

# MADE IN CHINA LOVED BY THE WORLD





Gree Electric Appliances, Inc. of Zhuhai was founded in 1991 and was listed on the Shenzhen Stock Exchange in November 1996. At the beginning, Gree was only a company that assembled residential air conditioners. Now it has grown into a diversified global technological industrial group that has expanded its business to air conditioners, home appliances, high-end equipment and communication equipment under three brand names: GREE, KINGHOME and TOSOT. Gree was the number one brand of air conditioners in the world in 2021\*.

Thanks to 500 million users' choices, Gree brands are sold widely to more than 180 countries and regions.

Action makes the future and innovation makes achievement. Looking forward, Gree will press ahead with its business philosophy of passion, innovation and realization. We aim to build a centenary air conditioning enterprise and create a better life for humankind.

2015 Gree's sales revenue exceeded 15.08 billion USD.

2016 Gree's sales revenue exceeded 16.51 billion USD.

2017 Gree's sales revenue exceeded 22.21 billion USD.

Gree entered into the list of Forbes Global 2000 again and ranked No. 294, moving up 70 places compared with the previous year. Gree's sales revenue exceeded 30.23 billion USD.

Gree entered into Fortune Global 500. Gree's return on equity (ROE) ranked the first among the 129 Chinese enterprises on the list.

2022 Gree ranked the 487th on the list of Fortune Global 500.

\*Gree is the number one brand of air conditioners in the world in 2021

Footnote: "Source Euromonitor International Limited; Consumer appliances 2022ed; retail volume sales in units, 2021 data."

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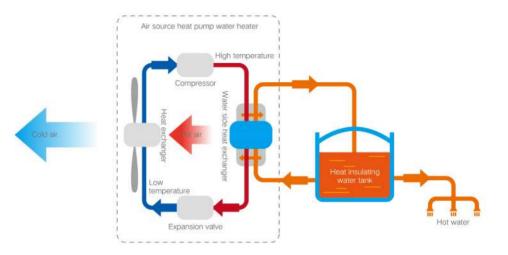
Circulating Air Source Heat Pump Water Heater is developed based on the theory of Reverse Carnot Cycle. Driven by a small amount of electrical power, taking refrigerant as carrier, it absorbs low grade heat in the air, and transforms them into usable high grade heat, which is then released into water so as to generate and secure domestic hot water, and finally it delivers hot water through hot water pipes to users. Its operation principle is the same as that of heat pump air conditioner. The heat pump air conditioner absorbs heat from the ambient, and then supplies the heat to indoor air; while the heat pump water heater uses the heat for heating production or domestic hot water. Its energy efficiency is 3 times higher than that of conventional electrical water heater. It's a new type of water heater, high-efficiency, energy-saving and environmental-friendly.

# **Key Features**

# Reverse Carnot Cycle

The unit absorbs low grade heat in the air, and transforms them into usable high grade heat, which is then released into water so as to generate and secure domestic hot water. It finally delivers hot water through hot water pipes to users.

• Circulating Heating Type: Supplement tap water to the storage water tank first; when water temperature is 5°C lower than the set temperature, heat the water in the water tank to the set value of cyclic temp in the form of "big water flow and small temperature rise".



Circulating Heating Type

## Heat Exchanger

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



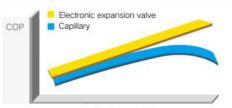
Special thickened inner groove copper pipe enhances the heat exchange performance by over 8%.



# 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 the capillary.





Environment Temperature



# More Efficient and More Energy-saving

# High-efficiency Heat Exchanger

Red copper heat exchange inner tube with spiral groove corrugation structure is adopted, with the features of big exchange area and small space usage. Eddy flow and turbulent flow flush through with contaminant release ability helps to keep the cleanness of water, reduce dirt and keep the stability of performance. Outer tube adopts high-quality stainless steel pipe and special stoving varnish of coating, which is with higher corrosion resistance and longer lifespan. Thanks to the dual-system tube in tube design, system heat exchange is more balanced and the performance is better than conventional bushing.







# High-efficiency Fan Blade and Motor

CFD simulation design; The unit adopts new high-efficiency axial flow blade with optimized blade shape and reasonable curve of blade edge. In the dynamic balance running test of fan blade, the motor matches perfectly.



The motor is more efficient with excellent internal configuration design, which can decrease mechanical energy consumption greatly, improving motor efficiency and decreasing noise and heat productivity. With high temperature withstand grade, it can prolong the life span.



## Four-digit Water Level Switch Control

Users can adjust water storage volume of water tank according to actual water consumption, especially for obvious off-peak and peak hours of water consumption.

The unit adopts four-digit water level switch control, which can increase adaptability of unit and maintain operation reliability of unit.

# More Convenient and More Comfortable

# Instant Water Heating, Instant Use

With intelligent water returning technology, users can instantly taking hot water by turning on the tap. You can enjoy 5-star hotel's water.



## Intelligent Defrosting Function

When the unit detects requirements of defrosting, the four-way valve reverses, and the refrigerant gas with high temperature and high pressure eliminates frost accumulated on the fin by passing through outdoor evaporator; When the unit detects that the frost has been defrosted already, the four-way valve reverses back again and continues to heat; It can defrost at the most suitable time so as to maintain its high-efficiency and reliable operation. Such defrosting way features thorough defrosting, short defrosting time and high efficiency.

Meanwhile, the unit can distinguish the areas which are easy to get frosting and not easy to get frosting according to ambient temperature, so as to adopt different defrosting intervals;

The unit can enter defrosting earlier by judging the thickness of frost, so as to ensure the water heating effect.

# Timer, Constant Temperature and Constant Water Level Functions

With timer, constant temperature and constant water level functions, it's more humanized.

# Free Setting of Unit On Time

Set the time for turning on the unit freely to satisfy needs of off-peak power use so as to lower operation cost.

# Power-off Memory Function

The unit will automatically operate in previous setting mode when power recovers after power failure.

# **More Reliable**

## Low Temperature Antifreezing Function

Low temperature antifreezing function can efficiently prevent frost cracking of heat exchanger.

## Intelligent Antifreezing Function

If the unit is turned on, when the unit notes that it is going to be frozen, it will automatically start circulating water pump so as to maintain the temperature of hot water pipe network and avoid the pipe network being frozen.

## Protection Functions

- Compressor high pressure protection
- High discharge temperature protection
- Water flow switch protection

- Compressor low pressure protection
- Sensor open-circuit/short-circuit protection
- Antifreezing protection



# More Intelligent Control

# Modular Design

- Free combination for convenient design and installation.
- Thanks to multiple parallel system, even if there is any malfunction occurs in one of the units, others can still operate normally. The risk of operation system is low, which is safe for usage.

## Centralized control

- The controller can control a single unit as well as multiple units. (16 units can be controlled centrally at most). Control functions include ON/OFF, water outlet temperature setting, timer on/off, parameter inquiry, etc.
- Free Combination. If there is any malfunction occurs in any of the units, it will not affect the operation of other units.



# **Circulating Air Source Heat Pump Water Heater**



It is specifically designed for users from different places. It can operate stably within -26°C~46°C, so that users can use hot water freely all the year around.

By adopting the optimized professional heat pump hot water system, the attenuation ratio of heating capacity in winter is small, which is more energy-saving.

Under ambient temperature of -15°C, the unit's capacity attenuation is 8% lower than that of conventional unit, with COP improved by 0.4w/w.

"Low-temperature heat pump" scroll compressor—flexible scroll design improves the anti-slugging ability of compressor; oil film sealing reduces friction, noise and mechanical energy consumption; a unique low-temperature injection design improves the reliability in severe conditions and prolongs the lifespan of compressor. It is with outstanding performance, safer, more comfortable and energy-saving.











Energy saving

Intelligent defrosting Compact design









Easier

Quality motor

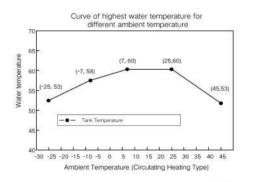
- ◆ Low ambient temperature liquid injection technology
- ◆ Automatic antifreezing technology of water system
- Engineering self-adaptive technology
- ◆ Humanized wired controller interface

|         | Nomin   | al Operating Condition | Operating Range   |  |
|---------|---------|------------------------|-------------------|--|
|         |         | Outdoor condition      | Outdoor condition |  |
|         | DB (°C) | WB (°C)                | DB (°C)           |  |
| Heating | 20      | 15                     | -26-46            |  |

# Circulating Heating Type<sup>3</sup>

| Model                  |               |         | GRS-Cm28/NaA-M   | GRS-Cm36/NaA-M    | GRS-Cm53/NaA-M    |
|------------------------|---------------|---------|------------------|-------------------|-------------------|
| Rated water heating of | capacity      | kW      | 28               | 36                | 53                |
| Rated water supply     |               | l/h     | 602              | 775               | 1140              |
| COP                    |               | W/W     | 3.83             | 3.87              | 4.08              |
| Tank Water temperatu   | ure range     | °C      | 30~60            | 30~60             | 30~60             |
| Power supply           |               | Ph/V/Hz | 3/380~ 415/50    | 3/380- 415/50     | 3/380~ 415/50     |
| Rated power input      | Water heating | kW      | 7.3              | 9.3               | 13                |
| Max power input        | Water heating | kW      | 10.1             | 13.2              | 19                |
| Sound Pressure level   |               | dB(A)   | ≤67              | ≤67               | ≤67               |
| Dimension(W × D × H)   | Outline       | mm      | 930 × 800 × 1605 | 930 × 800 × 1605  | 1340 × 800 × 1605 |
| Difficusion(W ~ D ~ H) | Packaged      | mm      | 1010×865×1775    | 1010 × 865 × 1775 | 1420 × 880 × 1775 |
| Net weight/Gross wei   | ght           | kg      | 243/260          | 260/277           | 358/376           |
| Loading quantity       | 40'GP/40'HQ   | set     | 26/26            | 26/26             | 21/21             |

- 1. Testing conditions of above data; Ambient temperature 20°C DB/15°C WB; Initial/Ending water temperature: 15°C/55°C;
- 2. Considering the system reliability and various water temperature demands for different ambient temperature, we have limited the highest water temperature. The curve is shown
- 3. The above products are not for EU.





# **Circulating Air Source Heat Pump Water Heater(Philippines)**

Air source heat pump water heater adopts heat pump principle, consumes a part of electric energy as compensation, and acquires heat capacity from ambient low taste energy (low temperature air source) through thermodynamic cycle to heat domestic hot water. Its energy efficiency ratio is 3 times higher than traditional electric water heater, so it is a new high-efficient, energy-saving and eco-friendly water heater.

It is mainly used in factories, hotels, restaurants, beauty salon, laundry and bath centers with hot water demand.





Golden fin



High efficiency





Energy saving









- ◆High-efficiency and energy-saving.
- ◆Safe and reliable.
- ◆Convenient for installation and convenient for maintenance.
- All-day operation and wide application range.
- ◆Green and eco-friendly.
- ◆Intelligent control.
- ◆Intelligent defrosting.

|         | Nominal   | Operating Condition | Operating Range   |  |  |
|---------|-----------|---------------------|-------------------|--|--|
|         | O         | utdoor condition    | Outdoor condition |  |  |
|         | DB ( 'C ) |                     | DB (°C)           |  |  |
| Heating | 20        | 15                  | -15~45            |  |  |

# Circulating Heating Type<sup>3</sup>

| Model                   |               |         | GRS-Cm39/NaA-H   |
|-------------------------|---------------|---------|------------------|
| Rated water heating c   | apacity       | kW      | 40               |
| Rated water supply      |               | I/h     | 860              |
| COP                     |               | W/W     | 4.30             |
| Tank Water temperatu    | ire range     | 'C      | 30~55            |
| Power supply            |               | Ph/V/Hz | 3/380/60         |
| Rated power input       | Water heating | kW      | 9,3              |
| Max power input         | Water heating | kW      | 12.7             |
| Sound Pressure level    |               | dB(A)   | ≤65              |
| Dimension(W × D × H)    | Outline       | mm      | 930 × 800 × 1605 |
| Difficultion(W > D > 1) | Packaged      | mm      | 1010×865×1775    |
| Net weight/Gross weight |               | kg      | 265/277          |
| Loading quantity        | 40'GP/40'HQ   | set     | 26/26            |

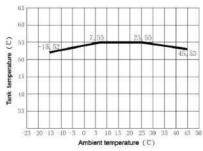


Fig 2-2 Variation curve of the highest water tank temp along with ambient temperature

# 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 releases it for room heating. It not only satisfies room heating requirements but also supplies domestic hot water. Besides, Versati can also provide you with cool air in hot summer. It is an All-in-One! Choose Versati, and enjoy a comfortable life all year round!



# 4th Generation DC Inverter Air to Water Heat Pump



## Eco-friendly — Create a Green World

Versati adopts R32, 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 emission. It is an eco-friendly product, which mirrors your social commitment to protect the environment.















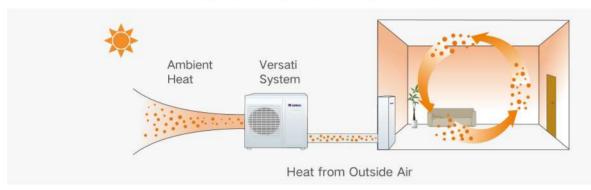
# **Outdoor Unit:** Sustainable Energy Converter

Versati III adopts DC inverter technology and the most efficient refrigerant R32 with zero ozone depletion, with excellent COP up to 5.06.



# Heat Pump Technology Lows 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 reducing the energy consumption and CO<sub>2</sub> 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

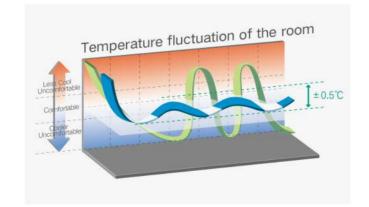
It will cause temperature fluctuation when turning on or turning off the unit frequently.

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 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 5.0

With its perfect class COP performance. Versati delivers more heating power with less energy consumption. The maximum COP is up to 5.06



Note: for 1Ph models for 3Ph models

Test Standard: EN14511-2018

## 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.

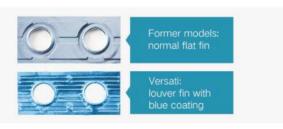
### DC Fan Motor

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%.



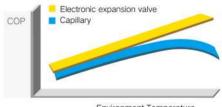
Special thickened inner groove copper pipe enhances the heat exchange performance by over 8%.



# 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 the capillary.





Environment Temperature

### Comfort

### Precise Temperature Regulation

The electronic expansion valve guarantees that the system make adjustment 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 guiet requirement at night or in special occasions.



# Reliability

Heat Exchange Anti-corrosion
Highly anti-corrosion blue hydrophilic coated aluminum fin has longer lifespan than the common blue
fin.



## Wide Voltage Range Operation



# 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

The compact design can save much transportation cost.



# Indoor Hydro: Heating/Cooling and Hot Water System

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 heating system and sanitary hot water tank. If you opt for the combination of heating and cooling, 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



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

460 × 318 × 860mm

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 you can enjoy the warmth when you get up or return home.



### Comfort

Smart Dual-temperature Detection Control Technology ON and OFF control of the unit is realized by upper temperature sensor, which renews water temperature in real time, thus ensuring the perfect timing of startup:

Avoid premature startup. Improve hot water yielding rate by accurate timing of hot/cold water mixture.

Avoid overdue startup. Improve hot water usage rate and shorten the waiting time of reheating.



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



## Health

- The domestic water is sanitary and can be used
- The enamel water 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

- By adopting bearing tank, the unit can replenish water when using water, ensuring rapid storage and continuous delivery.
- Magnesium stick protecting container contributes to longer lifespan.
- Thermal insulating layer 50mm in thickness.





• 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

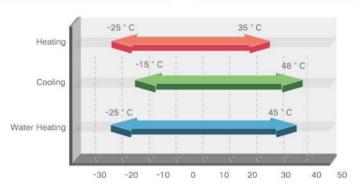
Cooling

Water Heating

Heating + Water Heating

Cooling + Water Heating

 Wide Range of Operation Temperature Heating -25~35 ° C -15~48 ° C Cooling Water Heating -25~45 ° C



Hot Water Temperature Range

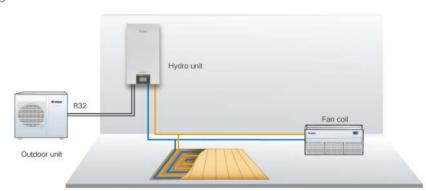
Domestic water: 40 ° C to 80 ° C

Heating: 20 ° C~60 ° C

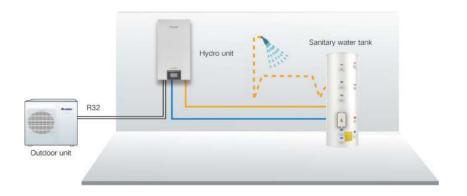
Cooling: 7 ° C~25 ° C

# Combination Examples:

Heating / Cooling



Water Heating



Heating/Cooling with Water Heating



# Multiple Additional Functions and User-friendly Function

- Urgent Water Heating The heat pump uses the backup electric heater in case that any fault occurs.
- Floor Protection The heat pump uses the backup electric heater in case that any fault occurs.

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 The heat pump and the electric heater of the water tank operate at the same time to realize rapid heating.
- Disinfection 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 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°C and 15°C.
- Weather-dependent Operation The unit can automatically adjust the operation state according to the temperature range set by the user.
- User-friendly and Large LED Display.
- Timer ON/Timer OFF
- Day/Weekly/Count-down Timer
- Weekly Programme
- Emergency Operation Mode(for Heating and Water Heating only)
- Forced Operation Mode
- Quiet Mode
- Central Control

# Versati № (Monobloc )

₹134a

VERSATI, a DC inverter multifunctional air-to-water heat pump adopting advanced heat pump technology, absorbs natural heat from the ambient air and then release heat to the room or water. It not only satisfies room heating requirements but also supplies domestic hot water. Besides, VERSATI can also provide you with cool air in hot summer.













High efficiency





Quiet function





Low voltage startup

Golden fin condenser



Intelligent defrosting

Comprehensive protection



Self-diagnosis



Weekly timer

24:00

Clock display

Key-card control

6

 It adopts the two-stage compressor technology to improve the heating capacity and energy efficiency under low temperature, with A7W35 COP up to 5.4, and average climate SCOP 35°C, A+++.

Child lock

- It can be combined with a fan coil unit, heat radiator, floor heating and a hot water tank to provide five working modes including cooling, heating and water heating.
- Versati is equipped with a 5-inch high-definition LCD touch screen, which provides 20 languages to suit users of different countries and regions.
- Users can set the relationship between ambient temperature and room temperature. The targeted room temperature will change accordingly with room load and ambient temperature change so as to bring comfort to users and save energy.
- Users can set the quiet time, for example, all day long or night time only, to improve the level of comfort.

| lka aa        | Water Side                    | Heat Source/User Side                |
|---------------|-------------------------------|--------------------------------------|
| Item          | Leaving Water Temperature(°C) | Environment Dry Bulb Temperature(°C) |
| Cooling       | 5-25                          | -15~48                               |
| Heating       | 20-65                         | -25 ~ 35                             |
| Water Heating | 40-80                         | -25 ~ 45                             |



|                     | Model                    |         | GRS-CQ4.0Pd/<br>NhG3-E | GRS-CQ6.0Pd/<br>NhG3-E | GRS-CQ8.0Pd/<br>NhG3-E | GRS-CQ10Pd/<br>NhG3-E | GRS-CQ12Pd/<br>NhG3-E | GRS-CQ14Pd/<br>NhG3-E | GRS-CQ16Pd/<br>NhG3-E |
|---------------------|--------------------------|---------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Capacity            | Cooling                  | kW      | 5.00                   | 6.50                   | 8.30                   | 10.20                 | 12.00                 | 13.70                 | 15.50                 |
| (Floor)             | Heating                  | kW      | 5.00                   | 6.00                   | 8.20                   | 10.20                 | 12.00                 | 14.20                 | 15,70                 |
| Power C             | Cooling                  | kW      | 0.96                   | 1.28                   | 1.56                   | 2.00                  | 2.45                  | 3.00                  | 3.60                  |
|                     | Heating                  | kW      | 0,93                   | 1.11                   | 1.54                   | 2.02                  | 2,43                  | 2,99                  | 3.45                  |
| EER(Floor C         | Cooling)                 | W/W     | 5.20                   | 5.10                   | 5.32                   | 5.10                  | 4.90                  | 4.57                  | 4.31                  |
| COP(Floor F         | -leating)                | WW      | 5.40                   | 5.40                   | 5.32                   | 5.05                  | 4.94                  | 4.75                  | 4.55                  |
| Capacity            | Cooling                  | kW      | 4.90                   | 5.70                   | 7.40                   | 9.00                  | 11.10                 | 13.30                 | 13.80                 |
| (FanCoil)           | Heating                  | kW      | 4.90                   | 6.80                   | 8.30                   | 10.20                 | 13.00                 | 14.20                 | 16.20                 |
| Power input         | Cooling                  | kW      | 1.40                   | 1.76                   | 2.00                   | 2.65                  | 3.58                  | 4.75                  | 5.09                  |
| (FanCoil)           | Heating                  | kW      | 1.17                   | 1.66                   | 1.90                   | 2.50                  | 3.45                  | 3.84                  | 4.49                  |
| EER(Fan Co          | oil)                     | W/W     | 3.50                   | 3.25                   | 3.70                   | 3,40                  | 3.10                  | 2.80                  | 2.71                  |
| COP(Fan Co          | oil or Radiator)         | W/W     | 4,20                   | 4,10                   | 4.36                   | 4,08                  | 3.77                  | 3.70                  | 3.61                  |
| Refrigerant o       | charge volume            | kg      | 0.95                   | 0.95                   | 1.60                   | 1.60                  | 2.20                  | 2.20                  | 2.20                  |
|                     | Operation                | -       | Automatic              | Automatic              | Automatic              | Automatic             | Automatic             | Automatic             | Automatic             |
|                     | Steps                    | -       | 2                      | 2                      | 2                      | 2                     | 2                     | 2                     | 2                     |
| Electric<br>heater  | Capacity                 | kW      | 3                      | 3                      | 6                      | 6                     | 6                     | 6                     | 6                     |
| leater              | Combination              | kW      | 1.5+1.5                | 1.5+1.5                | 3+3                    | 3+3                   | 3+3                   | 3+3                   | 3+3                   |
|                     | Power input              | V/Ph/Hz | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz            | 230V~ 50Hz            | 230V~ 50Hz            | 230V~ 50Hz            |
| Sanitary wat        | er temperature           | 10      | 40~80                  | 40-80                  | 40-80                  | 40-80                 | 40~80                 | 40-80                 | 40-80                 |
| Sound               | Cooling                  | dB(A)   | 51                     | 52                     | 52                     | 54                    | 54                    | 55                    | 56                    |
| pressure<br>level   | Heating                  | dB(A)   | 53                     | 53                     | 54                     | 56                    | 56                    | 58                    | 59                    |
| 010                 |                          | mm      | 1150                   | 1150                   | 1206                   | 1206                  | 1206                  | 1206                  | 1206                  |
|                     | Outline<br>(W × D × H)   | mm      | 365                    | 365                    | 445                    | 445                   | 445                   | 445                   | 445                   |
|                     | (MVDVD)                  | mm      | 735                    | 735                    | 878                    | 878                   | 878                   | 878                   | 878                   |
| Dimensions          |                          | mm      | 503                    | 503                    | 553                    | 553                   | 553                   | 553                   | 553                   |
|                     | Packaged<br>(W × L × H)  | mm      | 1258                   | 1258                   | 1338                   | 1338                  | 1338                  | 1338                  | 1338                  |
|                     | (VV × L × FT)            | mm      | 900                    | 900                    | 1020                   | 1020                  | 1020                  | 1020                  | 1020                  |
| Net weight kg       |                          | kg      | 95                     | 95                     | 127.0                  | 127.0                 | 142.0                 | 142.0                 | 1.42.0                |
| Gross weigh         | it .                     | kg      | 112                    | 112                    | 146.0                  | 146.0                 | 161.0                 | 161.0                 | 161.0                 |
|                     | 20 ' Container           | unit    | 38                     | 38                     | 32                     | 32                    | 32                    | 32                    | 32                    |
| Loading<br>quantity | 40 'Container            | unit    | 82                     | 82                     | 66                     | 66                    | 66                    | 66                    | 66                    |
| equicas stray       | 40 ' High Cube Container | unit    | 82                     | 82                     | 66                     | 66                    | 66                    | 66                    | 66                    |

|                   | Model                   |         | GRS-CQ8.0Pd/<br>NhG3-M | GRS-CQ10Pd/<br>NhG3-M | GRS-CQ12Pd/<br>NhG3-M | GRS-CQ14Pd/<br>NhG3-M | GRS-CQ16Pd/<br>NhG3-M |
|-------------------|-------------------------|---------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Capacity          | Cooling                 | kW      | 8.30                   | 10.20                 | 12.00                 | 13,90                 | 15.40                 |
| Floor)            | Heating                 | KW      | 8.20                   | 10.20                 | 12.00                 | 14.20                 | 15.70                 |
| ower              | Cooling                 | kW      | 1,64                   | 2.13                  | 2.61                  | 3.32                  | 4.05                  |
| nput(Floor)       | Heating                 | kW      | 1.62                   | 2.06                  | 2.49                  | 3.09                  | 3.57                  |
| ER(Floor C        | (ooling)                | W/W     | 5.06                   | 4.79                  | 4.60                  | 4.19                  | 3.80                  |
| OP(Floor H        | Heating)                | W/W     | 5.06                   | 4.95                  | 4.82                  | 4.60                  | 4.40                  |
| apacity           | Cooling                 | kW      | 7.10                   | 9.10                  | 11.10                 | 13.30                 | 13,80                 |
| FanCoil)          | Heating                 | kW      | 8,20                   | 10.20                 | 13.00                 | 14,20                 | 16.20                 |
| ower Input        | Cooling                 | kW      | 2.10                   | 2,80                  | 3.58                  | 4.75                  | 5.09                  |
| FanCoii)          | Heating                 | kW      | 2.05                   | 2.60                  | 3,45                  | 3,84                  | 4.49                  |
| ER(Fan Co         | ii)                     | W/W     | 3.38                   | 3.25                  | 3.10                  | 2.80                  | 2.71                  |
| OP(Fan Co         | oil or Radiator)        | WW      | 4.00                   | 3.92                  | 3.77                  | 3.70                  | 3,61                  |
| efrigerant d      | charge volume           | kg      | 1,60                   | 1.60                  | 2.20                  | 2.20                  | 2.20                  |
|                   | Operation               | 101     | Field supply           | Field supply          | Automatic             | Automatic             | Automatic             |
|                   | Steps                   | ( E)    | 2                      | 2                     | 2                     | 2                     | 2                     |
| lectric<br>eater  | Capacity                | kW      | 6                      | 6                     | 6                     | 6                     | 6                     |
| eater             | Combination             | kW      | 3+3                    | 3+3                   | 3+3                   | 3+3                   | 3+3                   |
|                   | Power input             | V/Ph/Hz | 400V 3N~ 50Hz          | 400V 3N~ 50Hz         | 400V 3N~ 50Hz         | 400V 3N~ 50Hz         | 400V 3N~ 50Hz         |
| anitary wat       | er temperature          | 'C      | 40~80                  | 40~80                 | 40~80                 | 40~80                 | 40~80                 |
| aund              | Cooling                 | dB(A)   | 52                     | 54                    | 54                    | 55                    | 56                    |
| ressure<br>ivel   | Heating                 | dB(A)   | 54                     | 56                    | 56                    | 58                    | 59                    |
|                   |                         | mm      | 1206                   | 1206                  | 1206                  | 1206                  | 1206                  |
|                   | Outline<br>(W × D × H)  | mm      | 445                    | 445                   | 445                   | 445                   | 445                   |
|                   | (W ~ D ~ FI)            | mm      | 878                    | 878                   | 878                   | 878                   | 878                   |
| imensions         |                         | mm      | 553                    | 553                   | 553                   | 553                   | 553                   |
|                   | Packaged<br>(W×L×H)     | mm      | 1338                   | 1338                  | 1338                  | 1338                  | 1338                  |
|                   | (MVFVII)                | mm      | 1020                   | 1020                  | 1020                  | 1020                  | 1020                  |
| et weight         | 111                     | kg      | 141.0                  | 141.0                 | 148.0                 | 148.0                 | 148.0                 |
| iross weigh       | t                       | kg      | 159.0                  | 159.0                 | 166.0                 | 166.0                 | 166.0                 |
|                   | 20 ' Container          | unit    | 32                     | 32                    | 32                    | 32                    | 32                    |
| oading<br>uantity | 40 ' Container          | unit    | 66                     | 66                    | 66                    | 66                    | 66                    |
| dog inth          | 40 ' High Cube Containe | r unit  | 66                     | 66                    | 66                    | 66                    | 66                    |

|                     | Model                    |       | GRS-CQ4.0Pd/<br>NhG4-E | GRS-CQ6.0Pd/<br>NhG4-E | GRS-CQ8.0Pd/<br>NhG4-E | GRS-CQ10Pd/<br>NhG4-E | GRS-CQ12Pd/<br>NhG4-E | GRS-CQ14Pd/<br>NhG4-E | GRS-CQ16Pd/<br>NhG4-E |
|---------------------|--------------------------|-------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Capacity            | Cooling                  | kW    | 5.00                   | 6.50                   | 8.30                   | 10.20                 | 12.00                 | 13.70                 | 15.50                 |
| (Floor)             | Heating                  | kW    | 5.00                   | 6.00                   | 8.20                   | 10.20                 | 12.00                 | 14.20                 | 15.70                 |
| Power               | Cooling                  | kW    | 0.96                   | 1.28                   | 1.56                   | 2.00                  | 2,45                  | 3.00                  | 3.60                  |
| input(Floor)        | Heating                  | kW    | 0.93                   | 1,11                   | 1.54                   | 2.02                  | 2.43                  | 2.99                  | 3.45                  |
| EER(Floor C         | ooling)                  | W/W   | 5.20                   | 5.10                   | 5.32                   | 5.10                  | 4.90                  | 4.57                  | 4.31                  |
| COP(Floor H         | leating)                 | W/W   | 5.40                   | 5.40                   | 5.32                   | 5.05                  | 4.94                  | 4.75                  | 4.55                  |
| Capacity            | Cooling                  | kW    | 4.90                   | 5.70                   | 7,40                   | 9.00                  | 11.10                 | 13.30                 | 13.80                 |
| (FanCoil)           | Heating                  | kW    | 4.90                   | 6.80                   | 8.30                   | 10.20                 | 13.00                 | 14.20                 | 16.20                 |
| Power input         | Cooling                  | KW    | 1,40                   | 1.76                   | 2.00                   | 2.65                  | 3.58                  | 4.75                  | 5.09                  |
| (FanCoil)           | Heating                  | kW    | 1.17                   | 1.66                   | 1.90                   | 2.50                  | 3.45                  | 3.84                  | 4.49                  |
| EER(Fan Co          | il)                      | W/W   | 3.50                   | 3.25                   | 3.70                   | 3.40                  | 3.10                  | 2.80                  | 2.71                  |
| COP(Fan Co          | oll or Radiator)         | W/W   | 4.20                   | 4.10                   | 4.36                   | 4.08                  | 3.77                  | 3.70                  | 3.61                  |
| Refrigerant o       | charge volume            | kg    | 0.95                   | 0.95                   | 1.60                   | 1.60                  | 2.20                  | 2.20                  | 2.20                  |
| Sanitary wat        | er temperature           | 10    | 40-80                  | 40-80                  | 40-80                  | 40~80                 | 40-80                 | 40-80                 | 40-80                 |
| Sound               | Cooling                  | dB(A) | 51                     | 52                     | 52                     | 54                    | 54                    | 55                    | 56                    |
| pressure<br>level   | Heating                  | dB(A) | 53                     | 53                     | 54                     | 56                    | 56                    | 58                    | 59                    |
|                     | - Contract               | mm    | 1150                   | 1150                   | 1206                   | 1206                  | 1206                  | 1206                  | 1206                  |
|                     | Outline<br>(W × D × H)   | mm    | 365                    | 365                    | 445                    | 445                   | 445                   | 445                   | 445                   |
|                     | (00.7 12.7 11)           | mm    | 735                    | 735                    | 878                    | 878                   | 878                   | 878                   | 878                   |
| Dimensions          |                          | mm    | 503                    | 503                    | 553                    | 553                   | 553                   | 553                   | 553                   |
|                     | Packaged<br>(W × L × H)  | mm    | 1258                   | 1258                   | 1338                   | 1338                  | 1338                  | 1338                  | 1338                  |
|                     | Merell                   | mm    | 900                    | 900                    | 1020                   | 1020                  | 1020                  | 1020                  | 1020                  |
| Net weight kg       |                          | kg    | 90                     | 90                     | 120.0                  | 120.0                 | 138.0                 | 138.0                 | 138.0                 |
| Gross weight        |                          | kg    | 106                    | 106                    | 139.0                  | 139.0                 | 156.0                 | 156.0                 | 156.0                 |
|                     | 20 * Container           | unit  | 38                     | 38                     | 32                     | 32                    | 32                    | 32                    | 32                    |
| Loading<br>quantity | 40 ' Container           | unit  | 82                     | 82                     | 66                     | 66                    | 66                    | 66                    | 66                    |
| quantity            | 40 ' High Cube Container | unit  | 82                     | 82                     | 66                     | 66                    | 66                    | 66                    | 66                    |

|                    | Model                    |       | GRS-CQ8.0Pd/NhG4-M | GRS-CQ10Pd/NhG4-M | GRS-CQ12Pd/NhG4-M | GRS-CQ14Pd/NhG4-M | GRS-CQ16Pd/NhG4-M |
|--------------------|--------------------------|-------|--------------------|-------------------|-------------------|-------------------|-------------------|
| Capacity           | Cooling                  | kW    | 8.30               | 10.20             | 12.00             | 13.90             | 15.40             |
| Floor)             | Heating                  | kW    | 8.20               | 10.20             | 12.00             | 14.20             | 15.70             |
| 2ower              | Cooling                  | kW    | 1.64               | 2.13              | 2.61              | 3.32              | 4.05              |
| nput(Floor)        | Heating                  | kW    | 1.62               | 2.06              | 2.49              | 3.09              | 3.57              |
| ER(Floor C         | coling)                  | W/W   | 5.06               | 4.79              | 4.60              | 4.19              | 3.80              |
| COP(Floor H        | leating)                 | W/W   | 5.06               | 4.95              | 4.82              | 4.60              | 4.40              |
| Capacity           | Cooling                  | kW    | 7.10               | 9.10              | 11.10             | 13.30             | 13.80             |
| (FanCoil)          | Heating                  | kW    | 8.20               | 10.20             | 13.00             | 14.20             | 16.20             |
| Power input        | Cooling                  | kW    | 2.10               | 2.80              | 3.58              | 4.75              | 5.09              |
| FanCoil)           | Heating                  | kW    | 2,05               | 2,60              | 3.45              | 3.84              | 4.49              |
| ER(Fan Co          | il)                      | W/W   | 3.38               | 3,25              | 3.10              | 2.80              | 2.71              |
| COP(Fan Co         | il or Radiator)          | W/W   | 4.00               | 3,92              | 3.77              | 3.70              | 3.61              |
| Refrigerant o      | harge volume             | kg    | 1.60               | 1.60              | 2.20              | 2.20              | 2.20              |
| Sanitary wat       | er temperature           | °C    | 40-80              | 40-80             | 40-80             | 40-80             | 40~80             |
| Sound              | Cooling                  | dB(A) | 52                 | 54                | 54                | 55                | 56                |
| oressure<br>evel   | Heating                  | dB(A) | 54                 | 56                | 56                | 58                | 59                |
|                    |                          | mm    | 1206               | 1206              | 1206              | 1206              | 1206              |
|                    | Outline<br>(W × D × H)   | mm    | 445                | 445               | 445               | 445               | 445               |
|                    | (W. O. II)               | mm    | 878                | 878               | 878               | 878               | 878               |
| Dimensions         |                          | mm    | 553                | 553               | 553               | 553               | 553               |
|                    | Packaged<br>(W×L×H)      | mm    | 1338               | 1338              | 1338              | 1338              | 1338              |
|                    | (W-L-1)                  | mm    | 1020               | 1020              | 1020              | 1020              | 1020              |
| Net weight k       |                          | kg    | 134.0              | 134.0             | 144.0             | 144.0             | 144.0             |
| Gross weigh        | t                        | kg    | 152.0              | 152.0             | 162.0             | 162.0             | 162.0             |
|                    | 20 ' Container           | unit  | 32                 | 32                | 32                | 32                | 32                |
| oading<br>quantity | 40 ' Container           | unit  | 66                 | 66                | 66                | 66                | 66                |
| quantity           | 40 ' High Cube Container | unit  | 66                 | 66                | 66                | 66                | 66                |







# **Versati III (Monobloc Type)**

It's a kind of integrated DC inverter unit that has cooling, heating and water heating functions, with up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C while the leaving water temperature range is 20~60°C.







4-8kW

10-16kW

Wired Controller ZF63011AJ















Intelligent defrosting

Memory function

Child lock







Low voltage startup

Golden fin condenser Inner groove copper

-20°C

High efficiency







Compact design





protection 6



24 hour timer

Low temperature heating Wide operation range Wide voltage range

Weekly timer

24:00

Clock display

Key-card control

Floor debugging function;

- Integrated structure for simple installation and less installation cost;
- R32 refrigerant, low GWP;
- Adopt two-stage compressor to widen the ambient temperature range for heating;
- Leaving water temperature up to 60°C, applicable to various heating terminals.

| Home          | Water Side                    | Heat Source/User Side               |  |
|---------------|-------------------------------|-------------------------------------|--|
| Item          | Leaving Water Temperature(°C) | Environment Dry Bulb Temperature(°C |  |
| Cooling       | 7~25                          | -15~48                              |  |
| Heating       | 20~60                         | -25~35                              |  |
| Water Heating | 40~80                         | -25~45                              |  |

## Specifications

| Model                         |          | GRS-CQ4.0Pd/NhG-K | GRS-CQ6.0Pd/NhG-K | GRS-CQ8.0Pd/NhG-K | GRS-CQ10Pd/NhG-K  | GRS-CQ12Pd/NhG-K  | GRS-CQ14Pd/NhG-K  |
|-------------------------------|----------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Power supply                  | V/Ph/Hz  | 220-240V~ 50Hz    | 220-240V~ 50Hz    | 220-240V~ 50Hz    | 220-240V~ 50Hz    | 220-240V~50Hz     | 220-240V~ 50Hz    |
| Capacity*1                    | kW       | 3.80              | 5.80              | 6.80              | 8.80              | 11.00             | 12.50             |
|                               | kW       | 4.00              | 6.00              | 7.50              | 10.00             | 12.00             | 14.00             |
|                               | kW       | 0.82              | 1.35              | 1.58              | 1.96              | 2.56              | 3.05              |
| Power input <sup>-1</sup>     | kW       | 0.78              | 1.20              | 1.63              | 2.17              | 2.64              | 3.22              |
| EER/COP"                      | W/W      | 4.63/5.10         | 4.30/5.00         | 4.30/4.60         | 4.49/4.61         | 4.30/4.55         | 4.10/4.35         |
| 0                             | kW       | 3.00              | 4.00              | 5.00              | 7.80              | 9.50              | 12.00             |
| Capacity*2                    | kW       | 4.00              | 6.00              | 7.50              | 10.00             | 12.00             | 14.00             |
| -                             | kW       | 0.94              | 1.29              | 1.61              | 2.48              | 3.11              | 4.14              |
| Power input*2                 | kW       | 1.00              | 1.58              | 2.00              | 2.70              | 3.48              | 4.18              |
| EER/COP*2                     | W/W      | 3.19/4.00         | 3.10/3.80         | 3.10/3.75         | 3.15/3.70         | 3.05/3.45         | 2.90/3.35         |
| Refrigerant                   | kg       | 0.87              | 0.87              | 0.87              | 2.20              | 2.20              | 2.20              |
| Sanitary water<br>temperature | °C       | 40-80             | 40~80             | 40~80             | 40~80             | 40~80             | 40-80             |
| Sound pressure                | dB(A)    | 51                | 52                | 53                | 56                | 56                | 57                |
| level                         | dB(A)    | 50                | 50                | 51                | 54                | 54                | 55                |
| Connecting pipe               | inch(mm) | 1                 | 1                 | 1                 | /                 | /                 | 1                 |
| connecting pipe               | inch(mm) | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 |
| Dimensions                    | mm       | 1150 × 345 × 758  | 1150 × 345 × 758  | 1150 × 345 × 758  | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  |
| $(W \times D \times H)$       | mm       | 1258 × 488 × 900  | 1258 × 488 × 900  | 1258 × 488 × 900  | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 |
| Net weight/Gross<br>weight    | kg       | 96/109            | 96/109            | 96/109            | 147/160           | 147/160           | 147/160           |
| Landina augostis              | unit     | 84                | 84                | 84                | 58                | 58                | 58                |
| Loading quantity              | unit     | 84                | 84                | 84                | 58                | 58                | 58                |

| Model                        |          | GRS-CQ10Pd/NhG-M  | GRS-CQ12Pd/NhG-M  | GRS-CQ14Pd/NhG-M  | GRS-CQ16Pd/NhG-M  | GRS-CQ16Pd/NhG-K  |
|------------------------------|----------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Power supply                 | V/Ph/Hz  | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ | 220-240V~ 50Hz    |
|                              | kW       | 8.80              | 11.00             | 12,50             | 14.50             | 14.50             |
| Capacity*1                   | kW       | 10.00             | 12.00             | 14.00             | 15.50             | 15.50             |
|                              | kW       | 1.96              | 2.56              | 3.05              | 3.82              | 3.85              |
| Power input <sup>*1</sup>    | kW       | 2.17              | 2.64              | 3.22              | 3.60              | 3.60              |
| EER/COP*1                    | W/W      | 4,49/4.61         | 4.30/4.55         | 4.10/4.35         | 3.80/4.30         | 3.77/4.31         |
|                              | kW       | 7.80              | 9.50              | 12.00             | 13.00             | 13.00             |
| Capacity*2                   | kW       | 9.00              | 12.00             | 13.00             | 15.50             | 15.50             |
|                              | kW       | 2.48              | 3.20              | 4.14              | 4.91              | 4.91              |
| Power input <sup>2</sup>     | kW       | 2.70              | 3.48              | 4.18              | 4.70              | 4.70              |
| EER/COP                      | W/W      | 3,15/3.33         | 2.97/3,45         | 2.90/3.11         | 2.65/3.30         | 2.65/3.30         |
| Refrigerant<br>charge volume | kg       | 2.20              | 2.20              | 2.20              | 2.20              | 2.20              |
| Sanitary water temperature   | °C       | 40-80             | 40-80             | 40~80             | 40-80             | 40~80             |
| Sound pressure               | dB(A)    | 56                | 56                | 57                | 59                | 59                |
| level                        | dB(A)    | 54                | 54                | 55                | 57                | 57                |
| Connecting pipe              | inch(mm) | 1                 | 1                 | 1                 | /                 | 1                 |
| Connecting pipe              | inch(mm) | /                 | 1                 | 1                 | 1                 | 1                 |
| Dimensions                   | mm       | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  |
| $(W \times D \times H)$      | mm       | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 |
| Net weight/Gross<br>weight   | kg       | 147/160           | 147/160           | 147/160           | 147/160           | 147/160           |
|                              | unit     | 58                | 58                | 58                | 58                | 58                |
| Loading quantity             | unit     | 58                | 58                | 58                | 58                | 58                |

1.Capacity and power input are based on the following conditions:

 Cooling conditions. Outdoor air temperature 35°C DB/-WB. Entering water temperature 23°C. Leaving water temperature 18°C

 Heating conditions. Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 30°C. Leaving water temperature 35°C Standing piping length 5m.

- For floor cooling.
   For floor heating.
- 5. For fan coil unit.
- 6. For fan coil or radiator.

Capacity and power input are based on the following conditions:
 Cooling conditions.

- Outdoor air temperature 35°C DB/-WB. Entering water temperature 12°C. Leaving water temperature 7°C
- · Heating conditions. Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 40°C. Leaving water temperature 45°C Standing piping length 5m.



| Model                    |                      |          | GRS-CQ10Pd/NhG2-K | GRS-CQ12Pd/NhG2-K | GRS-CQ14Pd/NhG2-K | GRS-CQ16Pd/NhG2-K |
|--------------------------|----------------------|----------|-------------------|-------------------|-------------------|-------------------|
| Power supply             |                      | V/Ph/Hz  | 220-240V~ 50Hz    | 220-240V~ 50Hz    | 220-240V~ 50Hz    | 220-240V~ 50Hz    |
| 0                        | Cooling"3            | kW       | 8.80              | 11.00             | 12,50             | 14.50             |
| Capacity <sup>11</sup>   | Heating*4            | kW       | 10.00             | 12.00             | 14.00             | 15.50             |
|                          | Cooling <sup>3</sup> | kW       | 1.96              | 2.56              | 3.05              | 3.85              |
| Power input*1            | Heating*             | kW       | 2.17              | 2.64              | 3,22              | 3.60              |
| EER/COP *1               |                      | W/W      | 4.49/4.61         | 4.30/4.55         | 4.10/4.35         | 3.77/4.31         |
| C                        | Cooling*5            | kW       | 7.80              | 9,50              | 12.00             | 13.00             |
| Capacity*2               | Heating <sup>6</sup> | kW       | 10.00             | 12.00             | 14.00             | 15.50             |
|                          | Cooling <sup>5</sup> | kW       | 2.48              | 3.11              | 4.14              | 4.91              |
| Power input *2           | Heating*6            | kW       | 2.70              | 3.48              | 4.18              | 4.70              |
| EER/COP *2               |                      | W/W      | 3.15/3.70         | 3.05/3.45         | 2.90/3.35         | 2.65/3.30         |
| Refrigerant charge volun | ne                   | kg       | 2.20              | 2.20              | 2.20              | 2.20              |
| Sanitary water temperat  | ure                  | °C       | 40~80             | 40~80             | 40~80             | 40~80             |
| Sound pressure level     | Cooling              | dB(A)    | 56                | 56                | 57                | 59                |
| Sound pressure level     | Heating              | dB(A)    | 54                | 54                | 55                | 57                |
| Connection pine          | Gas                  | inch(mm) | 1                 | Ÿ                 | 1                 | 1                 |
| Connecting pipe          | Liquid               | inch(mm) | /                 | 1                 | 1                 | /                 |
| Dimensions               | Outline              | mm       | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  |
| $(W \times D \times H)$  | Packaged             | mm       | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 |
| Net weight/Gross weight  |                      | kg       | 147/160           | 147/160           | 147/160           | 147/160           |
| Loading quantity         | 40'GP                | unit     | 58                | 58                | 58                | 58                |
| Luaurig quartity         | 40'HQ                | unit     | 58                | 58                | 58                | 58                |

| Model                      |                       | GRS-CQ10Pd/NhG2-M | GRS-CQ12Pd/NhG2-M | GRS-CQ14Pd/NhG2-M | GRS-CQ16Pd/NhG2-N |                   |
|----------------------------|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Power supply               |                       | V/Ph/Hz           | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ | 380-415V 3N~ 50HZ |
| 01-11                      | Cooling <sup>13</sup> | kW                | 8.80              | 11.00             | 12.50             | 14.50             |
| Capacity*1                 | Heating*4             | kW                | 10.00             | 12.00             | 14.00             | 15.50             |
| n                          | Cooling <sup>*3</sup> | kW                | 1.96              | 2.56              | 3.05              | 3.82              |
| Power input "1             | Heating <sup>4</sup>  | kW                | 2.17              | 2.64              | 3.22              | 3.60              |
| EER/COP *1                 |                       | W/W               | 4.49/4.61         | 4.30/4.55         | 4.10/4.35         | 3.80/4.30         |
| 0 22                       | Cooling*5             | kW                | 7.80              | 9.50              | 12.00             | 13.00             |
| Capacity <sup>*2</sup>     | Heating*6             | kW                | 9.00              | 12.00             | 13.00             | 15.50             |
|                            | Cooling <sup>15</sup> | kW                | 2.48              | 3.20              | 4.14              | 4.91              |
| Power input*2              | Heating*6             | kW                | 2.70              | 3.48              | 4.18              | 4.70              |
| EER/COP *2                 |                       | W/W               | 3.15/3.33         | 2.97/3,45         | 2.90/3.11         | 2.65/3.30         |
| Refrigerant charge volur   | ne                    | kg                | 2.20              | 2.20              | 2.20              | 2.20              |
| Sanitary water temperat    | ure                   | "C                | 40~80             | 40~80             | 40~80             | 40~80             |
| Sound pressure level       | Cooling               | dB(A)             | 56                | 56                | 57                | 59                |
| Sourid pressure lever      | Heating               | dB(A)             | 54                | 54                | 55                | 57                |
| C                          | Gas                   | inch(mm)          | 1                 | 1                 | 1                 | 1                 |
| Connecting pipe            | Liquid                | inch(mm)          | 1                 | 1                 | 1                 | 1                 |
| Dimensions                 | Outline               | mm                | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  | 1200 × 482 × 878  |
| $(W \times D \times H)$    | Packaged              | mm                | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 | 1293 × 589 × 1020 |
| Net weight/Gross weight kg |                       | kg                | 147/160           | 147/160           | 147/160           | 147/160           |
| Loading quantity           | 40'GP                 | unit              | 58                | 58                | 58                | 58                |
| Loading quartity           | 40'HQ                 | unit              | 58                | 58                | 58                | 58                |

Capacites and power inputs are based on the following conditions:
 Cooling conditions.

Outdoor air temperature 35°C DB/-WB. Entering water temperature 23°C.

Leaving water temperature 28°C

Heating conditions.
Outdoor air temperature 7°C DB/6°C WB.
Entering water temperature 30°C. Leaving water temperature 35°C Standing piping length 5m.

For floor cooling.
 For floor heating.

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

 Cooling conditions. Outdoor air temperature 35°C DB/-WB. Entering water temperature 12°C. Leaving water temperature 7°C

· Heating conditions.

Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 40°C. Leaving water temperature 45°C Standing piping length 5m.

# **Versati III (Split Type)**





It's a kind of integrated DC inverter unit that has cooling, heating and water heating functions, with up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C while the leaving water temperature range is 25~60°C.





4-6kW

8-10kW



12-16kW



4-16kW (Indoor unit)

|               | Water Side                    | Heat Source/User Side                |  |
|---------------|-------------------------------|--------------------------------------|--|
| Item          | Leaving Water Temperature(°C) | Environment Dry Bulb Temperature(°C) |  |
| Cooling       | 7~25                          | 10~48                                |  |
| Heating       | 25~60                         | -25~35                               |  |
| Water Heating | 40~80 (water tank)            | -25~45                               |  |













Child lock







Low voltage startup



Low temperature



Wide operation range

°C/°F switch



Wide voltage range

54:00

Clock display



Comprehensive protection

9



Long-distance





- Integrated structure for simple installation and less installation cost;
- R32 refrigerant, low GWP;
- Adopt two-stage compressor to widen the ambient temperature range for heating;
- Leaving water temperature up to 60°C, applicable to various heating terminals.



# Specifications

|                           | Model                 |          | GRS-CQ4.0Pd<br>/NhH2-E(O) | GRS-CQ6.0Pd<br>/NhH2-E(0) | GRS-CQ8.0Pd<br>/NhH2-E(O) | GRS-CQ10Pd<br>/NhH2-E(0) | GRS-CQ12Pd<br>/NhH-E(O) | GRS-CQ14Pd<br>/NhH-E(O) | GRS-CQ16Pd<br>/NhH-E(O) |
|---------------------------|-----------------------|----------|---------------------------|---------------------------|---------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| Power supply              |                       | V/Ph/Hz  | 230V~ 50Hz                | 230V~ 50Hz                | 230V~ 50Hz                | 230V~ 50Hz               | 230V~ 50Hz              | 230V~ 50Hz              | 230V- 50Hz              |
|                           | Cooling*3             | kW       | 3.9                       | 5.8                       | 7.7                       | 9.35                     | 11.00                   | 12.60                   | 13.00                   |
| Capacity*1                | Heating*4             | kW       | 4                         | 6                         | 8                         | 10                       | 12.00                   | 14.00                   | 15.50                   |
|                           | Cooling <sup>+3</sup> | kW       | 0.68                      | 1.13                      | 1.72                      | 2.36                     | 2.50                    | 3,41                    | 3.60                    |
| Power input <sup>*1</sup> | Heating*4             | kW       | 0.77                      | 1.20                      | 1.61                      | 2.10                     | 2.40                    | 2.98                    | 3.44                    |
| EER/COP *1                |                       | W/W      | 5.74/5.2                  | 5,15/5                    | 4.48/4.97                 | 3.96/4.76                | 4.40/5.00               | 3.70/4.70               | 3,61/4.50               |
| . 12                      | Cooling*5             | kW       | 3.4                       | 4                         | 7.15                      | 7.6                      | 10.59                   | 11.07                   | 11.51                   |
| Capacity *2               | Heating*6             | kW       | 4.1                       | 5.8                       | 8                         | 9.85                     | 12.40                   | 14.48                   | 16.09                   |
|                           | Cooling*5             | kW       | 0.92                      | 1.16                      | 2,49                      | 2.77                     | 3.79                    | 4.18                    | 4.49                    |
| Power input*2             | Heating*6             | kW       | 1.04                      | 1.52                      | 2.07                      | 2.69                     | 3.29                    | 3.93                    | 4.44                    |
| EER/COP <sup>+2</sup>     |                       | W/W      | 3.69/3.94                 | 3.45/3.82                 | 2.87/3.86                 | 2.74/3.67                | 2.79/3.77               | 2.65/3.68               | 2.56/3.62               |
| Refrigerant charge        | volume                | kg       | 1.1                       | 1,1                       | 1.84                      | 1.84                     | 1,84                    | 1.84                    | 1.84                    |
| Sanitary water tem        | perature              | °C       | 40~80                     | 40~80                     | 40~80                     | 40~80                    | 40~80                   | 40~80                   | 40~80                   |
| Sound pressure            | Cooling               | dB(A)    | 52                        | 52                        | 55                        | 55                       | 57                      | 58                      | 58                      |
| level                     | Heating               | dB(A)    | 52                        | 52                        | 55                        | 55                       | 57                      | 58                      | 58                      |
| Connection sine           | Gas                   | inch(mm) | 1/2"(12)                  | 1/2"(12)                  | 1/2"(12)                  | 1/2"(12)                 | 5/8"(16)                | 5/8"(16)                | 5/8"(16)                |
| Connecting pipe           | Liquid                | inch(mm) | 1/4"(6)                   | 1/4"(6)                   | 1/4"(6)                   | 1/4"(6)                  | 1/4"(6)                 | 1/4"(6)                 | 1/4"(6)                 |
| Dimensions                | Outline               | mm       | 975 × 396 × 702           | 975 × 396 × 702           | 982 × 427 × 787           | 982×427×787              | 940 × 460 × 820         | 940 × 460 × 820         | 940 × 460 × 820         |
| $(W \times D \times H)$   | Packaged              | mm       | 1029 × 458 × 845          | 1029 × 458 × 845          | 1097 × 478 × 937          | 1097×478×937             | 1103 × 573 × 973        | 1103 × 573 × 973        | 1103 × 573 × 973        |
| Net weight/Gross v        | weight                | kg       | 55/63                     | 55/63                     | 82/92                     | 82/92                    | 104/114                 | 104/114                 | 104/114                 |
| Loading quantity          | 40'GP                 | unit     | 114                       | 114                       | 96                        | 96                       | 84                      | 84                      | 84                      |
| Luading quantity          | 40'HQ                 | unit     | 171                       | 171                       | 96                        | 96                       | 84                      | 84                      | 84                      |

|                           | Model             |          | GRS-CQ4.0Pd/NhH2-E(I) | GRS-CQ6.0Pd/NhH2-E(I) | GRS-CQ8.0Pd/NhH2-E(I) | GRS-CQ10Pd/NhH2-E |
|---------------------------|-------------------|----------|-----------------------|-----------------------|-----------------------|-------------------|
| Power supply              |                   | V/Ph/Hz  | 230V~ 50              | 230V~ 50              | 230V~ 50              | 230V~ 50          |
| Nominal input             |                   | kW       | 3.1                   | 3.1                   | 6.1                   | 6.1               |
|                           | Cooling(fan coil) | °C       | 7                     | 7                     | 7                     | 7                 |
| T                         | Cooling(floor)    | °C       | 18                    | 18                    | 18                    | 18                |
| Leaving Water Temperature | Heating(fan coil) | °C       | 45                    | 45                    | 45                    | 45                |
|                           | Heating(floor)    | °C       | 35                    | 35                    | 35                    | 35                |
|                           | Туре              |          | Water-cooled          | Water-cooled          | Water-cooled          | Water-cooled      |
| Di una in                 | Nr.of speed       | 100      | variable-speed        | variable-speed        | variable-speed        | variable-speed    |
| Pump                      | Power input       | W        | 2-75                  | 2-75                  | 2-75                  | 2-75              |
|                           | Water flow limit  | LPM      | 12                    | 12                    | 12                    | 12                |
|                           | Operation         | +        | Automatic             | Automatic             | Automatic             | Automatic         |
|                           | Steps             | -        | 2                     | 2                     | 2                     | 2                 |
| Electric heater           | Capacity          | kW       | 3                     | 3                     | 6                     | 6                 |
|                           | Combination       |          | 1.5+1.5               | 1.5+1.5               | 3+3                   | 3+3               |
|                           | Power input       | kW       | 3                     | 3                     | 6                     | 6                 |
| Sound pressure level      |                   | dB(A)    | 34                    | 34                    | 34                    | 34                |
| Secondarios alas          | Gas               | Inch(mm) | 1/2"(12)              | 1/2"(12)              | 1/2"(12)              | 1/2"(12)          |
| Connecting pipe           | Liquid            | Inch(mm) | 1/4"(6)               | 1/4"(6)               | 1/4"(6)               | 1/4"(6)           |
| Dimensions(W × D × H)     | Outline           | mm       | 860 × 318 × 400       | 860 × 318 × 400       | 860 × 318 × 400       | 860×318×400       |
| Dimensions (vv × D × H)   | Packaged          | mm       | 1133×390×568          | 1133×390×568          | 1133×390×568          | 1133×390×568      |
| Net weight/Gross weight   |                   | kg       | 58/67                 | 58/67                 | 58/67                 | 58/67             |
| anding augustic           | 40'GP             | unit     | 46                    | 46                    | 46                    | 46                |
| Loading quantity          | 40'HQ             | unit     | 46                    | 46                    | 46                    | 46                |

Note:

1.Capacity and power input are based on the following conditions:

• Cooling conditions.

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 23°C.

Leaving water temperature 18°C

• Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

meating conditions.
 Outdoor air temperature 7°C DB/6°C WB.
 Entering water temperature 30°C.
 Leaving water temperature 35°C
 Standing piping length 5m.

3. For floor cooling.

5. For fan coil unit.

6. For fan coil or radiator.

Cooling conditions.
 Outdoor air temperature 35°C DB/-WB.
 Entering water temperature 12°C.
 Leaving water temperature 7°C

Heating conditions.
 Outdoor air temperature 7°C DB/6°C WB.
 Entering water temperature 40°C.
 Leaving water temperature 45°C
 Standing piping length 5m.

|                         | Model            |          | GRS-CQ12Pd<br>/NhH-E(l) | GRS-CQ14Pd<br>/NhH-E(I) | GRS-CQ16Pd<br>/NhH-E(I) |  |
|-------------------------|------------------|----------|-------------------------|-------------------------|-------------------------|--|
| Power supply            |                  | V/Ph/Hz  | 230V~ 50Hz              | 230V~ 50Hz              | 230V~ 50Hz              |  |
| Nominal input           |                  | kW       | 6.1                     | 6.1                     | 6.1                     |  |
|                         | Cooling*1        | °C       | 18                      | 18                      | 18                      |  |
| Leaving water           | Cooling*2        | °C       | 7                       | 7                       | 7                       |  |
| emperature              | Heating*1        | °C       | 35                      | 35                      | 35                      |  |
|                         | Heating*2        | °C       | 45                      | 45                      | 45                      |  |
|                         | Type             | 2        | Water-cooled            | Water-cooled            | Water-cooled            |  |
| Dumm                    | Nr. of speed     | =        | variable-speed          | variable-speed          | variable-speed          |  |
| Pump                    | Power input      | W        | 3-87                    | 3-87                    | 3-87                    |  |
|                         | Water flow limit | LPM      | 12                      | 12                      | 12                      |  |
|                         | Operation        | -:       | Automatic               | Automatic               | Automatic               |  |
|                         | Steps            | 8        | 2                       | 2                       | 2                       |  |
| Electric heater         | Capacity         | kW       | 6                       | 6                       | 6                       |  |
|                         | Combination      | kW       | 3+3                     | 3+3                     | 3+3                     |  |
|                         | Power input      | V/Ph/Hz  | 230V~ 50Hz              | 230V- 50Hz              | 230V~ 50Hz              |  |
| Sound pressure le       | evel             | dB(A)    | 29                      | 29                      | 29                      |  |
| Connecting pine         | Gas              | inch(mm) | 5/8"(16)                | 5/8*(16)                | 5/8"(16)                |  |
| Connecting pipe         | Liquid           | inch(mm) | 1/4"(6)                 | 1/4"(6)                 | 1/4"(6)                 |  |
| Dimensions              | Outline          | mm       | 860 × 460 × 318         | 860 × 460 × 318         | 860 × 460 × 318         |  |
| $(W \times D \times H)$ | Packaged         | mm       | 1133 × 568 × 390        | 1133 × 568 × 390        | 1133 × 568 × 390        |  |
| Net weight/Gross        | weight           | kg       | 58/67                   | 58/67                   | 58/67                   |  |
| Loadina avantit         | 40'GP            | unit     | 240                     | 240                     | 240                     |  |
| Loading quantity        | 40'HQ            | unit     | 240                     | 240                     | 240                     |  |

Note:
1.Capacity and power input are based on the following conditions:
Cooling conditions.
Outdoor air temperature 35°C DB/-WB.
Entering water temperature 23°C.
Leaving water temperature 18°C

Heating conditions.

Heating conditions.
 Outdoor air temperature 7°C DB/6°C WB.
 Entering water temperature 30°C.
 Leaving water temperature 35°C
 Standing piping length 5m.

For floor cooling.
 For floor heating.
 For fan coil unit.
 For fan coil or radiator.

2.Capacity and power input are based on the following conditions:

• Cooling conditions.

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 12°C.

Leaving water temperature 7°C

• Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 40°C.

Leaving water temperature 45°C

Standing piping length 5m.

| Model                   |                  | GRS-CQ8Pd/NhH-M(O) | GRS-CQ10Pd/NhH-M(0) | GRS-CQ12Pd/NhH-M(O) | GRS-CQ14Pd/NhH-M(0) | GRS-CQ16Pd/NhH-M(O) |                 |
|-------------------------|------------------|--------------------|---------------------|---------------------|---------------------|---------------------|-----------------|
| Power supply            |                  | V/Ph/Hz            | 400V 3N~ 50Hz       | 400V 3N~ 50Hz       | 400V 3N- 50Hz       | 400V 3N- 50Hz       | 400V 3N~ 50Hz   |
|                         | ., Cooling *3 kW |                    | 8.50                | 10.0                | 12,0                | 12.6                | 13.0            |
| Capacity *1             | Heating *4       | KW                 | 8.00                | 10.0                | 11.5                | 14.0                | 15.5            |
|                         | Cooling *3       | kW                 | 1.74                | 2.33                | 2.50                | 3.41                | 3.60            |
| Power input             | Heating *4       | kW                 | 1.63                | 2.15                | 2.40                | 2.98                | 3.44            |
| EER/COP "               |                  | WW                 | 4.89/4.91           | 4.29/4.65           | 4.40/5.00           | 3.70/4.70           | 3.61/4.51       |
|                         | Cooling *5       | KW                 | 7.60                | 8.2                 | 10.65               | 11.24               | 11.52           |
| Capacity *2             | Heating *6       | kW                 | 8,00                | 10.2                | 12.29               | 1440                | 16.13           |
|                         | Cooling *5       | kW                 | 2.48                | 2,61                | 3.74                | 4.13                | 4,38            |
| Power input             | Heating *6       | kW.                | 1.92                | 2.55                | 3.09                | 3.63                | 4.16            |
| EER/COP *2              |                  | W/W                | 3.07/4.17           | 3.14/4.00           | 2.85/3,98           | 2.72/3.98           | 2,63/3,88       |
| Refrigerant cha         |                  | kg                 | 1.84                | 1,84                | 1.84                | 1.84                | 1.84            |
| Sanitary water          | temperature      | °C                 | 40~80               | 40~80               | 40~80               | 40~80               | 40~80           |
| Sound                   | cooling          | dB(A)              | 57                  | 57                  | 57                  | 58                  | 58              |
| oressure<br>evel        | heating          | dB(A)              | 57                  | 57                  | 57                  | 58                  | 58              |
| Connecting              | Gas              | inch(mm)           | 1/2 " (12)          | 1/2 " (12)          | 5/8 * (16)          | 5/8 " (16)          | 5/8 " (16)      |
| oipe                    | Liquid           | inch(mm)           | 1/4 * (6)           | 1/4 " (6)           | 1/4 * (6)           | 1/4 * (6)           | 1/4 " (6)       |
| Dimensions              | Outline          | mm                 | 982 × 427 × 787     | 982 × 427 × 787     | 940 × 460 × 820     | 940 × 460 × 820     | 940 × 460 × 820 |
| $(W \times D \times H)$ | Packaged         | mm                 | 1097 × 478 × 937    | 1097 × 478 × 937    | 1103 × 573 × 973    | 1103 × 573 × 973    | 1103×573×973    |
| Net weight/Gro          | oss weight       | kg                 | 88/89               | 88/98               | 110/121             | 110/121             | 110/121         |
| Loading                 | 40'GP            | set                | 96                  | 96                  | 84                  | 84                  | 84              |
| quantity                | 40'HQ            | set                | 96                  | 96                  | 84                  | 84                  | 84              |

| Model Power supply V/Ph/Hz |                     | GRS-CQ8.0Pd/NhH-<br>M(I) | GRS-CQ10Pd/NhH-<br>M(l) | GRS-CQ12Pd/NhH-<br>M(I) | GRS-CQ14Pd/NhH-<br>M(I) | GRS-CQ16Pd/NhH-<br>M(I) |                |
|----------------------------|---------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------|
|                            |                     | 400V 3N- 50Hz            | 400V 3N~ 50Hz           | 400V 3N~ 50Hz           | 400V 3N~ 50Hz           | 400V 3N~ 50Hz           |                |
| Nominal input              |                     | KW                       | 6,1                     | 6.1                     | 6,1                     | 6.1                     | 6.1            |
|                            | Cooling *1          | °C                       | 18                      | 18                      | 18                      | 18                      | 18             |
| Leaving water              | Cooling *2          | °C                       | 7                       | 7                       | 7.                      | 7                       | 7              |
| emperature                 | Heating *1          | °C                       | 35                      | 35                      | 35                      | 35                      | 35             |
|                            | Heating *2          | "C                       | 45                      | 45                      | 45                      | 45                      | 45             |
|                            | Type                | 100                      | Water-cooled            | Water-cooled            | Water-cooled            | Water-cooled            | Water-cooled   |
|                            | Nr. of speed        | -                        | Variable-speed          | Variable-speed          | Variable-speed          | Variable-speed          | Variable-speed |
| Pump                       | Power input         | W                        | 2-75                    | 2-75                    | 3-87                    | 3-87                    | 3-87           |
|                            | Water flow<br>limit | LPM                      | 12                      | 12                      | 12                      | 12                      | 12             |
|                            | Operation           | 190                      | Automatic               | Automatic               | Automatic               | Automatic               | Automatic      |
|                            | Steps               |                          | 2                       | 2                       | 2                       | 2                       | 2              |
| Electric heater            | Capacity            | kW                       | 6                       | 6                       | 6                       | 6                       | 6              |
|                            | Combination         | kW                       | 3+3                     | 3+3                     | 3+3                     | 3+3                     | 3+3            |
|                            | Power input         | V/Ph/Hz                  | 400V 3N- 50Hz           | 400V 3N- 50Hz           | 400V 3N~ 50Hz           | 400V 3N~ 50Hz           | 400V 3N~ 50Hz  |
| Sound pressure             | e level             | dB(A)                    | 29                      | 29                      | 29                      | 29                      | 29             |
| Connecting                 | Gas                 | inch(mm)                 | 1/2"(12)                | 1/2*(12)                | 5/8"(16)                | 5/8"(16)                | 5/8"(16)       |
| pipe                       | Liquid              | inch(mm)                 | 1/4"(6)                 | 1/4*(6)                 | 1/4*(6)                 | 1/4"(6)                 | 1/4"(6)        |
| Dimensions                 | Outline             | mm                       | 860x318x460             | 860x318x460             | 860x318x460             | 860x318x460             | 860x318x460    |
| $W \times D \times H$ )    | Packaged            | mm                       | 1133x568x390            | 1133x568x390            | 1133x568x390            | 1133x568x390            | 1133x568x390   |
| Net weight/Gro             | ss weight           | kg                       | 60/69                   | 60/69                   | 60/69                   | 60/69                   | 60/69          |
| Loading                    | 40'GP               | set                      | 240                     | 240                     | 240                     | 240                     | 240            |
| quantity                   | 40'HQ               | set                      | 240                     | 240                     | 240                     | 240                     | 240            |

1.Capacites and power inputs are based on the following conditions:
 Cooling conditions.
 Outdoor air temperature 35°C DB/-WB.
 Entering water temperature 23°C.

Leaving water temperature 18°C

 Heating conditions. Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 30°C. Leaving water temperature 35°C Standing piping length 5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

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

Outdoor air temperature 35°C DB/-WB. Entering water temperature 12°C. Leaving water temperature 7°C

· Heating conditions. Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 40°C. Leaving water temperature 45°C Standing piping length 5m.



Cooling conditions.





# Versati III (All In One)

It's a kind of integrated DC inverter unit that has cooling, heating and water heating functions, with up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C while the leaving water temperature range is 25~60°C.









4-6kW

8-10kW

12-16kW

4-16kW













Low voltage startup

Golden fin condenser

Intelligent defrosting Key-card control





protection





Low temperature heating

-20°C



Wide operation

range

24:00

Clock display

Wide voltage range

Long-distance monitoring

Floor debugging function;

- Integrated structure for simple installation and less installation cost;
- R32 refrigerant, low GWP;

Cooling

Heating

Water heating

- Adopt two-stage compressor to widen the ambient temperature range for heating;
- Leaving water temperature up to 60°C, applicable to various heating terminals.



| Water side                    | Heat source/User side                |
|-------------------------------|--------------------------------------|
| Leaving water temperature('C) | Environment dry bulb temperature(°C) |
| 7~25                          | 10~48                                |
| 20~60                         | -25~35                               |
| 40~80                         | -25~45                               |



<sup>\*1:</sup> When operating conditions are out of the range listed above, please contact Gree.

# Specifications

### Outdoor Unit

|                          | /lodel                |          | GRS-CQ4.0Pd/NhH-E(0) | GRS-CQ6.0Pd/NhH-E(O) | GRS-CQ8.0Pd/NhH-E(O) | GRS-CQ10Pd/NhH-E(0 |
|--------------------------|-----------------------|----------|----------------------|----------------------|----------------------|--------------------|
| Power supply             |                       | V/Ph/Hz  | Ph/Hz 230V~ 50Hz     | 230V~ 50Hz           | 230V~ 50Hz           | 230V~ 50Hz         |
| Conneitel                | Cooling*3             | kW       | 3.80                 | 5.80                 | 7.00                 | 8.5                |
| Capacity*1               | Heating*4             | kW       | 4.00                 | 6.00                 | 8.00                 | 9,5                |
| Power input*1            | Cooling*3             | kW       | 0.82                 | 1.32                 | 1.75                 | 2.24               |
| -ower input              | Heating*4             | kW       | 0.78                 | 1.20                 | 1.70                 | 2.07               |
| EER/COP"                 |                       | W/W      | 4.63/5.13            | 4.40/5.00            | 4.00/4.71            | 3.79/4,59          |
| Canacit /2               | Cooling <sup>15</sup> | kW       | 3.15                 | 4.09                 | 5.30                 | 6.50               |
| Capacity*2               | Heating*6             | kW       | 4.00                 | 5.90                 | 8.00                 | 9.50               |
| Service Inco 477         | Cooling's             | kW       | 0.92                 | 1.28                 | 1.73                 | 2.27               |
| ower input <sup>2</sup>  | Heating's             | kW       | 1.02                 | 1.51                 | 2.14                 | 2.64               |
| ER/COP*2                 |                       | W/W      | 3.42/3.92            | 3.20/3.91            | 3.06/3.74            | 2.86/3.60          |
| Refrigerant charge volun | ne                    | kg       | 1.00                 | 1.00                 | 1,60                 | 1.60               |
| anitary water temperat   | ure                   | °C       | 40~80                | 40~80                | 40~80                | 40~80              |
| Farmed access on the at  | Cooling               | dB(A)    | 55                   | 55                   | 57                   | 57                 |
| Sound pressure level     | Heating               | dB(A)    | 55                   | 55                   | 57                   | 57                 |
| Sannastina alas          | Gas                   | inch(mm) | 1/2"(12)             | 1/2"(12)             | 1/2*(12)             | 1/2"(12)           |
| Connecting pipe          | Liquid                | inch(mm) | 1/4"(6)              | 1/4"(6)              | 1/4"(6)              | 1/4"(6)            |
| Dimensions               | Outline               | mm       | 975 × 396 × 702      | 975 × 396 × 702      | 982 × 427 × 787      | 982 × 427 × 787    |
| $W \times D \times H$ )  | Packaged              | mm       | 1029 × 458 × 845     | 1029 × 458 × 845     | 1097 × 478 × 937     | 1097 × 478 × 937   |
| Net weight/Gross weight  |                       | kg       | 55/63                | 55/63                | 82/92                | 82/92              |
| oading quantity          | 40'GP                 | unit     | 114                  | 114                  | 96                   | 96                 |
| Loading qualitity        | 40'HQ                 | unit     | 171                  | 171                  | 96                   | 96                 |

|                          |           |          | GRS-CQ12Pd/NhH-E(0) | GRS-CQ14Pd/NhH-E(O) | GRS-CQ16Pd/NhH-E(0) | GRS-CQ8.0Pd/NhH-M(O) |
|--------------------------|-----------|----------|---------------------|---------------------|---------------------|----------------------|
| Power supply             |           | V/Ph/Hz  | 230V~ 50Hz          | 230V~ 50Hz          | 230V~ 50Hz          | 400V 3N~ 50Hz        |
| C                        | Cooling*3 | kW       | 11.00               | 12.60               | 13.00               | 8.50                 |
| Capacity <sup>*1</sup>   | Heating*4 | kW       | 12.00               | 14.00               | 15.50               | 8.00                 |
| Power input*1            | Cooling*3 | kW       | 2.50                | 3.41                | 3.60                | 1.74                 |
|                          | Heating*4 | kW       | 2.40                | 2.98                | 3.44                | 1.63                 |
| EER/COP*1                |           | W/W      | 4.40/5.00           | 3.70/4.70           | 3.61/4.50           | 4.89/4.91            |
| Connells (2              | Cooling's | kW       | 10.59               | 11.07               | 11.51               | 7.60                 |
| Capacity <sup>12</sup>   | Heating*6 | kW       | 12.40               | 14.48               | 16.09               | 8.00                 |
| Daniel 100 422           | Cooling*5 | kW       | 3.79                | 4.18                | 4.49                | 2.48                 |
| Power input*2            | Heating*6 | kW       | 3.29                | 3.93                | 4.44                | 1.92                 |
| EER/COP*2                | 7         | W/W      | 2.79/3.77           | 2.65/3.68           | 2.56/3.62           | 3.07/4.17            |
| Refrigerant charge volun | 10        | kg       | 1.84                | 1.84                | 1.84                | 1.84                 |
| Sanitary water temperat  | ure       | 'C       | 40~80               | 40~80               | 40~80               | 40~80                |
| C                        | Cooling   | dB(A)    | 57                  | 58                  | 58                  | 57                   |
| Sound pressure level     | Heating   | dB(A)    | 57                  | 58                  | 58                  | 57                   |
| Consension also          | Gas       | inch(mm) | 5/8"(16)            | 5/8"(16)            | 5/8"(16)            | 1/2"(12)             |
| Connecting pipe          | Liquid    | inch(mm) | 1/4*(6)             | 1/4*(6)             | 1/4"(6)             | 1/4"(6)              |
| Dimensions               | Outline   | mm       | 940 × 460 × 820     | 940 × 460 × 820     | 940 × 460 × 820     | 982 × 427 × 787      |
| (W × D × H)              | Packaged  | mm       | 1103×573×973        | 1103 × 573 × 973    | 1103×573×973        | 1097 × 478 × 937     |
| Net weight/Gross weight  |           | kg       | 104/114             | 104/114             | 104/114             | 88/98                |
|                          | 40'GP     | unit     | 84                  | 84                  | 84                  | 96                   |
| Loading quantity         | 40'HQ     | unit     | 84                  | 84                  | 84                  | 96                   |

Note:

1. Capacity and power input are based on the following conditions:

Cooling conditions.

Outdoor air temperature 35°C DB/-WB.
Entering water temperature 23°C.
Leaving water temperature 18°C

Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 30°C. Leaving water temperature 35°C Standing piping length 5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

Capacites and power inputs are based on the following conditions:
 Cooling conditions.
 Outdoor air temperature 35°C DB/-WB.

Heating conditions.
Outdoor air temperature 7°C DB/6°C WB.
Entering water temperature 40°C.
Leaving water temperature 45°C
Standing piping length 5m.

Entering water temperature 12°C. Leaving water temperature 7°C

### 3. For floor cooling.

4. For floor heating.

5. For fan coil unit. 6. For fan coil or radiator.

# Specifications

## Outdoor Unit

|                                  | fodel     |          | GRS-CQ10Pd/NhH-M(0)  | GRS-CQ12Pd/NhH-M(O) | GRS-CQ14Pd/NhH-M(O) | GRS-CQ16Pd/NhH-M(C |
|----------------------------------|-----------|----------|----------------------|---------------------|---------------------|--------------------|
| Power supply                     |           | V/Ph/Hz  | /Ph/Hz 400V 3N~ 50Hz | 400V 3N~ 50Hz       | 400V 3N~ 50Hz       | 400V 3N- 50Hz      |
| C                                | Cooling*3 | kW       | 10.00                | 11.00               | 12.60               | 13.00              |
| Capacity <sup>1</sup>            | Heating*4 | kW       | 10.00                | 12.00               | 14.00               | 15.50              |
| Power input"                     | Cooling*3 | kW       | 2.33                 | 2.50                | 3.41                | 3.60               |
| -ower input                      | Heating*4 | kW       | 2.15                 | 2.40                | 2.98                | 3.44               |
| EER/COP"                         |           | W/W      | 4.29/4.65            | 4.40/5.00           | 3.70/4.70           | 3.61/4.51          |
| Capacity*2                       | Cooling*5 | kW       | 8.20                 | 10,65               | 11.24               | 11.52              |
| Japacity -                       | Heating*6 | kW       | 10.20                | 12.29               | 14.44               | 16.13              |
| Dancon Inc. 477                  | Cooling*5 | kW       | 2.61                 | 3.74                | 4.13                | 4.38               |
| Power input <sup>12</sup> Heatin |           | kW       | 2.55                 | 3.09                | 3.63                | 4,16               |
| EER/COP <sup>-2</sup>            |           | W/W      | 3.14/4               | 2.85/3.98           | 2.72/3.98           | 2.63/3.88          |
| Refrigerant charge volun         | ne        | kg       | 1.84                 | 1.84                | 1.84                | 1.84               |
| Sanitary water temperat          | ure       | °C       | 40~80                | 40~80               | 40~80               | 40~80              |
| Sound pressure level             | Cooling   | dB(A)    | 57                   | 57                  | 58                  | 58                 |
| sound pressure level             | Heating   | dB(A)    | 57                   | 57                  | 58                  | 58                 |
| Segmention plan                  | Gas       | inch(mm) | 1/2"(12)             | 5/8"(16)            | 5/8"(16)            | 5/8*(16)           |
| Connecting pipe                  | Liquid    | inch(mm) | 1/4°(6)              | 1/4"(6)             | 1/4"(6)             | 1/4"(6)            |
| Dimensions                       | Outline   | mm:      | 982 × 427 × 787      | 940 × 460 × 820     | 940 × 460 × 820     | 940 × 460 × 820    |
| $W \times D \times H$ )          | Packaged  | mm       | 1097 × 478 × 937     | 1103 × 573 × 973    | 1103×573×973        | 1103×573×973       |
| Net weight/Gross weight          |           | kg       | 88/98                | 110/121             | 110/121             | 110/121            |
| Loading quantity                 | 40'GP     | unit     | 96                   | 84                  | 84                  | 84                 |
| Loading qualitity                | 40'HQ     | unit     | 96                   | 84                  | 84                  | 84                 |

|                         | Model                |          | GRS-CQ4.0Pd/NhH2-E(0) | GRS-CQ6.0Pd/NhH2-E(0) | GRS-CQ8.0Pd/NhH2-E(O) | GRS-CQ10Pd/NhH2-E(O) |
|-------------------------|----------------------|----------|-----------------------|-----------------------|-----------------------|----------------------|
| Power supply            |                      | V/Ph/Hz  | 230V~ 50Hz            | 230V~ 50Hz            | 230V~ 50Hz            | 230V~ 50Hz           |
|                         | Cooling*3            | kW       | 3.90                  | 5.80                  | 7.70                  | 9.35                 |
| Camania et              | Heating*4            | kW       | 4.00                  | 6.00                  | 8.00                  | 10.00                |
| Capacity"               | Cooling*3            | kW       | 0.68                  | 1.13                  | 1.72                  | 2.36                 |
|                         | Heating*4            | kW       | 0.77                  | 1.20                  | 1.61                  | 2.10                 |
| EER/COP"                |                      | W/W      | 5.74/5.20             | 5.15/5.00             | 4.48/4.97             | 3.96/4.76            |
|                         | Cooling's            | kW       | 3,40                  | 4.00                  | 7.15                  | 7.60                 |
| Canada /2               | Heating <sup>™</sup> | kW       | 4.10                  | 5.80                  | 8.00                  | 9.85                 |
| Capacity <sup>12</sup>  | Cooling*5            | kW       | 0.92                  | 1.16                  | 2.49                  | 2.77                 |
|                         | Heating*6            | kW       | 1.04                  | 1.52                  | 2.07                  | 2.69                 |
| EER/COP'2               |                      | W/W      | 3.69/3.94             | 3,45/3.82             | 2.87/3.86             | 2.74/3.67            |
| Refrigerant charge volu | ime                  | kg       | 1.10                  | 1.10                  | 1.84                  | 1.84                 |
| Sanitary water temper   | ature                | °C       | 40~80                 | 40~80                 | 40~80                 | 40~80                |
| Sound pressure          | Cooling              | dB(A)    | 52                    | 52                    | 55                    | 55                   |
| evel                    | Heating              | dB(A)    | 52                    | 52                    | 55                    | 55                   |
| ~                       | Gas                  | inch(mm) | 1/2"(12)              | 1/2"(12)              | 1/2"(12)              | 1/2"(12)             |
| Connecting pipe         | Liquid               | inch(mm) | 1/4"(6)               | 1/4"(6)               | 1/4"(6)               | 1/4"(6)              |
| Dimensions              | Outline              | mm       | 975 × 396 × 702       | 975 × 396 × 702       | 982 × 427 × 787       | 982 × 427 × 787      |
| $W \times D \times H$ ) | Packaged             | mm       | 1029 × 458 × 845      | 1029 × 458 × 845      | 1097 × 478 × 937      | 1097 × 478 × 937     |
| Net weight/Gross weight |                      | kg       | 55/63                 | 55/63                 | 82/92                 | 82/92                |
|                         | 40'GP                | unit     | 114                   | 114                   | 96                    | 96                   |
| Loading quantity        | 40'HQ                | unit     | 171                   | 171                   | 96                    | 96                   |

1.Capacity and power inputare based on the following conditions:
 \* Cooling conditions.

Outdoor air temperature 35°C DB/-WB. Entering water temperature 23°C. Leaving water temperature 18°C • Heating conditions.

Outdoor air temperature 7°C DB/6°C WB. Entering water temperature 30°C. Leaving water temperature 35°C Standing piping length 5m.

2.Capacity and power input are based on the following conditions:

Cooling conditions.

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 12°C.

Leaving water temperature 7°C Heating conditions.

Heating conditions.
 Outdoor air temperature 7°C DB/6°C WB.
 Entering water temperature 40°C.
 Leaving water temperature 45°C
 Standing piping length 5m.



# Specifications

### Indoor Unit

|                         | Model               |          | GRS-CQ4.0PdG<br>/NhH-E(I) | GRS-CQ6.0PdG<br>/NhH-E(I) | GRS-CQ8.0PdG<br>/NhH-E(I) | GRS-CQ10PdG<br>/NhH-E(I) | GRS-CQ12PdG<br>/NhH-E(I) | GRS-CQ14PdG<br>/NhH-E(I) | GRS-CQ16PdG<br>/NhH-E(I) |
|-------------------------|---------------------|----------|---------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Power supply            |                     | V/Ph/Hz  | 230V~ 50Hz                | 230V- 50Hz                | 230V~ 50Hz                | 230V~ 50Hz               | 230V~ 50Hz               | 230V~ 50Hz               | 230V- 50Hz               |
| Nominal input           |                     | W        | 3100                      | 3100                      | 6100                      | 6100                     | 6100                     | 6100                     | 6100                     |
|                         | Cooling *1          | *C       | 18                        | 18                        | 18                        | 18                       | 18                       | 18                       | 18                       |
| Leaving                 | Cooling *2          | °C       | 7                         | 7                         | 7                         | 7                        | 7                        | 7                        | 7                        |
| water                   | Heating *1          | "C       | 35                        | 35                        | 35                        | 35                       | 35                       | 35                       | 35                       |
| temperature             | Heating *2          | 'C       | 45                        | 45                        | 45                        | 45                       | 45                       | 45                       | 45                       |
|                         | Type                | -        | Water-cooled              | Water-cooled              | Water-cooled              | Water-cooled             | Water-cooled             | Water-cooled             | Water-cooled             |
|                         | Nr. of speed        | -        | Variable-speed            | Variable-speed            | Variable-speed            | Variable-speed           | Variable-speed           | Variable-speed           | Variable-speed           |
| ump Power inpu          | Power input         | W        | 2-75                      | 2-75                      | 2-75                      | 2-75                     | 3-87                     | 3-87                     | 3-87                     |
|                         | Water flow<br>limit | LPM      | 12                        | 12                        | 12                        | 12                       | 12                       | 12                       | 12                       |
|                         | Operation           | - 1      | Automatic                 | Automatic                 | Automatic                 | Automatic                | Automatic                | Automatic                | Automatic                |
| en ar                   | Steps               | - 1      | 2                         | 2                         | 2                         | 2                        | 2                        | 2                        | 2                        |
| Electric                | Capacity            | kW       | 3                         | 3                         | 6                         | 6                        | 6                        | 6                        | 6                        |
| heater                  | Combination         | kW       | 1.5+1.5                   | 1.5+1.5                   | 3+3                       | 3+3                      | 3+3                      | 3+3                      | 3+3                      |
|                         | Power input         | V/Ph/Hz  | 230V~ 50Hz                | 230V- 50Hz                | 230V~ 50Hz                | 230V~ 50Hz               | 230V~ 50Hz               | 230V~ 50Hz               | 230V~ 50Hz               |
| Sound pressu            | re level            | dB(A)    | 29                        | 29                        | 29:                       | 29                       | 29                       | 29                       | 29                       |
| Connecting              | Gas                 | inch(mm) | 1/2*(12)                  | 1/2*(12)                  | 1/2"(12)                  | 1/2"(12)                 | 5/8"(16)                 | 5/8"(16)                 | 5/8"(16)                 |
| pipe                    | Liquid              | inch(mm) | 1/4*(6)                   | 1/4*(6)                   | 1/4*(6)                   | 1/4*(6)                  | 1/4"(6)                  | 1/4"(6)                  | 1/4"(6)                  |
| Dimensions              | Outline             | mm       | 860 × 318 × 460           | 860 × 318 × 460           | 860 × 318 × 460           | 860 × 318 × 460          | 860 × 318 × 460          | 860 × 318 × 460          | 860 × 318 × 460          |
| $(W \times D \times H)$ | Packaged            | mm       | 1133 × 568 × 390          | 1133 × 568 × 390          | 1133×568×390              | 1133 × 568 × 390         | 1133 × 568 × 390         | 1133 × 568 × 390         | 1133 × 568 × 390         |
| Net weight/Gro          | oss weight          | kg       | 62/71                     | 62/71                     | 62/71                     | 62/71                    | 58/67                    | 58/67                    | 58/67                    |
| Loading                 | 40'GP               | unit     | 240                       | 240                       | 240                       | 240                      | 240                      | 240                      | 240                      |
| quantity                | 40'HQ               | unit     | 240                       | 240                       | 240                       | 240                      | 240                      | 240                      | 240                      |

|                         | Model                 |          | GRS-CQ4.0PdG/NhH2-E(I) | GRS-CQ6.0PdG/NhH2-E(I) | GRS-CQ8.0PdG/NhH2-E(I) | GRS-CQ10PdG/NhH2-E(I) |
|-------------------------|-----------------------|----------|------------------------|------------------------|------------------------|-----------------------|
| Power supply            |                       | V/Ph/Hz  | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz            |
| Nominal input           |                       | W        | 3100                   | 3100                   | 6100                   | 6100                  |
|                         | Cooling"              | °C       | 18                     | 18                     | 18                     | 18                    |
| Leaving water           | Cooling*2             | °C       | 7                      | 7                      | 7                      | 7                     |
| emperature              | Heating*1             | °C       | 35                     | 35                     | 35                     | 35                    |
|                         | Heating <sup>12</sup> | °C       | 45                     | 45                     | 45                     | 45                    |
|                         | Type                  | -        | Water-cooled           | Water-cooled           | Water-cooled           | Water-cooled          |
| 2                       | Nr. of speed          | - 4      | Variable-speed         | Variable-speed         | Variable-speed         | Variable-speed        |
| Pump                    | Power input           | W        | 2-75                   | 2-75                   | 2-75                   | 2-75                  |
|                         | Water flow limit      | LPM      | 12                     | 12                     | 12                     | 12                    |
|                         | Operation             | -        | Automatic              | Automatic              | Automatic              | Automatic             |
|                         | Steps                 | · ·      | 2                      | 2                      | 2                      | 2                     |
| Electric heater         | Capacity              | kW       | 3                      | 3                      | 6                      | 6                     |
|                         | Combination           | kW       | 1.5+1.5                | 1.5+1.5                | 3+3                    | 3+3                   |
|                         | Power input           | V/Ph/Hz  | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz             | 230V~ 50Hz            |
| Sound pressure          | level                 | dB(A)    | 29                     | 29                     | 29                     | 29                    |
| Connecting              | Gas                   | inch(mm) | 1/2"(12)               | 1/2"(12)               | 1/2"(12)               | 1/2"(12)              |
| oipe                    | Liquid                | inch(mm) | 1/4*(6)                | 1/4"(6)                | 1/4"(6)                | 1/4"(6)               |
| Dimensions              | Outline               | mm       | 600 × 650 × 1800       | 600 × 650 × 1800       | 600 × 650 × 1800       | 600 × 650 × 1800      |
| $(W \times D \times H)$ | Packaged              | mm       | 803 × 703 × 2050       | 803 × 703 × 2050       | 803 × 703 × 2050       | 803 × 703 × 2050      |
| Net weight/Gro          | ss weight             | kg       | 195/230                | 195/230                | 195/230                | 195/230               |
| _oading                 | 40'GP                 | unit     | 40                     | 40                     | 40                     | 40                    |
| quantity                | 40'HQ                 | unit     | 40                     | 40                     | 40                     | 40                    |

Note:
1.Capacites and power inputs are based on the following conditions:
• Cooling conditions.
Outdoor air temperature 35°C DB/-WB.
Entering water temperature 23°C.
Leaving water temperature 18°C
• Heating conditions.
Outdoor air temperature 7°C DB/6°C WB.
Entering water temperature 30°C.
Leaving water temperature 35°C
Standing piping length 5m.

Copacites and power inputs are based on the following conditions:
 Cooling conditions.
 Outdoor air temperature 35°C DB/-WB.
 Entering water temperature 12°C.
 Leaving water temperature 7°C

Heating conditions.
Outdoor air temperature 7°C DB/6°C WB.
Entering water temperature 40°C.
Leaving water temperature 45°C
Standing piping length 5m.

# Specifications

### Indoor Unit

|                         | Model               |          | GRS-CQ8.0PdG/NhH2-M(I) | GRS-CQ10PdG/NhH-M(I) | GRS-CQ12PdG/NhH-M(I) |
|-------------------------|---------------------|----------|------------------------|----------------------|----------------------|
| Power supply            |                     | V/Ph/Hz  | 400V 3N~ 50Hz          | 400V 3N~ 50Hz        | 400V 3N~ 50Hz        |
| Nominal input           |                     | W        | 6100                   | 6100                 | 6100                 |
|                         | Cooling *1          | 'C       | 18                     | 18                   | 18                   |
| Leaving water           | Cooling *2          | °C       | 7                      | 7                    | 7                    |
| emperature              | Heating *1          | 0"       | 35                     | 35                   | 35                   |
|                         | Heating *2          | °C       | 45                     | 45                   | 45                   |
|                         | Type                | 2        | Water-cooled           | Water-cooled         | Water-cooled         |
| ump Powe                | Nr. of speed        | -        | Variable-speed         | Variable-speed       | Variable-speed       |
|                         | Power input         | W        | 2-75                   | 2-75                 | 3-87                 |
|                         | Water flow<br>limit | LPM      | 12                     | 12                   | 12                   |
| Op                      | Operation           |          | Automatic              | Automatic            | Automatic            |
|                         | Steps               |          | 2                      | 2                    | 2                    |
| Electric heater         | Capacity            | kW       | 6                      | 6                    | 6                    |
|                         | Combination         | kW       | 3+3                    | 3+3                  | 3+3                  |
|                         | Power input         | V/Ph/Hz  | 400V 3N~ 50Hz          | 400V 3N~ 50Hz        | 400V 3N~ 50Hz        |
| Sound pressure          | elevel              | dB(A)    | 34.                    | 29                   | 29                   |
| Connecting              | Gas                 | inch(mm) | 1/2"(12)               | 1/2"(12)             | 5/8*(16)             |
| oipe                    | Liquid              | inch(mm) | 1/4"(6)                | 1/4*(6)              | 1/4*(6)              |
| Dimensions              | Outline             | mm       | 600 × 650 × 1800       | 860 × 318 × 460      | 860 × 318 × 460      |
| $(M \times D \times H)$ | Packaged            | mm       | 803 × 703 × 2050       | 1133 × 568 × 390     | 1133×568×390         |
| Net weight/Gros         | ss weight           | kg       | 195/230                | 60/69                | 60/69                |
| Loading                 | 40'GP               | set      | 46                     | 240                  | 240                  |
| quantity                | 40°HQ               | set      | 46                     | 240                  | 240                  |

|                       | Model               |          | GRS-CQ14PdG/NhH-M(I) | GRS-CQ16PdG/NhH-M(I) |
|-----------------------|---------------------|----------|----------------------|----------------------|
| Power supply          |                     | V/Ph/Hz  | 400V 3N~ 50Hz        | 400V 3N- 50Hz        |
| Nominal input         |                     | W 6100   |                      | 6100                 |
|                       | Cooling *1          | 70       | 18                   | 18                   |
| Leaving water         | Cooling *2          | "C       | 7                    | 7                    |
| temperature           | Heating *1          | °C       | 35                   | 35                   |
|                       | Heating *2          | *C       | 45                   | 45                   |
|                       | Type                | 2        | Automatic            | Automatic            |
|                       | Nr. of speed        |          | Variable-speed       | Variable-speed       |
| Pump                  | Power input         | W        | 3-87                 | 3-87                 |
|                       | Water flow<br>limit | LPM      | 12                   | 12                   |
|                       | Operation           |          | Automatic            | Automatic            |
|                       | Steps               | ₩        | 2                    | 2                    |
| Electric heater       | Capacity            | kW       | 6                    | 6                    |
|                       | Combination         | kW       | 3+3                  | 3+3                  |
|                       | Power input         | V/Ph/Hz  | 400V 3N~ 50Hz        | 400V 3N- 50Hz        |
| Sound pressure        | e level             | dB(A)    | 34                   | 34                   |
| Connecting            | Gas                 | inch(mm) | 5/8"(16)             | 5/8"(16)             |
| pipe                  | Liquid              | inch(mm) | 1/4"(6)              | 1/4*(6)              |
| Dimensions            | Outline             | mm       | 860 × 318 × 460      | 860 × 318 × 460      |
| $(W\times D\times H)$ | Packaged            | mm       | 1133 × 568 × 390     | 1133 × 568 × 390     |
| Net weight/Gros       | ss weight           | kg       | 60/69                | 60/69                |
| Loading               | 40'GP               | set      | 240                  | 240                  |
| quantity              | 40'HQ               | set      | 240                  | 240                  |

- Note:

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

   Cooling conditions.

  Outdoor air temperature 35°C DB/-WB,
  Entering water temperature 23°C,
  Leaving water temperature 18°C

   Heating conditions.

  Outdoor air temperature 7°C DB/6°C WB,
  Entering water temperature 30°C,
  Leaving water temperature 35°C

  Standing piping length 5m.
- Cooling conditions.
   Outdoor air temperature 35°C DB/-WB.
   Entering water temperature 12°C.
   Leaving water temperature 7°C
- Heating conditions. Heating conditions.
   Outdoor air temperature 7°C DB/6°C WB.
   Entering water temperature 40°C.
   Leaving water temperature 45°C
   Standing piping length 5m.





Versati II, 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 with cool air in hot summer. It is an All-in-One! Choose Versati, enjoying a comfortable life all year round!

# **Key Features**

# 2nd Generation DC Inverter Air to Water Heat Pump



# 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 emission. It is an eco-friendly product, which mirrors your social commitment to protect the environment.







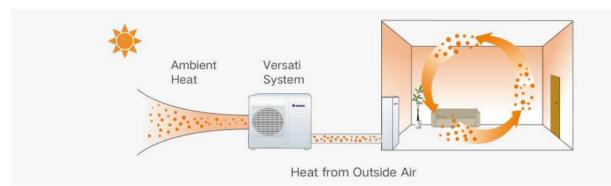
# **Outdoor Unit:** Sustainable Energy Converter

Versati II adopts DC inverter technology, and the most efficient refrigerant R410A with zero ozone depletion, with COP up to 4.56.



# Heat Pump Technology Lows Energy Consumption and CO2 Emissions

Thanks to the heat pump technology, Versati extracts the heat energy from outside air and increases its temperature for domestic heating purposes, greatly reducing 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

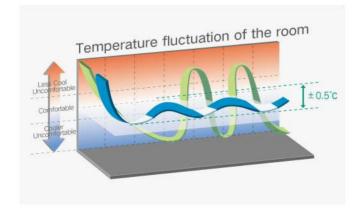
It will cause temperature fluctuation by turning on or turning off the unit frequently.

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 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 4.56

With its perfect class COP performance, Versati delivers more heating power with less energy consumption. The maximum COP is up to 4.56.



Note: For 1Ph models For 3Ph models

### Test Standard: EN14511-2018

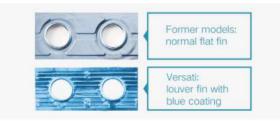
### Fan and Motor

- 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 consump-



### Heat Exchanger

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



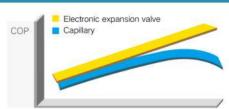
Special thickened inner groove copper pipe enhances the heat exchange performance by over 8%.



# 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 the capillary.





**Environment Temperature** 

## Comfort

### Precise Temperature Regulation

The electronic expansion valve guarantees that the system makes adjustment 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 guiet requirement at night or in special occasions.



## Reliability

## Heat Exchange Anti-corrosion

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



## Wide Voltage Range Operation



# Self-diagnosis of Outdoor Unit

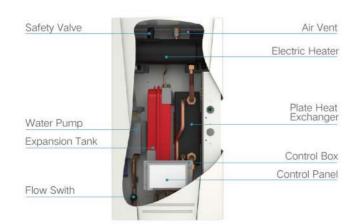
With the self-diagnosis function, the outdoor unit will start auto-protection if the power voltage or the current is out of the normal range. Protection will be cancelled automatically if the power condition resumes normal.

# Compact Design



# Indoor Hydro Box: Heating/Cooling and Hot Water System

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 heating system and sanitary hot water tank. If you opt for the combination of heating and cooling, 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



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

500 × 323 × 900mm

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 indoor hydro box. 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 you can enjoy the warmth when you get up or return home.



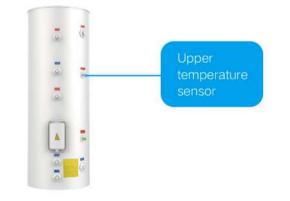
## Comfort

## Smart Dual-temperature Detection Control Technology

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

Avoid premature startup. Improve hot water yielding rate by accurate timing of hot / cold water mixture.

Avoid overdue startup. Improve 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 enamel water 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 users.



# Flexibility

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

# Reliability

- By adopting bearing tank, the unit can replenish water when using water, ensuring rapid storage and continuous delivery.
- Magnesium stick protecting container contributes to longer lifespan.

• Thermal insulating layer 50mm in thickness.





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



\*/B

Over-high temperature

Flexible Applications

# Five-Mode Operation

Heating

Cooling

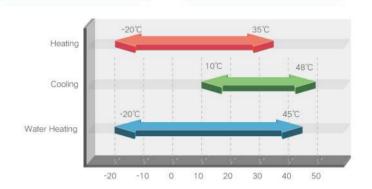
Water Heating

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

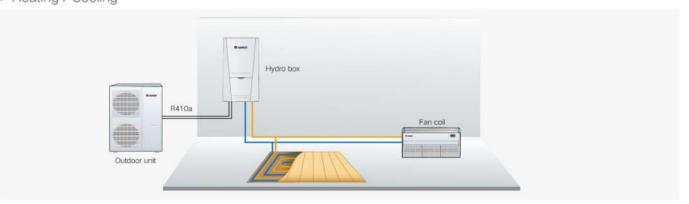
Domestic water: 40°C to 80°C

Heating: Fan coil/Radiator: 25°C~55°C Floor: 25°C~45°C

Cooling: Fan coil/Radiator:7°C~25°C Floor: 18°C~25°C

## Combination Examples:

Heating / Cooling

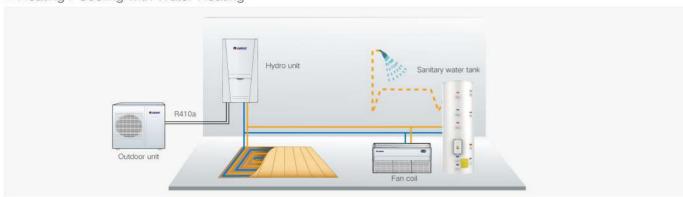


Water Heating





Heating / Cooling with Water Heating



## Multiple Additional Functions and User-friendly Function

- Urgent Water Heating
   The heat pump uses the backup electric heater in case that any fault occurs.
- Floor Protection
   The heat pump uses the backup electric heater in case that any fault occurs.

Under floor heating As for under floor heating, the default highest water temperature is  $45^{\circ}$ 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  $55^{\circ}$ 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
   The heat pump and the electric heater of the water tank operate at the same time to realize rapid heating.
- Disinfection
   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
   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°C and 15°C.
- Weather-dependent Operation
   The unit can automatically adjust the operation state according to the temperature range set by the user.
- User-friendly and Large LED Display.
- Timer ON/Timer OFF
- Day/Weekly/Count-down Timer
- Weekly Programme
- Emergency Operation Mode(for Heating and Water Heating only)
- Forced Operation Mode
- Quiet
- Central Control





# Versati |

Versati II water heater can perform cooling, heating, water heating, cooling+water heating, and heating+water heating. It can be connected to radiator, floor or fan coil for heat radiation.









8-10KW

12-16KW

8-16KW



·**M**.

Auxiliary electric heater











High efficiency Intellig

Intelligent defrosting Energy saving function

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- This unit is very powerful, smart and user-friendly, featuring various functions including holiday mode, absence mode, quiet mode, quiet preset, clock timer, weekly timer, holiday exclusion, floor setting, mode, etc.
- Cooling performance satisfies EU ERP energy efficiency, with a rating up to A++. Motor and water pump elements conform to the requirements set out by the EU Eco Directive.
- It can perform cooling, heating, water heating, cooling+water heating, and heating+water heating, and can be connected to radiator, floor or fan coil for heat radiation.

| Mode          | Heat Source Side Temperature(°C) | User Side Temperature (°C) |
|---------------|----------------------------------|----------------------------|
| Heating       | -20~35                           | 25~55                      |
| Cooling       | 10~48                            | 7~25                       |
| Water Heating | -20~45                           | 40~80                      |



# Specifications

# Outdoor Unit

|                         | Model     |          | GRS-CQ8.0Pd/NaE-K(O) | GRS-CQ10Pd/NaE-K(0) | GRS-CQ12Pd/NaE-K(O) |
|-------------------------|-----------|----------|----------------------|---------------------|---------------------|
| Power supply            |           | V/Ph/Hz  | 220~240/1/50         | 220~240/1/50        | 220~240/1/50        |
| Connecte wil            | Cooling   | kW       | 7.8                  | 8.2                 | 12.5                |
| Capacity*1              | Heating   | kW       | 8                    | 10                  | 12                  |
| Davier lancett          | Cooling   | kW       | 2                    | 2.1                 | 3                   |
| Power input*1           | Heating   | kW       | 1.8                  | 2.3                 | 2.8                 |
| EER/COP*1               |           | W/W      | 4.0/4.5              | 3.9/4.4             | 4.2/4.3             |
| Coposity#2              | Cooling   | kW       | 6.3                  | 7.2                 | 8.5                 |
| Capacity*2              | Heating   | kW       | 7.6                  | 9.5                 | 11.5                |
| Power input*2           | Cooling   | kW       | 2.3                  | 2.8                 | 2.8                 |
| rower input -           | Heating   | kW       | 2.2                  | 2.9                 | 3.4                 |
| EER/COP*2               |           | W/W      | 2.7/3.4              | 2.6/3.3             | 3.1/3.38            |
| Refrigerant charg       | e volume  | kg       | 2.3                  | 2.3                 | 3.6                 |
| Sanitary water ter      | mperature | ℃        | 40~80                | 40~80               | 40~80               |
| Sound pressure          | Cooling   | dB(A)    | 54                   | 54                  | 56                  |
| level                   | Heating   | dB(A)    | 56                   | 56                  | 58                  |
| Connecting pipe         | Gas       | inch(mm) | φ15.9                | φ15.9               | φ15.9               |
| connecting pipe         | Liquid    | inch(mm) | φ9.52                | φ9.52               | φ9.52               |
| Dimensions              | Outline   | mm       | 980×360×787          | 980×360×787         | 900×340×1350        |
| $(W \times D \times H)$ | Packaged  | mm       | 1097×478×940         | 1097×478×940        | 993×453×1500        |
| Net weight/Gross        | weight    | kg       | 80/89                | 80/89               | 107/117             |
| Loading quantity        | 40' GP    | set      | 96                   | 96                  | 50                  |
| Luading quantity        | 40' HQ    | set      | 96                   | 96                  | 50                  |

|                         | Model     |          | GRS-CQ14Pd/NaE-K(O) | GRS-CQ16Pd/NaE-K(O) | GRS-CQ12Pd/NaE-M(0) | GRS-CQ14Pd/NaE-M(O | GRS-CQ16Pd/NaE-M(C |
|-------------------------|-----------|----------|---------------------|---------------------|---------------------|--------------------|--------------------|
| Power supply            |           | V/Ph/Hz  | 220~240/1/50        | 220~240/1/50        | 380~415V/3/50       | 380~415V/3/50      | 380~415V/3/50      |
| O                       | Cooling   | kW       | 13.5                | 14.5                | 13,5                | 14.5               | 15                 |
| Capacity*1              | Heating   | kW       | 14                  | 15.5                | 12                  | 14                 | 15,5               |
| D                       | Cooling   | kW       | 3.4                 | 3.8                 | 3.55                | 4.03               | 4.23               |
| Power input*1           | Heating   | kW       | 3.3                 | 3.75                | 2.86                | 3.41               | 3.82               |
| EER/COP*1               |           | W/W      | 4.0/4.2             | 3.8/4.1             | 3.8/4.2             | 3.6/4.1            | 3.6/4.05           |
| Connello #2             | Cooling   | kW       | 9                   | 9.5                 | 10                  | 10.5               | 11                 |
| Capacity*2              | Heating   | kW       | 12.5                | 14.5                | 11.5                | 13                 | 14                 |
| C                       | Cooling   | kW       | 3                   | 3.3                 | 3.33                | 3.62               | 3.86               |
| Power input*2           | Heating   | kW       | 3.8                 | 4.5                 | 3.52                | 4.02               | 4.24               |
| EER/COP*2               |           | W/W      | 3/3.3               | 2.9/3.2             | 3.0/3.3             | 2.9/3.3            | 2.85/3.2           |
| Refrigerant charg       | e volume  | kg       | 3,6                 | 3.6                 | 3.6                 | 3.6                | 3.6                |
| Sanitary water ter      | mperature | ,C       | 40~80               | 40~80               | 40~80               | 40~80              | 40~80              |
| Sound pressure          | Cooling   | dB(A)    | 56                  | 56                  | 56                  | 56                 | 56                 |
| level                   | Heating   | dB(A)    | 58                  | 58                  | 58                  | 58                 | 58                 |
| Commontton when         | Gas       | inch(mm) | φ15.9               | φ15.9               | φ15,9               | φ15.9              | φ15.9              |
| Connecting pipe         | Liquid    | inch(mm) | φ9.52               | φ9.52               | φ9.52               | φ9,52              | φ9.52              |
| Dimensions              | Outline   | mm       | 900 × 340 × 1350    | 900 × 340 × 1350    | 900 × 340 × 1350    | 900 × 340 × 1350   | 900 × 340 × 1350   |
| $(W \times D \times H)$ | Packaged  | mm       | 993 × 453 × 1500    | 993 × 453 × 1500    | 993 × 453 × 1500    | 993 × 453 × 1500   | 993 × 453 × 1500   |
| Net weight/Gross        | weight    | kg       | 107/117             | 107/117             | 107/117             | 114/124            | 114/124            |
| Londina avanthu         | 40' GP    | set      | 50                  | 50                  | 50                  | 50                 | 50                 |
| Loading quantity        | 40' HQ    | set      | 50                  | 50                  | 50                  | 50                 | 50                 |

Note:\*1 for floor cooling; \*2 for fan coil cooling; \*3 for floor heating; \*4 for fan coil heating.

# Indoor Hydro Unit

| Model                   | Indoor u             | ınit     | GRS-CQ8.0Pd/NaE-K(I) | GRS-CQ10Pd/NaE-K(I) | GRS-CQ12Pd/NaE-K(I) |
|-------------------------|----------------------|----------|----------------------|---------------------|---------------------|
| Power supply            | '                    | V/Ph/Hz  | 220~240/1/50         | 220~240/1/50        | 220~240/1/50        |
| Nominal input           |                      | W        | 6100                 | 6100                | 6100                |
|                         | Cooling <sup>1</sup> | °C       | 18                   | 18                  | 18                  |
| Leaving water           | Cooling <sup>2</sup> | °C       | 7                    | 7                   | 7                   |
| emperature              | Heating <sup>3</sup> | °C       | 35                   | 35                  | 35                  |
|                         | Heating⁴             | °C       | 45                   | 45                  | 45                  |
|                         | Type                 | (5)      | RS25/7.5             | RS25/7.5            | RS25/7.5            |
| Diamo                   | Nr. of speed         |          | 800 / 4770           | 800 / 4770          | 800 / 4770          |
| Pump                    | Power input          | W        | 4-75                 | 4-75                | 4-75                |
|                         | Water flow limit     | LPM      |                      |                     |                     |
|                         | Operation            | 250      | Yes                  | Yes                 | Yes                 |
|                         | Steps                | 170      | 2                    | 2                   | 2                   |
| Electric heater         | Capacity             | kW       | 6                    | 6                   | 6                   |
|                         | Combination          | kW       | 3*2                  | 3*2                 | 3*2                 |
|                         | Power input          | Ph/V/Hz  | 1Ph/220~240V/50Hz    | 1Ph/220~240V/50Hz   | 1Ph/220~240V/50Hz   |
| Sound pressure          | level                | dB(A)    | 31                   | 31                  | 31                  |
| Connecting pine         | Gas                  | inch(mm) | φ15.9                | φ15.9               | φ15.9               |
| Connecting pipe         | Liquid               | inch(mm) | φ9.52                | φ9.52               | φ9.52               |
| Dimensions              | Outline              | mm       | 900 × 500 × 323      | 900 × 500 × 323     | 900 × 500 × 323     |
| $(W \times D \times H)$ | Packaged             | mm       | 1083 × 603 × 395     | 1083 × 603 × 395    | 1083 × 603 × 395    |
| Net weight/Gros         | s weight             | kg       | 56/65                | 56/65               | 57/66               |
| Loading auantih         | 40' GP               | set      | 205                  | 205                 | 205                 |
| Loading quantity        | 40' HQ               | set      | 246                  | 246                 | 246                 |

| Model                   | Indoor u             | ınit     | GRS-CQ14Pd/NaE-K(I) | GRS-CQ16Pd/NaE-K(I)          | GRS-CQ12Pd/NaE-M(I) | GRS-CQ14Pd/NaE-M(I) | GRS-CQ16Pd/NaE-M( |  |  |
|-------------------------|----------------------|----------|---------------------|------------------------------|---------------------|---------------------|-------------------|--|--|
| Power supply            |                      | V/Ph/Hz  | 220~240/1/50        | 220~240/1/50                 | 380~415/3/50        | 380~415/3/50        | 380~415/3/50      |  |  |
| Nominal input           |                      | W        | 6100                | 6100                         | 6100                | 6100                | 6100              |  |  |
|                         | Cooling <sup>1</sup> | °C       | 18                  | 18                           | 18                  | 18                  | 18                |  |  |
| Leaving water           | Cooling <sup>2</sup> | °C       | 7                   | 7                            | 7                   | 7                   | 7                 |  |  |
| emperature              | Heating <sup>3</sup> | °C       | 35                  | 35                           | 35                  | 35                  | 35                |  |  |
|                         | Heating <sup>4</sup> | *C       | 45                  | 45                           | 45                  | 45                  | 45                |  |  |
|                         | Type                 | 121      | RS25/7.5            | RS25/7.5                     | RS25/7.5            | RS25/7.5            | RS25/7.5          |  |  |
|                         | Nr. of speed         | 120      | 800 / 4770          | 800 / 4770                   | 800 / 4770          | 800 / 4770          | 800 / 4770        |  |  |
| ump                     | Power input          | W        | 4-75                | 4-75                         | 4-75                | 4-75                | 4-75              |  |  |
|                         | Water flow limit     | LPM      |                     | 25(under the max. pump lift) |                     |                     |                   |  |  |
|                         | Operation            | 180      | Yes                 | Yes                          | Yes                 | Yes                 | Yes               |  |  |
|                         | Steps                | (#3)     | 2                   | 2                            | 1                   | 1                   | 1                 |  |  |
| Electric heater         | Capacity             | kW       | 6                   | 6                            | 6                   | 6                   | 6                 |  |  |
|                         | Combination          | kW       | 3*2                 | 3*2                          | 6*1                 | 6*1                 | 6*1               |  |  |
|                         | Power input          | Ph/V/Hz  | 1Ph/220~240V/50Hz   | 1Ph/220~240V/50Hz            | 380~415V/3Ph/50Hz   | 380~415V/3Ph/50Hz   | 380~415V/3Ph/50Hz |  |  |
| Sound pressure          | level                | dB(A)    | 31                  | 31                           | 31                  | 31                  | 31                |  |  |
|                         | Gas                  | inch(mm) | φ15.9               | φ15.9                        | φ15.9               | φ15.9               | φ15.9             |  |  |
| Connecting pipe         | Liquid               | inch(mm) | φ9.52               | φ9.52                        | φ9.52               | φ9.52               | φ9.52             |  |  |
| Dimensions              | Outline              | mm       | 900 × 500 × 323     | 900 × 500 × 323              | 900 × 500 × 323     | 900 × 500 × 323     | 900 × 500 × 323   |  |  |
| $W \times D \times H$ ) | Packaged             | mm       | 1083 × 603 × 395    | 1083 × 603 × 395             | 1083 × 603 × 395    | 1083 × 603 × 395    | 1083 × 603 × 395  |  |  |
| Net weight/Gros         | s weight             | kg       | 57/66               | 57/66                        | 58/67               | 58/67               | 58/67             |  |  |
|                         | 40 ' GP              | set      | 205                 | 205                          | 205                 | 205                 | 205               |  |  |
| Loading quantity        | 40 ' HQ              | set      | 246                 | 246                          | 246                 | 246                 | 246               |  |  |

Note:\*1 for floor cooling; \*2 for fan coil cooling; \*3 for floor heating; \*4 for fan coil heating.





he Air to Water Heater adopts integrated design of outdoor unit and water tank, with beautiful appearance, small size, high-end intelligence and easy installation. It is suitable for household usage.

# **Key Features**

# Gree Integral Heat Pump Water Heater

By taking advantage of heat pump and consuming some electricity as compensation, it acquires heat (air source) from environment through thermal circuit. Then the heat will be transferred to condenser by compressor and released to heat water inside water tank subsequently. The COP is 3 times more than that of traditional water heaters.



# Integral Design & Convenient Installation

- By applying integral design which combines compressor, evaporator, condenser and water tank in a same cabinet, it can be installed without refrigeration pipe so that the installation becomes convenient and meets requirement of the decoration.
- Thanks to static heating mode, the unit has no circular water system. The installation and maintenance are very convenient.

# Hot Water Supplied Around the Clock

The unit will not be affected by night or weather. The highest outlet water temperature can reach 70°C to meet requirement of different places and users. Hot water can be supplied all day and all year round.

# Self-adaption Control for Electronic Expansion Valve

Use self-adaption control of electronic expansion valve and take advantage of heat in the air to heat water.



## Equispaced Water Inlets

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.



# Outer Winding Parallel Flow Pipe

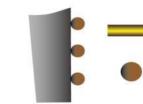
 The outside of inner water tank is surrounded with parallel flow pipes which greatly promote efficiency of heat exchange and stabilize water system.



• Parallel flow heat exchanger has bigger contact surface so that the heat exchange efficiency is higher; its material has good thermal conduction.



Surface is bigger and exchange efficiency is higher



Traditional O-type copper pipe Surface is smaller and exchange efficiency is low

# Two Temperature Sensors

- Each temperature sensor respectively on the top and bottom to inspect water temperature and operation of the unit. The control for water temperature is more accurate.
- Start-stop control is more accurate and water temperature is adjusted in general.
- Avoid early startup of the unit which would mix cool and hot water inside the water tank earlier so as to promote hot water yield of water tank.
- Avoid late startup of the unit which would cause low use ratio of hot water and long waiting time for re-heating.



## Reliable and Durable

- Use a special compressor for hot water which is high temperature and high pressure resistant. Compared with
  the common compressor, its efficiency is higher, and the sealing structure and intensity of rotor are beter. The
  complete system is more secure and reliable so as to guarantee the normal operation within wide scope of working condition.
- Inner water tank is made of advanced enameled steel inner pot and it's with extended magnesium rod, which is anticorrosive so as to prolong the lifespan of the unit.
- Controlled by microcomputer to automatically realize heating, thermal insulation, defrosting, and freeze protection.

## Eco-friendly and Safe

- There is no need for boiler or gas so that the pollution and toxic gas will not be produced and CO poisoning will not happen.
- Both inner and outer tanks are insulated and refrigerant pipe is completely isolated from water so that reliability and water quality can be guaranteed.
- Water and electricity are completely isolated so as to avoid potential risk, like electric leakage.
- Empty chamber design for water tank effectively relieves inner pressure. The safety valve is installed on the bottom of the water tank to prevent overhigh temperature and stabilize the water pressure.
- The product has passed drop, vibration and stacking tests and it can normally work after going through rough transportation conditions.
- There are multiple protections for security and malfunction inspection, including anti-creeping switch, over-temperature protection, anti-dry protection, overpressure protection, anti-reversal for water protection, auto temperature control, etc.

## User-friendly Operation Mode

- Superior operation interface with user-friendly mode.
- Water temperature can be freely set to 70°C. Meanwhile, timer ON and timer OFF can also be set.
   There are multiple operation modes for the unit, including standard hot water mode and energy-saving mode.
   The energy saving mode can meet the requirements of users for hot water and energy can also be saved.



# **Integral Heat Pump** Water Heater

The product adopts the integrated design of main unit and water tank, which is convenient for installation; the compressor specialized for heat pump water heater and the parallel-flow microchannel heat exchanger are adopted, which are high-efficiency and energy-saving; the high-efficiency finned heat exchanger is reliable and durable. The overall appearance is concise and can be used to provide hot water for the family.



Auxiliary electric heater



Clock display





EASY













Child lock







Memory function



|         |         |           | Nominal Operati | ng Condition |                   | Operating Range |
|---------|---------|-----------|-----------------|--------------|-------------------|-----------------|
|         | Outdoor | condition |                 | Indoor       | Outdoor condition |                 |
|         | DB(°C)  | WB (°C)   | DB(°C)          |              | WB(°C)            | DB (°C)         |
| Heating | 7       | 6         | 7               | 1            | 6                 | 0~45            |





| Model                     |                                  |          | GRS-1.5/TD150ANbA-K | GRS-1.5/TD200ANbA-K |  |
|---------------------------|----------------------------------|----------|---------------------|---------------------|--|
| Capacity <sup>1</sup>     |                                  | kW       | 1.5                 | 1.5                 |  |
| Power input <sup>1</sup>  |                                  | kW 0.429 |                     | 0.429               |  |
| COP2DHW                   |                                  | W/W      | 2.47                | 2.24                |  |
| Refrigerant               |                                  | *        | R134a               | R134a               |  |
| Refrigerant charge volu   | me                               | kg       | 0.8                 | 0.8                 |  |
| Refrigerant pressure      |                                  | MPa      | 2.8                 | 2.8                 |  |
| Tank presure              |                                  | MPa      | 0.8                 | 0.8                 |  |
| Ambient temp, for working |                                  | °C       | 0~45                | 0~45                |  |
| Leaving water temp.       |                                  | "C       | 35~70 35~70         |                     |  |
| Sound power level(heat    | evel(heating) <sup>3</sup> dB(A) |          | 62                  | 62                  |  |
| Volume                    |                                  | L        | 150                 | 190                 |  |
| Mater wieller             | Water inlet pipe                 | inch     | 0.59                | 0.59                |  |
| Water pipline             | Water outlet pipe                | inch     | 0.59                | 0.59                |  |
| Dimensions(W × D × H)     | Outline                          | mm       | 621 × 561 × 1760    | 621 × 561 × 2030    |  |
|                           | Packaged                         | mm       | 731 × 717 × 1845    | 731×717×2110        |  |
| Net weight/Gross weig     | Net weight/Gross weight          |          | 92/112              | 102,5/122.5         |  |
| Loading quantity          | 40'GP/40'HQ                      | set      | 48/48               | 48/48               |  |

- (1) Value obtained with the following conditions: Outdoor temperature: 20°C DB/15°C WB; Water tank temperature (start/end): 15°C /55°C.
- (2) Value obtained with an air temperature of 7°C and a water inlet at 10°C, as per EN16147-2017, (EU) No 814/2013.
- (3) Value obtained as per EN 12102-2008.

# **Integral Heat Pump Water Heater (Australia)**



The product adopts the integrated design of main unit and water tank, which is convenient for installation; the compressor specialized for heat pump water heater and the parallel-flow microchannel heat exchanger are adopted, which is high-efficiency and energy-saving; the finned heat exchanger adopts black anti-corrosion fins, which is reliable and durable. The overall appearance is concise and can be used to provide hot water for the family.









GRS-1.5/TD200ANbB-K

GRS-5.0/TD300ANbB-K









Intelligent defrosting High efficiency

Wide operation



Quality motor

- Parallel flow microchannel heat exchanger with external coil
- Black anti-corrosion finned heat exchanger is adopted
- The compressor is specialized for heat pump water heater
- The electronic expansion valve adopts adaptive control for better performance
- The surface-mounted dual water temperature sensors are adopted for stable temperature control
- Embedded integrated display panel is adopted for clear display and easy operation
- Safe protection design for effective protection

Auxiliary

Easy for installation and space saving

|         | Nominal Operati   | ing Condition | Operating Range |
|---------|-------------------|---------------|-----------------|
| Item    | Outdoor condition |               |                 |
|         | DB ("C)           | WB (°C)       | DB (°C)         |
| Heating | 20                | 16            | -7-46           |

| Model                         |                            |          | GRS-1.5/TD200ANbB-K | GRS-5.0/TD300ANbB-K |
|-------------------------------|----------------------------|----------|---------------------|---------------------|
| Capacity 1                    |                            | kW       | 1.5                 | 5                   |
| Power input <sup>1</sup>      |                            | kW 0.429 |                     | 1,282               |
| Refrigerant                   |                            |          | R134a               | R134a               |
| Refrigerant charge vo         | lume                       | kg       | 0.8                 | 1.35                |
| Refrigerant pressure          |                            | MPa      | 2.8                 | 2.8                 |
| Tank pressure                 |                            | MPa      | 0.85                | 0.85                |
| Ambient temp, for working     |                            | °C       | -7~45               | -7~45               |
| Leaving water temp.           |                            | ℃        | 55~70 55~70         |                     |
| Sound pressure level(heating) |                            | dB(A)    | 50                  | 53                  |
| Volume                        |                            | L        | 190                 | 280                 |
| Mater election                | Water inlet pipe           | inch     | 0.59                | 0.59                |
| Water pipeline                | Water outlet pipe          | inch     | 0.59                | 0.59                |
| Dimension(W × D × H)          | Outline                    | mm       | 621 × 561 × 2030    | 805 × 1020 × 1800   |
| Dimension(vv × D × m)         | Package                    | mm       | 731 × 717 × 2110    | 891 × 1061 × 1980   |
| Net weight/Gross wei          | let weight/Gross weight kg |          | 103.5/123.5         | 256/275             |
| Loading quantity              | 40'GP/40'HQ                | set      | 48/48               | 26/26               |

- (1) Value obtained with the following conditions: outdoor temperature: 20°C DB/15°C WB; water tank temperature (start/end):15°C/55°C.
- (2) Product conforms to AS 3498:2020 and AS/NZS 2712:2007.



# **Integral Heat Pump** Water Heater (Israel)

₹134a

The product adopts the integrated design of main unit and water tank, which is convenient for installation; the compressor specialized for heat pump water heater and the parallel-flow microchannel heat exchanger are adopted, which is high-efficiency and energy-saving; it can be connected to the solar water heater, achieving multi-energy complementary utilization. The overall appearance is concise and can be used to provide hot water for the family.









Auxiliary

Intelligent defrosting









GRS-1.5/TD150ANbC-K

- Connectable to the solar water heater for achieving multi-energy complementary utilization
- The parallel-flow microchannel heat exchanger with external coil
- The compressor is specialized for heat pump water heater
- The electronic expansion valve adopts adaptive control for better performance
- The surface-mounted dual temperature sensors are adopted for stable temperature control
- Touchable LCD panel is adopted for clear display and easy operation. WiFi remote control is available
- Safe protection design for effective protection
- Easy for installation and space saving

|         | Nominal Operating Condition |         | Operating Range |  |
|---------|-----------------------------|---------|-----------------|--|
| ltem    | Outdoor condition           |         |                 |  |
|         | DB (°C)                     | WB (°C) | DB (°C)         |  |
| Heating | 20                          | 15      | -7~45           |  |

|                    | Model            |          | GRS-1.5/TD150ANbC-K | GRS-1.5/TD200ANbC-K |
|--------------------|------------------|----------|---------------------|---------------------|
| Capacity           | Capacity kW      |          | 1.5                 | 1.5                 |
| Power Input        |                  | kW       | 0.429               | 0.429               |
| Refrigerant        |                  | <b>a</b> | R134a               | R134a               |
| Refrigerant cha    | irge volume      | kg       | 0.8                 | 0.8                 |
| Refrigerant pres   | ssure            | Мра      | 2.8                 | 2.8                 |
| Tank presure       |                  | Мра      | 0.8                 | 0.8                 |
| Ambient temp.      | for working      | °C       | -7~45               | -7~45               |
| Leaving water      | temp.            | °C       | 35-75               | 35-75               |
| Sound power le     | evel (heating)   | dB(A)    | 62                  | 62                  |
| Volume             |                  | L        | 150                 | 190                 |
| W.                 | ater inlet pipe  | inch     | 0.59                | 0.59                |
| Water pipline W    | ater outlet pipe | inch     | 0.59                | 0.59                |
| Dimensions Outline |                  | mm       | 621 × 561 × 1760    | 621 × 561 × 2030    |
| (W×D×H) Pa         | nckaged          | mm       | 731 × 717 × 1965    | 731 × 717 × 2230    |
| Net weight/Gro     | ss weight        | kg       | 92/123              | 102.5/134           |
| Loading quantit    | ty 40'GP/40'HQ   | set      | 48/48               | 48/48               |





Gree Split Type Water Heater offers you with sufficient hot water, ensuring a warm and comfortable life to each family. In addtion to save energy, it's also with high-tech smart technology for easy control, technology for your easy control.

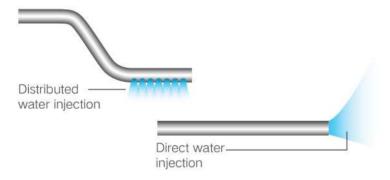


# Warm and Comfortable Life

• Flexible control by dual temperature sensors for improving utilization ratio of hot water Two temperature sensors have been installed on the water tank of Gree split type water heater. They can sense water temperature and operation status of unit at real time.



Distributed water injection design for bath at any time
 The water tank adopts distributed water injection at the bottom for efficient circulating control. By matching with the middle separation slow flow technology, water will split-flow downwards to reducing the disturbance to upper hot water, which can improve the service performance of hot water greatly and ensure the hot water volume inside water tank.



# More Efficiency and Energy-saving Life

Especial compressor system design for hot water, self-adaptive adjustment and control technology for electronic expansion valve and , 45mm high efficiency insulating layer .

• Especial compressor system design for hot water, safe and reliable

Adopt special compressor for hot water. Compared with the normal compressor, motor efficiency is much higher, sealing structure is much better, rotor strength is more powerful and the complete system is much safer and more reliable.



 Self-adaptive adjustment and control technology for electronic expansion valve, higher efficiency and more energy-saving

Adopt self-adaptive adjustment and control method for satisfying auto system adjustment under different ambient temperature and then output the proper throttling opening of electronic expansion valve. Therefore, the flow volume of refrigerant is more precise, operation is safer and more reliable, and the system is more energy-saving and more efficient.



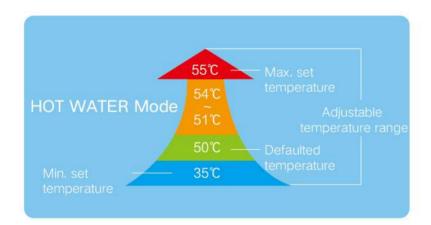
45mm high efficiency thermal insulation
 Water tank adopts high efficiency 45mm foaming layer for thermal insulation, 360° 3D thermal insulation are used for keeping the heat inside the water tank.



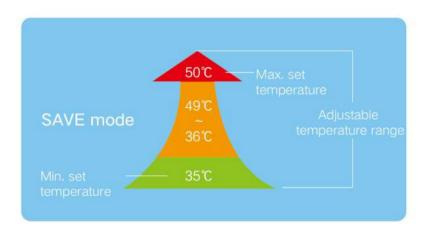
# Smart Life with Humanized Technology

 Humanized technology: 4 kinds of modes for selection The unit is with multiple operation functions. It has four modes: HOT WATER, SAVE, NIGHT and PRESET. These four modes can be selected by users. Meanwhile, users can set timer ON and timer OFF.

HOT WATER mode: The defaulted water outlet temperature is 50°C. Users can also adjust the water temperature freely. The highest water temperature can reach 55°C\*.



SAVE mode: As it's hot in summer, the water temperature can be lower. Gree air source water heater is with SAVE mode and the water temperature range is 35~50°C for saving energy.





TIMER function: Set timer ON in advance according to the requirement. Gree air source water heater will be started up in time to heat water.



NIGHT mode: In some cities, as the electricity price at night is lower than davtime. Gree air source water heater can be turned on automatically at night, which can save cost for VOU.



PRESET mode: Preset the time when you need to use hot water. The unit will intelligently start up the heating device in advance to heat the water according to your preset for providing you with hot water in time.

# **Split Type Water Heater**

Gree split type water heater offers you with sufficient hot water, ensuring a warm and comfortable life to each

Its installation is convenient and it is applicable for a family of 3 to 5 members.





CRS-S3.5PdG/NaA1-K

























Self-diagnosis

copper

Inner groove Compact design Clock display

Intelligent

Easier Maintenance

Child lock

Energy saving

- · Safe and eco-friendly
- Water and electricity are separated to avoid possible electric shock. Without possible toxicities of CO, users' safety can be ensured. No pollutant is released during operation, so there is no damage to the environment.
- Reliable and durable
- By adopting special compressor, the unit is resistant to high temperature and pressure. The water tank adopts advanced enamel inner container with magnesium sticks. The entire unit is with multiple protection functions to ensure long lifespan of the system.
- Easy installation
- Without limitation of environment, the unit can be installed in garage, stock room or basement, It is also suitable for skyscrapers, villa, and so on. Installation and maintenance are convenient for its no cycle waterway system.
- Easy operation
- Water temperature can be set. Water supply can be on or off depending on water temperature and water consumption, so that hot water can be supplied at any time. Unit on/off can be set by users according to requirements (the unit will stop once water temperature reaches the setting point). Running of unit in electric platykurtosis is possible to reduce electricity fee.
- Intelligent defrosting
- The unit with anti-freezing and intelligent defrosting functions can efficiently prevent freezing and frosting.
- The unit can make and supply hot water around the clock in despite of night, overcast and rainy days.



| ltem    | Nominal operating condition (temperature) |           |                      |                |
|---------|---|-----------|----------------------|----------------|
|         | Outdoor                                   | condition | Water side condition |                |
|         | DB(°C)                                    | WB (°C)   | Initial water (°C )  | Final water(C) |
| Heating | 20  | 15        | 15                   | 55             |

### Outdoor Unit

|                            | Model                       |       | GRS-S3.5PdG/NaA1-K   |  |
|----------------------------|-----------------------------|-------|--|--|
| Rated heating capacity (1) |                             | W     | 3500(1800~3700)  |  |
| Rated input power [1]      |                             | W     | 833(360-910)   |  |
| Load profile               |                             | 1/=1  | L  |  |
| COP <sub>DHW</sub> (2)     |                             | W/W   | 3.1  |  |
| Energy efficiency cla      | SS <sup>(2)</sup>           | -     | A <sup>+</sup>   |  |
| Water heating energy       | y efficiency <sup>(2)</sup> | (e)   | 130%   |  |
| Maximum input power        |                             | W     | 2000+1500W(Electric Heater)  |  |
| Outlet water temperature   |                             | C     | Default: 55°C, 35°C~55°C   |  |
| Power supply               |                             | -     | 220V-240V -50Hz  |  |
| Insulation level           |                             |       | T. Control of the con |  |
| Water-proof grade          |                             | -     | IPX4   |  |
| Defilement                 | Name                        | R410A |  |  |
| Refrigerant                | Charge                      | kg    | 1.4  |  |
| Outline dimensions         | W×D×H                       | mm    | 842 × 320 × 591  |  |
| Package dimensions         | W×D×H                       | mm    | 948 × 363 × 660  |  |
| Net weight/Gross we        | ight                        | kg    | 38.5/44.5  |  |
| Sound power level (3)      |                             | dB(A) | 63   |  |
| Operating range            |                             | ℃     | -25~45°C   |  |

Note: (1)Value obtained with the following conditions: Outdoor temperature: 20°C DB/15°C WB; water tank temperature (start/end): 15°C /55°C. (2) Value obtained with an air temperature of 7°C and a water inlet at 10°C, as per EN16147-2017, (EU) No 814/2013. (3) Value obtained as per EN 12102-2008.

### Water Tank

| Model                            |     | SXTD200LCJW/A-K  |  |
|----------------------------------|-----|------------------|--|
| Capacity                         | Lo  | 185              |  |
| Power supply for electric heater |     | 220V-240V-50Hz   |  |
| Input power for electric heater  | W   | 1500             |  |
| Outline dimensions(W x D x H)    | mm  | 462×462 ×2000    |  |
| Package dimensions(W x D x H)    | mm. | 2108 × 583 × 565 |  |
| Net weight/Gross weight          | kg  | 72.5/83          |  |
| Outer size of connection pipe    | mm  | Ф6, Ф9.52        |  |

Note: (1)The water tank of SXTD200LCJW/A-K is with enamel interior.

# **Award and Certificate**































Canadian CSA Certificate



German TÜV Certificate















German GS Certificate



European EMC Certificate



China EMC Certificate



**△** TÜV



Australian SAA Safe Certificate



Australia SAA Certificate



CQC Certificate



America ETL Certificate



Canadian ETL Certificate



Thailand TIS Certificate

