High Power series

Single Phase power supply

11kW **14kW**

Hydraulic unit
WSYG140DC6



Outdoor unit
WOYG112LCT
WOYG140LCT

3 Phase power supply

11kW **14kW** **16kW**

Hydraulic unit
WSYK160DC9



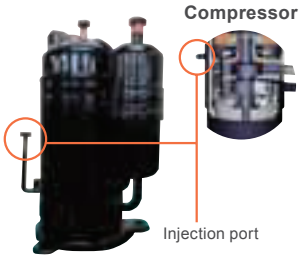
Outdoor unit
WOYK112LCT
WOYK140LCT
WOYK160LCT

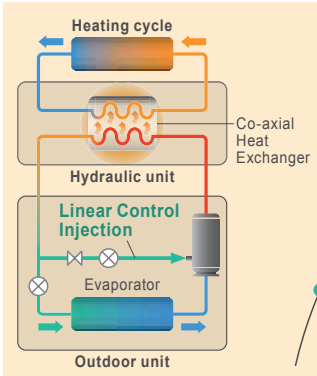


High Power & High Efficiency
Outdoor unit technology

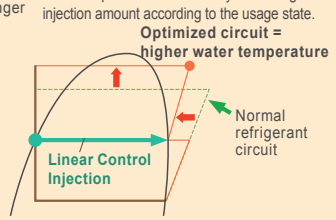


TWIN ROTARY COMPRESSOR with Linear Control Injection port



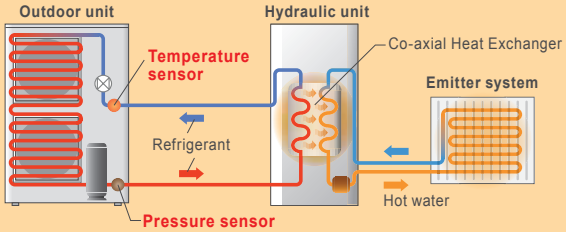


It realizes the high condensing temperature without overheating discharge gas temperature by Linear Control Injection process during compression.
Therefore, the condensing temperature rises up higher than normal circuit. A higher hot water temperature is realized by controlling the injection amount according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

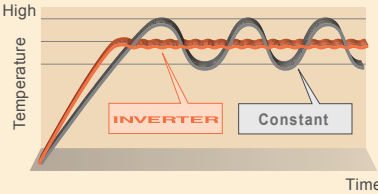


Optimization of refrigerant cycle operation

High power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.

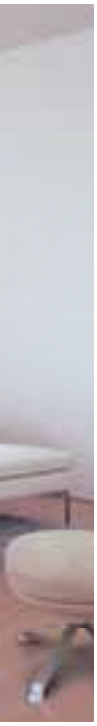


Accurate temperature control by DC inverter technology





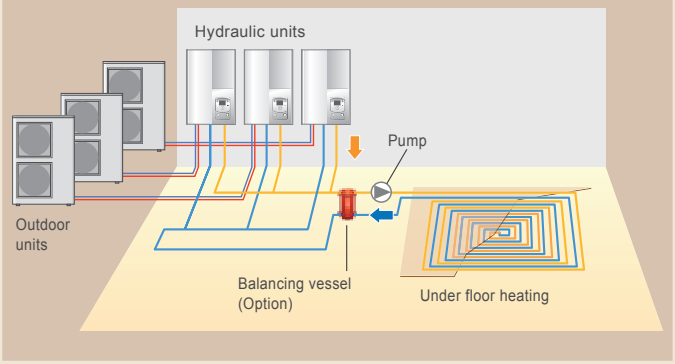
V-PAM inverter technology



High power models realizes high heating capacity and high efficiency by newly developed "Linear Control Injection Technology" and "Co-axial Heat Exchanger". These properties are the key for a reliable heating operation throughout the whole year- even in a strong winter.

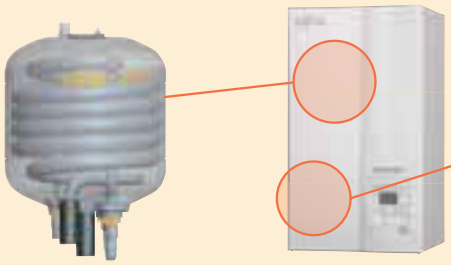
Cascade connection

Large capacities can be realized by combining up to three systems into one control circuit.



Renewed Hydraulic unit design

The redesigned coaxial compact heat exchanger and the new High efficiency pump lead to excellent energy values.



Co-axial Heat Exchanger

HIGH EFFICIENCY CLASS A PUMP

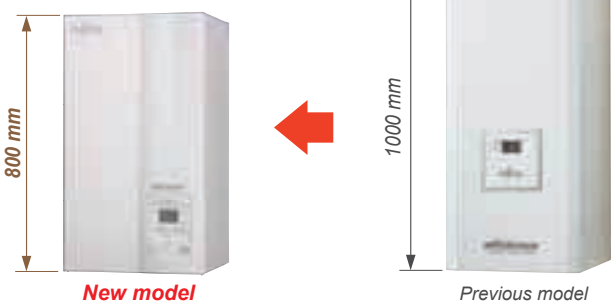


• Adopting High efficiency pump

Energy saving pump with constant volume or pressure adjustment function.

New designed Hydraulic unit allows significant space saving.

Height 20% reduction



New model *Previous model*

High Power series

Powerful Heating

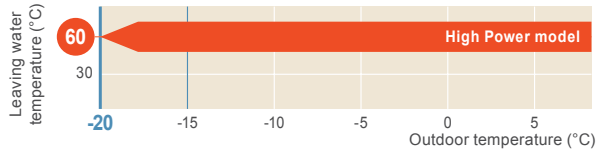
High power models realize high leaving water temperature and high heating capacity even at low ambient temperature by newly developed "Linear Control Injection Technology". It is possible to provide high water temperature and warm rooms in cold regions.

HIGH LEAVING WATER TEMPERATURE

No backup heater*

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

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

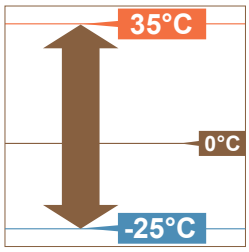


* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

EXTENDED OPERATION RANGE DOWN TO -25°C

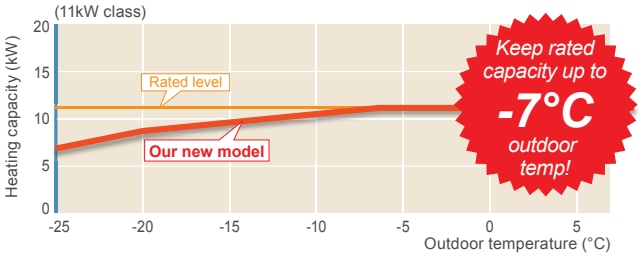
Improved operation range down to -25°C outdoor temperature

Down to -25°C Outdoor temperature



STRONG & POWERFUL HEATING CAPACITY

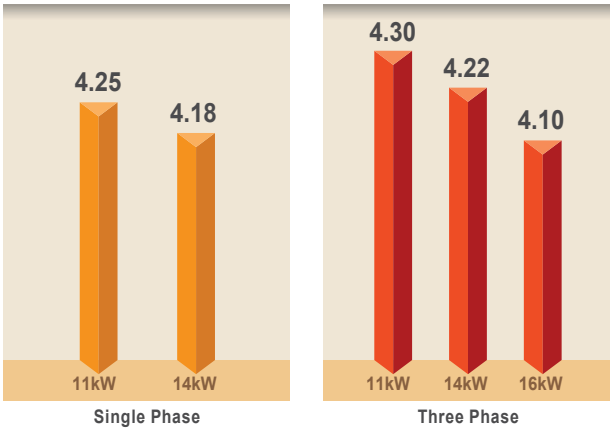
Keeping the rated heating capacity up to -7°C outdoor temperature



High Efficiency

Energy efficiency is improved by the linear Control Injection Technology and the optimization of refrigerant cycle control. High power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.

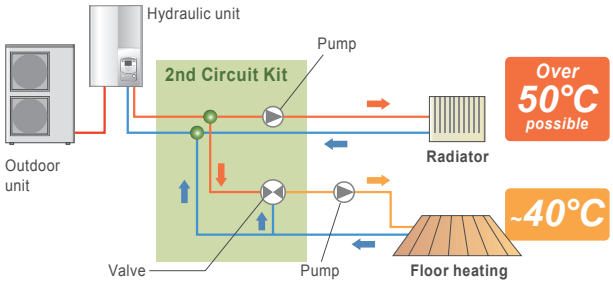
HIGH COP





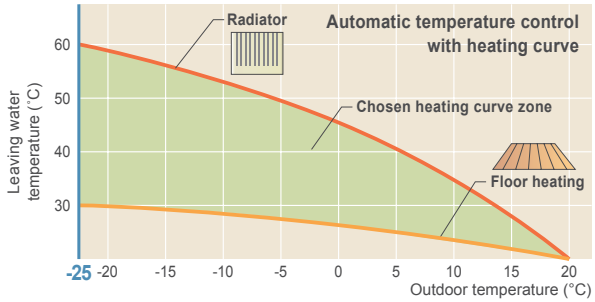
Intelligent Control

2 ZONE INDIVIDUAL CONTROL*



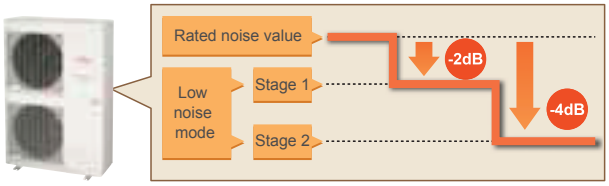
AUTOMATIC HEATING CURVE CONTROL

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



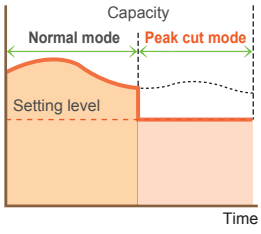
2 STAGE LOW NOISE MODE*

Outdoor unit can be switched to silent mode, depending on the installation environment.



PEAK CUT FUNCTION*

This function performs operation by setting a peak current value and reducing the power consumption.



Mode	The ratio of suppressing the power consumption
1	100%
2	75%
3	50%
4	Almost 0%

AND MORE

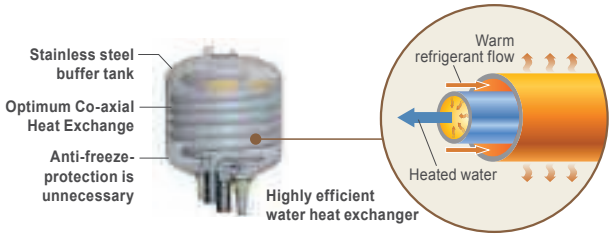
- Cooling operation is possible*
- Anti-Legionella function
- Additional electric heater control for backup
- Cascade connection is possible.* (Future Release)
- Web server can be connected.*

*Optional parts are required.

High Reliability

HIGH DURABILITY

- Corrosion protected
- No flow switch and no filter necessary

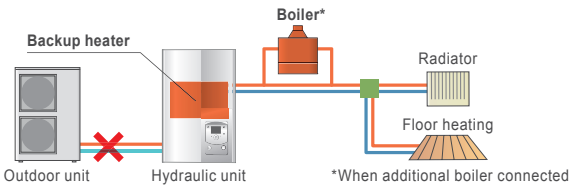


EASY INSTALLATION & MAINTENANCE

- All hydraulic safety & controlling components built in, no additional selection required
- Lifting bars for an installation without any difficulty or risk
- Easy access for maintenance operations
- Refrigerant pump down operation

EMERGENCY OPERATION

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





Smart & Comfort Control

The heating water temperature is controlled automatically depending on outdoor temperature. The place for the sensor can be chosen freely.
The room temperature and operation mode can be easily set. Options appear automatically by “plug & play”.



Simple operation mode setting
•Selecting the heating mode and Domestic hot water operation

Large LCD display
•Operation status display
•Error display
•plain text

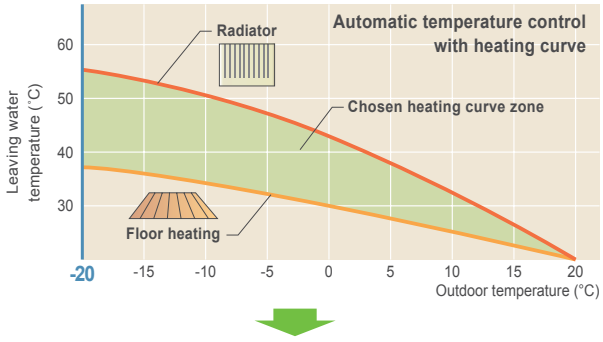
Navigation and setting
•Selecting the heating menu
•Setting program timer



Comfort Control

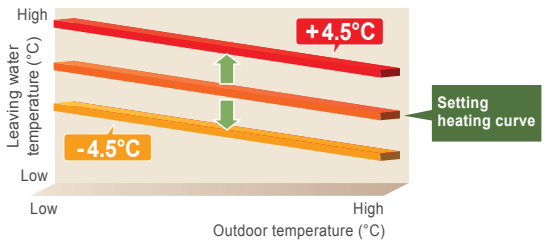
Automatic heating curve operation

Automatic heating curve control based on outdoor temp and setting room temperature.



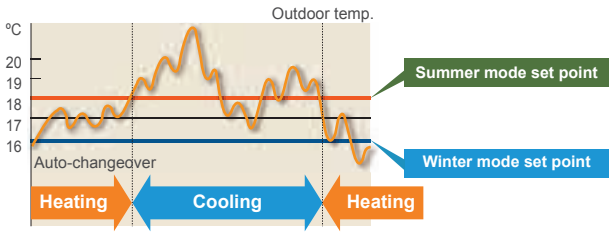
Heating curve off-set Adjust setting room temp.

This can be fine adjusted when too warm or too cold.



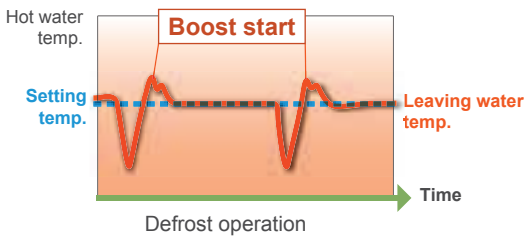
Auto-changeover

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 conditioning.



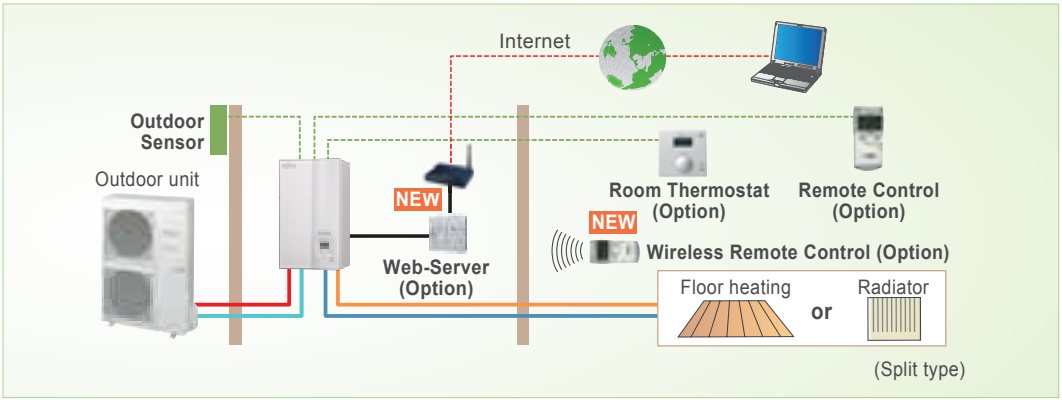
Quick recovery from defrost operation

Maintaining the room temperature during defrost operation by boost start operation



REMOTE CONTROL - EXTENSION

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



Energy Saving

Programmable timer

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

Heating mode

Automatic mode
Comfort/Reduce mode switching automatically according to outdoor temperature

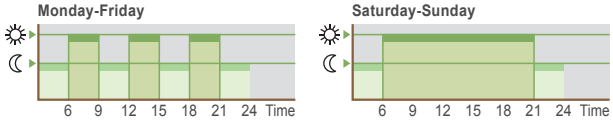
Comfort mode
Constant comfort temperature

Reduce mode
Constant reduce temperature

Protection mode
Stand-by mode with anti-frost protection

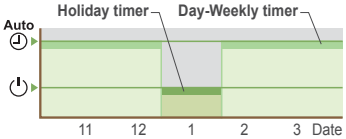
Day-Weekly timer setting

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



Holiday timer setting

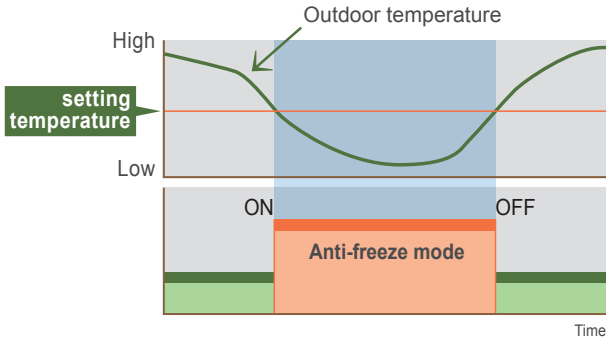
•The holiday timer can be set up for up to 8 periods
•If you are absent for a long time in the winter, freezing of room can be prevented.



Safety Function

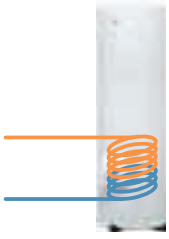
Anti-freeze function

Water circulation and compressor can be automatically performed at low outdoor temperature. Freezing of circulated water can be prevented.



Anti-legionella function

The growth of Legionella in DHW tank is suppressed and safe and clean hot water is supplied at all times.



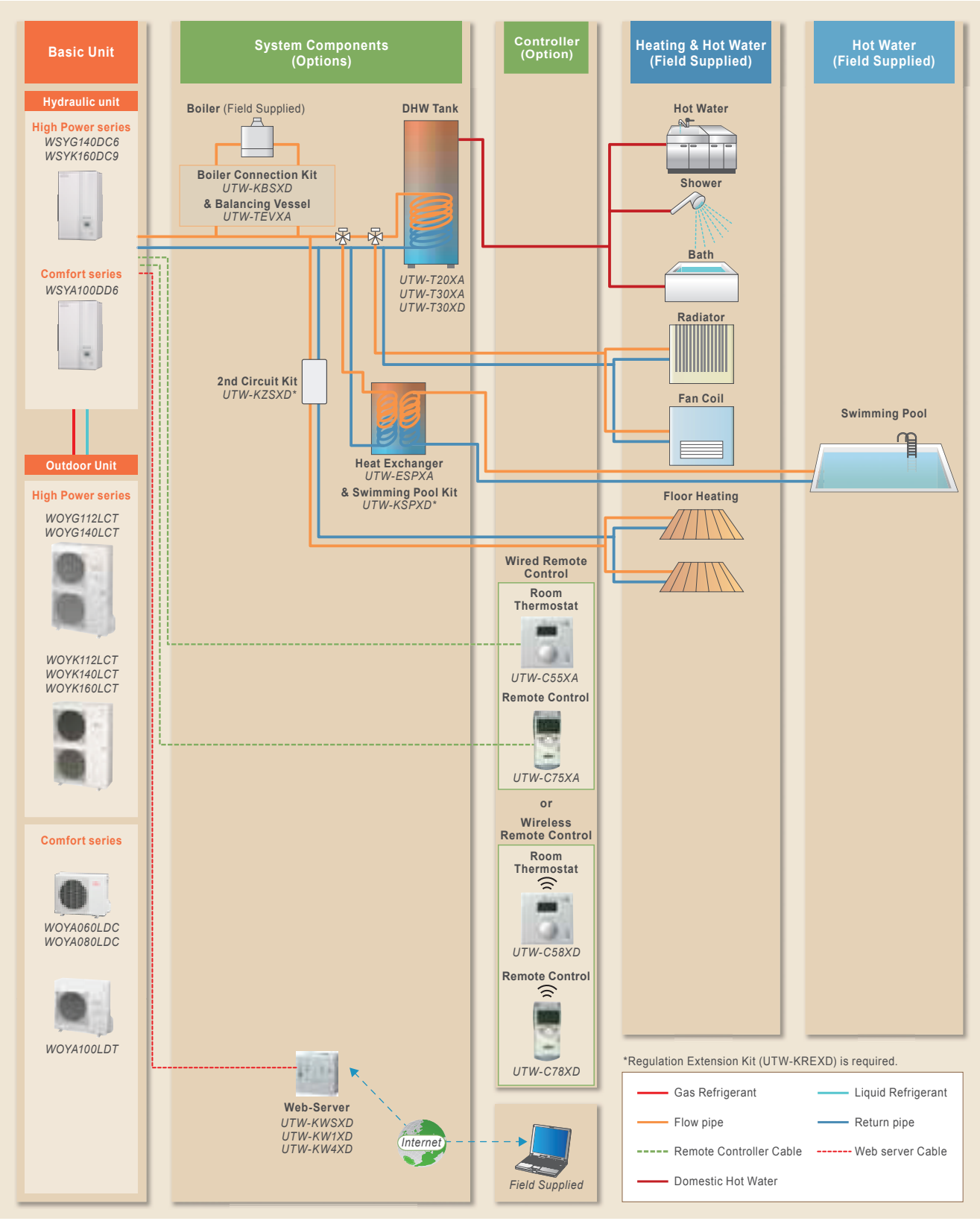
DHW Tank



Total solution concept for comfort inside your home

SPLIT TYPE

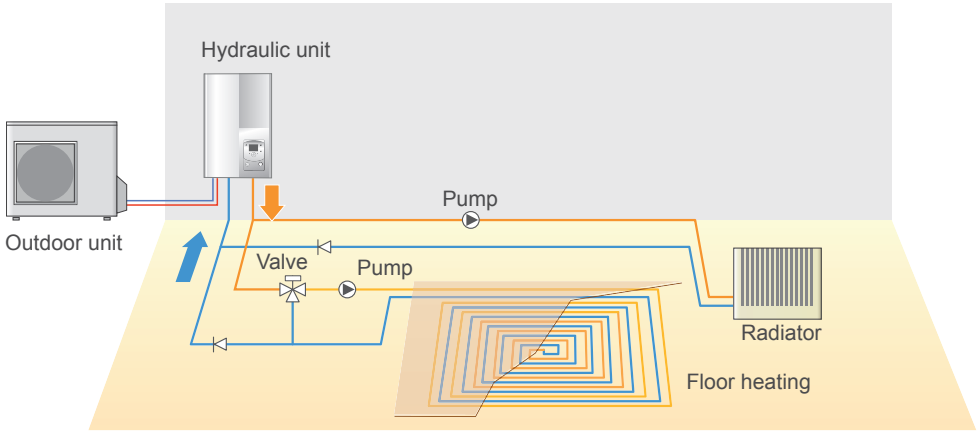
System configuration



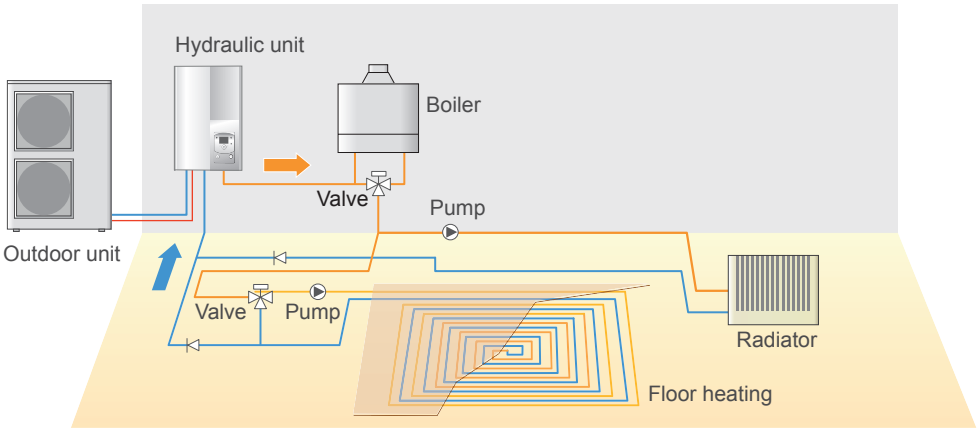
Split Case studies

2 emitter simultaneous heating (Individual control)

Floor heating + Radiator

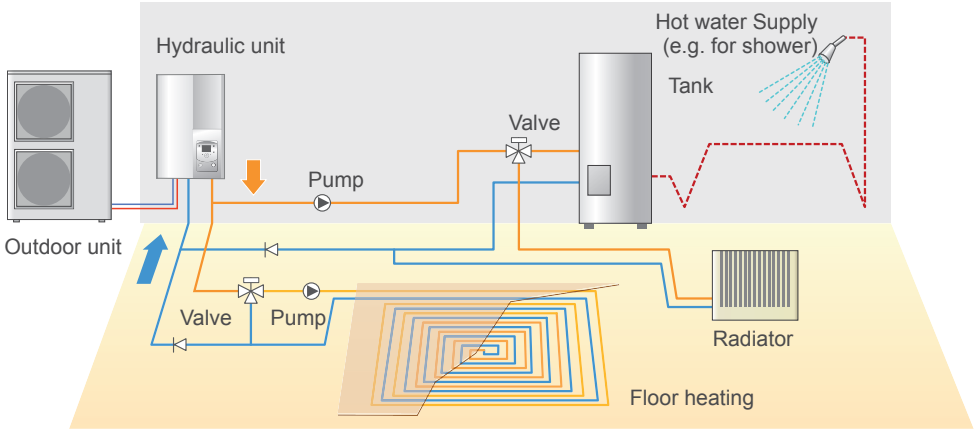


Boiler connected to heating (Boiler + Heating)



3 types of heat distribution

Floor heating + Radiator + Domestic Hot Water



Optional Parts Compatibility

Product Name	Model Name	Split									Monobloc		Split DHW integrated type								
		High Power					Comfort				Compact		High Power					Comfort			
		1Ø		3Ø			1Ø				1Ø		1Ø		3Ø			1Ø			
		11	14	11	14	16	5	6	8	10	8	10	11	14	11	14	16	5	6	8	10
2nd Circuit Kit	UTW-KZSXD	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—
	UTW-KZDXD	—	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●	●
Boiler Connection kit	UTW-KBSXD	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—
	UTW-KBDXD	—	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●	●
Balancing vessel	UTW-TEVXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DHW kit	UTW-KDWXA	—	—	—	—	—	—	—	—	—	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
	UTW-KDWXD	●	●	●	●	●	●	●	●	●	—	—	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
DHW Expansion Vessel kit	UTW-KDEXE	—	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●	●
DHW tank 200 Liter 300 Liter	UTW-T20XA UTW-T30XA	●	●	●	●	●	●	●	●	●	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
DHW tank 300 Liter	UTW-T30XD	●	●	●	●	●	●	●	●	●	●	●	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1	—*1
Circulating pump	UTW-PHFXD	●	●	●	●	●	—	—	—	—	—	—	●	●	●	●	●	—	—	—	—
Swimming Pool kit	UTW-KSPXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	UTW-KSPXD	●	●	●	●	●	●	●	●	●	—	—	●	●	●	●	●	●	●	●	●
Heat Exchanger for swimming pool kit	UTW-ESPXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cooling kit	UTW-KCLXD	●	●	●	●	●	●	●	●	●	—*2	—*2	●	●	●	●	●	●	●	●	●
Regulation Extension Kit	UTW-KREXD	●	●	●	●	●	●	●	●	●	—	—	●	●	●	●	●	●	●	●	●
Solar Regulation Kit	UTW-KSRXE	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—
Mode Exchange Kit	UTW-KMEXE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Low Noise Kit	UTW-KLNXE	●	●	●	●	●	—	—	—	—	—	—	●	●	●	●	●	—	—	—	—
HMI Kit	UTW-KHMXE*5	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●

Product Name	Model Name	Split									Monobloc		Split DHW integrated type								
		High Power					Comfort				Compact		High Power					Comfort			
		1Ø		3Ø			1Ø				1Ø		1Ø		3Ø			1Ø			
		11	14	11	14	16	5	6	8	10	8	10	11	14	11	14	16	5	6	8	10
Remote Controller – Wired	UTW-C75XA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	UTW-C75XA-E*5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remote Controller – Wireless	UTW-C78XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	UTW-C78XD-E*5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Room Thermostat – Wired	UTW-C55XA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Room Thermostat – Wireless	UTW-C58XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Outdoor Sensor Transmitter	UTW-MOSXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RF Modules – for X60-Port	UTW-M60XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RF Modules – for BSB-Port	UTW-MRCXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Web server	UTW-KWSXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	UTW-KW1XD UTW-KW4XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cascade Master Kit (incl. LPB Clip)	UTW-KCMXE	●	●	●	●	●	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—
Cascade Slave Kit (incl. LPB Clip)	UTW-KCSXE	●	●	●	●	●	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—
LPB Clip	UTW-KL1XD	●	●	●	●	●	●	●	●	●	—	—	●	●	●	●	●	●	●	●	●
Base Heater	UTZ-HAMXE	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—	—	—	—
Service Tool (incl.OCI700 adaptor)	UTW-KSTXD	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●	●	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
Service Tool Software	UTW-KPSXD	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4

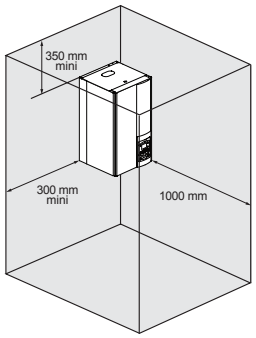
*1: DHW operation is possible without DHW Kit and DHW Tank.
*2: Cooling operation is possible without cooling kit
*3: UTW-KL1XD is required for the connection.
*4: UTW-KSTXD(OCI700 adaptor not included), UTW-KW1XD or UTW-KW4XD is required for the connection.
*5: Eastern European Language(English, Czech Republic, Slovakia, Poland, Turkey, Hungary, Russia, Slovenia, Greece, Serbia)

● : Available — : Not Available

Installation Limitations

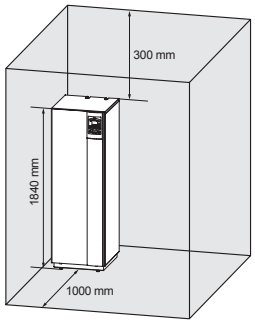
Equipment Installation

Split Type Hydraulic unit



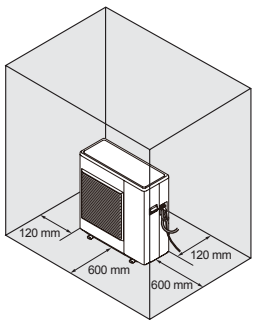
- Hydraulic unit is to be hang on the wall
- Weight < 60kg (including water)
- Distances for maintenance should be respected

Split DHW integrated Type Hydraulic unit



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

Monobloc Type Outdoor unit

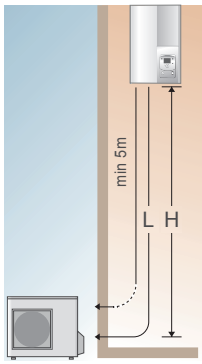


- Floor stand
- Weight 74 kg (without water)
- Distances for maintenance should be kept

Piping and Wiring

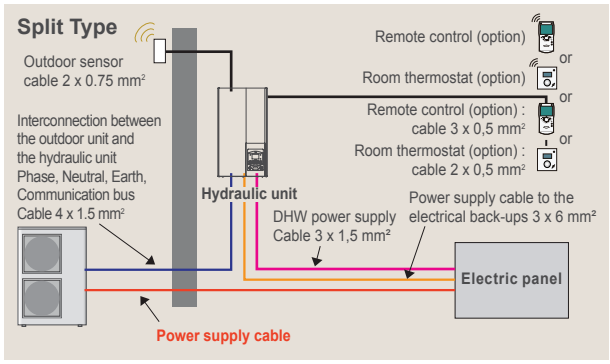
Piping

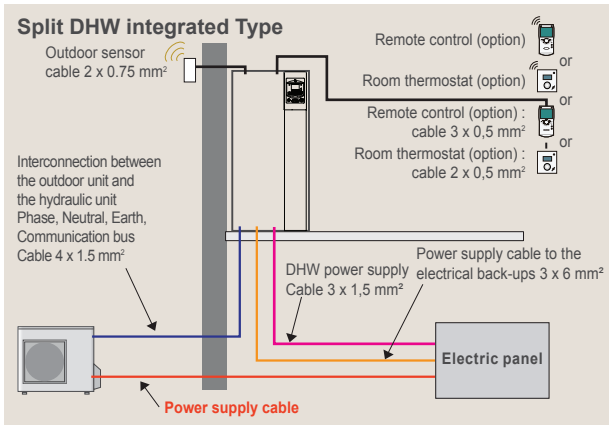
Split Type

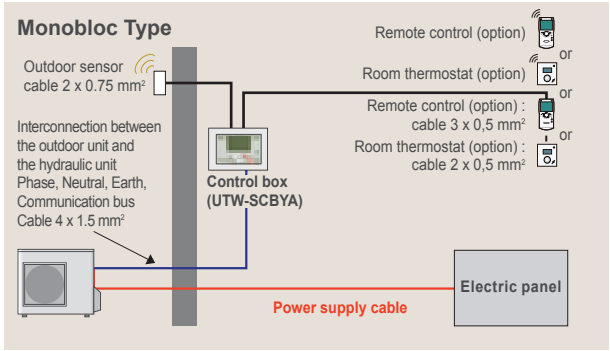


Series	Capacity range(kW)	H (m)	L (m)
Comfort	5	±15	5-20
	6		
	8		
	10		
High power	11		
	14		
	16		

Electrical wiring





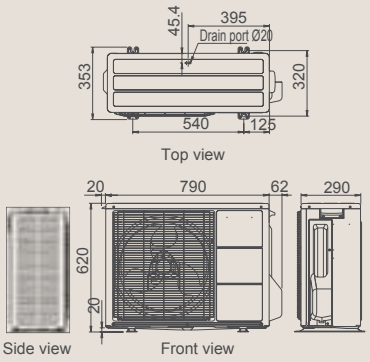


SPLIT TYPE

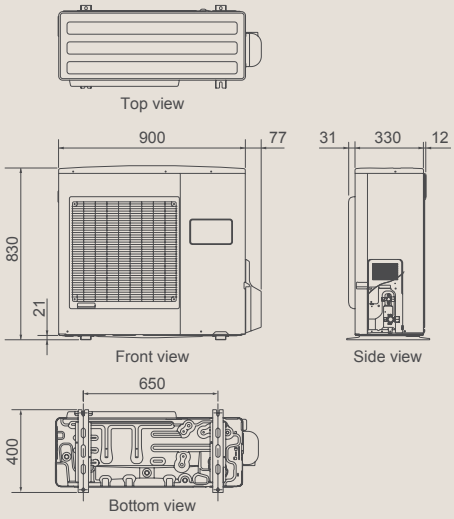
Unit : mm

Outdoor Units Comfort series

WOYA060LDC / WOYA080LDC



WOYA100LDT

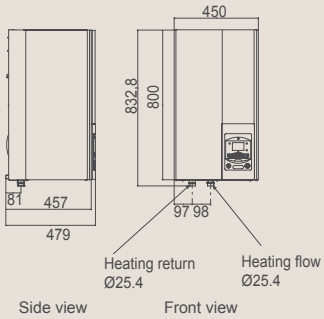


Hydraulic units Split type High Power series

WSYG140DC6 / WSYK160DC9

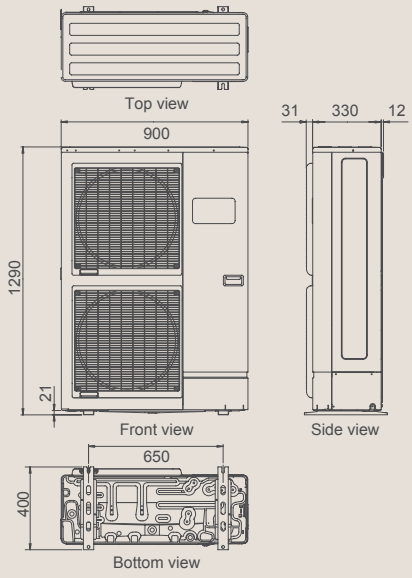
Hydraulic units Split type Comfort series

WSYA050DD6 / WSYA100DD6



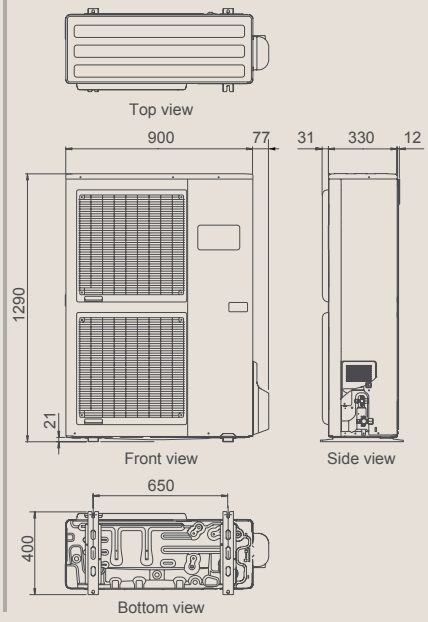
Outdoor Units High Power series

WOYK112LCT / WOYK140LCT / WOYK160LCT



Outdoor Units High Power series

WOYG112LCT / WOYG140LCT

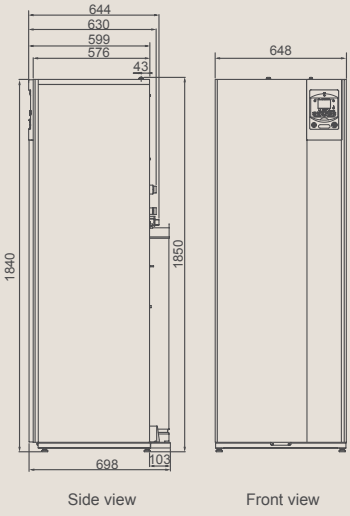


Hydraulic units Split DHW integrated type High Power series

WGYG140DD6 / WGYK160DD9

Hydraulic units Split DHW integrated type Comfort series

WGYA050DD6 / WGYA100DD6

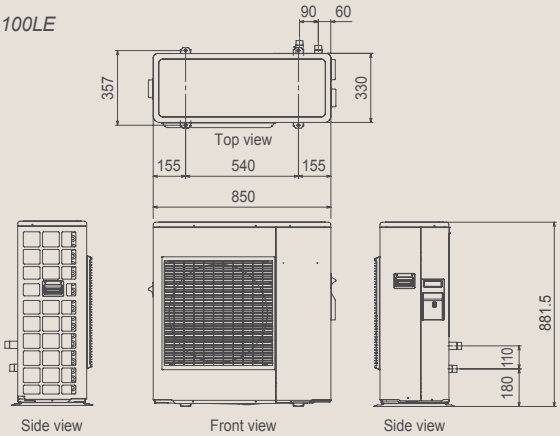


MONOBLOC TYPE

Unit : mm

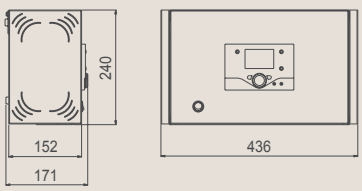
Compact series

WPYA080LE / WPYA100LE



Control Box

UTW-SCBYA



SPECIFICATIONS

Type				Split type								
Series name				High Power series					Comfort series			
												
Capacity range (kW)				11	14	11	14	16	5	6	8	10
+7°C / +35°C floor heating *1	Heating capacity	kW		10.80	13.50	10.80	13.50	15.17	4.50	6.00	7.50	10.00
	Input power			2.54	3.23	2.51	3.20	3.70	0.996	1.41	1.84	2.49
	COP			4.25	4.18	4.30	4.22	4.10	4.52	4.27	4.08	4.02
+2°C / +35°C floor heating *1	Heating capacity	kW		10.77	12.00	10.77	13.00	13.50	4.50	4.95	5.65	7.70
	Input power			3.44	3.87	3.40	4.15	4.34	1.39	1.53	1.78	2.47
	COP			3.13	3.10	3.17	3.13	3.11	3.24	3.24	3.17	3.12
-7°C / +35°C floor heating *1	Heating capacity	kW		10.80	12.00	10.80	13.00	13.50	4.10	4.60	5.70	7.40
	Input power			4.32	5.08	4.28	5.18	5.40	1.47	1.74	2.23	2.97
	COP			2.50	2.36	2.52	2.51	2.50	2.79	2.64	2.56	2.49
+7°C / +45°C radiators *1	Heating capacity	kW		9.23	11.54	10.10	12.60	13.00	4.50	5.10	6.20	8.27
	Input power			2.84	3.72	3.01	3.81	4.00	1.30	1.50	1.87	2.53
	COP			3.25	3.10	3.35	3.30	3.25	3.46	3.40	3.31	3.27
-7°C / +45°C radiators *1	Heating capacity	kW		9.16	11.45	10.02	12.50	13.00	4.10	4.45	5.05	7.40
	Input power			4.58	5.92	4.63	6.00	6.37	1.86	2.04	2.47	3.70
	COP			2.00	1.93	2.16	2.08	2.04	2.20	2.18	2.04	2.00
Backup heater	Capacity	kW×pcs.		6.0(3.0×2pcs.)	6.0(3.0×2pcs.)	9.0(3.0 × 3pcs.)	9.0(3.0 × 3pcs.)	9.0(3.0 × 3pcs.)	6.0(3.0×2pcs.)	6.0(3.0×2pcs.)	6.0(3.0×2pcs.)	6.0(3.0×2pcs.)
Hydraulic unit		Model name		WSYG140DC6		WSYK160DC9			WSYA050DD6	WSYA100DD6		
Power source				1Ø 230V, 50Hz		3Ø 400V, 50Hz			1Ø 230V, 50Hz			
Water circulation	Rated	L/min		31.2	39.0	31.2	39.0	43.8	13.00	17.33	21.66	28.88
	Min / Max			25.0 / 50.0					8.1/16.2	10.8/21.7	13.5/27.1	18.1/36.1
Dimensions H×W×D		mm		800 × 450 × 457					800 × 450 × 457			
Weight (Net)		kg		42					42			
Buffer tank capacity		L		16					16			
Expansion vessel capacity		L		8					8			
Leaving water temperature range		°C		8~60					8 ~ 55			
Water pipe connection diameter	Flow / Return	mm		Ø25.4 / Ø25.4					Ø25.4 / Ø25.4			
Outdoor unit		Model name		WOYG112LCT	WOYG140LCT	WOYK112LCT	WOYK140LCT	WOYK160LCT	WOYA060LDC		WOYA080LDC	WOYA100LDT
Power source				1Ø 230V, 50Hz		3Ø 400V, 50Hz			1Ø 230V, 50Hz			
Current	Rated	A		11.4	14.2	3.7	4.8	5.5	4.5	6.3	8.1	10.9
	Max			22.0	25.0	8.5	9.5	10.5	11.0	12.5	17.5	18.5
Noise level (Sound pressure)		dB(A)		55*2	56*2	53*2	55*2	56*2	48*2	51*2	56*2	55*2
Dimensions H×W×D		mm		1290 × 900 × 330					620 × 790 × 290			830×900×330
Weight (Net)		kg		92		99			41		42	60
Refrigerant				R410A					R410A			
Refrigerant amount		kg		2.50					1.10		1.40	1.80
Additional refrigerant charge amount		g/m		50					20		20	40
Connection pipe	Diameter	Liquid	mm	Ø9.52					Ø6.35			Ø9.52
		Gas	mm	Ø15.88					Ø12.70		Ø15.88	
	Length	Min / Max	m	5 / 20					5 / 20			
	Length (chargeless)	Max	m	15					15			
	Height difference	Max	m	15					15			
Operation range		Heating	°C	-25~35					-20 ~ 35			

Type				Monobloc type	
Series name				Compact series	
					
Capacity range (kW)				8	10
+7°C / +35°C floor heating *1	Heating capacity	kW		8.00	10.00
	Input power			1.78	2.30
	COP			4.50	4.35
+2°C / +35°C floor heating *1	Heating capacity	kW		7.40	8.10
	Input power			2.73	3.00
	COP			2.71	2.70
-7°C / +35°C floor heating *1	Heating capacity	kW		7.10	8.00
	Input power			2.93	3.32
	COP			2.42	2.41
+7°C / +45°C radiators *1	Heating capacity	kW		7.80	9.80
	Input power			2.23	2.88
	COP			3.50	3.40
-7°C / +45°C radiators *1	Heating capacity	kW		6.50	7.00
	Input power			2.98	3.31
	COP			2.18	2.11
Monobloc unit		Model name		WPYA080LE	WPYA100LE
Power source				1Ø 230V, 50Hz	
Water circulation	Rated	L/min		22.9	28.7
	Min / Max			10.0 / 30.0	10.0 / 30.0
Current	Rated	A		8.30	10.20
Noise level (Sound pressure)		dB(A)		51*2	51*2
Dimensions H×W×D		mm		881.5 × 850 × 330	
Weight (Net)		kg		74	
Water pipe connection diameter	Flow / Return	mm		Ø25.4 / Ø25.4	
Refrigerant				R410A	
Refrigerant amount		kg		1.5	
Leaving water temperature range		°C		8 ~ 55	
Operation range		Heating	°C	-20 ~ 35	

*1. The values of heating capacity/power input/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 and these values.
*2. Sound pressure level measured at distance of 1m from the device.