

SPLIT TYPE
AIR CONDITIONER
DUCT TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
ARYG18LHTBP	AOYG18LBCA
ARYG24LHTBP	AOYG24LBCA

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SPECIFICATIONS

ELECTRICAL DATA

INDOOR UNIT		ARYG18LHTBP	ARYG24LHTBP
OUTDOOR UNIT		AOYG18LBCA	AOYG24LBCA
TYPE		Cooling & Heating	
POWER SOURCE		Single phase 230V 50Hz	
COOLING	Capacity	5.20 kW	6.80 kW
	Power consumption	1.37 kW	1.95 kW
	EER	3.80 kW/kW	3.49 kW/kW
	Rated operating current	6.1 A	8.6 A
	Max operating current	10.0 A	13.5 A
	Moisture removal	1.2 L/h	1.8 L/h
HEATING	Capacity	6.0 kW	8.0 kW
	Power consumption	1.48 kW	2.21 kW
	COP	4.05 kW/kW	3.62 kW/kW
	Rated operating current	6.6 A	9.7 A
	Max operating current	13.5 A	18.5 A

FAN MOTOR AND FAN REVOLUTION

INDOOR UNIT	Discrimination	MFG-ZB0VC3N	
	High	820 rpm	900 rpm
	Medium	660 rpm	740 rpm
	Low	590 rpm	620 rpm
	Quiet	520 rpm	510 rpm
OUTDOOR UNIT	Discrimination	MFE-71TVAL	
	Cooling	870 rpm	1,100 rpm
	Heating	780 rpm	1,050 rpm

AIR CIRCULATION

INDOOR UNIT	High	1,050 m³/h	1,360 m³/h
	Medium	840 m³/h	1,080 m³/h
	Low	740 m³/h	880 m³/h
	Quiet	630 m³/h	680 m³/h
OUTDOOR UNIT	Cooling	1,900 m³/h	2,460 m³/h
	Heating	1,700 m³/h	2,340 m³/h

NOISE LEVEL

INDOOR UNIT	High	28 dB	32 dB
	Medium	25 dB	28 dB
	Low	22 dB	24 dB
	Quiet	20 dB	21 dB
OUTDOOR UNIT	Cooling	50 dB	55 dB
	Heating	51 dB	56 dB

Static pressure : 35Pa

Duct length : Inlet 1m, Outlet 2m

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 6 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		N-SF17ND1A	
WEIGHT (with oil)		10.6 kg	
PRECHARGED REFRIGERANT		1,800 g	
REFRIGERANT TYPE		R410A	
FULL CHARGE	Pipe length	15 m	1,800 g
		20 m	1,900 g
		25 m	2,000 g
		30 m	2,100 g
ADDITIONAL CHARGE		20 g/m	
MAX PIPING HEIGHT DIFFERENCE		20 m	

DIMENSIONS

INDOOR UNIT	H x W x D	300 x 1,000 x 700 mm
OUTDOOR UNIT	H x W x D	620 x 790 x 290 mm

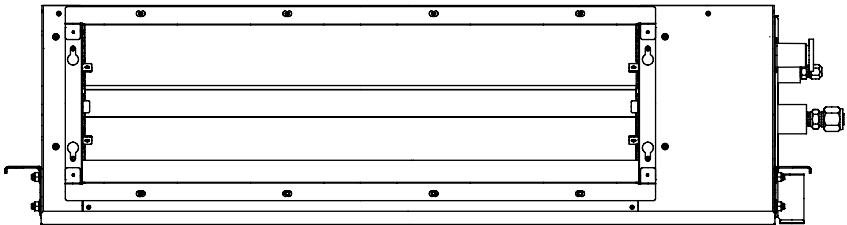
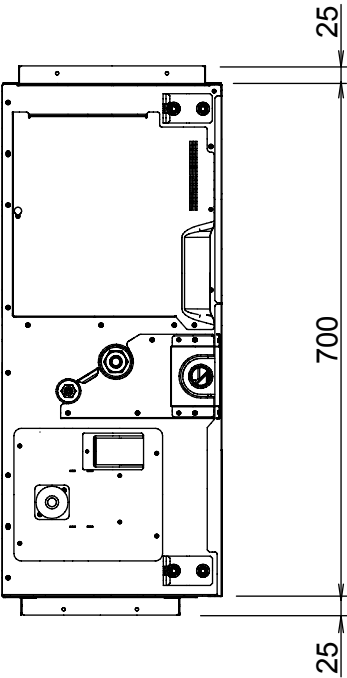
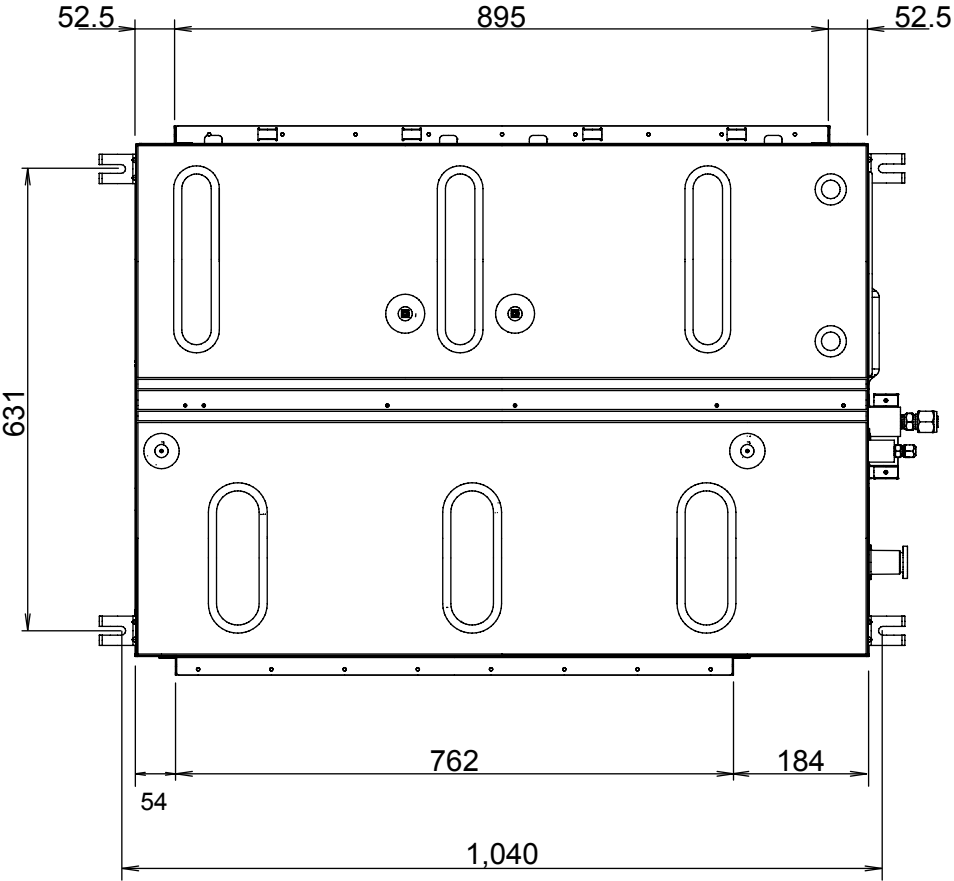
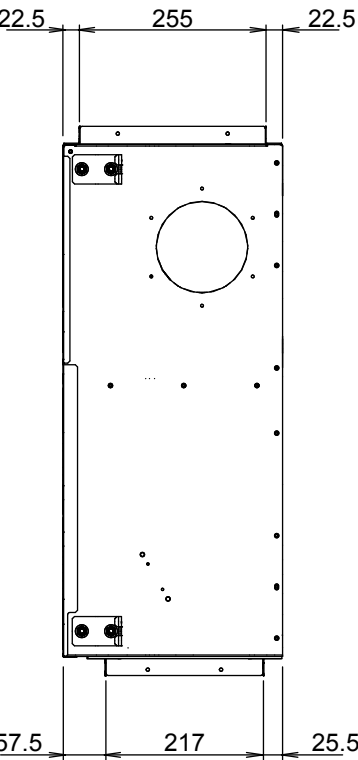
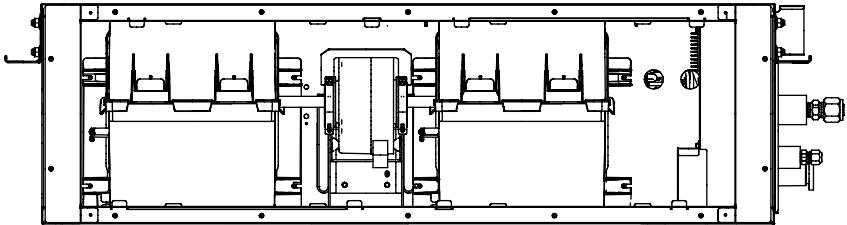
WEIGHT

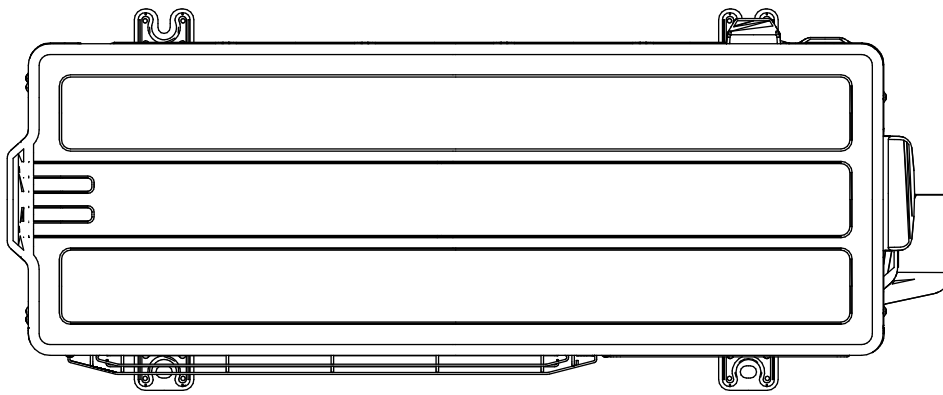
INDOOR UNIT	Net / Shipping	36 kg / 43 kg
OUTDOOR UNIT	Net / Shipping	41 kg / 45 kg

DIMENSIONS

INDOOR UNIT

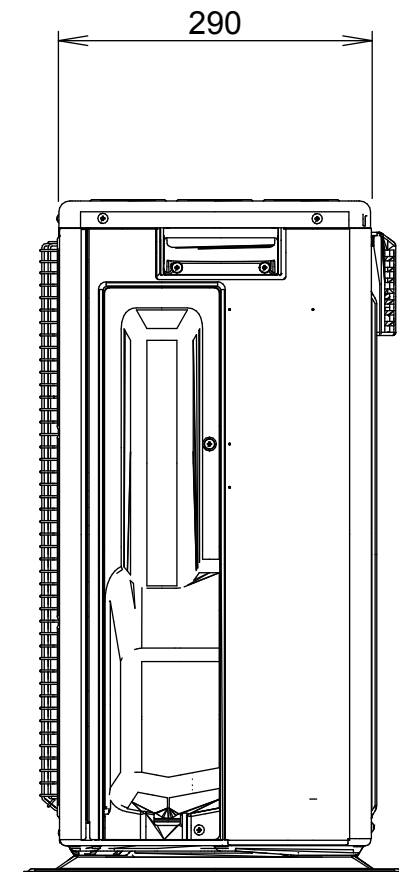
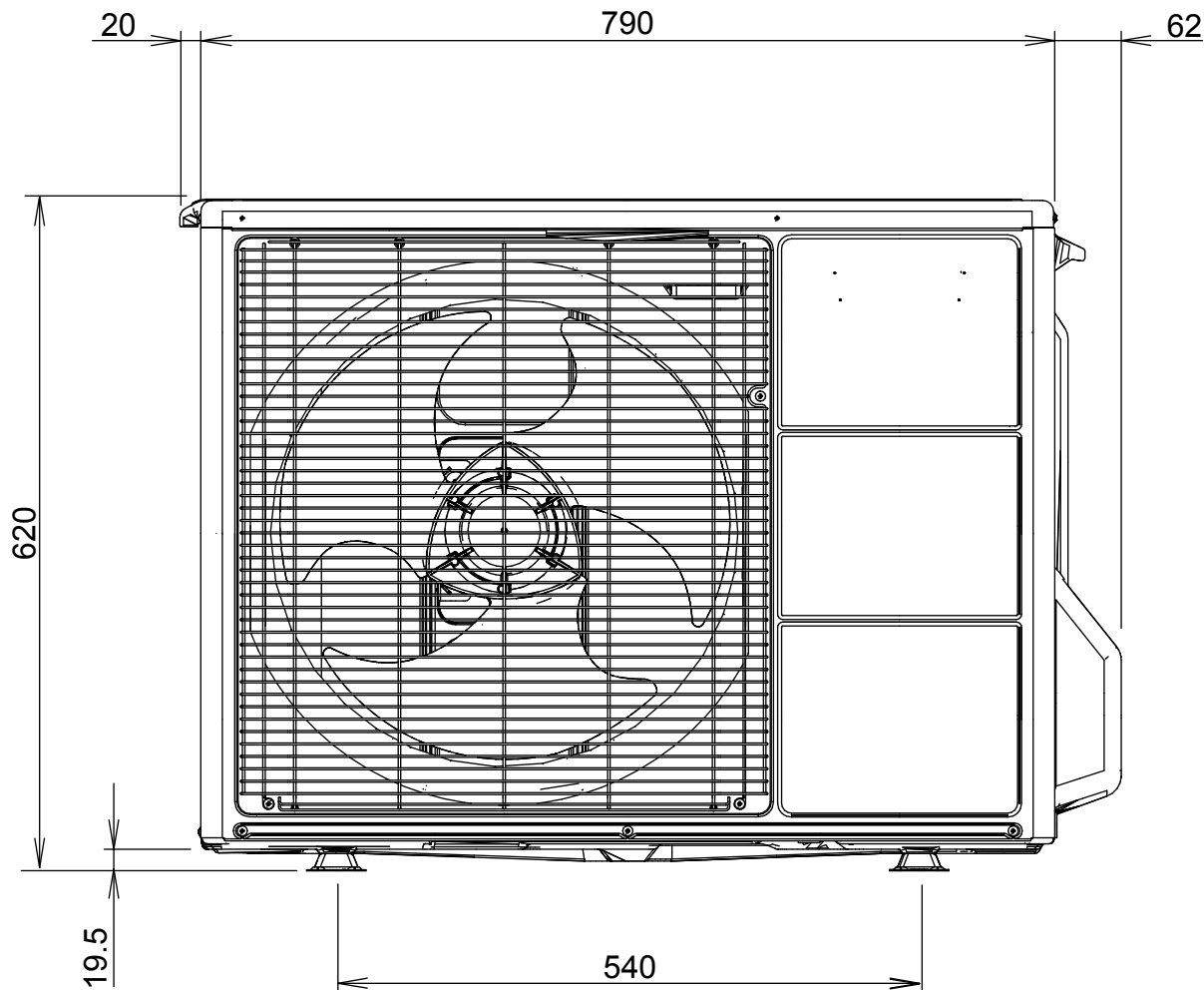
Unit : mm



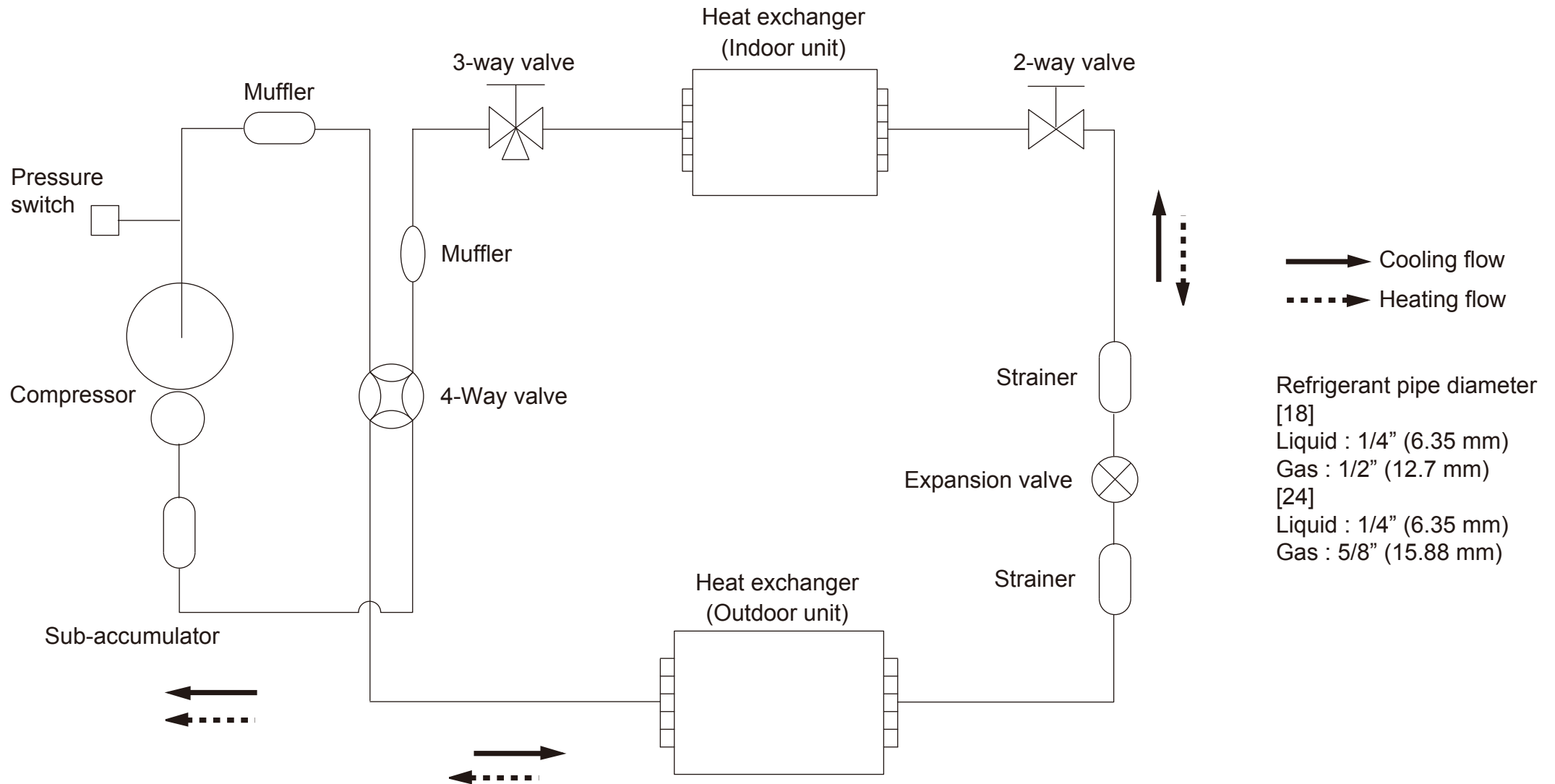


OUTDOOR UNIT

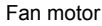
Unit : mm



REFRIGERANT SYSTEM DIAGRAM



CIRCUIT DIAGRAM

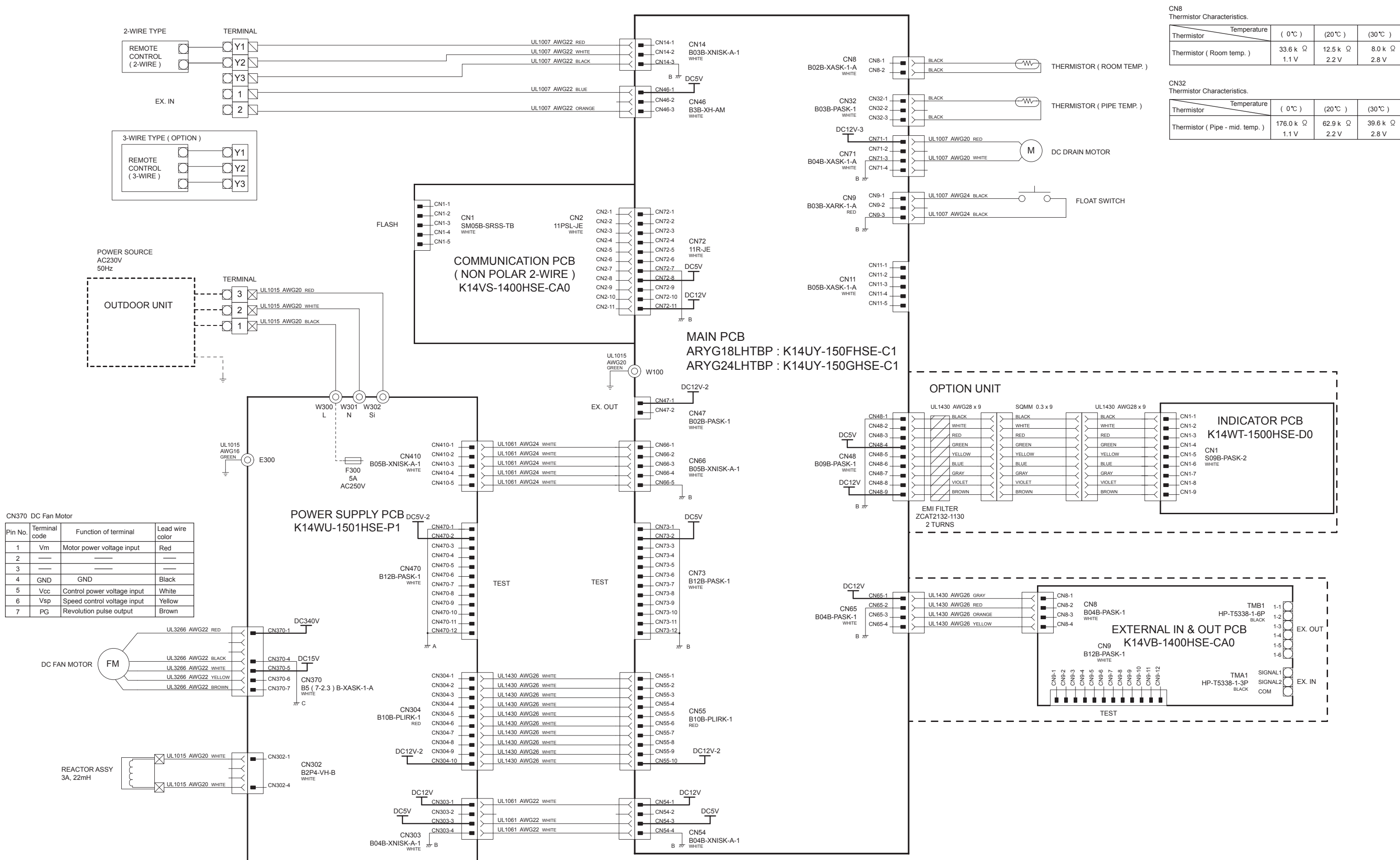


OUTDOOR UNIT

INDOOR UNIT

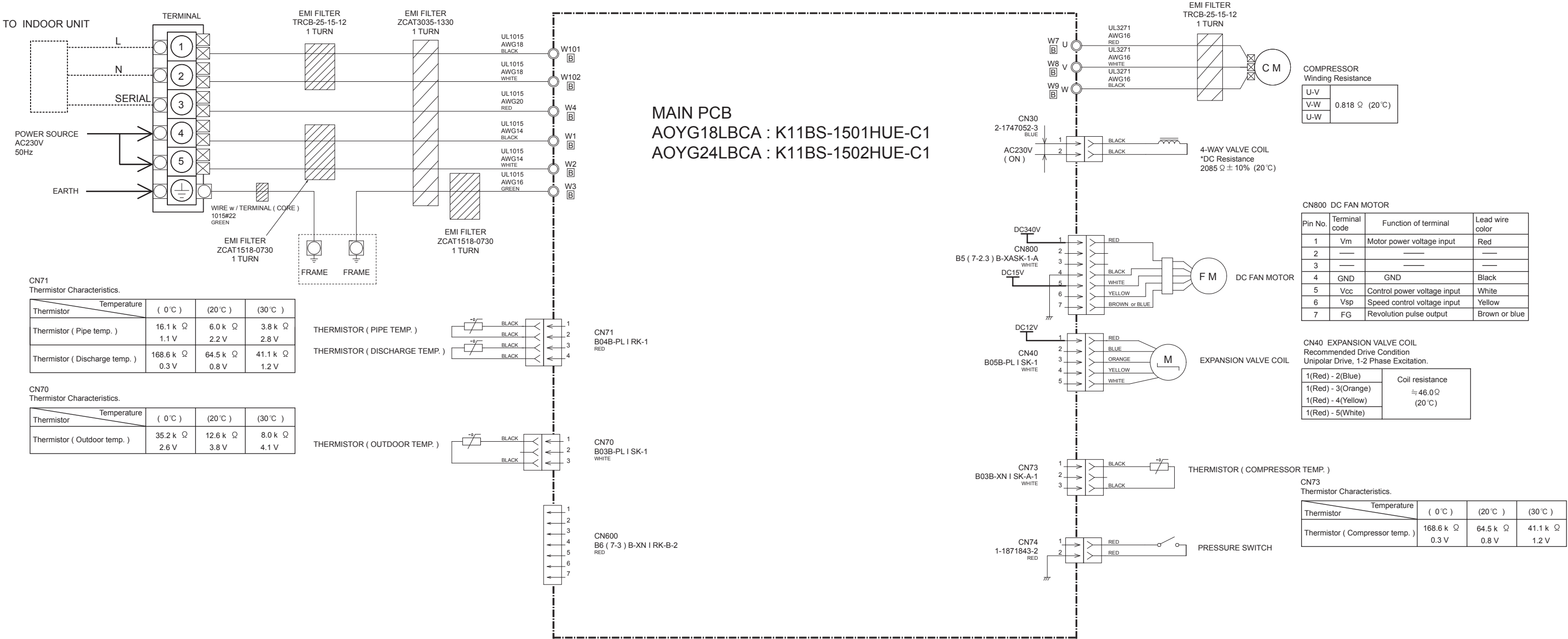
INDOOR UNIT

CONTROL UNIT
ARYG18LHTBP : EZ-01504HSE
ARYG24LHTBP : EZ-01505HSE



OUTDOOR UNIT

INVERTER ASSEMBLY
AOYG18LBCA : EZ-015FHUE
AOYG24LBCA : EZ-015GHUE



ERROR DETECTION

INDOOR UNIT

If you use a wired type remote control, error codes will appear on the remote control display.

If you use a wireless remote control, the lamps on the IR receiver unit will output error codes by way of blinking patterns.

See the lamp blinking patterns and error codes in the table below.

An error display is displayed only during operation.

For more details, refer to the installation manual of the remote control.

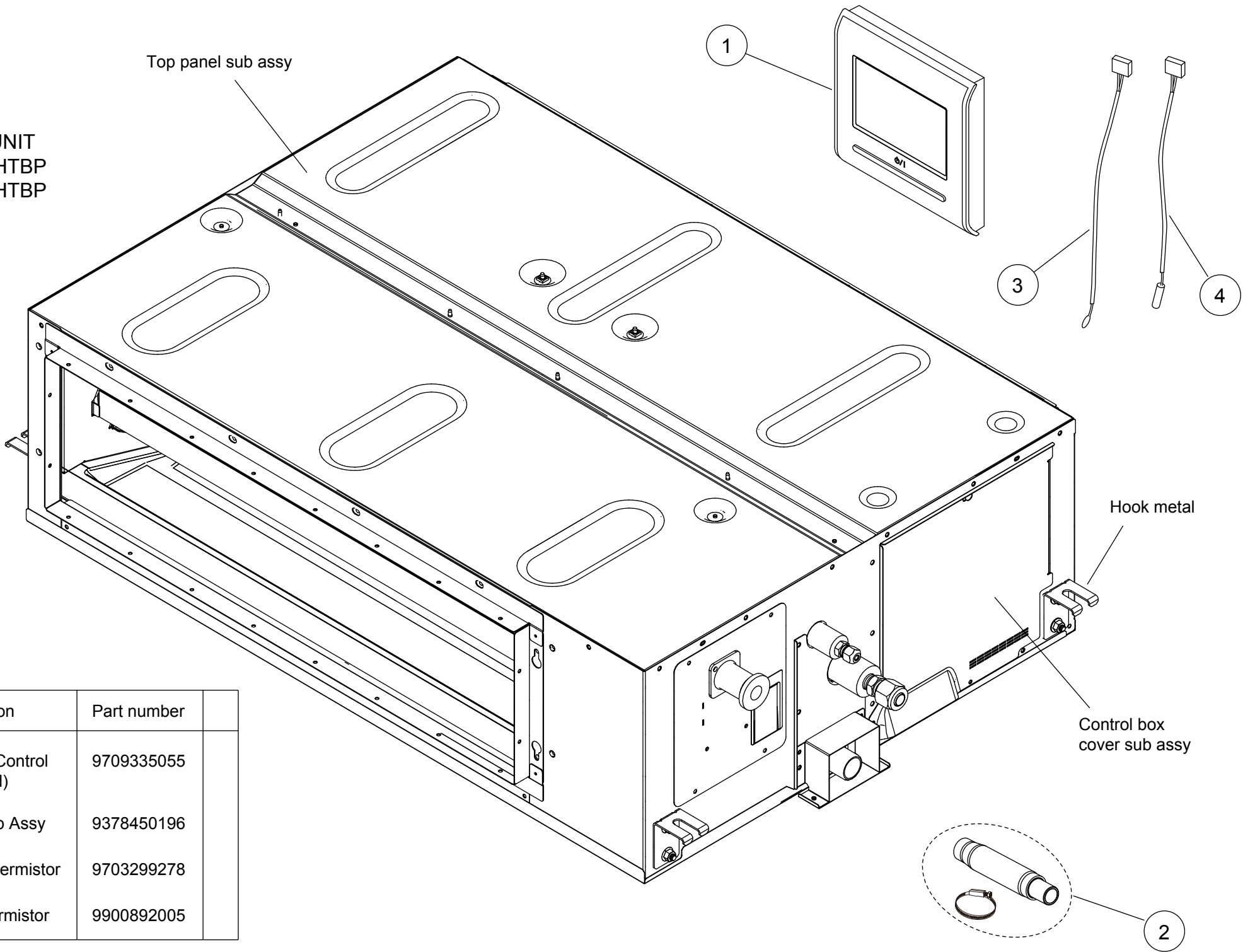
Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote control communication error
●(1)	●(5)	◇	15	Check run unfinished Automatic airflow adjustment error
●(1)	●(6)	◇	16	Peripheral unit transmission PCB connection error
●(1)	●(8)	◇	18	External communication error
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	• Connection unit number error (indoor secondary unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(6)	◇	26	Indoor unit address setting error
●(2)	●(7)	◇	27	Primary unit, secondary unit setup error [Simultaneous Multi]
●(2)	●(9)	◇	29	Connection unit number error in wired remote controller system
●(3)	●(1)	◇	31	Power supply interruption error
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(3)	◇	33	Indoor unit motor electricity consumption detection error
●(3)	●(5)	◇	35	Manual auto switch error
●(3)	●(9)	◇	39	Indoor unit power supply error for fan motor
●(3)	●(10)	◇	3A	Indoor unit communication circuit (wired remote controller) error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit heat ex. middle temp. sensor error
●(4)	●(4)	◇	44	Human sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(1)	◇	61	Outdoor unit reverse/missing phase and wiring error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error

Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error
●(6)	●(8)	◇	68	Outdoor unit rush current limiting resistor temp. rise error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection
●(9)	●(5)	◇	95	Compressor rotor position detection error (permanent stop)
●(9)	●(7)	◇	97	Outdoor unit fan motor 1 error
●(9)	●(8)	◇	98	Outdoor unit fan motor 2 error
●(9)	●(9)	◇	99	4-way valve error
●(9)	●(10)	◇	9A	Coil (expansion valve) error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	12	Branch boxes error [Flexible Multi]

Display mode ● : 0.5s ON / 0.5s OFF
◇ : 0.1s ON / 0.1s OFF
() : Number of flashing

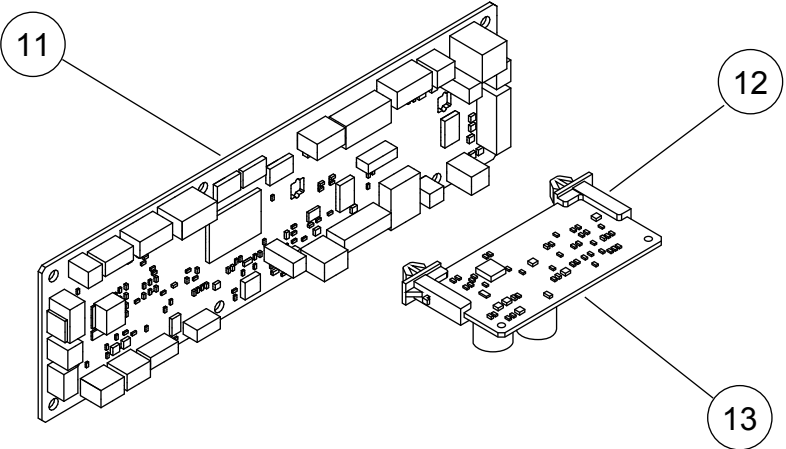
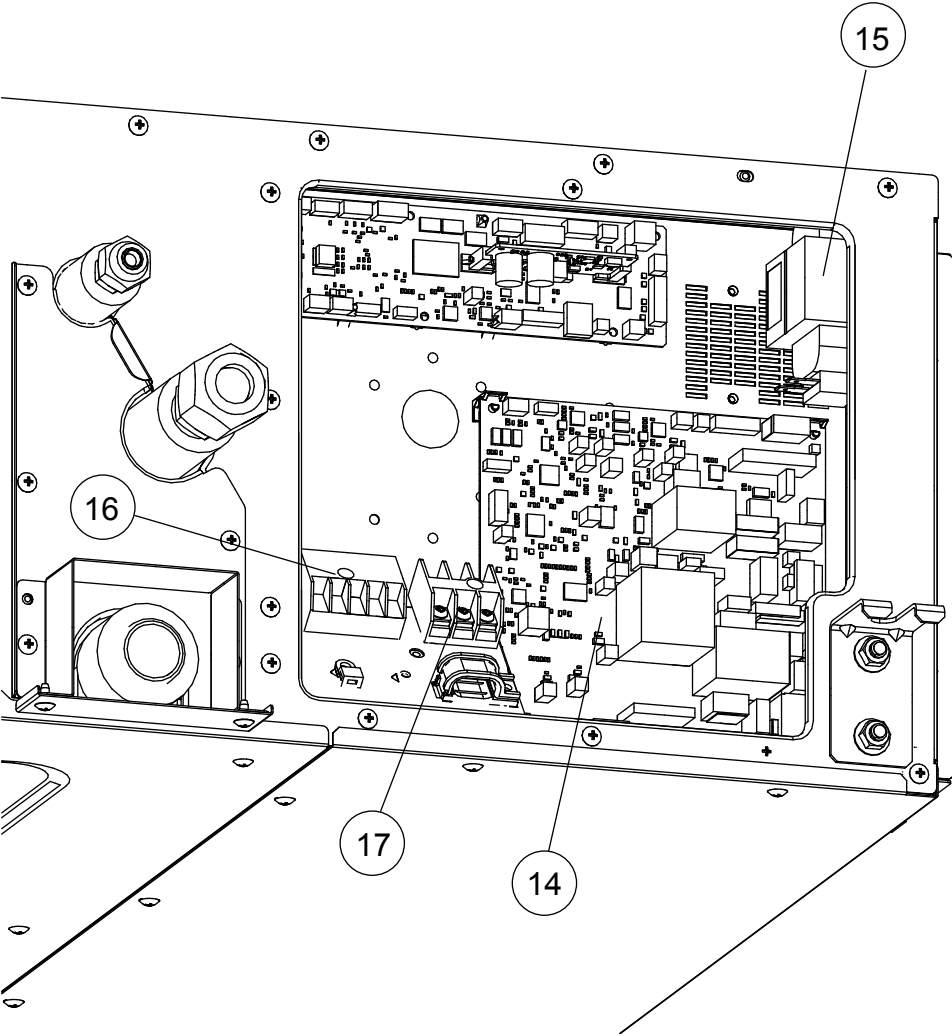
PARTS

INDOOR UNIT
ARYG18LHTBP
ARYG24LHTBP



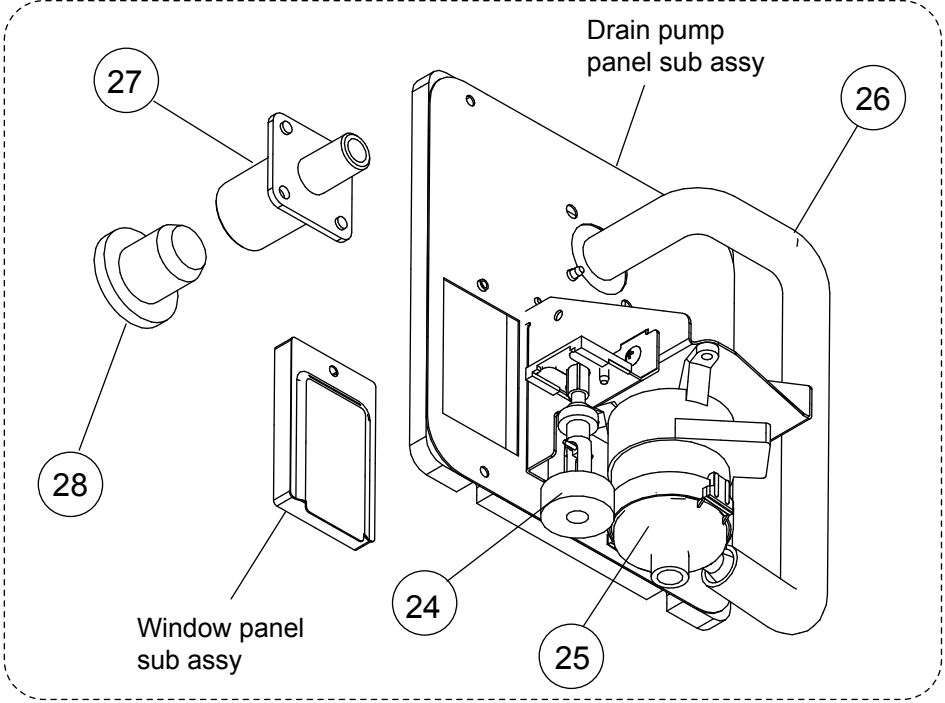
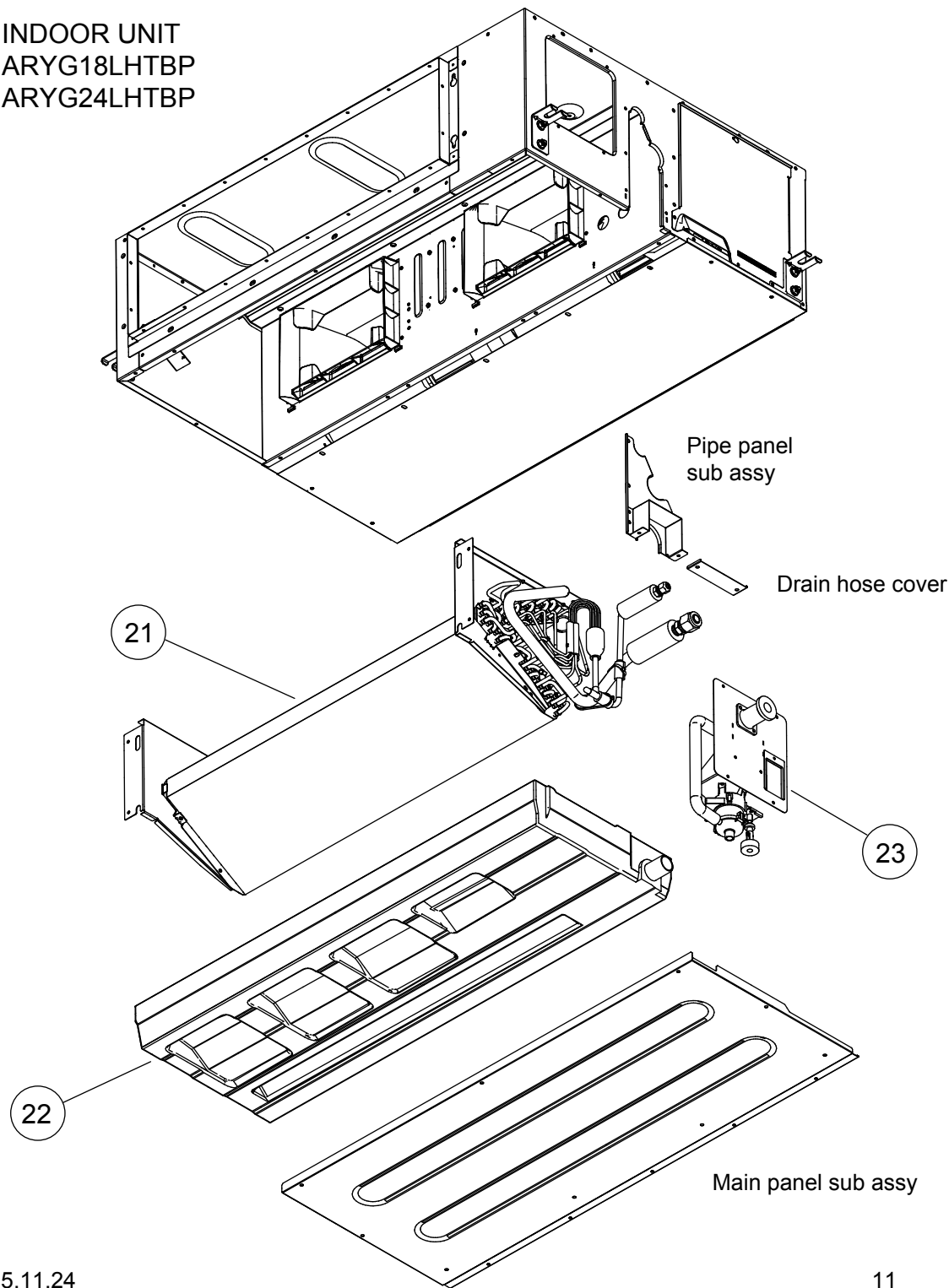
Ref.	Description	Part number	
1	Remote Control (no brand)	9709335055	
2	Hose Sub Assy	9378450196	
3	Room Thermistor	9703299278	
4	Pipe Thermistor	9900892005	

INDOOR UNIT
ARYG18LHTBP
ARYG24LHTBP

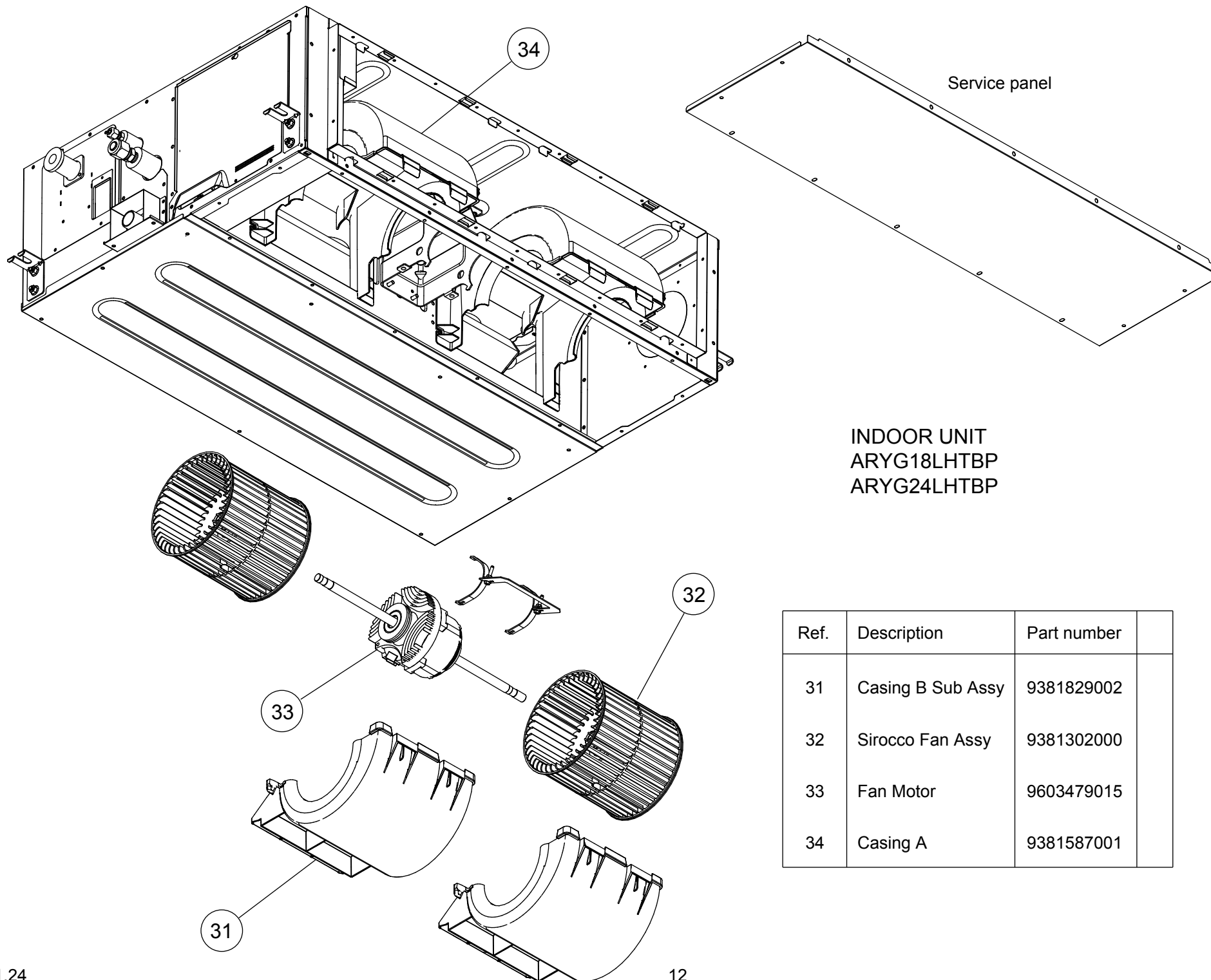


Ref.	Description	Part number	
11	Main PCB (18LHTBP)	9710016226	
11	Main PCB (24LHTBP)	9710016233	
12	Holder	0600063023	
13	Communication PCB	9710019005	
14	Power Supply PCB	9710032011	
15	Reactor Assy	9900898014	
16	Terminal (Remote)	9900896003	
17	Terminal (Power)	9900568009	

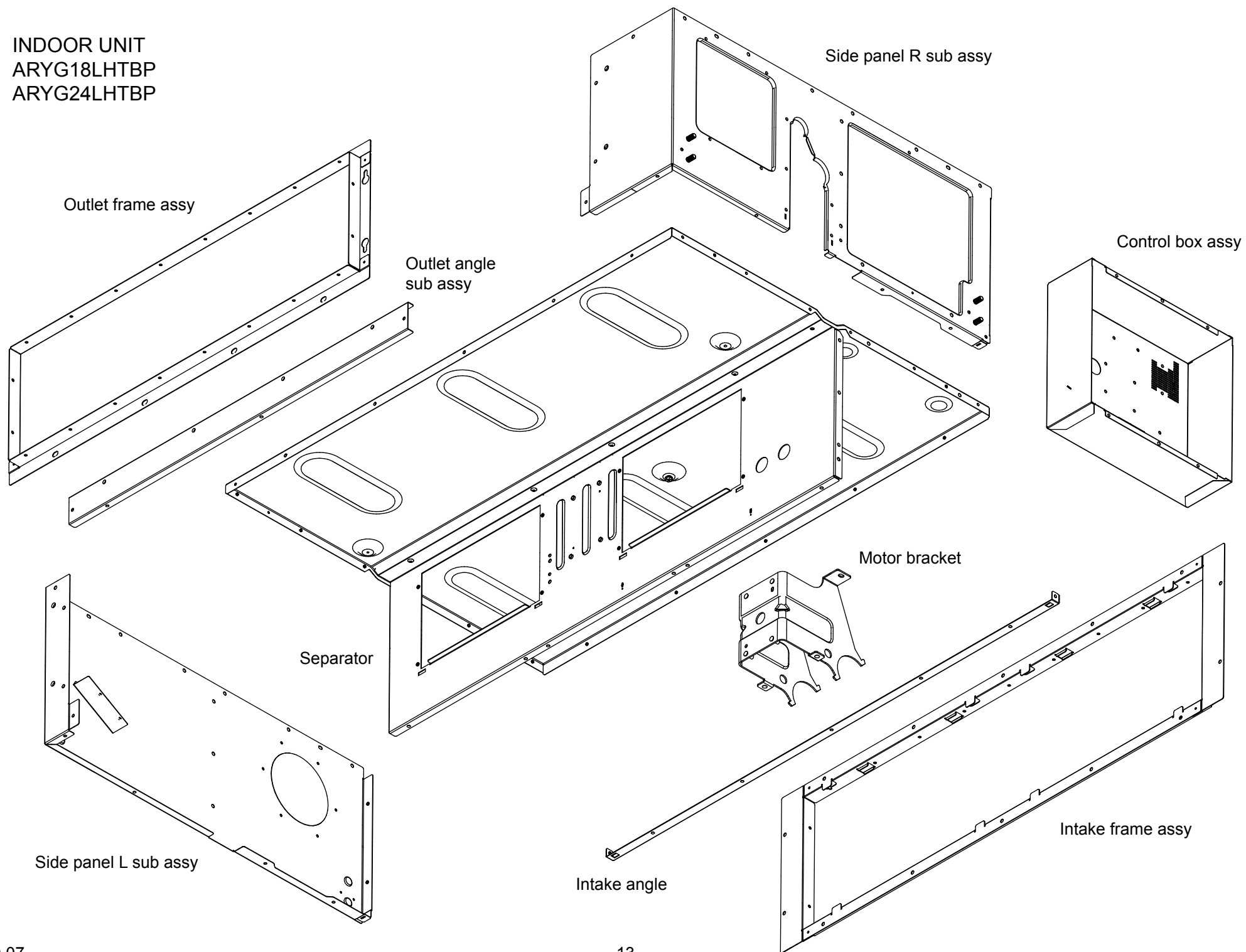
INDOOR UNIT
ARYG18LHTBP
ARYG24LHTBP

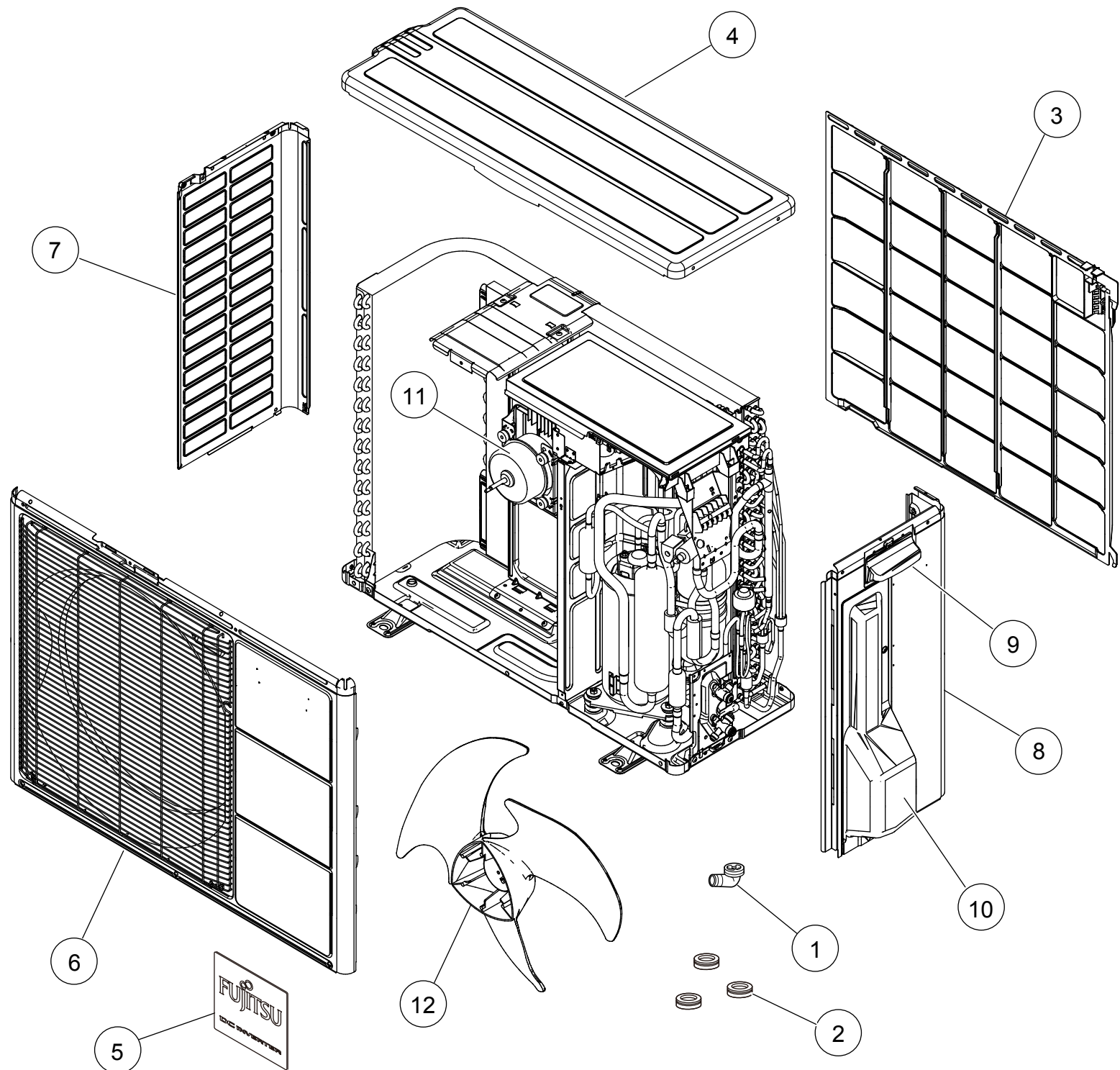


Ref.	Description	Part number	
21	Evaporator Total Assy (18)	9374517404	
21	Evaporator Total Assy (24)	9374517374	
22	Drain Pan Sub Assy	9381752027	
23	Drain Pump Sub Assy	9381766017	
24	Float Switch	9900465070	
25	Pump Assy	9900890018	
26	Drain Hose	9381576005	
27	Drain Port	9381565009	
28	Drain Cap	9381578009	



INDOOR UNIT
ARYG18LHTBP
ARYG24LHTBP



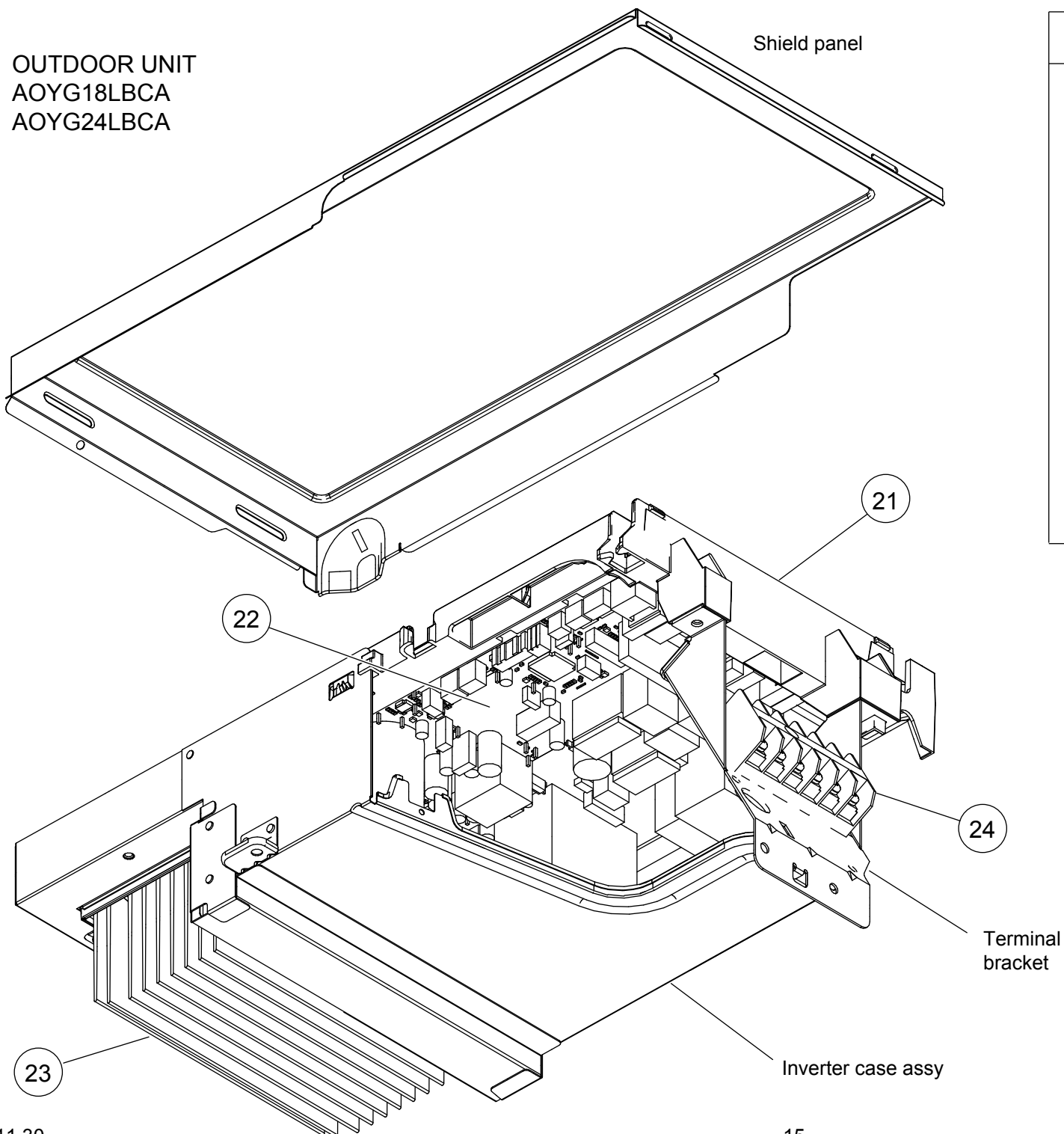


PARTS

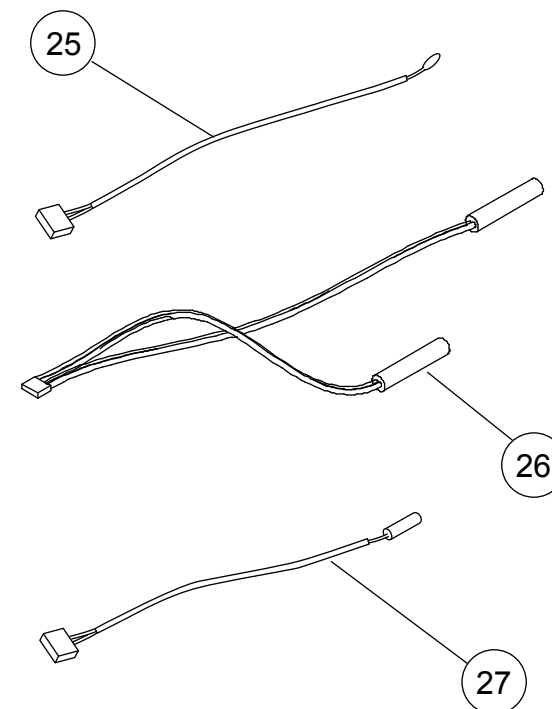
OUTDOOR UNIT
AOYG18LBCA
AOYG24LBCA

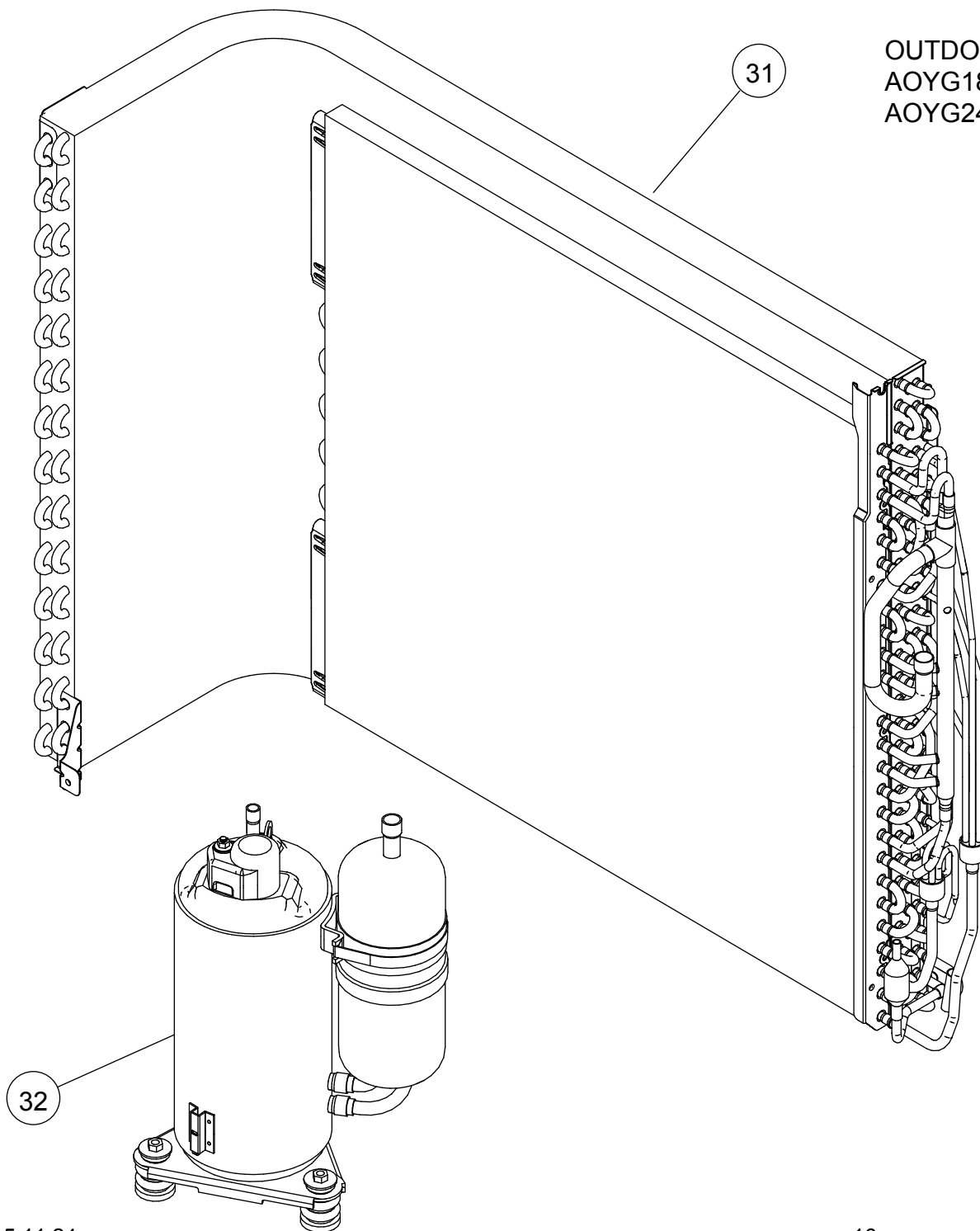
Ref.	Description	Part number	
1	Drain Assy	9303029022	
2	Drain Cap	313166024302	
3	Protective Net	9331640015	
4	Top Panel Assy	9318464139	
5	Emblem	9319151007	
6	Front Panel Assy	9318463040	
7	Cabinet Left Assy	9318461015	
8	Cabinet Right Assy	9318462012	
9	Grip	9317588003	
10	Switch Cover Assy	9318499001	
11	Fan Motor	9602724017	
12	Propeller Fan	9313808013	

OUTDOOR UNIT
AOYG18LBCA
AOYG24LBCA

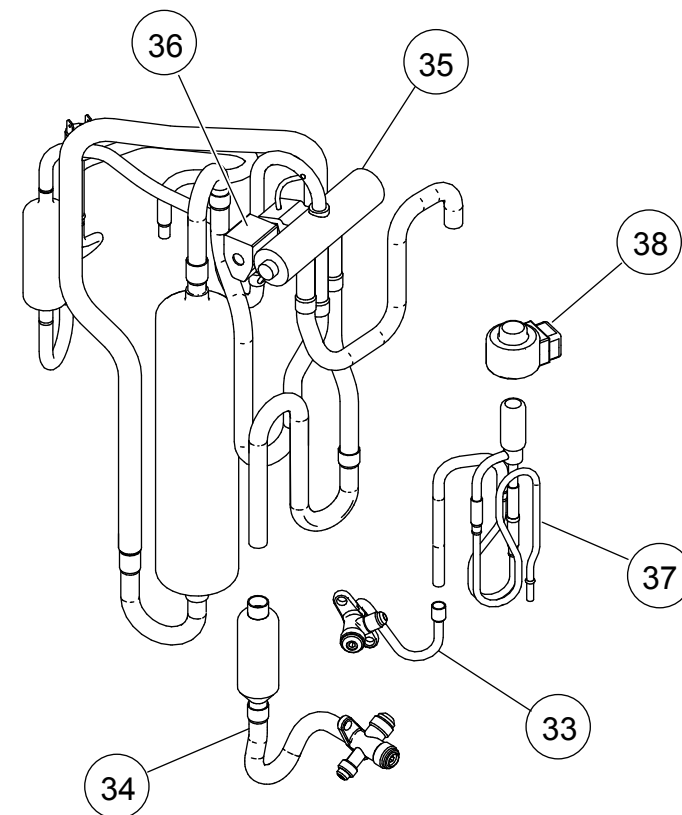


Ref.	Description	Part number	
21	PCB Holder	9319547015	
22	Main PCB (18LBCA)	9708995342	
22	Main PCB (24LBCA)	9708995359	
23	Heat Sink	9319540009	
24	Terminal 6P	9900435028	
25	Outdoor Thermistor	9900565008	
26	Thermistor Assy	9900727017	
27	Compressor Thermistor	9900777012	





OUTDOOR UNIT
AOYG18LBCA
AOYG24LBCA



Ref.	Description	Part number	
31	Condenser Total Assy	9317089166	
32	Compressor	9810244000	
33	2-way Valve Assy	9314554018	
34	3-way Valve Sub Assy (18)	9317109017	
34	3-way Valve Sub Assy (24)	9319098005	
35	4-way Valve Assy	9319874012	
36	Solenoid	9970110023	
37	Pulse Motor Valve Sub Assy	9319886022	
38	Expansion Valve Coil	9970095030	

ACCESSORIES

INDOOR UNIT

Name and Shape	Q'ty	Description
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling
Special nut B (small flange) 	4	
Washer 	8	
Coupler heat insulation (large) 	1	For indoor side pipe joint (gas pipe)
Coupler heat insulation (small) 	1	For indoor side pipe joint (liquid pipe)
Cable tie (large) 	4	For fixing the heat insulation
Cable tie (medium) 	1	For fixing the remote control cable
Cable tie (small) 	1	For fixing the remote control cable
Remote control 	1	For air conditioner operation
Remote control accessories	1 set	See Installation manual for remote control
Drain hose insulation 	1	Insulates the drain hose and vinyl hose
Drain hose 	1	For installing drain pipe VP25 (O.D.32, I.D.25)
Hose Band 	1	For installing drain hose

REMOTE CONTROL

Name and Shape	Q'ty	Application
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie (medium) 	1	For fixing the remote controller cable
Cable tie (small) 	1	For fixing the remote controller cable
Tube 	1	To protect wiring
Screw (M4 × 14 mm) 	1	For installing the remote controller cable to the indoor unit
Cable clammer 	1	For installing the remote controller cable to the indoor unit

OUTDOOR UNIT

Name and shape	Q'ty	Description
Drain pipe 	1	For outdoor unit drain piping work
Drain cap 	3	

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