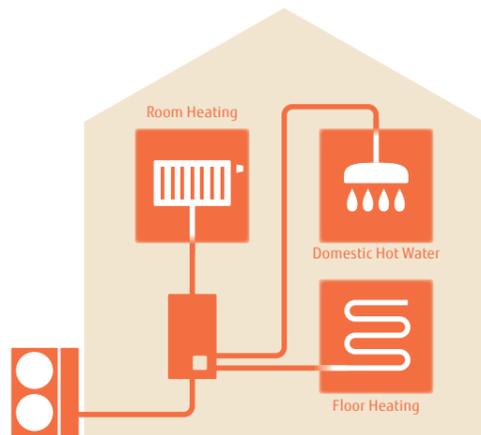


# Residential AIR TO WATER

- 280 Home Heating Air to Water Overview
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- 283 WATERSTAGE™ Lineup

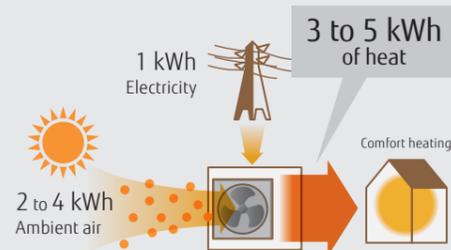


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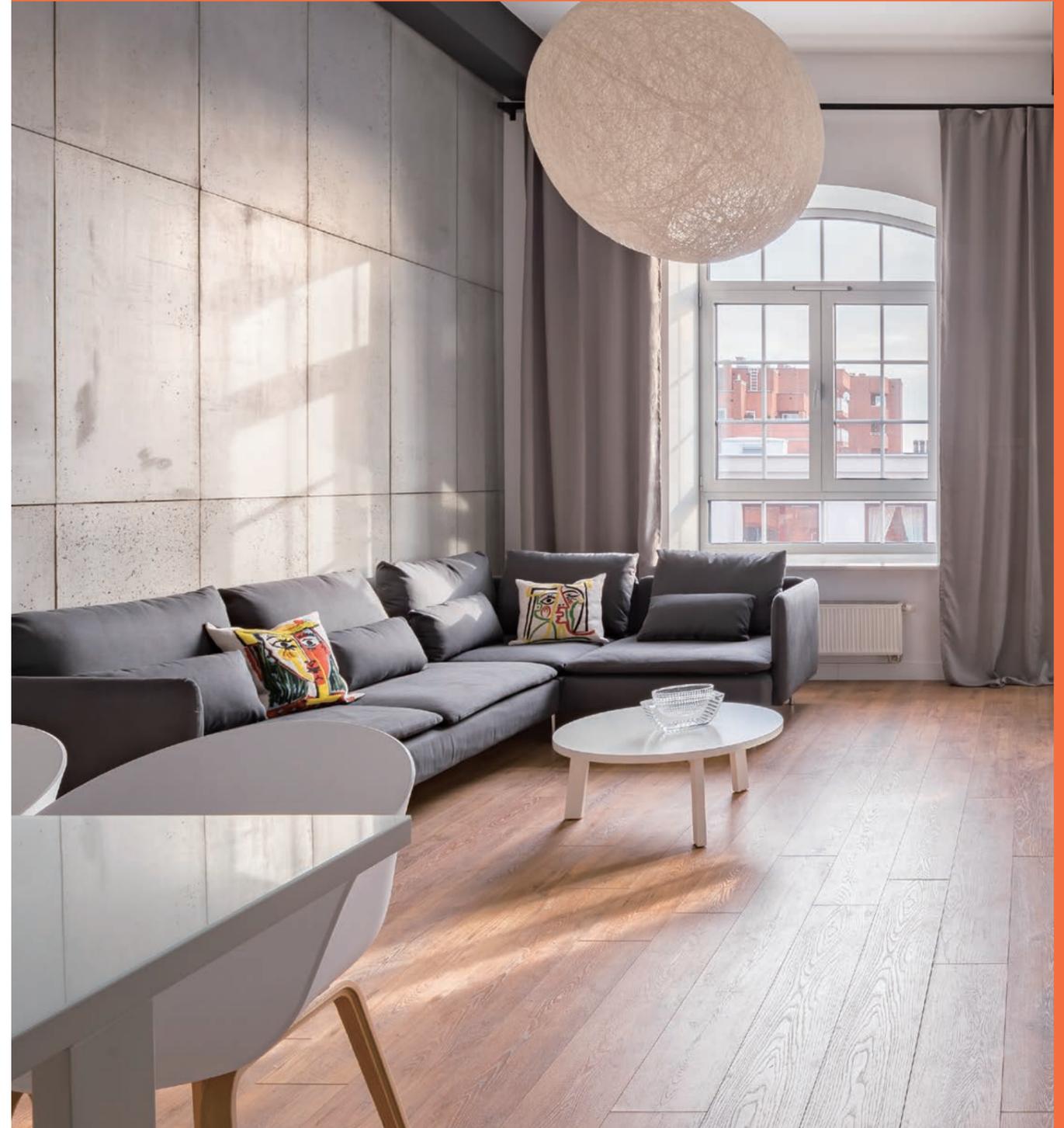
### What's a Heat Pump ?

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



### Complete Solution meets various needs

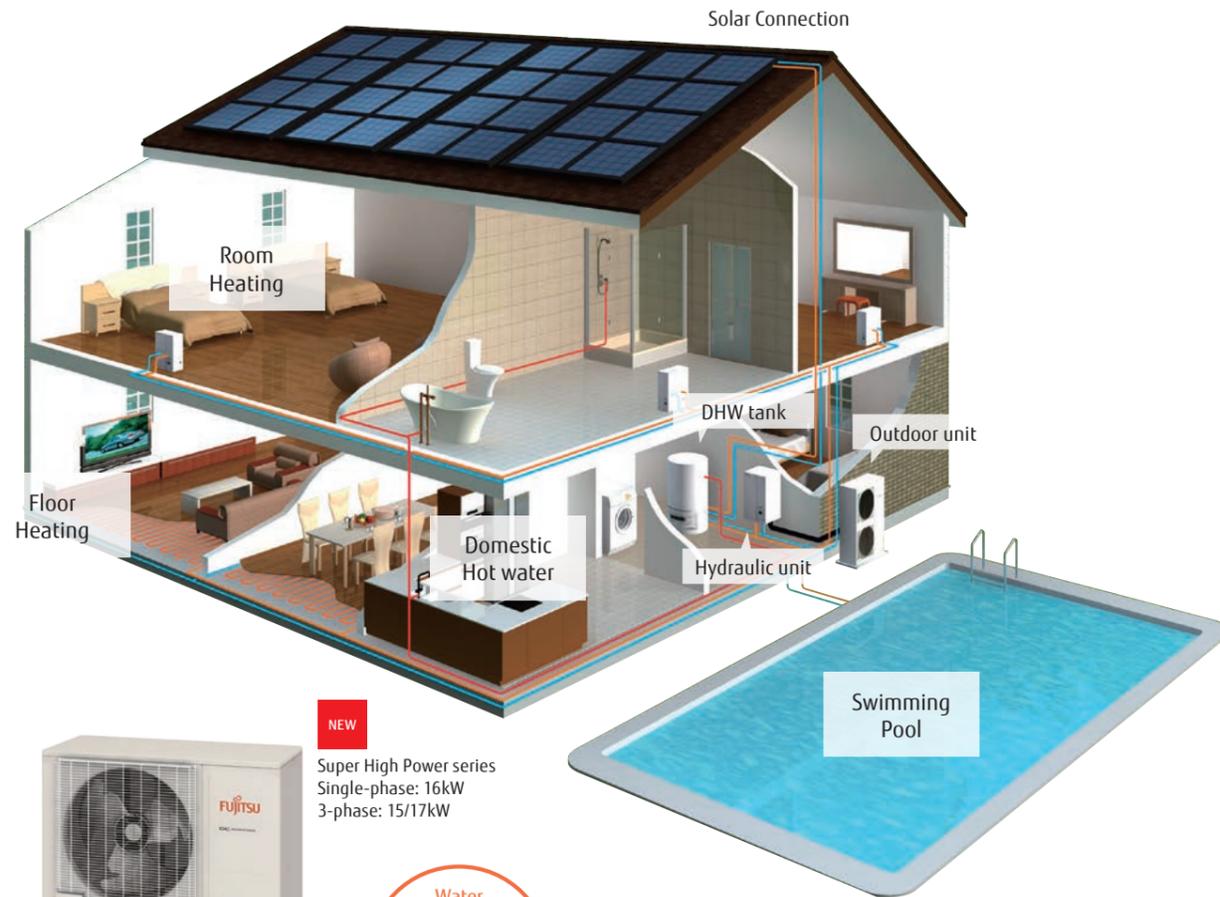
The clean energy produced by WATERSTAGE™ reliably delivers "comfort" to all spaces in the home up to the living room, bedrooms, bath, and swimming pool.



# Home Heating

## Air to Water Overview

Wide range lineup suited for regional characteristics, family structure, and application. We provide various products to meet your needs from High Power via heating-centered series to reasonably-priced compact series.



**NEW**  
Super High Power series  
Single-phase: 16kW  
3-phase: 15/17kW

Water temperature  
**60°C**

### High leaving water temperature

High leaving water temperature 60°C kept down to -20°C outdoor temperature without using backup heater.

### For Room heating & domestic hot water

Outdoor unit and hydraulic indoor unit can be installed freely, so installation is easy. Since hydraulic indoor unit is installed inside a house, freezing of circulated water can be prevented. A larger heating capacity can be performed flexibly by using more units in cascade connection.



### Appearance-oriented compact outdoor unit

Split type Comfort series

For Comfort series, optimized flow temperature control is realized by DC inverter technology.

\*: Outdoor Unit: WOYA060LFCA/WOYA080LFCA

Stylish space saving solution with built-in DHW tank

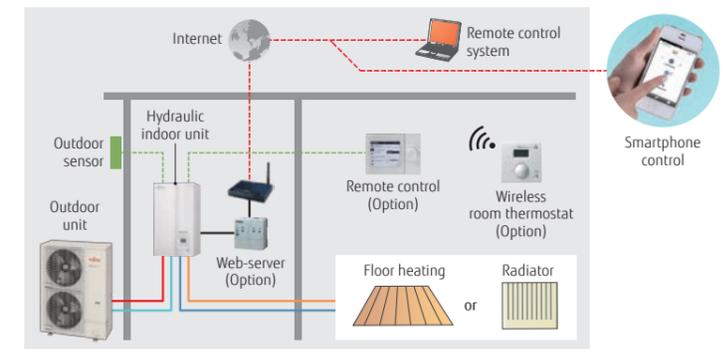


### Space is saved drastically due to built-in DHW tank.

Existing boiler can be replaced easily. A larger heating capacity can be performed flexibly by using more units in cascade connection.

**+ DHW Tank**  
DHW tank (option) can be used to supply hot water by connecting it to the system.

**+ Boiler**  
By combining existing boiler, powerful heating can be performed even at low outdoor temperature.  
\*optional part necessary



### Smart control

User's needs are supported by offering a variety of controls, such as individual control and remote control options.

# Technology

## High Efficiency

### For Outdoor Unit Twin Rotary Compressor with Linear Control Injection Port

It realizes the high condensing temperature without overheating discharge gas temperature by Linear Control Injection process during compression. Therefore, the condensing temperature rises up higher than normal circuit. A higher hot water temperature is realized by controlling the injection amount according to the usage state.



Linear Control Injection Port

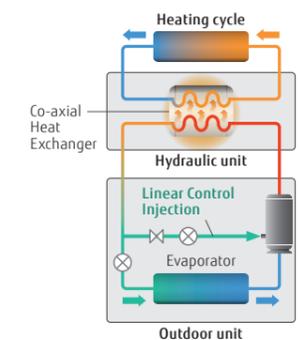
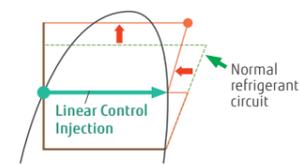
### For Hydraulic Indoor Unit Class A pump

Energy saving pump with constant volume or pressure adjustment function.

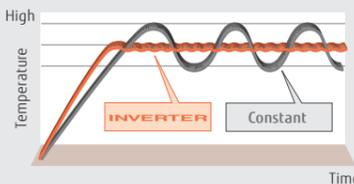


Energy efficiency class WSYK170DJ9

Optimized circuit = higher water temperature

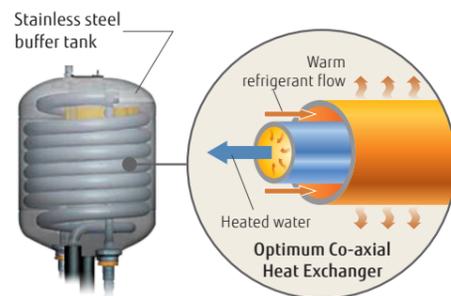


### Accurate temperature control by DC inverter technology



### Stainless steel buffer tank

Heat exchange amount is 25% higher than previous model. Energy saving performance is improved.



## Easy Control



### Hydraulic Indoor Unit Controller 4 Heating mode

- 1. Automatic mode**  
Comfort/Reduce mode switching automatically according to time program
- 2. Reduce mode**  
Constant reduce temperature

- 3. Comfort mode**  
Constant comfort temperature
- 4. Protection mode**  
Stand-by mode with anti-frost protection

## WATERSTAGE™ Lineup

Capacity (kW)	5	6	8	10	11	14	15	16	17
Split	Super High Power series Single phase								
	Hydraulic Indoor Unit/ Outdoor Unit							WSYG160DJ6 / WOYG160LJL	
	Super High Power series 3 phase								
Split	High Power series Single phase								
	Hydraulic Indoor Unit/ Outdoor Unit				WSYG140DG6 / WOYG112LHT	WSYG140DG6 / WOYG140LCTA			
	High Power series 3 phase								
Split	Hydraulic Indoor Unit/ Outdoor Unit				WSYK160DG9 / WOYK112LCTA	WSYK160DG9 / WOYK140LCTA		WSYK160DG9 / WOYK160LCTA	
	Comfort series								
	Hydraulic Indoor Unit/ Outdoor Unit	WSYA050DG6 / WOYA060LFCA	WSYA100DG6 / WOYA060LFCA	WSYA100DG6 / WOYA080LFCA	WSYA100DG6 / WOYA100LFTA				
Split	Super High Power series Single phase								
	Hydraulic Indoor Unit/ Outdoor Unit							WGYK160DJ6 / WOYG160LJL	
	Super High Power series 3 phase								
Split	Hydraulic Indoor Unit/ Outdoor Unit						WGYK170DJ9 / WOYK150LJL		WGYK170DJ9 / WOYK170LJL
	High Power series Single phase								
	Hydraulic Indoor Unit/ Outdoor Unit				WGYG140DG6 / WOYG112LHT	WGYG140DG6 / WOYG140LCTA			
Split	High Power series 3 phase								
	Hydraulic Indoor Unit/ Outdoor Unit				WGYK160DG9 / WOYK112LCTA	WGYK160DG9 / WOYK140LCTA		WGYK160DG9 / WOYK160LCTA	
	Comfort series								
Split	Hydraulic Indoor Unit/ Outdoor Unit	WGYA050DG6 / WOYA060LFCA	WGYA100DG6 / WOYA060LFCA	WGYA100DG6 / WOYA080LFCA	WGYA100DG6 / WOYA100LFTA				

## 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.

\*: only High Power 3phase

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

## 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

# Split Type / Split DHW Integrated Type



## Split Type

### Super high power series

Hydraulic indoor unit:  
WSYG160DJ6/[3 phase] WSYK170DJ9  
Outdoor unit:  
WOYG160LJL  
[3 phase] WOYK150LJL/WOYK170LJL



Hydraulic indoor unit  
Single Phase/  
3 Phase  
Outdoor unit  
Single Phase 16kW  
3 Phase 15/17kW

### High power series

Hydraulic indoor unit:  
WSYG140DG6/[3 phase] WSYK160DG9  
Outdoor unit:  
WOYG112LHT/WOYG140LCTA  
[3 phase] 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  
Single Phase  
Outdoor unit  
Single Phase  
5/6/8kW  
Single Phase  
10kW

## Split DHW Integrated Type

### Super high power series

Hydraulic indoor unit:  
WGYG160DJ6/[3 phase] WGYK170DJ9  
Outdoor unit:  
WOYG160LJL  
[3 phase] WOYK150LJL/WOYK170LJL



Hydraulic indoor unit  
Single Phase/  
3 Phase  
Outdoor unit  
Single Phase 16kW  
3 Phase 15/17kW

### High power series

Hydraulic indoor unit:  
WGYG140DG6/[3 phase] WGYK160DG9  
Outdoor unit:  
WOYG112LHT/WOYG140LCTA  
[3 phase] 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:  
WGYA050DG6/WGYA100DG6  
Outdoor unit:  
WOYA060LFCA/WOYA080LFCA/  
WOYA100LFTA



Hydraulic indoor unit  
Single Phase  
Outdoor unit  
Single Phase  
5/6/8 kW  
Single Phase  
10 kW

## High leaving water temperature

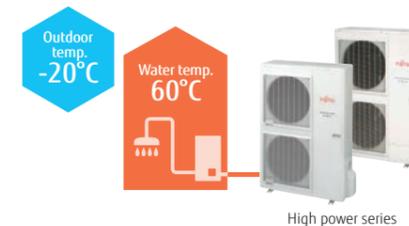
### Super High power series:

High leaving water temperature of 60°C is kept even when outdoor temperature is down to -20°C without using backup heaters. And it's possible to supply 55°C at -22°C outdoor temperature without backup heater.



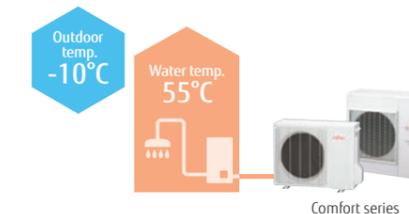
### High power series:

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



### 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.



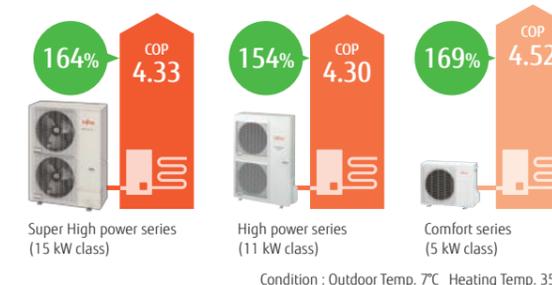
\* If you want to raise the hot water supply temperature, backup heaters can be used for auxiliary operation.

## High COP

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

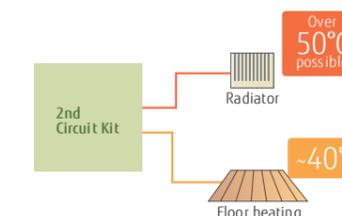


## Seasonal space heating energy efficiency (ηs)



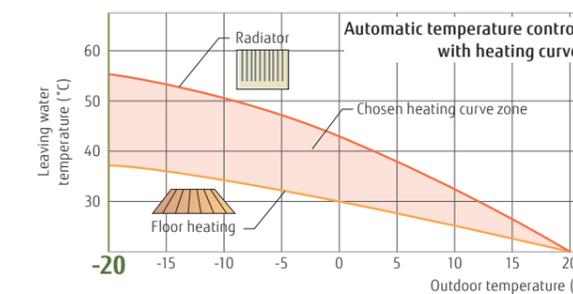
## 2 Zone individual control\*

2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)\*  
\*: Optional parts are required.



## Automatic heating curve control

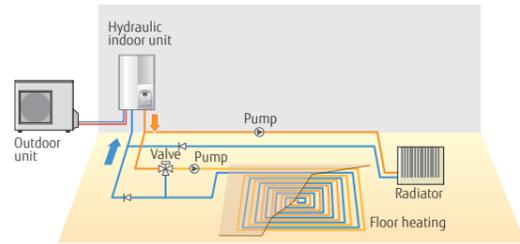
Automatic temperature regulation in accordance with heating curve (Depends on heating terminal and outdoor temperature)



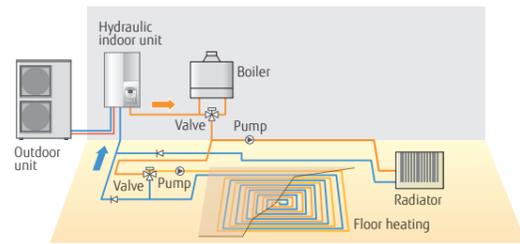
# Case Studies

## Split Type

**2 emitter simultaneous heating (Individual control)**  
Floor heating + Radiator

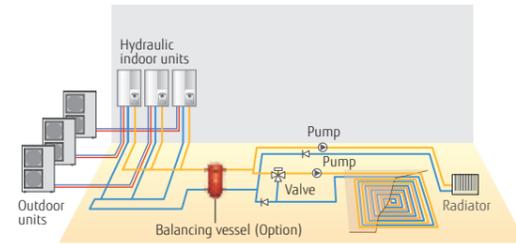


**Boiler connected to heating (Boiler + Heating)**

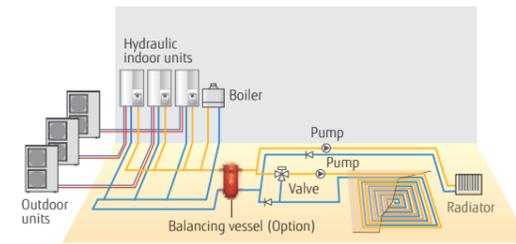


## Split Cascade System

**2 emitter simultaneous heating (Individual control)**  
Floor heating + Radiator

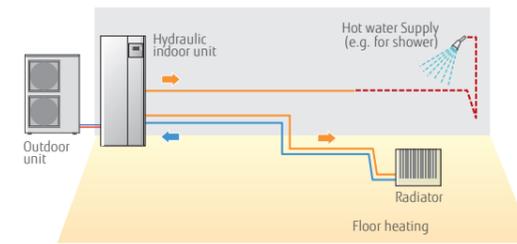


**Boiler connected to heating (Boiler + Heating)**

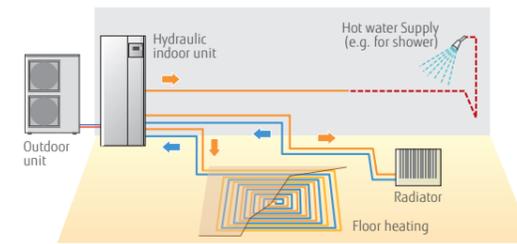


## Split DHW Integrated Type

**Single heating & Domestic Hot Water**  
Radiator + Domestic Hot Water



**2 emitter simultaneous heating (Individual control) & Domestic Hot Water**  
Radiator + Domestic Hot Water

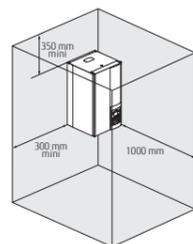


# Installation Limitations

## Equipment Installation

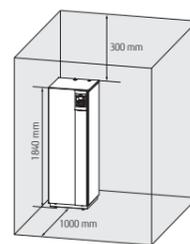
### Split type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight ≤ 88 kg (including water)
- Space for maintenance should be respected



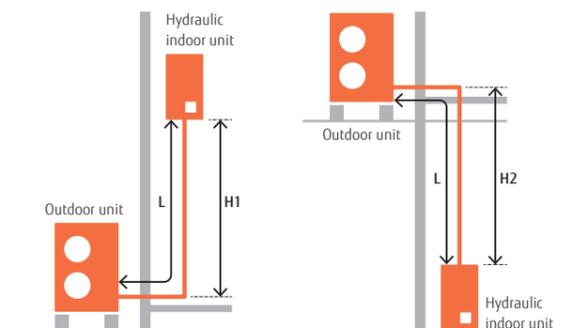
### Split DHW integrated type Hydraulic indoor unit

- Floor stand
- Weight ≤ 393 kg (including water)
- Space for maintenance should be respected.



## Piping and Wiring split type

Series	Capacity range (kW)	Pipe diameter (Liquid/Gas) (mm)	H1 (m)	H2 (m)	L (m)
Comfort	5	6.35/12.70	+20	-20	5-30
	6				
	8				
High power	10	9.52/15.88	+15	-15	5-20
	11				
	14				
Super High power	15	9.52/15.88	+15	-25	5-30
	16				
	17				





# Specifications & Dimensions

for Split Type Super High Power Series

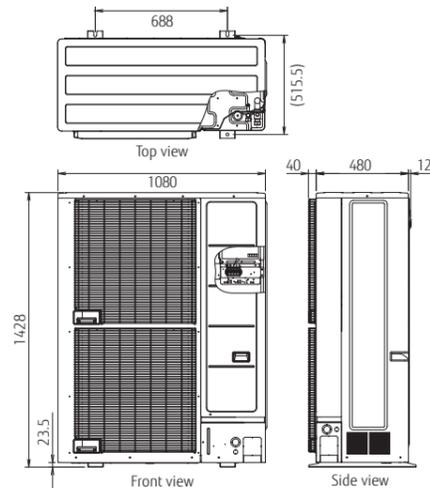
## Specifications

		Tentative					
Model Name	Hydraulic indoor unit Outdoor unit	WSYG160DJ6 WOYG160LJL	WSYK170DJ9 WOYK170LJL	WSYK170DJ9 WOYK170LJL	WSYK170DJ9 WOYK170LJL	WSYK170DJ9 WOYK170LJL	WSYK170DJ9 WOYK170LJL
<b>Capacity range</b>		16	15	17	17	17	17
7°C/35°C floor heating *1	Heating capacity	16.00	15.00	17.00	17.00	17.00	17.00
	Input power	3.86	3.46	4.10	4.10	4.10	4.10
	COP	4.15	4.33	4.15	4.15	4.15	4.15
2°C/35°C floor heating *1	Heating capacity	13.30	13.20	13.50	13.50	13.50	13.50
	Input power	4.25	4.06	4.27	4.27	4.27	4.27
	COP	3.13	3.25	3.16	3.16	3.16	3.16
-7°C/35°C floor heating *1	Heating capacity	14.50	13.20	15.00	15.00	15.00	15.00
	Input power	5.27	4.55	5.32	5.32	5.32	5.32
	COP	2.75	2.90	2.82	2.82	2.82	2.82
<b>Space heating characteristics**</b>							
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	14	16	16	17	17	18
Seasonal space heating energy efficiency (η <sub>s</sub> )	%	125	163	130	164	130	161
Annual energy consumption	kWh	8,757	8,014	9,915	8,606	10,232	9,059
Sound power level	Hydraulic indoor unit	45	45	45	45	45	45
	Outdoor unit	67	66	67	66	67	68
<b>Hydraulic indoor unit Specification</b>							
Power source		Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz			
Dimensions H×W×D	mm	805 × 450 × 471		805 × 450 × 471			
Weight (Net)	kg	52.5		52.5			
Water circulation	Min/Max L/min	26.4/57.8		24.0/54.2		27.3/61.4	
Buffer tank capacity	L	25		25			
Expansion vessel capacity	L	10		10			
Leaving water temperature range	Max °C	60		60			
Water pipe connection diameter	Flow/Return mm	Ø 25.4/Ø 25.4		Ø 25.4/Ø 25.4			
Backup heater	Capacity kW	6.0(3.0kW×2pcs.)		9.0(3.0kW×3pcs.)			
<b>Outdoor unit specification</b>							
Power source		Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz			
Current	Max A	28.00		14.0		14.0	
Dimensions H × W × D	mm	1,428 × 1,080 × 480		1,428 × 1,080 × 480		1,428 × 1,080 × 480	
Weight (Net)	kg	137		138		138	
Refrigerant	Type (Global Warming Potential) Charge	R410A (2.088) kg		R410A (2.088) kg		R410A (2.088) kg	
Additional refrigerant charge amount	g/m	50		50		50	
Connection pipe	Diameter	Liquid	mm	Ø 9.52		Ø 9.52	
		Gas	mm	Ø 15.88		Ø 15.88	
	Length	Min/Max	m	5/30		5/30	
		Length(Pre-charge)	m	15		15	
Height difference	Max m	25/15 (Outdoor unit:Upper/Lower)					
Operation range	Heating °C	-25 to 35		-25 to 35		-25 to 35	

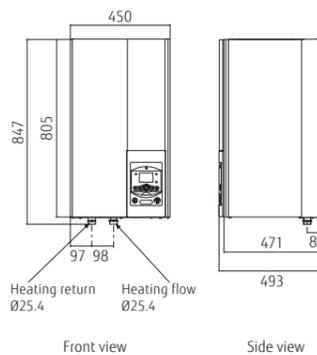
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.  
\*2:All information of ErP can be available for downloaded from <https://www.fujitsu-general.com/global/support/downloads/search/index.html>

## Dimensions

**Outdoor Unit:**  
Single Phase: WOYG160LJL  
3 Phase: WOYK150LJL/WOYK170LJL



**Hydraulic Indoor Unit:**  
Single Phase : WSYG160DJ6  
3 Phase: WSYK170DJ9



for Split Type High Power Series

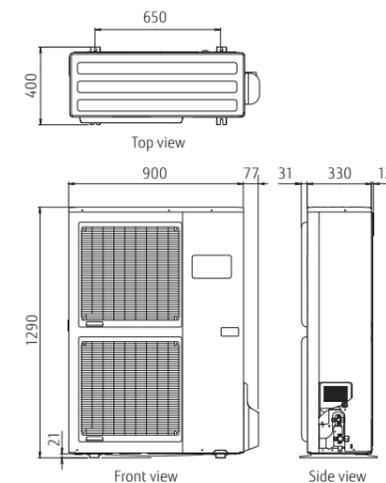
## Specifications

Model Name	Hydraulic indoor unit Outdoor unit	WSYG140DG6 WOYG112LHT	WSYG140DG6 WOYG140LCTA	WSYK160DG9 WOYK112LCTA	WSYK160DG9 WOYK140LCTA	WSYK160DG9 WOYK160LCTA	
<b>Capacity range</b>		11	14	11	14	16	
7°C/35°C floor heating *1	Heating capacity	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 *1	Heating capacity	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 *1	Heating capacity	10.38	11.54	10.38	12.20	13.50	
	Input power	4.32	5.08	4.28	5.13	5.40	
	COP	2.40	2.27	2.43	2.38	2.50	
<b>Space heating characteristics**</b>							
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	11
Seasonal space heating energy efficiency (η <sub>s</sub> )	%	112	151	113	148	112	154
Annual energy consumption	kWh	6,704	6,062	8,041	6,824	6,669	5,930
Sound power level	Hydraulic indoor unit	46	46	46	46	46	46
	Outdoor unit	68	69	69	68	70	71
<b>Hydraulic indoor unit Specification</b>							
Power source		Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz			
Dimensions H×W×D	mm	800 × 450 × 457		800 × 450 × 457			
Weight (Net)	kg	42		42			
Water circulation	Min/Max L/min	19.5/39.0		24.4/48.7		19.5/39.0	
Buffer tank capacity	L	16		16			
Expansion vessel capacity	L	8		8			
Leaving water temperature range	Max °C	60		60			
Water pipe connection diameter	Flow/Return mm	Ø 25.4/Ø 25.4		Ø 25.4/Ø 25.4			
Backup heater	Capacity kW	6.0(3.0kW×2pcs.)		9.0(3.0kW×3pcs.)			
<b>Outdoor unit specification</b>							
Power source		Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz			
Current	Max A	22.0		25.0		9.0	
Dimensions H × W × D	mm	1,290 × 900 × 330		1,290 × 900 × 330			
Weight (Net)	kg	92		99			
Refrigerant	Type (Global Warming Potential) Charge	R410A (2.088) kg		R410A (2.088) kg		R410A (2.088) kg	
Additional refrigerant charge amount	g/m	50		50		50	
Connection pipe	Diameter	Liquid	mm	Ø 9.52		Ø 9.52	
		Gas	mm	Ø 15.88		Ø 15.88	
	Length	Min/Max	m	5/20		5/20	
		Length(Pre-charge)	m	15		15	
Height difference	Max m	15					
Operation range	Heating °C	-25 to 35					

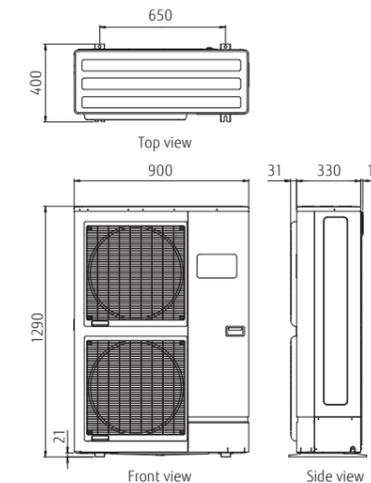
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.  
\*2:All information of ErP can be available for downloaded from <https://www.fujitsu-general.com/global/support/downloads/search/index.html>

## Dimensions

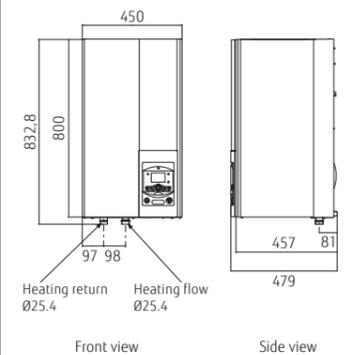
**Outdoor Unit:**  
Single Phase: WOYG112LHT/WOYG140LCTA



3 Phase: WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



**Hydraulic Indoor Unit:**  
Single Phase: WSYG140DG6  
3 Phase: WSYK160DG9



for Split Type Comfort Series

Specifications

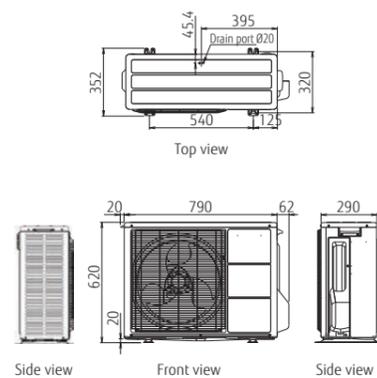
Model Name	Hydraulic indoor unit Outdoor unit	WSYA050DG6 WOYA060LFCA	WSYA100DG6 WOYA060LFCA	WSYA100DG6 WOYA080LFCA	WSYA100DG6 WOYA100LFCA						
<b>Capacity range</b>		5	6	8	10						
7°C/35°C floor heating *1	Heating capacity	4.50	6.00	7.50	10.00						
	Input power	0.996	1.41	1.84	2.49						
	COP	4.52	4.27	4.08	4.02						
2°C/35°C floor heating *1	Heating capacity	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 *1	Heating capacity	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						
<b>Space heating characteristics**</b>											
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	3,026	2,160	3,180	2,505	3,886	3,375	5,415	4,415		
Sound power level	Hydraulic indoor unit	46		46		46		46			
	Outdoor unit	65	60	65	63	65	69	68	69		
<b>Hydraulic indoor unit Specification</b>											
Power source	Single-phase 230 V 50 Hz										
Dimensions H×W×D	mm	800 × 450 × 457									
Weight (Net)	kg	42									
Water circulation	Min/Max	L/min		L/min		L/min		L/min			
Buffer tank capacity	L	8.1/16.2		10.8/21.7		13.5/27.1		18.1/36.1			
Expansion vessel capacity	L	16									
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.)				
<b>Outdoor unit specification</b>											
Power source	Single-phase 230 V 50 Hz					3-phase, 400 V 50 Hz					
Current	Max	A		A		A		A			
Dimensions H × W × D	mm	12.5		17.5		17.5		18.5			
Weight (Net)	kg	41					60				
Refrigerant	Type (Global Warming Potential)	R410A (2,088)									
Additional refrigerant charge amount	Charge	kg		kg		kg		kg			
		1.10		1.40		1.80		1.80			
Connection pipe	Diameter	Liquid	mm		mm		mm		mm		
		Gas	Ø 12.7		Ø 6.35		Ø 15.88		Ø 9.52		
	Length	Min/Max	m		m		m		m		
		Length(Pre-charge)	5/30		15		15		15		
Height difference	Max	m		m		m		m			
		20		20		20		20			
Operation range	Heating	°C		°C		°C		°C			
		-20 to 35		-20 to 35		-20 to 35		-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.

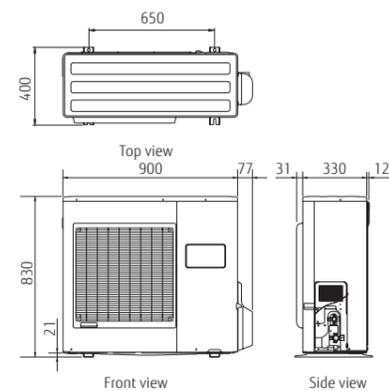
\*2: All information of ErP can be available for downloaded from <https://www.fujitsu-general.com/global/support/downloads/search/index.html>

Dimensions

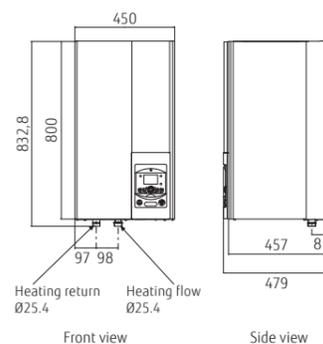
**Outdoor Unit:**  
WOYA060LFCA/WOYA080LFCA



WOYA100LFCA



**Hydraulic Indoor Unit:**  
WSYA050DG6/WSYA100DG6



for Split DHW Integrated Type Super High Power Series

Specifications

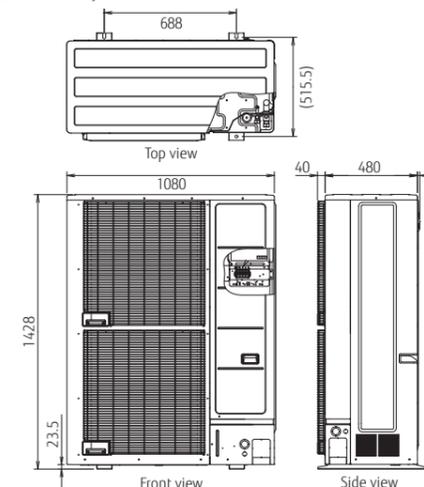
Model Name	Hydraulic indoor unit Outdoor unit	Tentative					
		WGY160DJ6 WOYG160LJL	WGYK170DJ9 WOYK150LJL	WGYK170DJ9 WOYK170LJL	WGYK170DJ9 WOYK170LJL		
<b>Capacity range</b>		16	15	17	17		
7°C/35°C floor heating *1	Heating capacity	16.00	15.00	17.00	17.00		
	Input power	3.86	3.46	4.10	4.10		
	COP	4.15	4.33	4.15	4.15		
2°C/35°C floor heating *1	Heating capacity	13.30	13.20	13.50	13.50		
	Input power	4.25	4.06	4.27	4.27		
	COP	3.13	3.25	3.16	3.16		
-7°C/35°C floor heating *1	Heating capacity	14.50	13.20	15.00	15.00		
	Input power	5.27	4.55	5.32	5.32		
	COP	2.75	2.90	2.82	2.82		
<b>Space heating characteristics**</b>							
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	14	16	16	17	17	18
Seasonal space heating energy efficiency (η <sub>s</sub> )	%	125	163	130	164	130	161
Annual energy consumption	kWh	8,757	8,014	9,915	8,606	10,232	9,059
Sound power level	Hydraulic indoor unit	45		45		45	
	Outdoor unit	67	66	67	66	67	68
<b>Domestic hot water characteristics**</b>							
Load profile						L	
Energy efficiency class						A	
Energy efficiency (η <sub>wh</sub> )						%	
Annual electricity consumption						kWh	
						941	
<b>Hydraulic indoor unit Specification</b>							
Power source	Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz				
Dimensions H×W×D	mm	800 × 450 × 457		1,841 × 648 × 698			
Weight (Net)	kg	42		166			
Water circulation	L/min	8.1/16.2		24.0/54.2		27.3/61.4	
DHW capacity	L	190					
Hot water heater capacity	kW	1.5					
Expansion vessel capacity	L	12					
Leaving water temperature range	Max	°C					
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	kW		kW			
		6.0(3.0kW×2pcs.)		9.0(3.0kW×3pcs.)			
<b>Outdoor unit specification</b>							
Power source	Single-phase, 230 V 50 Hz		3-phase, 400 V 50 Hz				
Current	Max	A		A			
		28.0		14.0			
Dimensions H × W × D	mm	1,428 × 1,080 × 480		1,428 × 1,080 × 480			
Weight (Net)	kg	137		138			
Refrigerant	Type (Global Warming Potential)	R410A (2,088)		R410A (2,088)			
Additional refrigerant charge amount	Charge	kg		kg			
		3.80		3.80			
Connection pipe	Diameter	Liquid	mm		mm		
		Gas	Ø 9.52		Ø 9.52		
	Length	Min/Max	m		m		
		Length(Pre-charge)	5/30		5/30		
Height difference	Max	m		m			
		15		15			
Operation range	Heating	°C		°C			
		-25 to 35		-25 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.

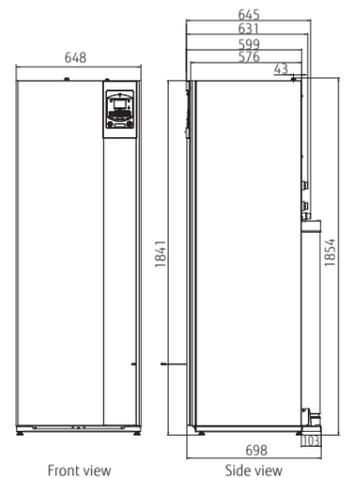
\*2: All information of ErP can be available for downloaded from <https://www.fujitsu-general.com/global/support/downloads/search/index.html>

Dimensions

**Outdoor Unit:**  
Single Phase: WOYG160LJL  
3 Phase: WOYK150LJL/WOYK170LJL



**Hydraulic Indoor Unit:**  
Single Phase: WGY160DJ6  
3 Phase: WGYK170DJ9



for Split DHW Integrated Type High Power Series

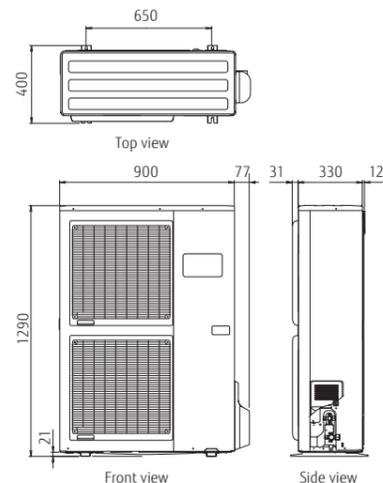
Specifications

Model Name	Hydraulic indoor unit Outdoor unit	WGYG140DG6 WOYG112LHT	WGYG140DG6 WOYG140LCTA	WGYK160DG9 WOYK112LCTA	WGYK160DG9 WOYK140LCTA	WGYK160DG9 WOYK160LCTA
<b>Capacity range</b>						
7°C/35°C floor heating *1	Heating capacity	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 *1	Heating capacity	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 *1	Heating capacity	10.38	11.54	10.38	12.20	13.50
	Input power	4.32	5.08	4.28	5.13	5.40
	COP	2.40	2.27	2.43	2.38	2.50
<b>Space heating characteristics**</b>						
Temperature application	°C	55	35	55	35	55
Energy efficiency class		A+	A++	A+	A+	A+
Rated heat output (P <sub>rated</sub> )	kW	9	11	11	13	9
Seasonal space heating energy efficiency (η <sub>s</sub> )	%	112	151	113	148	112
Annual energy consumption	kWh	6,704	6,062	8,041	6,824	6,669
Sound power level	Hydraulic indoor unit	46		46		46
	Outdoor unit	68		69		71
<b>Domestic hot water characteristics**</b>						
Load profile		L				
Energy efficiency class		A				
Energy efficiency (η <sub>wh</sub> )	%	88				
Annual electricity consumption	kWh	1166				
<b>Hydraulic indoor unit Specification</b>						
Power source		Single-phase 230 V 50 Hz			3-phase, 400 V 50 Hz	
Dimensions H×W×D	mm	1,840×648×698			1,840×648×698	
Weight (Net)	kg	152			152	
Water circulation	L/min	19.5/39.0	24.4/28.7	19.5/39.0	24.4/48.7	27.4/54.8
DHW capacity	L	190				
Hot water heater capacity	kW	1.5				
Expansion vessel capacity	L	12				
Leaving water temperature range	Max °C	60				
Water pipe connection diameter	Flow/Return	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.)	
<b>Outdoor unit specification</b>						
Power source		Single-phase 230 V 50 Hz			3-phase, 400 V 50 Hz	
Current	Max	A	22.0	25.0	9.0	10.5
Dimensions H × W × D	mm	1,290 × 900 × 330			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			50
Connection pipe	Diameter	Liquid	Ø 9.52			
		Gas	Ø 15.88			
	Length	Min/Max	5/20			
		Length(Pre-charge)	15			
Height difference	Max	15				
Operation range	Heating	°C -25 to 35				

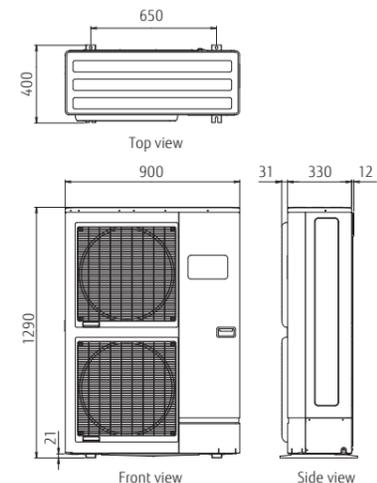
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.  
\*2:All information of ErP can be available for downloaded from <https://www.fujitsu-general.com/global/support/downloads/search/index.html>

Dimensions

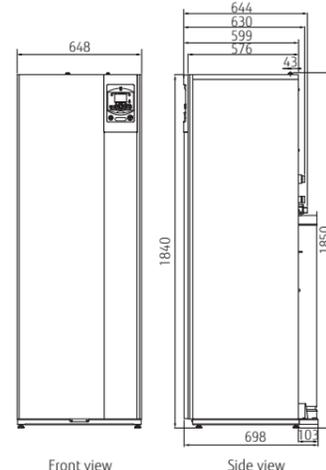
**Outdoor Unit:**  
Single Phase: WOYG112LHT/WOYG140LCTA



3 Phase: WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



**Hydraulic Indoor Unit:**  
Single Phase: WGYG140DG6  
3 Phase: WGYK160DG9



for Split DHW Integrated Type Comfort Series

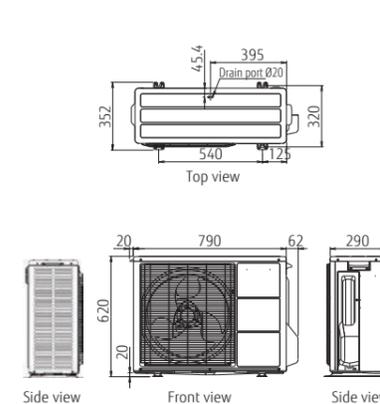
Specifications

Model Name	Hydraulic indoor unit Outdoor unit	WGYA050DG6 WOYA060LFCA	WGYA100DG6 WOYA060LFCA	WGYA100DG6 WOYA080LFCA	WGYA100DG6 WOYA100LFCA
<b>Capacity range</b>					
7°C/35°C floor heating *1	Heating capacity	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 *1	Heating capacity	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 *1	Heating capacity	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
<b>Space heating characteristics**</b>					
Temperature application	°C	55	35	55	35
Energy efficiency class		A+	A++	A+	A+
Rated heat output (P <sub>rated</sub> )	kW	4	4	5	5
Seasonal space heating energy efficiency (η <sub>s</sub> )	%	115	169	115	169
Annual energy consumption	kWh	3,026	2,160	3,180	2,505
Sound power level	Hydraulic indoor unit	46		46	
	Outdoor unit	65	60	65	63
<b>Domestic hot water characteristics**</b>					
Load profile		L			
Energy efficiency class		A+			
Energy efficiency (η <sub>wh</sub> )	%	120			
Annual electricity consumption	kWh	880			
<b>Hydraulic indoor unit Specification</b>					
Power source		Single-phase 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	Ø 25.4/Ø 25.4			
Hot water pipe connection diameter	mm	Ø 19.05			
Backup heater	Capacity	6.0(3.0kW×2pcs.)			
<b>Outdoor unit specification</b>					
Power source		Single-phase 230 V 50 Hz			
Current	Max	A	12.5	17.5	18.5
Dimensions H × W × D	mm	620 × 790 × 290		830 × 900 × 330	
Weight (Net)	kg	41		42	
Refrigerant	Type (Global Warming Potential)	R410A (2,088)			
Additional refrigerant charge amount	Charge	kg	1.10	1.40	1.80
Connection pipe	Diameter	Liquid	Ø 6.35		
		Gas	Ø 12.70		
	Length	Min/Max	5/30		
		Length(Pre-charge)	15		
Height difference	Max	20			
Operation range	Heating	°C -20 to 35			

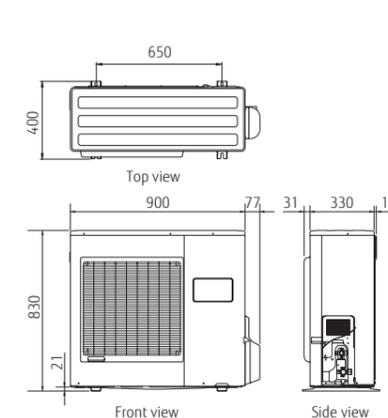
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.  
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Dimensions

**Outdoor Unit:**  
WOYA060LFCA/WOYA080LFCA



WOYA100LFCA



**Hydraulic Indoor Unit:**  
WGYA050DG6/WGYA100DG6

