Versati
Air to Water Heat Pump
Nowadays, people are increasingly focusing on heating costs as well as environmental issues. Traditional heating systems are expensive and are bad for sustainable development of the environment. Thus, people are searching for new high efficiency heating technology, low operation costs and eco-friendly features.

Versati takes natural heat from the ambient air and uses it for room heating. It not only satisfies room heating requirements but also supplies domestic hot water. Versati also provides cool air in hot summer. All-in-One!

VERSATI DC Inverter Multifunctional Air To Water Heat Pump

High Efficiency

Twin Rotary DC Inverter Compressor

Compared to traditional compressors, DC inverter compressors have the advantages of high performance and high efficiency.

- By adopting DC inverter technology, the compressor regulates its output according to the heating requirements to achieve higher efficiency.
- The DC inverter compressor optimizes its output to ensure efficient operation.
- Using stepless power regulation technology, the DC inverter compressor achieves stepless output regulation between 20Hz and 120Hz. It enables the system to meet the temperature requirements of various circumstances, significantly lowers the power consumption and is easy to use.

Comfort

Precise Temperature Regulation

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

Quiet Mode

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

Reliability

Heat Exchange Anti-corrosion

- Highly anti-corrosion blue hydrophilic coated aluminum fins have a longer lifespan than common fins.

Wide Voltage Range Operation

- The unit can safely operate within the following:
  - 1-phase: 185V - 264V
  - 3-phase: 319V - 456V

Eco-Friendly

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

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.

Heat Exchanger
- Compared with the common fin, the heat exchange efficiency of the louver fin is increased by 5%.
- Special thickened inside-thread copper pipe enhances the heat exchange performance by over 8%.

Compact Design
- Stepless adjustment
- Higher air flow volume and lower power consumption

High Efficiency
- High COP plate heat exchanger

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

Flexible and Compact Design
- Compact design, easy for installation
- Dimensions (W x D x H): 500 x 324 x 900mm
- Pressure safety, plate heat exchanger, expansion tank, water pump and control box all in one

Outdoor Unit

Hydro Box
User Friendly Control System

- Timer setting button
- On/Off button
- Parameter setting button
- ESC button
- Silent mode on/off button
- Address setting button
- Function setting button
- Child tank button
- Clock setting button

Controller

- Upper temperature sensor
- Lower temperature sensor
- Cold water inlet pipe with decentralized water inlets

Water Tank

- Smart Dual-temperature Detection Control Technology
  - ON and OFF control of the unit is realized by upper and lower temperature sensors, which renew water temperature in real time, thus ensuring the perfect timing of startup
  - Avoid premature startup. Improved hot water yielding rate by accurate timing of hot/cold water mixture
  - Avoid overdue startup. Improved hot water use rate and shorten the waiting time of reheating

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

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Health

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

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**Versati Air to Water Heat Pump**

**Water Tank**

**Flexible applications**

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

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

Isolation of water and electricity ensures safe operation
- Water and electricity are completely separated so that electrical leakage is absolutely avoided
- Advanced microcomputer control and complete protection functions help prevent electricity leakage, dry heating, overheating, etc

**Combination Examples**
- Heating / Cooling

**Five-Mode Operation**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Range</th>
</tr>
</thead>
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<tr>
<td>Heating</td>
<td>-20~35°C</td>
</tr>
<tr>
<td>Cooling</td>
<td>10~40°C</td>
</tr>
<tr>
<td>Water Heating</td>
<td>-20~48°C</td>
</tr>
<tr>
<td>Heating + water heating</td>
<td>-20~35°C</td>
</tr>
<tr>
<td>Cooling + water heating</td>
<td>10~48°C</td>
</tr>
</tbody>
</table>

**Wide Range of Operation Temperature**
- Heating: -20~35°C
- Cooling: 10~40°C
- Water Heating: -20~48°C
- Heating + water heating: -20~35°C
- Cooling + water heating: 10~48°C

**Hot Water Temperature Range**
- Domestic water: 40~80°C
- 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

**Dual-coil design** makes it convenient to join solar panel or boiler.
Flexible Applications Specifications

Urgent Water Heating
- The heat pump uses the backup electrical heater in case that any fault occurred.

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 times 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 automatic operation 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.

Floor Protection
- Under floor heating:
  - As for under floor heating, the default highest water temperature is 45°C so that it will not damage the floor or reduce its lifespan due to superheat. (The highest temperature of outlet water during heating operation is 55°C)
- Under floor cooling:
  - As for under floor cooling, the default lowest water temperature is 18°C so that it will not produce condensate which will damage the floor or reduce the lifespan of the floor. (The lowest temperature of outlet water during cooling operation is 7°C)

Multiple Additional Functions and Humanized Function

GRS-CQ6.0Pd Na-K(I)
GRS-CQ8.0Pd Na-K(O)
GRS-CQ10Pd Na-K(O)
GRS-CQ12Pd Na-K(O)
GRS-CQ14Pd Na-K(O)
GRS-CQ16Pd Na-K(O)

Power Supply V/Ph/Hz 220~240/1/50

Connecting pipe (water)
- Gas mm (inch) 12.7 (1/2) 15.9 (5/8) 15.9 (5/8) 15.9 (5/8) 15.9 (5/8) 15.9 (5/8)
- Liquid mm (inch) 6.35 (1/4) 9.52 (3/8) 9.52 (3/8) 9.52 (3/8) 9.52 (3/8) 9.52 (3/8)

Connecting pipe (water)
- Water inlet inch "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP
- Water outlet inch "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP "1" Male BSP

Safety valve Bar 3 3 3 3 3 3

Leaving water temp.
- Cooling (Fan coil unit) [°C] 7~25
- Heating (Fan coil unit) [°C] 25~55 (High Temperature Cycle)
- Heating (Floor heating) [°C] 12~40 (Low Temperature Cycle)

Pump
- Type - Water-cooled
- Nr. of speed 3
- Water flow limit LPM 7.5
- Volume Liter 10
- Water Pressure (Max) Bar 3

Expansion Vessel
- Water Pressure (Max) Bar 3

Electric Heater
- Type - Sheath Sheath Sheath Sheath Sheath Sheath
- Material - Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel
- Operation - Automatic Automatic Automatic Automatic Automatic Automatic
- Capacity kW 1.5 3 3 3 3 3
- Construction - 3 + 3 3 + 3 3 + 3 3 + 3 3 + 3
- Power input V/Hz 12/230/50

Heat Exchanger
- Type - Brazed Plate HEX Brazed Plate HEX Brazed Plate HEX Brazed Plate HEX Brazed Plate HEX Brazed Plate HEX
- Quantity 1 1 1 1 1 1

Sound Pressure Level dBA 31 31 31 31 31 31

Dimensions
- Outdoor Unit (WxDxH) mm 900 x 500 x 324
- Packaged (WxDxH) mm 1040 x 605 x 380
- Weight Net Kg 52 53
- Gross Kg 62 63

Indoor Unit
### Specifications

#### Outdoor Unit

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Heating (Rooftop) [kW]</th>
<th>Cooling (Rooftop) [kW]</th>
<th>Power Input</th>
<th>Heating (Rooftop) [kW]</th>
<th>Cooling (Rooftop) [kW]</th>
<th>EER</th>
<th>COP</th>
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<td>4.7</td>
<td>5.2</td>
<td>4.2</td>
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</table>

#### Power Supply
- Voltage: 220~240 V/50 Hz
- Rated current: 20 A
- Rated input: 6.0 A

#### Refrigerant
- Type: R410A
- Charge [g]: 1100

#### Control
- Type: Electronic Expansion Valve

#### Sanitary Water
- Temperature [°C]: 40-60

#### Refrigerant Pipe
- Diameter (mm): 12.7 (1/2), 15.9 (5/8), 15.9 (5/8), 15.9 (5/8), 15.9 (5/8), 15.9 (5/8)
- Connection: Flare Connection

#### Dimensions
- Height [mm]: 2000, 3000
- Width [mm]: 2000, 3000
- Depth [mm]: 2000, 3000

#### Weight
- Net Weight [kg]: 60, 90
- Gross Weight [kg]: 65, 95

### Note:
1. **Capacities and power inputs** are based on the following conditions:
   - **Cooling conditions**
     - Indoor Water Temperature 23°C/18°C
     - Outdoor Air Temperature 35°CDB/24°CWB
   - **Heating conditions**
     - Indoor Water Temperature 30°C/35°C
     - Outdoor Air Temperature 7°CDB/6°CWB
   - Standard piping length 7.5m
2. **Capacities and power inputs** are based on the following conditions:
   - **Cooling conditions**
     - Indoor Water Temperature 12°C/7°C
     - Outdoor Air Temperature 35°CDB/24°CWB
   - **Heating conditions**
     - Indoor Water Temperature 40°C/45°C
     - Outdoor Air Temperature 7°CDB/6°CWB
     - Standard piping length 7.5m

#### Water Tank

<table>
<thead>
<tr>
<th>Water Tank Volume</th>
<th>SKVD200/LC_A-K</th>
<th>SKVD300/LC_A-K</th>
<th>SKVD200/LC_A-M</th>
<th>SKVD300/LC_A-M</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>200</td>
<td>300</td>
<td>200</td>
<td>300</td>
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</table>

#### Electric Heater Power
- Type: Electrically Heated
- Voltage: 230~240 V/50 Hz
- Rated current: 30 A

#### Screw thread spec
- Outer diameter [mm]: 5/8 BSP
- Female [mm]: 5/8 BSP
Thinking and acting in harmony

Air Trade Centre is a prominent supplier of Heating, Ventilation and Air Conditioning products (HVAC), active both within Europe and beyond. The strength of Air Trade Centre derives from our unique combination of people, knowledge, experience and technology. We provide customized advice and specialize in supplying HVAC equipment and components and consistently deliver high-quality HVAC solutions.

Air Trade Centre offers:
- One-stop-shopping
- A broad spectrum of more than 10,000 products of which 80% are available in stock
- Over 250 employees in 11 countries
- Company information in 6 languages
- An E-shop in 8 languages.

Our organization stimulates development and the sharing of technology. By allocating a fixed percentage of our income to internal and external training programs, Air Trade Centre aims to satisfy customers, employees and shareholders through our company's growth on the international HVAC market. Durable HVAC solutions are central to this. With this vision in mind, we have adopted a strategy designed to establish long-term relationships with the help of Single Sourcing and a broad, comprehensive product range.

Air Trade Centre believes in an organization of people who are unconditionally faithful and loyal to one another. Our personnel is persistently ambitious and resolute in their actions, which ultimately leads to greater feeling for and involvement with each other and the world around us. This is symbolized by the special qualities of the Crane, a strong, tranquil and majestic bird that for centuries has been a symbol of happiness, good health and long life in many cultures. The dancing Crane, our company’s perfect metaphor for the harmony between people and technology.