

Versati II+ Hot Water Heating System





Gree Versati II+ Heat Pump

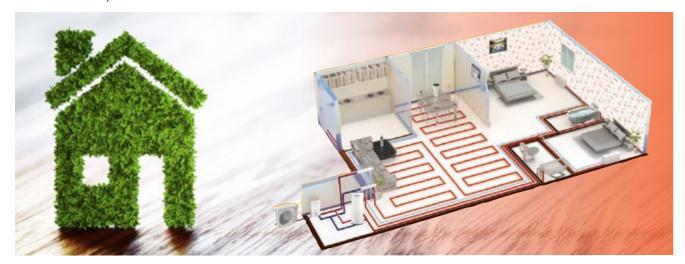
The Versati II+ Hot Water series is a DC inverter, multifunction air to water heat pump which has adopted advanced heat pump technology. Working on the same principle as a regular heat pump the Versati II+ units absorb natural heat from the ambient air and use this to heat water for home heating and domestic hot water usage. In summer the Versati II+ can reverse cycle and provide cold water for summer cooling.

The Versati II+ Series is the latest in domestic and light commercial energy efficient hot water heating. With a massive operating range from -20°C to 45°C it is perfectly suited to all applications in New Zealand. From the Southern Alps to those scorching summer days in central Canterbury the Gree Versati II+ Series has got your water heating covered.

The Versati II+ Hot Water system is available in two configurations the Versati II+ Split and the Versati II+ Monobloc depending on your specific requirements.

Eco-friendly

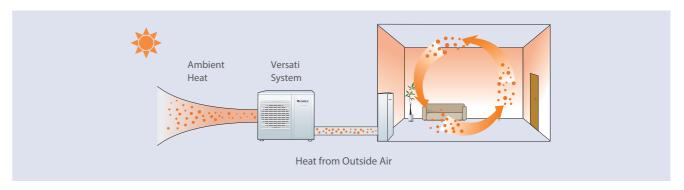
The Versati II+ System uses R410A, a more eco-friendly refrigerant which has an ozone depletion rating of zero. Moreover, with advanced heat pump technology and powerful hardware, the efficiency of your Versati II+ has been improved, resulting in much lower energy consumption. It is an eco-friendly product, which is in line with our social commitment to protect the environment.



Heat pump Technology Lower Energy Consumption and CO2 Emissions

The Versati II+ system utilises Heat Pump Technology, which extracts the heat energy from the outside air and increases its temperature for domestic heating purposes.

Using the Versati II+ hot water heat pump system rather than traditional heating methods such as natural gas or electric elements reduces your energy consumption and as a result your CO2 emissions. Not only is the Versati II+ saving you money thanks to its superior energy efficiency it is also reducing your impact on the environment.

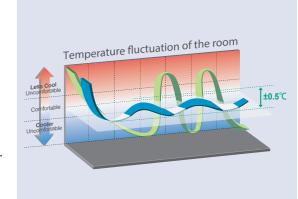


Super DC Inverter Technology

Traditional systems operate on an "On/Off" cycle causing large and frequent temperate fluctuations. By adopting DC inverter technology the Versati II+ compressor regulates its output according to the cooling/heating load to achieve higher energy efficiency.

The Versati II+ compressors provide stepless power regulation between 20Hz and 120Hz resulting in much smoother operation.

The 180° sine wave current output uses a smaller start-up current, lower torque pulse and free speed regulation between 900 and 6600rpm. It enables the system to adapt to the heat load variations quickly and seamlessly with less stress on components resulting in a more reliable, energy efficient system.



COP up to 4.56

Versati II+ has exceptional heating efficiency with a maximum COP of up to 4.56. That is up to a huge 356% increase in heating output when compared to a traditional electric element heating system. While still consuming the same amount of power

Fan and Motor

• Efficient Axial Fan

The Versati II+ units come with efficient axial fans.

Designed using the most advanced Computational Fluid

Dynamics methods, they offer a balance of powerful

cooling and low running noise to ensure reliable and
steady operation of the system.

DC Fan Motor

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

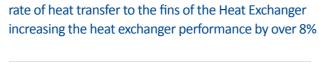
Capacity 8kW 10kW 12kW 14kW Test Standard: EN15411-2011 Note: for 1Ph models, for 3Ph models.

Heat Exchanger

Compared with common heat exchanger fins the Versati II+ system uses the unique louver fin design with an increase in heat transfer efficiency by 5%.

Former Models:
Normal Flat Fin

Versati:
Louver Fin

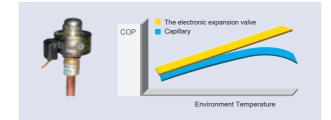


Special internal grooved copper pipe increases the



Electronic Expansion Valve

The electronic expansion valve allows more flexible operation. It can automatically adjust the throttle according to the refrigerant demand based on the stability of the system. It is more energy efficient and stable than a traditional capillary tube based system.



Comfort

• Precise Temperature Regulation

The combination of the electronic expansion valve and DC inverter compressor guarantees that the system can automatically make adjustments in the most efficient way according to the ambient and water conditions.

• Quiet Mode

By adjusting the output of the compressor and fan, the operational noise of the unit can be decreased by more than 3dB(A), at night time or where quiet operation is desired.

Reliability

• Gold Fin

The outdoor units feature Gold Fin coating on the outdoor coil. This improves efficiency by accelerating the defrost process and offers greater resistant to corrosive elements. Gold fin coils perform 20x better under salt spray testing than Blue Fin Coils.



• Wide Voltage Range Operation

Versati II+ units are designed to operate through a wider range of voltages, this means better reliability where the power supply is unstable.



Power fault Self-diagnosis

With the self-diagnosis function you can be confident that your investment is protected from power fluctuations. The Versati II+ units will start auto-protection if the voltage or the current is outside of the normal operating range. This protection will be cancelled automatically when the power returns to its normal range.

Flexible, Compact Design

Choose between the Versati II+ Split Type or the Versati II+ Monobloc depending on your installation limitations. The Versati II+ units have been designed to be as compact as is practical. Saving on transport costs and the operational footprint all without compromising on the serviceability of the units components.



Split Type

Outdoor Unit: Contains the Heat Pump Indoor Unit: Contains the expansion tank, heat exchanger, safety valve, water pump, control box and controller

Monobloc Type

Unit contains the Heat Pump, expansion tank, heat exchanger, safety valve and water pump
*Unit Control is supplied separately

Five Operating Modes

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

Cooling
Water Heating

-20°C

-20°C

48°C

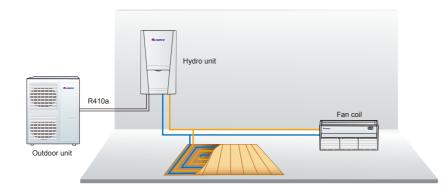
45°C

45°C

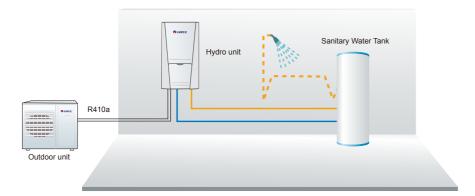
Hot Water Temperature Range
 Domestic water: 40°C to 80°C

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

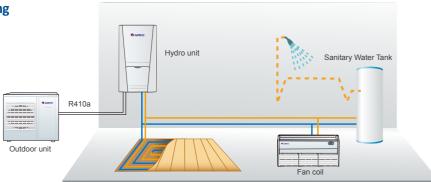
Heating / Cooling



Water Heating



• Heating / Cooling with Water Heating



High Efficiency

Versati II+ Hot Water Heat Pumps are fitted with high COP brazed plate heat exchangers to ensure maximum heat transfer between the refrigerant and the water in the system. The heat exchangers are carefully selected to ensure the highest efficiency possible.



Intelligent Control

The advanced temperature control of the system allows the timer to be programmed per hour or per day. As a result this gives you the flexibility to automatically reduce the temperature at night or during your holiday in order to save power, but still have pleasantly warm water when you get up or return home.



Additional Functions

• Urgent Water Heating

The heat pump uses the backup electrical heater if a fault occurs..

• Under Floor Heating

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)

Quick Water Heating

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

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 between10°C and 15°C.

- ON/OFF Timer
- Day/Weekly/Count-down Timer
- Weekly Programme

• Emergency Operation Mode

(for Heating and Water Heating only)

Under floor cooling

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)

Disinfection

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

• 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
- Forced Operation & Silent Modes
- Central Control

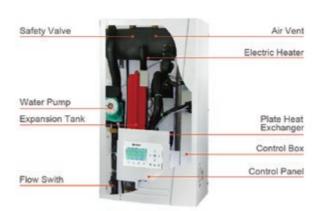


Indoor Unit

Outdoor Unit

Specifications

The indoor hydro-box transfers the heat energy in the refrigerant to the water circulated in the central heating radiators, underfloor heating system and sanitary hot water heating system and sanitary hot water tank. If you opt for the combination of heating and cooling, then the indoor unit can also decrease the water temperature to distribute to radiators or underfloor for summer cooling. The Versati II+ Split Type is suitable for applications where there is a long distance between where the hot water is required and where the outdoor unit can be mounted.



Versati II+ Specifications (Split Type)

| Model - Outdo | or Unit | GRS-CQ16Pd/NaB-K(O) | |
|------------------------------|----------|---------------------|-------------------|
| Part Number | | | AC7704 / O |
| Power Supply | | V/Ph/Hz | 220~240V-1Ph-50HZ |
| Capacity (Underfloor) | Cooling | kW | 14.5 |
| | Heating | kW | 15.5 |
| Power Input (Underfloor) | Cooling | kW | 4.53 |
| | Heating | kW | 3.78 |
| EER/COP (Underfloor) | | W/W | 3.2 / 4.1 |
| Capacity (Underfloor) | Cooling | kW | 10.5 |
| | Heating | kW | 14 |
| Power Supply (Underfloor) | Cooling | kW | 3.96 |
| | Heating | kW | 4 |
| EER/COP | | W/W | 2.65 / 3.5 |
| Refrigerant Charge Volume | | kg | 3.2 |
| Sanitary Water Temperature | | °C | 40~80 |
| Sound Pressure Level | Cooling | dB(A) | 57 |
| | Heating | dB(A) | 58 |
| Connecting Pipe Diameter | Gas | inch(mm) | ф 5 / 8 (15.9) |
| | Liquid | inch(mm) | ф 3 / 8 (9.52) |
| Dimensions | Outline | mm | 900x412x1345 |
| (W x D x H) | Packaged | mm | 995x455x1500 |
| Net Weight/Gross Weight | | kg | 106 / 118 |
| Looding Ouggett: | 40'GP | - | 50 |
| Loading Quantity | 40'HQ | - | 50 |

| · Unit | GRS-CQ16Pd/NaB-K(I) | |
|-------------------------------|--|---|
| | AC7704 / I | |
| | V/Ph/Hz | 1 / 220 - 240 / 50 |
| | W | 6200 |
| Cooling (FCU) | °C | 7~25 |
| Cooling (Underfloor) | °C | 18~25 |
| Heating (FCU) | °C | 25~55 (High) |
| Heating (Underfloor) | °C | 25~45 (Low) |
| Туре | - | Water-cooled |
| Nr. of Speed | - | 3 |
| Power Input | W | 200 |
| Water Flow Limit | LPM | 12 |
| Operation | - | Automatic |
| Steps | - | 2 |
| Capacity | kW | 3 |
| Combination | kW | 3+3 |
| Power Input | Ph/V/Hz | 1 / 230 / 50 |
| ound Pressure Level | | 31 |
| Gas | inch(mm) | ф 5 / 8 (15.9) |
| Liquid | inch(mm) | ф 5 / 8 (15.9) |
| Outline | mm | 900x500x324 |
| Packaged | mm | 1043x608x395 |
| let Weight/Gross Weight | | 57 / 66 |
| pading Quantity 40'GP / 40'HQ | | 205 / 246 |
| | Cooling (Underfloor) Heating (FCU) Heating (Underfloor) Type Nr. of Speed Power Input Water Flow Limit Operation Steps Capacity Combination Power Input vel Gas Liquid Outline Packaged Weight | V/Ph/Hz V/Ph/Hz W Cooling (FCU) °C Cooling (Underfloor) °C Heating (FCU) °C Heating (Underfloor) °C Type - Nr. of Speed - Power Input W Water Flow Limit LPM Operation - Steps - Capacity kW Combination kW Power Input Ph/V/Hz vel dB(A) Gas inch(mm) Outline mm Packaged mm Weight kg |

Underfloor Test Conditions: Cooling: Ambient Air 35oC DB/24oC WB, Water 23oC EWT/18o LWT. Heating: Ambient Air 7oC DB/6oC WB, Water 30oC EWT/35o LWT Fan Coil Unit Test Conditions: Cooling: Ambient Air 35oC DB/24oC WB, Water 12oC EWT/7o LWT Heating: Ambient Air 7oC DB/6oC WB, Water 40oC EWT/45o LWT Technical specifications are tested under laboratory conditions and may differ as a result of installation application.



Versati II+ Monobloc Type

The Versati II+ Monobloc Type is a fully self-contained Hot Water Heat Pump unit. The unit contains everything you need all in one. Just connect the water pipes, electrical power and the controller and your good to go. It even includes the water pump.

It is ideal for applications where you can position the outdoor unit close to where the hot water is required. It has the advantage over the Split Type unit where fewer installation resources are required.

| Model Part Number | | | GRS-CQ10Pd/NaC-K | GRS-CQ14Pd/NaC-M AC7703 |
|---------------------------|---------|----------------|------------------|--------------------------------|
| | | | AC7701 | |
| Capacity (Underfloor) | Heating | kW | 9.5 | 14.2 |
| | Cooling | kW | 9.8 | 14.5 |
| EER/COP | | W/W | 3.%43 | 3.9 ²/₄.2 4 |
| Capacity (FCU) | Heating | ^k W | 9.5 | 13 |
| | Cooling | kW | 7.4 | 10.3 |
| EER/COP (FCU) | | W/W | 3.⅓.53 | 3.1 ²/ ₃ .61 |
| Sanitary Water Temp | | оС | 40-80 | 40-80 |
| Sound Pressure | | db | 53 | 54 |
| Operating Temp Range | | оС | -20 to 45 | -20 to 45 |
| Dimensions | | mm | 1390x890x420 | 1350x1438x381 |
| Power Supply | | - | 1 Phase | 3 Phase |
| Refrigerant Charge Volume | | Kg | 3.5 | 4 |
| Net Weight/ Gross Weight | | Kg | 14 8/ i61 | 20⁵ /₂ 20 |
| Water Flow Volume | | m³/h | 1.6 | 2.4 |

Underfloor Test Conditions: Cooling: Ambient Air 35oC DB/24oC WB, Water 23oC EWT/18o LWT. Heating: Ambient Air 7oC DB/6oC WB, Water 30oC EWT/35o LWT Fan Coil Unit Test Conditions: Cooling: Ambient Air 35oC DB/24oC WB, Water 12oC EWT/7o LWT. Heating: Ambient Air 7oC DB/6oC WB, Water 40oC EWT/45o LWT Technical specifications are tested under laboratory conditions and may differ as a result of installation application.

Gree 5 Year Warranty

Have peace of mind knowing that your Gree Versati II+ Hot Water Heat Pump is covered by our industry leading 5 year comprehensive parts and labour warranty.



Gree Electric Appliances Inc. Of Zhuhai

Based in the thriving industrial city of Zhuhai in China, GREE Electric Appliances is the world's largest specialised air conditioning enterprise. With nine manufacturing plants producing over 7,000 different models, sold to over 100 countries.

GREE employs over 5,000 R & D staff. This has allowed them to develop a wide range of quality products featuring energy saving technology, intelligent temperature control, smart defrosting and a wide range of filter options.

GREE's use of quality materials and state of the art manufacturing facilities has resulted in GREE maintaining its No 1 residential air conditioning global sales position since 2005. With more than 200 million users of residential air-conditioners globally, it's a quality you can trust.











For Installation and Sales:

For Parts and Warranty:



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