



PRODUCT LINEUP

AIR TO WATER

For RESIDENTIAL

Room Heating & Cooling

Domestic Hot Water

Swimming Pool

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.

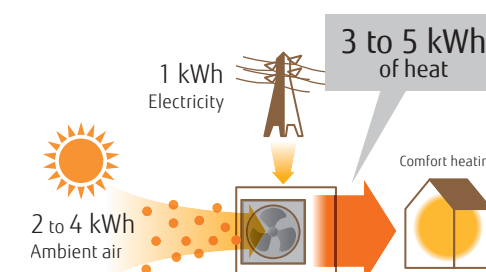
WATERSTAGE™



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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.





HOME HEATING

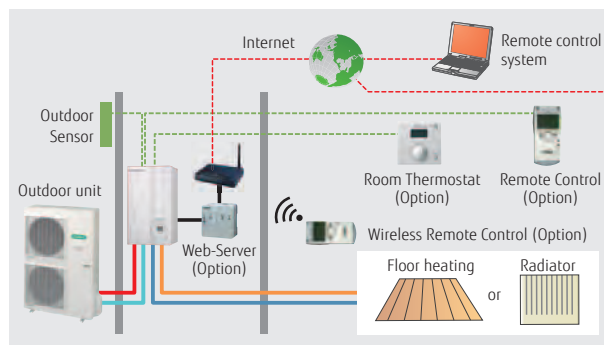
Wide range lineup suited for regional characteristics, family structure, and application. We provide various products to meet your needs from High Power via heating-centered series to reasonably-priced compact series

WATERSTAGE™



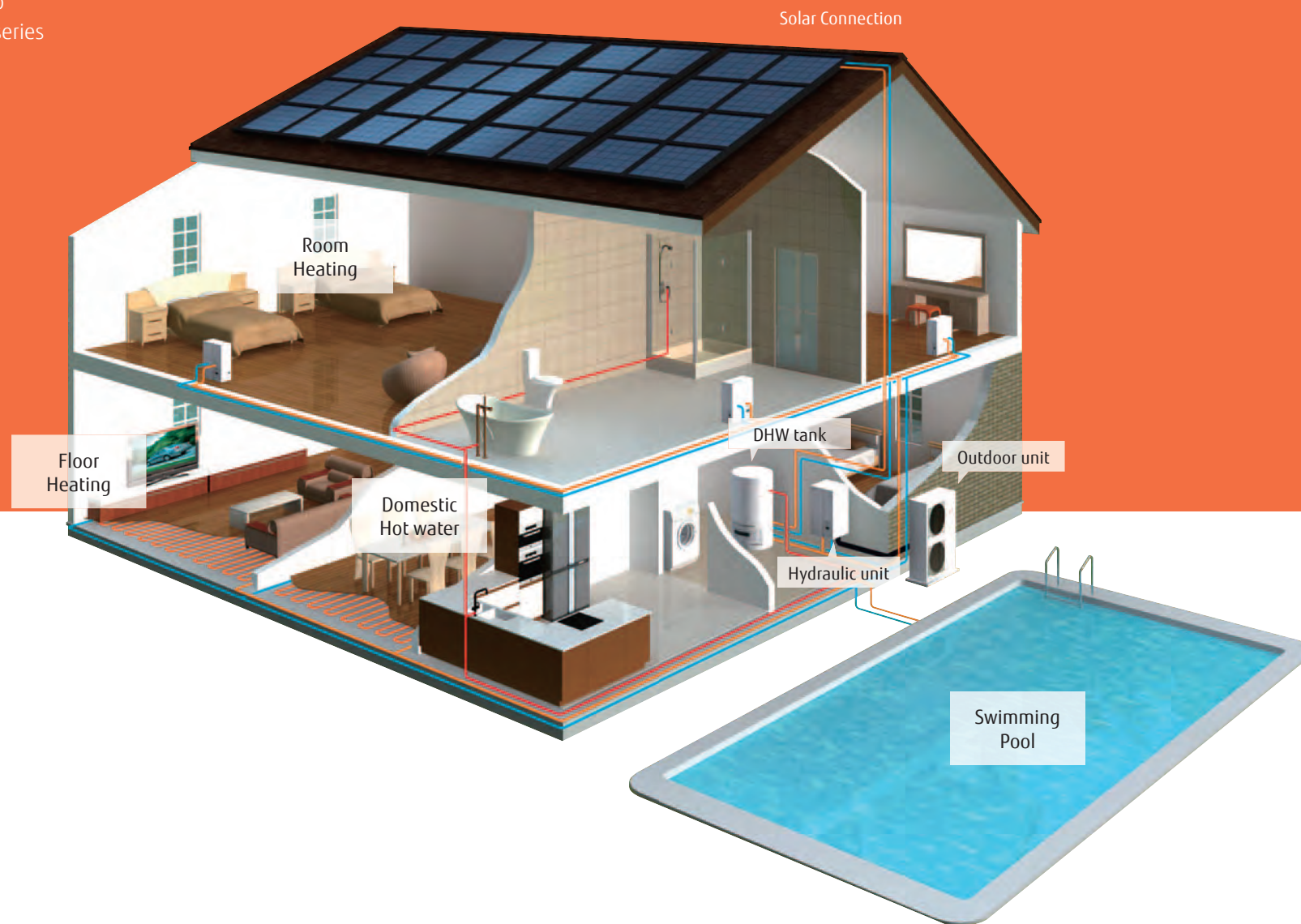
High leaving water temperature

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



Smart control

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



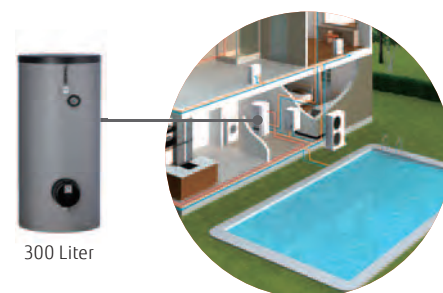
For Room heating & domestic hot water

Split type High Power Series

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.



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+ 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.

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.

Appearance-oriented compact outdoor unit

Split type Comfort series

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

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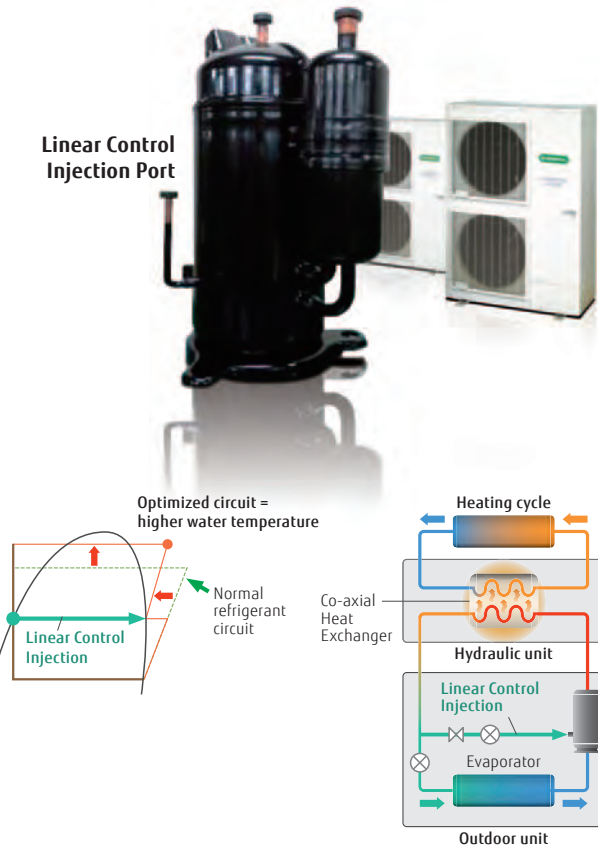


CORE TECHNOLOGY

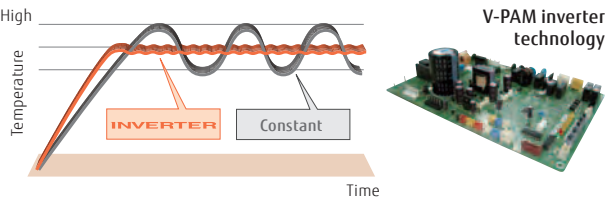
High Efficiency

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.



Accurate temperature control
by DC inverter technology

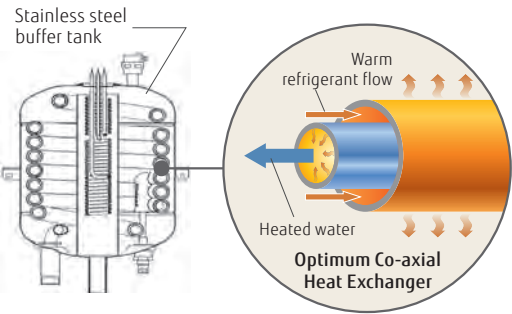


For Hydraulic Indoor Unit
Class A pump

Energy saving pump with constant volume or pressure adjustment function.

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	16
Split/Split	High Power series Single phase Page 244				 WSHG140DG6 / WOHG112LHT	 WSHG140DG6 / WOHG140LCTA	
	Hydraulic Indoor Unit/Outdoor Unit						
	High Power series 3 phase Page 244				 WSHK160DG9 / WOHK112LCTA	 WSHK160DG9 / WOHK140LCTA	 WSHK160DG9 / WOHK160LCTA
Split/DHW integrated	Comfort series Page 244	 WSHA050DG6 / WOHA060LFCA	 WSHA100DG6 / WOHA060LFCA	 WSHA100DG6 / WOHA080LFCA	 WSHA100DG6 / WOHA100LFTA		
	Hydraulic Indoor Unit/Outdoor Unit						
	High Power series Single phase Page 244				 WGHG140DG6 / WOHG112LHT	 WGHG140DG6 / WOHG140LCTA	
Split/DHW integrated	High Power series 3 phase Page 244				 WGHK160DG9 / WOHK112LCTA	 WGHK160DG9 / WOHK140LCTA	 WGHK160DG9 / WOHK160LCTA
	Hydraulic Indoor Unit/Outdoor Unit						
	Comfort series Page 244	 WGHA050DG6 / WOHA060LFCA	 WGHA100DG6 / WOHA060LFCA	 WGHA100DG6 / WOHA080LFCA	 WGHA100DG6 / WOHA100LFTA		
Split/DHW integrated	Hydraulic Indoor Unit/Outdoor Unit						

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

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

High power series
Comfort series

WATERSTAGE™



High power series

Hydraulic indoor unit:

WSHG140DG6/[3phase] WSHK160DG9

Outdoor unit:

WOHG112LHT/WOHG140LCTA

[3phase] WOHK112LCTA/WOHK140LCTA/WOHK160LCTA

Comfort series

Hydraulic indoor unit:

WSHA050DG6/WSHA100DG6

Outdoor unit:

WOHA060LFCA/WOHA080LFCA/WOHA100LFTA



Hydraulic indoor unit
Single Phase/
3 Phase

Outdoor unit
Single Phase
11/14 kW

3 Phase
11/14/16 kW



Hydraulic indoor unit

Outdoor unit
5/6/8 kW

10 kW

Split DHW Integrated Type

High power series
Comfort series

WATERSTAGE™



High power series

Hydraulic indoor unit:

WGHG140DG6/[3phase] WGHK160DG9

Outdoor unit:

WOHG112LHT/WOHG140LCTA

[3phase] WOHK112LCTA/WOHK140LCTA/WOHK160LCTA

Comfort series

Hydraulic indoor unit:

WGHA050DG6/WGHA100DG6

Outdoor unit:

WOHA060LFCA/WOHA080LFCA/WOHA100LFTA



Hydraulic indoor unit
Single Phase/
3 Phase

Outdoor unit
Single Phase
11/14 kW

3 Phase
11/14/16 kW



Hydraulic indoor unit

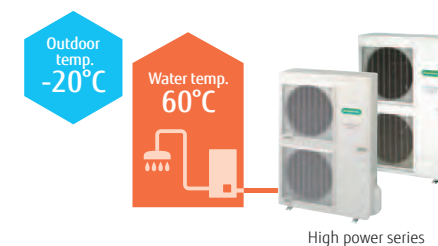
Outdoor unit
5/6/8 kW

10 kW

High leaving water temperature

High power series:

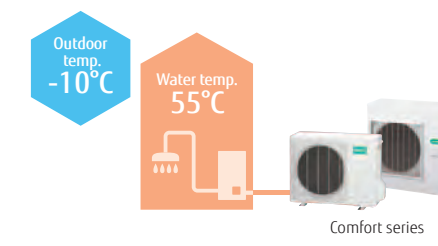
High leaving water temperature of 60°C is kept even when outdoor temperature is down to -20°C without using backup heaters.



High power series

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.



Comfort series

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

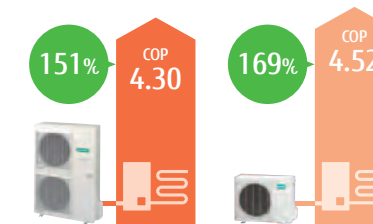
High COP

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

Energy efficiency class



Seasonal space heating energy efficiency (η_s)



High power series
(11 kW class)

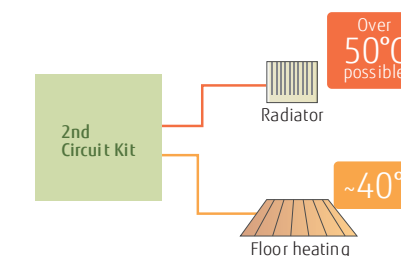
Comfort series
(5 kW class)

Condition : Outdoor Temp. 7°C Heating Temp. 35°C.

2 Zone individual control*

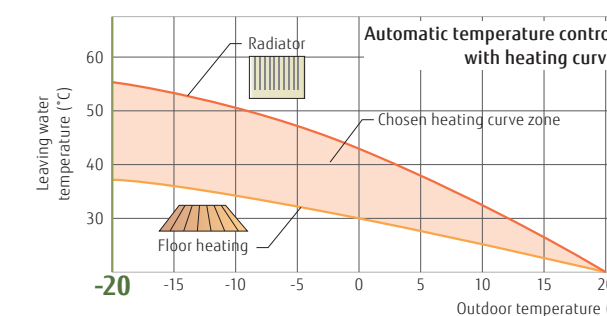
2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)*

*: Optional parts are required.

































Automatic heating curve control

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



Optional Parts

Product Name	Model Name	Split										Split DHW integrated type									
		High Power					Comfort					High Power					Comfort				
		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	11	14
2nd Circuit Kit	 UTW-KZSXE	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—
	 UTW-KZDXE	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●	●	●	●
Boiler Connection Kit	 UTW-KBSXD	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—
	 UTW-KBDXD	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●	●	●	●
Balancing Vessel	 UTW-TEVXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DHW Kit	 UTW-KDWXD (External)	●	●	●	●	●	●	●	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
DHW Tank	200 Liter 300 Liter 400 Liter  UTW-T20AXH UTW-T30AXH UTW-T40AXH	●	●	●	●	●	●	●	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
	200 Liter 300 Liter 400 Liter  UTW-T20BXH UTW-T30BXH UTW-T40BXH	●	●	●	●	●	●	●	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
Circulating Pump	 UTW-PHFYG	●	●	●	●	●	—	—	—	—	●	●	●	●	●	—	—	—	—	—	—
Swimming Pool Kit	 UTW-KSPXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat Exchanger for Swimming Pool Kit	 UTW-ESPXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cooling Kit	 UTW-KCLXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
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									
		High Power					Comfort					High Power					Comfort				
		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	11	14
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-M0SXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RF Modules	 for BSB-Port UTW-MRCXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Web Server	 UTW-KW1XD UTW-KW4XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
LPB Clip	 UTW-KL1XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
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	 UTW-XWZXZ2	●	●	●	●	●	—	—	—	—	●	●	●	●	●	—	—	—	—	—	—

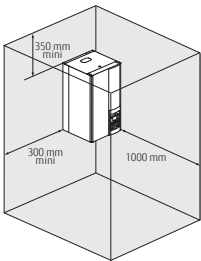
*1: DHW operation is possible without DHW Kit and DHW Tank. ● : Available — : Not Available
*2: Cooling operation is possible without cooling kit
*3: 19 Languages included, no separate Eastern European RC necessary. C74TXF: Built in Room Temperature sensor C74HXF: Built in Room temperature and Humidity 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

Installation Limitations

Equipment Installation

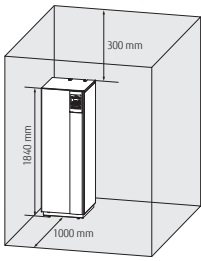
Split type Hydraulic indoor unit

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



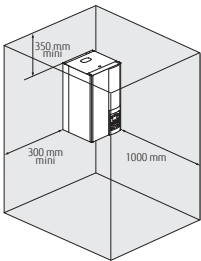
Split DHW integrated type Hydraulic indoor unit

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



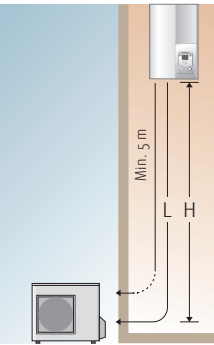
Monobloc Type Hydraulic indoor unit

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



Piping and Wiring

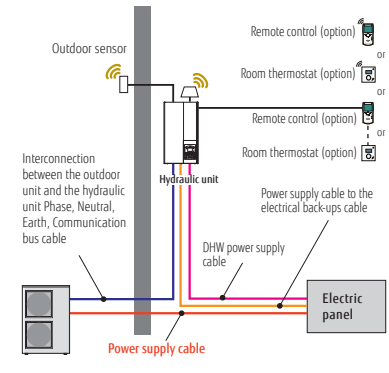
Split type



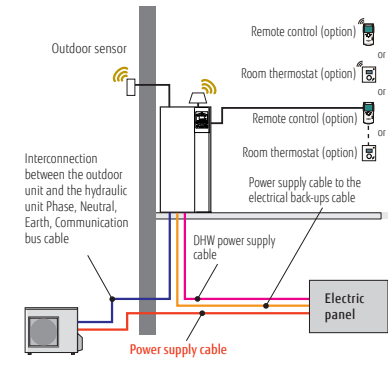
Series	Capacity range(kW)	H (m)	L (m)
Comfort	5	±20	5-30
	6		
	8		
	10		
High power	11	±15	5-20
	14		
	16		

Electrical wiring

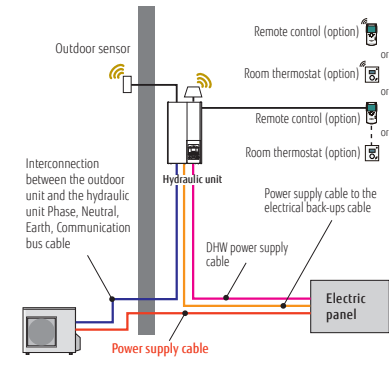
Split type



Split DHW integrated type



Monobloc Type with Hydraulic indoor unit



Specifications & Dimensions

Split type High power series

Specifications

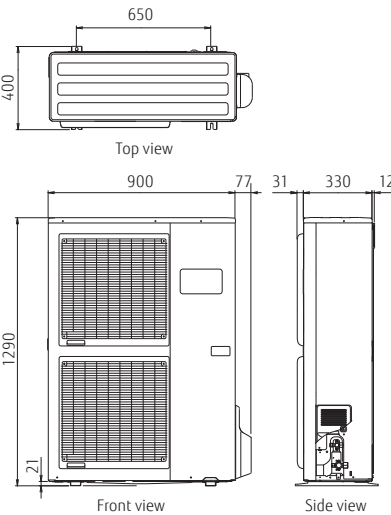
Model Name	Hydraulic indoor unit		WSHG140DG6		WSHG140DG6		WSHK160DG9		WSHK160DG9		WSHK160DG9						
Capacity range	Outdoor unit		WOHG112LHT		WOHG140LCTA		WOHK112LCTA		WOHK140LCTA		WOHK160LCTA						
7°C/35°C floor heating * ¹	Heating capacity	kW	11		14		11		14		16						
	Input power		10.80		13.50		10.80		13.50		15.17						
	COP		2.54		3.23		2.51		3.20		3.70						
2°C/35°C floor heating * ¹	Heating capacity	kW	4.25		4.18		4.30		4.22		4.10						
	Input power		10.77		12.00		10.77		13.00		13.50						
	COP		3.44		3.87		3.40		4.15		4.34						
-7°C/35°C floor heating* ¹	Heating capacity	kW	3.13		3.10		3.17		3.13		3.11						
	Input power		10.38		11.54		10.38		12.20		13.50						
	COP		4.32		5.08		4.28		5.13		5.40						
			2.40		2.27		2.43		2.38		2.50						
Space heating characteristics* ²																	
Temperature application			°C		55		35		55		35						
Energy efficiency class					A+		A++		A+		A++						
Rated heat output (P _{rated})			kW		9		11		11		13						
Seasonal space heating energy efficiency(η _s)			%		112		151		113		148						
Annual energy consumption			kWh		6704		6062		8041		6824						
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46		46						
	Outdoor unit		68		69		69		68		70						
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						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		24.4/48.7		27.4/54.8		
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		Ø 25.4/Ø 25.4						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						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)												
Additional refrigerant charge amount			Charge		kg		2.50										
					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												
Operation range	Height difference	Max	m		15												
		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 www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

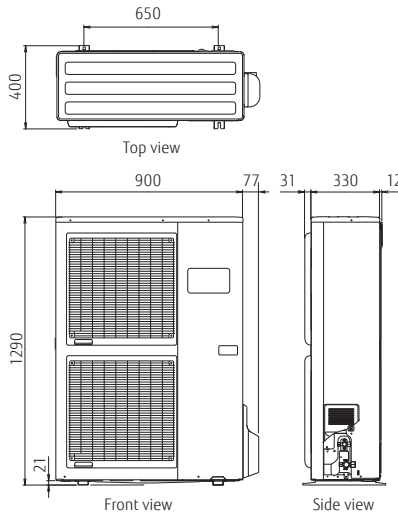
Dimensions

High power series

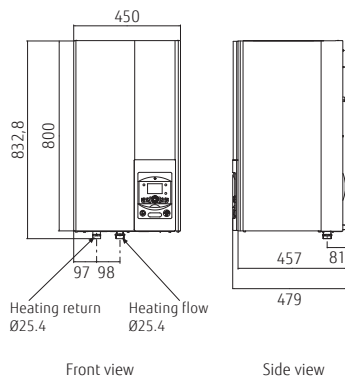
Outdoor Unit:
WOHG112LHT/WOHG140LCTA



WOHG112LHT/WOHG140LCTA



Hydraulic Indoor Unit:
WSHG140DG6/WSHK160DG9



Specifications & Dimensions

Split type Comfort series

Specifications

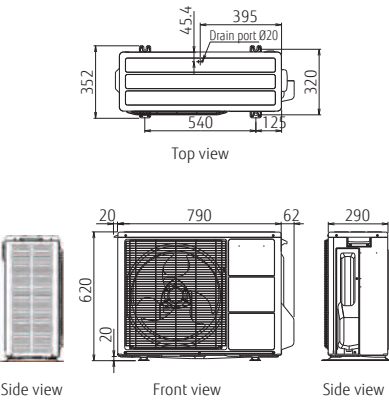
Model Name		Hydraulic indoor unit		WSHA050DG6		WSHA100DG6		WSHA100DG6		WSHA100DG6	
		Outdoor unit		WOHA060LFCA		WOHA060LFCA		WOHA080LFCA		WOHA100LFTA	
Capacity range				5		6		8		10	
7°C/35°C floor heating * ¹	Heating capacity	kW	4.50		6.00		7.50		10.00		
	Input power		0.996		1.41		1.84		2.49		
	COP		4.52		4.27		4.08		4.02		
2°C/35°C floor heating * ¹	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* ¹	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**											
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 _{rated})		kW		4	4	5	5	6	7	8	8
Seasonal space heating energy efficiency(η _s)		%		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		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	
		mm		Ø 6.35				Ø 9.52		Ø 9.52	
Connection pipe	Diameter	Liquid									
		Gas									
	Length	Min/Max	m	Ø 12.7		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.

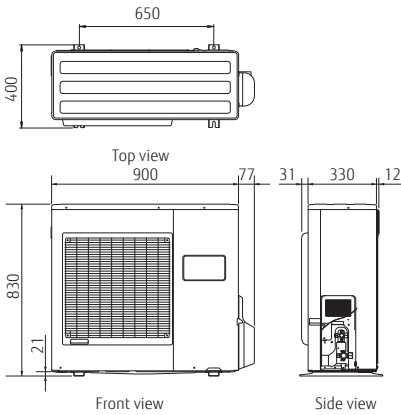
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

Dimensions

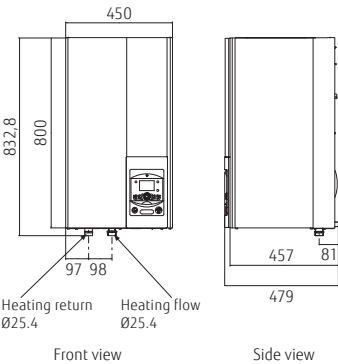
Outdoor Unit:
WOHA060LFCA/WOHA080LFCA



WOHA100LFTA



Hydraulic Indoor Unit:
WSHA050DG6/WSHA100DG6



Split DHW Integrated type High power series

Specifications

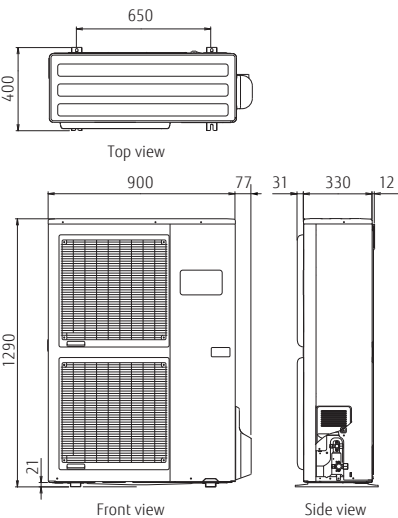
Model Name		Hydraulic indoor unit		WGHG140DG6		WGHG140DG6		WGHK160DG9		WGHK160DG9		WGHK160DG9		
		Outdoor unit		WOHG112LHT		WOHG140LCTA		WOHK112LCTA		WOHK140LCTA		WOHK160LCTA		
Capacity range				11		14		11		14		16		
7°C/35°C floor heating *1	Heating capacity	kW	10.80		13.50		10.80		13.50		15.17			
	Input 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 *1	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*1	Heating capacity	kW	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			
Space heating characteristics**														
Temperature application		°C	55	35	55	35	55	35	55	35	55	35		
Energy efficiency class			A+	A++	A+	A+	A+	A++	A+	A++	A+	A+		
Rated heat output(P _{rated})		kW	9	11	11	13	9	11	11	13	13	14		
Seasonal space heating energy efficiency(η _s)		%	112	151	113	148	112	154	117	150	117	149		
Annual energy consumption		kWh	6704	6062	8041	6824	6669	5930	7803	6738	9062	7408		
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46		46			
	Outdoor unit		68		69		69		68		71			
Domestic hot water characteristics**														
Load profile			L											
Energy efficiency class			A											
Energy efficiency(η _{wh})		%	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		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											
Water pipe connection diameter		Flow/Return	mm											
Hot water pipe connection diameter		mm	Ø 25.4/Ø 25.4											
Backup heater		Capacity	kW					Ø 19.05						
			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											
		Gas	Ø 9.52											
	Length	Min/Max	m											
		Length(Pre-charge)	m											
Operation range	Height difference	Max	m											
	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.

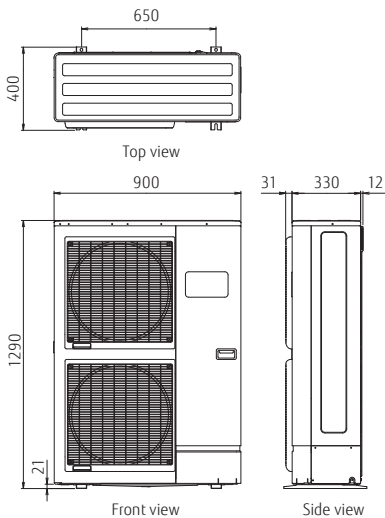
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

Dimensions

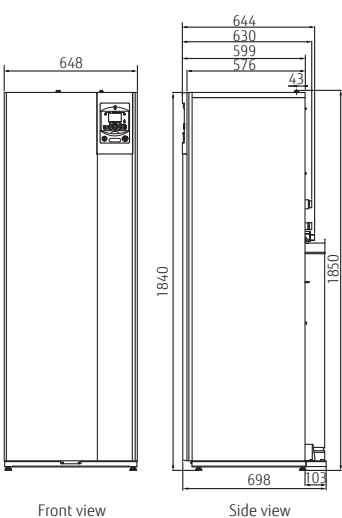
Outdoor Unit:
WOHG112LHT/WOHG140LCTA



WOHK112LCTA/WOHK140LCTA/WOHK160LCTA



Hydraulic Indoor Unit:
WGHG140DG6/WGHK160DG9



Specifications & Dimensions

Split DHW Integrated type Comfort series

Specifications: Split DHW Integrated type Comfort series

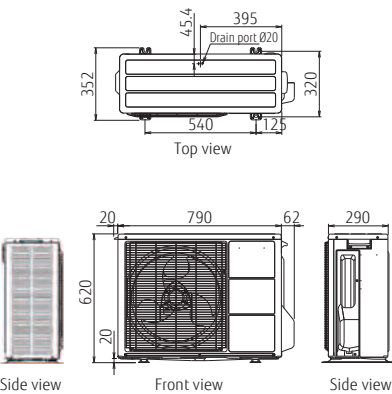
Model Name		Hydraulic indoor unit		WGHA050DG6		WGHA100DG6		WGHA100DG6		WGHA100DG6	
		Outdoor unit		WOHA060LFCA		WOHA060LFCA		WOHA080LFCA		WOHA100LFTA	
Capacity range				5		6		8		10	
7°C/35°C floor heating * ¹	Heating capacity	kW	4.50		6.00		7.50		10.00		
	Input power		0.996		1.41		1.84		2.49		
	COP		4.52		4.27		4.08		4.02		
2°C/35°C floor heating * ¹	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* ¹	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* ²											
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 _{rated})		kW	4	4	5	5	6	7	8	8	
Seasonal space heating energy efficiency(η _s)		%	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* ²											
Load profile			L								
Energy efficiency class			A+								
Energy efficiency(η _{wh})		%	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	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	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		60
Refrigerant		Type (Global Warming Potential)	R410A (2,088)								
Additional refrigerant charge amount		Charge	kg		1.10		1.40		1.80		
			g/m		25		40		9.52		
Connection pipe	Diameter	Liquid	mm		Ø 12.70		Ø 6.35		Ø 15.88		
		Gas									
	Length	Min/Max	m		5/30						
	Length(Pre-charge)		m		15						
Operation range	Height difference	Max	m		20						
		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.

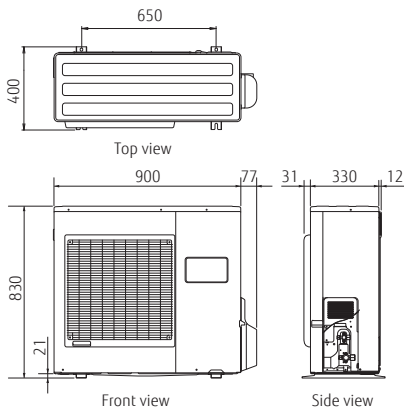
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

Dimensions

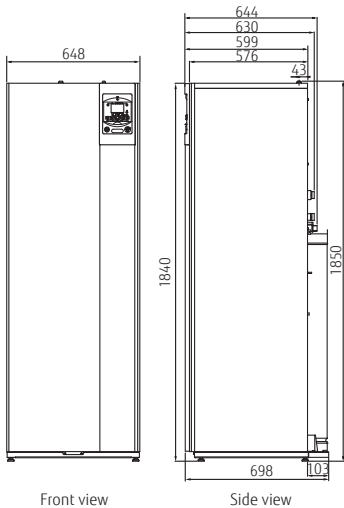
Outdoor Unit:
WOHA060LFCA/WOHA080LFCA



WOHA100LFTA



Hydraulic Indoor Unit:
WGHA050DG6/WGHA100DG6

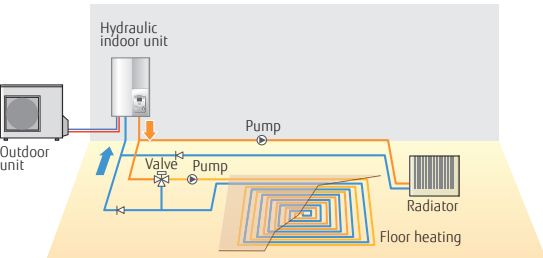


Case Studies

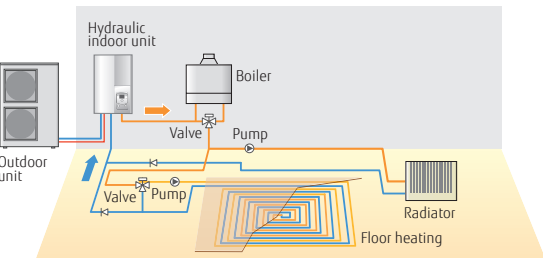
Split Type

2 emitter simultaneous heating (Individual control)

Floor heating + Radiator



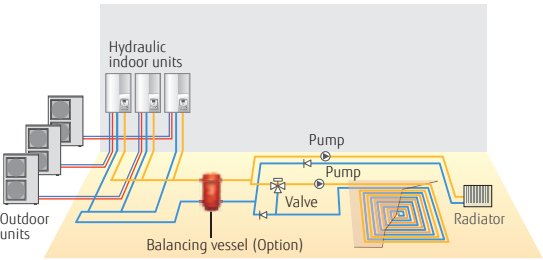
Boiler connected to heating (Boiler + Heating)



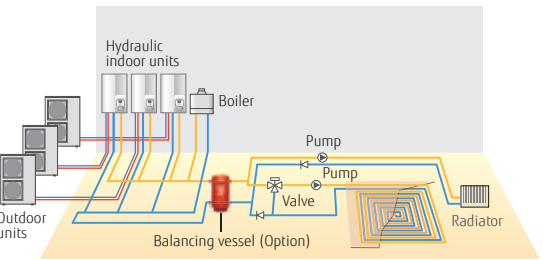
Split Cascade System

2 emitter simultaneous heating (Individual control)

Floor heating + Radiator



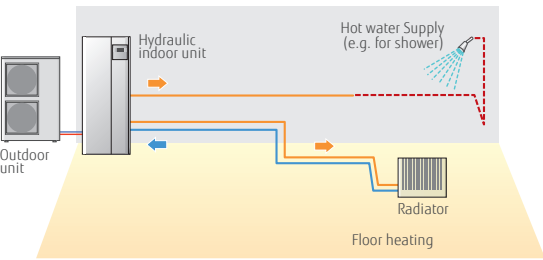
Boiler connected to heating (Boiler + Heating)



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

