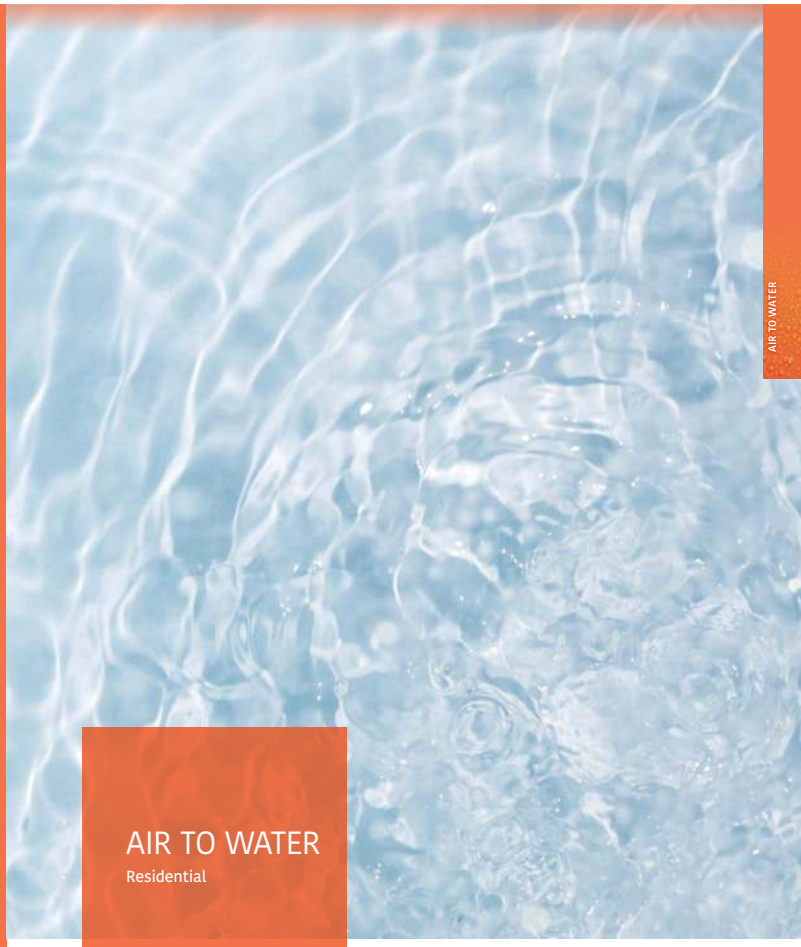
Библиотека СОК

Residential

AIR TO WATER

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AIR TO WATER

Residential

AIR TO WATER Overview

Solutions That Meet a Variety of Needs

Water heated by Air to Water, which uses clean energy, can provide a steady supply of comfortable water throughout the home for heating and hot water applications.





2nd floor

Bedroom & Bathroom







Room heating

Domestic Hot Water

1st floor

Living & Dining Kitchen







Under floor heating

Air to water Heat Pump

Outdoor unit

The unit is used to extract heat from the environment, making use of renewable energy resources from the sun and the outside air.



Indoor unit control box*

If you want to update your system by reusing your existing pump and buffer tank, etc., you can do so by installing only the control box.

OR

Indoor unit Wall-mounted

Stands for preparation of heating water for under floor heating and radiators. It can optionally operate with domestic hot water tank.

OR

Indoor unit Domestic Hot Water integrated

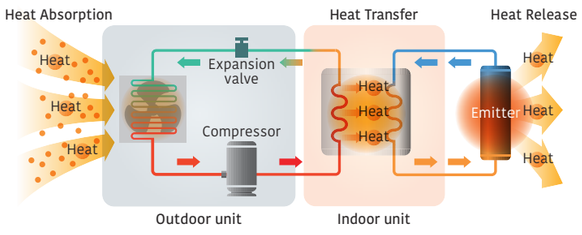
Can be used with a variety of heating systems,including under floor heating and radiators. Space saving heating and DHW supply in a single indoor unit.

*The control box can only be selected for Monobloc outdoor unit.

Ecological Consideration in Your Home

Heat pump system framework

Heat is absorbed from the atmosphere by expanding the refrigerant.
Higher-temperature heat is generated by compressing the refrigerant, and the indoor unit transfers that heat to the water.



*Split products are listed as examples.

Things We can Contribute to



Our Goal

Decarbonisation

European Comission is committed to decarbonisation and has a national target of "**Net Zero**" carbon emissions by 2050.

We need to reduce carbon emissions with green technology products and increase carbon absorption by working to extend nature.

Carbon Emission
Reduce carbon emissions with green technology

+

Carbon Absorption
Increase carbon absorption with rich nature

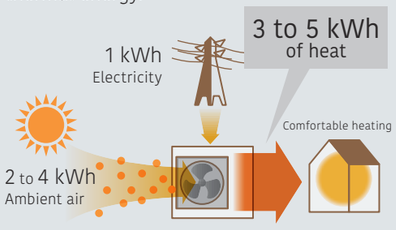
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Net Zero
Amount of carbon emission and absorption

General's ATW system will provide the best solutions that are friendly to the environment and people with products conscious of decarbonisation.

What is a heat pump?

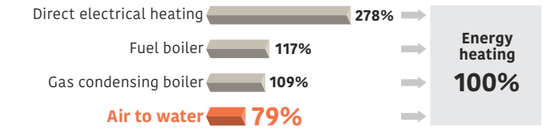
A heat pump extracts heat energy from the atmosphere. It requires only 1 kW of electricity to generate 3 to 5 kW of thermal energy.



Primary energy usage reduced substantially

Proportion of primary energy converted into heating energy is 100%

Primary Energy Consumption*

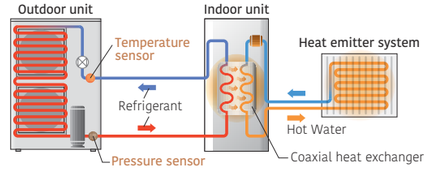


* The amount of electricity loss varies according to the power plant. Typical energy efficiency of a power plant: 36%

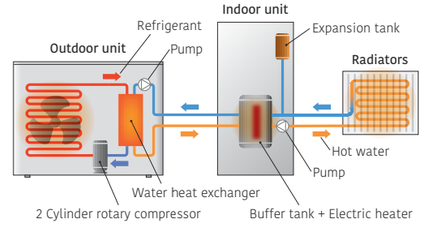
The Choice of Air to water

Optimized refrigerant cycle operation

Split Type



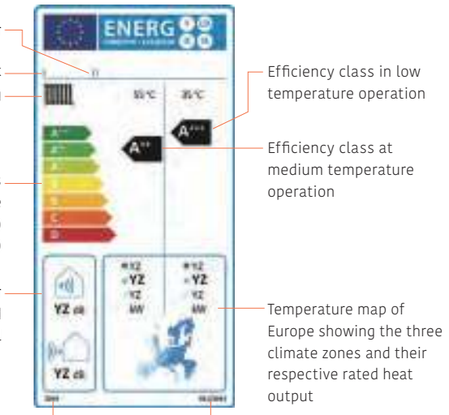
Monobloc Type



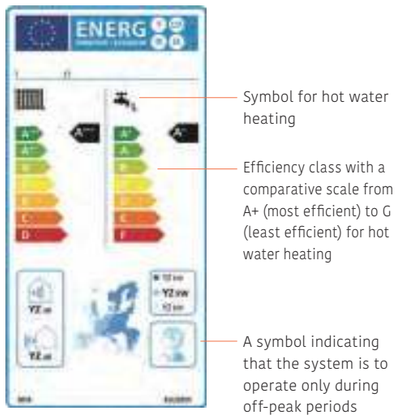
Energy Efficiency Standards

Product Labels

Space heaters



Combination heaters



The Ecodesign Directive Lot 1 Regulation 813/2013

The Ecodesign directive defines a regulatory framework for improving the environmental performance of energy-related products (ErP) through design.
Since September 26, 2015, the Ecodesign Directive has applied to space heaters, including heat pumps and fossil fuel fired boilers, combination heaters for space and hot water heating, water heaters, and water storage tanks.
All of these products must meet minimum requirements for energy efficiency*1 and maximum sound power level. The minimum energy efficiency class were raised on September 26, 2017, and the maximum sound levels were lowered on September 26, 2018.

*1: Energy efficiency is expressed in terms of seasonal space heating efficiencies (ηs). The value is based upon the Seasonal Coefficient of Performance (SCOP).

The Energy Labelling Directive (EU) No. 811/2013

Energy label is intended to enable consumers to make direct comparisons of energy use and product features. All labels should indicate the product identifier, efficiency class, sound power level, and heat output. Heat generators are rated A+++ to G. There are two different product labels. One for space heaters and one for combination heaters.

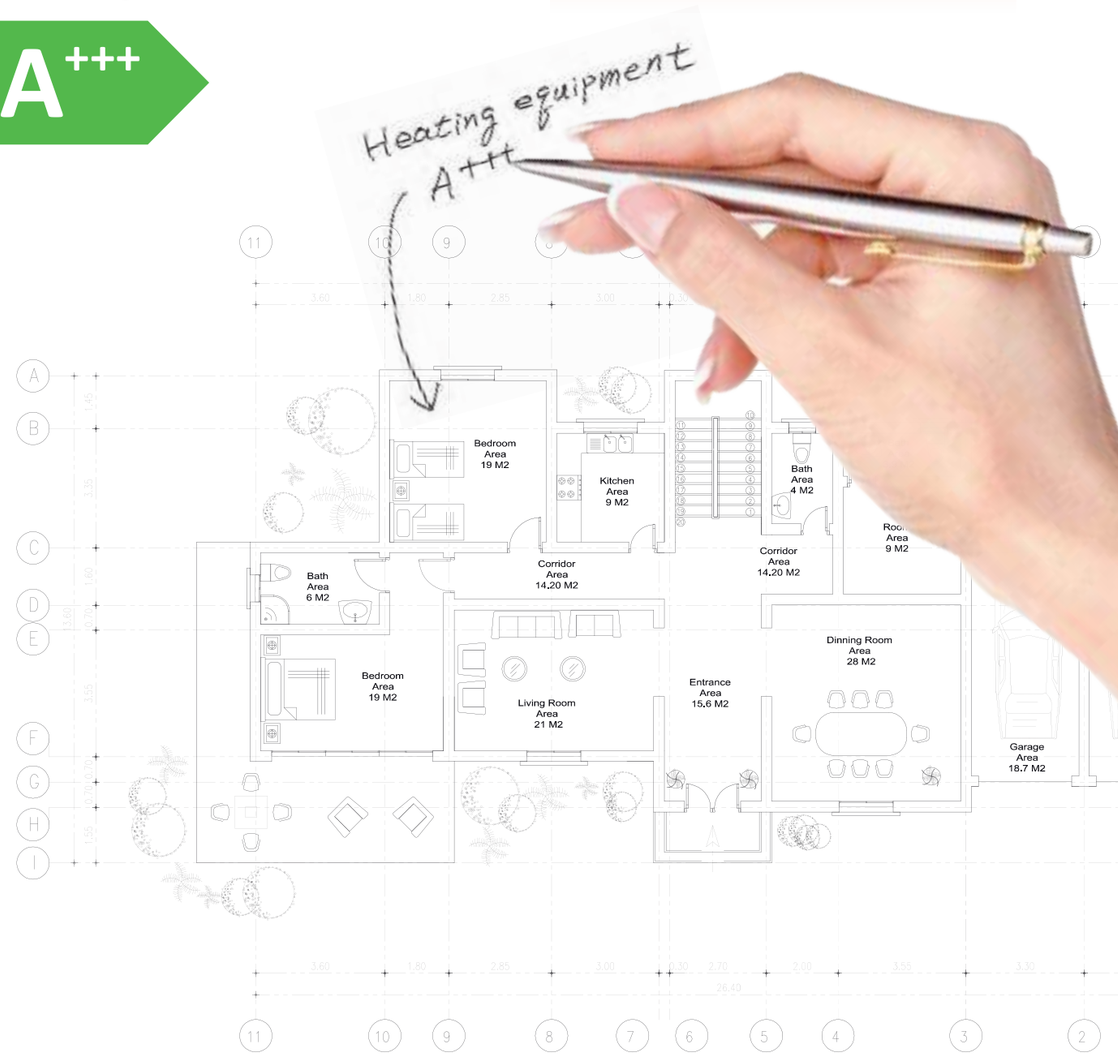
Seasonal space heating
Energy efficiency class

	Except low temp. HP 55°C	Low temp. HP 35°C
A+++	ηs ≥ 150	ηs ≥ 175
A++	125 ≤ ηs < 150	150 ≤ ηs < 175
A+	98 ≤ ηs < 125	123 ≤ ηs < 150
A	90 ≤ ηs < 98	115 ≤ ηs < 123
B	82 ≤ ηs < 90	107 ≤ ηs < 115
C	75 ≤ ηs < 82	100 ≤ ηs < 107
D	36 ≤ ηs < 75	61 ≤ ηs < 100
E	34 ≤ ηs < 36	59 ≤ ηs < 61
F	30 ≤ ηs < 34	55 ≤ ηs < 59
G	ηs < 30	ηs < 55

Due to restrictions on the use of fossil fuels in Europe and the F-Gas regulations, the use of environmentally friendly heating equipment is required not only for new buildings but also for renovated properties. Let's consider installing high energy efficiency products that will be essential for future living environments.

Heating Equipment

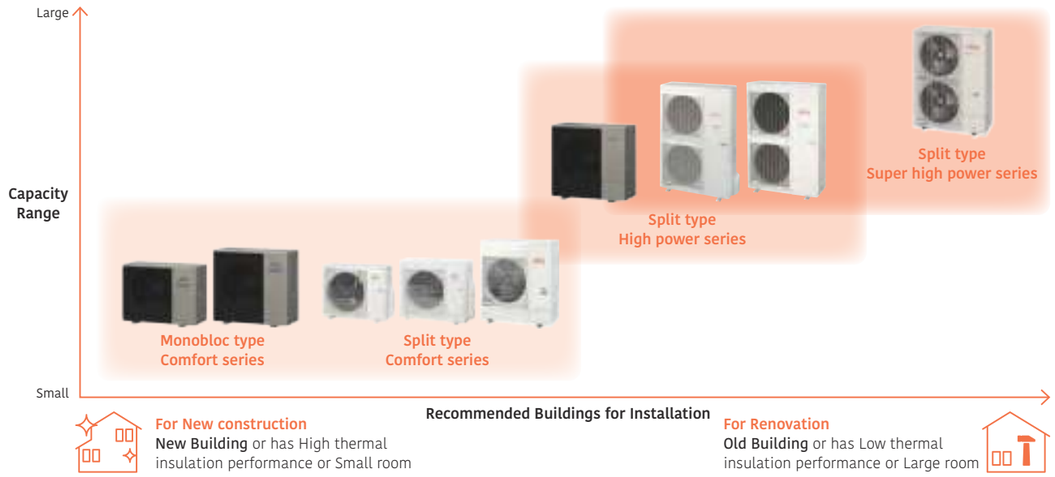
A+++



AIR TO WATER Series
Overview

ATW Product Simplified Selection Method

Please select a product based on the amount of heat required to maintain a comfortable temperature in the house, just as with air conditioners. For example, the Split comfort series with a low Capacity Range is recommended for newly built houses, as they tend to have high thermal insulation performance.



RESIDENTIAL

Monobloc type

Series	System Outline	Refrigerant	Recommended Buildings for Installation
Comfort series  Control box Wall mounted DHW integrated 5 kW 8/10 kW	**Indoor unit** Control box consists of the hot water circuit controller and the user interface. It is not connected to the water pipe. **Outdoor unit** • Supplies 60°C hot water even when the outdoor temperature is -5°C. • Supplies 55°C hot water even when the outdoor temperature is -10°C. • Can be used with a variety of heating systems, including under floor heating and radiators.* • Heating and DHW supply in one system.* • Up to Three independent control circuits.* • Operating range is -20 to 35°C in heating. • Cooling operation is possible	R32	

* Please refer to page W-042 to W-045 for optional parts information.

RESIDENTIAL

Split type

Series	System Outline	Refrigerant	Recommended Buildings for Installation
Comfort series  Wall mounted DHW integrated 5/6 kW 8 kW 10 kW	• Supplies 55°C hot water even when the outdoor temperature is -10°C. • Heating and DHW supply in one system.* • Equipped with additional electric heater for backup • Up to two independent control circuits.* • Cooling operation is possible.* • Operating range is -20 to 35°C. • Can be used with a variety of heating systems, including under floor heating and radiators.*	R32	
NEW High power series  Wall mounted DHW integrated 10/12/14 kW	• Supplies 60°C hot water even when the outdoor temperature is -15°C. • Can be used with a variety of heating systems, including under floor heating and radiators.* • Heating and DHW supply in one system.* • Up to Two independent control circuits.* • Operating range is -25 to 35°C.	R32	
High power series  Wall mounted DHW integrated 11/14 kW 11/14/16 kW	• Supplies 60°C hot water even when the outdoor temperature is -20°C. • Can be used with a variety of heating systems, including under floor heating and radiators.* • Heating and DHW supply in one system.* • Up to two independent control circuits.* • Cascade connection is possible for up to three systems.* • Cooling operation is possible.* • Operating range is -25 to 35°C.	R410A	
Super high power series  Wall mounted DHW integrated 16 kW	• Supplies 60°C hot water even when the outdoor temperature is -20°C. • Can be used with a variety of heating systems, including under floor heating and radiators.* • Heating and DHW supply in one system.* • Equipped with additional electric heater for backup • Up to two independent control circuits.* • Cooling operation is possible.* • Operating range is -25 to 35°C.	R410A	

* Please refer to page W-050 to W-055 for optional parts information. For options for the R32 High Power Series, refer to W-042 through W-045.

AIR TO WATER Lineup

Type	Series	Refrigerant	Model	Power Source	Capacity 5kw	Capacity 6kw	Capacity 8kw	Capacity 10kw	Capacity 11kw	Capacity 14kw	Capacity 15kw	Capacity 16kw	Capacity 17kw	Approval CEN KEYMARK	Approval EHPA
Monobloc type	Comfort series Control box type	R32 Heating & Cooling		Single phase, ~230 V, 50 Hz	UTW-SCBEC WPEG050KRF		UTW-SCBEC WPEG080KRF	UTW-SCBEC WPEG100KRF							
	Comfort series Wall-mounted type	R32 Heating & Cooling		Single phase, ~230 V, 50 Hz	WSEP100KR3 WPEG050KRF		WSEP100KR3 WPEG080KRF	WSEP100KR3 WPEG100KRF							
	Comfort series DHW Integrated type	R32 Heating & Cooling		Single phase, ~230 V, 50 Hz	WGEP100KR3-19 WPEG050KRF		WGEP100KR3-19 WPEG080KRF	WGEP100KR3-19 WPEG100KRF							

*Cooling is available by using the option



SG ready Label

SG ready is a label issued to heat pumps and their control technologies that meet the requirements set by BWP*4, and technologies that conform to their standards can be integrated into a smart grid. SG ready labeled heat pumps receive signals from the power grid and PV systems with regard to energy and renewable energy sources such as wind, solar, and water. All of General's heat pump series are SG ready compatible.

*4: BWP: Bundesverband Wärmepumpe e. V (Federal German Heat Pump Association)

The CEN Heat Pump KEYMARK

The Heat Pump KEYMARK is a full certificate supporting the quality of heat pumps in the European market.
The Heat Pump KEYMARK is a voluntary, independent, European certification mark (ISO Type 5 Certification) for all heat pumps, combination heat pumps, and hot water heaters (as covered by Ecodesign, EU Regulation 813/2013 and 814/2013). General's Air to Water*5 has acquired the KEYMARK certificate*6.

*5: R32 refrigerant comfort model only
*6: Learn more about the validity of the mark at www.heatpumpkeymark.com/about/

AIR TO WATER Lineup

Type	Series	Refrigerant	Model	Power Source	Capacity 5kw	6kw	8kw	10kw	11kw	12kw	14kw	15kw	16kw	17kw	Approval CEN KEYMARK	EHPA
Split type	Comfort series Wall-mounted type	R32 Heating*		Single phase, ~230 V, 50 Hz	WSYA050ML3 WOYA060KLT	WSYA080ML3 WOYA060KLT	WSYA080ML3 WOYA080KLT	WSYA100ML3 WOYA100KLT							✓	
	Comfort series DHW Integrated type	R32 Heating*		Single phase, ~230 V, 50 Hz	WGYA050ML3 WOYA060KLT	WGYA080ML3 WOYA060KLT	WGYA080ML3 WOYA080KLT	WGYA100ML3 WOYA100KLT							✓	
	High Power series Wall-mounted type	R32 Heating	 NEW	Single phase, ~230 V, 50 Hz				WSEG140MQ6 WOYG100MQL		WSEG140MQ6 WOYG121MQL	WSEG140MQ6 WOYG140MQL				✓	
		R32 Heating	 NEW	3-phase, ~400 V, 50 Hz						WSEK140MQ9 WOYK121MQL	WSEK140MQ9 WOYK140MQL				✓	
		R410A Heating*		Single phase, ~230 V, 50 Hz					WSYG140DG6 WOYG112LHT		WSYG140DG6 WOYG140LCTA				✓	
		R410A Heating*		3-phase, ~400 V, 50 Hz					WSYK160DG9 WOYK112LCTA		WSYK160DG9 WOYK140LCTA		WSYK160DG9 WOYK160LCTA		✓	✓
	High Power series DHW Integrated type	R32 Heating	 NEW	Single phase, ~230 V, 50 Hz				WGEG140MQ6-19 WOYG100MQL		WGEG140MQ6-19 WOYG121MQL	WGEG140MQ6-19 WOYG140MQL				✓	
		R32 Heating	 NEW	3-phase, ~400 V, 50 Hz						WGEK140MQ9-19 WOYK121MQL	WGEK140MQ9-19 WOYK140MQL				✓	
		R410A Heating*		Single phase, ~230 V, 50 Hz					WGYG140DG6 WOYG112LHT		WGYG140DG6 WOYG140LCTA				✓	
		R410A Heating*		3-phase, ~400 V, 50 Hz					WGYK160DG9 WOYK112LCTA		WGYK160DG9 WOYK140LCTA		WGYK160DG9 WOYK160LCTA		✓	✓
	Super High Power series Wall-mounted type	R410A Heating*		Single phase, ~230 V, 50 Hz									WSYG160DJ6 WOYG160LJL		✓	
		R410A Heating*		3-phase, ~400 V, 50 Hz								WSYK170DJ9 WOYK150LJL		WSYK170DJ9 WOYK170LJL	✓	
	Super High Power series DHW Integrated type	R410A Heating*		Single phase, ~230 V, 50 Hz									WGYG160DJ6 WOYG160LJL		✓	
		R410A Heating*		3-phase, ~400 V, 50 Hz								WGYK170DJ9 WOYK150LJL		WGYK170DJ9 WOYK170LJL	✓	

*Cooling is available by using the option

EHPA Quality Label

General's Air to Water*2 has acquired the EHPA Quality Label*3 through testing in accordance with the International Standards EN14511 and EN17025. The EHPA Quality Label*3 is a label that shows the end-consumer a quality heat pump unit on the market.

*2: 3-phase high power series only
*3: Learn more about the validity of the mark at www.ehpa.org/quality/quality-label/

SG ready Label

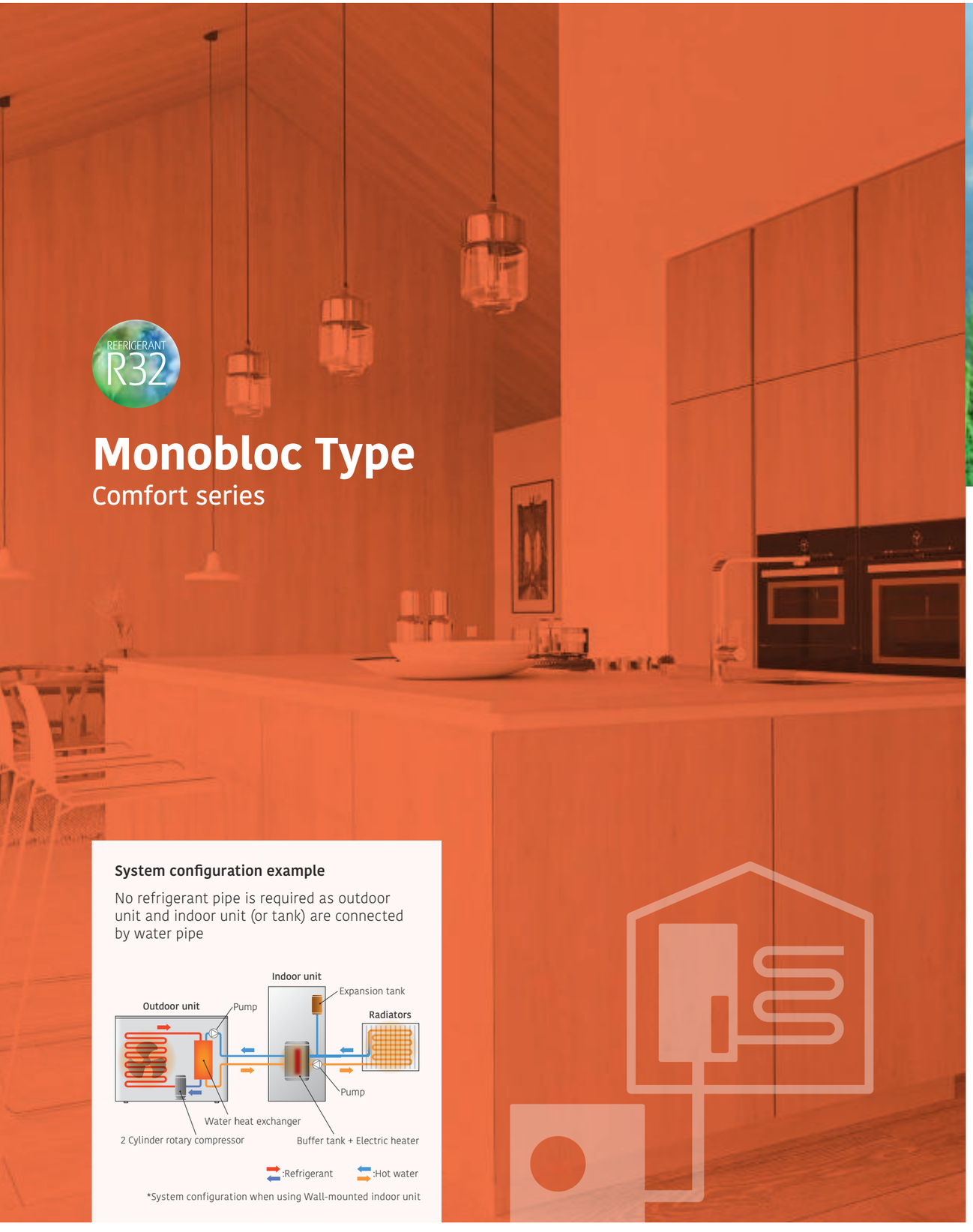
SG ready is a label issued to heat pumps and their control technologies that meet the requirements set by BWP*4, and technologies that conform to their standards can be integrated into a smart grid. SG ready labeled heat pumps receive signals from the power grid and PV systems with regard to energy and renewable energy sources such as wind, solar, and water. All of General's heat pump series are SG ready compatible.

*4: BWP: Bundesverband Wärmepumpe e. V (Federal German Heat Pump Association)

The CEN Heat Pump KEYMARK

The Heat Pump KEYMARK is a full certificate supporting the quality of heat pumps in the European market.
The Heat Pump KEYMARK is a voluntary, independent, European certification mark (ISO Type 5 Certification) for all heat pumps, combination heat pumps, and hot water heaters (as covered by Ecodesign, EU Regulation 813/2013 and 814/2013). General's Air to Water*5 has acquired the KEYMARK certificate*6.

*5: R32 refrigerant comfort model only
*6: Learn more about the validity of the mark at www.heatpumpkeymark.com/about/



REFRIGERANT R32

Monobloc Type

Comfort series

System configuration example

No refrigerant pipe is required as outdoor unit and indoor unit (or tank) are connected by water pipe

*System configuration when using Wall-mounted indoor unit







Monobloc type with fewer pipe works and easy installation. It provides a wide variety of solutions to meet the usage environment.

Aesthetic and Compact Design

By changing from the conventional two-fan system to a large-diameter single-fan system, we have been able to keep the height down. Because it is lower than a house window, you won't have any trouble finding a place to install the outdoor unit.



Official YouTube Channel

High Energy Efficiency

Energy Efficiency Class

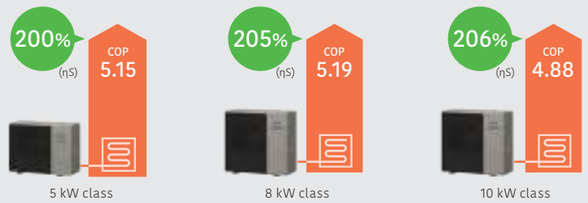


*Temperature application: Heating temp. 35°C

Plate heat exchanger with high heat exchange performance improves energy-related product performance, achieving high energy efficiency.
All classes achieved top rank A+++* energy efficiency class.

Seasonal space heating energy efficiency (η_s)

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



* Value when the control box is connected



Compact & High efficiency Plate heat exchanger

Transmitting the heat of the Refrigerant to the Water.

5 kW class

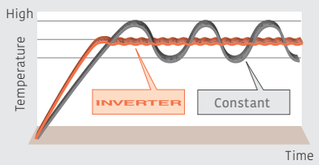




Invertor Technology

Invertor-equipped models operate at a capacity suited to the heat load. Because they can respond to heat loads in details inverter-equipped models are more economical and comfortable than non-inverter models.
Compared to a non-inverter, it reaches the set temperature more quickly, operates at the minimum capacity and responds to slight changes in water temperature. The range of water temperature fluctuation is small, and a comfortable temperature is maintained.

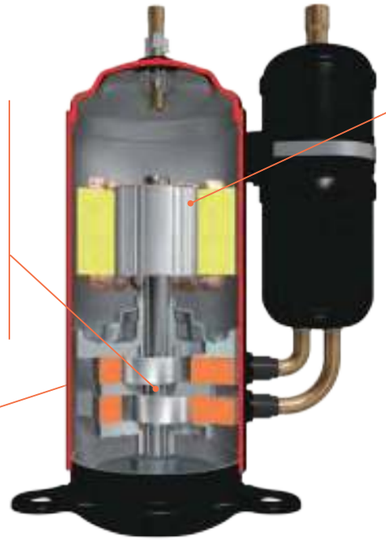
Inverter technology controls temperatures precisely.



Technology to Achieve High Efficiency

High-precision parts

The precision machining of parts has improved the degree of adhesion between parts. Refrigerant leakage from gaps has been reduced, leading to improved compression efficiency and high-efficiency operation. In addition, the contact surfaces between parts have been smoothed and the amount of wear has been reduced, resulting in stable performance over a long period of time.



2 Cylinder rotary compressor

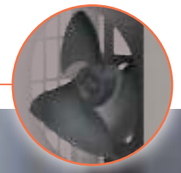
High-magnetic flux motor

Copper and iron losses are thoroughly suppressed to realize high magnetic flux of the motor. The high magnetic flux produces stronger torque than ever before. Thanks to this, operation with less current is possible, bringing out high-efficiency operation.

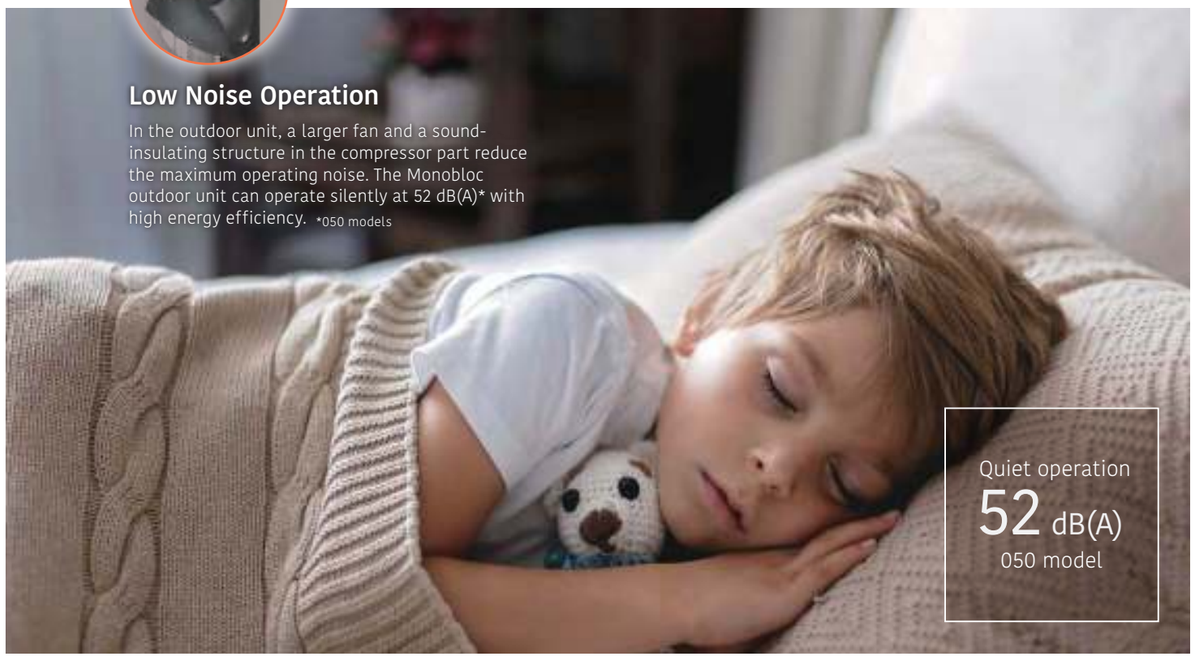


Smooth gas flow

The arrangement of parts that do not obstruct refrigerant flow in the compressor leads to highly efficient operation. Broad interpretation of the optimization of refrigerant flow paths has resulted in about 13 patents.



Larger fan



Low Noise Operation

In the outdoor unit, a larger fan and a sound-insulating structure in the compressor part reduce the maximum operating noise. The Monobloc outdoor unit can operate silently at 52 dB(A)* with high energy efficiency. *050 models

Durability and Reliability

We take care to ensure that our products can be used by our customers for a long time.
We have taken measures to reduce damage to our products even in the event of problems with the installation environment or during operation.



8 & 10 kW classes



Pressure Switch

The pressure switch equipped on the refrigerant cycle protects the system from malfunction that may caused by abnormal refrigerant pressure.



Silicon Coating of PCBs

The silicon coating protects the PCBs and their components from damage caused by small animals living in the electrical box and salt.

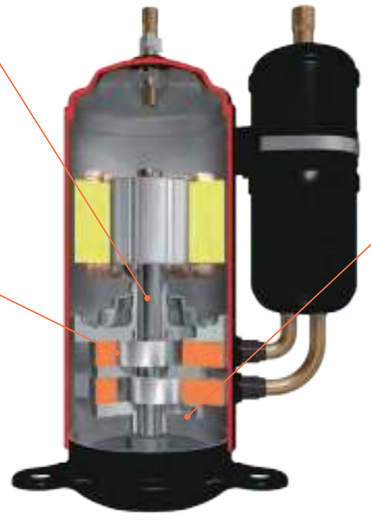
Technology to Increase Durability

Optimized shaft design

- The stress on specific parts is reduced, reducing the risk of wear and damage
- Vibration during rotation is reduced, reducing wear and fatigue damage, and ultimately improving durability

DLC coating vane

- It has a very high hardness and low wear coefficient, and shows excellent resistance to wear
- It is chemically stable and has excellent resistance to various working fluids and environmental conditions, so it protects the vanes from corrosion and chemical degradation, contributing to a longer lifespan



2 Cylinder rotary compressor

Optimal lubricant

- Prevents friction and heating of parts, improving durability
- Contains rust-proofing and antioxidant agents, protecting metal parts from corrosion and preventing breakdowns and performance degradation
- Reduces impact between parts, suppresses vibration, and prevents excessive stress on parts, improving durability



*The values in the pictures are examples.

Service Monitor Tool

UTY-ASSXZ1

Bluetooth Communication

AIRSTAGE Service Monitor Tool can diagnose using a smart device and reduce the working time compared with diagnosis by PC. No need to connect a PC making diagnosis easier even in narrow spaces.



Application with simple design

Application for smart devices has been released. The stylish design makes the application easy to use for everyone.

Refrigerant cycle diagram display

The operating status can be displayed with a simple, clear diagram*2 on the smart device. It reduces the time for diagnosis and makes diagnosis easier. It can complement abundant experience and advanced knowledge of refrigerant cycle. This shortens the training time for service personnel.

*2: List and graph displays are also available



AIRSTAGE
Service Monitor Tool

Compact and Lightweight Design

This model is easy to carry by compact and lightweight design. The service personnel can visit the maintenance site with small luggage.



Function List

			UTY-ASSXZ1
Product specification	Installation		Outdoor unit PCB
	Communication		Bluetooth
Function	Product distinction		●
	Signal-type distinction		●
	Operating status display	List	●
		Graph	●
		Refrigerant cycle diagram	●
		Operating history records	●
	Adapter firmware update		●
	Adapter status monitoring		●
	Input and output of history data		●

Specifications

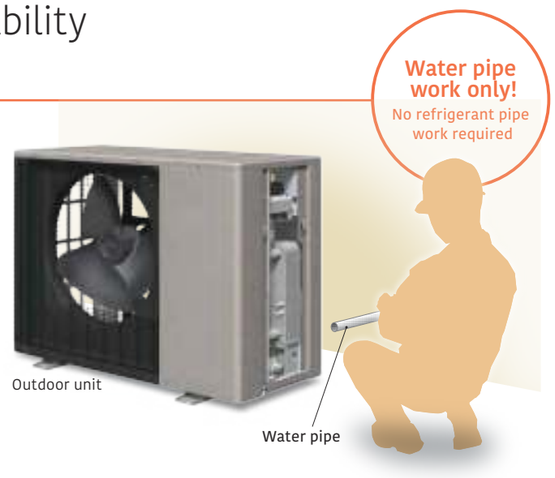
	UTY-ASSXZ1
Dimensions (H x W x D) (mm)	20 x 35 x 60 (adapter)
Communication cable (cm)	60
Weight (g)	25 (adapter)
Communication method	Bluetooth 5.3
Max. communication distance (m)	10*3
Compatible device	Android8.0, iOS17 or later

*3: Depends on the environment

Serviceability and Maintainability

Easy Pipe Work

No refrigerant pipe work is required as the outdoor unit is an integrated unit, The hot water unit comes standard with the outdoor unit. Installation requires only hydraulic connection work, making installation easy.



Easy Installation

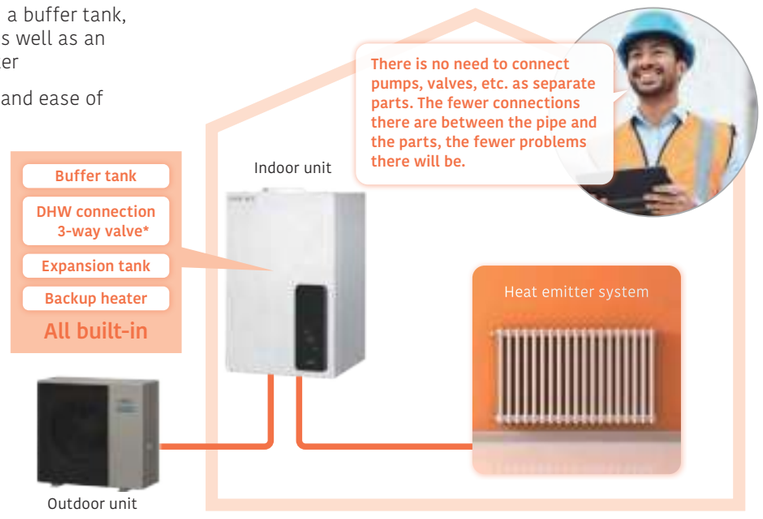
Wire connections can be made simply by removing the side panel, so installation work can be easily carried out from a single direction. The compact, lightweight panel is easy to remove.



Improved Workability

- The indoor unit is equipped with a buffer tank, DHW connection 3-way valve*, as well as an expansion tank and backup heater
- This improves system reliability and ease of installation

*Wall-mounted only



Useful Features

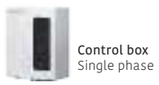
Features	Explanation
Quick recovery from defrosting	Maintains room temperature by boost start operation during defrosting
Auto changeover	When auto mode is selected, the system automatically switches between cooling and heating modes depending on the outside temperature.
2-zone independent control	2-zone independent control
Backup heater operation	Backup heater maintains a comfortable room temperature even when the outside temperature is low. It is intelligently controlled as a safety backup for very cold days and nights, and only operates when really needed.
Peak cut function	Sets the peak current value to reduce power consumption. Mode 1 -> 100% Mode 2 -> 75% Mode 3 -> 50% Mode 4 -> Almost 0%
Anti-Freezing function	When the outside temperature drops below a specified level, the compressor will self-activate and water will also be automatically circulated to prevent freezing.
Anti-Legionella function	Prevents the growth of Legionella bacteria in the DHW tank to supply safe and clean hot water at all times.
Emergency operation	If an outdoor unit fails to operate, a built-in backup heater or an external boiler is activated to supply an uninterrupted supply of hot water to the house.



Monobloc type
Comfort series (Control box type)

Indoor unit:
UTW-SCBEC

Outdoor unit:
WPEG050KRF / WPEG080KRF
WPEG100KRF



Control box
Single phase



Outdoor unit
Single phase
5 kW



Outdoor unit
Single phase
8/10 kW

Specifications

Model Name	Indoor unit		Control box					
	Outdoor unit		UTW-SCBEC		UTW-SCBEC		UTW-SCBEC	
			WPEG050KRF		WPEG080KRF		WPEG100KRF	
Capacity Range			5		8		10	
7°C/35°C floor heating *1	Heating capacity (Max.)	kW	5.00 (8.31)		8.00 (13.28)		10.00 (15.20)	
	Input power (Max.)		0.97 (1.97)		1.54 (2.96)		2.05 (3.53)	
	COP (Max.)		5.15 (4.22)		5.19 (4.48)		4.88 (4.30)	
7°C/55°C radiator *1	Heating capacity (Max.)	kW	5.00 (7.21)		8.00 (10.60)		10.00 (11.56)	
	Input power (Max.)		1.64 (2.44)		2.62 (3.51)		3.36 (3.94)	
	COP (Max.)		3.04 (2.95)		3.05 (3.02)		2.98 (2.93)	
-7°C/55°C radiator *1	Heating capacity (Max.)	kW	4.80 (5.36)		7.50 (8.15)		8.50 (9.00)	
	Input power (Max.)		2.25 (2.57)		3.50 (3.94)		3.97 (3.94)	
	COP (Max.)		2.13 (2.09)		2.14 (2.07)		2.14 (2.93)	
35°C/18°C cooling mode *1	Cooling capacity (Max.)	kW	5.45 (6.55)		7.79 (10.87)		9.40 (10.87)	
	Input power (Max.)		1.25 (1.82)		1.69 (3.22)		2.40 (3.22)	
	EER (Max.)		4.35 (3.60)		4.62 (3.37)		3.91 (3.37)	
Space heating characteristics*2								
Temperature application		°C	55	35	55	35	55	35
Energy efficiency class			A++	A+++	A++	A+++	A++	A+++
Rated heat output (P_{rated})		kW	6	6	9	9	10	10
Seasonal space heating energy efficiency (η_s)		%	143	200	144	205	146	206
Annual energy consumption		kWh	3,110	2,364	4,880	3,571	5,480	4,018
Sound power level*3	Outdoor unit	dB(A)	52	52	56	56	57	57
Indoor unit specifications								
Power source			Single phase, 230 V, 50 Hz					
Dimensions H × W × D		mm	483 × 370 × 222		483 × 370 × 222		483 × 370 × 222	
Weight (Net)		kg	10		10		10	
Outdoor unit specifications								
Power source			Single phase, 230 V, 50 Hz					
Current	Max.	A	14.6		19.1		20.6	
Water flow temperature range	Max.	°C	60		60		60	
Dimensions H × W × D		mm	798 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480	
Weight (Net)		kg	85		109		109	
Refrigerant	Type (Global Warming Potential)		R32 (675)		R32 (675)		R32 (675)	
	Charge	kg	0.88		1.47		1.47	
Connection pipe Diameter	Water	mm	Ø25.4		Ø25.4		Ø25.4	
Operating range	Heating	°C	-20 to 35		-20 to 35		-20 to 35	

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

Monobloc type
Comfort series (Wall-mounted type / DHW Integrated type)

Indoor unit:
WSEP100KR3
WGEP100KR3-19

Outdoor unit:
WPEG050KRF / WPEG080KRF
WPEG100KRF



Wall Mounted
Single phase



DHW Integrated
Single phase



Outdoor unit
Single phase
5kW



Outdoor unit
Single phase
8/10 kW

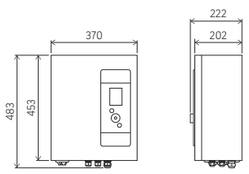
Specifications

Model Name	Indoor unit		Wall Mounted			DHW Integrated		
	Outdoor unit		WSEP100KR3	WSEP100KR3	WSEP100KR3	WGEP100KR3-19	WGEP100KR3-19	WGEP100KR3-19
			WPEG050KRF	WPEG080KRF	WPEG100KRF	WPEG050KRF	WPEG080KRF	WPEG100KRF
Capacity Range			5	8	10	5	8	10
7°C/35°C floor heating*1	Heating capacity (Max.)	kW	5.00 (8.10)	8.00 (13.07)	10.00 (14.99)	5.00 (8.10)	8.00 (13.07)	10.00 (14.99)
	Input power (Max.)		1.00 (2.00)	1.57 (3.08)	2.13 (3.64)	1.00 (2.00)	1.57 (3.08)	2.13 (3.64)
	COP (Max.)		4.99 (4.05)	5.08 (4.24)	4.70 (4.11)	4.99 (4.05)	5.08 (4.24)	4.70 (4.11)
7°C/55°C radiator*1	Heating capacity (Max.)	kW	5.00 (6.86)	8.00 (10.24)	10.00 (11.20)	5.00 (6.86)	8.00 (10.24)	10.00 (11.20)
	Input power (Max.)		1.72 (2.47)	2.62 (3.55)	3.40 (3.99)	1.72 (2.47)	2.62 (3.55)	3.40 (3.99)
	COP (Max.)		2.91 (2.77)	3.05 (2.89)	2.94 (2.81)	2.91 (2.77)	3.05 (2.89)	2.94 (2.81)
-7°C/55°C radiator*1	Heating capacity (Max.)	kW	4.80 (4.90)	7.50 (7.69)	8.50 (8.54)	4.80 (4.90)	7.50 (7.69)	8.50 (8.54)
	Input power (Max.)		2.51 (2.62)	3.62 (3.99)	4.11 (4.35)	2.51 (2.62)	3.62 (3.99)	4.11 (4.35)
	COP (Max.)		1.91 (1.87)	2.07 (1.93)	2.07 (1.96)	1.91 (1.87)	2.07 (1.93)	2.07 (1.96)
35°C/18°C cooling mode*1	Cooling capacity (Max.)	kW	5.35 (6.42)	7.69 (10.75)	9.30 (10.75)	5.35 (6.42)	7.69 (10.75)	9.30 (10.75)
	Input power (Max.)		1.26 (1.85)	1.72 (3.32)	2.47 (3.32)	1.26 (1.85)	1.72 (3.32)	2.47 (3.32)
	EER (Max.)		4.23 (3.48)	4.47 (3.24)	3.77 (3.24)	4.23 (3.48)	4.47 (3.24)	3.77 (3.24)
Space heating characteristics*2								
Temperature application		°C	55 35	55 35	55 35	55 35	55 35	55 35
Energy efficiency class			A++ A+++	A++ A+++	A++ A+++	A++ A+++	A++ A+++	A++ A+++
Rated heat output (P_{rated})		kW	6 6	9 9	10 10	6 6	9 9	10 10
Seasonal space heating energy efficiency (η_s)		%	133 189	139 195	141 195	133 189	139 195	141 195
Annual energy consumption		kWh	3,355 2,503	5,078 3,764	5,685 4,269	3,355 2,503	5,078 3,764	5,685 4,269
Sound power level*3	Outdoor unit	dB(A)	52 52	56 56	57 57	52 52	56 56	57 57
Indoor unit specifications								
Power source			Single phase, 230 V, 50 Hz			Single phase, 230 V, 50 Hz		
Dimensions H × W × D		mm	737 × 448 × 469	737 × 448 × 469	737 × 448 × 469	1755 × 598 × 623	1755 × 598 × 623	1755 × 598 × 623
Weight (Net)		kg	34.0	34.0	34.0	130.0	130.0	130.0
Water circulation	Min./Max.	L/min	8.5	14.5	14.5	8.5	14.5	14.5
DHW tank volume		L	-	-	-	190	190	190
Buffer tank capacity		L	16	16	16	16	16	16
Expansion vessel capacity		L	12	12	12	12	12	12
Water flow tempreature range	Max.	°C	60	60	60	60	60	60
Water pipe connection diameter	Flow/Return	mm	Ø19.05/Ø19.05	Ø19.05/Ø19.05	Ø19.05/Ø19.05	Ø19.05/Ø19.05	Ø19.05/Ø19.05	Ø19.05/Ø19.05
Electrical heater capacity	Heating	kW	3.0	3.0	3.0	3.0	3.0	3.0
	DHW		-	-	-	1.2	1.2	1.2
Delclared load profile		-	-	-	-	L	L	L
Efficiency ηDHW		%	-	-	-	124	124	124
Heating up time			-	-	-	1h45min	1h35min	1h35min
COP(EN16147)		-	-	-	-	3.10	3.10	3.10
Outdoor unit specifications								
Power source			Single phase, 230 V, 50 Hz			Single phase, 230 V, 50 Hz		
Current	Max.	A	14.6	19.1	20.6	14.6	19.1	20.6
Water flow temperature range	Max.	°C	60	60	60	60	60	60
Dimensions H × W × D		mm	798 × 1,080 × 480	1,008 × 1,080 × 480	1,008 × 1,080 × 480	798 × 1,080 × 480	1,008 × 1,080 × 480	1,008 × 1,080 × 480
Weight (Net)		kg	85	109	109	85	109	109
Refrigerant	Type (Global Warming Potential)		R32 (675)	R32 (675)	R32 (675)	R32 (675)	R32 (675)	R32 (675)
	Charge	kg	0.88	1.47	1.47	0.88	1.47	1.47
Connection pipe Diameter	Water	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4	Ø25.4	Ø25.4
Operating range	Heating	°C	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35

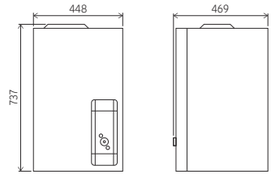
*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

Dimensions
(Unit: mm)

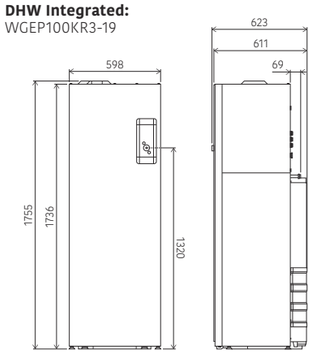
Control box:
UTW-SCBEC



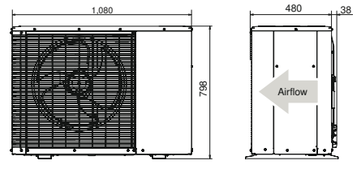
Wall Mounted:
WSEP100KR3



DHW Integrated:
WGEP100KR3-19

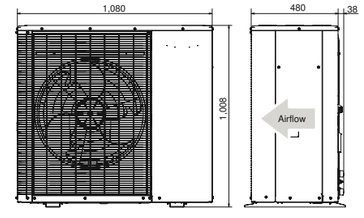


Outdoor unit:
WPEG050KRF

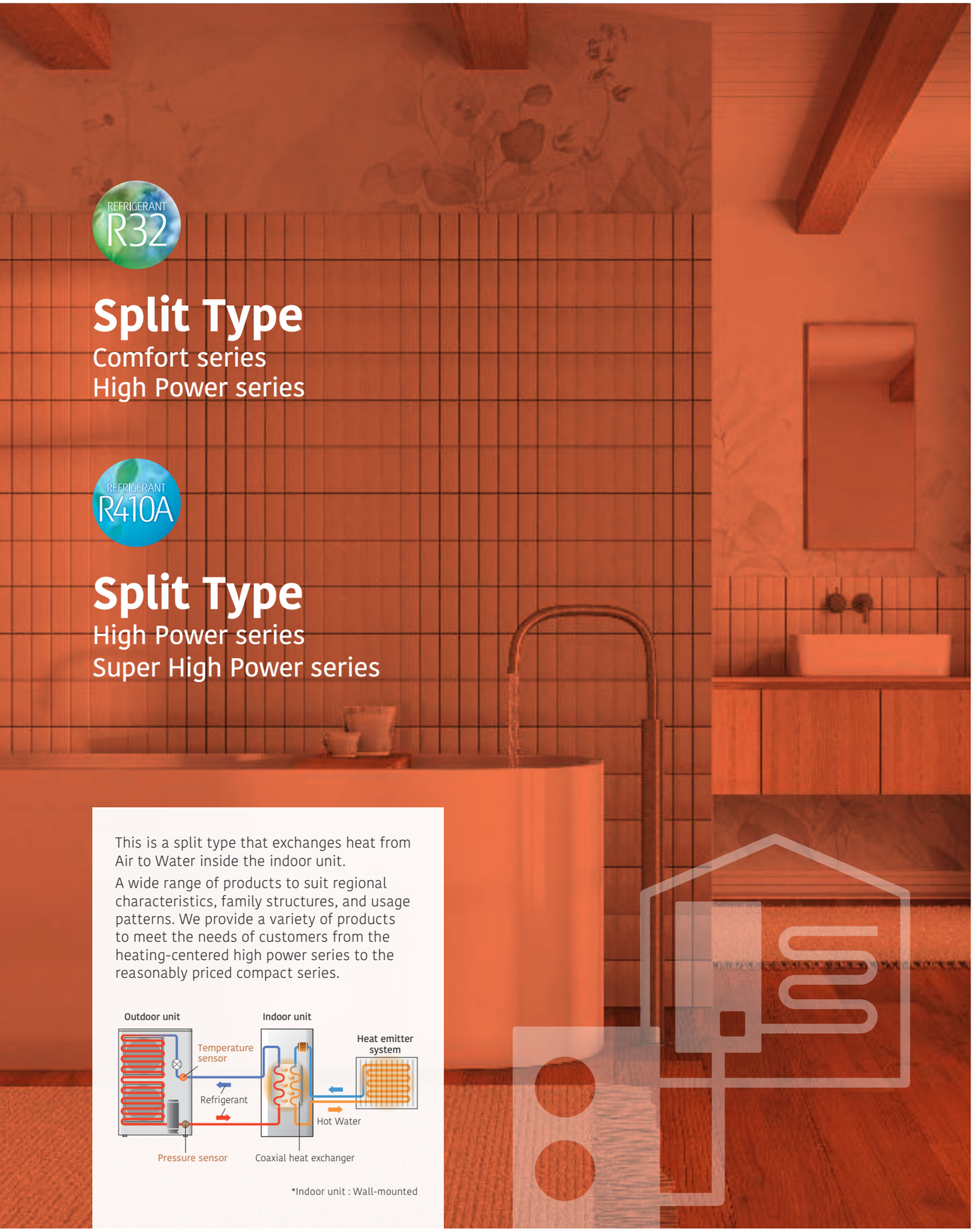


Front view Side view (R)

WPEG080KRF/WPEG100KRF



Front view Side view (R)



REFRIGERANT R32

Split Type

Comfort series
High Power series

REFRIGERANT R410A

Split Type

High Power series
Super High Power series

This is a split type that exchanges heat from Air to Water inside the indoor unit.

A wide range of products to suit regional characteristics, family structures, and usage patterns. We provide a variety of products to meet the needs of customers from the heating-centered high power series to the reasonably priced compact series.

*Indoor unit : Wall-mounted

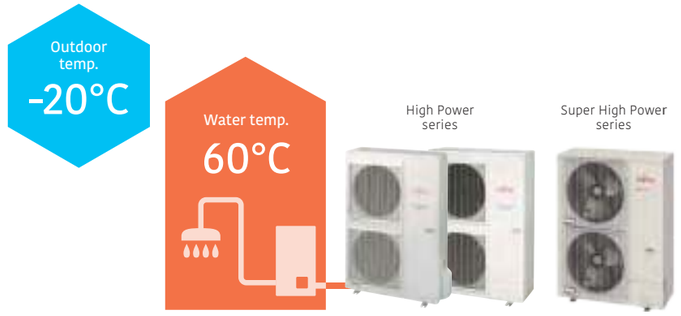
High Water Flow Temperature

The temperature of water flow can be maintained at 60°C without using a backup heater, even when the outdoor temperature drops to -20°C*.

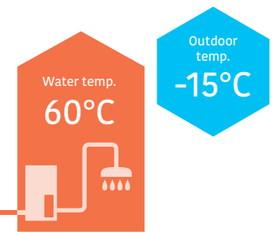
* The Super High Power Series and The R410A High Power Series only. The R32 High Power Series is rated for -15°C. The Comfort Series is rated for -10°C.



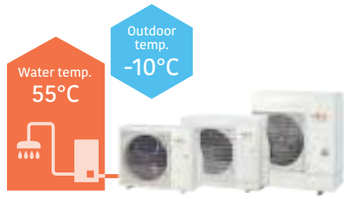
High Power series & Super High Power series



NEW High Power series



Comfort series



* If you want to raise the temperature of the water supply to above the maximum temperature, use a backup heater

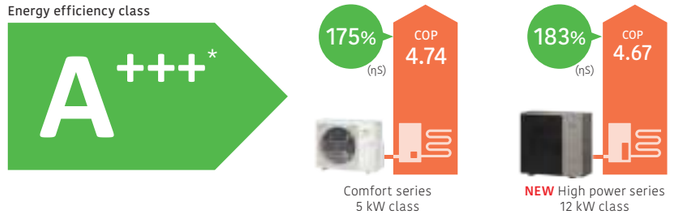
High COP

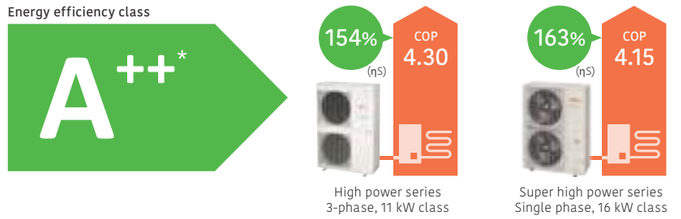
Heat pumps of ATW Systems work more efficiently and consume less energy than conventional heating systems.



Seasonal space heating energy efficiency (η_s)

*Conditions: Outdoor Temp. 7°C, Heating Temp. 35°C





High Energy Efficiency

Outdoor Unit **Technology to Achieve high Efficiency**

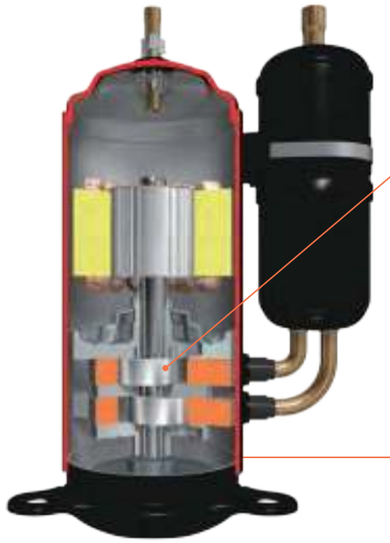
High-magnetic flux motor

Copper and iron losses are thoroughly suppressed to realize high magnetic flux of the motor. The high magnetic flux produces stronger torque than ever before. Thanks to this, operation with less current is possible, bringing out high-efficiency operation.



Smooth gas flow

The arrangement of parts that do not obstruct refrigerant flow in the compressor leads to highly efficient operation. Broad interpretation of the optimization of refrigerant flow paths has resulted in about 13 patents.



2 Cylinder rotary compressor

High-precision parts

The precision machining of parts has improved the degree of adhesion between parts. Refrigerant leakage from gaps has been reduced, leading to improved compression efficiency and high-efficiency operation. In addition, the contact surfaces between parts have been smoothed and the amount of wear has been reduced, resulting in stable performance over a long period of time.

NEW High power series outdoor unit





Larger fan

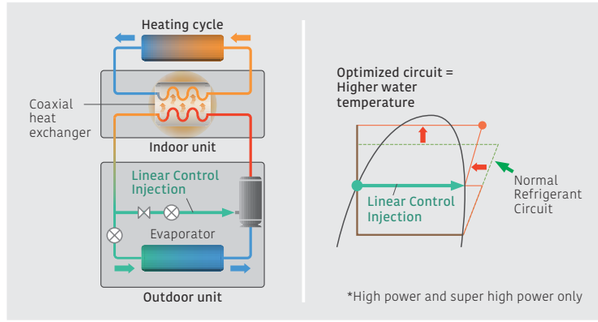


Low Noise Operation

In the outdoor unit, a larger fan and a sound-insulating structure in the compressor part reduce the maximum operating noise. The Split type High power Series outdoor unit can operate silently at 56 dB(A)* with high energy efficiency. *10/12 kW models

Twin-Rotary Compressor with Linear Control Injection Port

The compressor achieves a high condensing temperature without overheating the discharge gas temperature due to the Linear control injection process used during compression.
This makes the condensing temperature higher than in a normal circuit. Higher water temperatures can be achieved by controlling the injection volume according to usage conditions.



Super High power series outdoor unit



High power series outdoor unit

Comfort series outdoor unit



5/6 kW　8 kW　10 kW

DC Inverter

DC inverter provides smooth water temperature control.

DC Fan Motor

High-performance, high-efficiency small DC fan motor mounted

DC Twin-Rotary Compressor

High-efficiency DC twin-rotary compressor

Indoor Unit **Technology to Achieve high Efficiency**



Class A Pump

Energy-saving pump with the ability to adjust the flow rate and pressure to a constant level

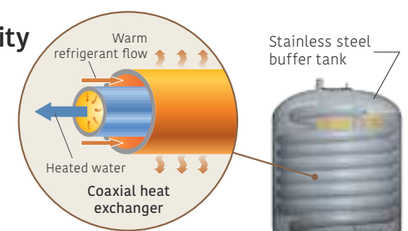


Wall-mounted



DHW Integrated

High-durability coaxial heat exchanger



Stainless Steel Buffer Tank

Energy-saving performance has also been improved. The buffer tank has anti-corrosion protection thanks to stainless steel material.

Durability and Reliability



We take care to ensure that our products can be used by our customers for a long time.
We have taken measures to reduce damage to our products even in the event of problems with the installation environment or during operation.



Pressure Switch

The pressure switch equipped on the refrigerant cycle protects the system from malfunction that may caused by abnormal refrigerant pressure.

Silicon Coating of PCBs

The silicon coating protects the PCBs and their components from damage caused by small animals living in the electrical box and salt.



Technology to Increase Durability

Optimal bearings

Reduced stress on specific parts of the body reduces the risk of wear and tear.
Reduced vibration during rotation reduces wear and fatigue damage, resulting in increased durability.



2 Cylinder rotary compressor
NEW High power series

Coated vane

- Very high hardness and low coefficient of wear, providing excellent resistance to abrasion. Scientifically stable and highly resistant to a wide range of working fluids and environmental conditions, it protects vanes from corrosion and chemical degradation, contributing to longer service life.

Optimal lubricating oil

- Improves durability by preventing friction and heating of parts
- Contains rust inhibitors and antioxidants to protect metal parts from corrosion, which can cause failure and loss of performance.
- Reduces shock and vibration between parts, preventing overstressing of parts and increasing durability

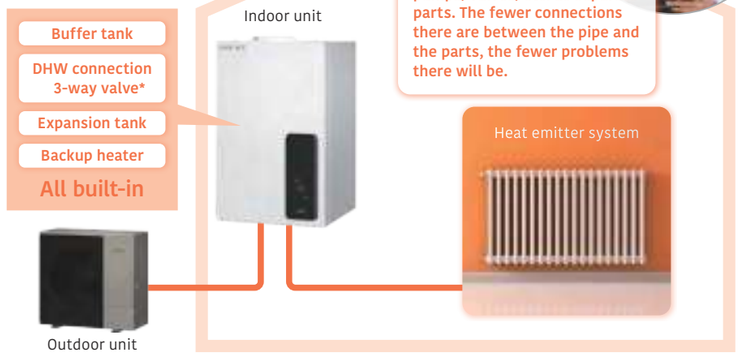
Serviceability and Maintainability



Improved Workability

- The indoor unit is equipped with a buffer tank, DHW connection 3-way valve*, as well as an expansion tank and backup heater
- This improves system reliability and ease of installation

*Wall-mounted only

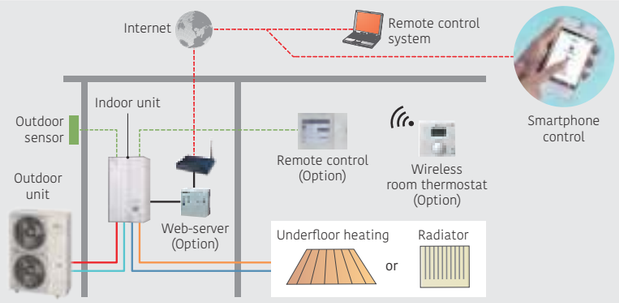


Useful Features

Features	Explanation
Quick recovery from defrosting	Maintains room temperature by boost start operation during defrosting
Auto changeover	When cooling mode is selected, the system automatically switches between cooling and heating modes depending on the outside temperature.
2-zone independent control	2-zone independent control
Backup heater operation	Backup heater maintains a comfortable room temperature even when the outside temperature is low. It is intelligently controlled as a safety backup for very cold days and nights, and only operates when really needed.
Peak cut function	Sets the peak current value to reduce power consumption. Mode 1 -> 100% Mode 2 -> 75% Mode 3 -> 50% Mode 4 -> Almost 0%
Anti-Freezing function	When the outside temperature drops below a specified level, the compressor will self-activate and water will also be automatically circulated to prevent freezing.
Anti-Legionella function	Prevents the growth of Legionella bacteria in the DHW tank to supply safe and clean hot water at all times.
Emergency operation	If an outdoor unit fails to operate, a built-in backup heater or an external boiler is activated to supply an uninterrupted supply of hot water to the house.

Smart Control

To meet the diverse needs of customers, we offer a variety of control options, such as individual control and remote control options.



Split type
Comfort series (Wall-mounted type)

Indoor unit:
WSYA050ML3 / WSYA080ML3 / WSYA100ML3

Outdoor unit:
WOYA060KLT / WOYA080KLT / WOYA100KLT

Wall-mounted
Single phase



Outdoor unit
Single phase
5/6 kW



Outdoor unit
Single phase
8 kW



Outdoor unit
Single phase
10 kW

Specifications

Model Name	Indoor unit			WSYA050ML3		WSYA080ML3		WSYA080ML3		WSYA100ML3	
	Outdoor unit			WOYA060KLT		WOYA060KLT		WOYA080KLT		WOYA100KLT	
Capacity Range				5		6		8		10	
7°C/35°C floor heating *1	Heating capacity (Max.)	kW		4.50 (7.64)		5.50 (8.93)		7.50 (9.64)		9.50 (15.29)	
	Input power (Max.)			0.949 (1.80)		1.18 (2.24)		1.69 (2.46)		2.11 (3.89)	
	COP (Max.)			4.74 (4.24)		4.65 (3.99)		4.43 (3.92)		4.50 (3.93)	
2°C/35°C floor heating *1	Heating capacity	kW		4.50		5.30		6.30		9.30	
	Input power			1.33		1.65		1.96		3.08	
	COP			3.39		3.22		3.21		3.02	
-7°C/35°C floor heating*1	Heating capacity (Max.)	kW		4.40 (4.97)		5.00 (6.13)		5.70 (7.05)		8.90 (10.40)	
	Input power (Max.)			1.59 (1.67)		1.90 (2.12)		2.13 (2.55)		3.36 (3.62)	
	COP (Max.)			2.76 (2.98)		2.63 (2.89)		2.68 (2.76)		2.65 (2.87)	
-7°C/55°C Radiator*1	Heating capacity (Max.)	kW		3.90 (4.24)		4.25 (4.86)		5.30 (5.85)		8.00 (8.00)	
	Input power (Max.)			2.11 (2.25)		2.25 (2.69)		2.79 (3.26)		4.10 (4.10)	
	COP (Max.)			1.85 (1.88)		1.89 (1.81)		1.90 (1.79)		1.95 (1.95)	
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	5	5	5	6	6	7	8	9
Seasonal space heating energy efficiency (η_s)			%	125	175	125	175	128	177	130	178
Annual energy consumption			kWh	3,035	2,322	3,411	2,594	3,903	2,982	5,083	3,875
Sound power level*3	Indoor unit		dB(A)	40	-	40	-	40	-	40	-
	Outdoor unit			57	-	57	-	60	-	62	-
Indoor unit specifications											
Power source				Single phase, ~230 V, 50 Hz							
Dimensions H × W × D			mm	847 × 450 × 493		847 × 450 × 493		847 × 450 × 493		847 × 450 × 493	
Weight (Net)			kg	47		47		47		47	
Water circulation	Min./Max.		L/min	7.6/22.0		8.5/22.0		10.0/22.0		13.2/30.0	
Buffer tank capacity			L	16		16		16		16	
Expansion vessel capacity			L	8		8		8		8	
Water flow temperature range	Max.		°C	55		55		55		55	
Water pipe connection diameter	Flow/Return		mm	Ø25.4/Ø25.4		Ø25.4/Ø25.4		Ø25.4/Ø25.4		Ø25.4/Ø25.4	
Electrical heater capacity	Heating		kW	3.0		3.0		3.0		3.0	
Outdoor unit specifications											
Power source				Single phase, ~230 V, 50 Hz							
Current	Max.		A	13.0		13.0		18.0		19.0	
Dimensions H × W × D			mm	632 × 799 × 290		632 × 799 × 290		716 × 820 × 315		998 × 940 × 320	
Weight (Net)			kg	39		39		42		62	
Refrigerant	Type (Global Warming Potential)			R32 (675)		R32 (675)		R32 (675)		R32 (675)	
	Charge		kg	0.97		0.97		1.02		1.63	
Additional refrigerant charge			g/m	25		25		25		20	
Connection pipe	Diameter	Liquid	mm	6.35		6.35		6.35		9.52	
		Gas		12.70		12.70		12.70		15.88	
	Length	Min./Max.	m	3/30		3/30		3/30		3/30	
	Length (Pre-charge)		m	15		15		15		20	
	Height difference	Max.	m	20		20		20		20	
Operating range		Heating	°C	-20 to 35		-20 to 35		-20 to 35		-20 to 35	

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

Split type
Comfort series (DHW Integrated type)

Indoor unit:
WGYA050ML3 / WGYA080ML3 / WGYA100ML3

Outdoor unit:
WOYA060KLT / WOYA080KLT / WOYA100KLT



DHW Integrated
Single phase



Outdoor unit
Single phase
5/6 kW



Outdoor unit
Single phase
8 kW



Outdoor unit
Single phase
10 kW

Specifications

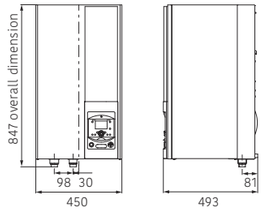
Model Name	Indoor unit			WGYA050ML3		WGYA080ML3		WGYA080ML3		WGYA100ML3	
	Outdoor unit			WOYA060KLT		WOYA060KLT		WOYA080KLT		WOYA100KLT	
Capacity range				5		6		8		10	
7°C/35°C floor heating *1	Heating capacity (Max.)	kW		4.50 (7.64)		5.50 (8.93)		7.50 (9.64)		9.50 (15.29)	
	Input power (Max.)			0.949 (1.80)		1.18 (2.24)		1.69 (2.46)		2.11 (3.89)	
	COP (Max.)			4.74 (4.24)		4.65 (3.99)		4.43 (3.92)		4.50 (3.93)	
2°C/35°C floor heating *1	Heating capacity	kW		4.50		5.30		6.30		9.30	
	Input power			1.33		1.65		1.96		3.08	
	COP			3.39		3.22		3.21		3.02	
-7°C/35°C floor heating*1	Heating capacity (Max.)	kW		4.40 (4.97)		5.00 (6.13)		5.70 (7.05)		8.90 (10.40)	
	Input power (Max.)			1.59 (1.67)		1.90 (2.12)		2.13 (2.55)		3.36 (3.62)	
	COP (Max.)			2.76 (2.98)		2.63 (2.89)		2.68 (2.76)		2.65 (2.87)	
-7°C/55°C Radiator*1	Heating capacity (Max.)	kW		3.90 (4.24)		4.25 (4.86)		5.30 (5.85)		8.00 (8.00)	
	Input power (Max.)			2.11 (2.25)		2.25 (2.69)		2.79 (3.26)		4.10 (4.10)	
	COP (Max.)			1.85 (1.88)		1.89 (1.81)		1.90 (1.79)		1.95 (1.95)	
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	5	5	5	6	6	7	8	9
Seasonal space heating energy efficiency (η_s)			%	125	175	125	175	128	177	130	178
Annual energy consumption			kWh	3,035	2,322	3,411	2,594	3,903	2,982	5,083	3,875
Sound power level*3	Indoor unit		dB(A)	40	-	40	-	40	-	40	-
	Outdoor unit			57	-	57	-	60	-	62	-
Domestic hot water characteristics*2											
Load profile				L		L		L		L	
Energy efficiency class				A+		A+		A+		A+	
Energy efficiency (ηwh)			%	130		130		130		130	
Annual electricity consumption			kWh	793		793		793		793	
Indoor unit specifications											
Power source				Single phase, ~230 V, 50 Hz							
Dimensions H × W × D			mm	1,863 × 648 × 700		1,863 × 648 × 700		1,863 × 648 × 700		1,863 × 648 × 700	
Weight (Net)			kg	145		145		145		145	
Water circulation	Min./Max.		L/min	7.6/22.0		8.5/22.0		10.0/22.0		13.2/30.0	
DHW tank volume			L	190		190		190		190	
Electrical heater capacity	Heating		kW	3.0		3.0		3.0		3.0	
	DHW			1.5		1.5		1.5		1.5	
Buffer tank capacity			L	16		16		16		16	
Expansion vessel capacity			L	8		8		8		8	
Water flow temperature range	Max.		°C	55		55		55		55	
Water pipe connection diameter	Flow/Return		mm	Ø25.4/Ø25.4		Ø25.4/Ø25.4		Ø25.4/Ø25.4		Ø25.4/Ø25.4	
Hot water pipe connection diameter			mm	Ø19.05		Ø19.05		Ø19.05		Ø19.05	
Outdoor unit specifications											
Power source				Single phase, ~230 V, 50 Hz							
Current	Max.		A	13.0		13.0		18.0		19.0	
Dimensions H × W × D			mm	632 × 799 × 290		632 × 799 × 290		716 × 820 × 315		998 × 940 × 320	
Weight (Net)			kg	39		39		42		62	
Refrigerant	Type (Global Warming Potential)			R32 (675)		R32 (675)		R32 (675)		R32 (675)	
	Charge		kg	0.97		0.97		1.02		1.63	
Additional refrigerant charge			g/m	25		25		25		20	
Connection pipe	Diameter	Liquid	mm	6.35		6.35		6.35		9.52	
		Gas		12.70		12.70		12.70		15.88	
	Length	Min./Max.	m	3/30		3/30		3/30		3/30	
	Length (Pre-charge)		m	15		15		15		20	
	Height difference	Max.	m	20		20		20		20	
Operating range		Heating	°C	-20 to 35		-20 to 35		-20 to 35		-20 to 35	

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

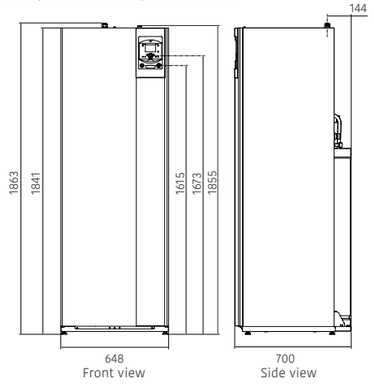
Dimensions

(Unit: mm)

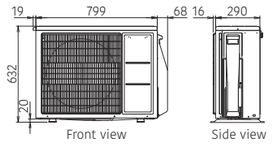
Indoor Unit:
WSYA050ML3/WSYA080ML3/WSYA100ML3



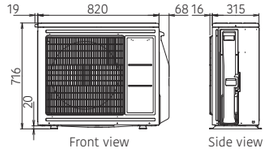
WGYA050ML3/WGYA080ML3/WGYA100ML3



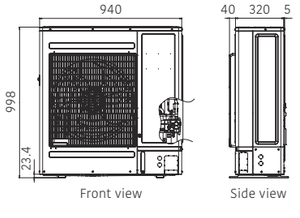
Outdoor Unit:
WOYA060KLT



WOYA080KLT



WOYA100KLT



Split type
High power series (Wall-mounted type)

Indoor unit:
WSEG140MQ6
[3-phase] WSEK140MQ9

Outdoor unit:
WOYG100MQL / WOYG121MQL / WOYG140MQL
[3-phase] WOYK121MQL / WOYK140MQL



Wall Mounted
Single phase/
3-phase



Outdoor unit
Single phase 10/12/14 kW
3-phase 12/14 kW

Specifications

Model Name	Indoor unit		Wall Mounted									
	Outdoor unit		WSEG140MQ6 WOYG100MQL		WSEG140MQ6 WOYG121MQL		WSEG140MQ6 WOYG140MQL		WSEK140MQ9 WOYK121MQL		WSEK140MQ9 WOYK140MQL	
Capacity Range			10		12		14		12		14	
7°C/35°C floor heating*1	Heating capacity (Max.)	kW	10.08 (15.3)		12.55 (16.2)		14.47 (17.8)		12.55 (16.2)		14.47 (17.8)	
	Input power (Max.)		2.18 (3.54)		2.69 (3.80)		3.36 (4.16)		2.69 (3.80)		3.36 (4.16)	
	COP (Max.)		4.62 (4.33)		4.67 (4.25)		4.31 (4.28)		4.67 (4.25)		4.31 (4.28)	
7°C/55°C radiator*1	Heating capacity (Max.)	kW	8.24 (12.3)		9.16 (13.7)		10.09 (15.5)		9.16 (13.7)		10.09 (15.5)	
	Input power (Max.)		2.79 (4.15)		3.06 (4.72)		3.36 (5.41)		3.06 (4.72)		3.36 (5.41)	
	COP (Max.)		2.95 (2.96)		2.99 (2.91)		3.00 (2.87)		2.99 (2.91)		3.00 (2.87)	
-7°C/55°C radiator*1	Heating capacity (Max.)	kW	7.10 (9.1)		8.63 (10.2)		10.28 (10.5)		8.63 (10.2)		10.28 (10.5)	
	Input power (Max.)		3.30 (4.26)		4.03 (4.84)		4.74 (4.99)		4.03 (4.84)		4.74 (4.99)	
	COP (Max.)		2.15 (2.14)		2.14 (2.12)		2.17 (2.11)		2.14 (2.12)		2.17 (2.11)	
Space heating characteristics*2												
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	8.2	8.5	9.8	10.1	11.4	11.7	9.8	10.1	11.4	11.7
Seasonal space heating energy efficiency (η_s)		%	131	183	135	183	137	185	135	183	137	185
Annual energy consumption		kWh	5,060	3,771	5,879	4,476	6,717	5,132	5,879	4,476	6,717	5,132
Sound power level*3	Outdoor unit	dB(A)	56		56		58		56		58	
Indoor unit specifications												
Power source			Single phase, 230 V, 50 Hz						3-phase, ~400 V, 50 Hz			
Dimensions H × W × D		mm	750 × 448 × 469		750 × 448 × 469		750 × 448 × 469		750 × 448 × 469		750 × 448 × 469	
Weight (Net)		kg	46		46		46		46		46	
Water circulation	Min./Max.	L/min	10/42		10/42		10/42		10/42		10/42	
DHW tank volume		L	-		-		-		-		-	
Buffer tank capacity		L	15		15		15		15		15	
Expansion vessel capacity		L	12		12		12		12		12	
Water flow tempreature range	Max.	°C	60		60		60		60		60	
Water pipe connection diameter	Flow/Return	mm	Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05	
Electrical heater capacity	Heating	kW	6		6		6		9		9	
Outdoor unit specifications												
Power source			Single phase, 230 V, 50 Hz						3-phase, ~400 V, 50 Hz			
Current	Max.	A	19.5		22.0		25.0		8.8		9.8	
Water flow temperature range	Max.	°C	60		60		60		60		60	
Dimensions H × W × D		mm	1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480	
Weight (Net)		kg	96		96		102		96		102	
Refrigerant	Type (Global Warming Potential)		R32		R32		R32		R32		R32	
	Charge	kg	1.40		1.40		1.63		1.40		1.63	
Additional refrigerant charge		g/m	50		50		50		50		50	
Connection pipe Diameter	Liquid	mm	Ø6.35		Ø6.35		Ø6.35		Ø6.35		Ø6.35	
	Gas		Ø12.7		Ø12.7		Ø12.7		Ø12.7		Ø12.7	
Connection pipe Length	Min./Max.	m	3/25		3/25		3/25		3/25		3/25	
Length (Pre-charge)		m	15		15		15		15		15	
Height difference	Max.		20		20		20		20		20	
Operating range	Heating	°C	-25 to 35		-25 to 35		-25 to 35		-25 to 35		-25 to 35	

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

Split type
High power series (DHW Integrated type)

Indoor unit:
WGEG140MQ6-19
[3-phase] WGEK140MQ9-19

Outdoor unit:
WOYG100MQL / WOYG121MQL / WOYG140MQL
[3-phase] WOYK121MQL / WOYK140MQL



Wall Mounted
Single phase/
3-phase



Outdoor unit
Single phase 10/12/14 kW
3-phase 12/14 kW

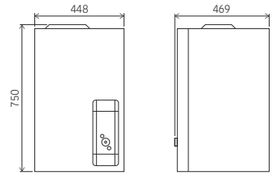
Specifications

Model Name	Indoor unit		DHW Integrated									
	Outdoor unit		WGEG140MQ6-19 WOYG100MQL		WGEG140MQ6-19 WOYG121MQL		WGEG140MQ6-19 WOYG140MQL		WGEK140MQ9-19 WOYK121MQL		WGEK140MQ9-19 WOYK140MQL	
Capacity Range			10		12		14		12		14	
7°C/35°C floor heating*1	Heating capacity (Max.)	kW	10.08 (15.3)		12.55 (16.2)		14.47 (17.8)		12.55 (16.2)		14.47 (17.8)	
	Input power (Max.)		2.18 (3.54)		2.69 (3.80)		3.36 (4.16)		2.69 (3.80)		3.36 (4.16)	
	COP (Max.)		4.62 (4.33)		4.67 (4.25)		4.31 (4.28)		4.67 (4.25)		4.31 (4.28)	
7°C/55°C radiator*1	Heating capacity (Max.)	kW	8.24 (12.3)		9.16 (13.7)		10.09 (15.5)		9.16 (13.7)		10.09 (15.5)	
	Input power (Max.)		2.79 (4.15)		3.06 (4.72)		3.36 (5.41)		3.06 (4.72)		3.36 (5.41)	
	COP (Max.)		2.95 (2.96)		2.99 (2.91)		3.00 (2.87)		2.99 (2.91)		3.00 (2.87)	
-7°C/55°C radiator*1	Heating capacity (Max.)	kW	7.10 (9.1)		8.63 (10.2)		10.28 (10.5)		8.63 (10.2)		10.28 (10.5)	
	Input power (Max.)		3.30 (4.26)		4.03 (4.84)		4.74 (4.99)		4.03 (4.84)		4.74 (4.99)	
	COP (Max.)		2.15 (2.14)		2.14 (2.12)		2.17 (2.11)		2.14 (2.12)		2.17 (2.11)	
Space heating characteristics*2												
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	8.2	8.5	9.8	10.1	11.4	11.7	9.8	10.1	11.4	11.7
Seasonal space heating energy efficiency (η_s)		%	131	183	135	183	137	185	135	183	137	185
Annual energy consumption		kWh	5,060	3,771	5,879	4,476	6,717	5,132	5,879	4,476	6,717	5,132
Sound power level*3	Outdoor unit	dB(A)	56		56		58		56		58	
Indoor unit specifications												
Power source			Single phase, 230 V, 50 Hz						3-phase, ~400 V, 50 Hz			
Dimensions H × W × D		mm	1,780×598×624		1,780×598×624		1,780×598×624		1,780×598×624		1,780×598×624	
Weight (Net)		kg	135		135		135		135		135	
Water circulation	Min./Max.	L/min	10/42		10/42		10/42		10/42		10/42	
DHW tank volume		L	190		190		190		190		190	
Buffer tank capacity		L	16		16		16		16		16	
Expansion vessel capacity		L	12		12		12		12		12	
Water flow tempreature range	Max.	°C	60		60		60		60		60	
Water pipe connection diameter	Flow/Return	mm	Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05		Ø19.05/Ø19.05	
Electrical heater capacity	Heating	kW	6.0		6.0		6.0		9.0		9.0	
	DHW		1.2		1.2		1.2		1.2		1.2	
Delclared load profile		-	L		L		L		L		L	
Efficiency ηDHW		%	116		116		116		116		116	
Heating up time			1h30min		1h20min		1h10min		1h20min		1h10min	
COP(EN16147)		-	2.90		2.90		2.90		2.90		2.90	
Outdoor unit specifications												
Power source			Single phase, 230 V, 50 Hz						3-phase, ~400 V, 50 Hz			
Current	Max.	A	19.5		22.0		25.0		8.8		9.8	
Water flow temperature range	Max.	°C	60		60		60		60		60	
Dimensions H × W × D		mm	1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480		1,008 × 1,080 × 480	
Weight (Net)		kg	96		96		102		96		102	
Refrigerant	Type (Global Warming Potential)		R32		R32		R32		R32		R32	
	Charge	kg	1.40		1.40		1.63		1.40		1.63	
Additional refrigerant charge		g/m	50		50		50		50		50	
Connection pipe Diameter	Liquid	mm	Ø6.35		Ø6.35		Ø6.35		Ø6.35		Ø6.35	
	Gas		Ø12.7		Ø12.7		Ø12.7		Ø12.7		Ø12.7	
Connection pipe Length	Min./Max.	m	3/25		3/25		3/25		3/25		3/25	
Length (Pre-charge)		m	15		15		15		15		15	
Height difference	Max.		20		20		20		20		20	
Operating range	Heating	°C	-25 to 35		-25 to 35		-25 to 35		-25 to 35		-25 to 35	

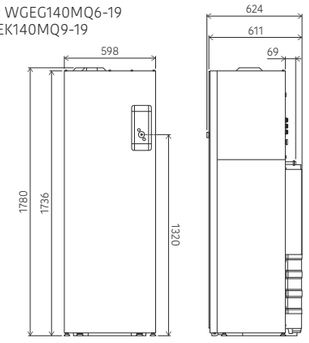
*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/
*3: The sound power level values are based on EN12102 standard measurements under EN14825 standard conditions.

Dimensions
(Unit: mm)

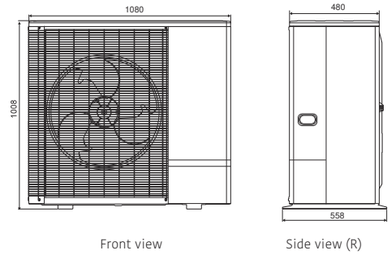
Wall Mounted:
Single phase: WSEG140MQ6
3-phase: WSEK140MQ9



DHW Integrated:
Single phase: WGEG140MQ6-19
3-phase: WGEK140MQ9-19



Outdoor Unit:
Single phase: WOYG100MQL/WOYG121MQL/WOYG140MQL
3-phase: WOYK121MQL/WOYK140MQL



Front view
Side view (R)

Split type
High power series (Wall-mounted type)

Indoor unit:
WSYG140DG6/
[3-phase]WSYK160DG9

Outdoor unit:
WOYG112LHT / WOYG140LCTA
[3-phase] WOYK112LCTA /
WOYK140LCTA /WOYK160LCTA


Wall-mounted
Single phase/
3-phase


Outdoor unit
Single phase
11/14 kW


Outdoor unit
3-phase
11/14/16 kW

Specifications

Model Name	Indoor unit		WSYG140DG6		WSYG140DG6		WSYK160DG9		WSYK160DG9		WSYK160DG9	
	Outdoor unit		WOYG112LHT		WOYG140LCTA		WOYK112LCTA		WOYK140LCTA		WOYK160LCTA	
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	
-7°C/55°C Radiator*1	Heating capacity	kW	7.57		9.20		9.27		10.10		11.00	
	Input power		4.57		5.08		5.09		5.65		6.29	
	COP		1.66		1.81		1.82		1.79		1.75	
Space heating characteristics*2												
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	6,704	6,062	8,041	6,824	6,669	5,930	7,803	6,738	9,062	7,408
Sound power level	Indoor unit	dB(A)	46		46		46		46		46	
	Outdoor unit		68		69		69	68	70	68	71	
Indoor unit specifications												
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		24.4/48.7		27.4/54.8	
Buffer tank capacity		L	16				16					
Expansion vessel capacity		L	8				8					
Water flow temperature range	Max.	°C	60				60					
Water pipe connection diameter	Flow/Return	mm	Ø25.4/Ø25.4				Ø25.4/Ø25.4					
Electrical heater capacity	heating	kW	6.0(3.0 kW×2pcs.)				9.0(3.0 kW×3pcs.)					
Outdoor unit specifications												
Power source			Single phase, ~230 V, 50 Hz				3-phase, ~400 V, 50 Hz					
Current	Max.	A	22.0	25.0			9.0	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		g/m	50									
Connection pipe	Diameter	Liquid	mm	Ø9.52								
		Gas		Ø15.88								
	Length	Min./Max.	m	5/20								
	Length (Pre-charge)		m	15								
	Height difference	Max.	m	15								
Operating range		Heating	°C	-25 to 35								

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/

Split type
High power series (DHW Integrated type)

Indoor unit:
WGYG140DG6/
[3-phase]WGYK160DG9

Outdoor unit:
WOYG112LHT / WOYG140LCTA
[3-phase] WOYK112LCTA / WOYK140LCTA /
WOYK160LCTA


DHW Integrated
Single phase/
3-phase


Outdoor unit
Single phase
11/14 kW


Outdoor unit
3-phase
11/14/16 kW

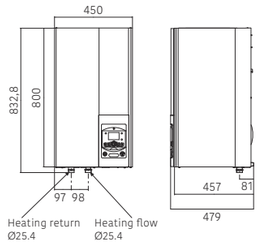
Specifications

Model Name	Indoor unit		WGYG140DG6		WGYG140DG6		WGYK160DG9		WGYK160DG9		WGYK160DG9	
	Outdoor unit		WOYG112LHT		WOYG140LCTA		WOYK112LCTA		WOYK140LCTA		WOYK160LCTA	
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	
-7°C/55°C Radiator*1	Heating capacity	kW	7.57		9.20		9.27		10.10		11.00	
	Input power		4.57		5.08		5.09		5.65		6.29	
	COP		1.66		1.81		1.82		1.79		1.75	
Space heating characteristics*2												
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	6,704	6,062	8,041	6,824	6,669	5,930	7,803	6,738	9,062	7,408
Sound power level	Indoor unit	dB(A)	46		46		46		46		46	
	Outdoor unit		68		69		69	68	70	68	71	
Domestic hot water characteristics*2												
Load profile			L									
Energy efficiency class			A									
Energy efficiency(η_{wh})		%	88									
Annual electricity consumption		kWh	1166									
Indoor unit specifications												
Power source			Single phase, ~230 V, 50 Hz				3-phase, ~400 V, 50 Hz					
Dimensions H × W × D		mm	1,840 × 648 × 698									
Weight (Net)		kg	152									
Water circulation	Min./Max.	L/min	19.5/39.0		24.4/28.7		19.5/39.0		24.4/48.7		27.4/54.8	
DHW tank volume		L	190									
Electrical heater capacity	Heating	kW	6				9					
	DHW		1.5									
Buffer tank capacity		L	16									
Expansion vessel capacity		L	12									
Water flow temperature range	Max.	°C	60									
Water pipe connection diameter	Flow/Return	mm	Ø25.4/Ø25.4									
Hot water pipe connection diameter		mm	Ø19.05									
Outdoor unit specifications												
Power source			Single phase, ~230 V, 50 Hz				3-phase, ~400 V, 50 Hz					
Current	Max.	A	22.0	25.0			9.0	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		g/m	50									
Connection pipe	Diameter	Liquid	mm	Ø9.52								
		Gas		Ø15.88								
	Length	Min./Max.	m	5/20								
	Length (Pre-charge)		m	15								
	Height difference	Max.	m	15								
Operating range		Heating	°C	-25 to 35								

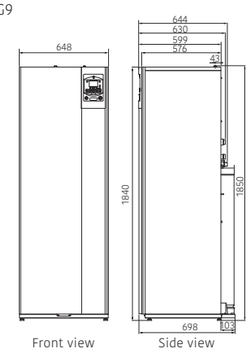
*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/

Dimensions
(Unit: mm)

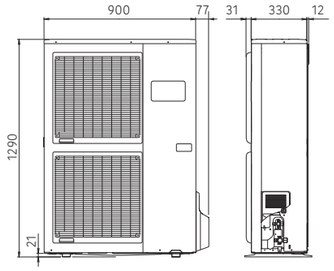
Indoor Unit:
Single phase: WSYG140DG6
3-phase: WSYK160DG9



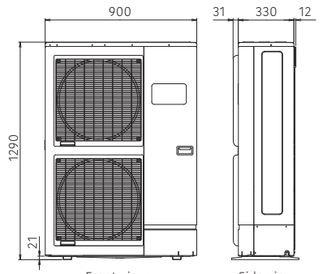
Single phase: WGYG140DG6
3-phase: WGYK160DG9



Outdoor Unit:
Single phase: WOYG112LHT/WOYG140LCTA



3-phase: WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Split type
Super high power series (Wall-mounted type)

Indoor unit:
WSYG160DJ6 / [3-phase] WSYK170DJ9

Outdoor unit:
WOYG160LJL
[3-phase] WOYK150LJL / WOYK170LJL



Wall-mounted
Single phase/
3-phase



Outdoor unit
Single phase 16 kW
3-phase 15/17 kW

Specifications

Model Name				WSYG160DJ6		WSYK170DJ9		WSYK170DJ9	
	Indoor unit			WOYG160LJL		WOYK150LJL		WOYK170LJL	
Capacity range				16		15		17	
7°C/35°C floor heating *1	Heating capacity		kW	16.00		15.00		17.00	
	Input power			3.86		3.46		4.10	
	COP			4.15		4.33		4.15	
2°C/35°C floor heating *1	Heating capacity		kW	13.30		13.20		13.50	
	Input power			4.25		4.06		4.27	
	COP			3.13		3.25		3.16	
-7°C/35°C floor heating*1	Heating capacity		kW	14.50		13.20		15.00	
	Input power			5.27		4.55		5.32	
	COP			2.75		2.90		2.82	
-7°C/55°C Radiator*1	Heating capacity		kW	10.90		13.20		14.20	
	Input power			5.89		6.77		7.40	
	COP			1.85		1.95		1.92	
Space heating characteristics*2									
Temperature application			°C	55	35	55	35	55	35
Energy efficiency class				A++	A++	A++	A++	A++	A++
Rated heat output (P_{rated})			kW	14	16	16	17	17	18
Seasonal space heating energy efficiency (η_s)			%	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	Indoor unit		dB(A)	45	45	45	45	45	45
	Outdoor unit			67	66	67	66	67	68
Indoor unit specifications									
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	22		22			
Expansion vessel capacity			L	10		10			
Water flow temperature range	Max.		°C	60		60			
Water pipe connection diameter	Flow/Return		mm	Ø25.4/Ø25.4		Ø25.4/Ø25.4			
Electrical heater capacity	Heating		kW	6.0 (3.0 kW × 2 pcs.)		9.0 (3.0 kW × 3 pcs.)			
Outdoor unit specifications									
Power source				Single phase, ~230 V, 50 Hz		3-phase, ~400 V, 50 Hz			
Current	Max.		A	28.0		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)			R410A (2,088)					
	Charge		kg	3.80		3.80		3.80	
Additional refrigerant charge			g/m	50		50		50	
Connection pipe	Diameter	Liquid	mm	Ø9.52		Ø9.52		Ø9.52	
		Gas		Ø15.88		Ø15.88		Ø15.88	
	Length	Min./Max.	m	5/30		5/30		5/30	
	Length (Pre-charge)		m	15		15		15	
	Height difference	Max.	m	25/15 (Outdoor unit: Upper/Lower)					
Operating range		Heating	°C	-25 to 35		-25 to 35		-25 to 35	

*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/

Split type
Super high power series (DHW Integrated type)

Indoor unit:
WGYG160DJ6 / [3-phase] WGYK170DJ9

Outdoor unit:
WOYG160LJL
[3-phase] WOYK150LJL / WOYK170LJL



DHW Integrated
Single phase/
3-phase



Outdoor unit
Single phase 16 kW
3-phase 15/17 kW

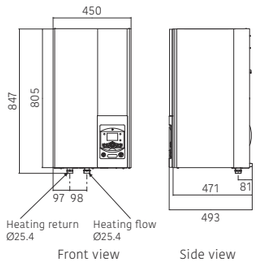
Specifications

Model Name				WGYG160DJ6		WGYK170DJ9		WGYK170DJ9	
	Indoor unit			WOYG160LJL		WOYK150LJL		WOYK170LJL	
Capacity range				16		15		17	
7°C/35°C floor heating *1	Heating capacity		kW	16.00		15.00		17.00	
	Input power			3.86		3.46		4.10	
	COP			4.15		4.33		4.15	
2°C/35°C floor heating *1	Heating capacity		kW	13.30		13.20		13.50	
	Input power			4.25		4.06		4.27	
	COP			3.13		3.25		3.16	
-7°C/35°C floor heating*1	Heating capacity		kW	14.50		13.20		15.00	
	Input power			5.27		4.55		5.32	
	COP			2.75		2.90		2.82	
-7°C/55°C Radiator*1	Heating capacity		kW	10.90		13.20		14.20	
	Input power			5.89		6.77		7.40	
	COP			1.85		1.85		1.92	
Space heating characteristics*2									
Temperature application			°C	55	35	55	35	55	35
Energy efficiency class				A++	A++	A++	A++	A++	A++
Rated heat output (P_{rated})			kW	14	16	16	17	17	18
Seasonal space heating energy efficiency (η_s)			%	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	Indoor unit		dB(A)	45	45	45	45	45	45
	Outdoor unit			67	66	67	66	67	68
Domestic hot water characteristics*2									
Load profile				L					
Energy efficiency class				A					
Energy efficiency (ηwh)			%	109					
Annual electricity consumption			kWh	941					
Indoor unit specifications									
Power source				Single phase, ~230 V, 50 Hz		3-phase, ~400 V, 50 Hz			
Dimensions H × W × D			mm	1,841 × 648 × 698					
Weight (Net)			kg	166					
Water circulation	Min./Max.		L/min	26.4/57.8		24.0/54.2		27.3/61.4	
DHW tank volume			L	190					
Electrical heater capacity	Heating		kW	6.0 (3.0 kW × 2 pcs.)		9.0 (3.0 kW × 3 pcs.)			
	DHW			1.5					
Buffer tank capacity			L	22					
Expansion vessel capacity			L	12					
Water flow temperature range	Max.		°C	60					
Water pipe connection diameter	Flow/Return		mm	Ø25.4/Ø25.4					
Hot water pipe connection diameter			mm	Ø19.05					
Outdoor unit specifications									
Power source				Single phase, ~230 V, 50 Hz		3-phase, ~400 V, 50 Hz			
Current	Max.		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)			
	Charge		kg	3.80		3.80			
Additional refrigerant charge			g/m	50		50			
Connection pipe	Diameter	Liquid	mm	Ø9.52		Ø9.52			
		Gas		Ø15.88		Ø15.88			
	Length	Min./Max.	m	5/30		5/30			
	Length (Pre-charge)		m	15		15			
	Height difference	Max.	m	25/15 (Outdoor unit: Upper/Lower)		25/15 (Outdoor unit: Upper/Lower)			
Operating range		Heating	°C	-25 to 35		-25 to 35			

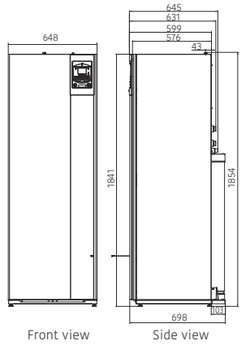
*1: Heating capacity, input power, and COP are measured using the EN14511 standard. Actual usage environments, such as the operating modes of the heating equipment, room temperature, and controller settings, may cause differences in values between those listed in the catalog and the actual performance characteristics.
*2: Information about ErP can be downloaded from our website at www.generalww.com/global/support/downloads/search/

Dimensions
(Unit: mm)

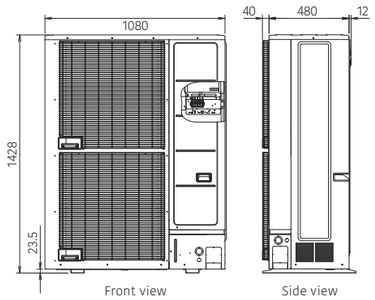
Indoor Unit:
Single phase: WSYG160DJ6
3-phase: WSYK170DJ9



Single phase: WGYG160DJ6
3-phase: WGYK170DJ9



Outdoor Unit:
Single phase: WOYG160LJL
3-phase: WOYK150LJL/WOYK170LJL





Indoor Unit

Type-A
Type-B

Selecting the indoor unit

- This is a device for storing hot water and circulating it to housing equipment.
- Selection criteria for the indoor unit is which housing equipment it will be connected to, such as a radiator or shower.
- Indoor unit you choose will also depend on whether you already own devices such as a pump or tank.



What Each Indoor Unit Can Do

Indoor unit control box*
If you want to update your system by reusing your existing pump and buffer tank, etc., you can do so by installing only the control box.

Indoor unit Wall-mounted
Stands for preparation of heating water for under floor heating and radiators. It can optionally operate with domestic hot water tank.

Indoor unit Domestic Hot Water (DHW) integrated
Can be used with a variety of heating systems,including under floor heating and radiators. Space saving heating and DHW supply in a single indoor unit.

*The control box can only be selected for Monobloc outdoor unit.

Types of Indoor Units

Type-**A**



Compatibility
for Monobloc type Comfort series / Split type High power series*
*The R32 High Power Series cannot be connected to the control box.

Indoor unit type / Housing Equipment	Control box*	Wall-mounted	DHW integrated
Under floor heating	○	●	●
Radiator	○	●	●
Fan coil	○	●	●
Bath	○	○	●
Shower	○	○	●
Hot Water	○	○	●

Type-**B**



Compatibility
for Split type
Comfort series, High power series
Super high power series

Indoor unit type / Housing Equipment	Wall-mounted	DHW integrated
Under floor heating	●	●
Radiator	●	●
Fan coil	●	●
Bath	○	●
Shower	○	●
Hot water	○	●

●: It can be used by constructing a system using options and carrying out water pipe work.
○: It can be used by constructing a system using options and carrying out water pipe work, by reusing (or locally procuring) existing pumps and tanks, etc.
Housing Equipment requires the preparation of separately sold products.

Type-**A**

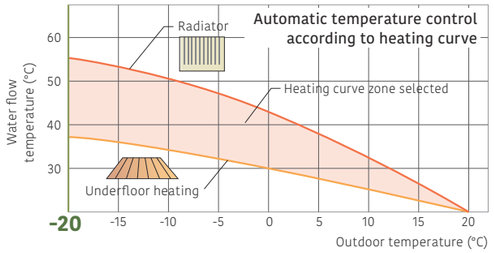
Comfort Control

Useful Features

Flow temperature control with climate compensation

Automatic Heating Curve Control

Automatic temperature regulation according to heating curve (depending on heating terminal and outdoor temperature)



Auto Changeover

When Auto mode is selected, the system automatically switches between cooling and heating modes depending on the outdoor temperature to serve as an all-season air conditioner.



Quick Recovery from Defrosting

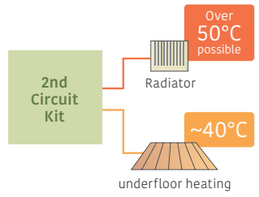
Maintains room temperature by boost start operation during defrosting.

2-zone Independent Control

2-zone independent control (For example, the individual control of 2 underfloor heating zones or the combination of 1 underfloor heating zone and 1 radiator zone)*1*2

*1: Optional parts such as 2-zone kits, 3-zone kits, and thermostats are required

*2: 3 Zones can be controlled in the Control Box



Backup Heater Operation

Backup heater maintains a comfortable room temperature even when the outside temperature is low. The backup heater is intelligently controlled as a safety backup for very cold days and nights, and only operates when really needed.

Controller with a clear color display and simple icons for easy function settings

Color display

Shows all the information items related to the operation mode:

WLAN Connectivity / Operation / Pressure / Set temperature (DHW/Flow) Clock / Message / Service maintenance



Operation indicator
Fixed white:Normal operation
Flashing orange: Error

Menu access button

Navigation knob:
Rotation: Menu navigation
Press: Validation

Back button

Main operation flow and settings for installers and end users

		Flow Chart	Example Item
Installers	1	Install Settings	Pump speed setting, Configuration, Heating curve setting, Heat pump shut off
	2	Option Settings	Cooling Kit, DHW Kit, Boiler Kit
	3	Convenient Function	Automatic heating curve settings, Underfloor controlled driving, Outdoor temperature adjustment, Maintenance period settings
	4	Workout Settings	Outdoor temperature simulator
	5	Confirmation	Checking operation (Heating and cooling, DHW, option)
End users	6	User Settings	Date and time, Time program, Operation temperature settings

Energy Saving

Away mode

It will set heating and DHW mode to the frost protection* during the selected period:

-**If you activate away mode on HMI:** You can choose start and end time/date.

-**If you activate away mode on Room thermostat (option):** You can choose start and end time/date, as well as room setpoint during away period.

*: The protection mode automatically prevents an excessively sharp drop in room temperature.

Safety Features

Anti-freeze function*

When the outside temperature drops below a specified level, the outdoor unit water pump will self-activate and water will also be automatically circulated to prevent freezing.

*The R32 High Power Series is excluded.

Easy Installation & Maintenance

- All hydraulic safety and control components are built in with no additional selection required.
- Easy access for maintenance
- Refrigerant pump down operation

Error and Maintenance Alarm

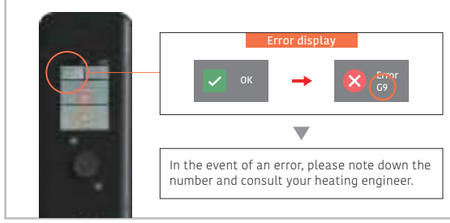
Enables quick error-handling services and maintenance

Error Warning



Maintenance Support

Diagnostics functions for troubleshooting



Easy to Set Up

Easy Start

Choose language, set date and time. Answer questions from Easy Start.



Remote Connectivity and Control

Via app “Cozy tough”, you can manage and control of electric heaters, electric water heaters, heat pump water heaters, heat pumps.

* Cozytouch is a service of Group Atlantic



Type-A

Optional Parts & Control Overview

To meet the diverse needs of customers, we offer a variety of control options, such as individual control and remote control options.



for Indoor unit

Electrical backup heater relay
UTW-KBHXQ
It allows the backup heater for heating at 3 kW as standard can be used at 6 kW.

for Locally units

UTW-KZSXQ

Second Circuit Kit
It can supply hot water at different temperatures to each two types of heating equipment, such as radiators and underfloor heating.



(×2)



(×1)

UTW-KZC2XQ



UTW-KZDXQ

Boiler Connection Kit
It can build hybrid systems using both boilers and heat pumps. Boiler and heat pumps are switched according to outside air temperature.

UTW-KBCXQ



for DHW



UTW-KDWXQ

UTW-KDWCXQ

DHW Kit
Required to connect locally purchased DHW tanks to Air to Water.



DHW tank
200 Liters: UTW-T20AXH / UTW-T20BXH
300 Liters: UTW-T30AXH / UTW-T30BXH
The BXH series is a more efficient tank than the AXH series.



DHW Expansion Kit
UTW-KDEXQ
The expansion vessel(18L) for connection to DHW water pipe.

Service & Maintenance Tool

Service Monitor Tool
UTY-ASSXZ1





Wall-mounted

Indoor unit Controller

DHW Integrated

Monobloc type Comfort series

for Outdoor unit



Drain pan
UTW-KDPXQ
It is used to collect and drain condensation water generated by outdoor unit.

Antivibration Rubber feet
UTW-KARXQ
It reduces vibration caused by the operation of compressors and other equipment, and suppresses the generation of noise.



Antifreezing valve for Monobloc
UTW-KAVXQ
When water pipes freeze, the internal pressure increases and the pipes are purged to prevent parts from breaking.

Individual Control

Room thermostat
An optional wireless thermostat allows remote control of the ATW system away from the indoor unit. Can also be operated from mobile apps.



Wired power & Wired connect
UTW-C105XQ



Wired power & Radio connect
UTW-C225XQ



Battery power & Radio connect
UTW-C228

Cozy tough (Application)
* Cozytouch is a service of Group Atlantic



Type-A Optional Parts List

Product Name	Model Name	Monobloc Type				Split Type		
		Comfort series				High Power Series		
		1Ø				1Ø/3Ø		
		Contoll Box	Wall-mounted	DHW Integrated	Outdoor Unit	Wall-mounted	DHW Integrated	Outdoor Unit
Second Circuit Kit	UTW-KZSXQ		●*1			●*1		
DHW Kit	UTW-KDWXQ		●			●		
Boiler Kit	UTW-KBSXS					●		
Boiler Connection Kit	UTW-KBDXS						●	
Second Circuit Kit	UTW-KZDXQ			●*1			●*1	
DHW Loop Kit	UTW-KDLXQ			●			●	
DHW Expansion Kit	UTW-KDEXQ			●			●	
Outdoor temperature sensor	UTW-KESXQ	●	●	●		●	●	
Condensation detection kit	UTW-KCDXQ	●	●	●		●	●	
Regulation Extension Kit	UTW-KREXQ	●	●	●		●	●	
Electrical Backup heater relay	UTW-KBHXQ		●	●				
Room thermostat (Wired) — Wired power supply	UTW-C105XQ	●	●	●		●	●	
Room thermostat (Wireless) — Wired power supply	UTW-C225XQ	●	●	●		●	●	
Room thermostat (Wireless) — Battery power supply	UTW-C228XQ	●	●	●		●	●	
Cover Plate for thermostat	UTW-KCPXQ	●	●	●		●	●	
Dual circuit decoupling kit	UTW-KZVXS					●	●	
Flow kit	UTW-PHFXS					●	●	
High flow kit	UTW-PHFXS					●	●	

Product Name	Model Name	Monobloc Type				Split Type		
		Comfort series				High Power Series		
		1Ø				1Ø/3Ø		
		Contoll Box	Wall-mounted	DHW Integrated	Outdoor Unit	Wall-mounted	DHW Integrated	Outdoor Unit
Drain pan	UTW-KDPXQ				●			●
Antivibration Rubber feet	UTW-KARXQ				●			●
Antifreezing valve for Monobloc	UTW-KAVXQ				●			
Single Circuit Kit (×1)	UTW-KZC1XQ	●						
Second Circuit Kit (×2) + (×1)	UTW-KZC2XQ	●						
Third Circuit Kit (×3) + (×2) + (×1)	UTW-KZC3XQ	●						
Boiler Connection Kit	UTW-KBCXQ	●						
DHW Kit	UTW-KDWCXQ	●						
DHW Kit for cascade	UTW-KDCXS (*:075296)	●	●			●		
Backup Heater Kit	UTW-HB6CXQ	●						
DHW tank — 200 Liters / 300 Liters	UTW-T20AXH UTW-T30AXH	●	●			●		
DHW tank — 200 Liters / 300 Liters	UTW-T20BXH UTW-T30BXH	●	●			●		
Cascade — Master kit	UTW-KCMXS (*:024270)	●	●			●		
Cascade — Gateway kit	UTW-KCGXS (*:075058)	●	●			●		

*1: Regulation extension kit (UTW-KREXQ) is not included but is required for connection.
*: Order Code

Type-**B**

Comfort Control

The high-grade heating controller automatically adjusts the flow temperature according to the climate conditions to maintain the room and domestic hot water temperatures at the desired levels.



Indoor unit Controller

4 Heating modes

1. Automatic mode
Enables automatic switching between Comfort mode and Reduce mode according to time program

2. Reduce mode
Maintains water temperature at a lower level

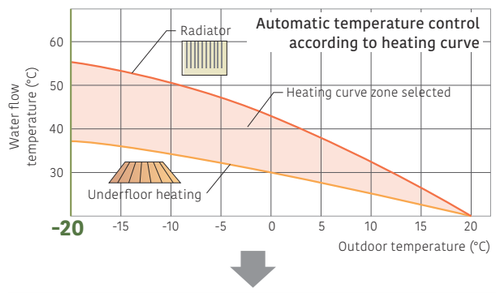
3. Comfort mode
Maintains water temperature at a comfortable level

4. Protection mode
Activates frost protection in standby operation

Useful Features

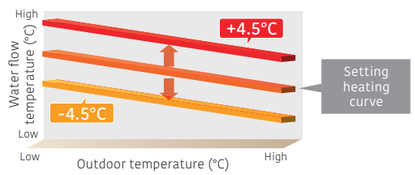
Automatic Heating Curve Control

Automatic temperature regulation according to heating curve (depending on heating terminal and outdoor temperature)



The heating curve will shift to adjust the room temperature setting.

Can be fine-adjusted when it is too warm or too cold.



Quick Recovery from Defrosting

Maintains room temperature by boost start operation during defrosting.

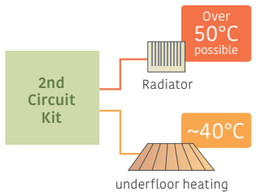
Auto Changeover

When cooling mode is selected, the system automatically switches between cooling and heating modes depending on the outdoor temperature to serve as an all-season air conditioner.

2-Zone Independent Control

2-zone independent control (For example, the individual control of 2 underfloor heating zones or the combination of 1 underfloor heating zone and 1 radiator zone)*1

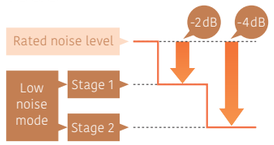
*1: Optional parts required



2-Stage Low-Noise Mode

The outdoor unit can be switched to quiet mode, depending on the installation environment.

*Effective only for high power series



Backup Heater Operation

Backup heater maintains a comfortable room temperature even when the outside temperature is low. The backup heater is intelligently controlled as a safety backup for very cold days and nights, and only operates when really needed.

* Optional parts is needed for high power series.

Energy Saving

Time Program

- The timer is easy to set.
- You can select the heating mode in conjunction with various times of the day.

Day-weekly timer

- Allows up to 3 settings per day.
- Allows individual settings for each day of the week.

Holiday timer

- Allows up to 8 settings.
- While you are away from home for an extended period during winter, the system prevents your room or house from freezing.

Peak Cut Function*2

Sets the peak current value to reduce power consumption.

Mode	Ratio to reduce power consumption
1	100%
2	75%
3	50%
4	Almost 0%

* Please refer to page W-054 and W-055 for optional parts information.



Safety Features

Anti-Legionella Function

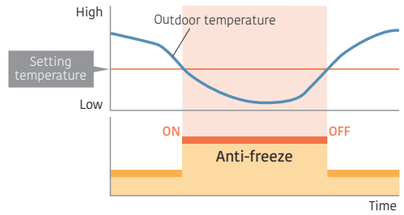
Prevents the growth of Legionella bacteria in the DHW tank to supply safe and clean hot water at all times.



DHW tank 300 L

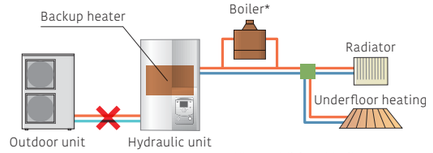
Anti-Freeze Function

When the outside temperature drops below a specified level, the compressor will self-activate and water will also be automatically circulated to prevent freezing.



Emergency Operation

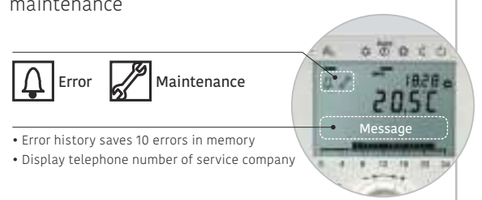
If an outdoor unit fails to operate, a built-in backup heater or an external boiler is activated to supply an uninterrupted supply of hot water to the house.



*When additional boiler connected

Error and Maintenance Alarm

Enables quick error-handling services and maintenance



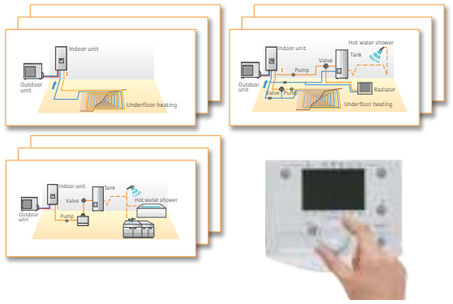
- Error history saves 10 errors in memory
- Display telephone number of service company

Type-**B**

Simple Installation

Presetting Configurations

A controller installed makes it easy to configure the system without having to set each component or unit individually.



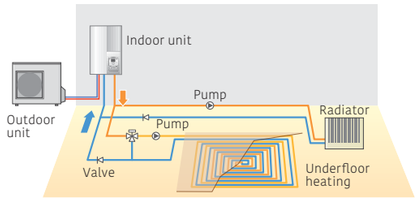
8 simple patterns for system presetting
(Pair of heating: 12 patterns)

Configuration (Parameter 5700)	Installation type
Presetting 1	1 heating circuit
Presetting 2	2 heating circuits
Presetting 3	1 heating circuit with boiler backup
Presetting 4	2 heating circuits with boiler backup
Presetting 5	1/2 heating circuit with buffer control
Presetting 6	1/2 heating circuit with buffer control and boiler backup
Presetting 7	Cascade connection Primary
Presetting 8	Cascade connection A
Presetting 9	Cascade connection B/C

- DHW & solar control auto detection
- Cascade connection only available in High Power models.

Outdoor Temperature Simulation

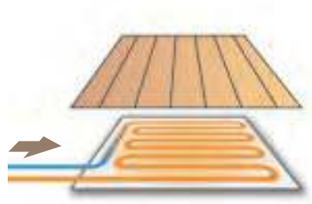
It verifies that each unit operates properly under the set conditions and expected outdoor air temperature when the system is actually assembled.



The outdoor temperatures can be simulated in the range of -50°C to +50°C.

Concrete Floor Drying

Allows the concrete surrounding the hot-water pipes to dry more quickly, shortening the construction period for underfloor heating installations.

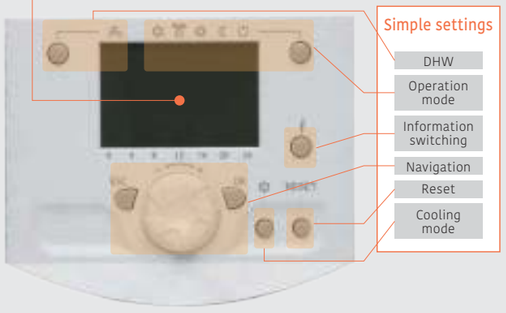


Set temperature
Maximum 75°C

Set period
Maximum 25 days

Controller with a large liquid crystal display and buttons for easy function settings

Large display
Shows all the information items related to the operation mode:
•Clock •Temperature •DHW •Message •Service/maintenance •Timer menu



Main operation flow and settings for installers and end users

		Flow Chart	Example Item
Installers	1	Install Settings	Pump speed setting, Configuration, Heating curve setting, Heat pump shut off
	2	Option Settings	Cooling Kit, DHW Kit, Boiler Kit
	3	Convenient Function	Automatic heating curve settings, Underfloor controlled driving, Outdoor temperature adjustment, Maintenance period settings
	4	Workout Settings	Outdoor temperature simulator
	5	Confirmation	Checking operation (Heating and cooling, DHW, option)
End users	6	User Settings	Date and time, Time program, Operation temperature settings

Easy Installation & Maintenance

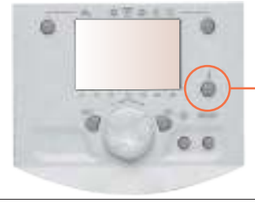
- All hydraulic safety and control components are built in with no additional selection required.
- Lifting bars for installation free of difficulty or risk
- Easy access for maintenance
- Refrigerant pump down operation

Maintenance Support

Diagnostics functions for troubleshooting

Error display

How to check for the errors displayed:



If an error occurs,
the controller will display an error symbol.

Detailed information displayed
•Error code
•Error designation
•Clear text info (UART)

Press "Info" button

Indoor unit error

If an error occurs, the green and red indicator lamp will blink along with the cause of the error.



Indicator lamp 2 (GREEN)
Indicator lamp 1 (RED)

Confirm the number of blinks.

Outdoor unit error



For High Power model and Super High Power model

If an error occurs,
POWER / MODE ON
ERROR Blinks rapidly

Confirm the blink code in the error code indication.

Check the error code table

Type-**B**

Control Overview

To meet the diverse needs of customers, we offer a variety of control options, such as individual control and remote control options.



Individual Control



Wireless room thermostat (option)
UTW-C58XD



Wired room thermostat (option)
UTW-C55XA



Wired remote controller (option)
UTW-C74TXF*1
UTW-C74HXF*1

RF module



UTW-MRCXD



Service & Maintenance Tool



Web server (option)
UTW-KW1XD
UTW-KW4XD

Service tool (option)



UTW-KPSXD*3
software

or



LPB clip (option)
UTW-KL1XD



UTW-KSTXD*4

*3: UTW-KW1XD or UTW-KW4XD is required for the connection.
*4: UTW-KL1XD is required for the connection.



Adapters for External Devices



Web server (option)
UTW-KW1XD
UTW-KW4XD



MODBUS® clip (option)
UTW-KMBXJ*2

Internet





Remote control system



Smart device control



Home automation system

* Please refer to page W-038 and W-039 for system compatibility information.



Super High Power series Indoor unit

Indoor unit Controller

Easy-to-set operation modes
- Selecting the heating mode and domestic hot water (DHW) operation

Large liquid crystal display
- Shows operation status
- Shows error messages
- Messages in plain text

Navigation and settings
- Select from heating menu
- Setting Time program



HMI Kit (option)
UTW-KHMXE
Supports multiple languages

Type-B

Optional Parts Overview

Various optional parts are available to use ATW according to needs and environments.



for Locally units



UTW-KZSXE*1

Second Circuit Kit
It can supply hot water at different temperatures to each two types of heating equipment, such as radiators and underfloor heating.



UTW-KZDXE*1



UTW-KZSXJ



UTW-KZDXJ

Boiler Connection Kit
It can build hybrid systems using both boilers and heat pumps. Boiler and heat pumps are switched according to outside air temperature.



UTW-KBSXD



UTW-KBDXD



UTW-KBSXJ

*1: The UTW-KREXD (Regulation Extension Kit) is not included but is required for connection.





for DHW



DHW Kit
UTW-KDWXD (External)
Required to connect locally purchased DHW tanks to Air to Water.



DHW Tank
200 Liters: UTW-T20AXH / UTW-T20BXH
300 Liters: UTW-T30AXH / UTW-T30BXH
The BXH series is a more efficient tank than the AXH series.



UTW-KDEXE



UTW-KDEXL

DHW Expansion Kit
The expansion vessel(18L) for connection to DHW water pipe.

for Outdoor unit



Drain Pan
UTW-KDPXB
It is used to collect and drain condensation water generated by outdoor unit.



External Connection Kit
UTY-XWZXZ2 / UTY-XWZXZ3
The signal input (low noise mode, peak cut) and signal output (compressor operation, base pan heater control) for outdoor unit are possible externally.

for Indoor unit



Circulating Pump
UTW-PHFXG
The high-output pump for replacement of the standard pump in the hydraulic unit. It can be used in properties with longer and more complex water pipe.

Cascade Master/Slave Kit
Up to 3 indoor units can be connected for large-capacity use. It is need to install a primary kit in one unit and a secondary kit in one or two other units.



Cascade Master Kit (incl. LPB clip)



Cascade Slave Kit (incl. LPB clip)

Cooling Kit
Required when using ATW also for cooling operation. It is used to prevent condensation occurring in the indoor unit.



UTW-KCLXD



UTW-KCLXL



Electrical Back Up Heater Replay
UTW-KBHXL
It allows the backup heater for heating at 3 kW as standard can be used at 6 kW.

Type-B Optional Parts List

Product Name	Model Name	Split Type												Split DHW Integrated Type											
		Super High Power			High Power					R32 Comfort				Super High Power			High Power					R32 Comfort			
		1Ø	3Ø		1Ø		3Ø			1Ø				1Ø	3Ø		1Ø		3Ø			1Ø			
		16	15	17	11	14	11	14	16	5	6	8	10	16	15	17	11	14	11	14	16	5	6	8	10
Second Circuit Kit	UTW-KZSXE	–	–	–	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	–	–	–	–	–	–	–	–	–	–	–	–
	UTW-KZDXE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1
	UTW-KZSXJ	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	UTW-KZDXJ	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–	–	–	–
Boiler Connection Kit	UTW-KBSXD	–	–	–	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–
	UTW-KBDXD	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	●	●	●
	UTW-KBSXJ	●	●	●	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–	–	–	–
Balancing vessel	UTW-TEVXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DHW Kit	UTW-KDWXD (External)	●	●	●	●	●	●	●	●	●	●	●	●	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2
DHW tank 200 Liters 300 Liters	UTW-T20AXH UTW-T30AXH	●	●	●	●	●	●	●	●	●	●	●	●	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2
DHW tank 200 Liters 300 Liters	UTW-T20BXH UTW-T30BXH	●	●	●	●	●	●	●	●	●	●	●	●	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2	–*2
DHW Expansion Kit	UTW-KDEXE	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	●	●	–	–	–	–
	UTW-KDEXL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●	●
Circulating pump	UTW-PHFXG	●	●	●	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	●	–	–	–	–
Cooling Kit	UTW-KCLXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–	–
	UTW-KCLXL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●	●
Regulation Extension Kit	UTW-KREXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Drain pan	UTW-KDPXB	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–	–	–	–	●	●	●	–
Cascade Master Kit (incl. LPB clip)	UTW-KCMXE	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cascade Slave Kit (incl. LPB clip)	UTW-KCSXE	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Product Name	Model Name	Split Type												Split DHW Integrated Type											
		Super High Power			High Power					R32 Comfort				Super High Power			High Power					R32 Comfort			
		1Ø	3Ø		1Ø		3Ø			1Ø				1Ø	3Ø		1Ø		3Ø			1Ø			
		16	15	17	11	14	11	14	16	5	6	8	10	16	15	17	11	14	11	14	16	5	6	8	10
HMI Kit	UTW-KHMXE	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
Remote controller Wired	UTW-C74TXF	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
	UTW-C74HXF	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
Room thermostat Wired	UTW-C55XA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Room thermostat Wireless	UTW-C58XD	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4
Outdoor sensor transmitter	UTW-MOSXD	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4	●*4
RF modules for BSB-Port	UTW-MRCXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Web server	UTW-KW1XD	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5
	UTW-KW4XD	–	–	–	●*5	●*5	●*5	●*5	●*5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
LPB clip	UTW-KL1XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MODBUS® clip	UTW-KMBXJ	–	–	–	●*6	●*6	●*6	●*6	●*6	–	–	–	–	–	–	–	●*6	●*6	●*6	●*6	●*6	–	–	–	–
Service tool (incl. OCI700 Adapter)	UTW-KSTXD	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7	●*7
Service tool software	UTW-KPSXD	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8	●*8
External Connect Kit	UTY-XWZXZ2	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	●	●	●	●	●	–	–	–	–
	UTY-XWZXZ3	●	●	●	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–	–	–	●
Electrical backup heater relay	UTW-KBHXL	–	–	–	–	–	–	–	–	●	●	●	●	–	–	–	–	–	–	–	–	●	●	●	●

*1: The UTW-KREXD (Regulation Extension Kit) is not included but is required for connection.
*2: Split DHW integrated type supplies DHW without the DHW Kit and DHW tank.
*3: Includes 21 languages with no need to prepare an RC for Eastern Europe separately.
C74TXF has a built-in room temperature sensor. C74HXFhas a built-in room temperature and humidity sensor.
*4: UTW-MRCXD (RF modules) is required for the connection.
*5: The connection of UTW-KW4XD for simultaneous control of multiple ATW units is only possible for cascade systems.
*6: Additional Spare parts 9708302034 (Analogue interface PCB) and 109696 (connection wire) are required.
*7: UTW-KL1XD (LPB clip) is required for the connection.
*8: UTW-KW1XD or UTW-KW4XD (Web server) is required for the connection.

●: Available —: Not Available