

# AIR TO WATER





**WATERSTAGE™ makes an Economical and Clean hot water heating system by Heat Pump**

**Complete Solution meets various needs**

The clean energy produced by WATERSTAGE™ reliably delivers “comfort” to all spaces in the home up to the living room, bedrooms, bath, and swimming pool.

***WATERSTAGE™***

All Type Lineup

Split Type

Split DHW Integrated Type

Monobloc Type

Smart & Comfort Control









Case Studies

Optional Parts

Installation Limitations

Specifications & Dimensions

# All type Lineup

Capacity (kW)		5	6	8
Split	High Power series Single phase Page 218  Hydraulic Indoor Unit / Outdoor Unit			
	High Power series 3 phase Page 218  Hydraulic Indoor Unit / Outdoor Unit			
	Comfort series Page 218  Hydraulic Indoor Unit / Outdoor Unit	 WSYA050DG6 / WOYA060LFCA	 WSYA100DG6 / WOYA060LFCA	 WSYA100DG6 / WOYA080LFCA
Split DHW integrated	High Power series Single phase Page 218  Hydraulic Indoor Unit / Outdoor Unit			
	High Power series 3 phase Page 218  Hydraulic Indoor Unit / Outdoor Unit			
	Comfort series Page 218  Hydraulic Indoor Unit / Outdoor Unit	 WGYA050DG6 / WOYA060LFCA	 WGYA100DG6 / WOYA060LFCA	 WGYA100DG6 / WOYA080LFCA
Monobloc	Compact series with hydraulic unit Page 220  Hydraulic Indoor Unit / Outdoor Unit	 WSY100DF6 / WPYA050LG		 WSY100DF6 / WPYA080LG

## EHPA Quality label



Fujitsu General's WATERSTAGE\* have obtained the EHPA Quality Label\*\* by tests according to the international Standards EN14511 and EN17025. The EHPA Quality Label\*\* is a label that shows the end-consumer a quality heat pump unit on the market.

\*: High Power split model














\*\*:. Check the validity of label at [www.ehpa.org/QL](http://www.ehpa.org/QL)

## SG-Ready Label



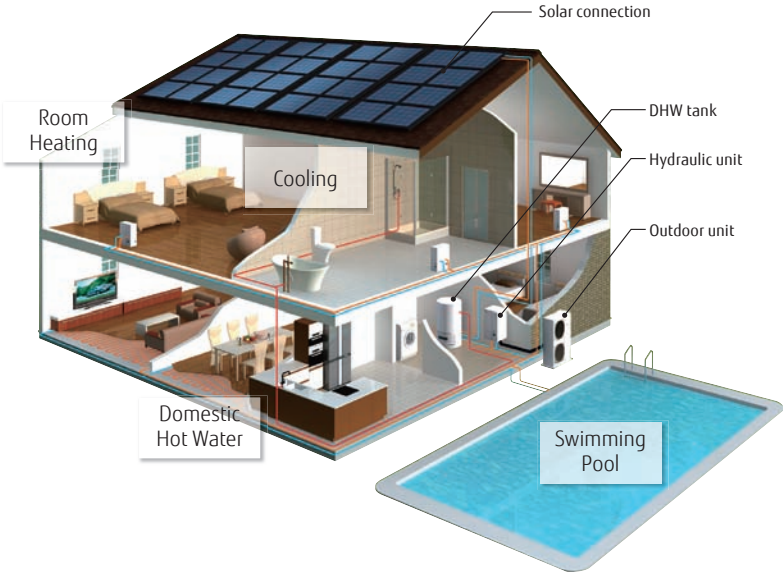
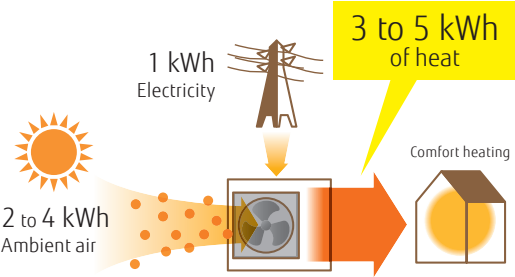
SG-Ready is a defined standard by BWP\*\*\*, which makes it possible that the device can be integrated into a smart grid. Heat pumps, which are equipped with the SG-Ready Label, can receive signals from the power grid (and e.g. also from PV systems) about the available (unused renewable) energy (from wind, sun & water). Fujitsu General provides the SG-Ready compatibility to all new Heat Pumps series.

\*\*\*BWP: the Federal German Heat Pump Association

10	11	14	16
	 WSYG140DG6 / WOYG112LCTA	 WSYG140DG6 / WOYG140LCTA	
	 WSYK160DG9 / WOYK112LCTA	 WSYK160DG9 / WOYK140LCTA	 WSYK160DG9 / WOYK160LCTA
 WSYA100DG6 / WOYA100LFTA			
	 WGYG140DG6 / WOYG112LCTA	 WGYG140DG6 / WOYG140LCTA	
	 WGYK160DG9 / WOYK112LCTA	 WGYK160DG9 / WOYK140LCTA	 WGYK160DG9 / WOYK160LCTA
 WGYA100DG6 / WOYA100LFTA			
 WSYP100DF6 / WPPYA100LG			

## What's a Heat Pump ?

Absorbing free energy from the atmosphere. Heat pump system requires only 1 kW of electricity to generate 3 to 5 kW thermal energy.





## Split type High power Series/Comfort series



### High power series

Hydraulic indoor unit: WSYG140DG6/[3phase] WSYK160DG9

Outdoor unit: WOYG112LCTA/WOYG140LCTA

[3phase] WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic indoor unit

Single Phase/  
3 Phase



Outdoor unit

Single Phase  
11/14 kW



3 Phase  
11/14/16 kW

### Comfort series

Hydraulic indoor unit: WSYA050DG6/WSYA100DG6

Outdoor unit: WOYA060LFCA/WOYA080LFCA/WOYA100LFTA



Hydraulic indoor unit



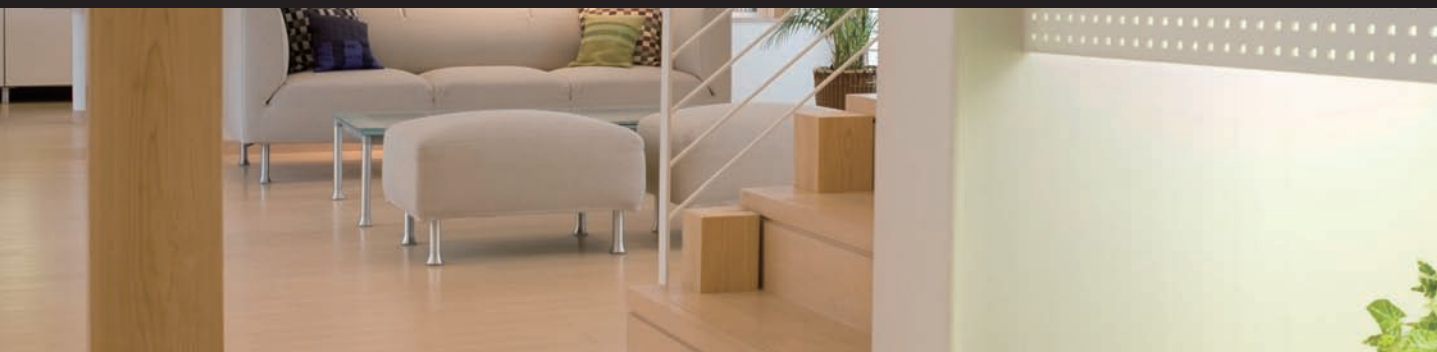
Outdoor unit

5/6/8 kW



10 kW

## Split DHW Integrated Type High power Series/Comfort series



### High power series

Hydraulic indoor unit: WGYG140DG6/[3phase] WGYK160DG9

Outdoor unit: WOYG112LCTA/WOYG140LCTA

[3phase] WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic indoor unit

Single Phase/  
3 Phase



Outdoor unit

Single Phase  
11/ 4 kW



3 Phase  
11/14/16 kW

### Comfort series

Hydraulic indoor unit: WGYA050DG6/WGYA100DG6

Outdoor unit: WOYA060LFCA/WOYA080LFCA/WOYA100LFTA



Hydraulic indoor unit



Outdoor unit

5/6/8 kW

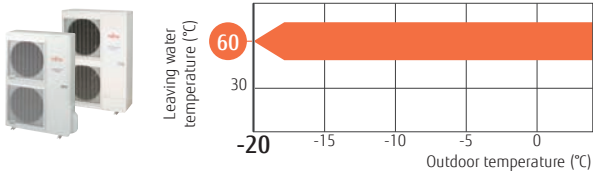


10 kW

## High leaving water temperature

**High power series:** High leaving water temperature of 60°C is kept even when outdoor temperature is down to -20°C without using backup heaters.

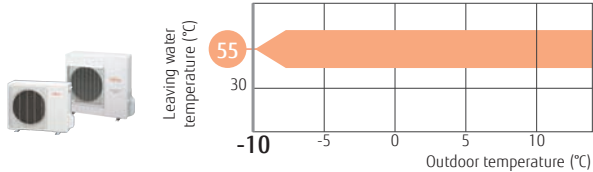
At -20°C outdoor temperature: 60°C Hot water



\* If you want to raise the hot water supply temperature, backup heaters can be used for auxiliary operation.

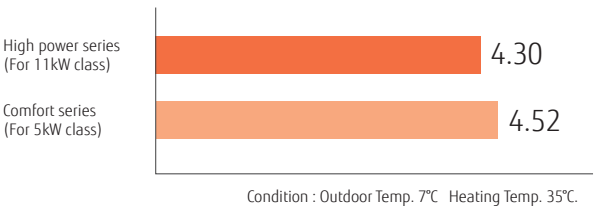
**Comfort series:** Maximum leaving water temperature is 55°C without backup heater. Hot water supply temperature can be maintained even at -10°C outdoor temperature.

At -10°C outdoor temperature: 55°C Hot water



## High COP

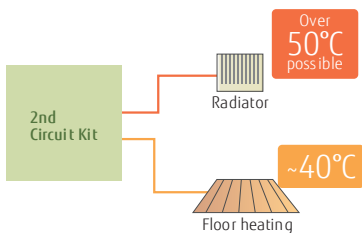
Air to water heat pumps work with much more efficiency and save more energy than a traditional heating system.



## 2 Zone individual control\*

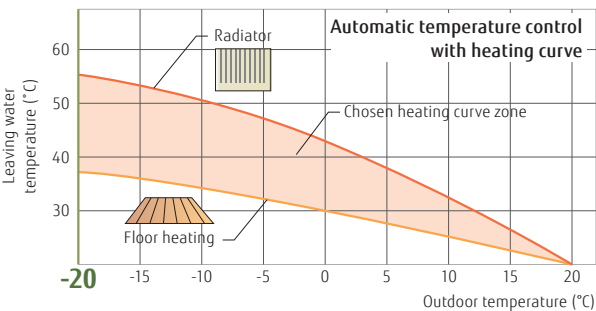
2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)\*

\*: Optional parts are required.



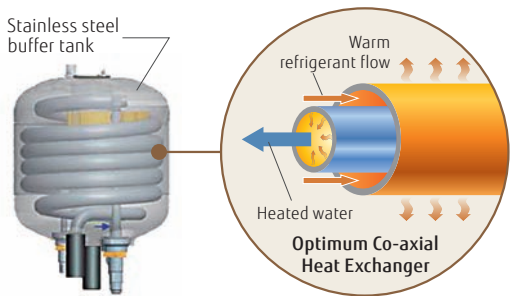
## Automatic heating curve control

Automatic temperature regulation in accordance with heating curve (Depends on heating terminal and outdoor temperature)



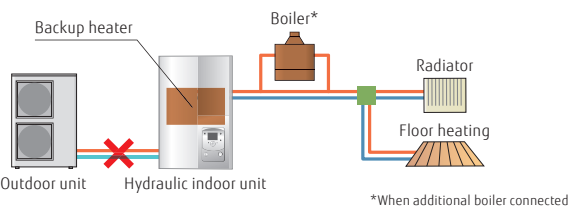
## High durability

- Corrosion protected
- No flow switch necessary
- Anti-freeze-protection is unnecessary



## Emergency operation

System can continuously supply hot water by built in back up heater or boiler, as emergency, even if an error has occurred.

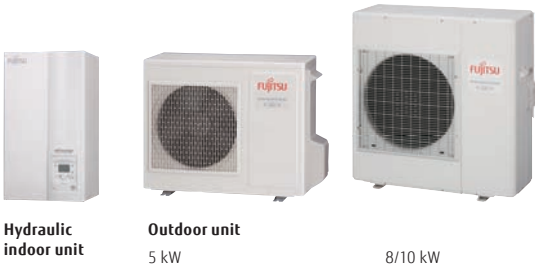




Compact series

Hydraulic indoor unit: WSYP100DG6

Outdoor unit : WPYA050LG / WPYA080LG / WPYA100LG



Hydraulic indoor unit

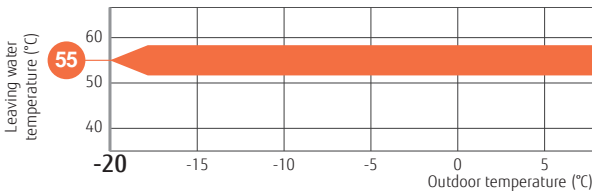
Outdoor unit  
5 kW

8/10 kW

Features

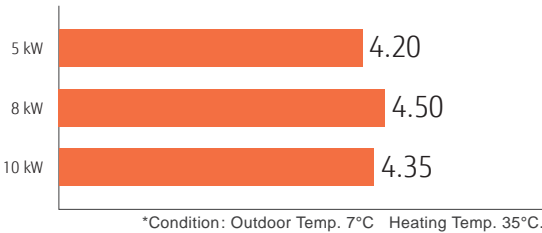
High leaving water temperature

High leaving water temperature of 55°C keeps to -20°C outdoor temperature without additional heater.



High COP

High COP is realized by using a DC twin rotary compressor, inverter technology, and high efficient water heat exchanger.



Compact & light weight design



Features of the hydraulic indoor unit

- The compact Indoor unit provides two electrical back up heater, each with 3kW capacity• 12 L expansion vessel included
- No waste of space. DHW Kit installation inside the hydraulic unit possible.
- New generation controller. Connection by MODBUS protocol possible.
- Integrated heat metering (flow sensor included).



Hydraulic indoor unit

# Smart & Comfort Control



### Navigation and setting

- Selecting the heating mode
- Setting program timer

### Large LCD panel

- Operation status display
- Error display
- Plain text

### Simple operation mode setting

- Selecting the heating mode and Domestic hot water operation

**Heating mode**  
**Auto**  
Automatic mode  
Comfort/Reduce mode switching automatically according to outdoor temperature

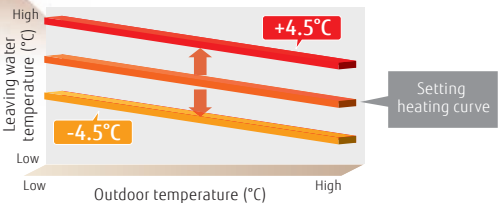
**Comfort mode**  
Constant comfort temperature

**Reduce mode**  
Constant reduce temperature

**Protection mode**  
Stand-by mode with anti-frost protection

### Automatic heating curve operation

Automatic heating curve control based on outdoor temperature and setting room temperature. This can be adjusted when too warm or too cold.



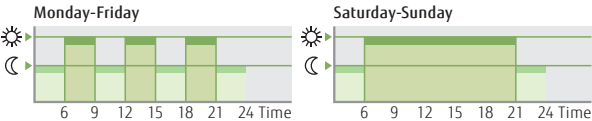
### Programmable timer

- The setting of timer operation can easily be adjusted.
- Changing the heating mode linked with time is possible.

### Day-Weekly timer setting

- The day-weekly timer can be set up for up to 3 times per day.
- Allows separate settings for each day of the week.

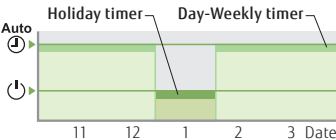
### Day-Weekly timer setting



### Holiday timer setting

- The holiday timer can be set for up to 8 periods
- If you are absent for a long time in the winter, freezing of room can be prevented.

### Holiday timer setting

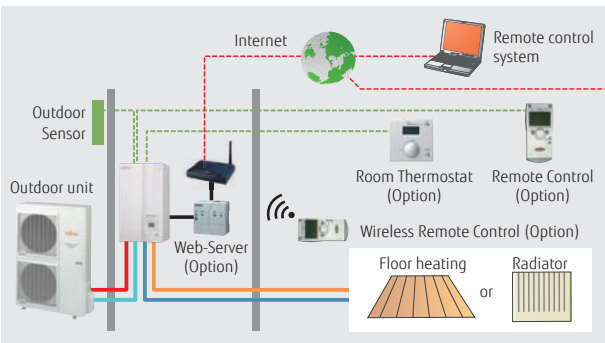


### Auto-changeover

If the cooling operation function is set, the system can automatically switch to cooling or heating, depending on the outdoor temperature to provide all-season comfortable air conditioner.

### Remote control-extension

Various remote controls are available on your hands. Remote control is also available via Web. All kinds of life styles are supported.



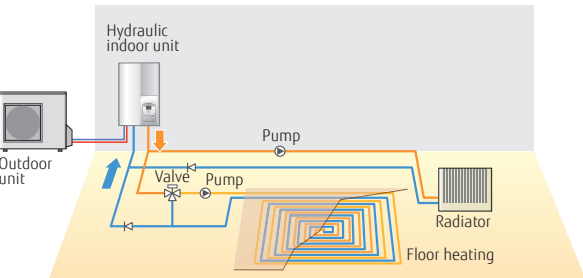


# Case Studies

## Split Case studies

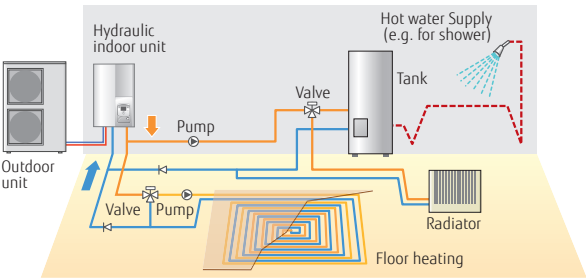
### 2 emitter simultaneous heating (Individual control)

Floor heating + Radiator

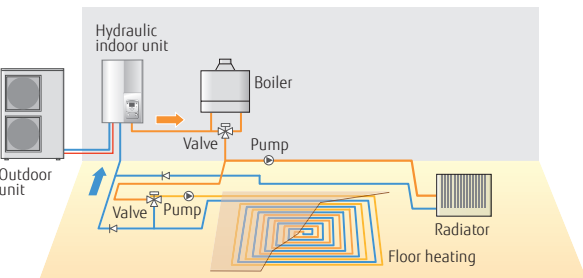


### 3 types of heat distribution

Floor heating + Radiator + Domestic Hot Water

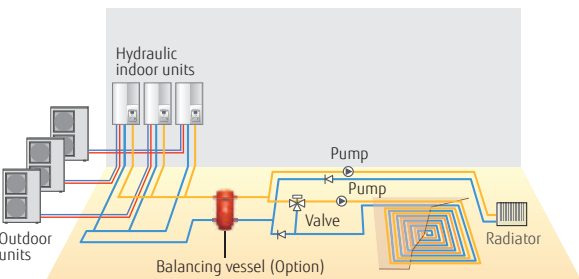


### Boiler connected to heating (Boiler + Heating)

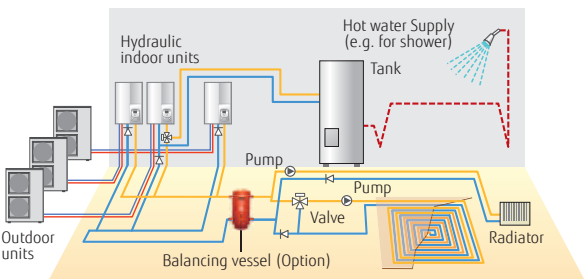


## Split Cascade System Case studies

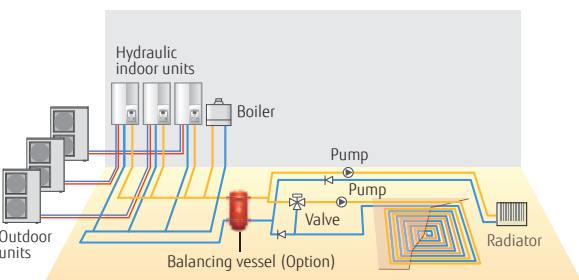
### 2 emitter simultaneous heating (Individual control)



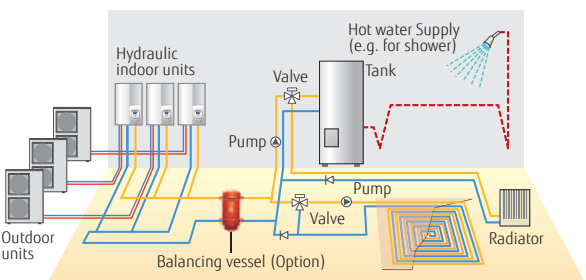
### 2 emitter simultaneous heating & Domestic Hot Water (type A)



### Boiler connected to heating (Boiler + Heating)



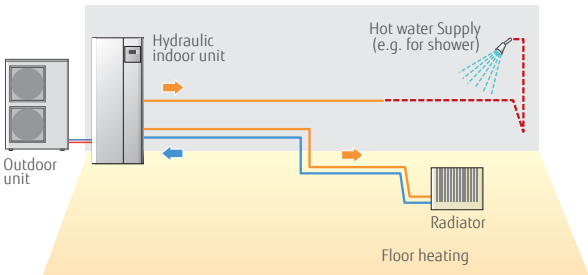
### 2 emitter simultaneous heating & Domestic Hot Water (type B)



# Split DHW integrated Case studies

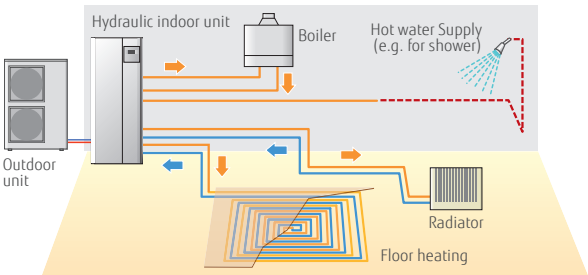
## Single heating & Domestic Hot Water

Radiator + Domestic Hot Water



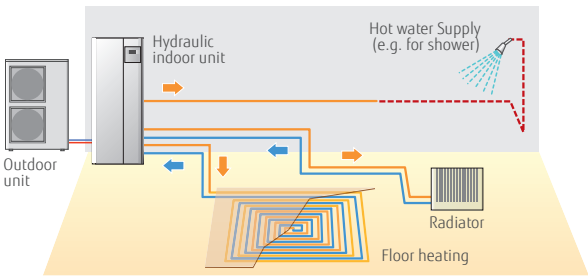
## Boiler connected to heating (Boiler + Heating) & Domestic Hot Water

Radiator + Domestic Hot Water



## 2 emitter simultaneous heating (Individual control) & Domestic Hot Water

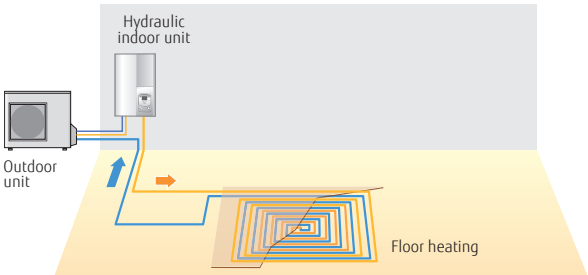
Radiator + Domestic Hot Water



# Monobloc Case studies

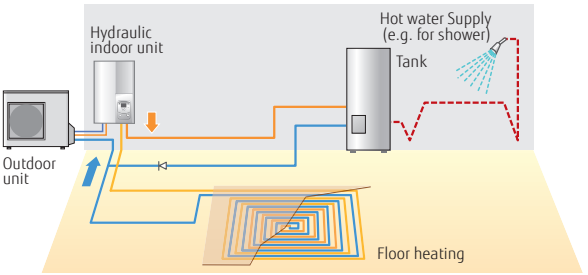
## Single heating system

Floor heating



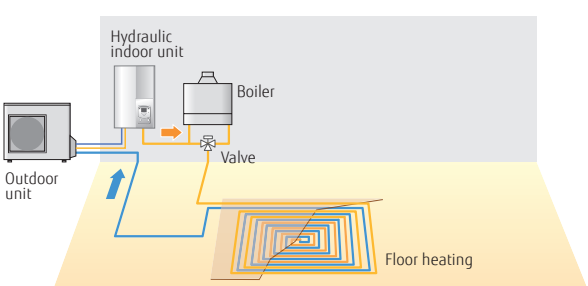
## 2 types of heat distribution

Floor heating + Domestic Hot Water





















## Boiler connected to heating (Boiler + Heating)

Floor heating



Optional Parts

Product Name	Model Name	Split										Split DHW integrated type										Monobloc			
		High Power					Comfort					High Power					Comfort					Compact			
		10		30			10					10		30			10					10			
		11	14	11	14	16	5	6	8	10		11	14	11	14	16	5	6	8	10		5	8	10	
2nd Circuit Kit		UTW-KZSXE	●	●	●	●	●	●	●	●		—	—	—	—	—	—	—	—	—		—	—	—	
		UTW-KZDXE	—	—	—	—	—	—	—	—		●	●	●	●	●	●	●	●	●		—	—	—	
Boiler Connection kit		UTW-KBSXD	●	●	●	●	●	●	●	●		—	—	—	—	—	—	—	—	—		—	—	—	
		UTW-KBDXD	—	—	—	—	—	—	—	—		●	●	●	●	●	●	●	●	●		—	—	—	
Balancing vessel		UTW-TEVXA	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	
DHW kit		UTW-KDWXG (Internal)	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—		●	●	●	
		UTW-KDWXD (External)	●	●	●	●	●	●	●	●		—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1		●	●	●	
DHW tank	200 Liter 300 Liter 	UTW-T20XA UTW-T30XA	●	●	●	●	●	●	●	●		—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1		●	●	●	
	300 Liter 	UTW-T30XD	●	●	●	●	●	●	●	●		—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1		●	●	●	
Circulating pump		UTW-PHFXD	●	●	●	●	—	—	—	—		●	●	●	●	●	—	—	—	—		—	—	—	
Swimming Pool kit		UTW-KSPXD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	
Heat Exchanger for swimming pool kit		UTW-ESPPXA	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	
Cooling kit		UTW-KCLXD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		—*2	—*2	—*2	
Regulation Extension Kit		UTW-KREXD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	
Low Noise Kit		UTW-KLNXE	●	●	●	●	—	—	—	—		●	●	●	●	●	—	—	—	—		—	—	—	
Drain Pan		UTW-KDPXA	—	—	—	—	●	●	●	—		—	—	—	—	—	—	—	—	—		—	—	—	
Cascade Master Kit (incl. LPB Clip)		UTW-KCMXE	●	●	●	●	—	—	—	●		—	—	—	—	—	—	—	—	—		—	—	—	
Cascade Slave Kit (incl. LPB Clip)		UTW-KCSXE	●	●	●	●	—	—	—	●		—	—	—	—	—	—	—	—	—		—	—	—	

Product Name	Model Name	Split										Split DHW integrated type										Monobloc		
		High Power					Comfort					High Power					Comfort					Compact		
		10		30			10					10		30			10					10		
		11	14	11	14	16	5	6	8	10		11	14	11	14	16	5	6	8	10		5	8	10
HMI Kit		UTW-KHMXE*3	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
Remote Controller		UTW-C74TXF*3	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
		UTW-C74HXF*3	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
		UTW-C78XD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
		UTW-C78XD-E*4	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
Room Thermostat		UTW-C55XA	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
		UTW-C58XD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
Outdoor Sensor Transmitter		UTW-MOSXD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
RF Modules		UTW-MRCXD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
Web server		UTW-KW1XD UTW-KW4XD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
LPB Clip		UTW-KL1XD	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●
MODBUS Clip		UTW-KMBXE	—*7	—*7	—*7	—*7	—*7	—*7	—*7	—*7		—*7	—*7	—*7	—*7	—*7	—*7	—*7	—*7	—*7		●	●	●
Base Heater		UTW-HAMXE	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—		●	●	●
		UTW-HAMXF	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—		●	—	—
Service Tool (incl.OCI700 adaptor)		UTW-KSTXD	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5		●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5		●*5	●*5	●*5
Service Tool Software		UTW-KPSXD	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6		●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6		●*6	●*6	●*6
External connect kit		UTY-XWZX22	●	●	●	●	—	—	—	—		●	●	●	●	—	—	—	—	—		—	—	—

\*1: DHW operation is possible without DHW Kit and DHW Tank.
\*2: Cooling operation is possible without cooling kit
\*3: 19 Languages included,no separate Estern European RC necessary. C74TXF: Built in Room Temperature sensor C74HXF: Built in Room temperature and Humidity sensor
\*4: Eastern European Language(English, Czech Republic, Slovakia, Poland, Turkey, Hungary, Russia, Slovenia, Greece, Serbia)
\*5: UTW-KL1XD is required for the connection.
\*6: UTW-KW1XD or UTW-KW4XD is required for the connection.
\*7: Additional optional part necessary

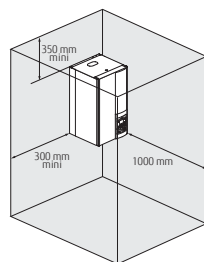
● : Available
— : Not Available

# Installation Limitations

## Equipment Installation

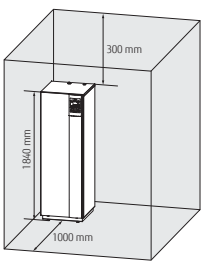
### Split type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight < 65 kg (including water)
- Space for maintenance should be respected



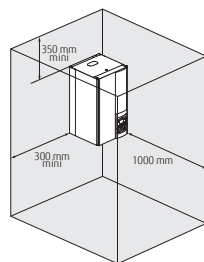
### Split DHW integrated type Hydraulic indoor unit

- Floor stand
- Weight 366 kg (including water)
- Space for maintenance should be respected.



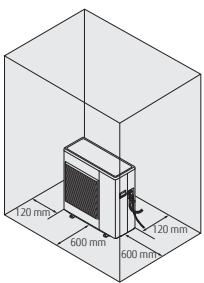
### Monobloc Type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight < 62 kg (including water)
- Distances for maintenance should be respected



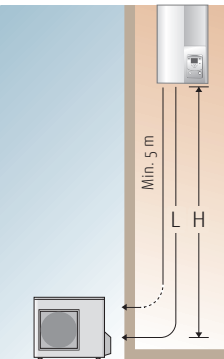
### Monobloc type Outdoor unit

- Floor stand
- Weight 72 kg (without water): WPYA080LG, WPYA100LG
- 49 kg (without water): WPYA050LG
- Distances for maintenance should be kept



## Piping and Wiring

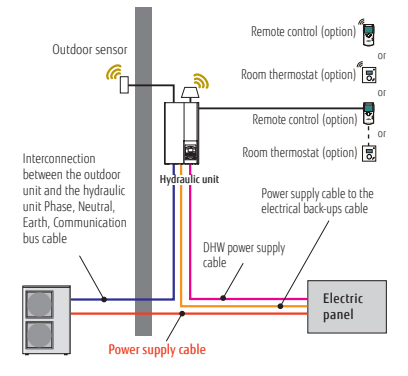
### Split type



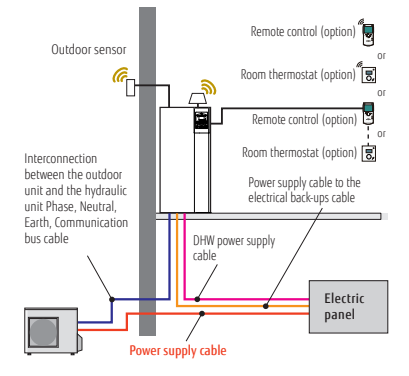
Series	Capacity range(kW)	H (m)	L (m)
Comfort	5	±20	5-30
	6		
	8		
	10		
High power	11	±15	5-20
	14		
	16		

### Electrical wiring

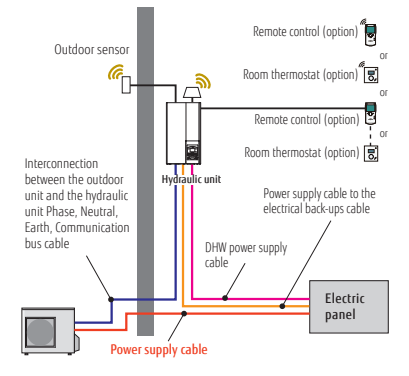
#### Split type



#### Split DHW integrated type



#### Monobloc Type with Hydraulic indoor unit





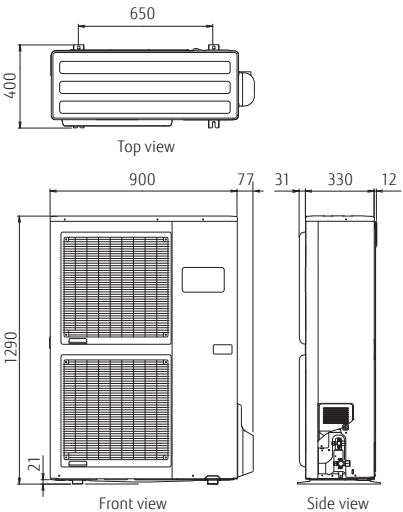
# Specifications & Dimensions

## Split type Specifications (High power series)

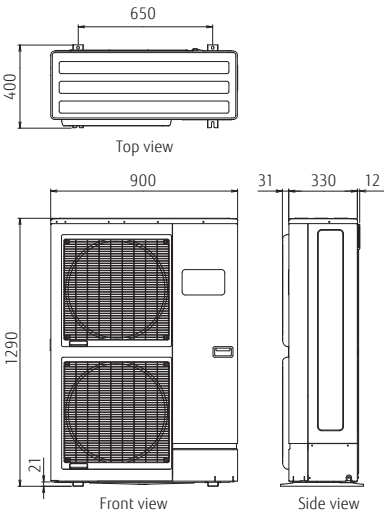
Model Name		Hydraulic indoor unit		WSYG140DG6		WSYG140DG6		WSYK160DG9		WSYK160DG9		WSYK160DG9				
		Outdoor unit		WOYG112LCTA		WOYG140LCTA		WOYK112LCTA		WOYK140LCTA		WOYK160LCTA				
Capacity range				11		14		11		14		16				
7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	10.80		13.50		10.80		13.50		15.17					
	Input power		2.54		3.23		2.51		3.20		3.70					
	COP		4.25		4.18		4.30		4.22		4.10					
2°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	10.77		12.00		10.77		13.00		13.50					
	Input power		3.44		3.87		3.40		4.15		4.34					
	COP		3.13		3.10		3.17		3.13		3.11					
-7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	10.80		12.00		10.80		13.00		13.50					
	Input power		4.32		5.08		4.28		5.18		5.40					
	COP		2.50		2.36		2.52		2.51		2.50					
Space heating characteristics* <sup>2</sup>																
Temperature application			°C		55		35		55		35		55		35	
Energy efficiency class					A+		A++		A+		A++		A+		A++	
Rated heat output(P <sub>rated</sub> )			kW		9		11		11		13		9		14	
Seasonal space heating energy efficiency(η <sub>s</sub> )			%		109		151		113		148		112		154	
Annual energy consumption			kWh		6842		6062		8041		6824		6669		5930	
Sound power level	Hydraulic indoor unit				46				46				46		46	
	Outdoor unit		dB(A)		68				69				69		68	
Hydraulic indoor unit Specification																
Power source			1 Ø 230 V 50 Hz						3 N 400 V 50 Hz							
Dimensions H×W×D			mm		800 × 450 × 457											
Weight (Net)			kg		42											
Water circulation			Min/Max		L/min		19.5/39.0		24.4/48.7		19.5/39.0		24.4/48.7		27.4/54.8	
Buffer tank capacity			L		16											
Expansion vessel capacity			L		8											
Leaving water temperature range			Max		°C											
Water pipe connection diameter			Flow/Return		mm		Ø 25.4/Ø 25.4									
Backup heater			Capacity		kW		6.0(3.0kW×2pcs.)				9.0(3.0kW×3pcs.)					
Outdoor unit specification																
Power source			1 Ø 230 V 50 Hz						3 N 400 V 50 Hz							
Current			Max		A		22.0		25.0		8.5		9.5		10.5	
Dimensions H × W × D			mm		1,290 × 900 × 330											
Weight (Net)			kg		92						99					
Refrigerant			Type (Global Warming Potential)		R410A (2,088)											
			Charge		kg		2.50									
Additional refrigerant charge amount			g/m		50											
Connection pipe	Diameter	Liquid	mm		Ø 9.52											
		Gas			Ø 15.88											
	Length	Min/Max	m		5/20											
		Length(Pre-charge)	m		15											
Height difference			Max		m		15									
Operation range			Heating		°C		-25 to 35									

## Split type Dimensions (High power series)

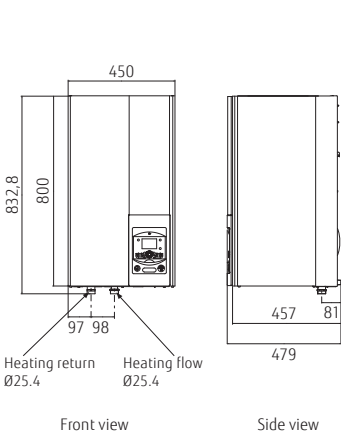
**Outdoor Unit :**  
WOYG112LCTA/WOYG140LCTA



**Outdoor Unit :**  
WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



**Hydraulic Indoor Unit :**  
WSYG140DG6/WSYK160DG9



Split type Specifications (Comfort series)

Model Name		Hydraulic indoor unit		WSYA050DG6		WSYA100DG6		WSYA100DG6		WSYA100DG6				
		Outdoor unit		WOYA060LFCA		WOYA060LFCA		WOYA080LFCA		WOYA100LFCA				
Capacity range				5		6		8		10				
7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	4.50		6.00		7.50		10.00					
	Input power		0.996		1.41		1.84		2.49					
	COP		4.52		4.27		4.08		4.02					
2°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	4.50		4.95		5.65		7.70					
	Input power		1.39		1.53		1.78		2.47					
	COP		3.24		3.24		3.17		3.12					
-7°C/35°C floor heating* <sup>1</sup>	Heating capacity	kW	4.10		4.60		5.70		7.40					
	Input power		1.47		1.74		2.23		2.97					
	COP		2.79		2.64		2.56		2.49					
Space heating characteristics* <sup>2</sup>														
Temperature application			°C	55	35	55	35	55	35	55	35			
Energy efficiency class				A+	A++	A+	A++	A+	A++	A+	A++			
Rated heat output(P <sub>rated</sub> )			kW	4	4	5	5	6	7	8	8			
Seasonal space heating energy efficiency(η <sub>s</sub> )			%	115	169	115	169	118	156	113	155			
Annual energy consumption			kWh	3026	2160	3180	2505	3886	3375	5415	4415			
Sound power level	Hydraulic indoor unit		dB(A)	46		46		46		46				
	Outdoor unit			65	60	65	63	65	69	68	69			
Hydraulic indoor unit Specification														
Power source			1 Ø 230 V 50 Hz											
Dimensions H×W×D			mm	800 × 450 × 457										
Weight (Net)			kg	42										
Water circulation			Min/Max	L/min		8.1/16.2		10.8/21.7		13.5/27.1		18.1/36.1		
Buffer tank capacity			L	16										
Expansion vessel capacity			L	8										
Leaving water temperature range			Max	°C 55										
Water pipe connection diameter			Flow/Return	mm Ø 25.4/Ø 25.4										
Backup heater			Capacity	kW 6.0(3.0kW×2pcs.)										
Outdoor unit specification														
Power source			1 Ø 230 V 50 Hz											
Current			Max	A		11.0		12.5		17.5		18.5		
Dimensions H × W × D			mm	620 × 790 ×290									830 × 900 × 330	
Weight (Net)			kg	41									42	90
Refrigerant			Type (Global Warming Potential)	R410A (2,088)										
			Charge	kg		1.10		1.40		1.80				
Additional refrigerant charge amount				g/m		25		40		40				
Connection pipe	Diameter	Liquid	mm	Ø 6.35				Ø 9.52						
		Gas	Ø 12.7				Ø 15.88							
	Length	Min/Max	m	5/30										
	Length(Pre-charge)		m	15										
	Height difference	Max	m	20										
Operation range			Heating	°C		-20 to 35								

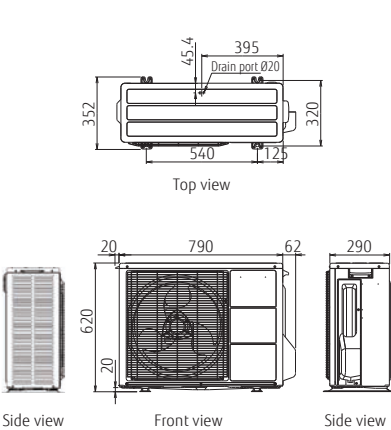
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.

\*2:All information of ErP can be available for downloaded from [www.fujitsu-general.com/global/products/erp-ecodesign/index.html](http://www.fujitsu-general.com/global/products/erp-ecodesign/index.html).

Split type Dimensions (Comfort series)

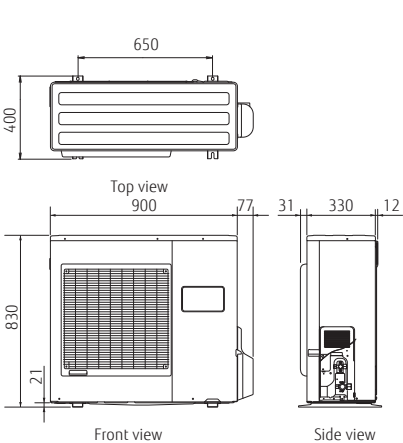
Outdoor Unit :

WOYA060LFCA/WOYA080LFCA



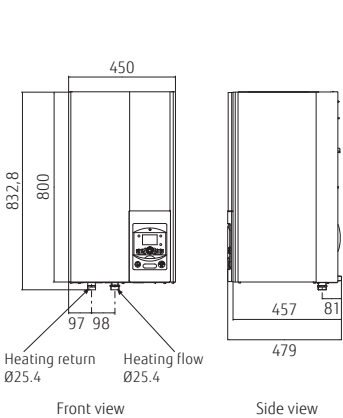
Outdoor Unit :

WOYA100LFCA



Hydraulic Indoor Unit :

WSYA050DG6/WSYA100DG6

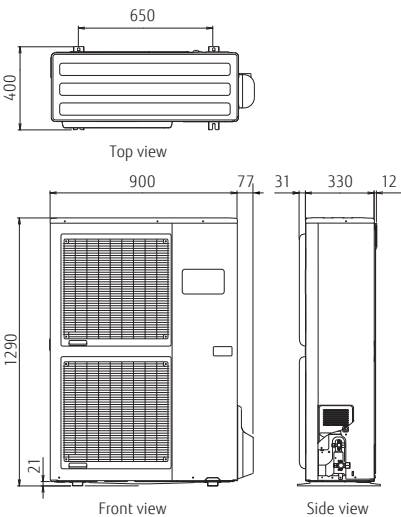


Split DHW Integrated type Specifications (High power series)

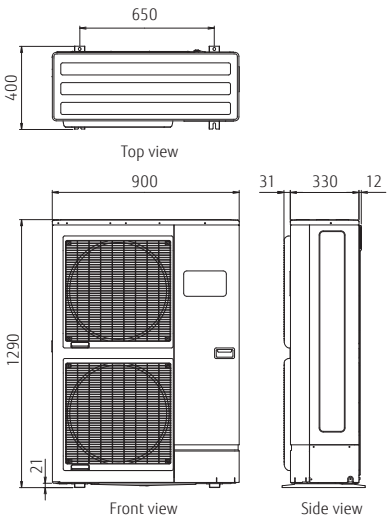
Model Name		Hydraulic indoor unit		WGYG140DG6		WGYG140DG6		WGYK160DG9		WGYK160DG9		
		Outdoor unit		WOYG112LCTA		WOYG140LCTA		WOYK112LCTA		WOYK140LCTA		
Capacity range				11		14		11		14		
7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	10.80		13.50		10.80		13.50			
	Input power		2.54		3.23		2.51		3.20			
	COP		4.25		4.18		4.30		4.22			
2°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	10.77		12.00		10.77		13.00			
	Input power		3.44		3.87		3.40		4.15			
	COP		3.13		3.10		3.17		3.13			
-7°C/35°C floor heating* <sup>1</sup>	Heating capacity	kW	10.80		12.00		10.80		13.00			
	Input power		4.32		5.08		4.28		5.18			
	COP		2.50		2.36		2.52		2.51			
Space heating characteristics* <sup>2</sup>												
Temperature application			°C	55	35	55	35	55	35	55	35	
Energy efficiency class				A+	A++	A+	A+	A+	A++	A+	A+	
Rated heat output(P <sub>rated</sub> )			kW	9	11	11	13	9	11	11	13	
Seasonal space heating energy efficiency(η <sub>s</sub> )			%	109	151	113	148	112	154	117	150	
Annual energy consumption			kWh	6842	6062	8041	6824	6669	5930	7803	6738	
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46			
	Outdoor unit		68		69		69		68			
Domestic hot water characteristics* <sup>2</sup>												
Load profile			L									
Energy efficiency class			A									
Energy efficiency(η <sub>wh</sub> )			%	88								
Annual electricity consumption			kWh	1166								
Hydraulic indoor unit Specification												
Power source			1 Ø 230 V 50 Hz						3 N 400 V 50 Hz			
Dimensions H×W×D			mm	1,840× 648 × 698								
Weight (Net)			kg	152								
Water circulation			L/min	19.5/39.0		24.4/28.7		19.5/39.0		24.4/48.7		
DHW capacity			L	190								
Hot water heater capacity			kW	1.5								
Expansion vessel capacity			L	12								
Leaving water temperature range			°C	60								
Water pipe connection diameter			mm	Ø 25.4/Ø 25.4								
Hot water pipe connection diameter			mm	Ø 19.05								
Backup heater			Capacity	6.0(3.0kW×2pcs.)						9.0(3.0kW×3pcs.)		
Outdoor unit specification												
Power source			1 Ø 230 V 50 Hz						3 N 400 V 50 Hz			
Current			Max	A	22.0		25.0		8.5		10.5	
Dimensions H × W × D			mm	1,290 × 900 ×330								
Weight (Net)			kg	92						99		
Refrigerant			Type (Global Warming Potential)	R410A (2,088)								
Additional refrigerant charge amount			Charge	kg	2.50							
Connection pipe	Diameter	Liquid	mm	50								
		Gas	mm	Ø 9.52								
	Length	Min/Max	m	Ø 15.88								
		Length(Pre-charge)	m	5/20								
Operation range	Height difference	Max	m	15								
		Heating	°C	-25 to 35								

Split DHW Integrated type Dimensions (High power series)

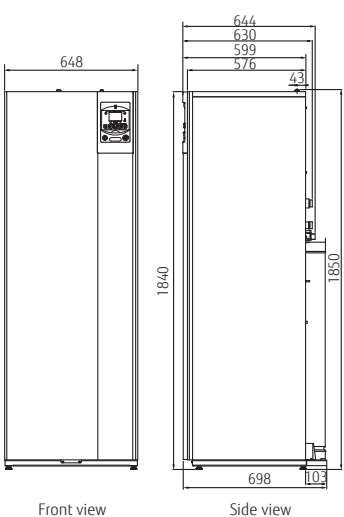
Outdoor Unit :  
WOYG112LCTA/WOYG140LCTA



Outdoor Unit :  
WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic Indoor Unit :  
WGYG140DG6/WGYK160DG9



Split DHW Integrated type Specifications (Comfort series)

Model Name		Hydraulic indoor unit		WGYA050DG6		WGYA100DG6		WGYA100DG6		WGYA100DG6		
		Outdoor unit		WOYA060LFCA		WOYA060LFCA		WOYA080LFCA		WOYA100LFTA		
Capacity range				5		6		8		10		
7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	4.50		6.00		7.50		10.00			
	Input power		0.996		1.41		1.84		2.49			
	COP		4.52		4.27		4.08		4.02			
2°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	4.50		4.95		5.65		7.70			
	Input power		1.39		1.53		1.78		2.47			
	COP		3.24		3.24		3.17		3.12			
-7°C/35°C floor heating* <sup>1</sup>	Heating capacity	kW	4.10		4.60		5.70		7.40			
	Input power		1.47		1.74		2.23		2.97			
	COP		2.79		2.64		2.56		2.49			
Space heating characteristics* <sup>2</sup>												
Temperature application			°C	55	35	55	35	55	35	55	35	
Energy efficiency class				A+	A++	A+	A++	A+	A++	A+	A++	
Rated heat output(P <sub>rated</sub> )			kW	4	4	5	5	6	7	8	8	
Seasonal space heating energy efficiency(η <sub>s</sub> )			%	115	169	115	169	118	156	113	155	
Annual energy consumption			kWh	3026	2160	3180	2505	3886	3375	5415	4415	
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46			
	Outdoor unit		65	60	65	63	65	69	68	69		
Domestic hot water characteristics* <sup>2</sup>												
Load profile			L									
Energy efficiency class			A+									
Energy efficiency(η <sub>wh</sub> )			%	120								
Annual electricity consumption			kWh	880								
Hydraulic indoor unit Specification												
Power source			1 Ø 230 V 50 Hz									
Dimensions H×W×D			mm	1,840× 648 × 698								
Weight (Net)			kg	152								
Water circulation			L/min	8.1/16.2		10.8/21.7		13.5/27.1		18.1/36.1		
DHW capacity			L	190								
Hot water heater capacity			kW	1.5								
Expansion vessel capacity			L	12								
Leaving water temperature range			Max °C	55								
Water pipe connection diameter			Flow/Return mm	Ø 25.4/Ø 25.4								
Hot water pipe connection diameter			mm	Ø 19.05								
Backup heater			Capacity mm	6.0(3.0kW×2pcs.)								
Outdoor unit specification												
Power source			1 Ø 230 V 50 Hz									
Current			Max A	11.0		12.5		17.5		18.5		
Dimensions H × W × D			mm	620 × 790 ×290							830 × 900 ×330	
Weight (Net)			kg	41				42		60		
Refrigerant			Type (Global Warming Potential)	R410A (2,088)								
Additional refrigerant charge amount			Charge kg	1.10				1.40		1.80		
Connection pipe			g/m	25				40		40		
	Diameter	Liquid Gas mm	Ø 6.35						Ø 9.52			
	Length	Min/Max m	Ø 12.70				5/30		Ø 15.88			
	Length(Pre-charge)	m	15									
	Height difference	Max m	20									
Operation range			Heating °C	-20 to 35								

\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.

\*2:All information of ErP can be available for download from [www.fujitsu-general.com/global/products/erp-ecodesign/index.html](http://www.fujitsu-general.com/global/products/erp-ecodesign/index.html).

Split type Dimensions (Comfort series)

Outdoor Unit :

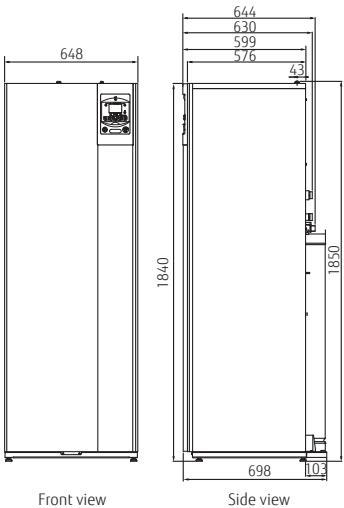
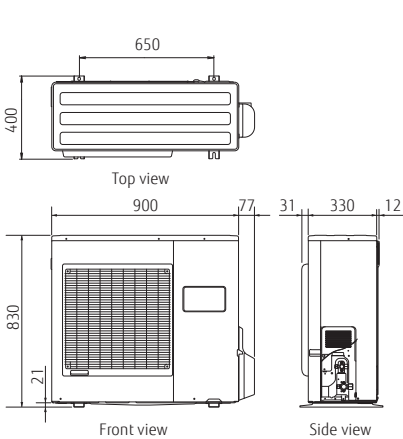
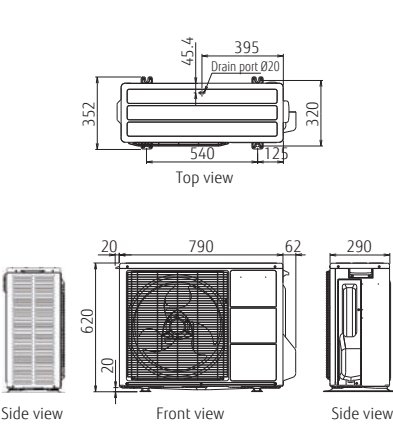
WOYA060LFCA/WOYA080LFCA

Outdoor Unit :

WOYA100LFTA

Hydraulic Indoor Unit :

WGYA050DG6/WGYA100DG6



Monobloc type Specifications

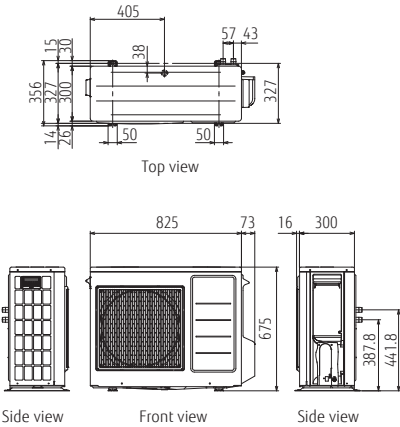
Model Name			Hydraulic indoor unit		WSYP100DG6					
			Outdoor unit		WPYA050LG		WPYA080LG		WPYA100LG	
Capacity range					5		8		10	
7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	5.00		8.00		10.00			
	Input power		1.19		1.78		2.30			
	COP		4.20		4.50		4.35			
2°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	3.65		4.35		4.90			
	Input power		1.07		1.23		1.44			
	COP		3.40		3.55		3.40			
-7°C/35°C floor heating * <sup>1</sup>	Heating capacity	kW	3.55		7.10		8.00			
	Input power		1.38		2.93		3.32			
	COP		2.57		2.42		2.41			
Space heating characteristics* <sup>2</sup>										
Temperature application			°C	55	35	55	35	55	35	
Energy efficiency class				A+	A++	A+	A++	A+	A++	
Rated heat output(P <sub>rated</sub> )			kW	4	4	6	7	7	8	
Seasonal space heating energy efficiency(η <sub>s</sub> )			%	118	171	123	168	118	167	
Annual energy consumption			kWh	3055	1952	3828	3580	4491	3700	
Sound power level			Outdoor unit	dB (A)	62	61	65	68		
Hydraulic indoor unit Specification										
Power source			1 Ø 230 V 50 Hz							
Dimensions H×W×D			mm	803 × 450 × 457						
Weight (Net)			kg	40						
Buffer tank capacity			L	22						
Expansion vessel capacity			L	12						
Water pipe connection diameter			Flow/Return	mm	Ø 25.4/Ø 25.4					
Backup heater			Capacity	kW	6.0(3.0kW×2pcs.)					
Outdoor unit specification										
Power source			1 Ø 230 V 50 Hz							
Dimensions H × W × D			mm	675 × 825 × 300		882 × 850 × 330				
Weight (Net)			kg	49		72				
Current			Max	A	10.9	15.2		17.5		
Water circulation			Min/Max	L/min	5.0/20.0		10.0/30.0			
Water pipe connection diameter			Flow/Return	mm	Ø 19.05/Ø 19.05		Ø 25.4/Ø 25.4			
Refrigerant			Type (Global Warming Potential)			R410A (2,088)				
			Charge	kg	1.05		1.72			
Leaving water temperature range			Max	°C	55					
Operation range			Heating	°C	-20 to 35					

\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.

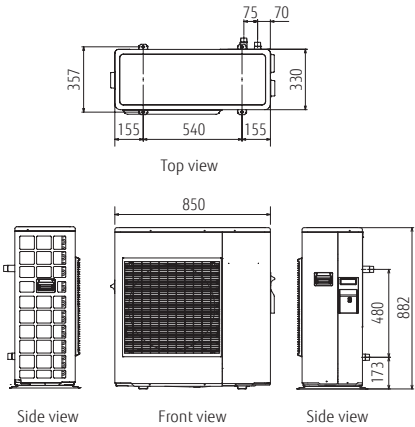
\*2:All information of ErP can be available for downloaded from [www.fujitsu-general.com/global/products/erp-ecodesign/index.html](http://www.fujitsu-general.com/global/products/erp-ecodesign/index.html).

Monobloc type Dimensions

Outdoor Unit :  
WPYA050LG



Outdoor Unit :  
WPYA080LG/WPYA100LG



Hydraulic Indoor Unit :  
WSYP100DG6

