



warm your life with silent tech

# Hi-Master V Series

R290 Monobloc Air Source Heat Pump



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A+++



**High Efficiency A+++**  
*Eco-friendly*

The Hi-Master V Series can meet highest class A+++, providing our customers the best eco-friendly performance for the heat pump system.



**R290 Natural Refrigerant**  
*Low GWP and low carbon life*

Using the natural refrigerant R290 (with a GWP of only 3), the Hi-Master V 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.



## Quiet Operation

No noise to disturb the neighbors

Through effective noise reduction solutions, the Hi-Master V Series can achieve a sound pressure level down to 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.



Within 1m

**31 dB(A)**  
Ultra-low  
Noise Level

## Aesthetic Appearance Design

Decorate your home

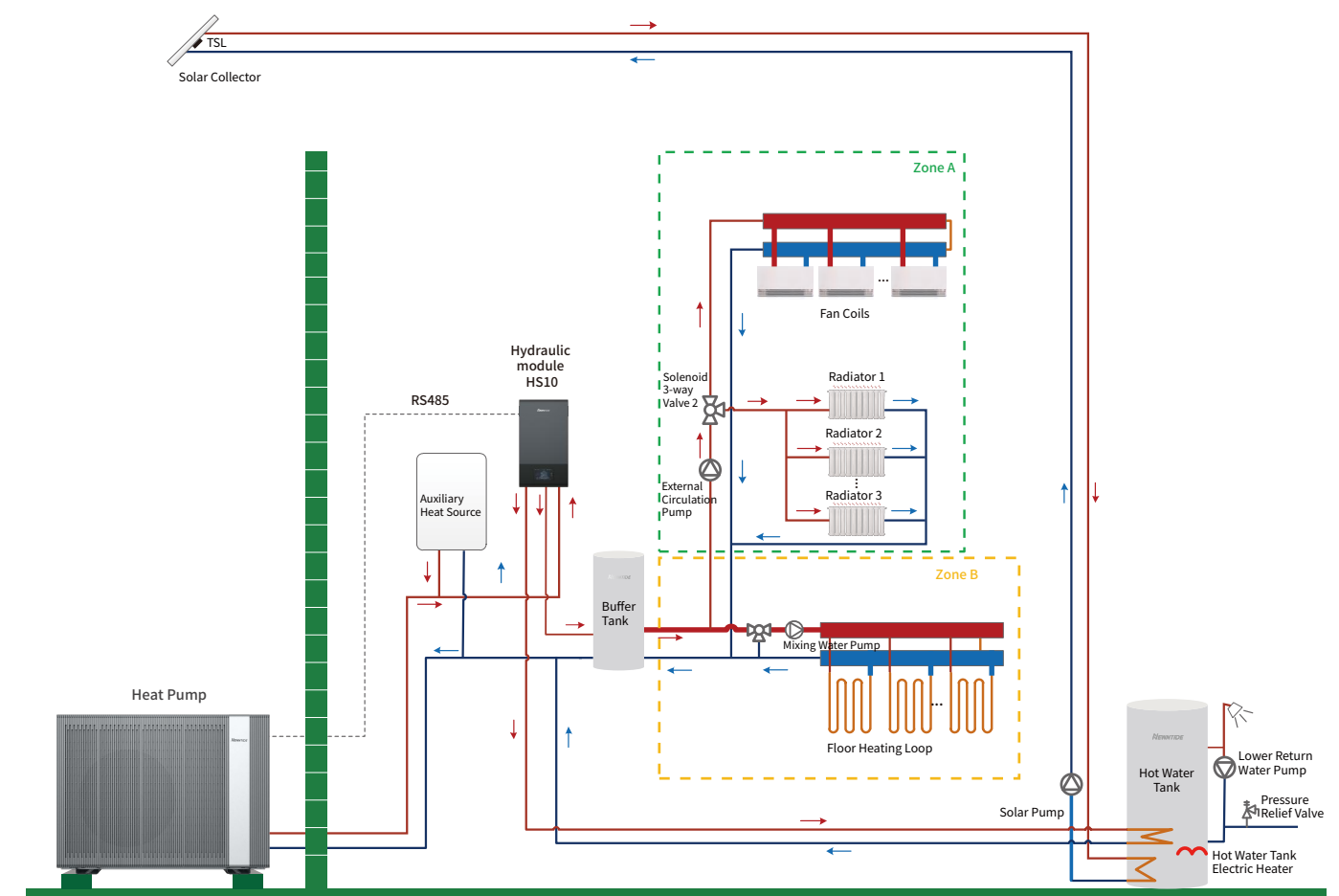
With its chic metallic gray finish and sleek lines, the Hi-Master V Series heat pump effortlessly complements a variety of home styles, from modern apartments to quaint cottages, brick homes and traditional villas. Its stylish design seamlessly enhances the ambiance and effortlessly blends in to aesthetically enhance your space.



## Integrated Solution

Efficient installation and flexible connectivity

The Hi-Master V 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.



Allows heat pumps to support the power grid, have a lower carbon footprint and be more cost-effective to operate.



High Energy Efficiency



Built-in WiFi








Silent Operation



Innovative Structure





-  Heating Curve Setting
-  Electricity Consumption Monitor
-  BMS Central Control
-  Multilingual Menu
-  Two Heating Zones

## **Easy Remote Control and Management** *WIFI, APP & IoT*

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.

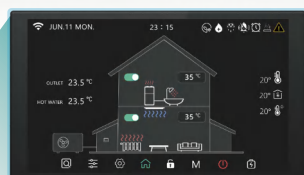




## Key Upgrades

Better Performance

### 7-inch Large Screen



Extra- large screen ensures easy operation and pleasant user experience.



Water Flowmeter

Use vortex flowmeter to accurately read the real-time water flow of the unit.



Refrigerant Leak Detector

Detect the concentration of refrigerant in the cavity. When it reaches the safety setting value or above, you will be reminded by an alarm and the power supply will be switched off promptly.



Gas and Magnetic Dirt Separator

The gas and magnetic dirt separator integrates exhaust, filtration, magnetic decontamination, and safe pressure relief.

## Featured Functions

Enhanced Capabilities

### 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

## Control module CM10



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

Model: NE-F	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

## Hydraulic module HS10



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

Model: NE-F	HS10-1P	HS10
Power Supply	220-240V/50HZ	380-415V 3N~/50HZ
Max. Heating Power(KW)	3	9
Max. Heating Current (A)	13.1	13.7
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

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Model: NE-F	60HCR5INV	90HCR5INV	130HCR5INV	130HCR5TINV	160HCR5TINV
[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:

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