



BlueWind Series

R290 DC Inverter Space Heating Heat Pump



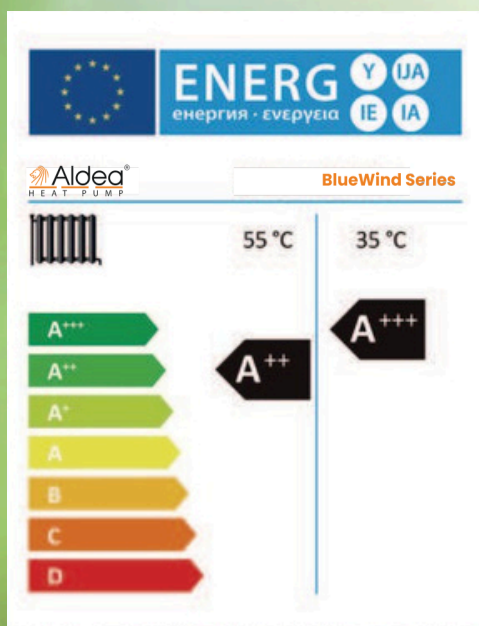


Environmentally Friendly Technologie

-BlueWind Series-

Refrigerant

Aldea Bluewind Series heat pump uses the R290 eco-friendly refrigerant whose GWP is lower than 20 and helps curb global warming. The heat pump with R290 reaches higher efficiency than those with other refrigerants.



Energy Label

Complying with ErP directives, BlueWind Series proves itself with powerful capacity and and attains the A+++ energy label, which meets users' needs for low energy bills.

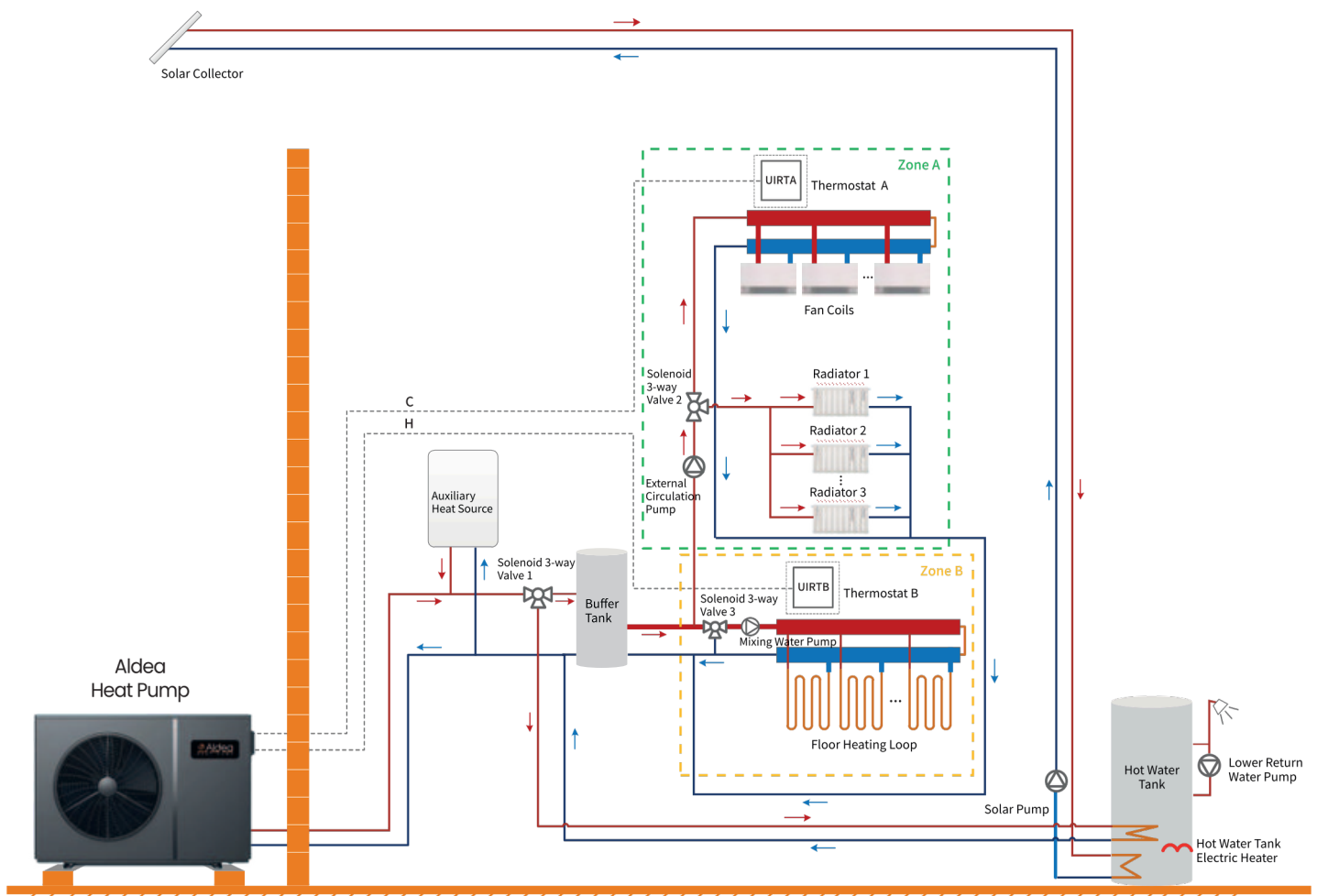




R290 Refrigerant

Whole-house Installation Sketch

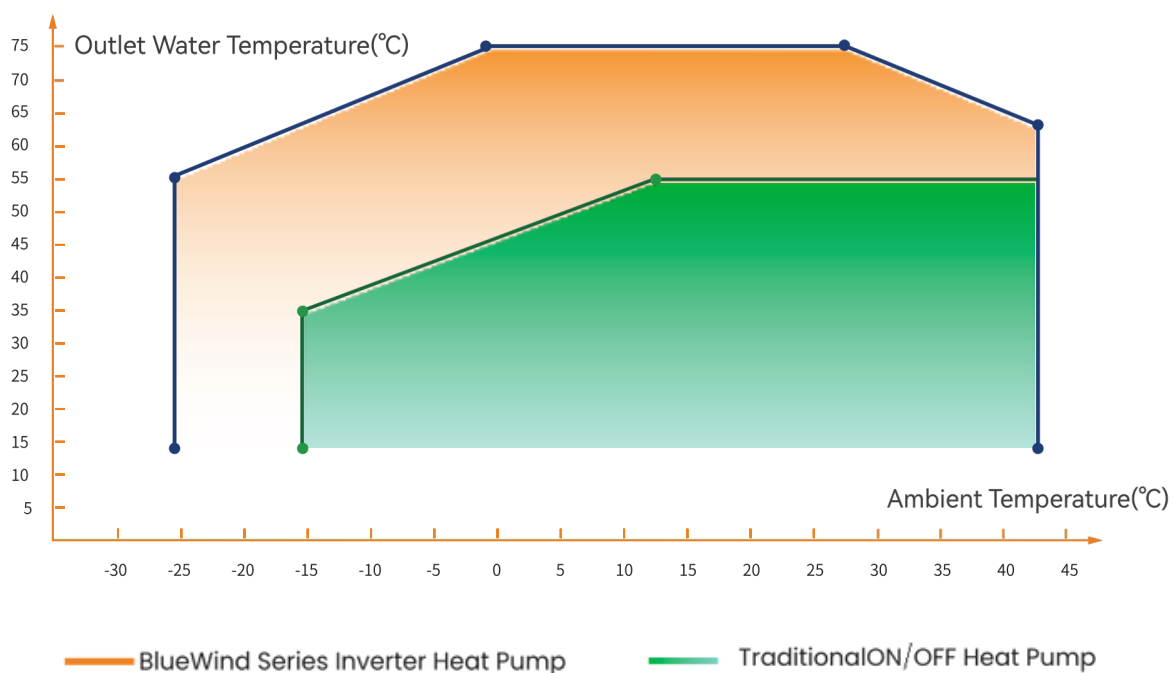
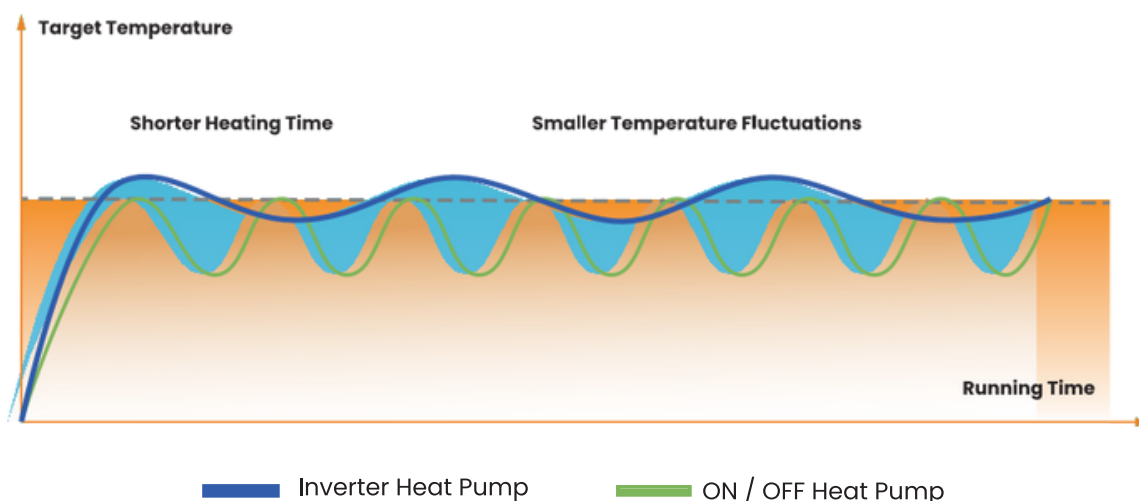
The BlueWind Series heat pump allows the interlock with auxiliary heat sources to provide heating, cooling, and hot water for the house. With the Smart Grid control function, the unit can automatically switch states to make full use of idle power, further saving electricity, according to the power storage of photovoltaics and the power status of the grid. Additionally, users can access a room thermostat to control the switch of the host unit and realize precise zone control.



Full DC Inverter Technology



BlueWind Series has the dedicated engineering technology of component supply selection, which allows BlueWind heat pumps to work within fully efficient control logic, results in less temperature fluctuations and stable workflow."



Stable running at -25°C ambient temperature and the max water outlet temperature is up to 75°C.

Low Noise

In addition to brushless DC inverter fans, the BlueWind Series evi heat pump adopts reinforced sound reduction measures such as the dual shock absorption by the famous-brand compressor. The sound levels start as low as 42dB(A), making itself the most silent system in our DC inverter lineup

DC Inverter Compressor



DC Brushless Motor



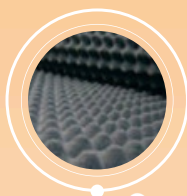
Special Design Fan Blade



Shock Absorber Plate



Sound Absorbing Cotton



Turbulence Air Grille



Optimized Pipeline Design



Components



DC Inverter Circulation Pump

Famous silent circulation pump is installed inside the unit to realize more comfortable experience



DC Inverter Compressor

Famous brand compressor ensures the stable heating capacity and reduces noise.



DC Fan Motor

DC fan motor is equipped to improve higher Work efficiency and lower noise.



Expansion Tank

Built-in expansion tank to keep stable water system and convenient installation.



Plate Heat Exchanger

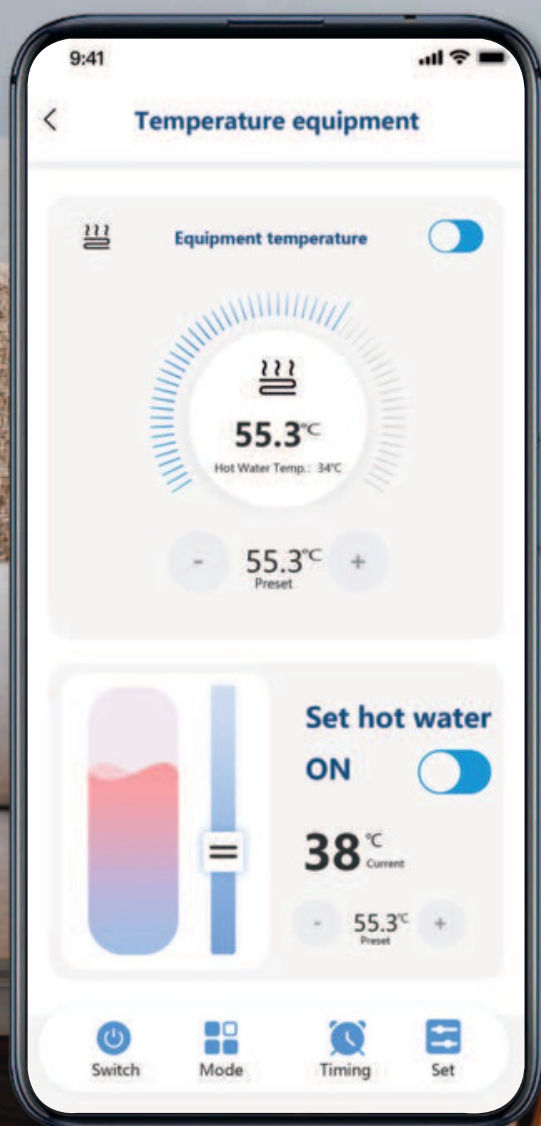
Plate heat exchanger with well-known brand is selected to increase heat exchange area for higher COP.





Wifi Connection

With Wi-Fi function, the users control the heat pump anywhere and anytime:



Heating



Cooling



Hot Water



Hot Water + Cooling



Hot Water + Heating



Mute



Time Serring



Electric Heater



Curve

Touch Screen Color LCD Display

The 7-inch color LCD display can be installed on the wall. Featured with 0.5°C precise temperature control, water temperature curve display, easy timing, one-key mute, one-key faster heating, etc, it is very user-friendly.





| BlueWind Series | ALD-YAMB206 | ALD-YAMB210 | ALD-YAMB213 | ALD-YAMB216 | ALD-YAMBT210 | ALD-YAMBT213 | ALD-YAMBT216 | ALD-YAMBT218 | ALD-YAMBT220 |
|--|------------------|------------------|-------------|-------------------|-------------------|--------------|-------------------|--------------|--------------|
| [Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C. | | | | | | | | | |
| Heating Capacity (kW) | 2.00~6.00 | 3.50~8.81 | 4.50~12.74 | 6.00~16.00 | 3.50~8.81 | 4.50~12.74 | 6.00~16.00 | 6.30~18.00 | 6.70~20.36 |
| Power Input (kW) | 0.30~1.31 | 0.58~1.89 | 0.75~2.82 | 1.00~3.49 | 0.58~1.89 | 0.75~2.82 | 1.00~3.49 | 1.05~3.92 | 1.12~4.62 |
| COP | 6.00~4.58 | 6.00~4.65 | 6.00~4.52 | 6.00~4.59 | 6.00~4.65 | 6.00~4.52 | 6.00~4.59 | 6.00~4.59 | 5.98~4.40 |
| [Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C. | | | | | | | | | |
| Heating Capacity (kW) | 1.80~5.40 | 3.15~7.98 | 3.90~11.25 | 5.40~14.4 | 3.15~7.98 | 3.90~11.25 | 5.40~14.4 | 5.70~16.20 | 5.80~18.48 |
| Power Input (kW) | 0.39~1.74 | 0.68~2.55 | 0.85~3.66 | 1.17~4.97 | 0.68~2.55 | 0.85~3.66 | 1.17~4.97 | 1.24~5.58 | 1.26~6.29 |
| COP | 4.63~3.10 | 4.63~3.13 | 4.59~3.07 | 4.61~2.90 | 4.63~3.13 | 4.59~3.07 | 4.61~2.90 | 4.60~2.90 | 4.60~2.94 |
| [Space Cooling] Ambient Temp. (DB/WB): 35°C / -, Water Temp. (Inlet/Outlet): 12°C/7°C. | | | | | | | | | |
| Cooling Capacity (kW) | 1.20~4.00 | 1.53~5.96 | 2.93~8.87 | 3.50~13.00 | 1.53~5.96 | 2.93~8.87 | 3.50~13.00 | 4.00~13.50 | 4.40~14.40 |
| Power Input (kW) | 0.26~1.38 | 0.33~2.11 | 0.63~3.26 | 0.76~4.33 | 0.33~2.11 | 0.63~3.26 | 0.76~4.33 | 0.86~4.50 | 0.95~4.69 |
| EER | 4.62~2.90 | 4.64~2.82 | 4.65~2.72 | 4.60~3.00 | 4.64~2.82 | 4.65~2.72 | 4.60~3.00 | 4.63~3.00 | 4.63~3.08 |
| [Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C. | | | | | | | | | |
| Heating Capacity (kW) | 6.6 | 9.33 | 13.9 | 17.2 | 9.33 | 13.9 | 17.2 | 19.8 | 22.69 |
| Power Input (kW) | 1.52 | 2.14 | 3.28 | 4.00 | 2.14 | 3.28 | 4.00 | 4.60 | 5.19 |
| Hot Water Current Input Range (A) | 6.66 | 9.8 | 14.36 | 17.75 | 3.5 | 5.36 | 6.53 | 7.51 | 7.95 |
| COP | 4.35 | 4.35 | 4.24 | 4.3 | 4.35 | 4.24 | 4.3 | 4.3 | 4.37 |
| Max. Power Input (kW) | 2.8 | 4 | 5 | 6 | 4 | 5 | 6 | 6.5 | 6.8 |
| Max. Running Current (A) | 14.3 | 18.3 | 22.9 | 29 | 7.1 | 8.7 | 10.8 | 11.3 | 11.6 |
| Max. Outlet Water Temp. (°C) | 75 | | | | 75 | | | | |
| Operation Range (°C) | -25~43 | | | | -25~43 | | | | |
| Power Supply | 220~240V~/50Hz | | | | 380~415V/3N~/50Hz | | | | |
| Rated Water Flow (m³/h) | 1.03 | 1.5 | 2.19 | 2.75 | 1.5 | 2.19 | 2.75 | 3.10 | 3.44 |
| Compressor Brand | HIGHLY | | | | HIGHLY | | | | |
| Circulating Pump | Built-In | | | | Built-In | | | | |
| Expansion Tank (L) | 2 | | | 5 | 2 | | | 5 | |
| CO2 Equivalent (Ton) | 0.0015 | 0.0023 | 0.0029 | 0.0049 | 0.0023 | 0.0029 | 0.0049 | 0.0049 | 0.0049 |
| ErP Level (35°C) | A+++ | | | | A+++ | | | | |
| ErP Level (55°C) | A++ | | | | A++ | | | | |
| Refrigerant Type | R290 | | | | R290 | | | | |
| Sound Pressure Level dB (A) at 1m | 42 | 49 | 55 | 54 | 43 | 48 | 54 | 54 | 56 |
| Water Pipe Connection (inch) | G1 1/4" | | | | G1 1/4" | | | | |
| Water Proof Class | IPX4 | | | | IPX4 | | | | |
| Electricity Shock Proof | I | | | | I | | | | |
| Net Dimensions (L×W×H) (mm) | 1180 x 440 x 710 | 1263 x 440 x 875 | | 1263 x 440 x 1375 | 1263 x 440 x 875 | | 1263 x 440 x 1375 | | |

Notice: The above data is for reference only. The specs data is subject to actual product.

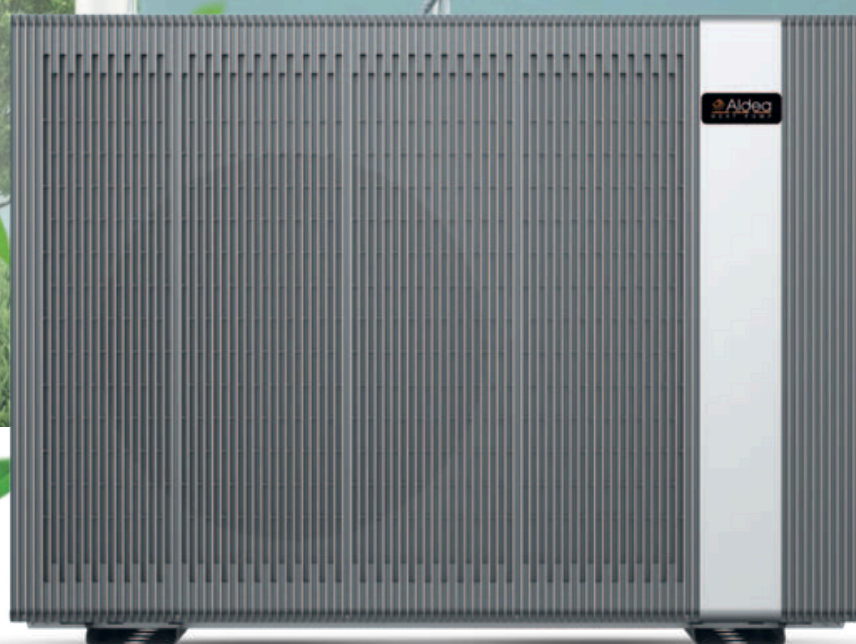
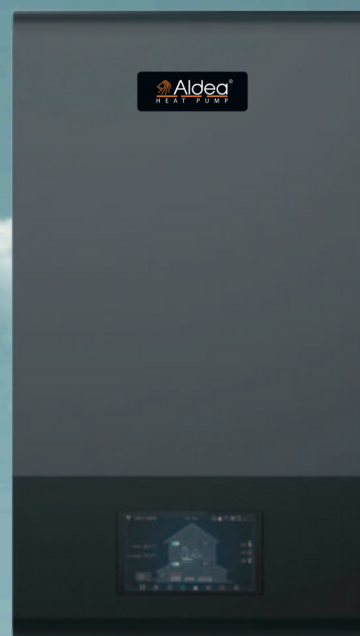
Aldea reserves the right to make changes in product design and technical parameters as deemed necessary without prior notice.

Low GWP and Low Carbon Life

Using the natural refrigerant R290 (with a GWP of only 3) , the **BlueWind Master Series** heat pump has a minimal impact on global warming and zero harm to ozone layer, making it the best choice for the low carbon heating system. Designed to optimize efficiency and reduce energy consumption, this heat pump provides customers the affordable sustainable heating solutions.

38_{db}

A+++





No Noise To Disturb The Neighbors

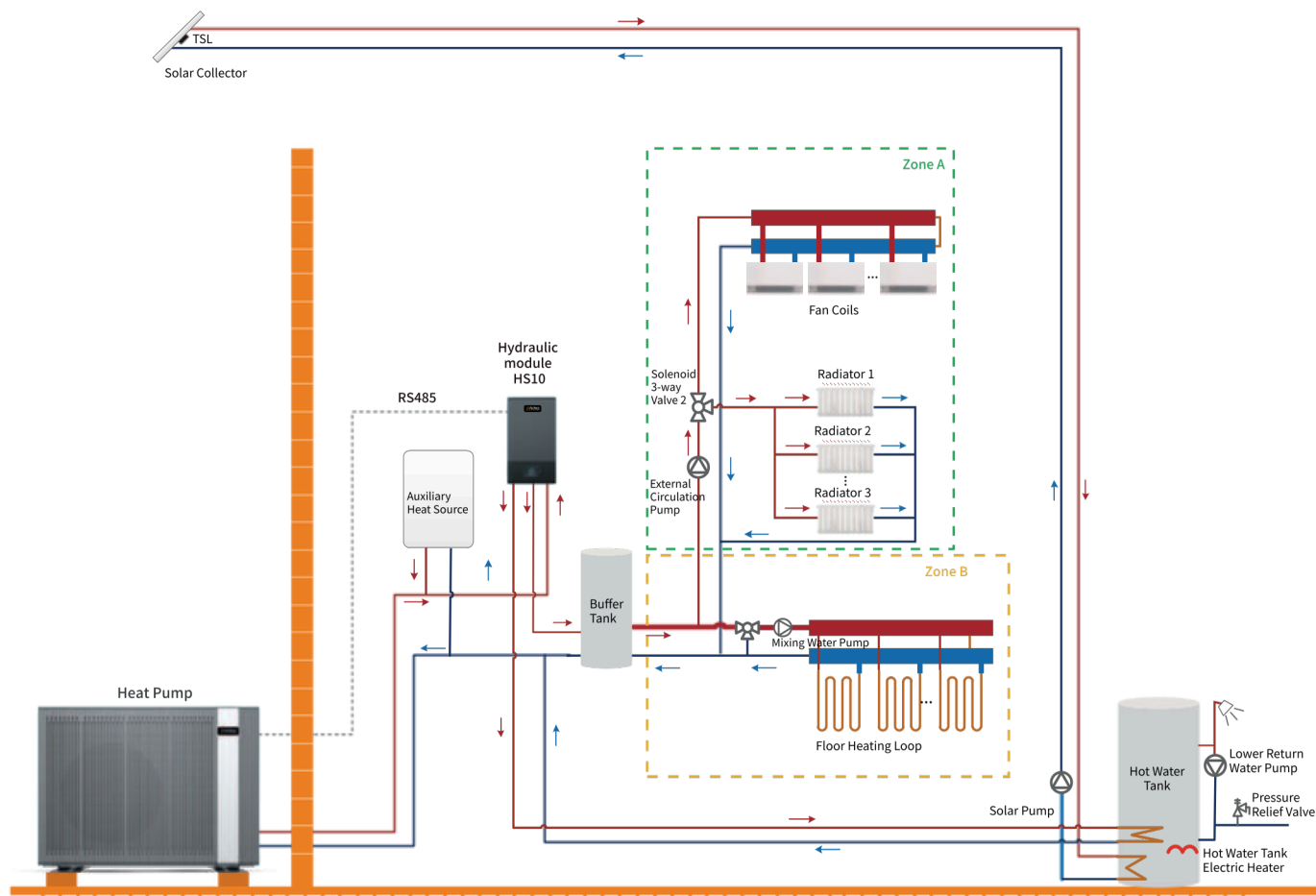


Through effective noise reduction solutions, the BlueWind Master Series ensures a sound pressure level of 31dB(A) at 1m and 24dB(A) at 3m, lower than the sound in a library. You'll barely notice it's working, so your neighbors won't be disturbed by the noise.



Efficient Installation and Flexible Connectivity

The BlueWind Master Series monobloc heat pump integrates control system and hydronic module into one indoor box, simplify the piping to increase the installation efficiency. Such design will offer flexible connectivity for retrofit of old house with original water piping, or new apartments.



Easy Remote Control And Management



Use the built-in Wi-Fi connectivity, Eco-Home app and IoT technology to effortlessly manage and control your heat pump from anywhere, ensuring personalized comfort tailored to your preferences.



Featured Functions



MULTIPLE DEFROST MEASURES

Intelligent defrost, chassis electric heating, centralized drainage are designed to prevent icing.

MULTIPLE NOISE REDUCTION MEASURES

CFD-based EPP deflector, extra-large silent fan blades, compressor with 4-level sound insulation, double-layer bracket and optimized piping vibration design ensure extreme-quiet operation.

ADAPTIVE ENERGY-SAVING ALGORITHM

Self-developed algorithm fits the actual heat load of the building to achieve high energy efficiency and low noise.



MULTI-MODE ADAPTIVE OPERATION OF WATER PUMP

The pumps can adaptively operate in three modes: target temperature difference, target flow rate, and target speed.

ENERGY CALCULATION

A self-developed algorithm enables real-time display and statistics by time period, providing a fast overview of energy output, energy consumption, and energy efficiency ratio.

MULTIPLE SAFETY MEASURES

Electrical isolation, Active refrigerant gas venting channel, gas and magnetic separator and Refrigerant leak detector to guarantee the safety.



Control Module



Centralized control for domestic climate and hot water system

Advanced energy statistics algorithms

7-Inch user-friendly controller interface

Integrated WIFI remote control

Suitable for standard set-up and hybrid systems

| | CM10 |
|---|---------------|
| Power Supply | 220-240V/50HZ |
| Net Dimensions (L×W×H) (mm) | 390×100×420 |
| Water Proof Class | IPX1 |
| Electricity Shock Proof | I |
| Notice:The above data is for reference only. The specs data is subject to actual product. | |



Hydraulic Station



Centralized control for domestic climate and hot water system

Hydraulic components integrated, including 8L expansion water tank

Integrated with all the functions of the Control Module CM10

3-way valve for Space heating, cooling and DHW

Modulating electric auxiliary heater with up to 9 kW

| | HS10-1P | HS10 |
|---|---------------|-------------------|
| Power Supply | 220-240V/50HZ | 380-415V 3N~/50HZ |
| Max. Heating Power(KW) | 3 | 9 |
| Max. Heating Current (A) | 13.8 | 14.5 |
| Max. Outlet Water Temp. (°C) | 75 | 75 |
| Water In/Out Connection(inch) | G1-1/4" | G1-1/4" |
| Sound Pressure dB(A) at 1m | 30 | 30 |
| Net Dimensions (L×W×H) (mm) | 418×310×750 | 418×310×750 |
| Water Proof Class | IPX1 | IPX1 |
| Electricity Shock Proof | I | I |
| Notice:The above data is for reference only. The specs data is subject to actual product. | | |



| BlueWind Master Series | ALD-YAMB106 | ALD-YAMB110 | ALD-YAMB113 | ALD-YAMBT113 | ALD-YAMBT116 |
|---|-----------------------|-------------|-------------|--------------------|--------------|
| [Space Heating] (W35°C-W55°C) | | | | | |
| Equivalent Maximum Heat Production(kW) | 6 | 9 | 13 | 13 | 16 |
| Prated (Pdesignh, Average climate) (kW) | 4.8/4.9 | 7.1/7.1 | 10.0/9.7 | 10.0/9.9 | 12.9/12.6 |
| ηs (Average climate) (%) | 200/144 | 199/146 | 203/149 | 199/149 | 200/145 |
| SCOP (EN14825 Average climate) (W/W) | 5.08/3.66 | 5.05/3.73 | 5.14/3.79 | 5.05/3.80 | 5.07/3.69 |
| ErP Level (EN14825 Average climate) | A+++ / A++ | | | | |
| Heat Output (EN14511-2) (kW) | 4.2/4.1 | 5.9/5.9 | 7.9/7.9 | 7.8/7.9 | 10.1/10.1 |
| COP (EN14511-2) (W/W) | 5.1/3.2 | 4.9/3.2 | 5.0/3.1 | 5.0/3.1 | 5.1/3.2 |
| Sound Power Level (EN12021-1)(dB(A)) | 47/46 | 54/54 | 54/52 | 55/55 | 53/54 |
| Sound Pressure Level at 1m(dB(A)) | 32/31 | 38/38 | 38/37 | 40/39 | 38/39 |
| [Space Cooling] Ambient Temp. (DB/WB): 35°C / -, Water Temp. (Inlet/Outlet): 12°C/7°C | | | | | |
| Cooling Capacity (kW) | 1.47-4.91 | 2.33-6.96 | 3.27-9.13 | 3.27-9.13 | 4.32-11.8 |
| Power Input (kW) | 0.34-1.60 | 0.54-2.23 | 0.75-2.99 | 0.75-2.99 | 0.98-3.78 |
| Cooling Current Input Range (A) | 1.49-7.03 | 2.37-9.79 | 3.41-12.95 | 1.23-4.55 | 1.61-5.81 |
| EER (W/W) | 4.32-3.07 | 4.31-3.12 | 4.34-3.06 | 4.34-3.06 | 4.38-3.12 |
| [Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C | | | | | |
| Heating Capacity (kW) | 6.61 | 9.33 | 13.45 | 13.45 | 16.60 |
| Power Input (kW) | 1.52 | 2.14 | 3.11 | 3.11 | 3.82 |
| Hot Water Current Input Range (A) | 6.67 | 9.40 | 13.65 | 4.83 | 5.93 |
| COP | 4.35 | 4.35 | 4.32 | 4.32 | 4.35 |
| Max. Power Input (kW) | 2.8 | 4.5 | 5.4 | 5.4 | 5.8 |
| Max. Running Current (A) | 14.3 | 19.8 | 23.5 | 8.25 | 8.9 |
| Max. Outlet Water Temp. (°C) | 75 | | | | |
| Operation Range (°C) | -25-43 | | | | |
| Power Supply | 220-240V~/50Hz | | | 380-415V/3N~/ 50Hz | |
| Rated Water Flow Rate (m³/h) | 1.03 | 1.55 | 2.20 | 2.20 | 2.75 |
| Compressor Brand | MITSUBISHI/Rotary | | | | |
| Circulating Pump | Wilo/ DC | | | | |
| Water Side Heat Exchanger | Plate | | | | |
| Air Side Heat Exchanger | Finned Tube | | | | |
| Fan/Motor | Axial/DC | | | | |
| Display | 7-Inch / IPS 1024×600 | | | | |
| Remote Control | WIFI / APP / IOT | | | | |
| Refrigerant Type | R290 | | | | |
| Water Pipe Connection (inch) | G1 1/4" | | | | |
| Protection Class | IPX4 | | | | |
| Electricity Shock Proof | I | | | | |
| Net Weight (kg) | 130 | 1.55 | 2.20 | 2.20 | 2.75 |
| Net Dimensions (L×W×H) (mm) | 1102×557×1021 | | | 1377×557×1021 | |

Notice:

1. The above data is for reference only. The specs data is subject to actual product.
2. The equivalent maximum heat production is for reference only, and the actual operation will not run to the maximum heat production at ambient temperatures above 0 °C,
3. Aldea reserves the right to make changes in product design and technical parameters as deemed necessary without prior notice.



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