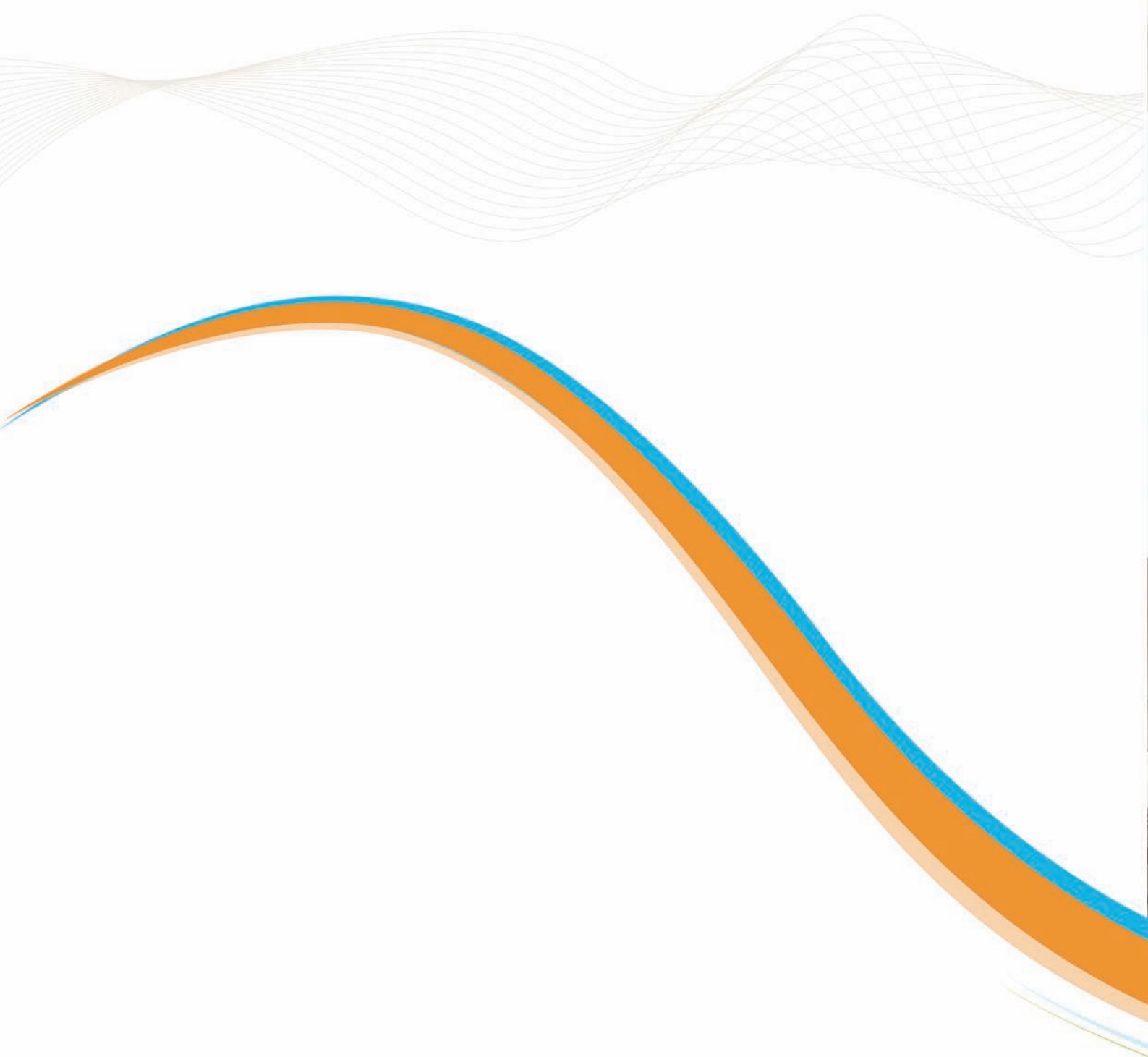




**DC Inverter Multifunctional
Air to Water Heat Pump**

Versati



GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China 519070

Tel: (+86-756) 8522218 Fax: (+86-756) 8669426

Email: gree@gree.com.cn [Http://www.gree.com](http://www.gree.com)

Specifications and appearance are subject to change without notice.

Copyright © Gree Electric Appliances, inc. of Zhuhai. All rights reserved.

GC-1101-02



What is Versati ?

Nowadays, people are increasingly focusing on the cost of heating as well as the environmental issues. Traditional heating systems cost people more money and are bad for sustainable development of the environment. Thus, people are searching for new heating technology with high efficiency, low running cost and eco-friendly features. Fortunately, they find Versati!

What is Versati?

Versati, a DC inverter multifunctional air to water heat pump adopting advanced heat pump technology, absorbs natural heat from the ambient air and then heats it for room heating. It not only satisfies room heating requirements but also supplies domestic hot water. Besides, Versati can also provide you a cool air in hot summer. It is an All-in-One! Choose Versati, and enjoy a comfortable life all year round!

Eco-friendly — Create a Green World

Versati adopts R410A, a new eco-friendly refrigerant which is harmless to the atmosphere. Moreover, with advanced heat pump technology and powerful hardware, the efficiency of Versati has been improved, resulting in much lower CO₂ discharge. It is an eco-friendly product, which mirrors your social commitment to protect environment.



Outdoor Unit: Sustainable Energy Converter

Versati adopts DC Inverter Technology and the most efficient Refrigerant R410A with Zero Ozone depletion, which excellent COP up to 4.5.

Heat pump Technology Lower the Consumption and CO₂ Emissions

Versati based on Heat Pump Technology, which extracts the heat energy from the outside air and increases its temperature for domestic heating purposes, greatly reduces the energy consumption and CO₂ emissions.



Super DC Inverter Technology

■ Twin Rotary DC Inverter Compressor

Compared with traditional compressor, DC inverter compressor has the advantages of high performance and high efficiency.

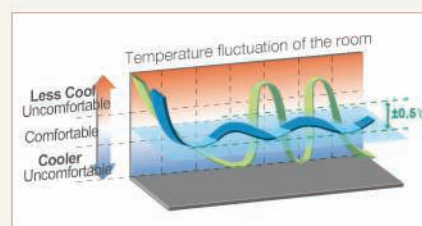
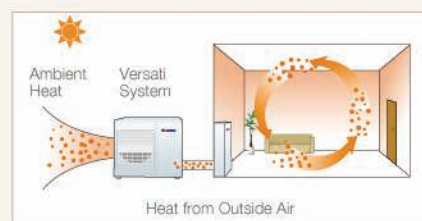
DC Inverter System

The inverter technology with high-power and high energy efficiency not only creates comfortable living circumstance, but also saves energy.

Traditional System

ON and OFF frequently cause temperature fluctuation.

- By adopting DC Inverter technology, the compressor regulates its output according to the cooling/heating load to achieve higher energy efficiency.
- DC Inverter compressor optimizes its output which ensures high efficient operation.
- With stepless power regulation technology, the DC Inverter compressor achieves stepless output regulation between 20Hz and 120Hz.
- The 180 degree sine wave current output features in small startup current, small torque pulse and free speed regulation between 900 and 6600r/min. It enables the system to meet the temperature requirements of various circumstances, lowers the power consumption greatly and ensures comfortable use.



COP up to 4.5

With its perfect class COP performance, Versati delivers more heating power with less energy consumption. The maximum COP is up to 4.5.



Fan and Motor

■ Efficient Axial Fan

Efficient axial fan with its streamline design and huge air flow volume, offers powerful cooling capacity and ensures the stability and reliability of system.

■ DC Fan Motor

The stepless adjustment of DC fan motor ensures higher air flow volume and lower power consumption.



Heat Exchanger

- Compared with the common fin, the heat exchange efficiency of the louver fin is increased by 5%.



Former Models:
Normal Flat Fin



Versati: Louver Fin with
Blue Coated

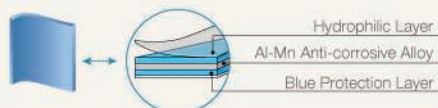
- Special thickened inside-thread copper pipe enhances the heat exchange performance by over 8%.



Reliability

Heat Exchange Anti-corrosion

Highly anti-corrosion blue hydrophilic coated aluminum fin has longer lifespan than common blue fin.



Wide Voltage Range Operation

1Phase

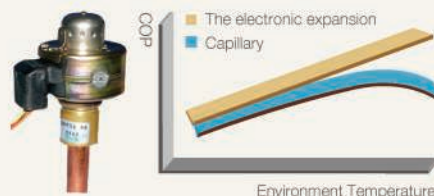


3Phase



Electronic Expansion Valve

The electronic expansion valve is highly flexible. It can automatically adjust the throttle according to the refrigerant demand based on the stability of the system. It is more energy saving and stable than capillary.



Comfort

Precise Temperature Regulation

The electronic expansion valve guarantees that the system made adjustments automatically according to the changes of the circumstance and water temperature.

Quiet Mode

By adjusting the output of the compressor and fan, the operation noise of the unit can be decreased by more than 3dB(A), meeting the quiet requirement at night or in special occasions.

Self-diagnosis of the Outdoor Unit

With the self-diagnosis function, the outdoor unit will start auto-protection if the power voltage or the current is out of the normal range. Protection will be cancelled automatically if the power condition resumes normal.

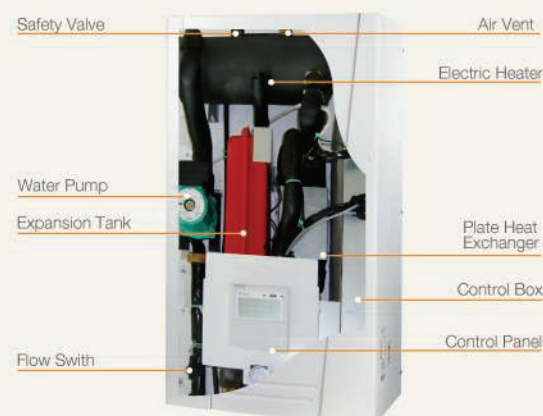
Compact Design

Compact design ensures larger load-space, thus, saves much transport costs.



Indoor Hydro Unit: Heating / Cooling and H

The indoor hydro-box transfers the heat in the refrigerant to the water circulated in the central heating radiators, under-floor heating system and sanitary hot water tank. If you opt for the combination of heating and cooling, then the indoor unit can also decrease the water temperature to distribute a refreshing coolness.



High Efficiency

■ High COP plate heat exchanger



■ High efficient pump



Flexible and Compact Design



52kg
Min. Weight

Compact design, easy for installation.
Dimension (W×D×H) (mm)

500×324×900mm

Pressure safety, plate heat exchanger, expansion tank, water pump and control box all in one.

Intelligent Temperature Control

The advanced control of the system is integrated in the indoor hydro unit. The timer can be programmed per hour or per day. In this way, the temperature is reduced automatically at night or during your holiday, but will be pleasantly warm when you get up or return home.



Hot Water System

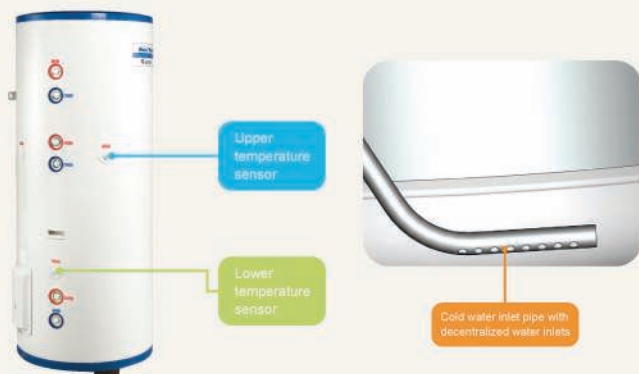
Comfort

Smart Dual-temperature Detection Control Technology

ON and OFF control of the unit is realized by upper and lower temperature sensors, which renews water temperature in real time, thus ensuring the perfect timing of startup:

- Avoid premature startup. Improved hot water yielding rate by accurate timing of hot / cold water mixture.
- Avoid overdue startup. Improved hot water use rate and shorten the waiting time of reheating.

Water is charged from the bottom and the water inlet pipe has equispaced water inlets, which can reduce cold water shock and enhance the service life of the tank.



Health

- The domestic water is sanitary and can be used directly.
- The stainless steel tank and coil will not affect the water quality.
- The disinfection function at a high temperature up to 70°C can prevent the growth of bacteria and ensure sanitary water, creating a wholesome life experience for the user.

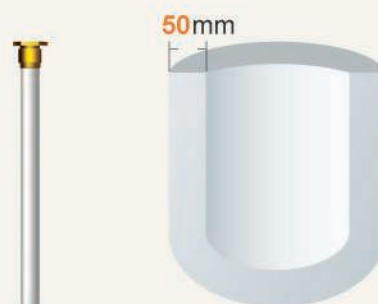


Flexibility

- Dual-coil design makes it convenient to join solar panel or boiler.

Reliability

- Adopting bearing tank, the unit can replenish water when using water, ensuring rapid storage and continuous delivery.
- Magnesium stick protecting container contributes to lifespan.
- 50mm thickness of thermal insulating layer.



- Isolation of water and electricity ensures safe operation.

Water and electricity are completely separated so that electrical leakage is absolutely avoided.

Advanced microcomputer control and complete protection functions help prevent electricity leakage, dry heating, over-high temperature, etc.



Dry heating



Electricity leakage



Over-high temperature

Flexible Applications

Five-Mode Operation

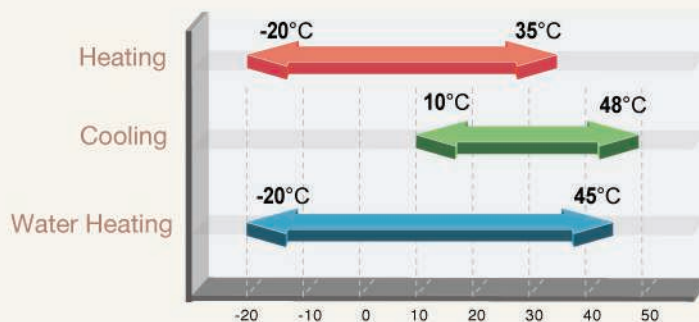
Heating	Cooling	Water Heating	Heating + water heating	Cooling + water heating
---------	---------	---------------	-------------------------	-------------------------

Wide Range of Operation Temperature

Heating	-20~35°C
Cooling	10~48°C
Water Heating	-20~45°C

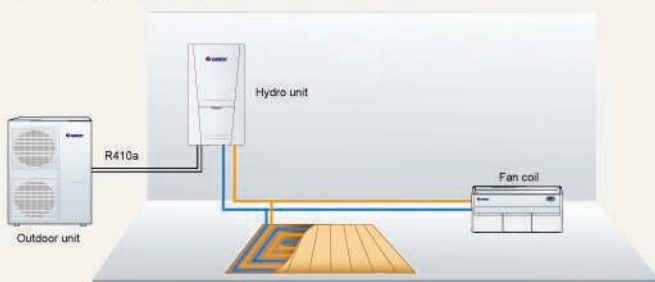
Hot Water Temperature Range

Domestic water:	40°C to 80°C
Heating:	High temperature cycle: 25°C~55°C
	Low temperature cycle: 25°C~45°C
Cooling:	Fan coil/Radiator: 7°C~25°C
	Floor : 18°C~25°C

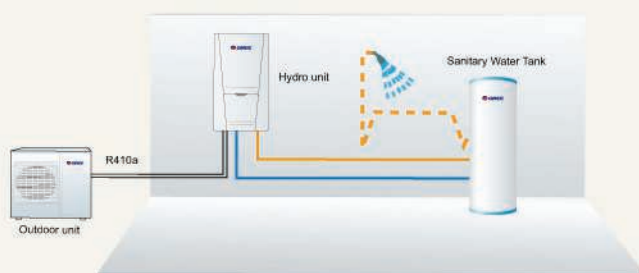


Combination Examples

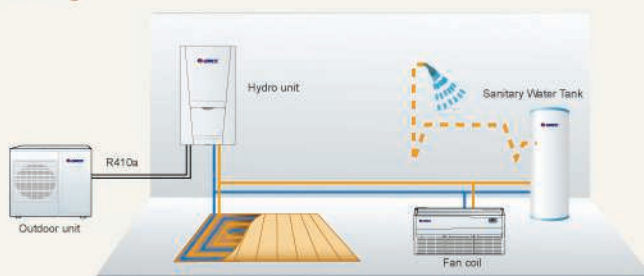
Heating / Cooling



Water Heating



Heating / Cooling with Water Heating

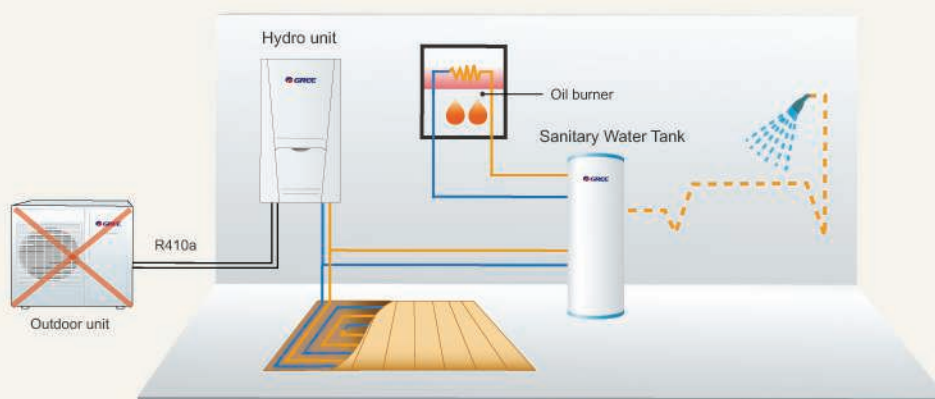




Multiple Additional Functions and Humanized Function

■ Urgent Water Heating

The heat pump uses the backup electrical heater in case that any fault occurred.



■ Floor Protection

■ Under floor heating

As for under floor heating, the default highest water temperature is 45°C so that it will not damage the floor or reduce its lifespan due to superheat. (The highest temperature of outlet water during heating operation is 55°C)

■ Under floor cooling

As for under floor cooling, the default lowest water temperature is 18°C so that it will not produce condensate which will damage the floor or reduce the lifespan of the floor. (The lowest temperature of outlet water during cooling operation is 7°C)

■ Quick Water Heating Mode

The heat pump and the electric heater of the water tank operate at the same time to realize rapid heating.

■ Disinfection Operation Mode

The water will be heated to 70°C at set time to kill the bacteria in the water. The disinfection is usually carried out at night.

■ Holiday Mode (for Heating only)

When the user is on a trip in winter, the unit can be set to operate automatically so as to keep the room temperature between 10 and 15°C.

■ Weather-dependent Mode (AUTO Operation)

The unit can automatically adjust the operation state according to the temperature range set by the user.

■ Use-friendly and Large LED Display

■ ON/OFF Timer

■ Day/Weekly/Count-down Timer

■ Weekly Programmed

■ Emergency Operation Mode (for Heating and Water Heating only)

■ Forced Operation Mode

■ Silent Mode

■ Central Control

Specifications



Outdoor Unit

Model			GRS-CQ6.0Pd/ Na-K(O)	GRS-CQ8.0Pd/ Na-K(O)	GRS-CQ10Pd/ Na-K(O)	GRS-CQ12Pd/ Na-K(O)	GRS-CQ14Pd/ Na-K(O)	GRS-CQ16Pd/ Na-K(O)
Capacity ¹	Heating(floor heating)	kW	6.2	8.5	10.0	12.0	14.0	16.0
	Cooling(floor cooling)	kW	5.5	9.0	10.5	14.0	15.0	15.5
Power Input ¹	Heating(floor heating)	kW	1.50	2.10	2.50	2.67	3.33	3.90
	Cooling(floor cooling)	kW	1.60	2.50	3.14	3.68	4.28	4.62
EER ¹	Cooling(floor cooling)		3.40	3.60	3.35	3.80	3.50	3.35
COP ¹	Heating(floor heating)		4.10	4.00	4.00	4.50	4.20	4.00
Capacity ²	Heating(fan coil or radiator)	kW	5.5	8.0	9.0	11.5	13.0	14.0
	Cooling(fan coil)	kW	4.0	6.5	8.0	10.0	11.0	11.5
Power Input ²	Heating(fan coil or radiator)	kW	1.80	2.65	2.90	3.35	3.88	4.59
	Cooling(fan coil)	kW	1.53	2.50	3.08	3.45	3.93	4.20
EER ²	Cooling(fan coil)		2.60	2.60	2.60	2.90	2.80	2.50
COP ²	Heating(fan coil or radiator)		3.00	3.00	3.10	3.40	3.35	3.05
Power Supply	Ph-V-Hz		1-Phase, 220~240V, 50Hz					
Compressor	Type		Hermetically sealed swing compressor					
Refrigerant Charge	R410A	g	1700	2000	2000	3300	3300	3300
Sanitary Water Temperature		°C	40~80	40~80	40~80	40~80	40~80	40~80
Sound Pressure Level	Cooling	dB(A)	57	57	57	57	57	60
	Heating	dB(A)	59	59	59	59	59	62
Dimensions	Outline (WxDxH)	mm	921×427×791	921×427×791	921×427×791	950×412×1253	950×412×1253	950×412×1253
	Packaged (WxDxH)	mm	1065×485×840	1065×485×840	1065×485×840	1110×450×1385	1110×450×1385	1110×450×1385
Net Weight / Gross Weight		Kg	66/71	69/74	69/74	99/108	99/108	99/108
Connecting Pipe (Refrigerant)	Gas	mm	12.7	15.9	15.9	15.9	15.9	15.9
		inch	1/2	5/8	5/8	5/8	5/8	5/8
	Liquid	mm	6.35	9.52	9.52	9.52	9.52	9.52
		inch	1/4	3/8	3/8	3/8	3/8	3/8
Loading quantity	20'GP/40'GP/ 40'HQ	sets	48/96/144	48/96/144	48/96/144	26/52/52	26/52/52	26/52/52



Outdoor Unit

Model			GRS-CQ12Pd/Na-M(O)	GRS-CQ14Pd/Na-M(O)	GRS-CQ16Pd/Na-M(O)
Capacity ¹	Heating(floor heating)	kW	12.0	14.0	15.0
	Cooling(floor cooling)	kW	14.0	15.0	15.5
Power Input ¹	Heating(floor heating)	kW	2.80	3.33	3.90
	Cooling(floor cooling)	kW	3.80	4.28	4.40
EER ¹	Cooling(floor cooling)		3.80	3.50	3.50
COP ¹	Heating(floor heating)		4.50	4.20	4.00
Capacity ²	Heating(fan coil or radiator)	kW	11.0	12.0	14.0
	Cooling(fan coil)	kW	10.0	10.5	11.0
Power Input ²	Heating(fan coil or radiator)	kW	3.35	3.80	4.20
	Cooling(fan coil)	kW	3.45	3.60	4.00
EER ²	Cooling(fan coil)		2.90	2.80	2.70
COP ²	Heating(fan coil or radiator)		3.40	3.35	3.20
Power Supply	Ph-V-Hz		3-Phase, 380~415V, 50Hz		
Compressor	Type		Hermetically sealed swing compressor		
Refrigerant Charge	R410A	g	3500	3500	3500
Sanitary Water Temperature		°C	40~80	40~80	40~80
Sound Pressure Level	Cooling	dB(A)	57	57	57
	Heating	dB(A)	59	59	59
Dimensions	Outline (WxDxH)	mm	950x412x1253	950x412x1253	950x412x1253
	Packaged (WxDxH)	mm	1110x450x1385	1110x450x1385	1110x450x1385
Net Weight / Gross Weight		Kg	99/108	99/108	99/108
Connecting Pipe (Refrigerant)	Gas	mm	15.9	15.9	15.9
		inch	5/8	5/8	5/8
	Liquid	mm	9.52	9.52	9.52
		inch	3/8	3/8	3/8
Loading quantity	20' GP/40' GP/ 40' HQ	sets	26/52/52	26/52/52	26/52/52

Note:

1. Capacities and power inputs are based on the following conditions:

- ① Cooling conditions
Indoor Water Temperature 23°C/18°C
Outdoor Air Temperature 35°CDB/24°CWB
- ② Heating conditions
Indoor Water Temperature 30°C/35°C
Outdoor Air Temperature 7°CDB/6°CWB
- ③ Standard piping length 7.5m

2. Capacities and power inputs are based on the following conditions:

- ① Cooling conditions
Indoor Water Temperature 12°C/7°C
Outdoor Air Temperature 35°CDB/24°CWB
- ② Heating conditions
Indoor Water Temperature 40°C/45°C
Outdoor Air Temperature 7°CDB/6°CWB
- ③ Standard piping length 7.5m

Hydro Unit



Model			GRS-CQ6.0Pd/ Na-K(l)	GRS-CQ8.0Pd/ Na-K(l)	GRS-CQ10Pd/ Na-K(l)	GRS-CQ12Pd/ Na-K(l)	GRS-CQ14Pd/ Na-K(l)	GRS-CQ16Pd/ Na-K(l)
Nominal Input	W		3200	6200	6200	6200	6200	6200
Power Supply	Ph-V-Hz		1-Phase, 220~240V, 50Hz					
Leaving Water Temp.	Cooling (fan coil)	°C	7-25	7-25	7-25	7-25	7-25	7-25
	Cooling (floor cooling)	°C	18-25	18-25	18-25	18-25	18-25	18-25
	Heating (fan coil)	°C	25~55 (High Temperature Cycle)					
	Heating (floor heating)	°C	25~45 (Low Temperature Cycle)					
Pump	Type		Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
	Nr.of Speed		3	3	3	3	3	3
	Power Input	W	200	200	200	200	200	200
	Water Flow Limit	LPM	7.5	7.5	7.5	7.5	7.5	7.5
Electric Heater	Operation		Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
	Steps		2	2	2	2	2	2
	Capacity	KW	3	6	6	6	6	6
	Combination	KW	1.5+1.5	3+3	3+3	3+3	3+3	3+3
Sound Pressure Level	dB(A)		31	31	31	31	31	31
Dimensions	Outline (WxDxH)	mm	900x500x324	900x500x324	900x500x324	900x500x324	900x500x324	900x500x324
	Packaged (WxDxH)	mm	1040x605x380	1040x605x380	1040x605x380	1040x605x380	1040x605x380	1040x605x380
Net Weight / Gross Weight	Kg		52/62	52/62	52/62	53/63	53/63	53/63
Loading quantity	20'GP/40'GP/40'HQ	sets	100/205/246	100/205/246	100/205/246	100/205/246	100/205/246	100/205/246

Model			GRS-CQ12Pd/Na-M(l)	GRS-CQ14Pd/Na-M(l)	GRS-CQ16Pd/Na-M(l)
Nominal Input	W		6200	6200	6200
Power Supply	Ph-V-Hz		3-Phase, 380~415V, 50Hz		
Leaving Water Temp.	Cooling (fan coil)	°C	7-25	7-25	7-25
	Cooling (floor cooling)	°C	18-25	18-25	18-25
	Heating (fan coil)	°C	25~55 (High Temperature Cycle)		
	Heating (floor heating)	°C	25~45 (Low Temperature Cycle)		
Pump	Type		Water-cooled	Water-cooled	Water-cooled
	Nr.of Speed		3	3	3
	Power Input	W	200	200	200
	Water Flow Limit	LPM	7.5	7.5	7.5
Electric Heater	Operation		Automatic	Automatic	Automatic
	Steps		1	1	1
	Capacity	KW	6	6	6
	Combination	KW	6	6	6
Sound Pressure Level	dB(A)		31	31	31
Dimensions	Outline (WxDxH)	mm	900x500x324	900x500x324	900x500x324
	Packaged (WxDxH)	mm	1040x605x380	1040x605x380	1040x605x380
Net Weight / Gross Weight	Kg		53/63	53/63	53/63
Loading quantity	20'GP/40'GP/40'HQ	sets	100/205/246	100/205/246	100/205/246

Specifications

Water Tank



Model			SXVD200LCJ/A-K	SXVD300LCJ/A-K	SXVD200LCJ2/A-K	SXVD300LCJ2/A-K	SXVD350LCJ2/A-K	SXVD400LCJ2/A-K
Volume	L		200	300	200	300	350	400
Power Supply	Ph-V-Hz		1-Phase, 220~240V, 50Hz					
Electric Heater Power	W		3000	3000	3000	3000	3000	3000
Cool Water Inlet Pipe	Outer Diameter	mm	DN15	DN15	DN15	DN15	DN15	DN15
		inch	1/2	1/2	1/2	1/2	1/2	1/2
	Screw Thread Spec		1/2"Female BSP	1/2"Female BSP	1/2"Female BSP	1/2"Female BSP	1/2"Female BSP	1/2"Female BSP
Circulation Water Inlet/Outlet Pipe	Outer Diameter	mm	/	/	DN20	DN20	DN20	DN20
		inch	/	/	3/4	3/4	3/4	3/4
	Screw Thread Spec		/	/	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP
Water Inlet/Outlet (heat pump) Pipe	Outer Diameter	mm	DN20	DN20	DN20	DN20	DN20	DN20
		inch	3/4	3/4	3/4	3/4	3/4	3/4
	Screw Thread Spec		3/4"Female BSP	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP
Unit Dimension	ΦD×H	mm	Φ540X1595	Φ620X1620	Φ540X1595	Φ620X1620	Φ620X1895	Φ620X2125
Packing Dimension	Height	mm	630	710	630	710	722	722
	Width	mm	1620	1645	1620	1645	1920	2150
	Depth	mm	625	705	625	705	705	705
Net Weight /Gross Weight	kg		68/77	82/92	71/80	87/97	100/126	110/139
Loading Quantity	20'GP/40'GP/40'HQ	sets	36/75/100	30/63/63	36/75/100	30/63/63	27/54/54	24/51/51

Model			SXVD200LCJ/A-M	SXVD300LCJ/A-M	SXVD200LCJ2/A-M	SXVD300LCJ2/A-M
Volume	L		200	300	200	300
Power Supply	Ph-V-Hz		3-Phase,380~415V, 50Hz			
Electric Heater Power	W		3000	3000	3000	3000
Cool Water Inlet Pipe	Outer Diameter	mm	DN15	DN15	DN15	DN15
		inch	1/2	1/2	1/2	1/2
	Screw Thread Spec		1/2"Female BSP	1/2"Female BSP	1/2"Female BSP	1/2"Female BSP
Circulation Water Inlet/Outlet Pipe	Outer Diameter	mm	/	/	DN20	DN20
		inch	/	/	3/4	3/4
	Screw Thread Spec		/	/	3/4"Female BSP	3/4"Female BSP
Water Inlet/Outlet (heat pump) Pipe	Outer Diameter	mm	DN20	DN20	DN20	DN20
		inch	3/4	3/4	3/4	3/4
	Screw Thread Spec		3/4"Female BSP	3/4"Female BSP	3/4"Female BSP	3/4"Female BSP
Unit Dimension	ΦD×H	mm	Φ540X1595	Φ620X1620	Φ540X1595	Φ620X1620
Packing Dimension	Height	mm	630	710	630	710
	Width	mm	1620	1645	1620	1645
	Depth	mm	625	705	625	705
Net Weight /Gross Weight	kg		68/77	82/92	71/80	87/97
Loading Quantity	20'GP/40'GP/40'HQ	sets	36/75/100	36/75/100	36/75/100	36/75/100