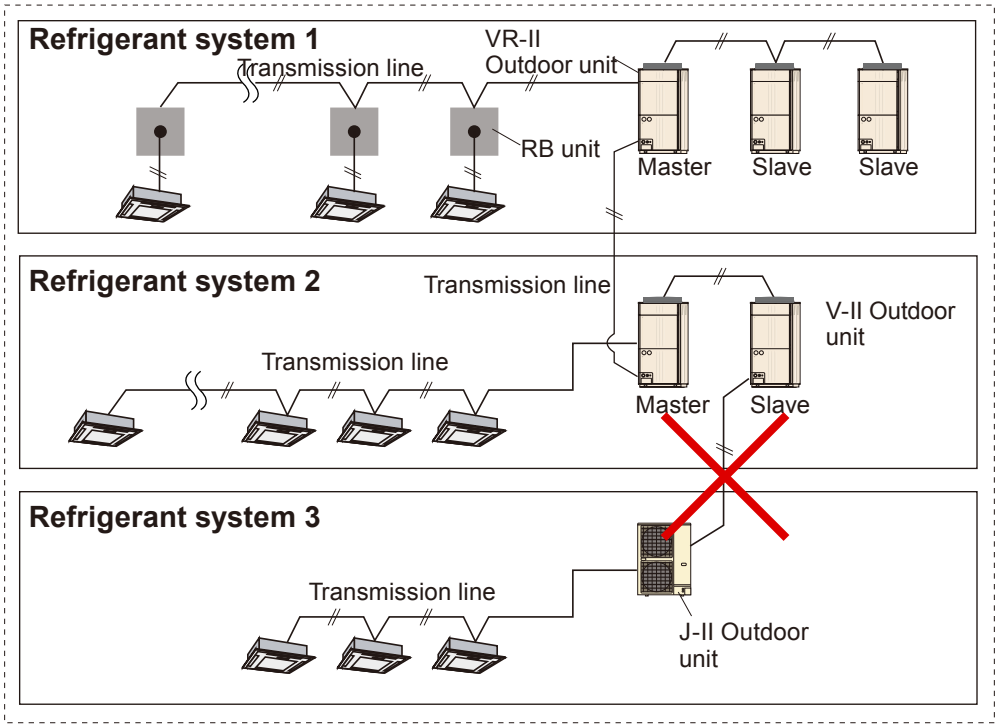
NOTES

NOTES

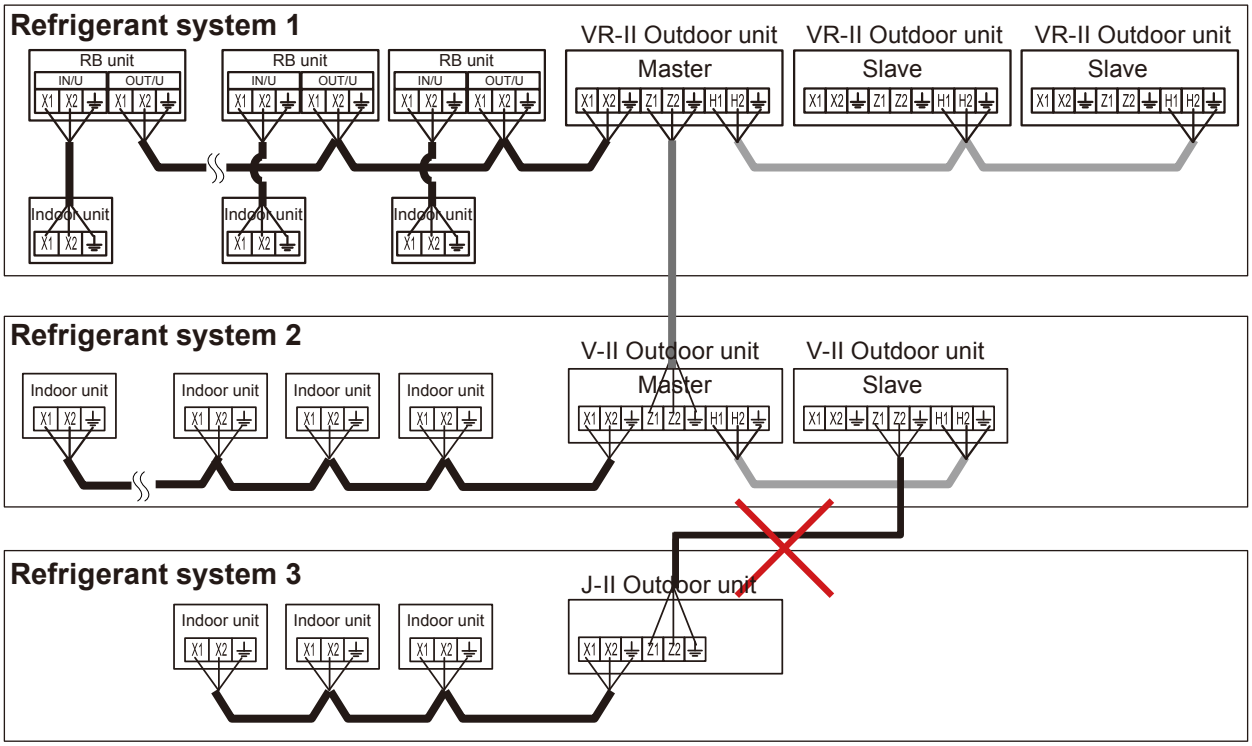
■ EXAMPLE3 (Prohibited)

NOTE: Slave unit of VR-II, V-III or V-II and J-IIIL, J-III, J-IIS or J-II cannot be connected.

VRF network system



● Connection method to terminal



NOTES

NOTES

Refrigerant R410A INVERTER

AIRSTAGE™
Variable Refrigerant Flow System

10. OPTIONAL PARTS

DTV_VR2E018E_12--CHAPTER10
2017.03.31

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1. SEPARATION TUBE

■ CONNECTION CAPACITY

Total cooling capacity of indoor units (kW)	Separation tube	
	For 2 pipes	For 3 pipes
19.6 or less	UTP-AX054A	-
28.0 or less	UTP-AX090A	UTP-BX090A
28.1 to 56.0	UTP-AX180A	UTP-BX180A
56.1 or more	UTP-AX567A	UTP-BX567A

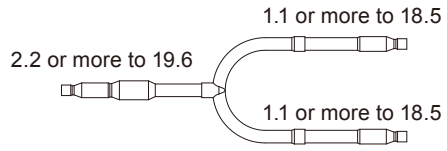
Each Value above such as 19.6, 28.0, 28.1, 56.0 and 56.1[kw] means total cooling capacity at rated condition of indoor unit connected under the targeted separation tube.

● For 2 pipes

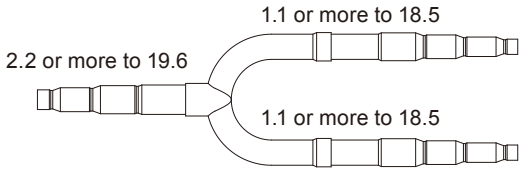
(UNIT : kW)

UTP-AX054A

Liquid pipe

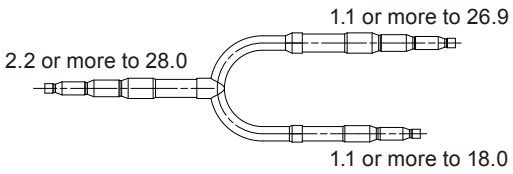


Gas pipe

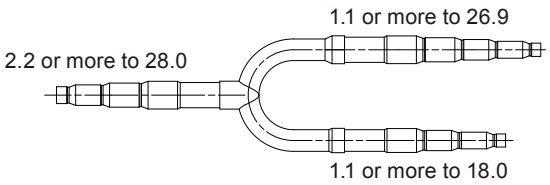


UTP-AX090A

Liquid pipe

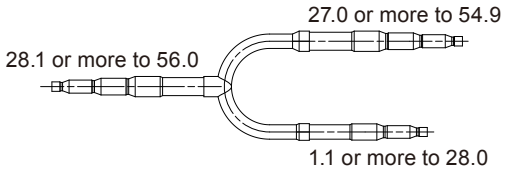


Gas pipe

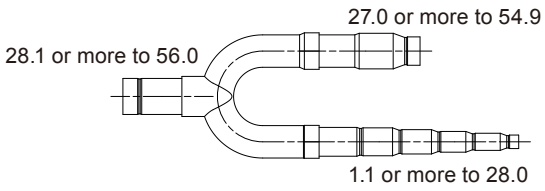


UTP-AX180A

Liquid pipe

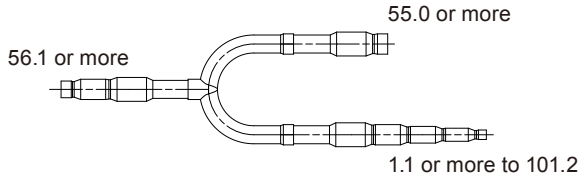
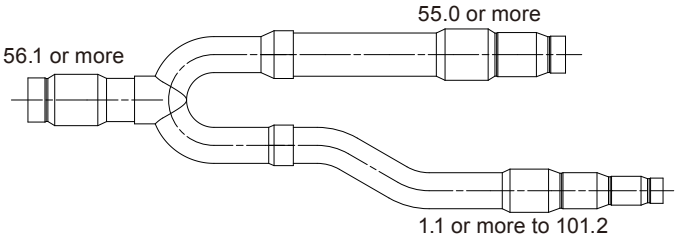


Gas pipe



● For 2 pipes

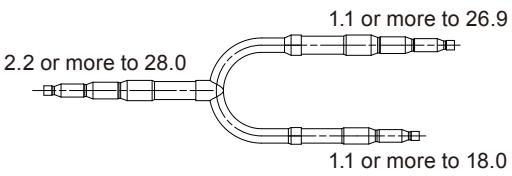
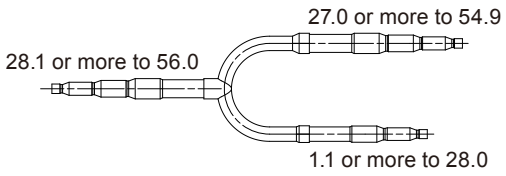
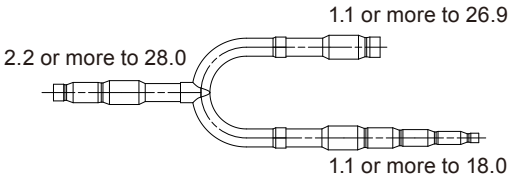
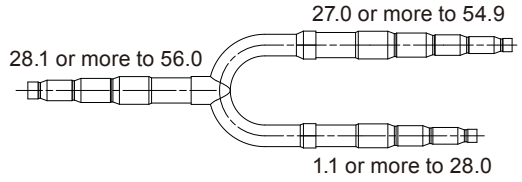
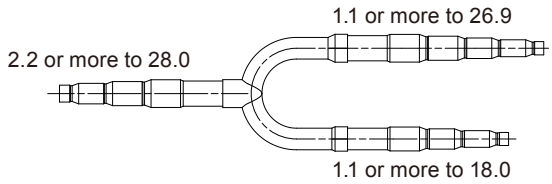
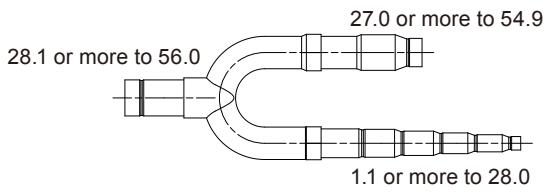
(UNIT : kW)

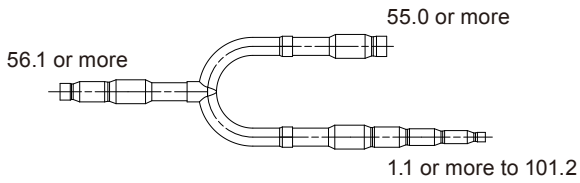
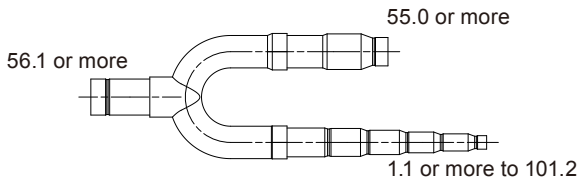
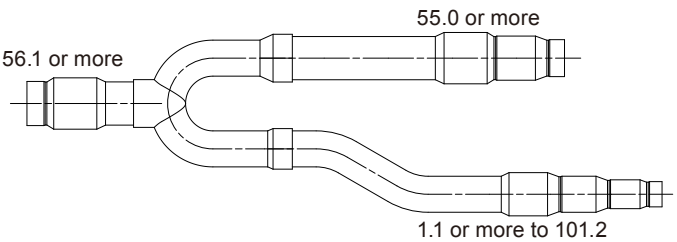
UTP-AX567A
Liquid pipe 
Gas pipe 

OPTIONAL PARTS

● For 3 pipes

(UNIT : kW)

UTP-BX090A	UTP-BX180A
Liquid pipe  	Liquid pipe 
Discharge gas pipe  	Discharge gas pipe 
Suction gas pipe  	Suction gas pipe 

UTP-BX567A
Liquid pipe 
Discharge gas pipe 
Suction gas pipe 

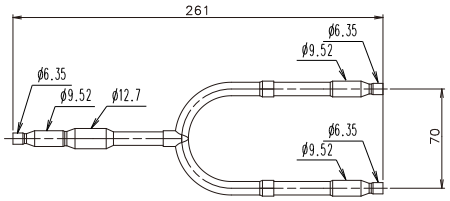
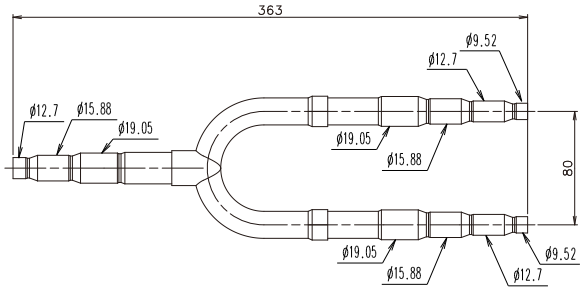
OPTIONAL PARTS

1-1. SEPARATION TUBE FOR 2 PIPES

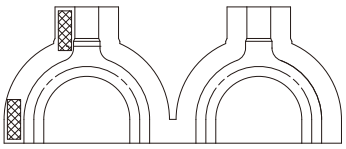
■ UTP-AX054A

● Port diameters and dimensions

(Unit : mm)

Liquid pipe	Q'ty	Gas pipe	Q'ty
	1		1

● Heat insulation

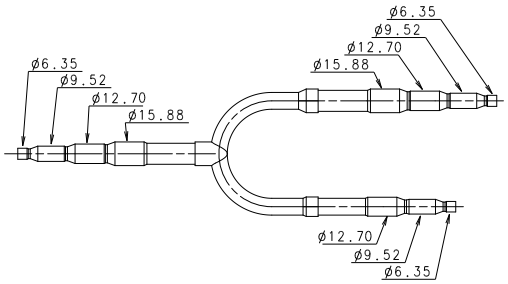
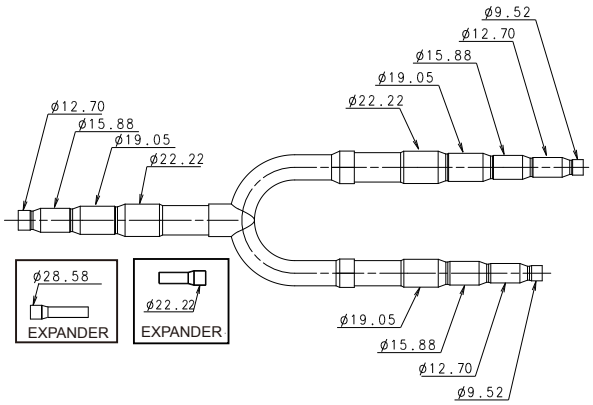
Heat insulation	Q'ty	Application
	2	Large x 1 (for gas pipe) Small x 1 (for liquid pipe)

Tape	Q'ty
	8

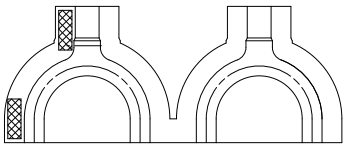
OPTIONAL PARTS

■ UTP-AX090A

● Port diameters

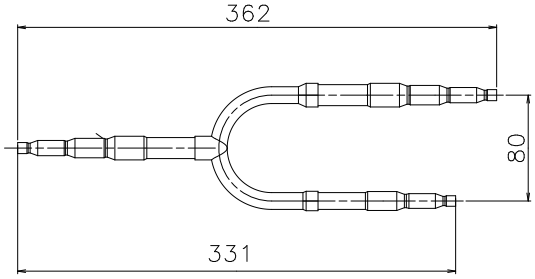
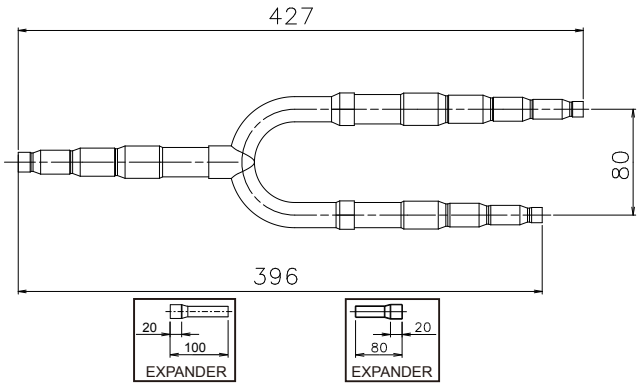
Liquid pipe	Q'ty	Gas pipe	Q'ty
	1		1

● Heat insulation

Heat insulation	Q'ty	Application
	2	for Liquid pipe x1 for Gas pipe x1

Tape	Q'ty
	8

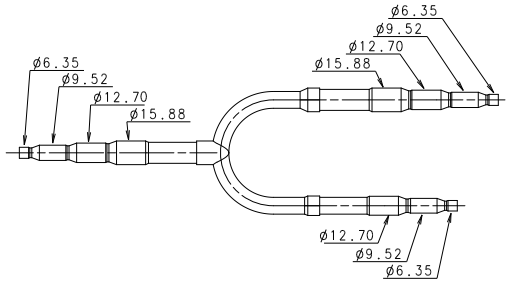
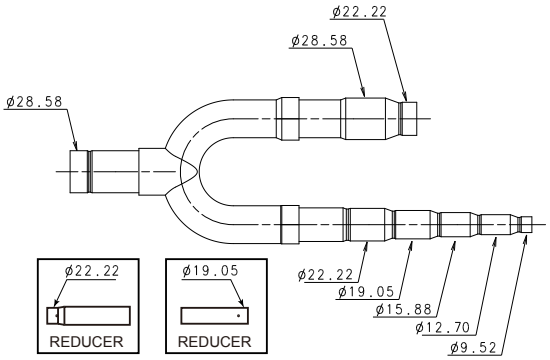
● Dimensions

Liquid pipe	Gas pipe
	

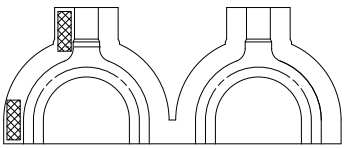
OPTIONAL PARTS

■ UTP-AX180A

● Port diameters

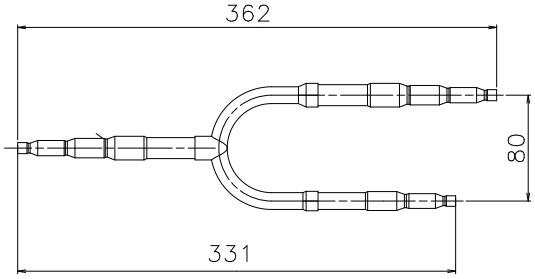
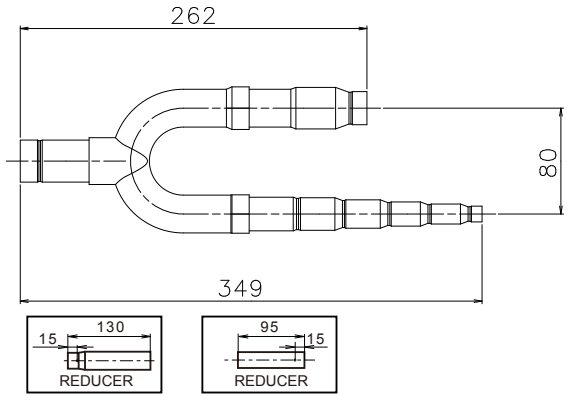
Liquid pipe	Q'ty	Gas pipe	Q'ty
	1		1

● Heat insulation

Heat insulation	Q'ty	Application
	2	for Liquid pipe x1 for Gas pipe x1

Tape	Q'ty
	8

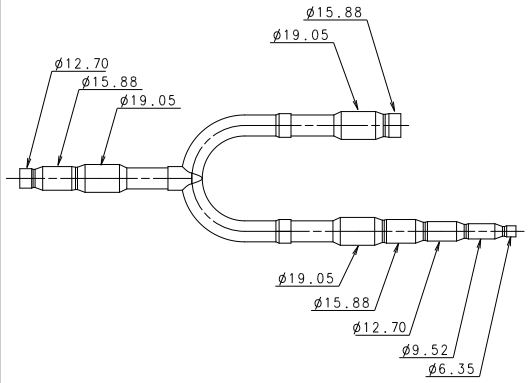
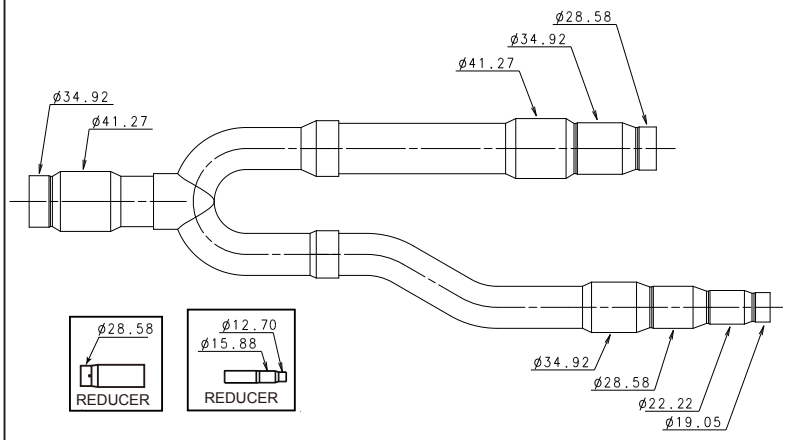
● Dimensions

Liquid pipe	Gas pipe
	

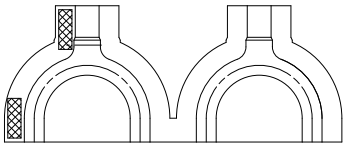
OPTIONAL PARTS

■ UTP-AX567A

● Port diameters

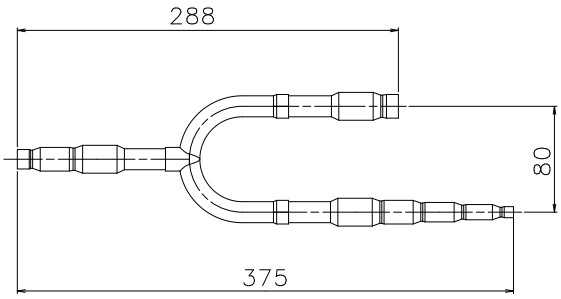
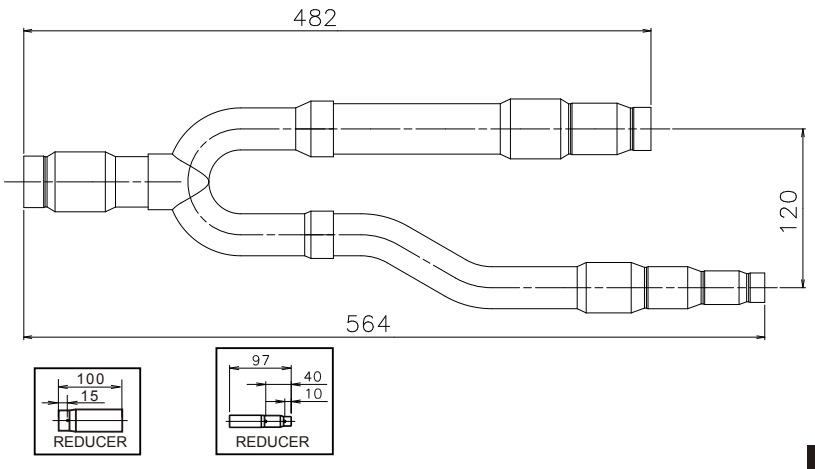
Liquid pipe	Q'ty	Gas pipe	Q'ty
	1		1

● Heat insulation

Heat insulation	Q'ty	Application
	2	for Liquid pipe x1 for Gas pipe x1

Tape	Q'ty
	8

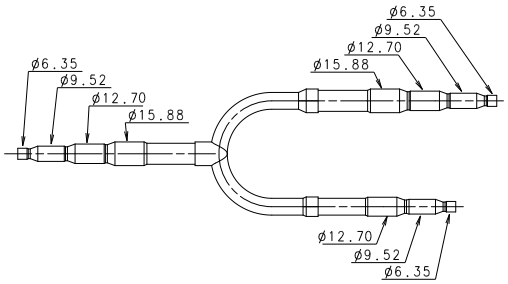
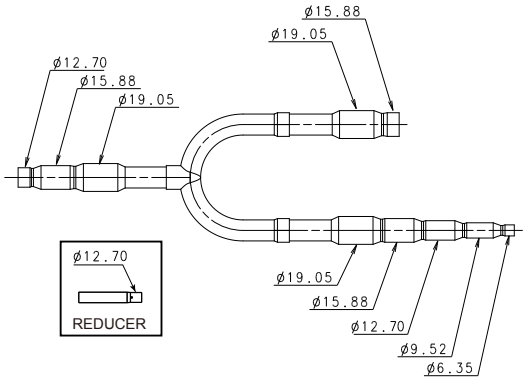
● Dimensions

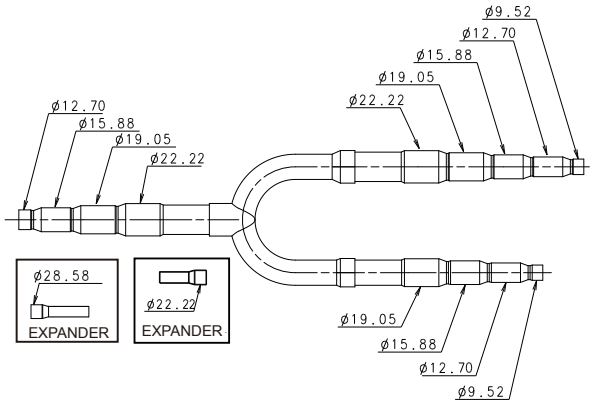
Liquid pipe	Gas pipe
	

1-2. SEPARATION TUBE FOR 3 PIPES

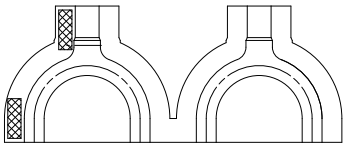
■ UTP-BX090A

● Port diameters

Liquid pipe	Q'ty	Discharge gas pipe	Q'ty
	1		1

Suction gas pipe	Q'ty
	1

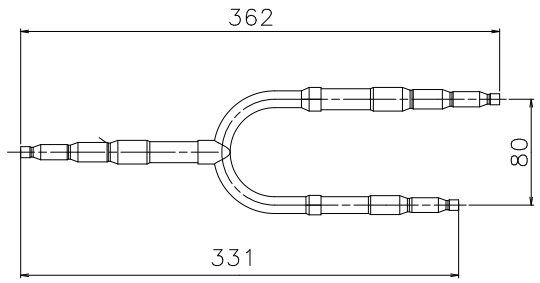
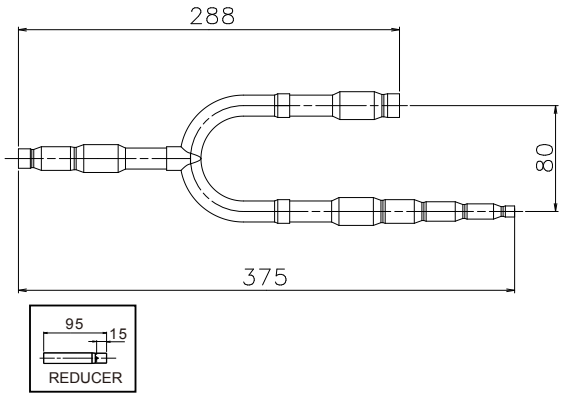
● Heat insulation

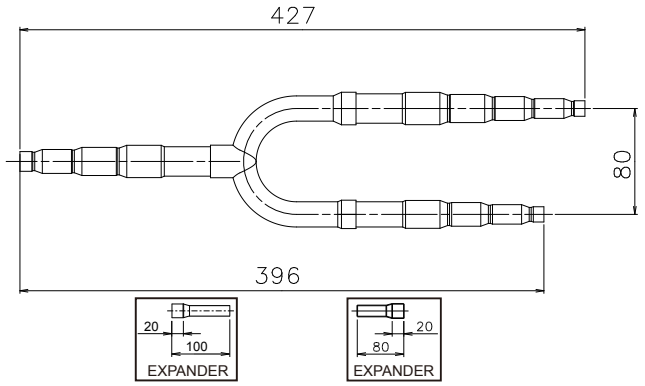
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

Tape	Q'ty
	8

OPTIONAL PARTS

● Dimensions

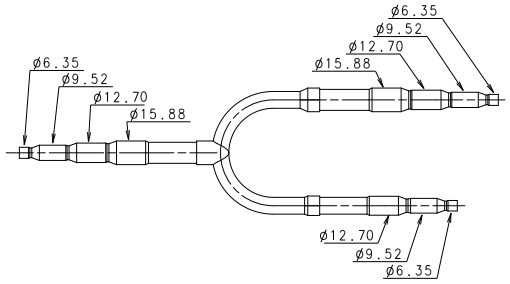
Liquid pipe	Discharge gas pipe
	

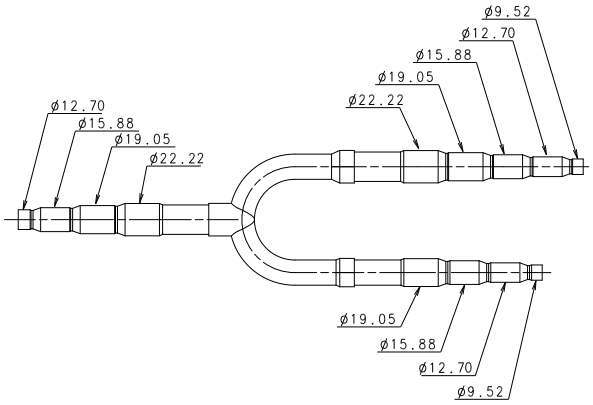
Suction gas pipe


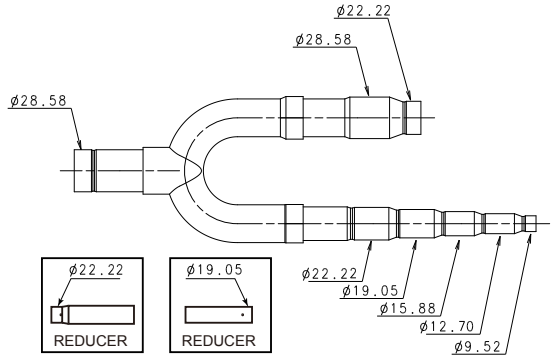
OPTIONAL PARTS

■ UTP-BX180A

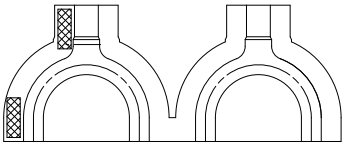
● Port diameters

Liquid pipe	Q'ty
	1

Discharge gas pipe	Q'ty
	1

Suction gas pipe	Q'ty
	1

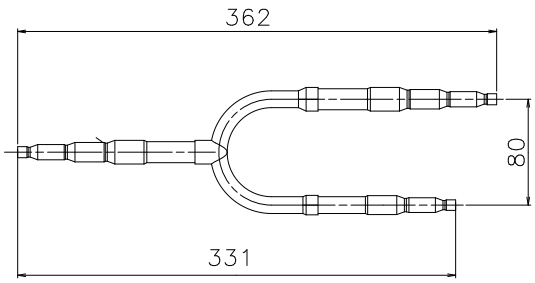
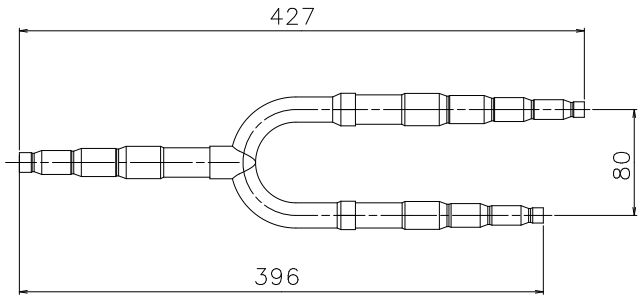
● Heat insulation

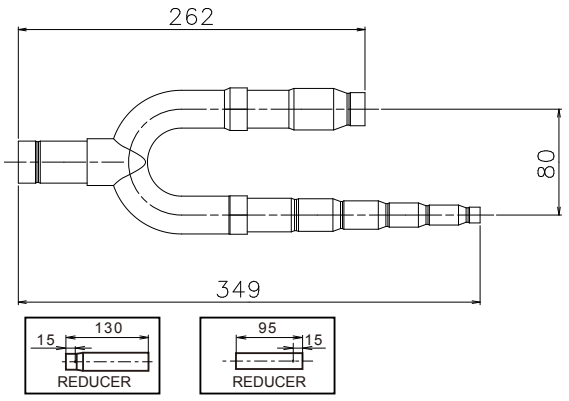
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

Tape	Q'ty
	8

OPTIONAL PARTS

● Dimensions

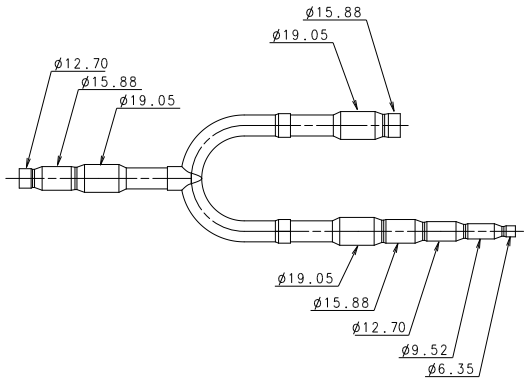
Liquid pipe	Discharge gas pipe
	

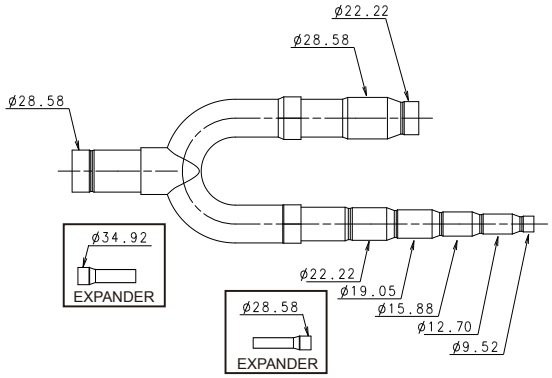
Suction gas pipe


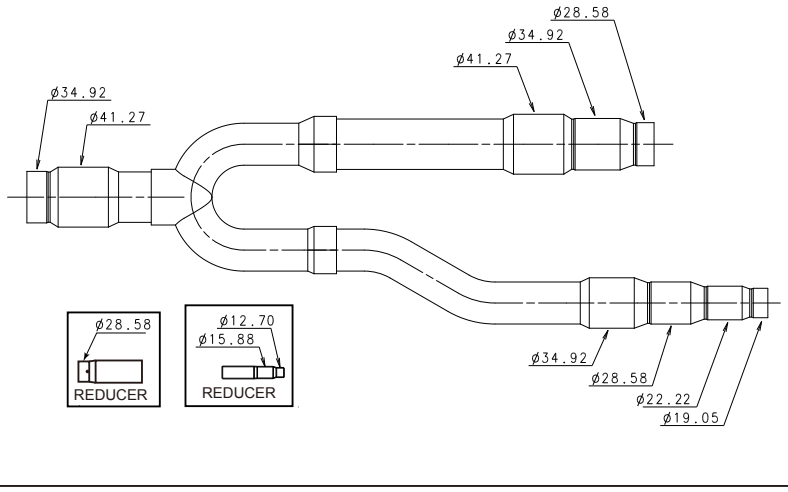
OPTIONAL PARTS

■ UTP-BX567A

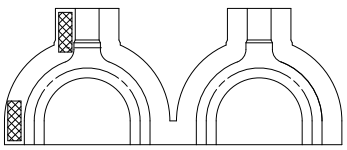
● Port diameters

Liquid pipe	Q'ty
	1

Discharge gas pipe	Q'ty
	1

Suction gas pipe	Q'ty
	1

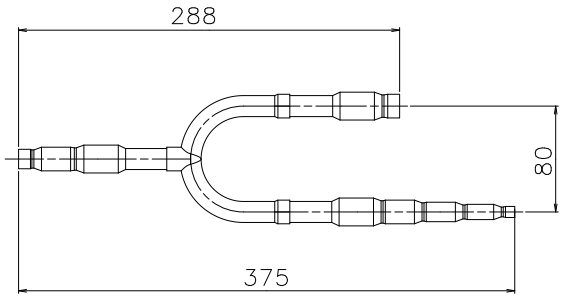
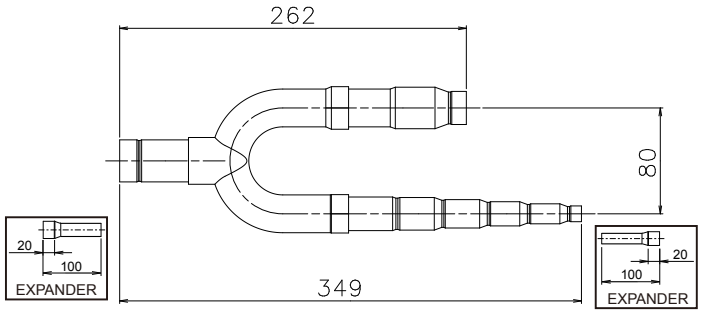
● Heat insulation

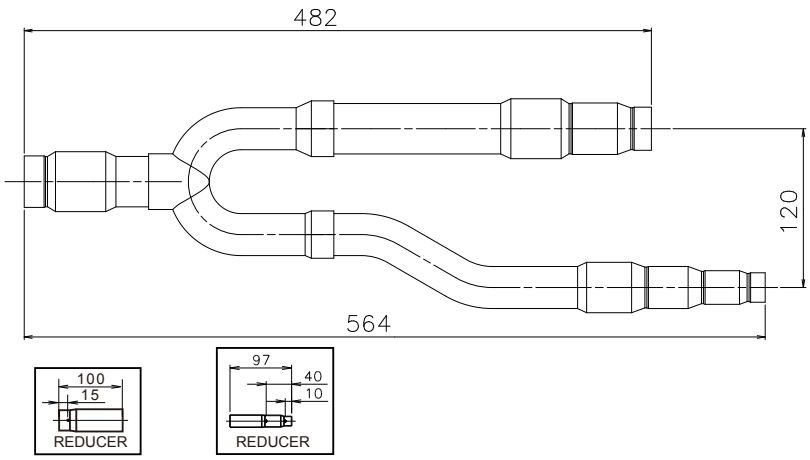
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

Tape	Q'ty
	8

OPTIONAL PARTS

● Dimensions

Liquid pipe	Discharge gas pipe
	

Suction gas pipe


OPTIONAL PARTS

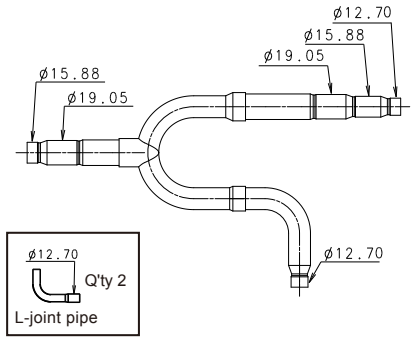
2. OUTDOOR UNIT BRANCH KIT

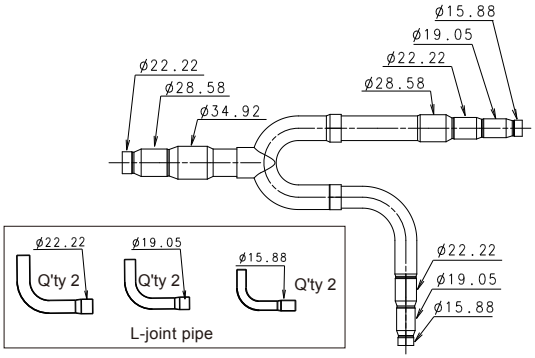
■ UTP-DX567A

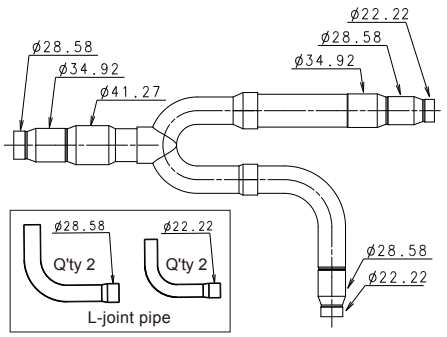
(Unit : mm)

NOTE: Only for VR-II series.

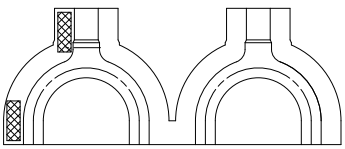
● Port diameters

Liquid pipe	Q'ty
	1

Discharge gas pipe	Q'ty
	1

Suction gas pipe	Q'ty
	1

● Heat insulation

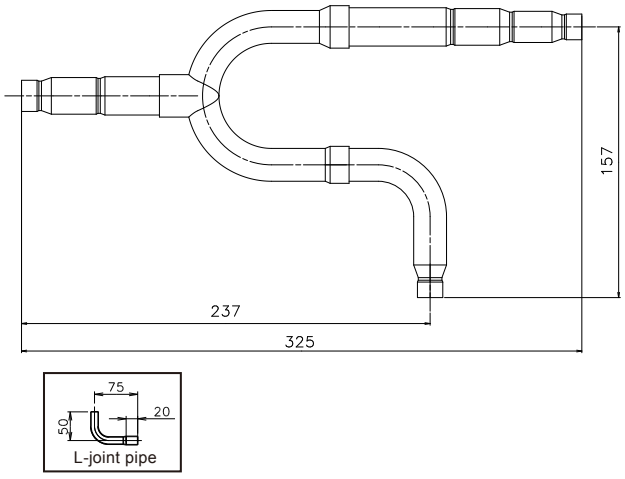
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

Tape	Q'ty
	8

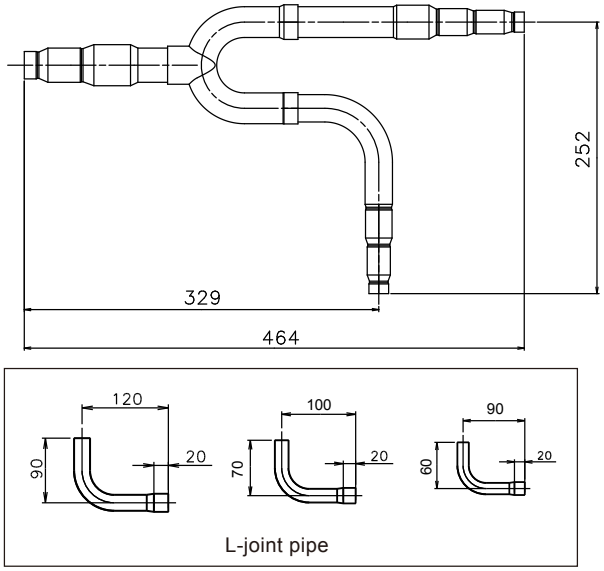
OPTIONAL PARTS

● Dimensions

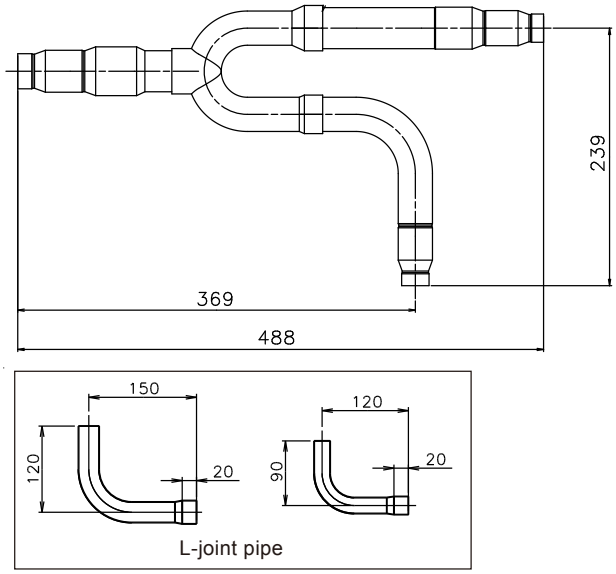
Liquid pipe



Discharge gas pipe



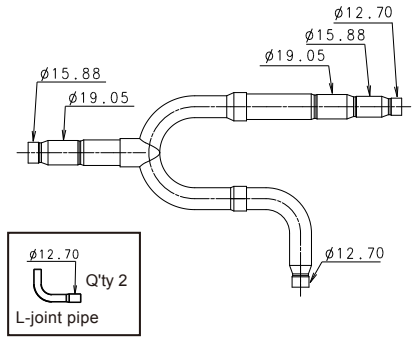
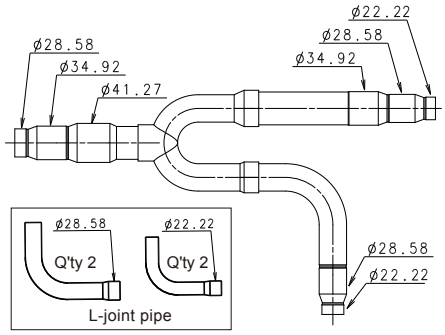
Suction gas pipe



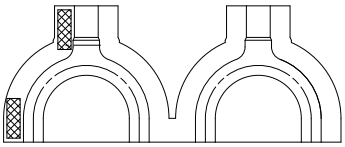
■ UTP-CX567A

NOTE: Only for V-III, V-II series.

● Port diameters

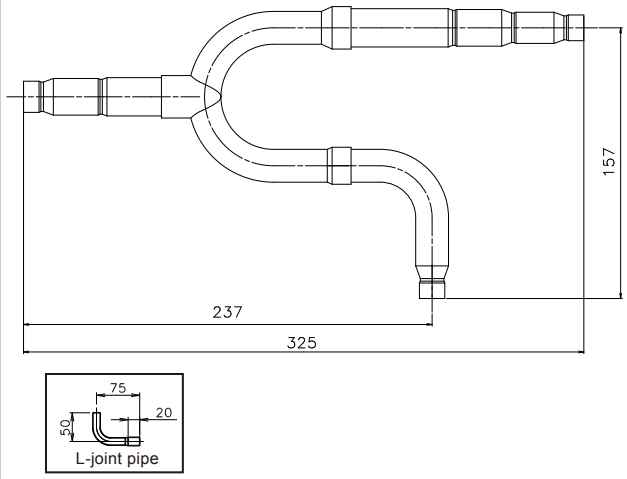
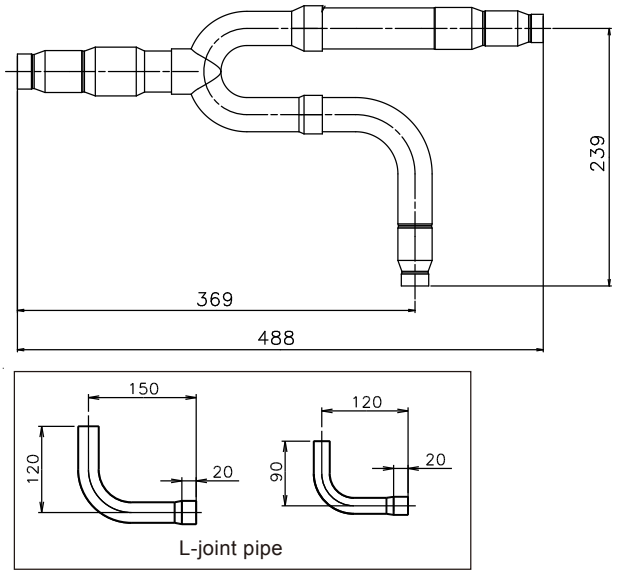
Liquid pipe	Q'ty	Gas pipe	Q'ty
	1		1

● Heat insulation

Heat insulation	Q'ty	Application
	2	for Liquid pipe x1 for Gas pipe x1

Tape	Q'ty
	8

● Dimensions

Liquid pipe	Gas pipe
	

3. HEADER

■ CONNECTING CAPACITY

Total cooling capacity of indoor units (kW)	For 2 pipes		For 3 pipes	
	3 - 6 Branches	3 - 8 Branches	3 - 6 Branches	3 - 8 Branches
28.0 or less	UTR-H0906L	UTR-H0908L	UTP-J0906A	UTP-J0908A
28.1 to 56.0	UTR-H1806L	UTR-H1808L	UTP-J1806A	UTP-J1808A

Each Value above such as 28.0, 28.1 and 56.0[kw] means total cooling capacity at rated condition of indoor unit connected under the targeted header tube.

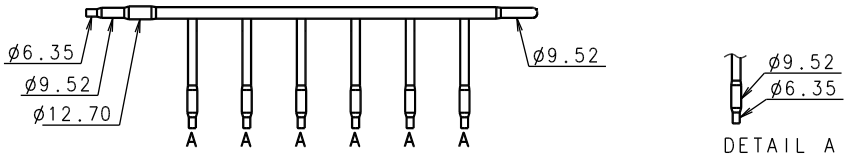
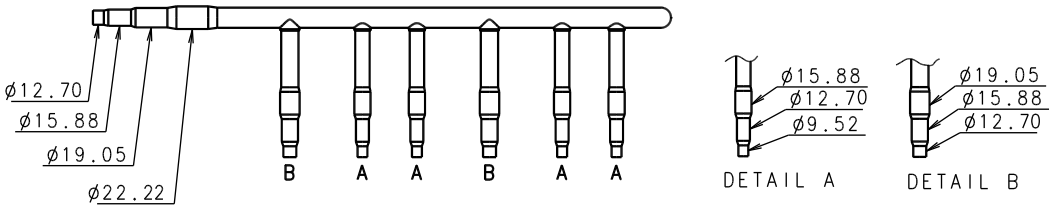
OPTIONAL PARTS

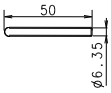
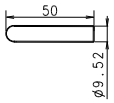
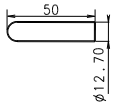
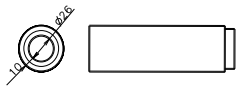
3-1. HEADER FOR 2 PIPES

■ MODEL : UTR-H0906L

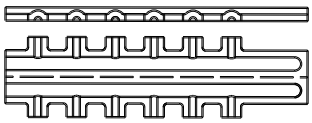
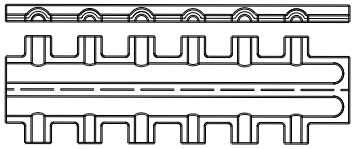
(Unit : mm)

● Port diameters

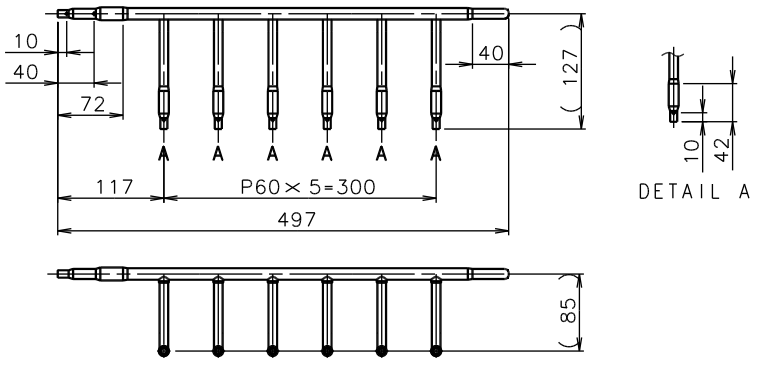
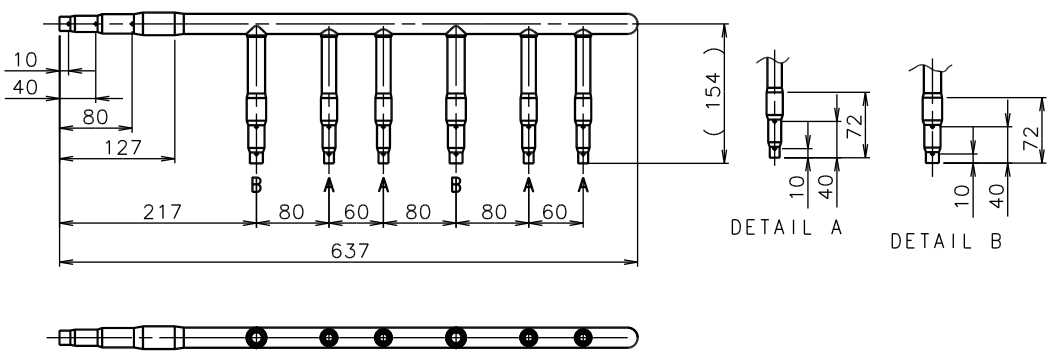
Liquid pipe	
Gas pipe	

Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
 Q'ty 3	 Q'ty 2	 Q'ty 2	 Q'ty 6

● Heat insulation

Header insulation liquid	Header insulation gas
 Q'ty 1	 Q'ty 1

● Dimensions

Liquid pipe	
Gas pipe	

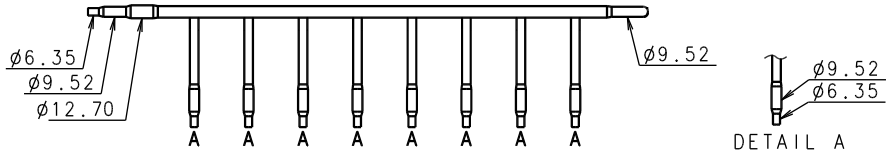
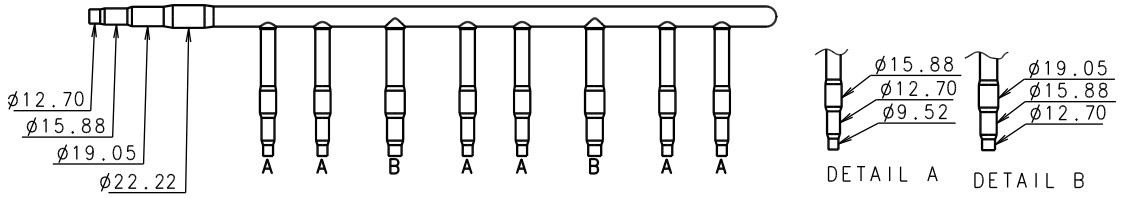
OPTIONAL PARTS

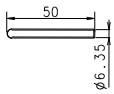
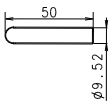
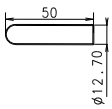
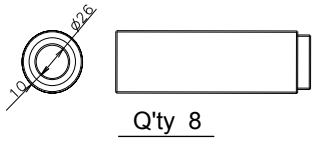
OPTIONAL PARTS

■ MODEL : UTR-H0908L

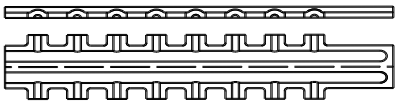
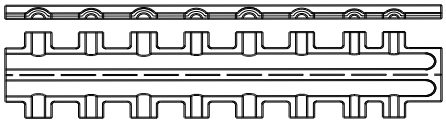
(Unit : mm)

● Port diameters

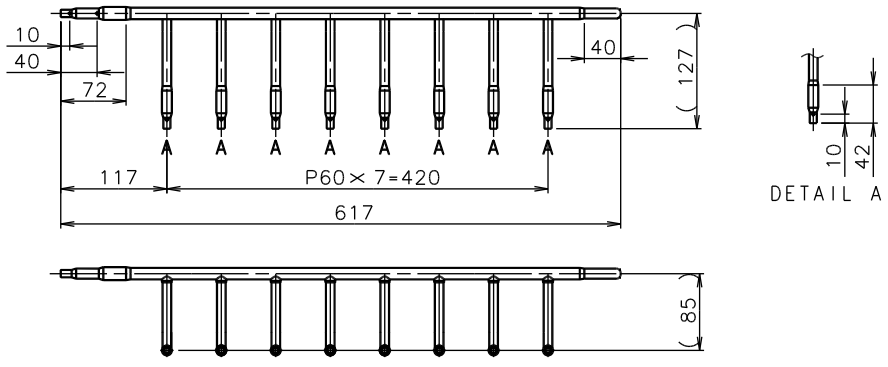
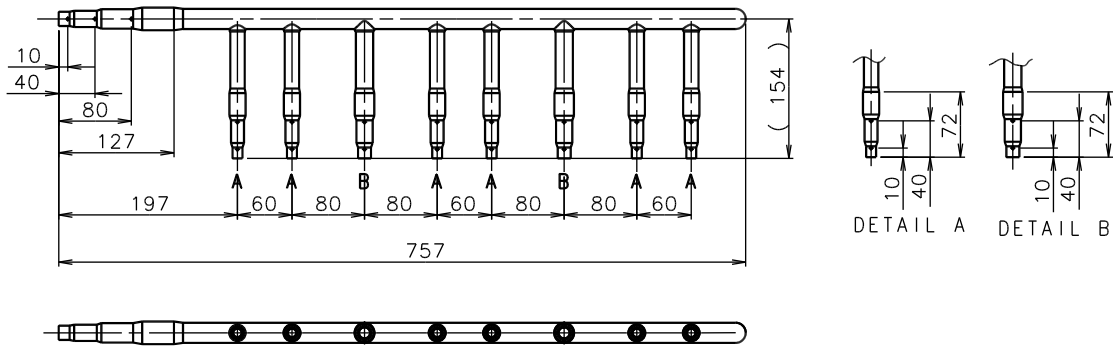
Liquid pipe	
Gas pipe	

Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
			
Q'ty 5	Q'ty 4	Q'ty 2	Q'ty 8

● Heat insulation

Header insulation liquid	Header insulation gas
	
Q'ty 1	Q'ty 1

● Dimensions

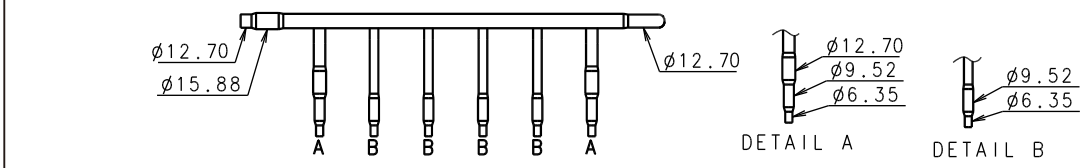
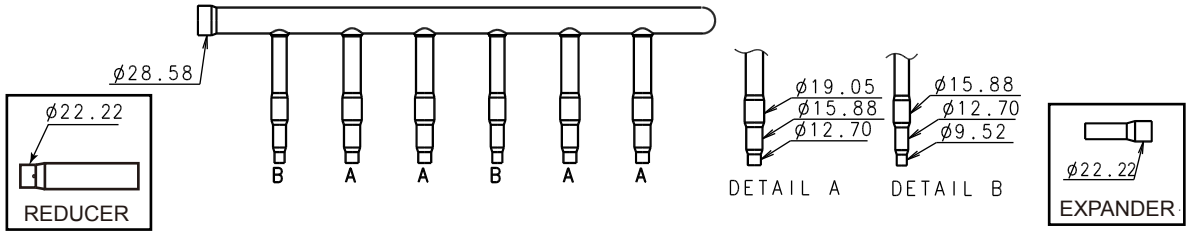
Liquid pipe	
Gas pipe	

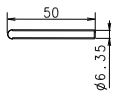
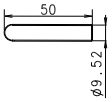
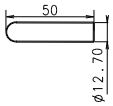
OPTIONAL PARTS

■ MODEL : UTR-H1806L

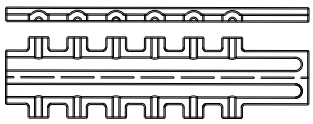
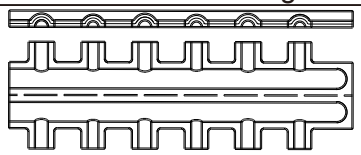
(Unit : mm)

● Port diameters

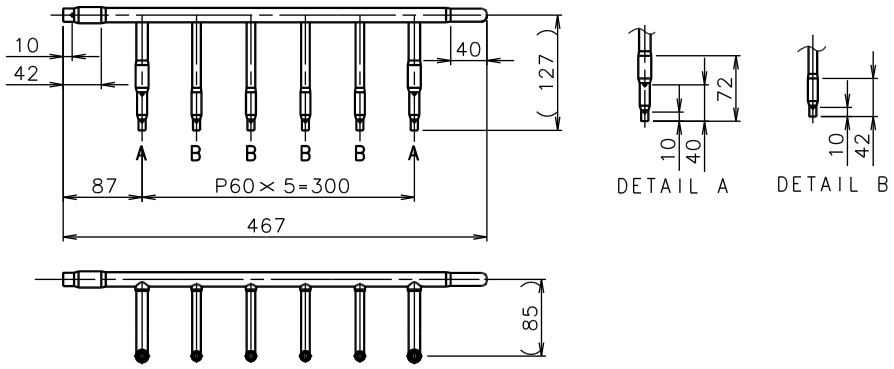
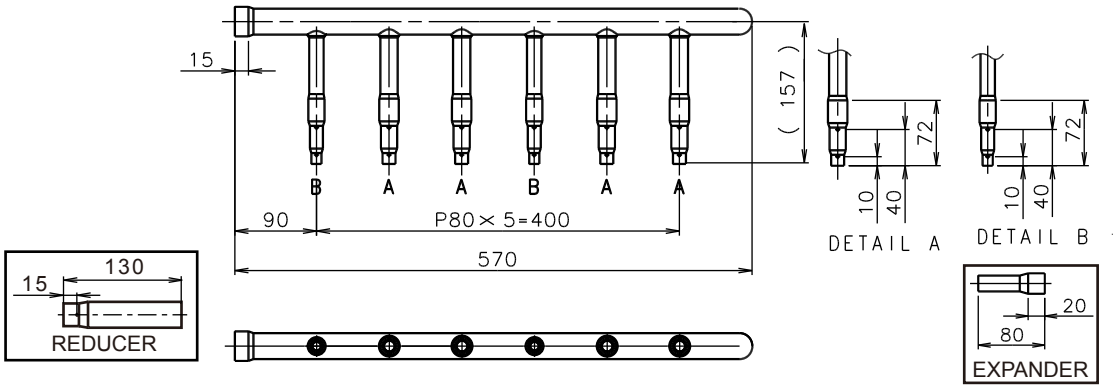
Liquid pipe	
Gas pipe	

Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
 Q'ty 3	 Q'ty 2	 Q'ty 2	 Q'ty 6

● Heat insulation

Header insulation liquid	Header insulation gas
 Q'ty 1	 Q'ty 1

● Dimensions

Liquid pipe	
Gas pipe	

OPTIONAL PARTS

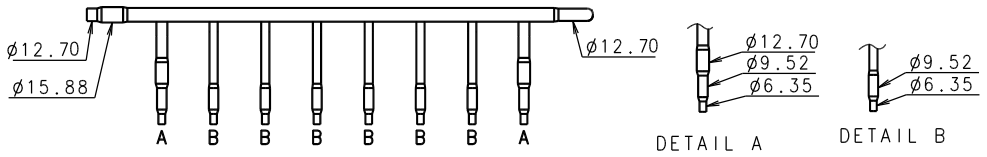
OPTIONAL PARTS

■ MODEL : UTR-H1808L

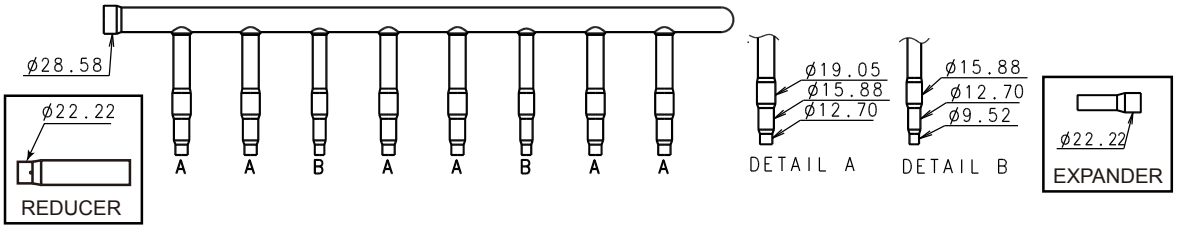
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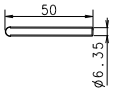
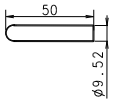
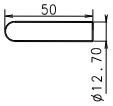
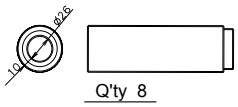
● Port diameters

Liquid pipe

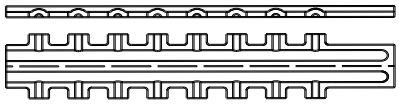
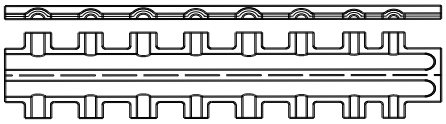


Gas pipe



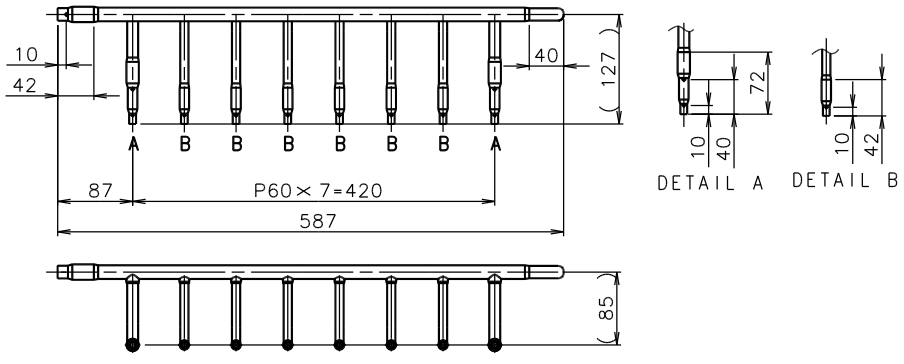
Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
			
Q'ty 5	Q'ty 2	Q'ty 4	Q'ty 8

● Heat insulation

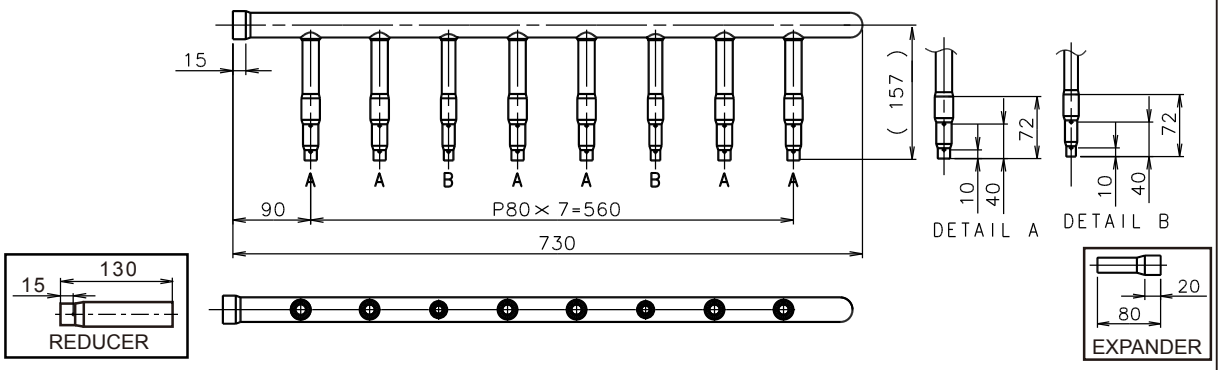
Header insulation liquid	Header insulation gas
	
Q'ty 1	Q'ty 1

● Dimensions

Liquid pipe



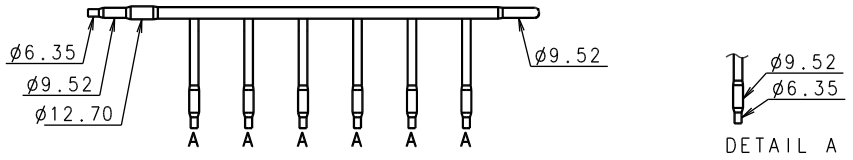
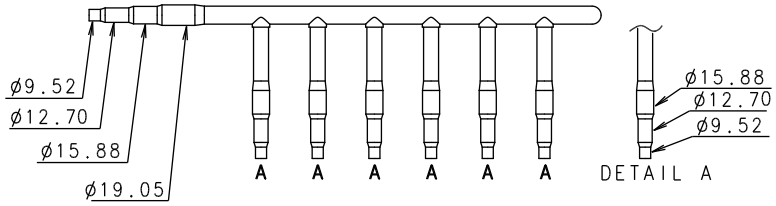
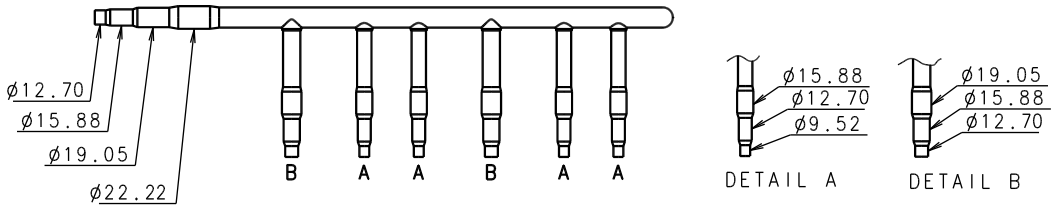
Gas pipe

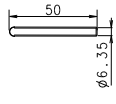
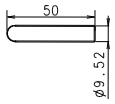
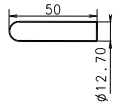


3-2. HEADER FOR 3 PIPES

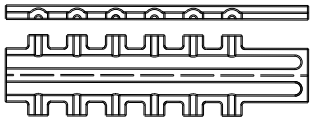
■ MODEL : UTP-J0906A

● Port diameters

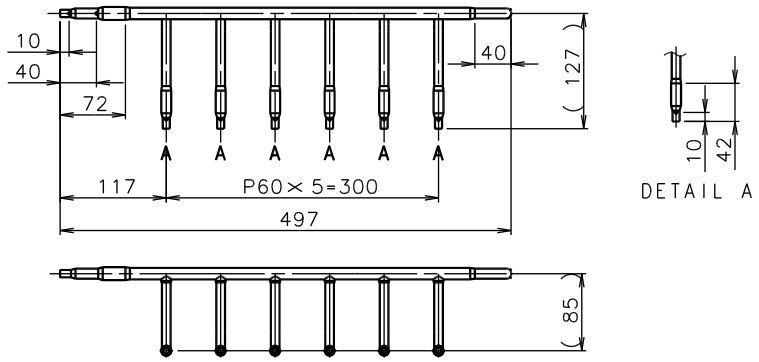
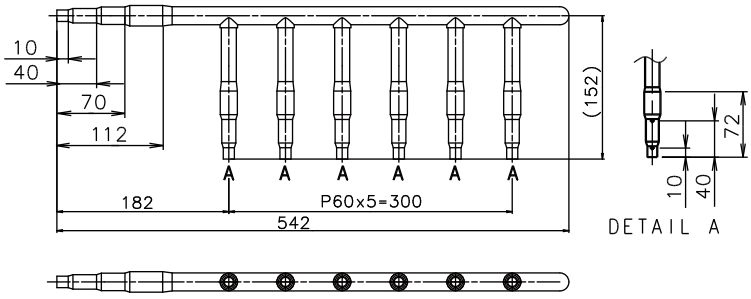
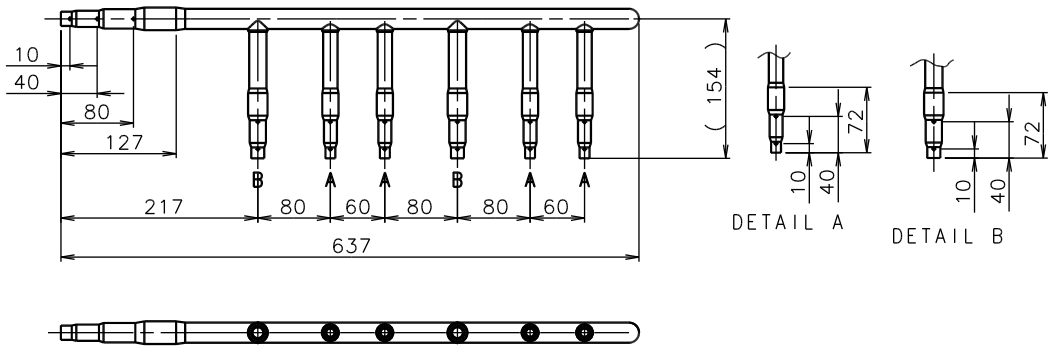
Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
 Q'ty 3	 Q'ty 5	 Q'ty 2	 Q'ty 9

● Heat insulation

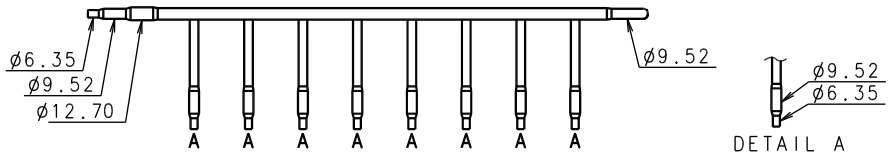
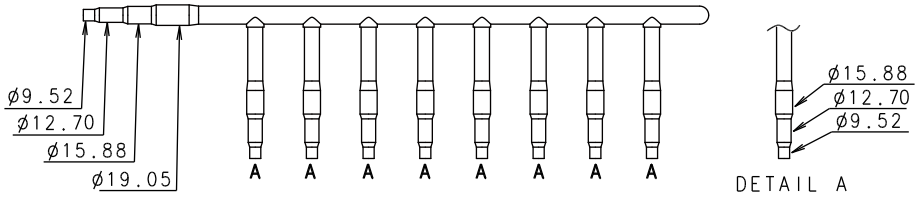
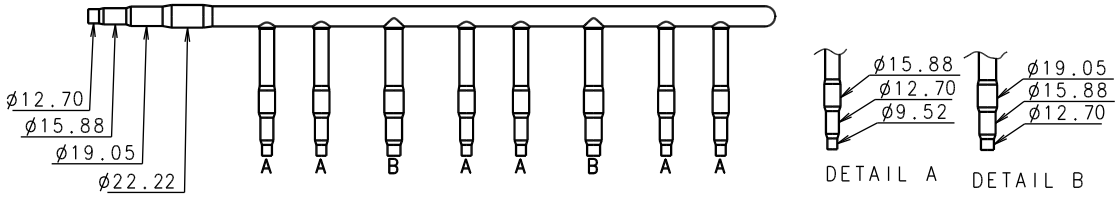
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

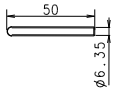
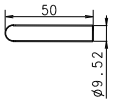
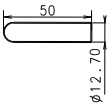
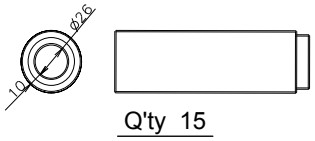
● Dimensions

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

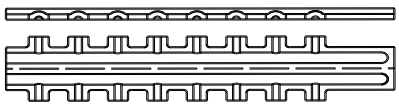
■ MODEL : UTP-J0908A

● Port diameters

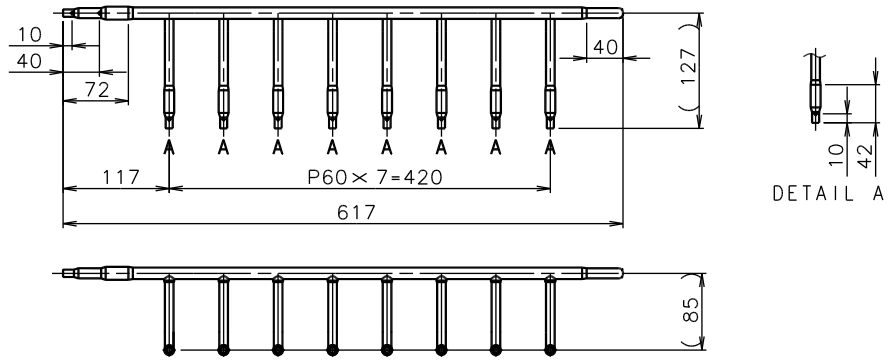
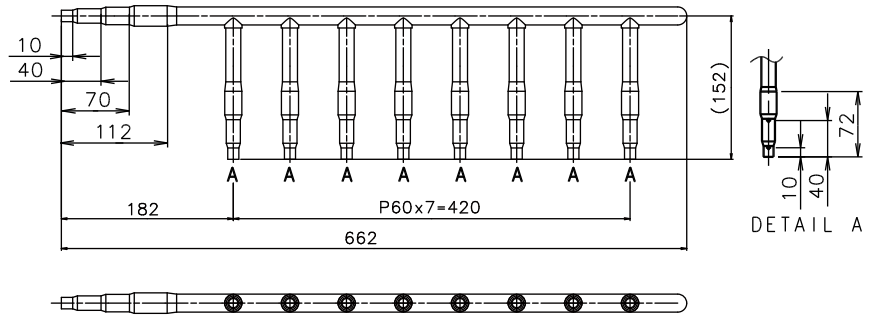
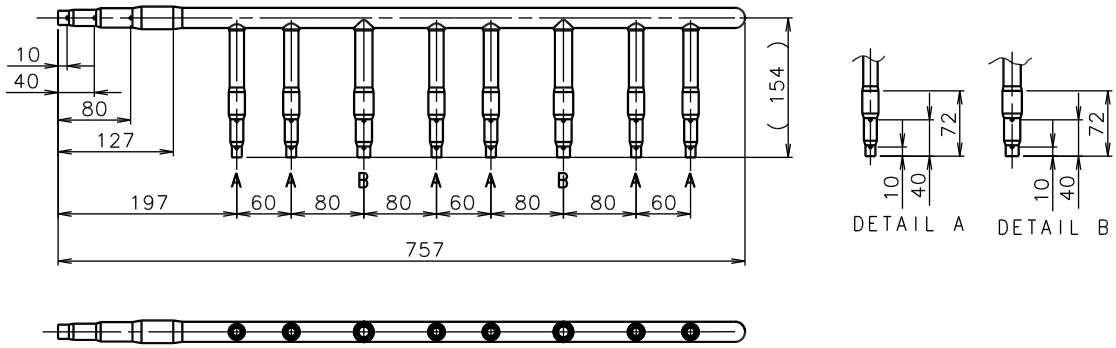
Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
			
Q'ty 5	Q'ty 9	Q'ty 2	Q'ty 15

● Heat insulation

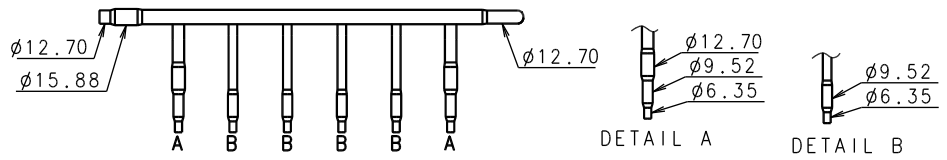
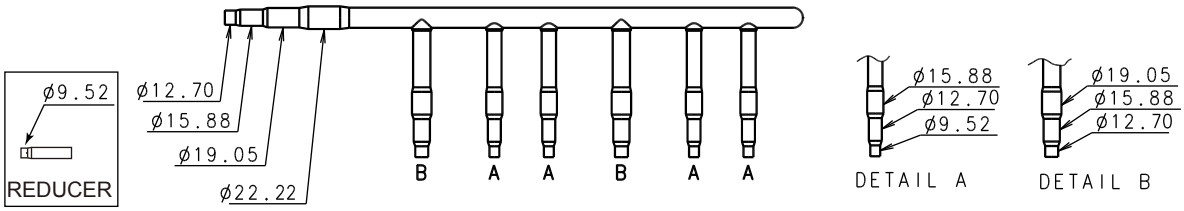
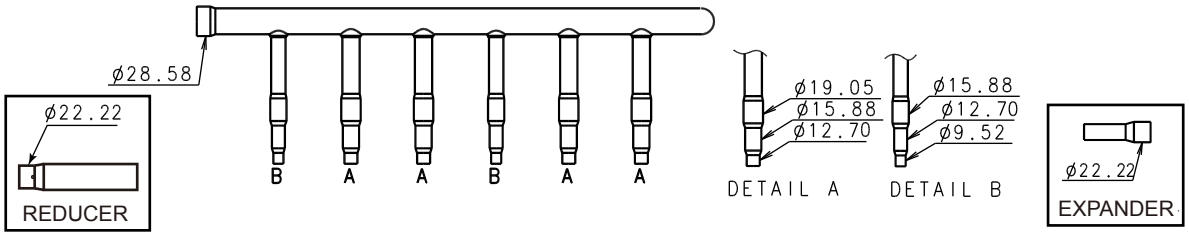
Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

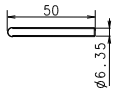
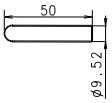
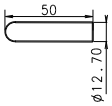
● Dimensions

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

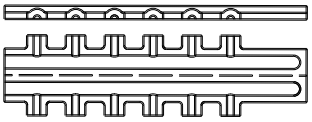
■ MODEL : UTP-J1806A

● Port diameters

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

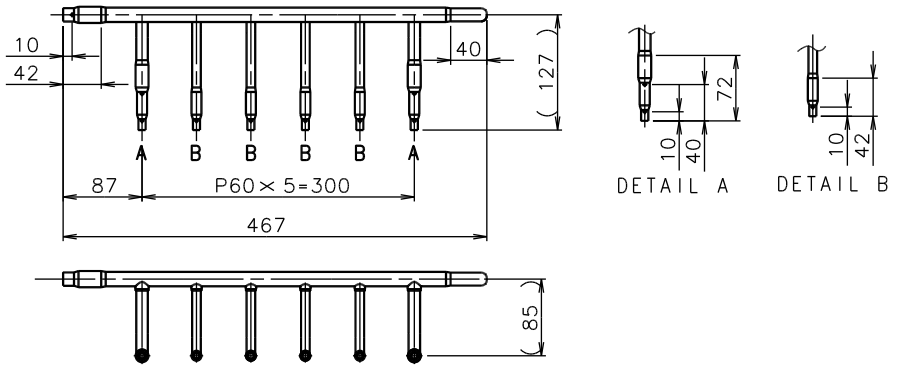
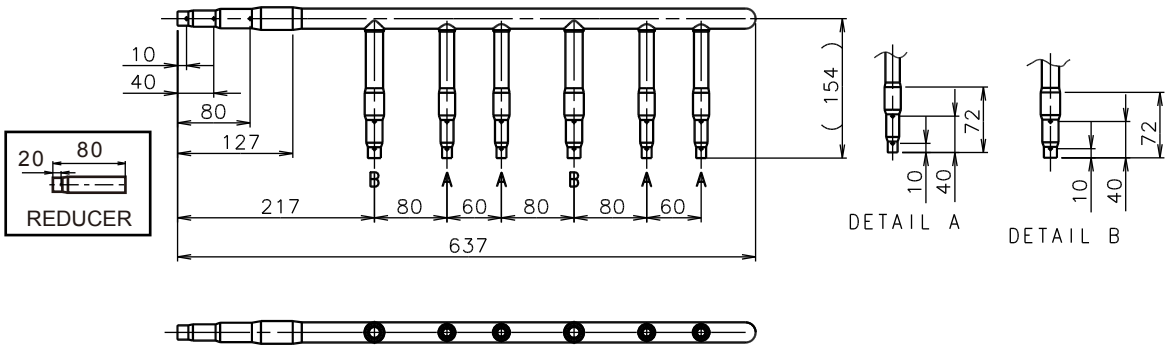
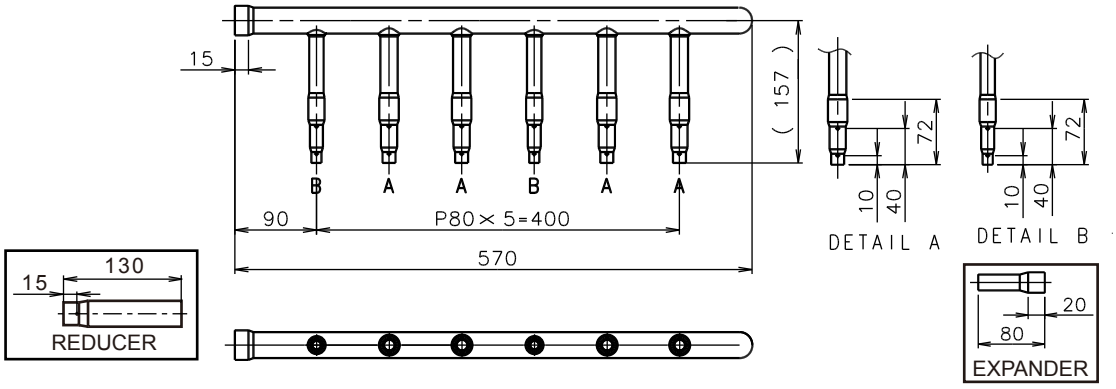
Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
 Q'ty 3	 Q'ty 4	 Q'ty 4	 Q'ty 9

● Heat insulation

Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

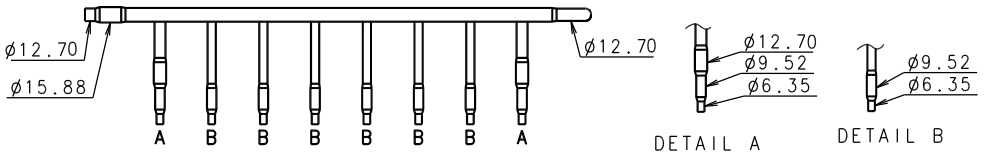
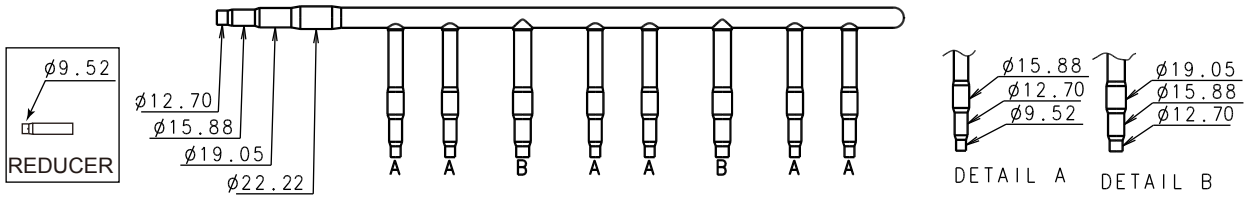
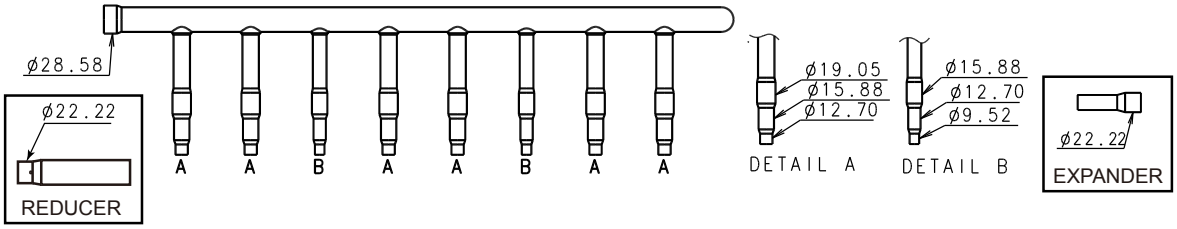
OPTIONAL PARTS

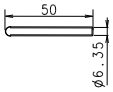
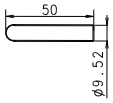
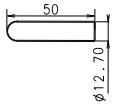
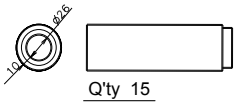
● Dimensions

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

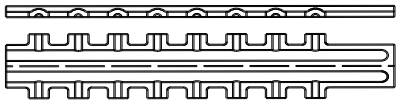
■ MODEL : UTP-J1808A

● Port diameters

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

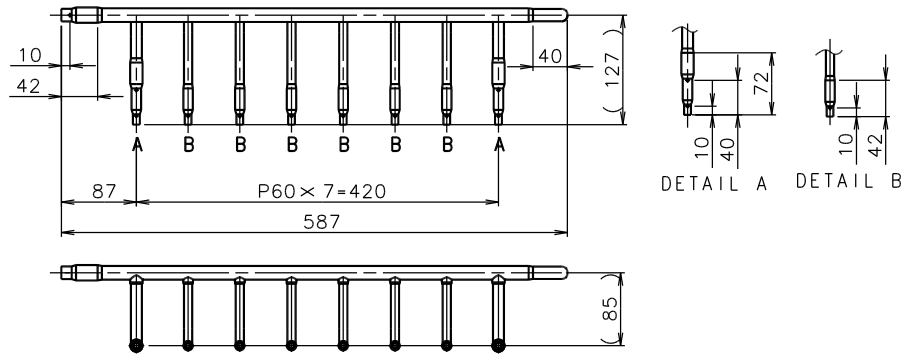
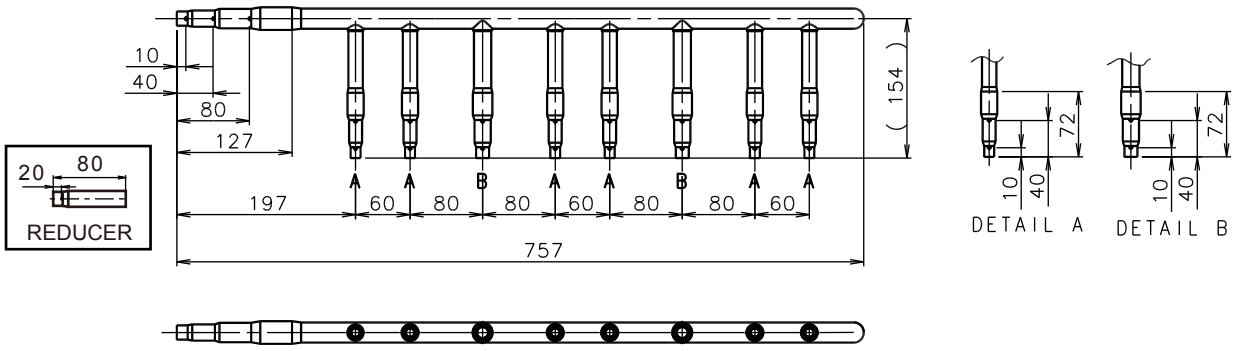
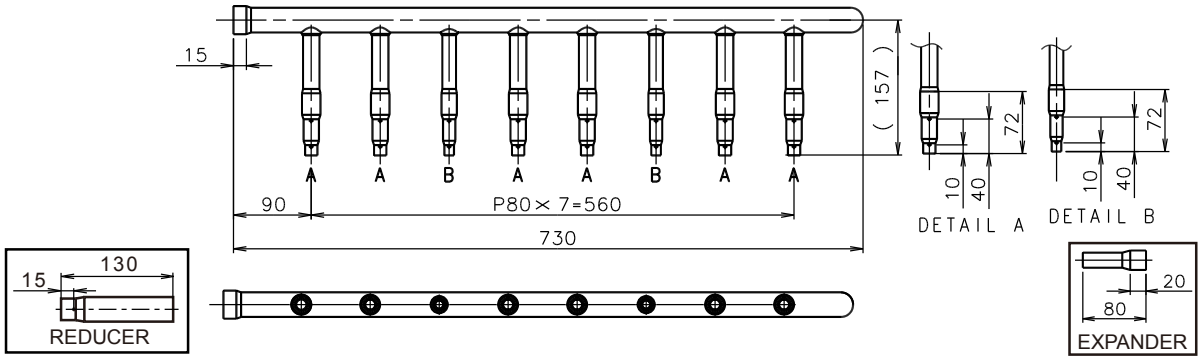
Closed pipe A	Closed pipe B	Closed pipe C	Closed pipe insulation
 Q'ty 5	 Q'ty 6	 Q'ty 6	 Q'ty 15

● Heat insulation

Heat insulation	Q'ty	Application
	3	for Liquid pipe x1 for Discharge gas pipe x1 for Suction gas pipe x1

OPTIONAL PARTS

● Dimensions

Liquid pipe	
Dis-charge gas pipe	
Suction gas pipe	

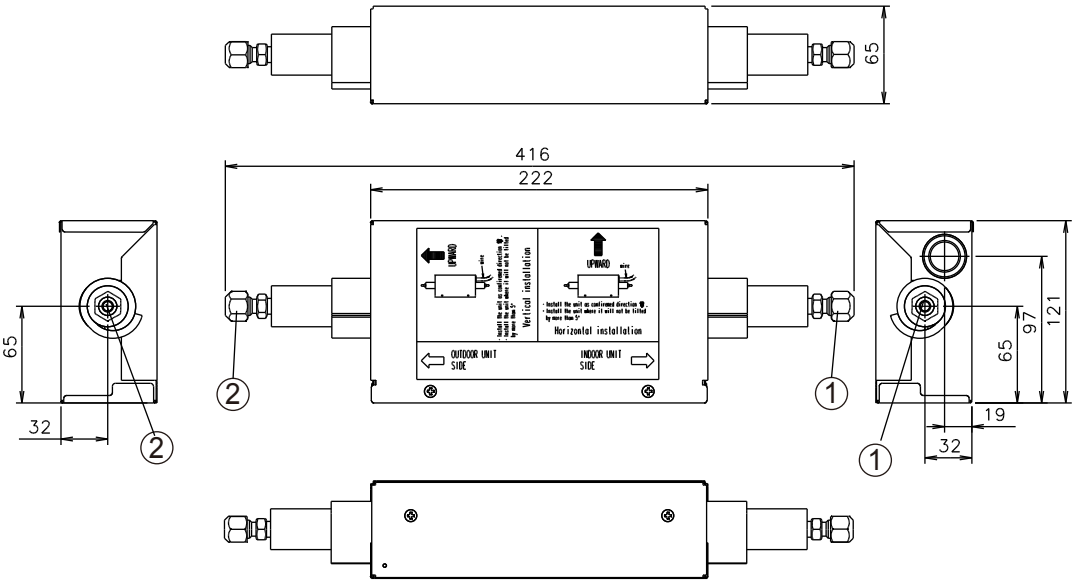
4. EV KIT

■ MODELS : UTR-EV09XB, UTR-EV14XB

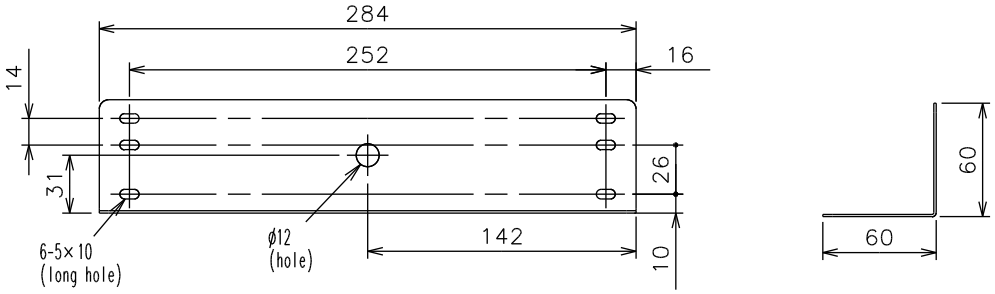
(Unit : mm)

Model	Applicable model
UTR-EV09XB	AS∗E04GACH, AS∗E07GACH, AS∗E09GACH AS∗E004GTAH, AS∗E007GTAH, AS∗E009GTAH AG∗E004GCAH, AG∗E007GCAH, AG∗E009GCHA
UTR-EV14XB	AS∗E12GACH, AS∗E14GACH AG∗E012GCAH, AG∗E014GCAH

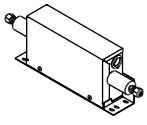
EV kit



Hanger



①	Refrigerant pipe flare connection (liquid pipe)	Indoor unit side	ø 6.35 mm
②		Outdoor unit side	ø 6.35 mm

Name and Shape		Q'ty	Name and Shape	Q'ty	Name and Shape	Q'ty	Name and Shape	Q'ty
EV kit 		1	Coupler heat insulation 	2	Special nut A (M10) (large frange) 	1	Special nut B (M10) (small frange) 	1
Binder	Large	5	Screw 	4	Tube 	1		
	Small	2						

5. RB UNIT

5-1. SPECIFICATIONS

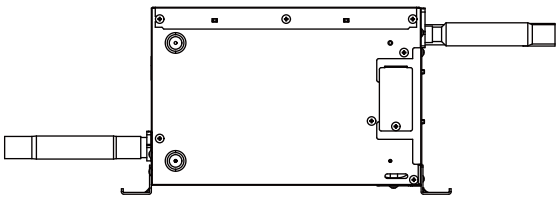
Model name				UTP-RX01AH	UTP-RX01BH	UTP-RX01CH	UTP-RX04BH
Power source				1 Phase 230V ~ 50Hz			
Available voltage range				198 to 264V			
Number of branches				1	1	1	4
Maximum number of connectable indoor units per branch				3	8	8	8
Maximum capacity of connectable indoor units(Q)			kW	Q ≤ 8.0	Q ≤ 18.0	Q ≤ 28.0	Q ≤ 56.0 *1
Maximum capacity of connectable indoor units per branch(Q)				Q ≤ 8.0	Q ≤ 18.0	Q ≤ 28.0	Q ≤ 18.0
Input power			W	17	24	31	96
Running current			A	0.11	0.16	0.22	0.64
Refrigerant type				R410A			
Dimensions (H x W x D)		Net	mm	198×298×268			260×658×428
		Gross		262×833×374			348×1250×775
Weight		Net	kg	7	7.5	8	31.5
		Gross		9.5	10.5	11	39.5
Connection pipe	Outdoor unit side	Suction gas pipe	mm	ø12.70	ø19.05	ø22.22	ø28.58
		Discharge gas pipe		ø9.52	ø12.70	ø19.05	ø22.22
		Liquid pipe		None			ø15.88
	Indoor unit side	Gas pipe		ø12.70	ø19.05	ø22.22	ø19.05
		Liquid pipe		None			ø9.52
	Method			Brazing			
Operation range			°C	-15 to 46			
			%RH	80 or less			

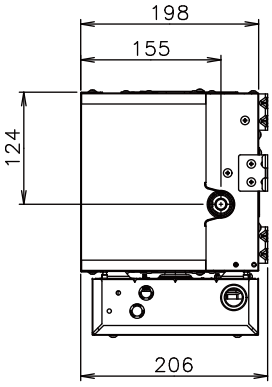
*1: In case of two RB units connected in series (total 8-branches), maximum capacity of connectable indoor units is up to 56.0kW.

5-2. DIMENSIONS

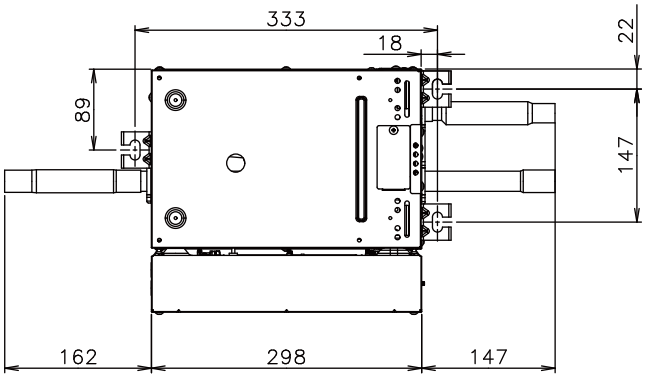
■ MODELS : UTP-RX01AH, UTP-RX01BH, UTP-RX01CH

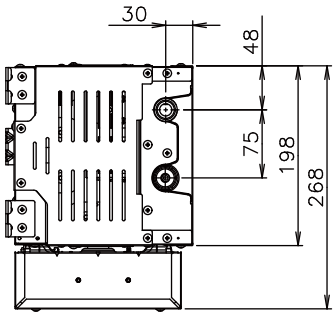
Unit : mm



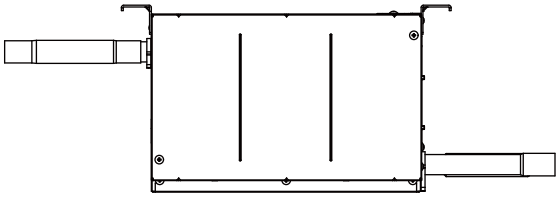


Indoor unit side

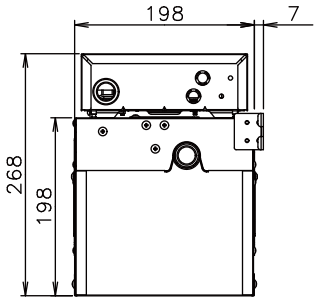


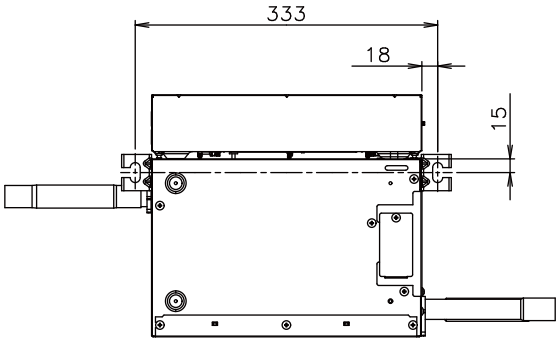


Outdoor unit side



Ceiling hanging



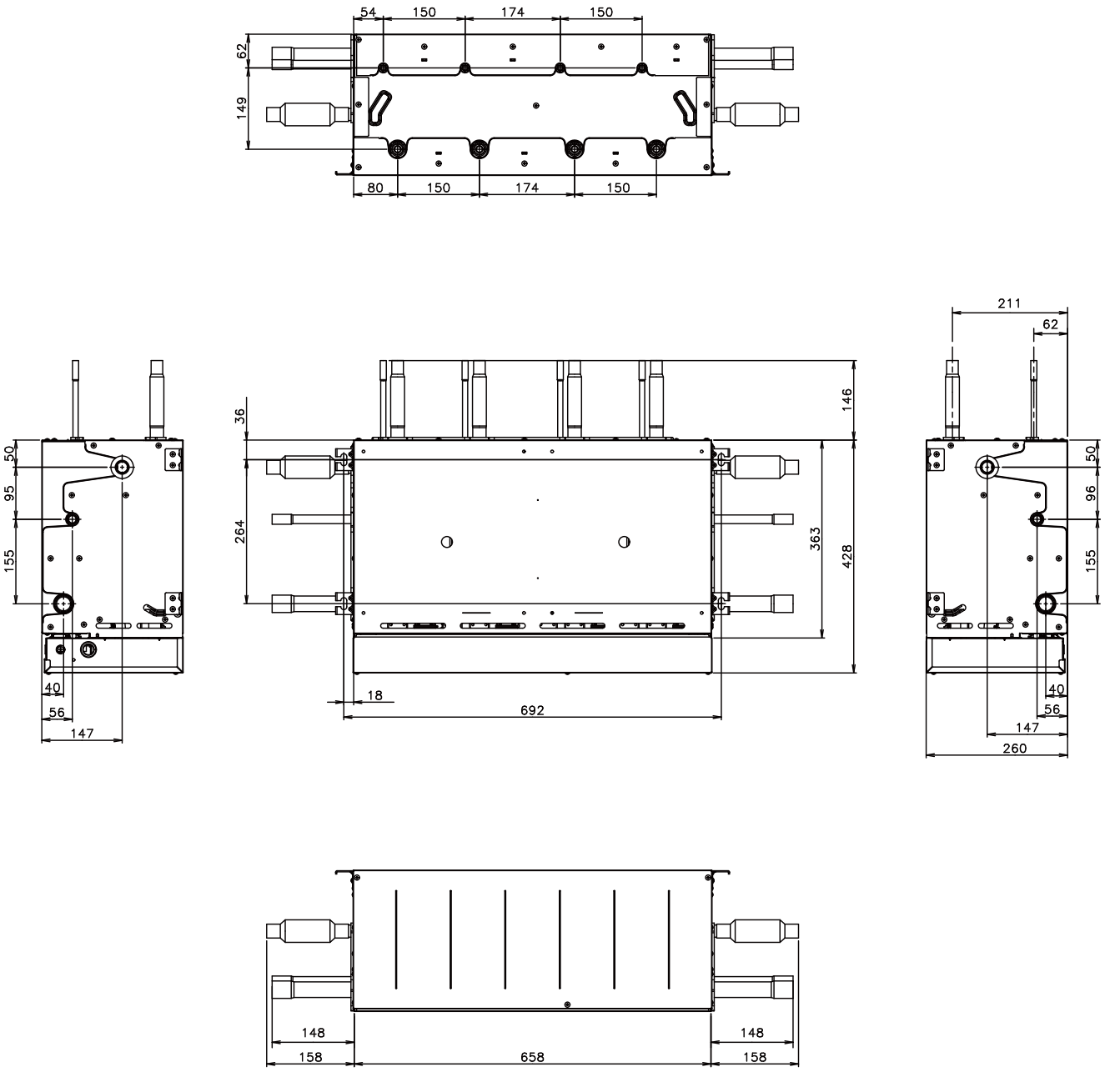


Wall hanging

OPTIONAL PARTS

■ MODEL : UTP-RX04BH

Unit : mm



OPTIONAL PARTS

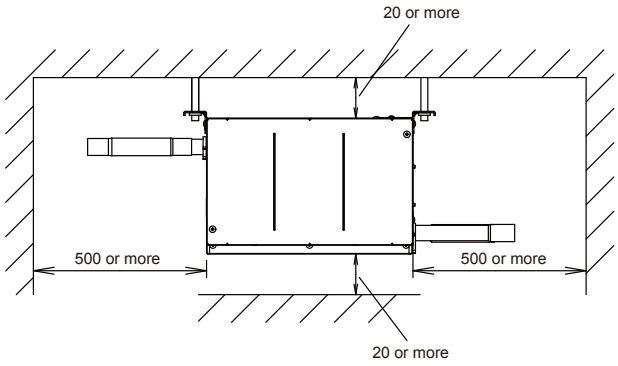
5-3. INSTALLATION

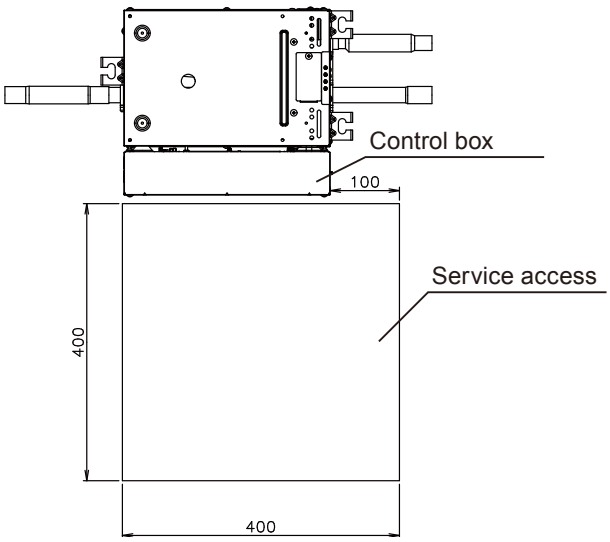
- Control box which is a part of RB units can be also changed the position depending on installation condition at each side of RB units
- Please be sure to prepare Service access in control box side.
- Since the sound of refrigerant flow may be felt as an unusual sound, please do not install in the underpart of the roof, such as a bedroom which sound worries.

■ MODELS : UTP-RX01AH, UTP-RX01BH, UTP-RX01CH

● Ceiling installation

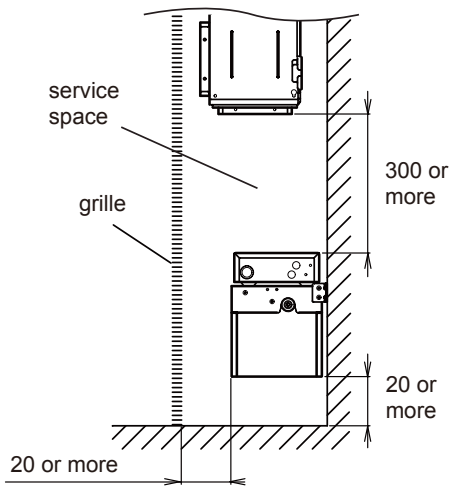
Unit : mm





● Wall installation

E.g.: If installing a duct model vertically.

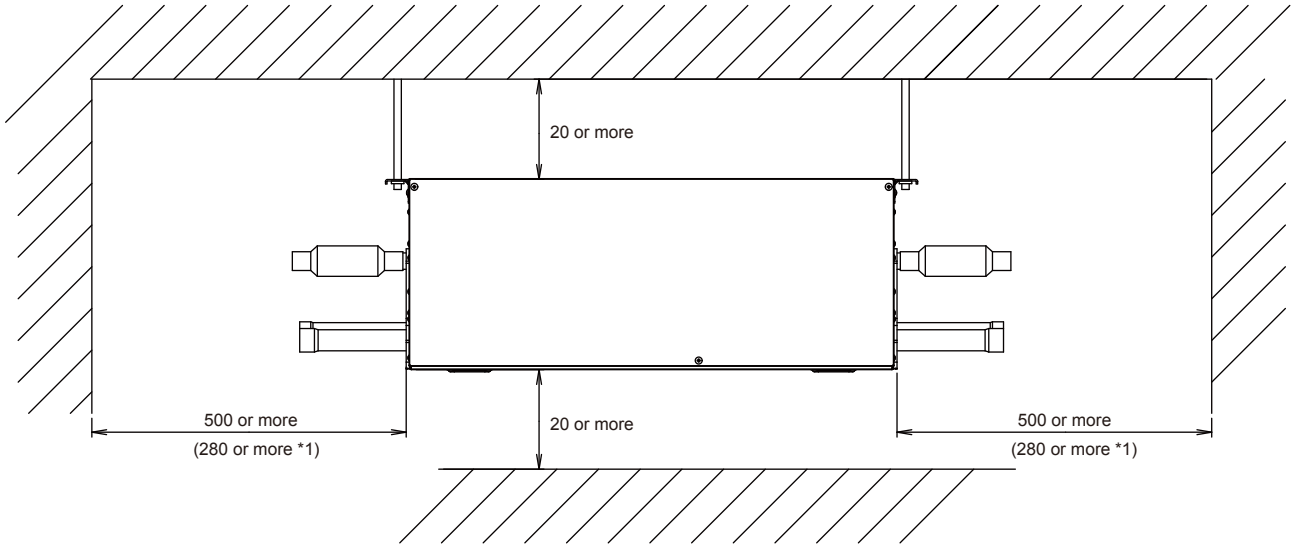


OPTIONAL PARTS

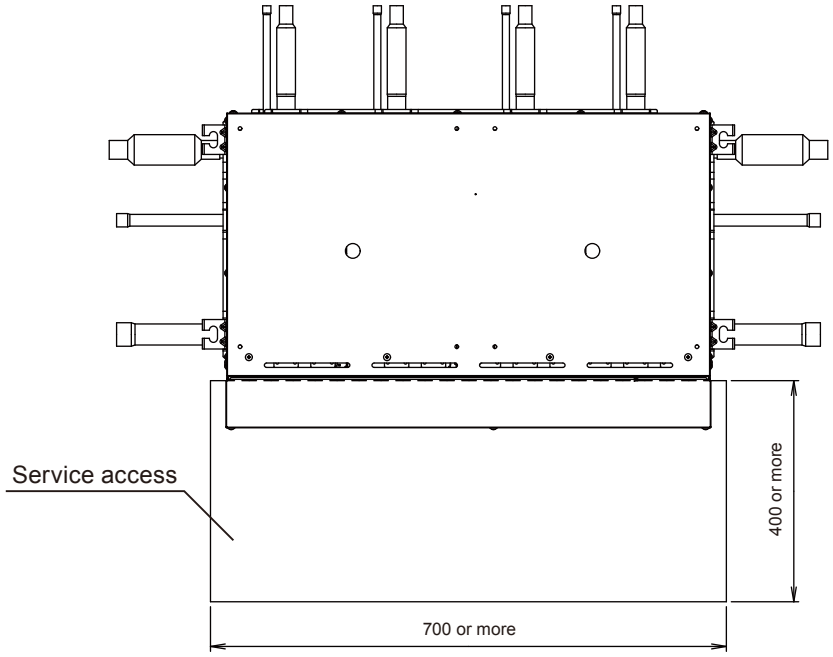
■ MODEL : UTP-RX04BH

● Ceiling installation

Unit : mm



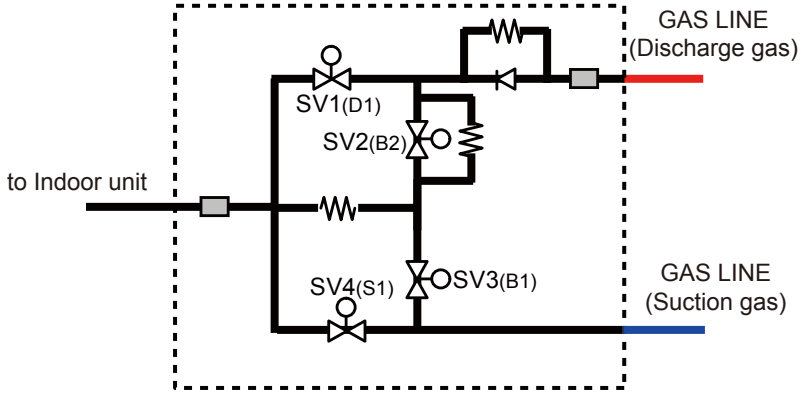
*1: When piping is not connected



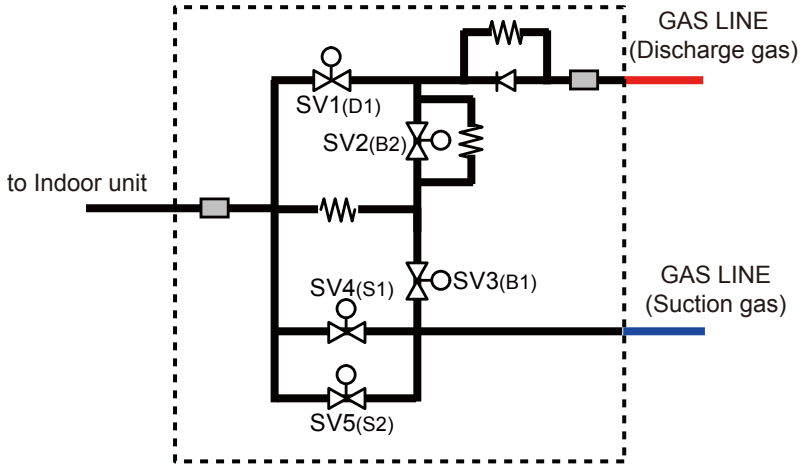
OPTIONAL PARTS

5-4. REFRIGERANT CIRCUIT

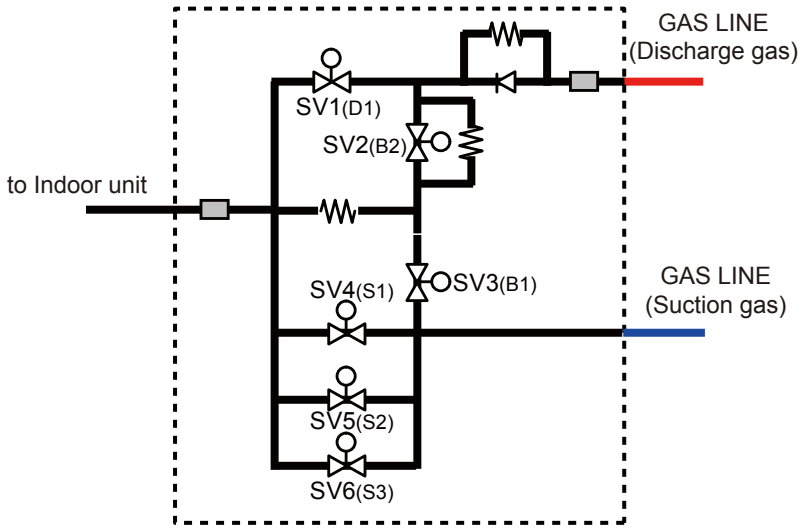
■ MODEL : UTP-RX01AH



■ MODEL : UTP-RX01BH

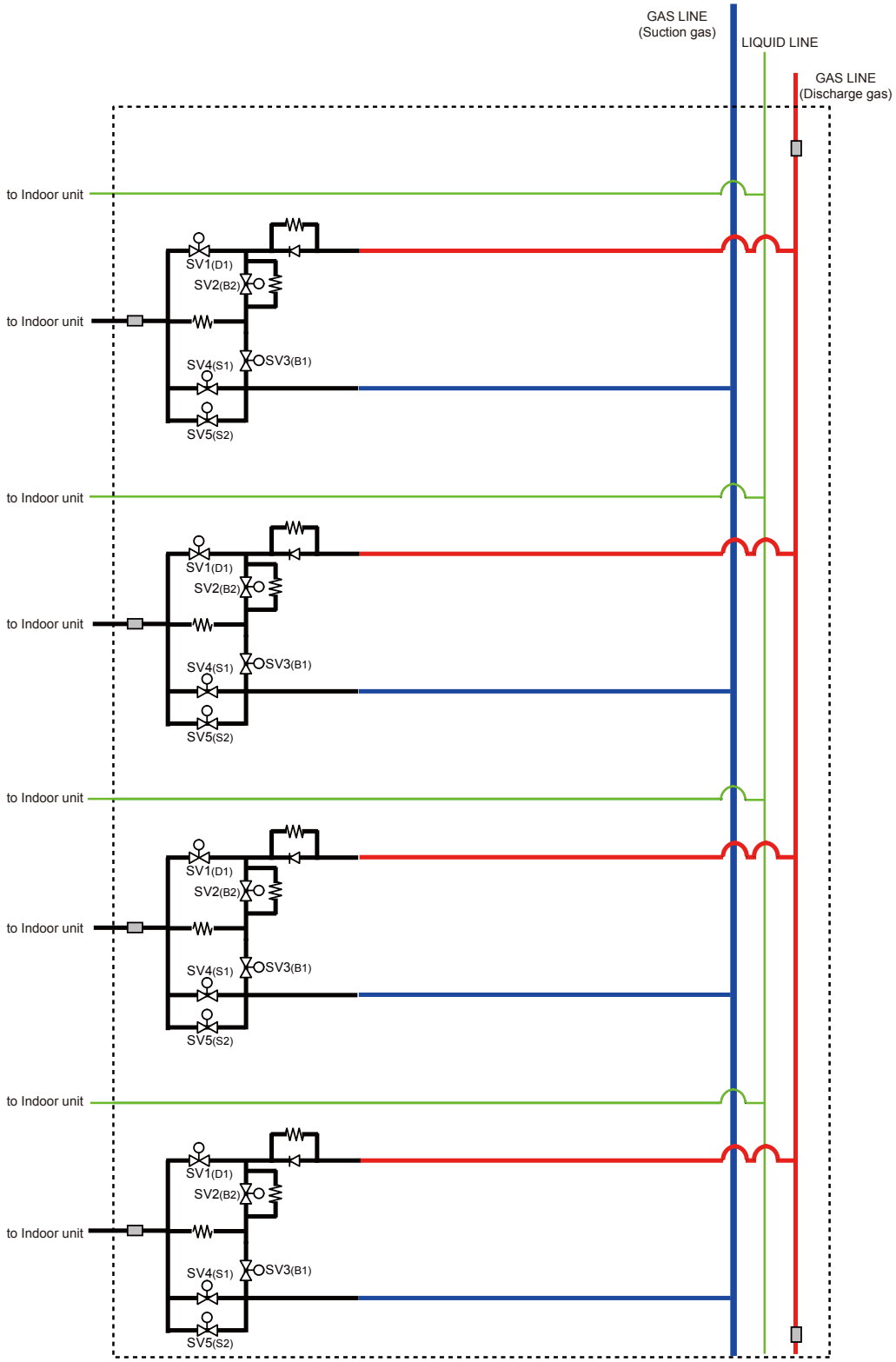


■ MODEL : UTP-RX01CH



OPTIONAL PARTS

■ MODEL : UTP-RX04BH



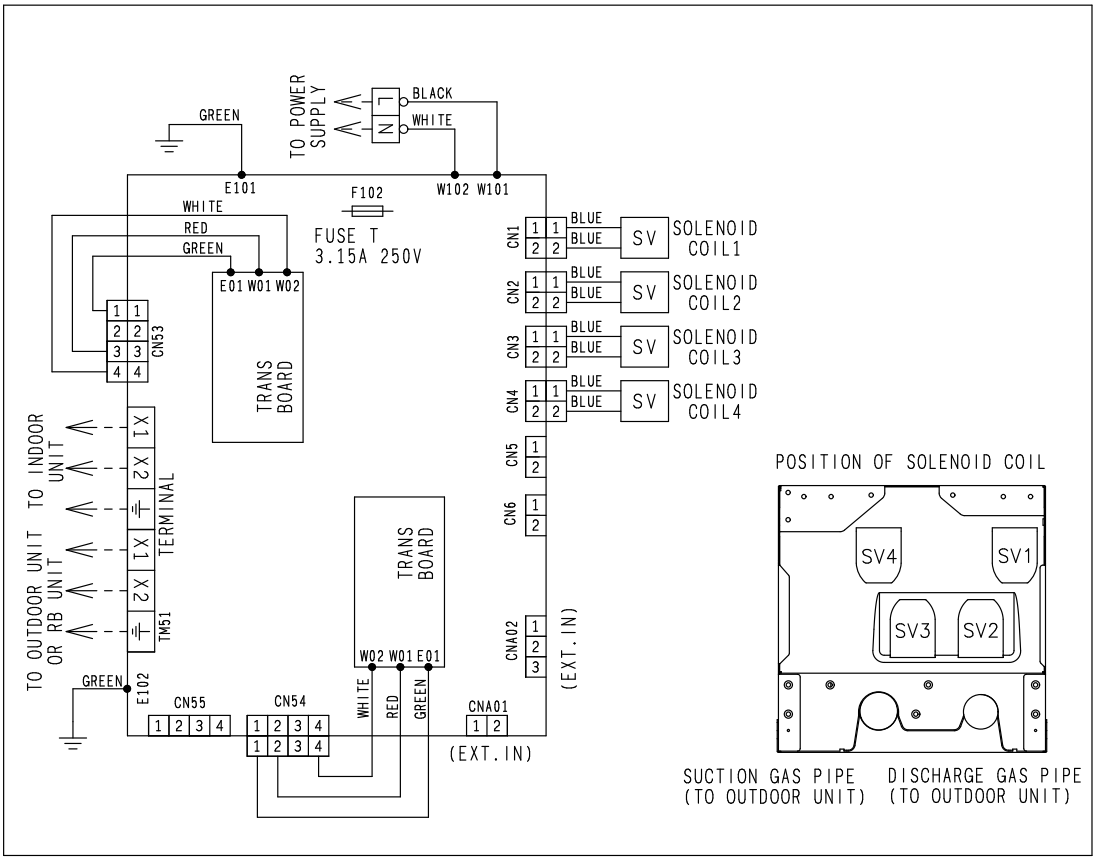
■ SYMBOL DESCRIPTION

MARK	DESCRIPTION
SV1(D1)	Solenoid valve (Discharge 1)
SV2(B2)	Solenoid valve (Bypass 2)
SV3(B1)	Solenoid valve (Bypass 1)
SV4(S1)	Solenoid valve (Suction 1)
SV5(S2)	Solenoid valve (Suction 2)
SV6(S3)	Solenoid valve (Suction 3)

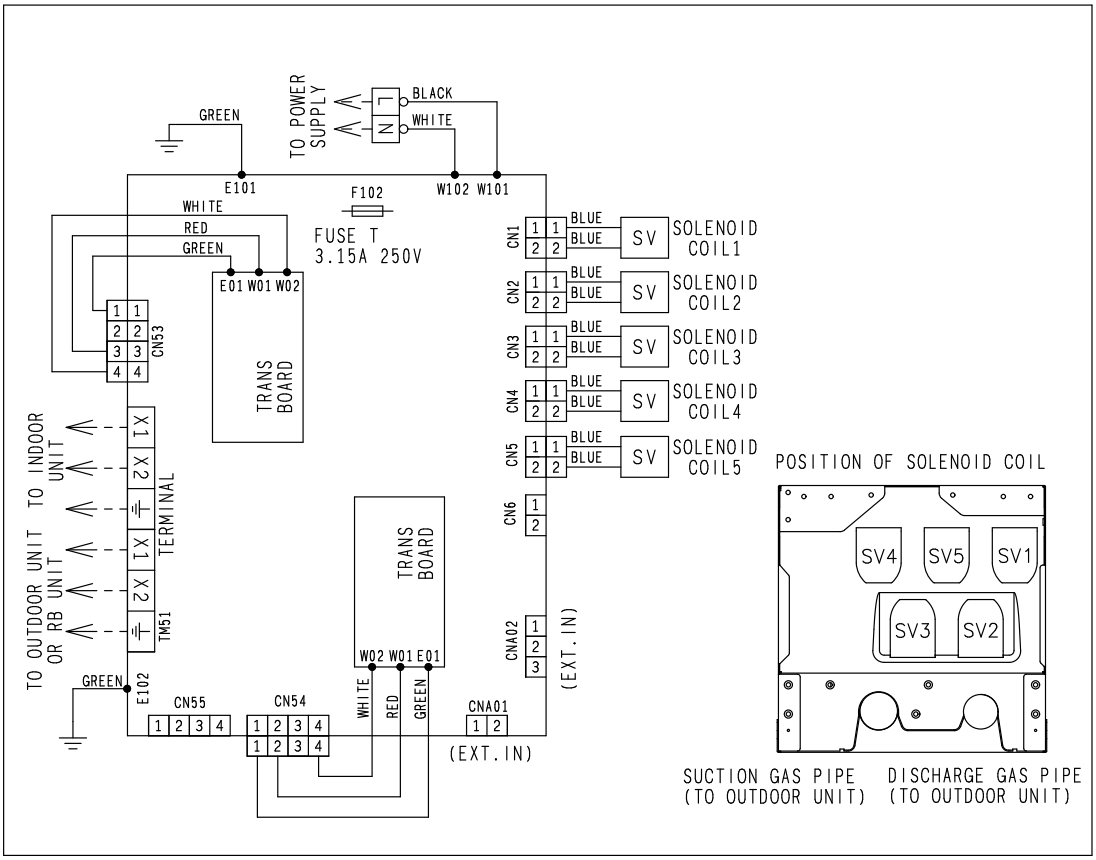
OPTIONAL PARTS

5-5. WIRING DIAGRAMS

■ MODEL : UTP-RX01AH

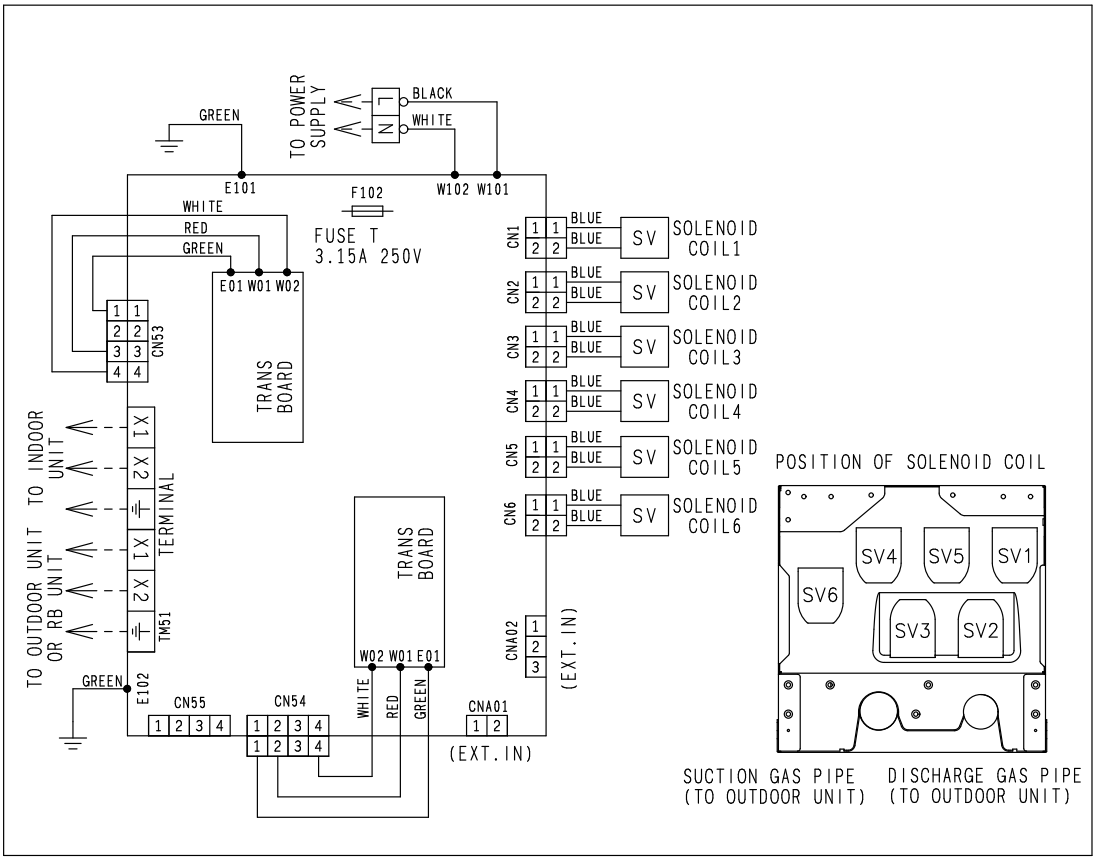


■ MODEL : UTP-RX01BH

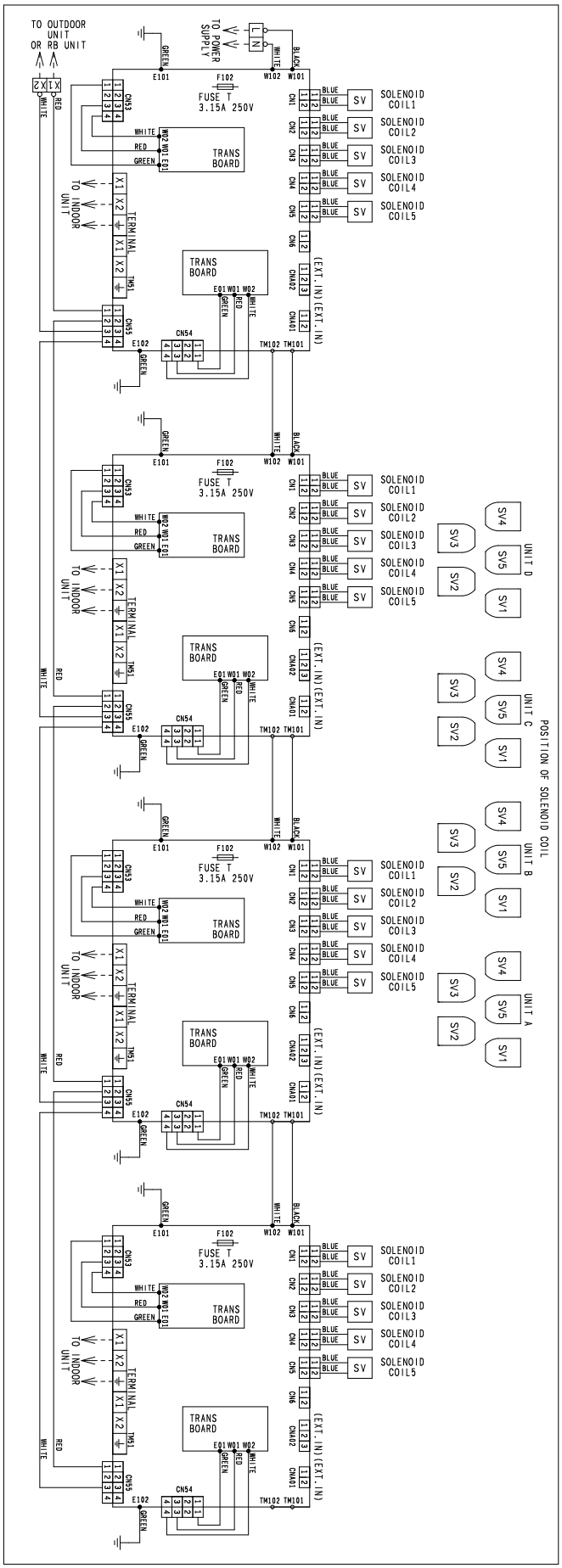


OPTIONAL PARTS

■ MODEL : UTP-RX01CH



■ MODEL : UTP-RX04BH



OPTIONAL PARTS

5-6. ELECTRIC CHARACTERISTICS

Model	Voltage (V)	Frequency (Hz)	MCA (A)	MFA (A)
UTP-RX01AH	230	50	0.13	20
UTP-RX01BH			0.19	
UTP-RX01CH			0.26	
UTP-RX04BH			0.76	

MCA : Min Circuit Amps = Max Operating Current (Full Load).

MFA : Main Fuse (Circuit breaker) Amps.

OPTIONAL PARTS

5-7. SAFETY DEVICES

Model	PCB fuse
UTP-RX01AH	250V x 1 3.15A x1
UTP-RX01BH	250V x 1 3.15A x1
UTP-RX01CH	250V x 1 3.15A x1
UTP-RX04BH	250V x 4 3.15A x 4

OPTIONAL PARTS

6. CONTROLLER

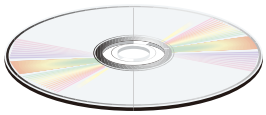
■ SYSTEM CONTROLLER (Software)

● UTY-APGXZ1 (Option: UTY-PEGXZ1, UTY-PPGXP2)



- Software protection key with software

● UTY-APGX (Option: UTY-PEGX)





- DVD-ROM
- Software protection key

●Maximum 1600 groups
/ 1600 indoor units can be controlled
●Monitoring status of operation

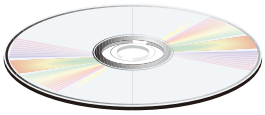
■ SYSTEM CONTROLLER LITE(Software)

● UTY-ALGXZ1 (Option: UTY-PLGXA2, UTY-PLGXR2, UTY-PLGXE2, UTY-PLGXP2, UTY-PLGXX2)



- Software protection key with software

● UTY-ALGX (Option: UTY-PLGXA1, UTY-PLGXR1, UTY-PLGXE1)





- DVD-ROM
- Software protection key

●Maximum 400 groups
/ 400 indoor units can be controlled
●Monitoring status of operation

■ TOUCH PANEL CONTROLLER

● UTY-DTG∗Z1
● UTY-DTG∗



●Maximum 400 groups
/ 400 indoor units can be controlled
●With yearly timer

■ CENTRAL REMOTE CONTROLLER

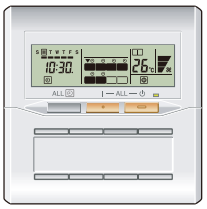
● UTY-DCG∗



●Maximum 16 groups
/ 100 indoor units can be controlled
●With weekly timer

■ GROUP REMOTE CONTROLLER

● UTY-CGG∗

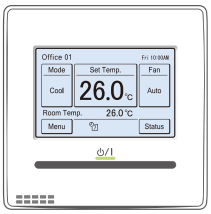


●Maximum 8 remote controller groups
(128 indoor units)
●With weekly timer

OPTIONAL PARTS

■ WIRED REMOTE CONTROLLER (Touch panel)

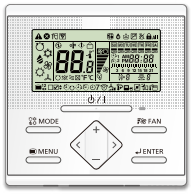
- UTY-RNR∗Z2
- UTY-RNR∗Z1



●Largest LCD touch panel
●On / Off weekly timer

■ WIRED REMOTE CONTROLLER

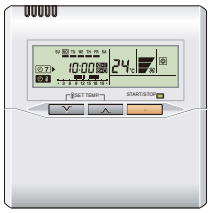
- UTY-RLR∗



●Largest LCD
●On / Off weekly timer

■ WIRED REMOTE CONTROLLER

- UTY-RNK∗

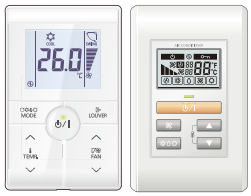


●On / Off weekly timer
●Built in thermo sensor

■ SIMPLE REMOTE CONTROLLER

- UTY-RSR∗
- UTY-RSK∗

With Operation mode



- UTY-RHR∗
- UTY-RHK∗

Without Operation mode



●Background light
●Easy operation

■ WIRELESS REMOTE CONTROLLER

- UTY-LNH∗



●On / Off sleep, program timer
●Easy operation

7. ADAPTOR / CONVERTOR / MAINTENANCE

■ NETWORK CONVERTOR

● UTY-VTGX



● Split system convertor

■ NETWORK CONVERTOR (AC power supply)

● UTY-VTGXV



● Split system convertor

■ NETWORK CONVERTOR

● UTY-VGGXZ1



● (Split system convertor)
● (Group remote convertor)

■ NETWORK CONVERTOR for LonWorks®

● UTY-VLGX



● LON / LON Convertor

■ MODBUS® CONVERTOR for VRF

● UTY-VMGX



● Modbus® Convertor

OPTIONAL PARTS

■ SIGNAL AMPLIFIER

● UTY-VSGXZ1



If the total length of transmission line exceeds 500m, or the number of units exceeds 64 units, Signal Amplifier will be necessary to use

■ EXTERNAL SWITCH CONTROLLER

● UTY-TERX
● UTY-TEKX



UTY-TERX



UTY-TEKX

Air conditioner switching can be controlled by connecting other sensor switches

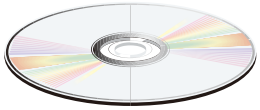
■ BACnet® GATEWAY (Software)

● UTY-ABGXZ1



- Software protection key with software

● UTY-ABGX





- DVD-ROM
- Software protection key

■ WIRELESS LAN INTERFACE

● UTY-TFSXZ1



Remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, and tablets.

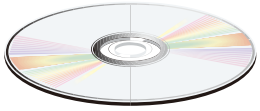
■ SERVICE TOOL

● UTY-ASGXZ1



- Software protection key with software

● UTY-ASGX





- DVD-ROM
- Software protection key

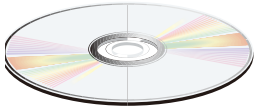
■ WEB MONITORING TOOL

● UTY-AMGXZ1



- Software protection key with software

● UTY-AMGX





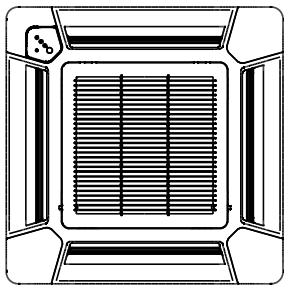
- DVD-ROM
- Software protection key

OPTIONAL PARTS

8. CASSETTE GRILLE

● UTG-UF∗C-W

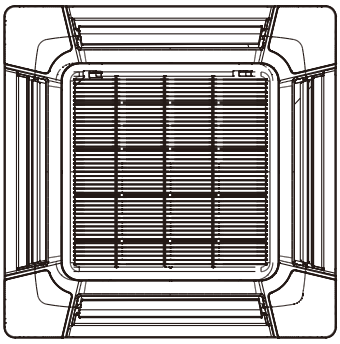
● For Compact Cassette type



∗IR receiver attached

● UTG-UG∗A-W

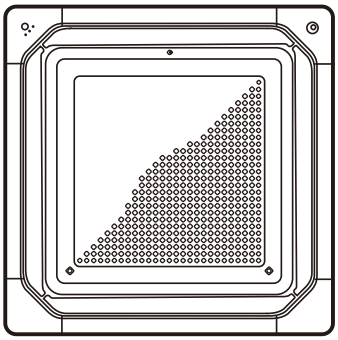
● For Cassette type



● UTG-UK∗C-W

● UTG-UK∗A-B

● For Cassette type (Circular Flow)



9. OTHERS

9-1. PARTS LIST

9-1-1. INDOOR UNIT

		Air outlet shutter plate		Panel spacer	Wide panel	Insulation kit for high humidity			Fresh air intake kit	
Type	Model name	UTR-YDZB	UTR-YDZK UTR-YDZC	UTG-BKXA-W UTG-BGYA-W	UTG-AKXA-W UTG-AGYA-W	UTZ-KXRA UTZ-KXGA	UTZ-KXRA UTZ-KXGB	UTZ-KXGC	UTZ-VXAA	UTZ-VXRA UTZ-VXGA
Compact cassette	AUXB04GBLH	O						O	O	
	AUXB04GALH	O						O	O	
	AUXB07GALH	O						O	O	
	AUXB09GALH	O						O	O	
	AUXB12GALH	O						O	O	
	AUXB14GALH	O						O	O	
	AUXB18GALH	O						O	O	
	AUXB24GALH	O						O	O	
Cassette	AUXD18GALH		O	O	O		O			O
	AUXD24GALH		O	O	O		O			O
	AUXA18GALH		O	O	O	O				O
	AUXA24GALH		O	O	O	O				O
	AUXA30GALH		O	O	O	O				O
	AUXA34GALH		O	O	O	O				O
	AUXA36GALH		O	O	O	O				O
	AUXA45GALH		O	O	O	O				O
	AUXA54GALH		O	O	O	O				O
Cassette (Circular flow)	AUXM018GLAH		O	O	O		O			O
	AUXM024GLAH		O	O	O		O			O
	AUXM030GLAH		O	O	O		O			O
	AUXK018GLAH		O	O	O	O				O
	AUXK024GLAH		O	O	O	O				O
	AUXK030GLAH		O	O	O	O				O
	AUXK034GLAH		O	O	O	O				O
	AUXK036GLAH		O	O	O	O				O
	AUXK045GLAH		O	O	O	O				O
	AUXK054GLAH		O	O	O	O				O
Low static pressure duct / concealed floor	ARXB07GALH									
	ARXB09GALH									
	ARXB12GALH									
	ARXB14GALH									
	ARXB18GALH									
Mini duct	ARXK04GCLH									
	ARXK07GCLH									
	ARXK09GCLH									
	ARXK12GCLH									
	ARXK14GCLH									
	ARXK18GCLH									
	ARXK24GCLH									
Slim duct / slim concealed floor	ARXD04GALH									
	ARXD07GALH									
	ARXD09GALH									
	ARXD12GALH									
	ARXD14GALH									
	ARXD18GALH									
	ARXD24GALH									
Medium static pressure duct	ARXA24GBLH									
	ARXA30GBLH									
	ARXA36GBLH									
	ARXA45GBLH									
High static pressure duct	ARXC36GBTH									
	ARXC45GATH									
	ARXC60GATH									
	ARXC72GBTH									
	ARXC90GBTH									
	ARXC96GATH									

OPTIONAL PARTS

		Air outlet shutter plate		Panel spacer	Wide panel	Insulation kit for high humidity			Fresh air intake kit	
Type	Model name	UTR-YDZB	UTR-YDZK UTR-YDZC	UTG-BKXA-W UTG-BGYA-W	UTG-AKXA-W UTG-AGYA-W	UTZ-KXRA UTZ-KXGA	UTZ-KXRA UTZ-KXGB	UTZ-KXGC	UTZ-VXAA	UTZ-VXRA UTZ-VXGA
Large airflow duct	ARXN18GATH									
	ARXN24GATH									
	ARXN30GATH									
	ARXN34GATH									
	ARXN36GATH									
	ARXN45GATH									
Compact Floor	AG*A004GCAH									
	AG*A007GCAH									
	AG*A009GCAH									
	AG*A012GCAH									
	AG*A014GCAH									
Compact Floor (EEV external)	AG*E004GCAH									
	AG*E007GCAH									
	AG*E009GCAH									
	AG*E012GCAH									
	AG*E014GCAH									
Floor / ceiling	AB*A12GATH									
	AB*A14GATH									
	AB*A18GATH									
	AB*A24GATH									
Ceiling	AB*A30GATH									
	AB*A36GATH									
	AB*A45GATH									
	AB*A54GATH									
Wall mounted	AS*A004GTAH									
	AS*A007GTAH									
	AS*A009GTAH									
	AS*A04GACH									
	AS*A07GACH									
	AS*A09GACH									
	AS*A12GACH									
	AS*A14GACH									
Wall mounted (EEV external)	AS*E004GTAH									
	AS*E007GTAH									
	AS*E009GTAH									
	AS*E04GACH									
	AS*E07GACH									
	AS*E09GACH									
	AS*E12GACH									
	AS*E14GACH									
Wall mounted	AS*A18GBCH									
	AS*A24GBCH									
	AS*A18GACH									
	AS*A24GACH									
	AS*A30GACH									
	AS*A030GTAH									
	AS*A034GTAH									

OPTIONAL PARTS

		IR receiver unit			Human sensor kit	Auto louver grille kit					
Type	Model name	UTY-LRH*B1	UTB-*WC	UTY-LBHXD	UTY-SHZXC	UTD-GXSA	UTD-GXSB	UTD-GXSC	UTD-GXTA	UTD-GXTB	UTD-GXTC
Compact cassette	AUXB04GBLH										
	AUXB04GALH										
	AUXB07GALH										
	AUXB09GALH										
	AUXB12GALH										
	AUXB14GALH										
	AUXB18GALH										
	AUXB24GALH										
Cassette	AUXD18GALH	O									
	AUXD24GALH	O									
	AUXA18GALH	O									
	AUXA24GALH	O									
	AUXA30GALH	O									
	AUXA34GALH	O									
	AUXA36GALH	O									
	AUXA45GALH	O									
	AUXA54GALH	O									
Cassette (Circular flow)	AUXM018GLAH			O	O						
	AUXM024GLAH			O	O						
	AUXM030GLAH			O	O						
	AUXK018GLAH			O	O						
	AUXK024GLAH			O	O						
	AUXK030GLAH			O	O						
	AUXK034GLAH			O	O						
	AUXK036GLAH			O	O						
	AUXK045GLAH			O	O						
	AUXK054GLAH			O	O						
Low static pressure duct / concealed floor	ARXB07GALH		O								
	ARXB09GALH		O								
	ARXB12GALH		O								
	ARXB14GALH		O								
	ARXB18GALH		O								
Mini duct	ARXK04GCLH		O						O		
	ARXK07GCLH		O						O		
	ARXK09GCLH		O						O		
	ARXK12GCLH		O						O		
	ARXK14GCLH		O						O		
	ARXK18GCLH		O							O	
	ARXK24GCLH		O								O
Slim duct / slim concealed floor	ARXD04GALH		O			O			O		
	ARXD07GALH		O			O			O		
	ARXD09GALH		O			O			O		
	ARXD12GALH		O			O			O		
	ARXD14GALH		O			O			O		
	ARXD18GALH		O				O			O	
	ARXD24GALH		O					O			O
Medium static pressure duct	ARXA24GBLH		O								
	ARXA30GBLH		O								
	ARXA36GBLH		O								
	ARXA45GBLH		O								
High static pressure duct	ARXC36GBTH		O								
	ARXC45GATH		O								
	ARXC60GATH		O								
	ARXC72GBTH		O								
	ARXC90GBTH		O								
	ARXC96GATH		O								

OPTIONAL PARTS

		IR receiver unit			Human sensor kit	Auto louver grille kit					
Type	Model name	UTY-LRH*B1	UTB-*WC	UTY-LBHXD	UTY-SHZXC	UTD-G*SA	UTD-G*SB	UTD-G*SC	UTD-GXTA	UTD-GXTB	UTD-GXTC
Large airflow duct	ARXN18GATH										
	ARXN24GATH										
	ARXN30GATH										
	ARXN34GATH										
	ARXN36GATH										
	ARXN45GATH										
Compact Floor	AG*A004GCAH										
	AG*A007GCAH										
	AG*A009GCAH										
	AG*A012GCAH										
	AG*A014GCAH										
Compact Floor (EEV external)	AG*E004GCAH										
	AG*E007GCAH										
	AG*E009GCAH										
	AG*E012GCAH										
	AG*E014GCAH										
Floor / ceiling	AB*A12GATH										
	AB*A14GATH										
	AB*A18GATH										
	AB*A24GATH										
Ceiling	AB*A30GATH										
	AB*A36GATH										
	AB*A45GATH										
	AB*A54GATH										
Wall mounted	AS*A004GTAH										
	AS*A007GTAH										
	AS*A009GTAH										
	AS*A04GACH										
	AS*A07GACH										
	AS*A09GACH										
	AS*A12GACH										
	AS*A14GACH										
Wall mounted (EEV external)	AS*E004GTAH										
	AS*E007GTAH										
	AS*E009GTAH										
	AS*E04GACH										
	AS*E07GACH										
	AS*E09GACH										
	AS*E12GACH										
	AS*E14GACH										
Wall mounted	AS*A18GBCH										
	AS*A24GBCH										
	AS*A18GACH										
	AS*A24GACH										
	AS*A30GACH										
	AS*A030GTAH										
	AS*A034GTAH										

OPTIONAL PARTS

		Long life filter		Flange		Drain pump unit			Remote sensor unit	Half concealed kit
Type	Model name	UTD-LF25NA	UTD-LF60KA	UTD-SF045T	UTD-RF204	UTZ-PX1BBA	UTZ-PX1NBA	UTR-DPB24T	UTY-XSZX	UTR-STA
Compact cassette	AUXB04GBLH									
	AUXB04GALH									
	AUXB07GALH									
	AUXB09GALH									
	AUXB12GALH									
	AUXB14GALH									
	AUXB18GALH									
	AUXB24GALH									
Cassette	AUXD18GALH									
	AUXD24GALH									
	AUXA18GALH									
	AUXA24GALH									
	AUXA30GALH									
	AUXA34GALH									
	AUXA36GALH									
	AUXA45GALH									
	AUXA54GALH									
Cassette (Circular flow)	AUXM018GLAH									
	AUXM024GLAH									
	AUXM030GLAH									
	AUXK018GLAH									
	AUXK024GLAH									
	AUXK030GLAH									
	AUXK034GLAH									
	AUXK036GLAH									
	AUXK045GLAH									
	AUXK054GLAH									
Low static pressure duct / concealed floor	ARXB07GALH					O			O	
	ARXB09GALH					O			O	
	ARXB12GALH					O			O	
	ARXB14GALH					O			O	
	ARXB18GALH					O			O	
Mini duct	ARXK04GCLH								O	
	ARXK07GCLH								O	
	ARXK09GCLH								O	
	ARXK12GCLH								O	
	ARXK14GCLH								O	
	ARXK18GCLH								O	
	ARXK24GCLH								O	
Slim duct / slim concealed floor	ARXD04GALH								O	
	ARXD07GALH								O	
	ARXD09GALH								O	
	ARXD12GALH								O	
	ARXD14GALH								O	
	ARXD18GALH								O	
	ARXD24GALH								O	
Medium static pressure duct	ARXA24GBLH	O		O	O		O		O	
	ARXA30GBLH	O		O	O		O		O	
	ARXA36GBLH	O		O	O		O		O	
	ARXA45GBLH	O		O	O		O		O	
High static pressure duct	ARXC36GBTH		O						O	
	ARXC45GATH		O						O	
	ARXC60GATH		O						O	
	ARXC72GBTH								O	
	ARXC90GBTH								O	
	ARXC96GATH								O	

OPTIONAL PARTS

		Long life filter		Flange		Drain pump unit			Remote sensor unit	Half concealed kit
Type	Model name	UTD-LF25NA	UTD-LF60KA	UTD-SF045T	UTD-RF204	UTZ-PX1BBA	UTZ-PX1NBA	UTR-DPB24T	UTY-XSZX	UTR-STA
Large airflow duct	ARXN18GATH								O	
	ARXN24GATH								O	
	ARXN30GATH								O	
	ARXN34GATH								O	
	ARXN36GATH								O	
	ARXN45GATH								O	
Compact Floor	AG*A004GCAH									O
	AG*A007GCAH									O
	AG*A009GCAH									O
	AG*A012GCAH									O
	AG*A014GCAH									O
Compact Floor (EEV external)	AG*E004GCAH									O
	AG*E007GCAH									O
	AG*E009GCAH									O
	AG*E012GCAH									O
	AG*E014GCAH									O
Floor / ceiling	AB*A12GATH									
	AB*A14GATH									
	AB*A18GATH									
	AB*A24GATH									
Ceiling	AB*A30GATH				O			O		
	AB*A36GATH				O			O		
	AB*A45GATH				O			O		
	AB*A54GATH				O			O		
Wall mounted	AS*A004GTAH									
	AS*A007GTAH									
	AS*A009GTAH									
	AS*A04GACH									
	AS*A07GACH									
	AS*A09GACH									
	AS*A12GACH									
	AS*A14GACH									
Wall mounted (EEV external)	AS*E004GTAH									
	AS*E007GTAH									
	AS*E009GTAH									
	AS*E04GACH									
	AS*E07GACH									
	AS*E09GACH									
	AS*E12GACH									
	AS*E14GACH									
Wall mounted	AS*A18GBCH									
	AS*A24GBCH									
	AS*A18GACH									
	AS*A24GACH									
	AS*A30GACH									
	AS*A030GTAH									
	AS*A034GTAH									

OPTIONAL PARTS

		External connect kit				
Type	Model name	UTY-XWZXZ7	UTY-XWZXZB	UTY-XWZXZC	UTY-XWZXZD	UTY-XWZXZE
Compact cassette	AUXB04GBLH	O	O	O	O	O
	AUXB04GALH	O	O	O	O	O
	AUXB07GALH	O	O	O	O	O
	AUXB09GALH	O	O	O	O	O
	AUXB12GALH	O	O	O	O	O
	AUXB14GALH	O	O	O	O	O
	AUXB18GALH	O	O	O	O	O
	AUXB24GALH	O	O	O	O	O
Cassette	AUXD18GALH	O	O	O	O	O
	AUXD24GALH	O	O	O	O	O
	AUXA18GALH	O	O	O	O	O
	AUXA24GALH	O	O	O	O	O
	AUXA30GALH	O	O	O	O	O
	AUXA34GALH	O	O	O	O	O
	AUXA36GALH	O	O	O	O	O
	AUXA45GALH	O	O	O	O	O
	AUXA54GALH	O	O	O	O	O
Cassette (Circular flow)	AUXM018GLAH	O	O	O	O	O
	AUXM024GLAH	O	O	O	O	O
	AUXM030GLAH	O	O	O	O	O
	AUXK018GLAH	O	O	O	O	O
	AUXK024GLAH	O	O	O	O	O
	AUXK030GLAH	O	O	O	O	O
	AUXK034GLAH	O	O	O	O	O
	AUXK036GLAH	O	O	O	O	O
	AUXK045GLAH	O	O	O	O	O
	AUXK054GLAH	O	O	O	O	O
Low static pressure duct / concealed floor	ARXB07GALH	O	O	O	O	O
	ARXB09GALH	O	O	O	O	O
	ARXB12GALH	O	O	O	O	O
	ARXB14GALH	O	O	O	O	O
	ARXB18GALH	O	O	O	O	O
Mini duct	ARXK04GCLH	O	O	O	O	O
	ARXK07GCLH	O	O	O	O	O
	ARXK09GCLH	O	O	O	O	O
	ARXK12GCLH	O	O	O	O	O
	ARXK14GCLH	O	O	O	O	O
	ARXK18GCLH	O	O	O	O	O
	ARXK24GCLH	O	O	O	O	O
Slim duct / slim concealed floor	ARXD04GALH	O	O	O	O	O
	ARXD07GALH	O	O	O	O	O
	ARXD09GALH	O	O	O	O	O
	ARXD12GALH	O	O	O	O	O
	ARXD14GALH	O	O	O	O	O
	ARXD18GALH	O	O	O	O	O
	ARXD24GALH	O	O	O	O	O
Medium static pressure duct	ARXA24GBLH	O	O	O	O	O
	ARXA30GBLH	O	O	O	O	O
	ARXA36GBLH	O	O	O	O	O
	ARXA45GBLH	O	O	O	O	O
High static pressure duct	ARXC36GBTH	O	O	O	O	O
	ARXC45GATH	O	O	O	O	O
	ARXC60GATH	O	O	O	O	O
	ARXC72GBTH	O	O	O	O	O
	ARXC90GBTH	O	O	O	O	O
	ARXC96GATH	O	O	O	O	O

OPTIONAL PARTS

		External connect kit				
Type	Model name	UTY-XWZXZ7	UTY-XWZXZB	UTY-XWZXZC	UTY-XWZXZD	UTY-XWZXZE
Large airflow duct	ARXN18GATH	O	O	O	O	O
	ARXN24GATH	O	O	O	O	O
	ARXN30GATH	O	O	O	O	O
	ARXN34GATH	O	O	O	O	O
	ARXN36GATH	O	O	O	O	O
	ARXN45GATH	O	O	O	O	O
Compact Floor	AG*A004GCAH	O	O	O	O	O
	AG*A007GCAH	O	O	O	O	O
	AG*A009GCAH	O	O	O	O	O
	AG*A012GCAH	O	O	O	O	O
	AG*A014GCAH	O	O	O	O	O
Compact Floor (EEV external)	AG*E004GCAH	O	O	O	O	O
	AG*E007GCAH	O	O	O	O	O
	AG*E009GCAH	O	O	O	O	O
	AG*E012GCAH	O	O	O	O	O
	AG*E014GCAH	O	O	O	O	O
Floor / ceiling	AB*A12GATH	O	O	O	O	O
	AB*A14GATH	O	O	O	O	O
	AB*A18GATH	O	O	O	O	O
	AB*A24GATH	O	O	O	O	O
Ceiling	AB*A30GATH	O	O	O	O	O
	AB*A36GATH	O	O	O	O	O
	AB*A45GATH	O	O	O	O	O
	AB*A54GATH	O	O	O	O	O
Wall mounted	AS*A004GTAH	O	O	O	O	O
	AS*A007GTAH	O	O	O	O	O
	AS*A009GTAH	O	O	O	O	O
	AS*A04GACH	O	O	O	O	O
	AS*A07GACH	O	O	O	O	O
	AS*A09GACH	O	O	O	O	O
	AS*A12GACH	O	O	O	O	O
	AS*A14GACH	O	O	O	O	O
Wall mounted (EEV external)	AS*E004GTAH	O	O	O	O	O
	AS*E007GTAH	O	O	O	O	O
	AS*E009GTAH	O	O	O	O	O
	AS*E04GACH	O	O	O	O	O
	AS*E07GACH	O	O	O	O	O
	AS*E09GACH	O	O	O	O	O
	AS*E12GACH	O	O	O	O	O
	AS*E14GACH	O	O	O	O	O
Wall mounted	AS*A18GBCH	O	O	O	O	O
	AS*A24GBCH	O	O	O	O	O
	AS*A18GACH	O	O	O	O	O
	AS*A24GACH	O	O	O	O	O
	AS*A30GACH	O	O	O	O	O
	AS*A030GTAH	O	O	O	O	O
	AS*A034GTAH	O	O	O	O	O

OPTIONAL PARTS

9-1-2. OTHERS

		External connect kit						
Type	Model name	UTY-XWZXZ6	UTY-XWZXZ7	UTY-XWZXZ8	UTY-XWZXZ9	UTY-XWZXZA	UTY-XWZXZB	UTY-XWZXZF
Outdoor unit	AJ∗A72GALH	O			O			O
	AJ∗A90GALH	O			O			O
	AJ∗108GALH	O			O			O
	AJ∗126GALH	O			O			O
	AJ∗144GALH	O			O			O
	AJ∗A72LALH	O			O			O
	AJ∗A90LALH	O			O			O
	AJ∗108LALH	O			O			O
	AJ∗126LALH	O			O			O
	AJ∗144LALH	O			O			O
	AJ∗040LBLAH	O			O			O
	AJ∗045LBLAH	O			O			O
	AJ∗054LBLAH	O			O			O
	AJ∗040LELAH	O			O			O
	AJ∗045LELAH	O			O			O
	AJ∗054LELAH	O			O			O
	AJ∗072LELAH	O			O			O
	AJ∗090LELAH	O			O			O
	AJ∗108LELAH	O			O			O
	AJ∗A40LALH	O			O			O
	AJ∗A45LALH	O			O			O
	AJ∗A54LALH	O			O			O
	AJ∗040LCLAH	O			O			O
	AJ∗045LCLAH	O			O			O
	AJ∗054LCLAH	O			O			O
	AJ∗072LALBH	O			O			O
	AJ∗090LALBH	O			O			O
	AJ∗108LALBH	O			O			O
	AJ∗126LALBH	O			O			O
	AJ∗144LALBH	O			O			O
	AJ∗162LALBH	O			O			O
RB unit	UTP-RX01AH	O					O	
	UTP-RX01BH	O					O	
	UTP-RX01CH	O					O	
	UTP-RX04BH	O					O	
Touch panel controller	UTY-DTG∗Z1 UTY-DTG∗					O		
Central remote controller	UTY-DCG∗		O	O		O		

OPTIONAL PARTS

■ AIR OUTLET SHUTTER PLATE

- UTR-YDZB
  - For Compact cassette type



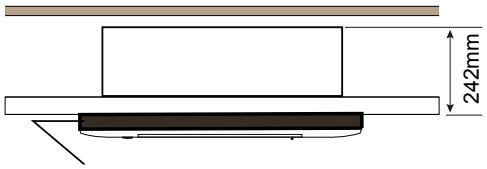
■ AIR OUTLET SHUTTER PLATE

- UTR-YDZK, UTR-YDZC
  - For Cassette type



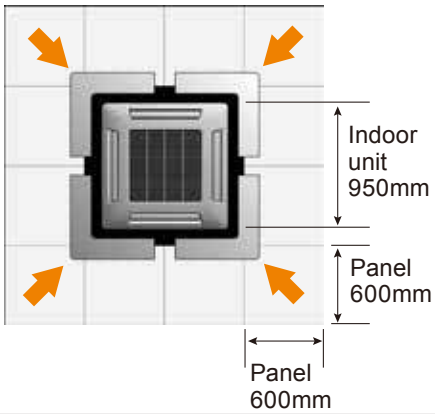
■ PANEL SPACER

- UTG-BKXA-W, UTG-BGYA-W
  - For Cassette type



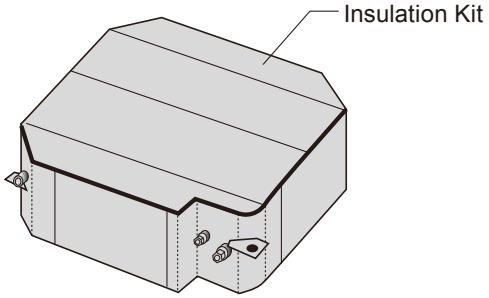
■ WIDE PANEL

- UTG-AKXA-W, UTG-AGYA-W
  - For Cassette type



■ INSULATION KIT for High Humidity

- UTZ-KXRA, UTZ-KXGA, UTZ-KXGB
  - For Cassette type
- UTZ-KXGC
  - For Compact cassette type



■ FRESH AIR INTAKE KIT

- UTZ-VXAA
  - For Compact cassette type



OPTIONAL PARTS

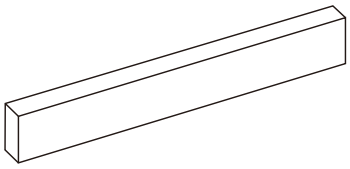
■ FRESH AIR INTAKE KIT

- UTZ-VXRA, UTZ-VXGA
  - For Cassette type



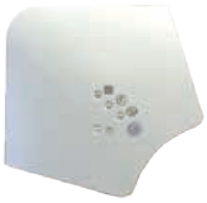
■ HALF CONCEALED KIT

- UTR-STA
  - For Compact Floor type



■ IR RECEIVER UNIT

- UTY-LRH∗B1
  - For Cassette type



The wireless remote controller (Model: UTY-LNH∗) is necessary separately

■ IR RECEIVER UNIT

- UTB-∗WC
  - For All Duct type (Except Large airflow duct)



The wireless remote controller (Model: UTY-LNH∗) is necessary separately

■ IR RECEIVER UNIT

- UTY-LBHXD
  - For Cassette type (Circular Flow)



The wireless remote controller (Model: UTY-LNH∗) is necessary separately

■ HUMAN SENSOR KIT

- UTY-SHZXC
  - For Cassette type (Circular Flow)



Touch Panel Wired RC (Model: UTY-RNRYZ2) is necessary.

OPTIONAL PARTS

■ AUTO LOUVER GRILLE KIT

- UTD-GXTA-W
  For Mini duct, Slim duct (04-14 models)
- UTD-GXTB-W
  For Mini duct, Slim duct (18 model)
- UTD-GXTC-W
  For MIni duct, Slim duct (24 model)



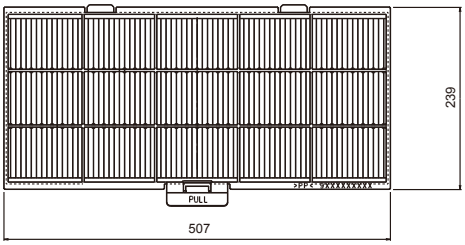
■ AUTO LOUVER GRILLE KIT

- UTD-GXSA-W
  For Slim duct (04-14 models)
- UTD-GXSB-W
  For Slim duct (18 model)
- UTD-GXSC-W
  For Slim duct (24 model)



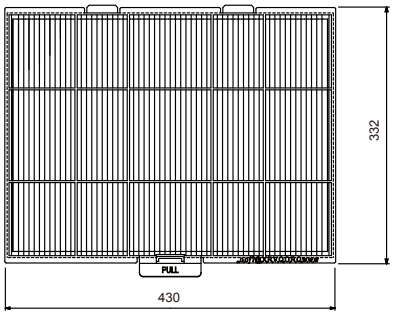
■ LONG-LIFE FILTER

- UTD-LF25NA
  - For Medium static pressure duct type



■ LONG-LIFE FILTER

- UTD-LF60KA
  - For High static pressure duct type
    (36, 45, 54, 60 models)



■ REMOTE SENSOR UNIT

- UTY-XSZX

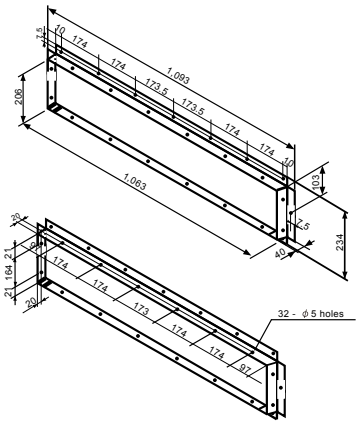


New amenity space can be offered by installing the Remote sensor

OPTIONAL PARTS

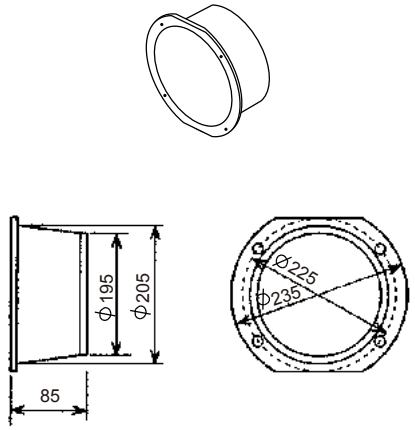
■ FLANGE (Square)

- UTD-SF045T
  - For Medium static pressure duct type



■ FLANGE (Round)

- UTD-RF204
  - For Medium static pressure duct type



■ DRAIN PUMP UNIT

- UTZ-PX1BBA
  - For Low static pressure duct/concealed floor type
- UTZ-PX1NBA
  - For Medium static pressure duct type



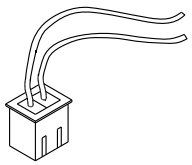
■ DRAIN PUMP UNIT

- UTR-DPB24T
  - For Ceiling type



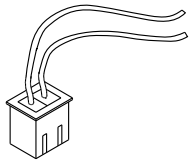
■ EXTERNAL CONNECT KIT

● UTY-XWZXZ6
- For Outdoor unit / RB unit



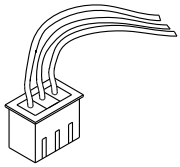
■ EXTERNAL CONNECT KIT

● UTY-XWZXZ7
- For Indoor unit / Central remote controller



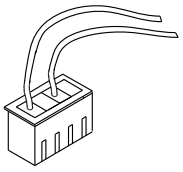
■ EXTERNAL CONNECT KIT

● UTY-XWZXZ8
- For Central remote controller



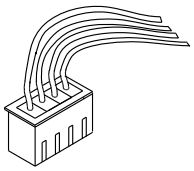
■ EXTERNAL CONNECT KIT

● UTY-XWZXZ9
- For Outdoor unit



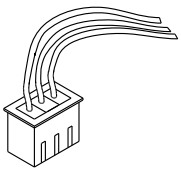
■ EXTERNAL CONNECT KIT

● UTY-XWZXZA
- For Touch panel controller / Central remote controller



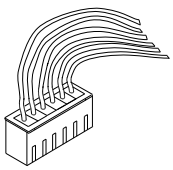
■ EXTERNAL CONNECT KIT

● UTY-XWZXZB
- For Indoor unit / RB unit



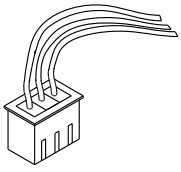
■ EXTERNAL CONNECT KIT

● UTY-XWZXZC
- For Indoor unit



■ EXTERNAL CONNECT KIT

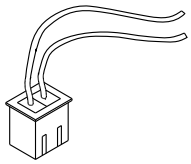
● UTY-XWZXZD
- For Indoor unit



OPTIONAL PARTS

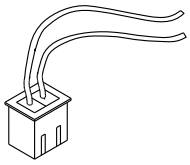
■ EXTERNAL CONNECT KIT

- UTY-XWZXZE
  - For Indoor unit



■ EXTERNAL CONNECT KIT

- UTY-XWZXZF
  - For Outdoor unit



OPTIONAL PARTS

10. OPTIONAL PARTS INSTALLATION

10-1. DRAIN PUMP UNIT

■ MODEL : UTZ-PX1BBA

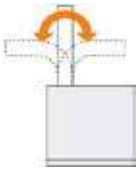
● Specifications

	Unit	Specifications
Height of drain up	mm	Maximum 1000
Power source	-	220-240V, 50/60Hz
Input Power (230V, 50/60Hz)	W	12 / 10.8
Current (230V, 50/60Hz)	mA	114 / 92
Dimensions (H x W x D)	mm	176 x 178 x 154
Weight	kg	2.5
Connection pipe diameter	-	VP25 (I.D.25mm, O.D.32mm)
Direction of pipe connection *1	-	360°
Angle of pipe connection *2	-	0° (Horizontal)-90° (Vertical)
Control method	-	Control board of indoor unit
safety device	-	Float switch, Thermal fuse

*1 : Direction of pipe connection



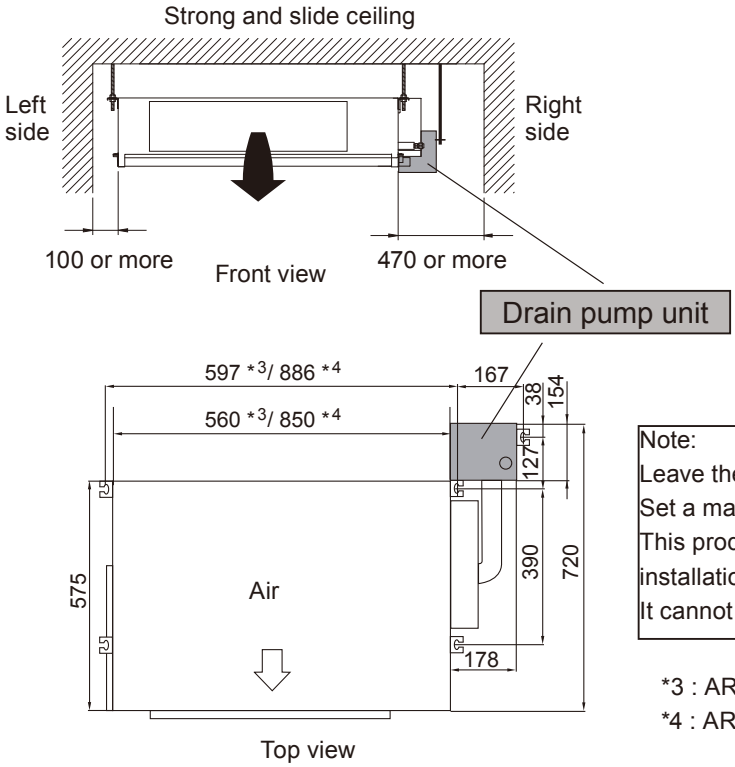
*2 : Angle of pipe connection



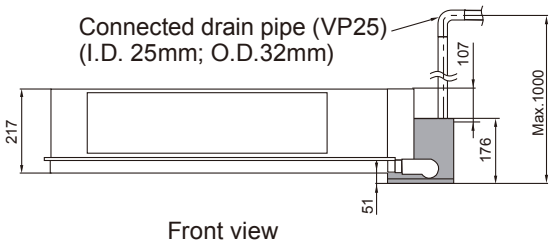
● Application indoor units

Type	Model name
Low static pressure duct / concealed floor	ARXB07GALH, ARXB09GALH, ARXB12GALH, ARXB14GALH, ARXB18GALH

● Mounting position



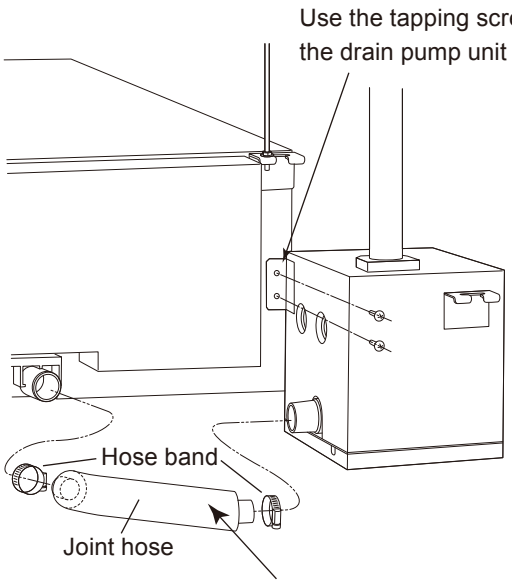
(Unit : mm)



Note:
Leave the space required to service the unit.
Set a maintenance hole near the drain pump unit.
This product is specially designed for ceiling concealed installation of the indoor unit.
It cannot be connected when it is installed on the floor.

*3 : ARXB07, 09
*4 : ARXB12, 14, 18

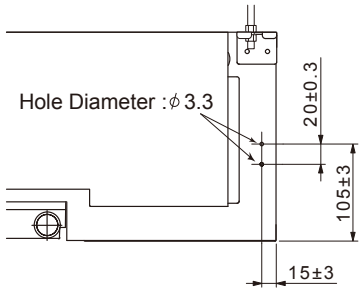
● Installing drain pump unit

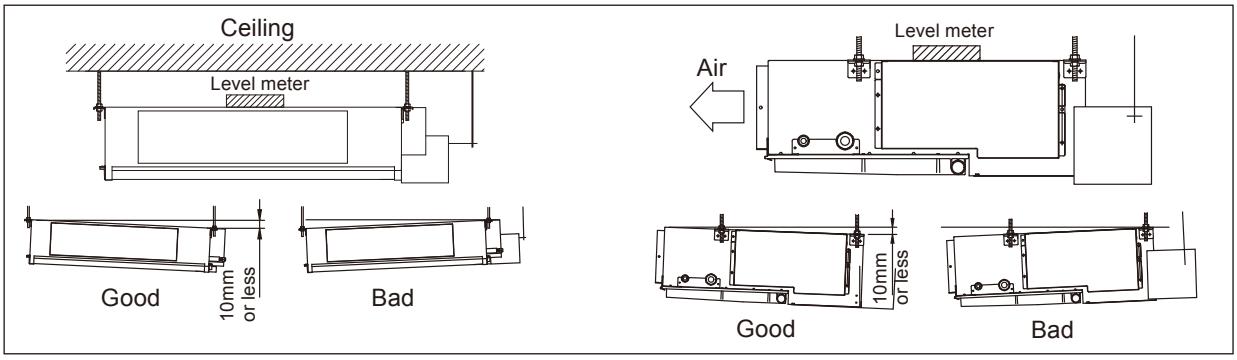


Thread the hose band through the joint hose, and insert it until it touches the drain pump unit and indoor unit.

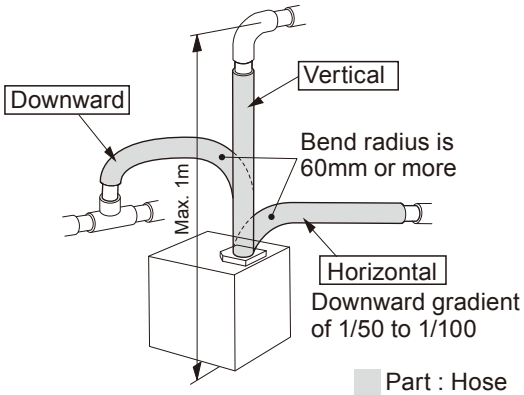
When there is no screw hole

Puncture holes at the following position and then install.

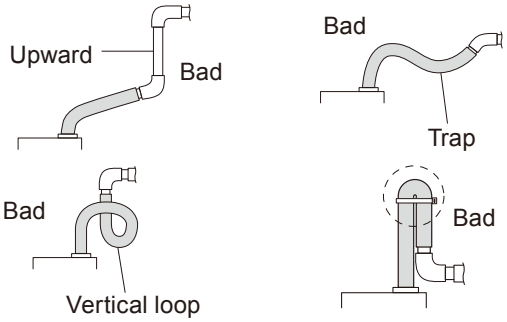




● Installing hose

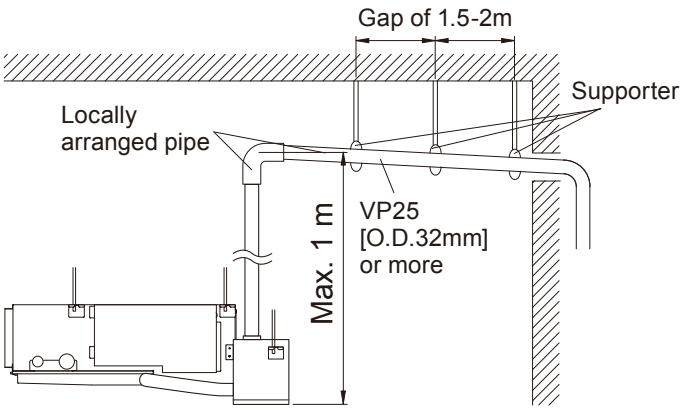


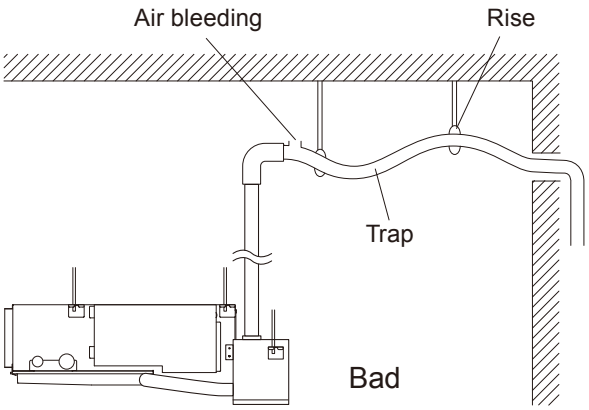
Example of wrong construction.

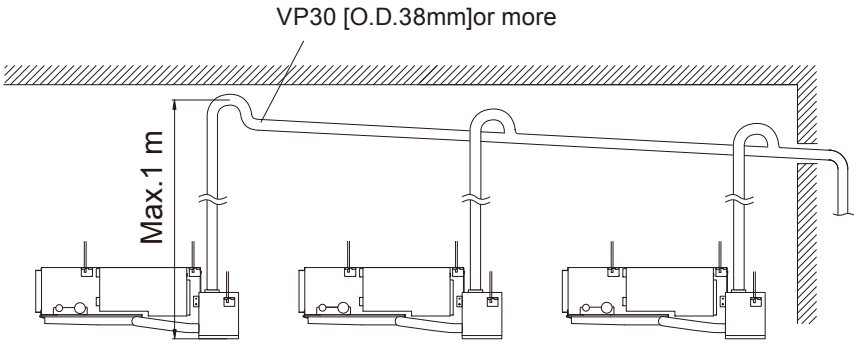


OPTIONAL PARTS

● Installing pipe

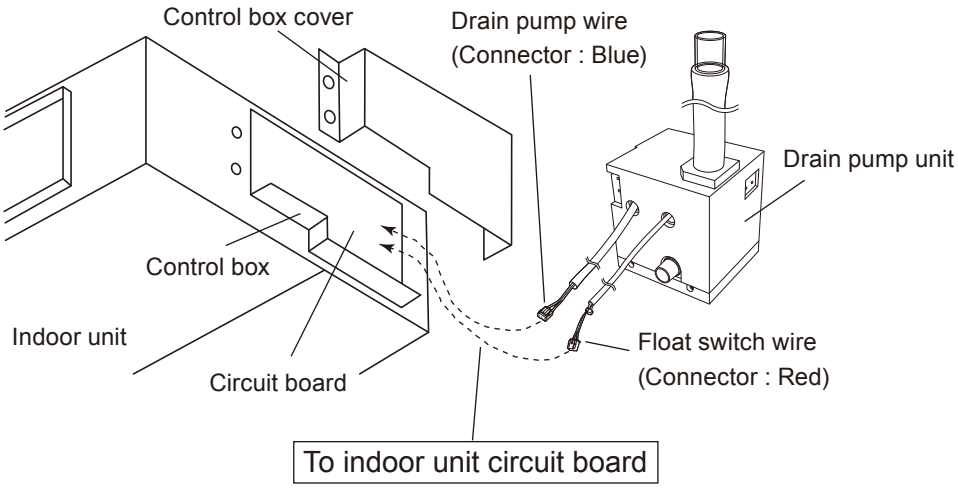






Observe the following procedures to construct centralized drain pipe fittings.

● Electrical wiring

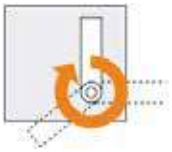


■ MODEL : UTZ-PX1NBA

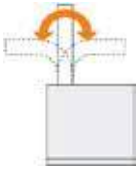
● Specifications

	Unit	Specifications
Height of drain up	mm	Maximum 1000
Power source	-	220-240V, 50/60Hz
Input Power (230V, 50/60Hz)	W	12 / 10.8
Current (230V, 50/60Hz)	mA	114 / 92
Dimensions (H x W x D)	mm	176 x 178 x 154
Weight	kg	2.5
Connection pipe diameter	-	VP25 (I.D.25mm, O.D.32mm)
Direction of pipe connection *1	-	360°
Angle of pipe connection *2	-	0° (Horizontal)-90° (Vertical)
Control method	-	Control board of indoor unit
safety device	-	Float switch, Thermal fuse

*1 : Direction of pipe connection



*2 : Angle of pipe connection

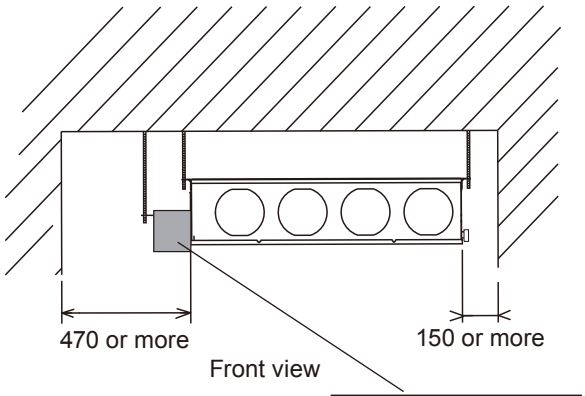


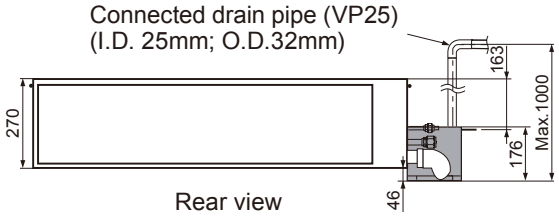
● Application indoor units

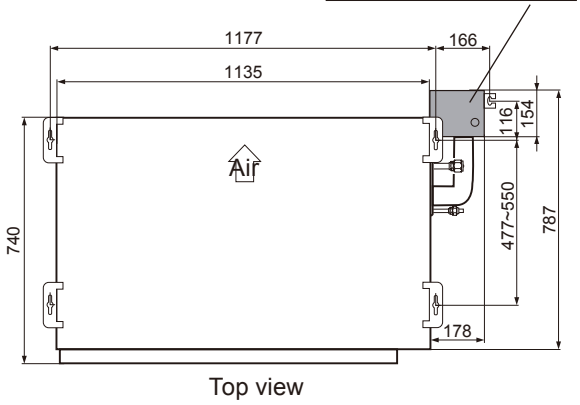
Type	Model name
Medium static pressure duct	ARXA24GBLH, ARXA30GBLH, ARXA36GBLH, ARXA45GBLH

● Mounting position

(Unit : mm)

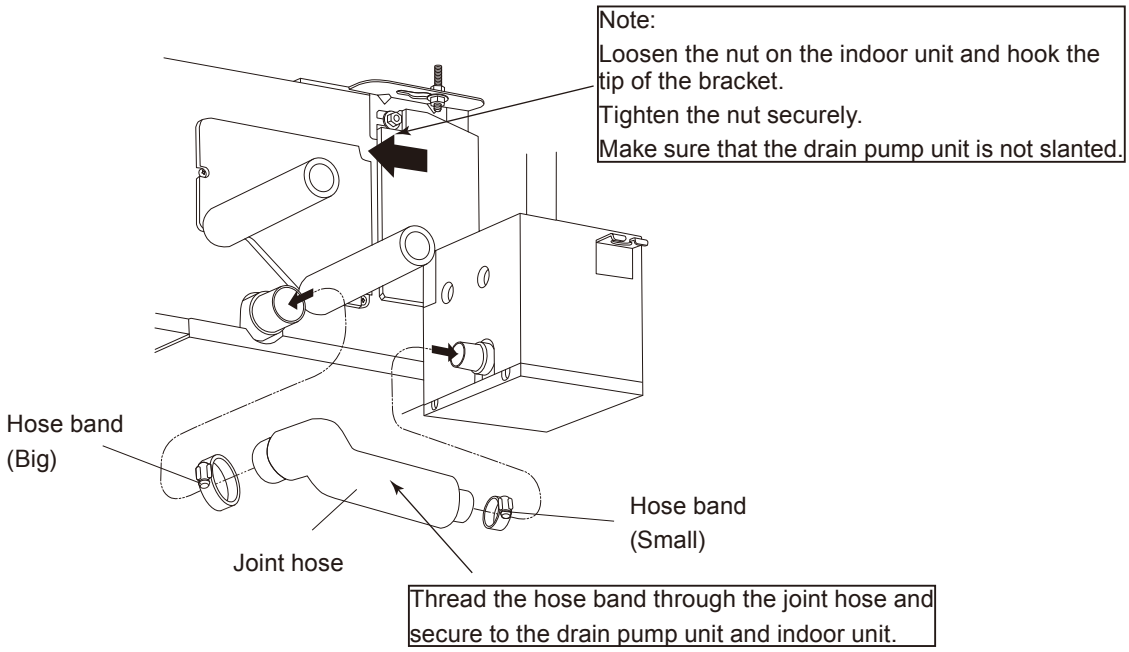


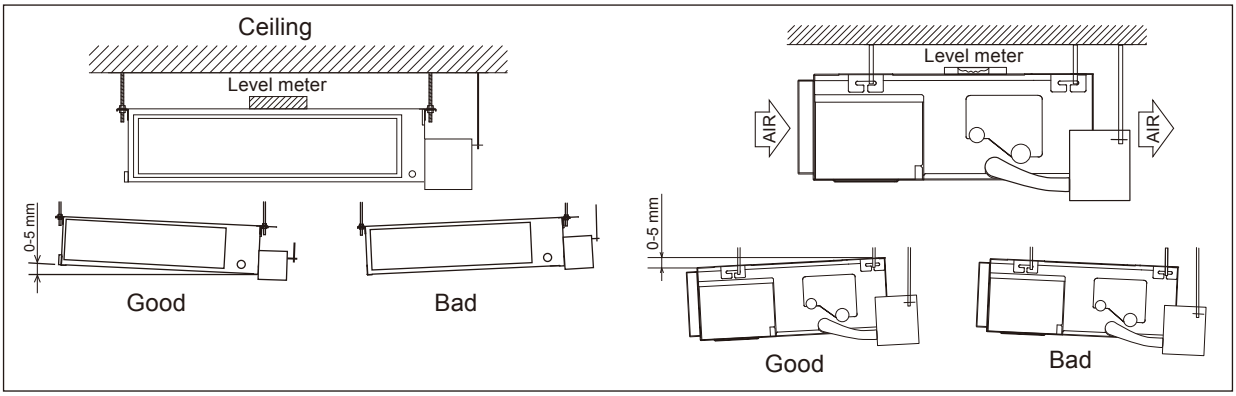




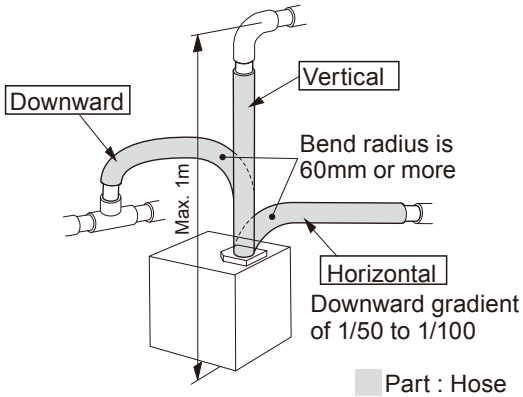
Note:
Leave the space required to service the unit.
Set a maintenance hole near the drain pump unit.

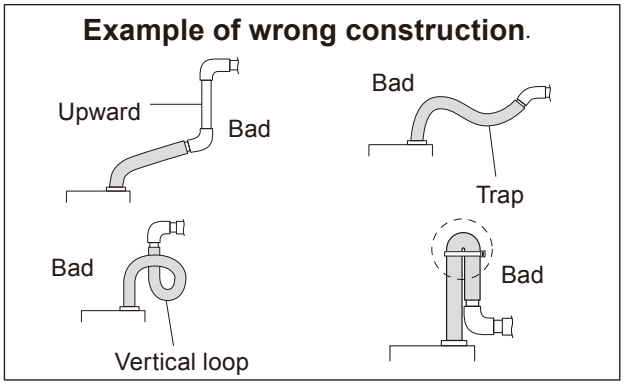
● Installing drain pump unit



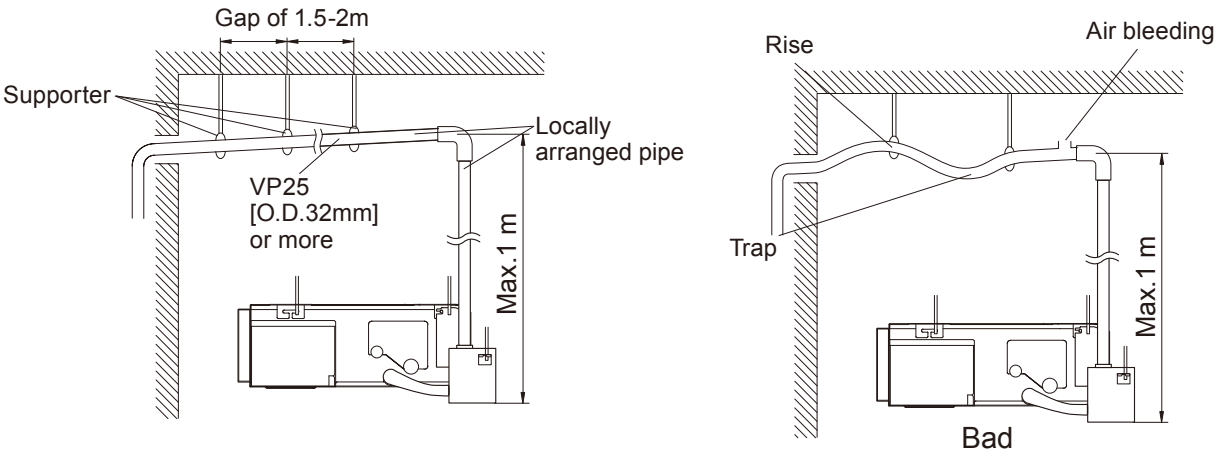


● Installing hose



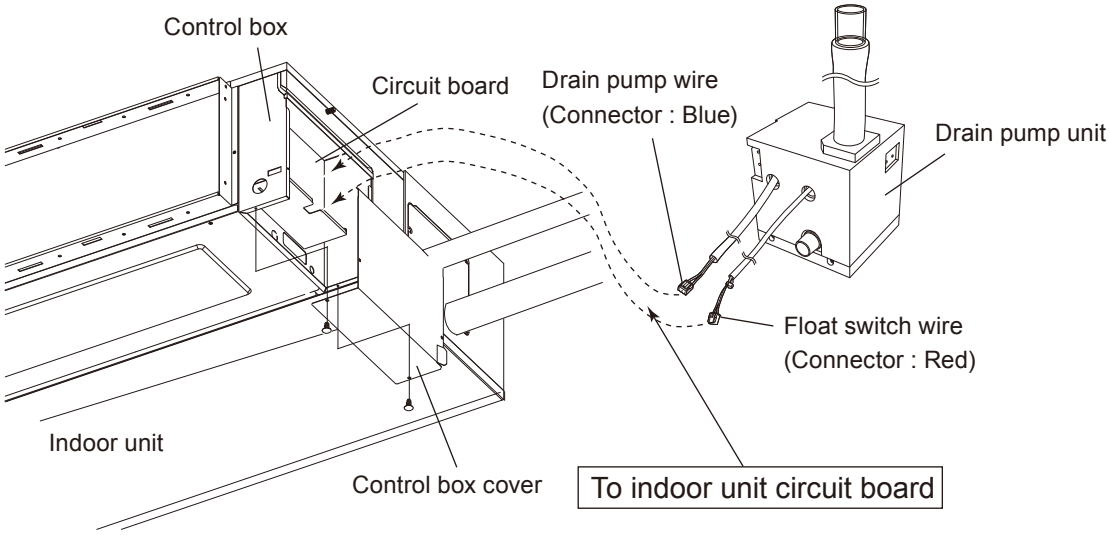


● Installing pipe



Observe the following procedures to construct centralized drain pipe fittings.

● Electrical wiring

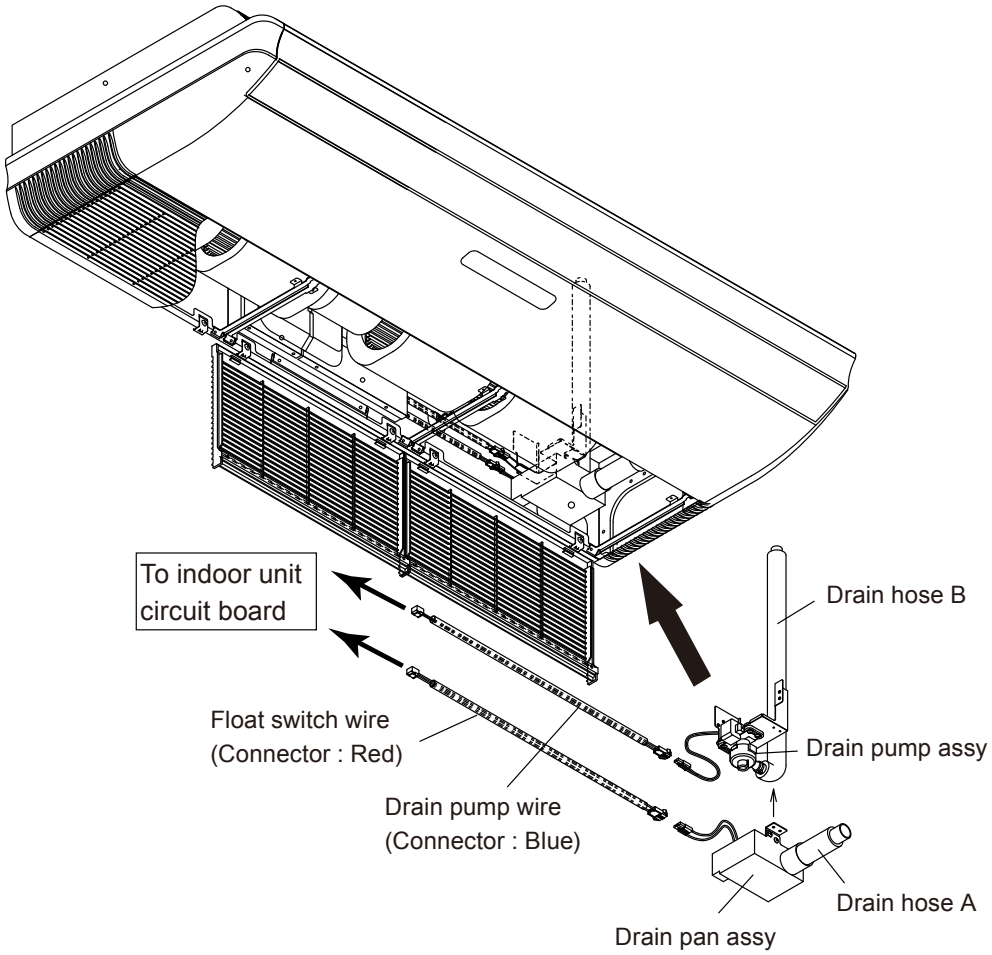


■ MODEL : UTR-DPB24T

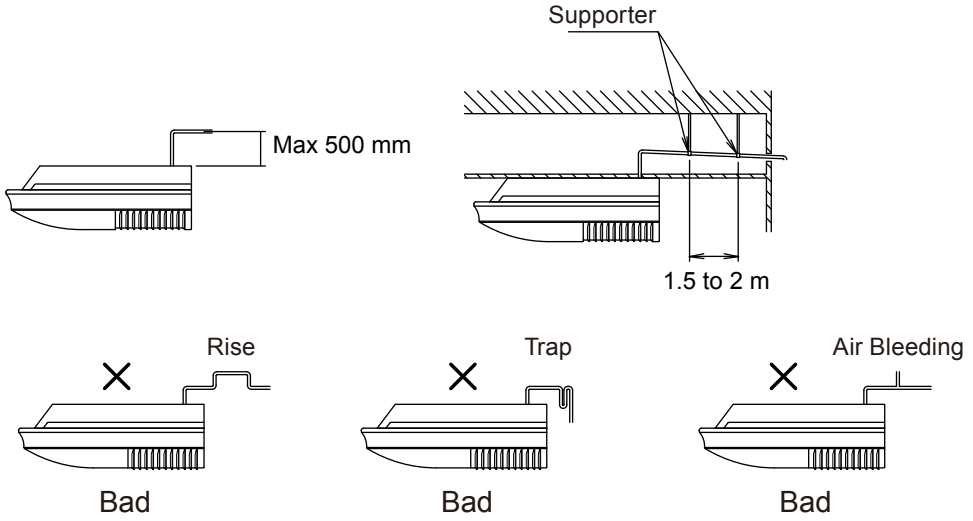
● Application indoor units

Type	Model name
Ceiling	AB∗A30GATH, AB∗A36GATH, AB∗A45GATH, AB∗A54GATH

● Installing drain pump unit & Electrical wiring



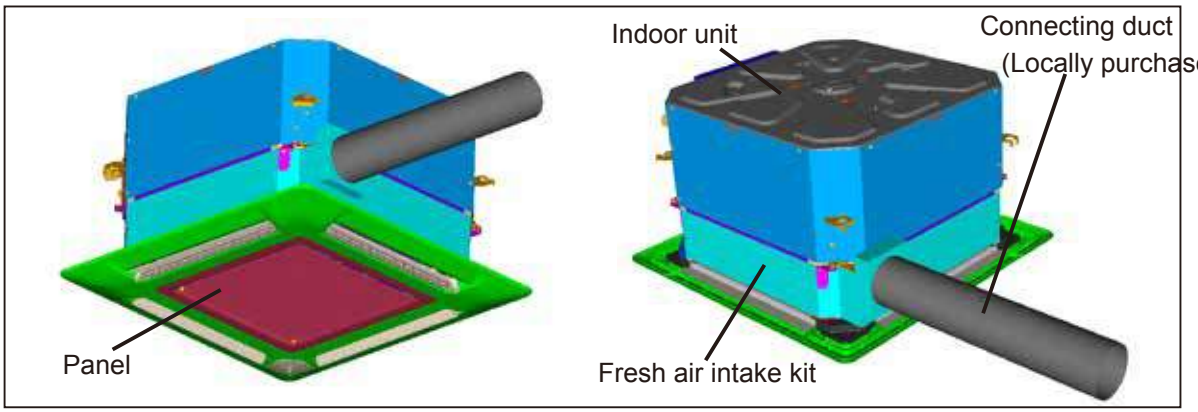
● Installing pipe



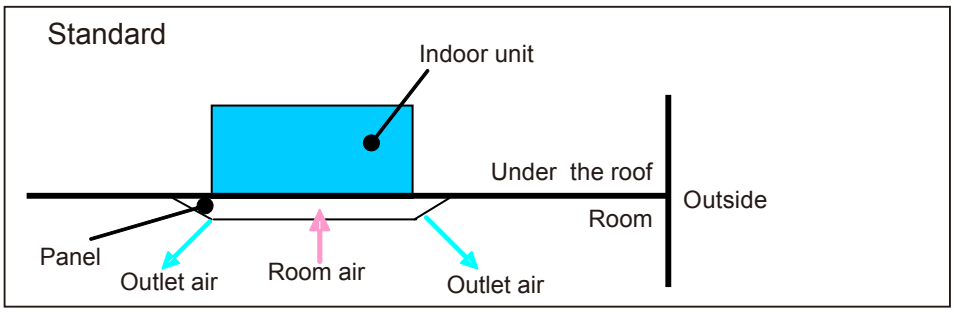
10-2. FRESH AIR INTAKE KIT (MODEL : UTZ-VXAA)

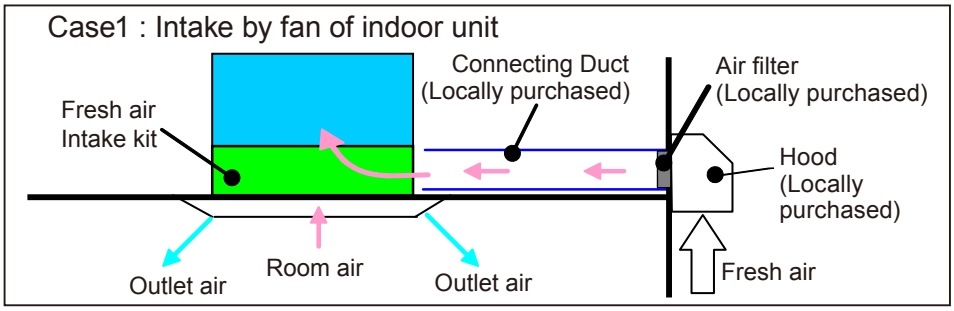
■ FEATURE

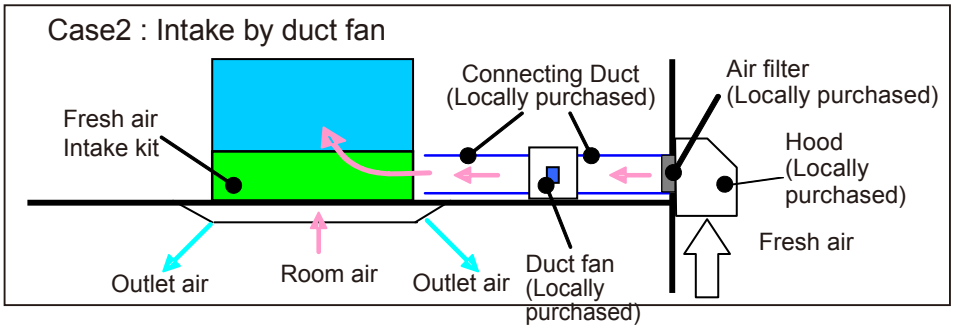
• It can be taken in fresh air of up to 10% of “high” air volume of the indoor unit by attaching Fresh Air Intake Kit to cassette type indoor unit.



■ INSTALLATION EXAMPLE







OPTIONAL PARTS

■ SPECIFICATIONS

Model name				UTZ-VXAA
Fresh air intake	Max. fresh air intake volume		%(for High)	10
Connection duct type			mm (inch)	ø 100 (3-15/16)
			Pcs	1
Dimension (HxWxD)		Net	mm (inch)	120 x 570 x 570 (4-23/32 x 22-7/16 x 22-7/16)
		Gross		165 x 585 x 585 (6-1/2 x23-1/32 x 23-1/32)
Weight		Net	kg (lb.)	3.5 (8)
		Gross		5.5 (12)

OPTIONAL PARTS

■ PRECAUTION

● About fresh air intake kit

- The Fresh Air Intake Kit can be installed onto cassette type air conditioners.
- The volume of ventilated air provided by the Fresh Air Intake Kit may be unable to fulfill ventilation regulations in all countries.
  On such occasions we ask that this kit be used along with Energy recovery ventilators.
- When intaking outside air please ensure correct air-conditioning design as based on air-conditioning load calculations.
  As outside air is not being processed an increase in outside air load can affect air conditioning.

● Installation location

- Area that generate substances that adversely affect the equipment, such as sulfuric gas,chlorine gas,add,or alkalli it will cause the copper pipes and brazed joints to corrode,whitch can cause refrigerant leakage.
- Area with high salt content,such as at the seaside. It will deteriorate metal parts, causing the parts to fall or the unit to leak water.
- Be certain to use electric dampers and shutters to avoid infiltration of cold air, wind and fog during shutdown in areas with cold climates, strong winds, or where fogs are common.
- Please ensure the product is installed a distance of at least three times the duct diameter away from exterior wall air inlets, or air exhausts for the prevention of short circuits.

● Temperature conditions

- Condensation may form on the product when outside air temperature is low, and the temperature and humidity surrounding the product are high. Don't intake the air of below 0°C into the Fresh air intake kit.
- The upper limit of the product's temperature range should respond to the outdoor temperature range.

● About duct fan

- When installing the duct fan, connect the drive relay (Locally purchased) and operate with the indoor unit.
- Please ensure the intake air volume is below 10% of the product’s air volume HI. When the intaken air volume becomes too large there the operating noise may increase and room temperature detection may be affected.

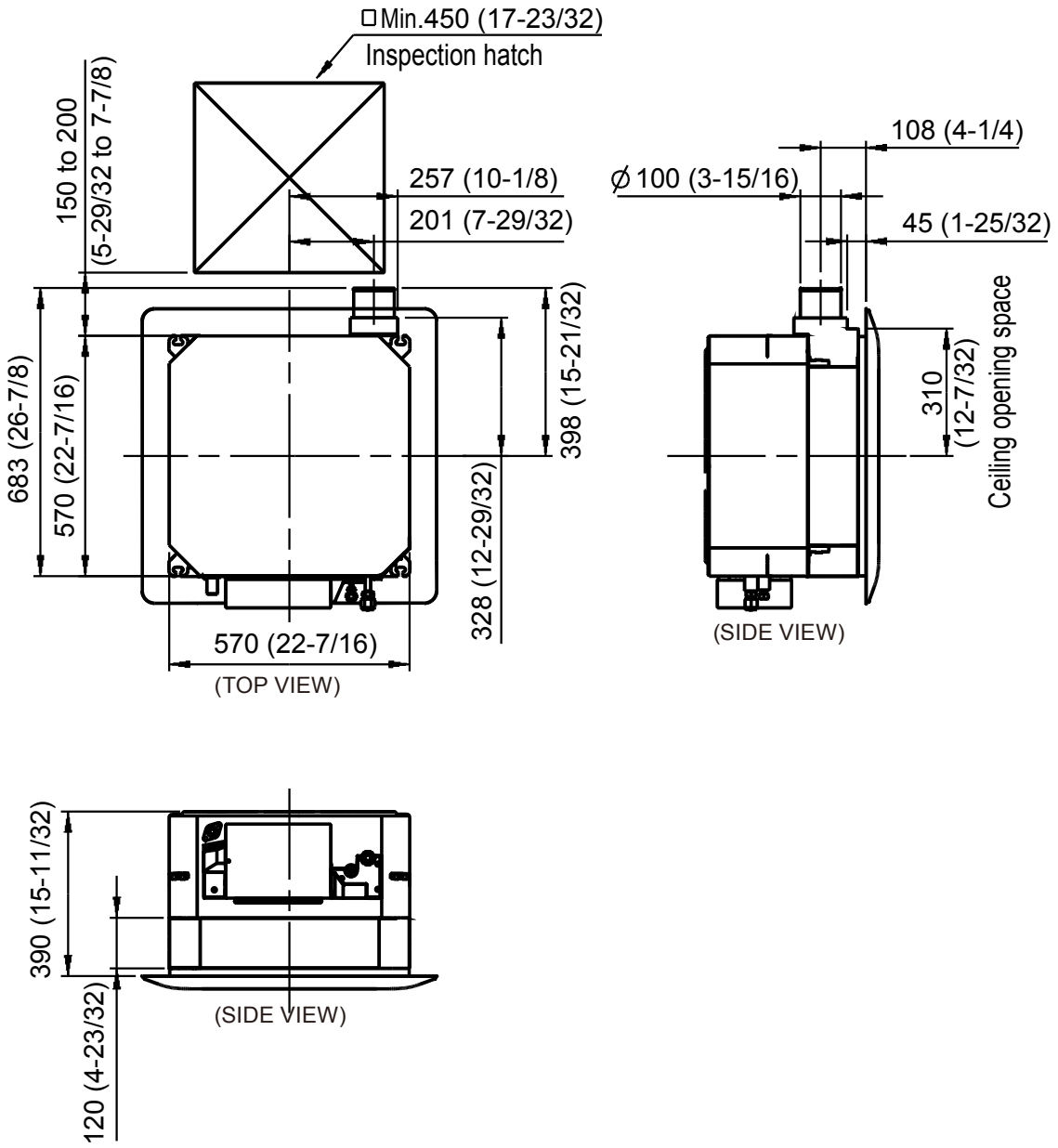
● About the duct connection

- Procure a duct with internal diameter that fits the external diameter of the duct flange.
- Please note that regulations of some countries may require the use of a nonflammable duct.
- If the duct penetrates a fire-retarding division or other fire-proofing measures, the installation of fire dampers, or a construction that does not adversely affect fire control measures is a regulatory requirement of some countries.
- When using metallic ducts please ensure metals (i.e., metal lath, wire lath, stainless sheeting) are electrically insulated. (A short occurring by electrical connection can cause fire)
- Please ensure to thermally insulate connected ducts to prevent condensation.
- Please make certain that netting or other measures are installed in parts exposed to the outside air to prevent infiltration of small animals such as birds and insects.
- Please be certain to install external air filters to parts exposed to the outside air for heat exchanger protection of indoor equipment.
- Please avoid the infiltration of rain water by installing outside ducts with an incline of at least 1/30, and fitting hoods on openings.

OPTIONAL PARTS

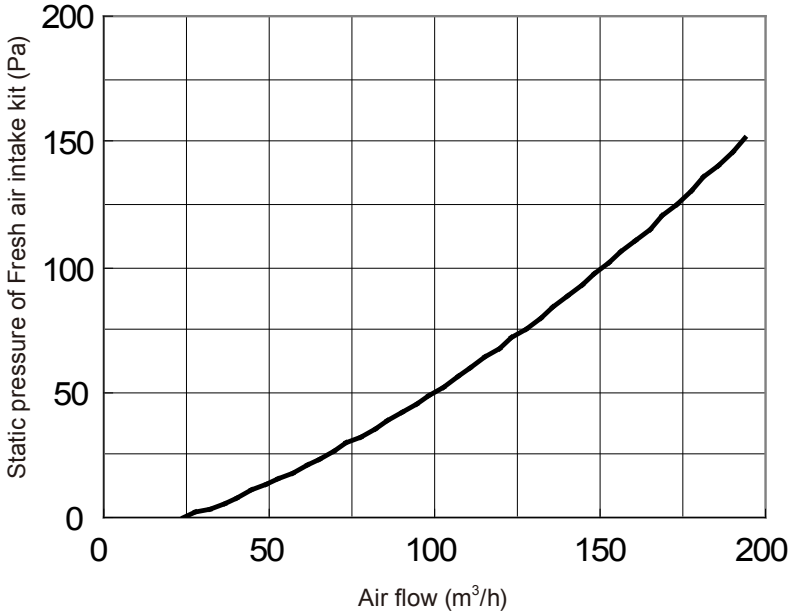
■ DIMENSIONS

Unit : mm (inch)

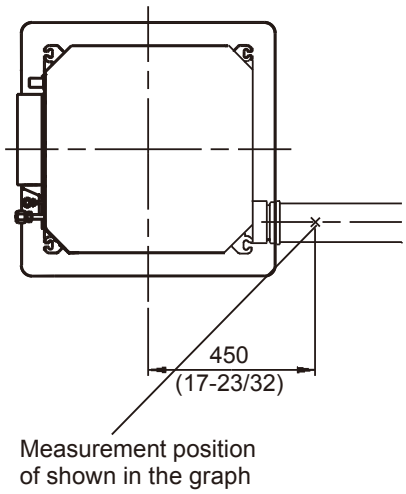


• When installing this kit, inspection hatch is necessary. (It is necessary when servicing.)

■ AIR FLOW



Unit : mm (inch)



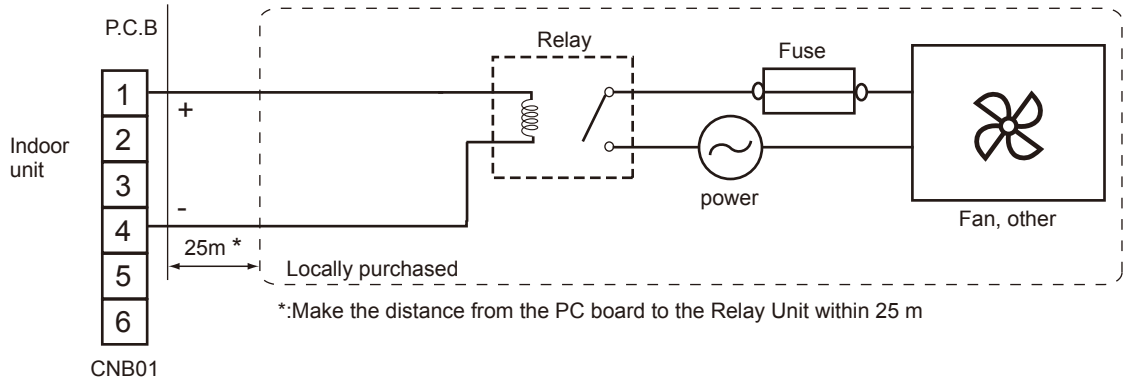
OPTIONAL PARTS

■ FRESH AIR CONTROL OUTPUT

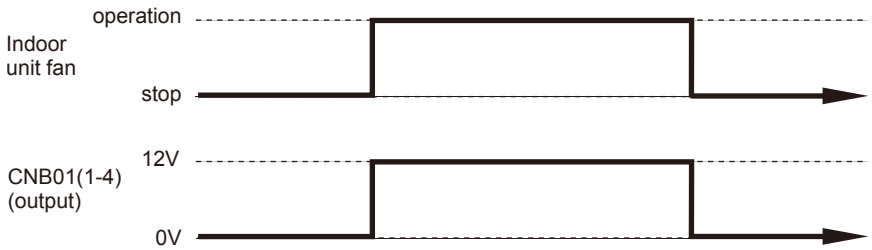
- You can control duct fan by synchronization with fan operation of indoor unit.
- Wire for fresh air control output is supplied with Fresh Air Intake Kit.
- Extended length of the wire : Max. 25m

● Connection diagram

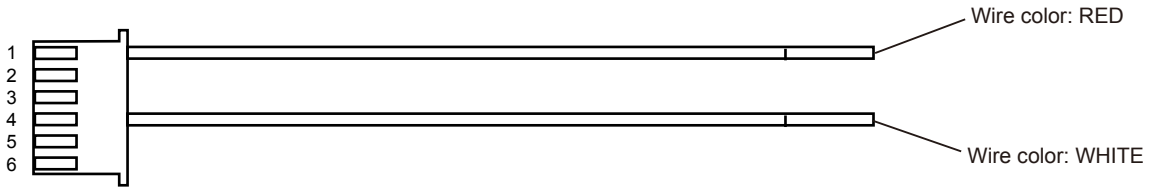
- For Relay Output voltage : DC12 ± 2V
  Permissible current : 50mA



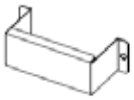
● Indoor unit status



● Wire (External output ③)



■ ACCESSORY PARTS

Name and shape	Q'ty	Application
Installation manual 	1	
Chamber 	1	Air joint for connection duct
Wire cover 	1	Cover for extension wire
Screw 	4	Attaching for chamber Attaching for wire cover
Extension wire for louver 	2	Extension wire for louver

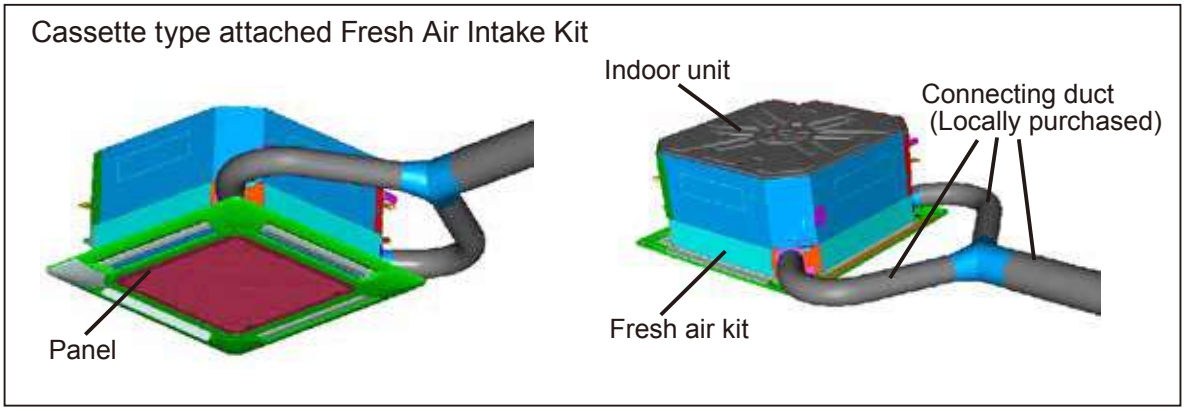
Name and shape	Q'ty	Application
Extension wire for receiver kit 	1	Extension wire for receiving kit
Wire (External output ①) 	1	For connect indoor unit to relay of duct fan (For single or multi)
Wire (External output ②) 	1	For connect indoor unit to relay of duct fan (For VRF)
Wire (External output ③) 	1	For connect indoor unit to relay of duct fan (For VRF)
Bolt 	4	For attaching kit to indoor unit
Binder 	1	For fixing wire

OPTIONAL PARTS

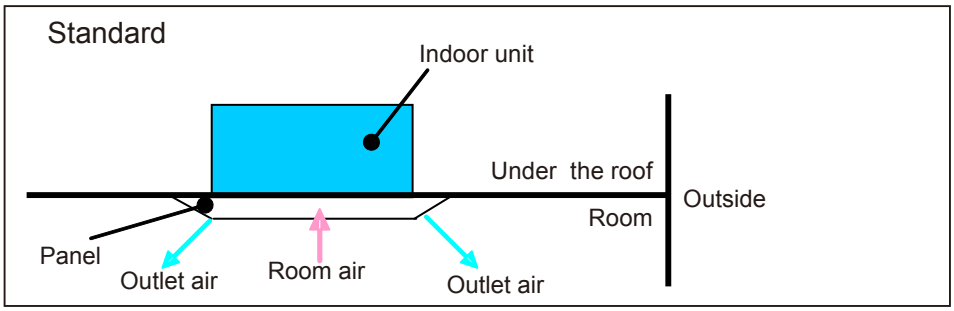
10-3. FRESH AIR INTAKE KIT (MODEL: UTZ-VXRA, UTZ-VXGA)

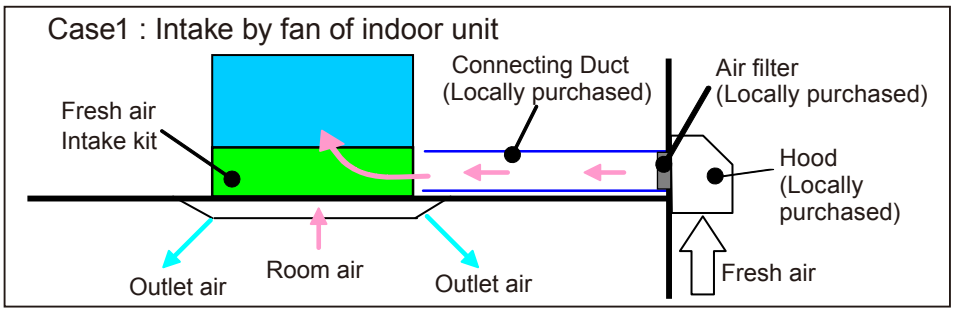
■ FEATURE

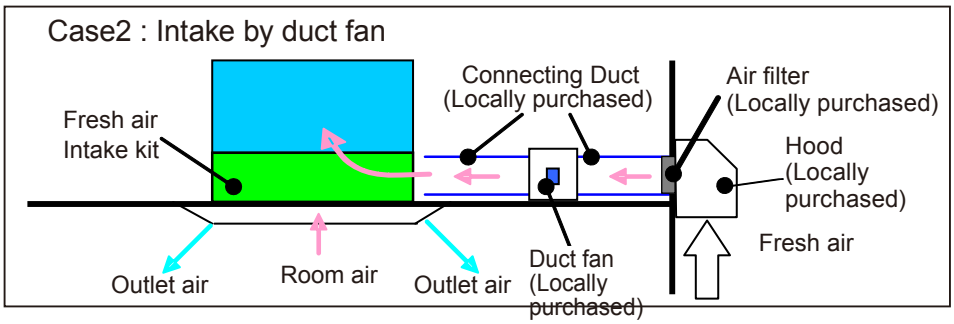
• It can be taken in fresh air of up to 10% of “high” air volume of the indoor unit by attaching Fresh Air Intake Kit to cassette type indoor unit.



■ INSTALLATION EXAMPLE







■ SPECIFICATIONS

Model name				UTZ-VXRA, UTZ-VXGA
Fresh air intake	Max. fresh air intake volume	% (for High)	2- way intake	10
			1- way intake	5
Connection duct type		mm (inch)		ø 100 (3-15/16)
		Pcs		2
Dimension (HxWxD)	Net	mm (inch)		120 x 840 x 840 (4-23/32 x 33-1/16 x 33-1/16)
	Gross			165 x 860 x 860 (6-1/2 x 33-27/32 x 33-27/32)
Weight	Net	kg (lb.)		5.5 (12)
	Gross			9.0 (20)

OPTIONAL PARTS

■ PRECAUTION

● About fresh air intake kit

- The Fresh Air Intake Kit can be installed onto cassette type air conditioners.
- The volume of ventilated air provided by the Fresh Air Intake Kit may be unable to fulfill ventilation regulations in all countries.

  On such occasions we ask that this kit be used along with Energy recovery ventilators.
- When intaking outside air please ensure correct air-conditioning design as based on air-conditioning load calculations.

  As outside air is not being processed an increase in outside air load can affect air conditioning.

● Installation location

- Area that generate substances that adversely affect the equipment, such as sulfuric gas,chlorine gas,add,or alkali it will cause the copper pipes and brazed joints to corrode,which can cause refrigerant leakage.
- Area with high salt content,such as at the seaside. It will deteriorate metal parts, causing the parts to fall or the unit to leak water.
- Be certain to use electric dampers and shutters to avoid infiltration of cold air, wind and fog during shutdown in areas with cold climates, strong winds, or where fogs are common.
- Please ensure the product is installed a distance of at least three times the duct diameter away from exterior wall air inlets, or air exhausts for the prevention of short circuits.

● Temperature conditions

- Condensation may form on the product when outside air temperature is low, and the temperature and humidity surrounding the product are high. Don't intake the air of below 0°C into the fresh air intake kit.
- The upper limit of the product's temperature range should respond to the outdoor temperature range.

● About duct fan

- When installing the duct fan, connect the drive relay (Locally purchased) and operate with the indoor unit.
- Please ensure the intake air volume is below 10% of the product's air volume HI. When the intaken air volume becomes too large there the operating noise may increase and room temperature detection may be affected.

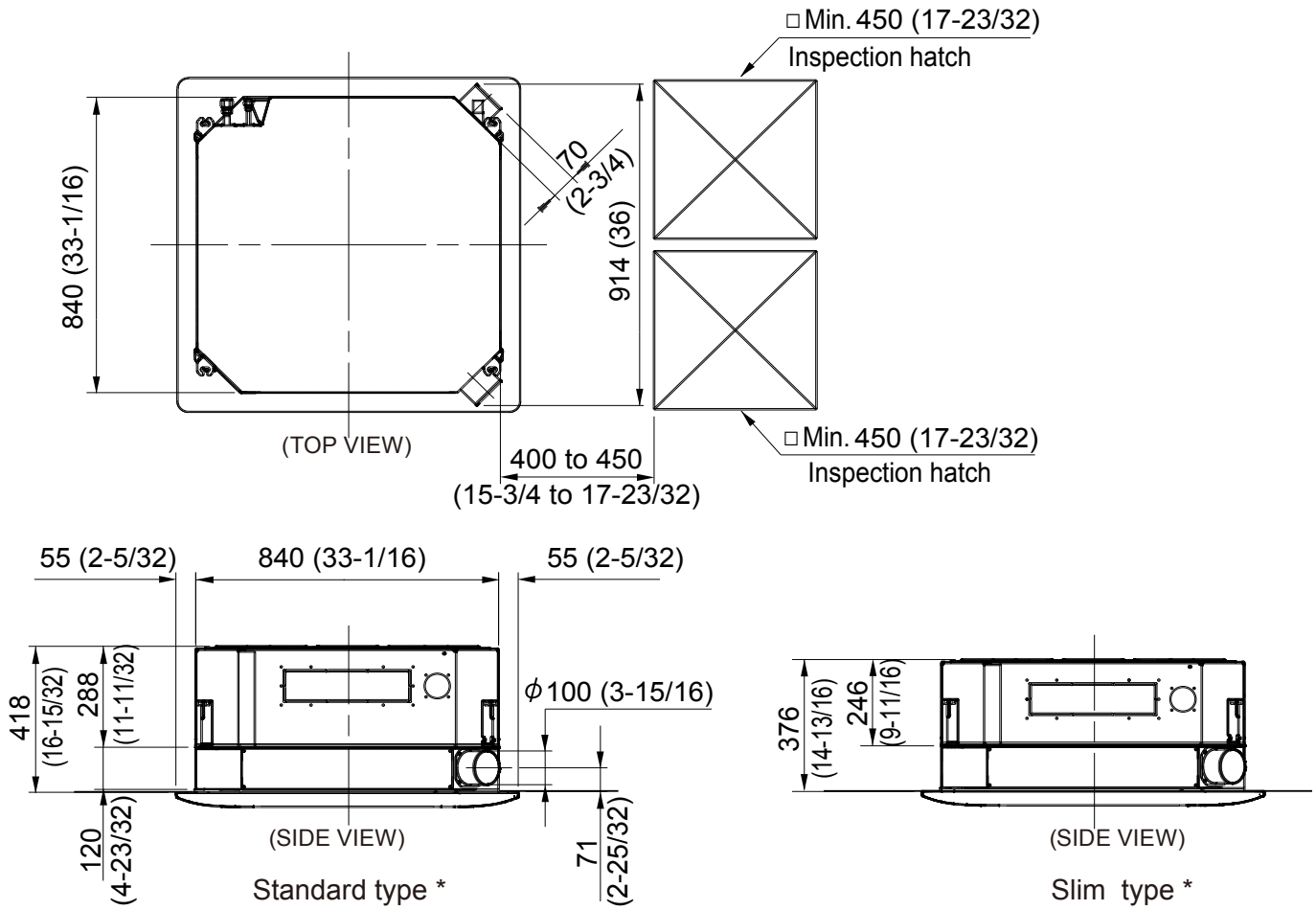
● About the duct connection

- Procure a duct with internal diameter that fits the external diameter of the duct flange.
- Please note that regulations of some countries may require the use of a nonflammable duct.
- If the duct penetrates a fire-retarding division or other fire-proofing measures, the installation of fire dampers, or a construction that does not adversely affect fire control measures is a regulatory requirement of some countries.
- When using metallic ducts please ensure metals (i.e., metal lath, wire lath, stainless sheeting) are electrically insulated. (A short occurring by electrical connection can cause fire)
- Please ensure to thermally insulate connected ducts to prevent condensation.
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- Please be certain to install external air filters to parts exposed to the outside air for heat exchanger protection of indoor equipment.
- Please avoid the infiltration of rain water by installing outside ducts with an incline of at least 1/30, and fitting hoods on openings.

OPTIONAL PARTS

■ DIMENSIONS

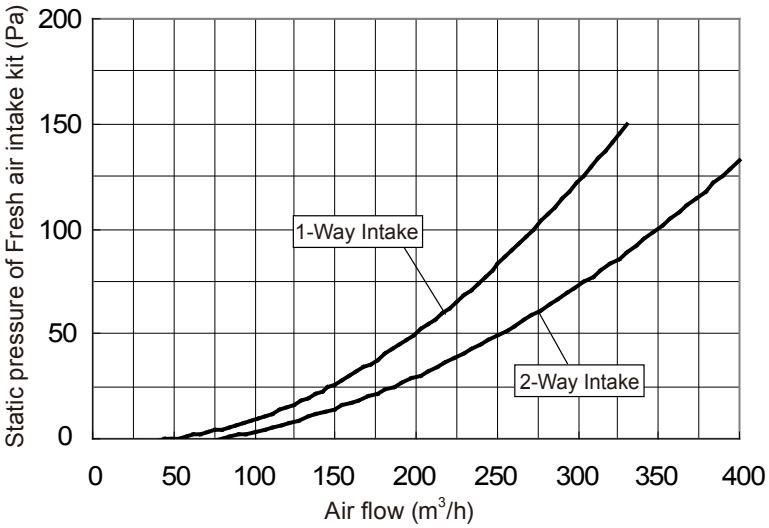
Unit : mm (inch)



* : The size is different according to indoor unit used.

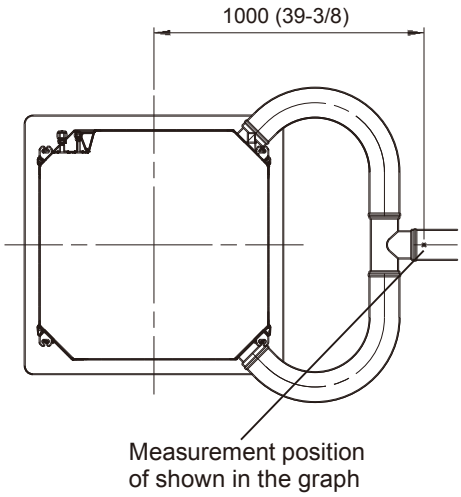
- When installing this kit, inspection hatch is necessary. (It is necessary when servicing.) Either one of inspection hatches must be installed.

■ AIR FLOW

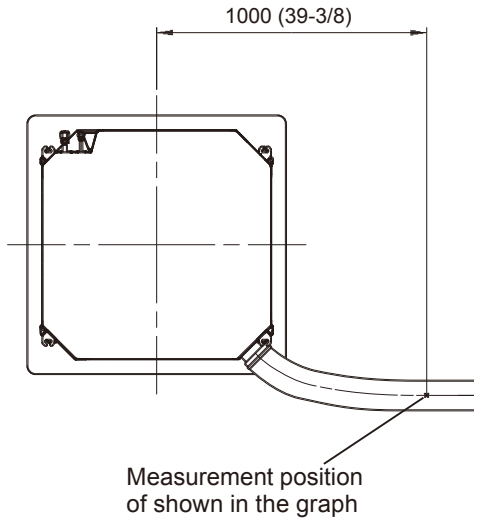


Unit:mm (inch)

for 2-Way Intake



for 1-Way Intake

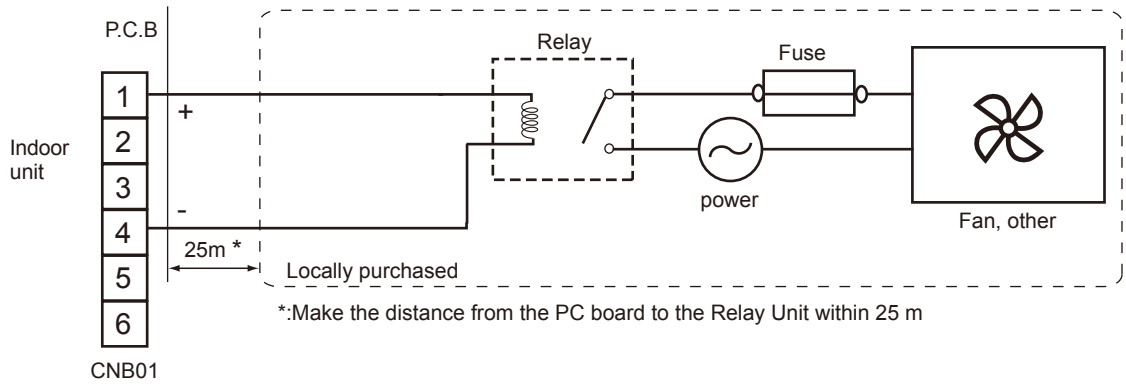


■ FRESH AIR CONTROL OUTPUT

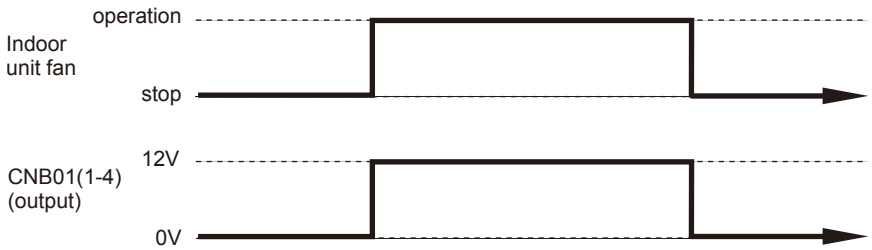
- You can control duct fan by synchronization with fan operation of indoor unit.
- Wire for fresh air control output is supplied with Fresh Air Intake Kit.
- Extended length of the wire : Max. 25m

● Connection diagram

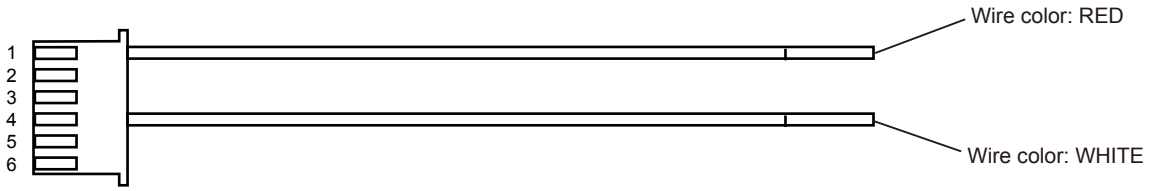
- For Relay Output voltage : DC12 ± 2V
  Permissible current : 50mA



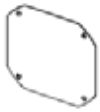
● Indoor unit status

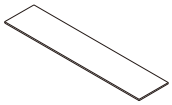


● Wire (External output ③)



■ ACCESSORY PARTS

Name and shape	Q'ty	Application
Installation manual 	1	
Duct Flange 	2	Air joint for connecting duct
Cover 	2	Protective cover to prevent surface condensation
Screw 	16	For Attaching duct flange For Attaching Cover
Hook plate 	4	Plate for attaching panel
Shutter plate 	1	Shutter plate for 1-way intake
Insulation ① 	2	Affixing the insulation outside of the kit
Insulation ② 	1	Affixing the insulation to tube of drain pump for prevent condensation

Name and shape	Q'ty	Application
Insulation ③ 	3	Affixing the insulation outside of the kit
Insulation ④ 	4	Affixing the insulation outside of the cover
Binder 	1	Fixing tube of drain pump
Extension wire for louver 	2	Extension wire for louver
Extension wire for receiver kit 	1	Extension wire for receiver kit
Wire (External output ①) 	1	For connect indoor unit to relay of duct fan
Wire (External output ②) 	1	For connect indoor unit to relay of duct fan
Wire (External output ③) 	1	For connect indoor unit to relay of duct fan (For VRF)
Bolt 	4	For attaching the kit to indoor unit

OPTIONAL PARTS

10-4. AUTO LOUVER GRILLE KIT

■ MODELS

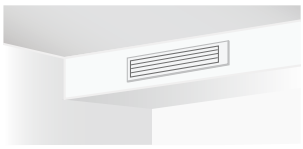
UTD-GXSA-W, UTD-GXTA-W
UTD-GXSB-W, UTD-GXTB-W
UTD-GXSC-W, UTD-GXTC-W

■ FEATURE

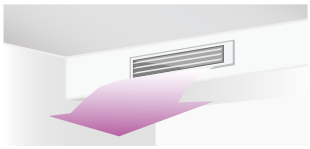
Simple flat Auto Louver will provide comfort airflow and harmonize with luxury interior.





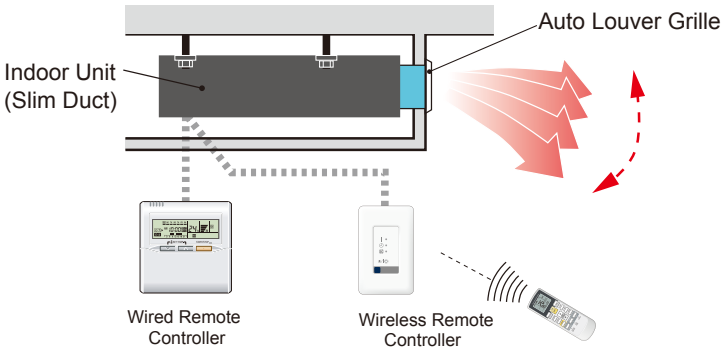


Closed louver
[Operation is stopped.]



Opened louver
[During operation]

● Flexible control



★*Operation with Indoor Unit*

Auto Louver can be operated by synchronizing remote controller of Indoor Unit.

★*UP and Down auto swing*

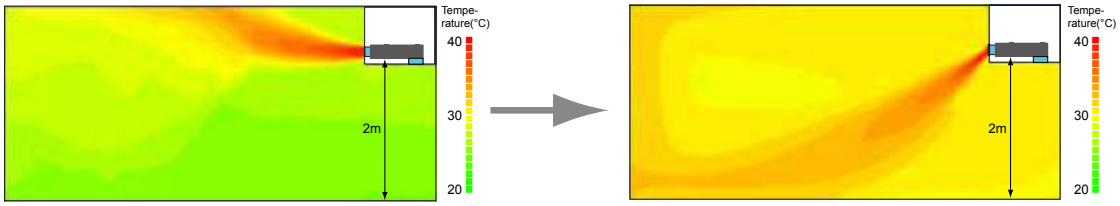
- Auto airflow direction and auto swing
- 4 steps selectable

★*Auto-closing louver*

When operation of Indoor Unit is stopped, the louver will automatically close.

OPTIONAL PARTS

● Ideal warm airflow



Without Auto Louver

[Condition]
Model (Indoor unit): ARXD12GALH
Outdoor temperature: 2°C
Operation contents: Heating
Set temperature: 30°C
Air flow: Hi

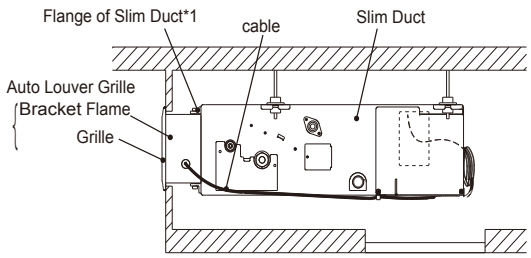
With Auto Louver

[Condition]
Model (Indoor unit): ARXD12GALH
Model (Auto louver grille): UTD-GXSA-W
Outdoor temperature: 2°C
Operation contents: Heating
Set temperature: 30°C
Air flow: Hi
Vertical flap: Downward

● Flexible installation

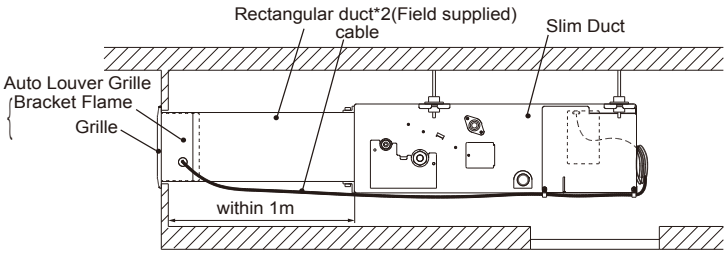
Auto Louver Grille can be connected either directly with indoor unit or through the rectangular duct.

(a) Direct connection to flange



*1 : Attachment is not necessary.

(b) Connection with rectangular duct



*2 : Length of connecting duct must be within 1m

■ SPECIFICATIONS

Model name			UTD-GXSA-W UTD-GXTA-W	UTD-GXSB-W UTD-GXTB-W	UTD-GXSC-W UTD-GXTC-W
Power Supply			Connecting with Control box of indoor unit		
Fixing of Auto Louver Grille			Screw fixing to Flange or Rectangular duct		
Extension Square Duct Limit			1.0m (Max. duct length between indoor unit and Grille)		
Net Dimension (H x W x D)		mm (inch)	180x683x(84+9) [7-3/32x26-7/8x(3-5/16+11/32)]	180x883x(84+9) [7-3/32x34-3/4x(3-5/16+11/32)]	180x1083x(84+9) [7-3/32x42-5/8x(3-5/16+11/32)]
Weight	Net	kg (lb.)	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)
	Gross		3.0 (6.7)	3.5 (7.8)	4.0 (8.9)
Color			White		
Louver Motor			Stepping Motor		
Material			Flame retardant ABS		
Accessories			Fitting Flame, etc.		
Operation range	Cooling	°C (°F)	18 to 32 (64 to 90)		
		% RH	80% or less		
	Heating	°C (°F)	16 to 30 (60 to 88)		

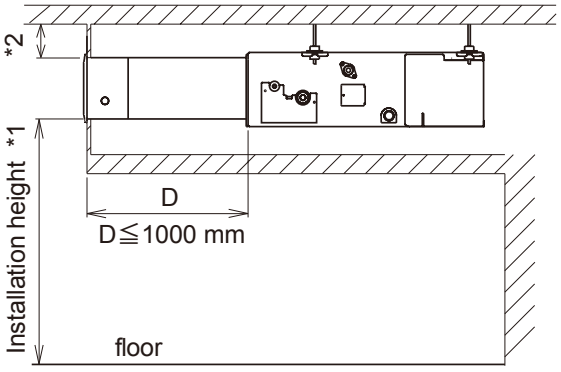
NOTE: Auto louver grille kit cannot be attached to ARXD07-24LATH with No revision code.
To identify the revision code, refer to “REVISION CODE” in chapter 1.

OPTIONAL PARTS

■ PRECAUTION

●Select the installation location that meets the following requirement and that is approved by the customer.

• Cold and warm air should reach the entire room.



*1) Refer to Design & Technical manual for Air velocity distribution and Air temperature distribution during heating.

*2) If the distance from the ceiling is not adequate, it may cause mildew stains on the wall or the ceiling. (Ensure to fix at least 150 mm away from any surface of the equipment.)

●Do not install the unit in the following areas

- The upper part of the vicinity of room entrance. It may cause condensation on the outlet port.
- Near a wall surface. It may cause condensation on the wall during cooling.
- Area filled with mineral oil or containing a large amount of splashed oil or steam, such as a kitchen.
- The place where it will be exposed to direct sunlight. Or else, it may cause a change in color.

●When the installation area is exposed to direct sunlight, take measures to block the light such as covering the grille surface with a sheet. Or else, it may cause a change in color.

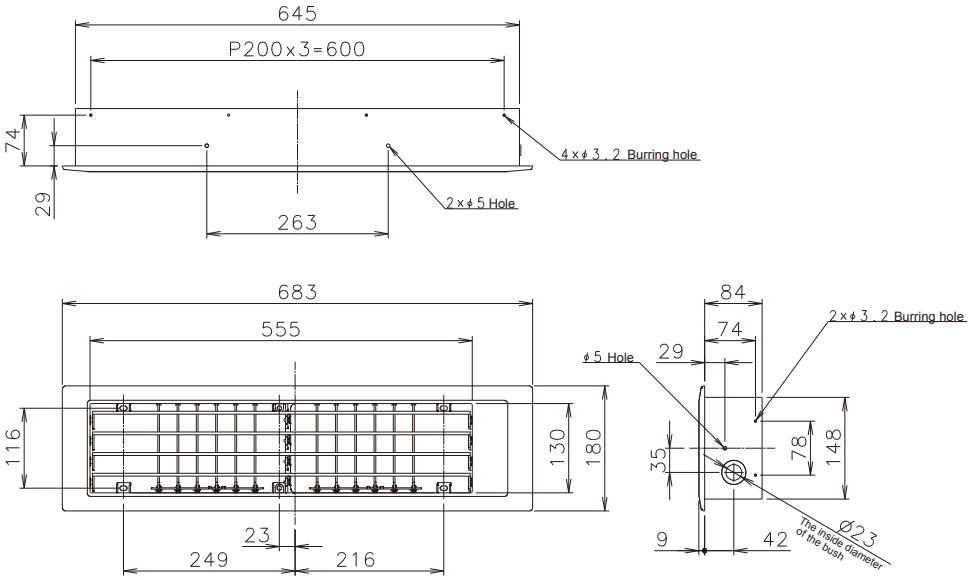
●Use an appropriate Grille that is compatible with the indoor unit. If not used with the correct combination, it may cause condensation.

●Perform heat insulation and field setting according the Design & Technical manual of Indoor unit. Not installing as per the instructions may cause condensation.

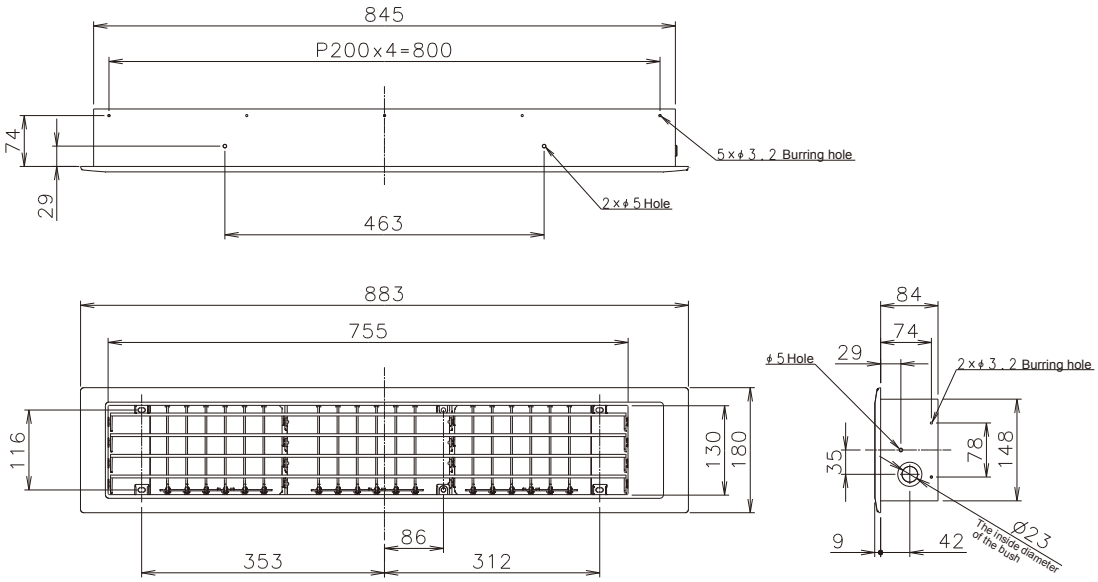
OPTIONAL PARTS

■ DIMENSIONS

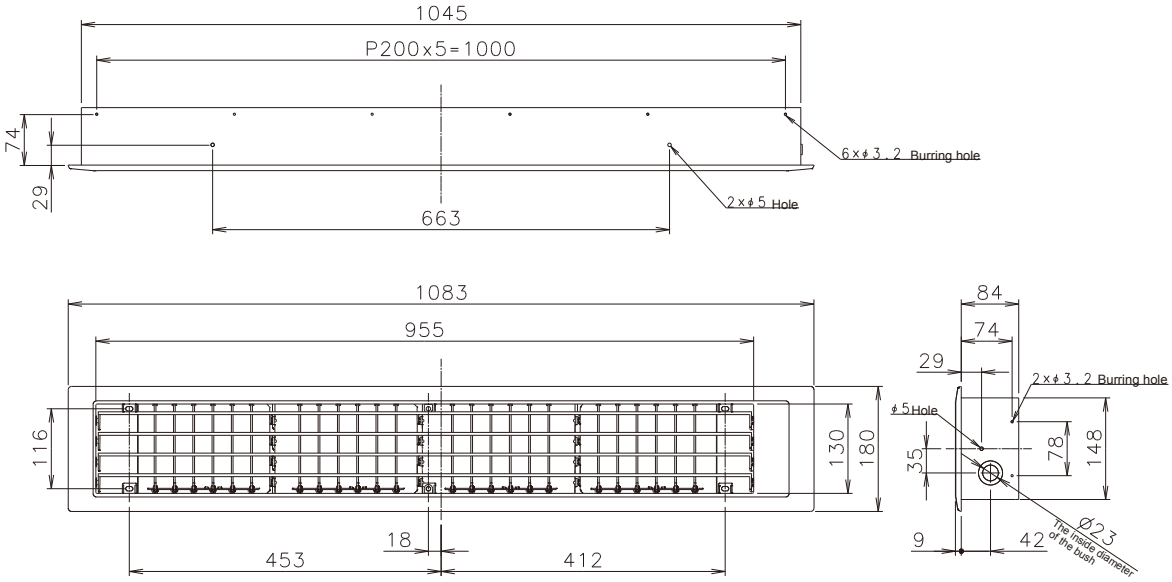
● MODELS: UTD-GXSA-W, UTD-GXTA-W



● MODELS: UTD-GXSB-W, UTD-GXTB-W

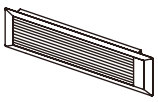
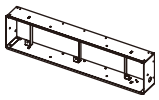


● MODELS: UTD-GXSC-W, UTD-GXTC-W



OPTIONAL PARTS

■ ACCESSORY PARTS

Name and shape	Q'ty
Installation manual 	1
Operating manual 	1
Grille 	1
Bracket frame 	1

Name and shape	Q'ty
Screw-A 	16
Screw-B 	6
Cable clip 	2
Binder 	3
Bushing 	1

OPTIONAL PARTS

AIRSTAGE™ J-III L



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Printed in Japan

DTV_J3LE050E_01

2017.03.31