

DC INVERTER AIR TO WATER PUMP

MONOBLOC

Heating+Cooling+DHW























Hien

ENERGY TRANSITION PROJECTS



















PROJECTS

MORE THAN 70000 PROJECTS COMPLETED SO FAR; MORE THAN 6.5 MILLION PRODUCTS DELIVERED.

SCHOOLS

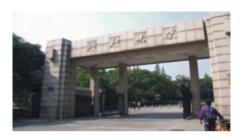












HOSPITALS













RESIDENTIAL













HIGHTLIGHT



The 2008 Shanghai World Expo.



The 2013 Boao Summit for Asia in Hainan.



The 2011 Universiade in Shenzhen.







The artificial island hot water project of the Hong Kong-Zhuhai-Macao Bridge in 2019.



2016 the hot water reconstruction project of Qingdao port.



2016 the G20 Hangzhou Summit.



The 2022 Beijing Winter Olympic Games & Paralynpic Games.



2023 the Asian Games in Hangzhou



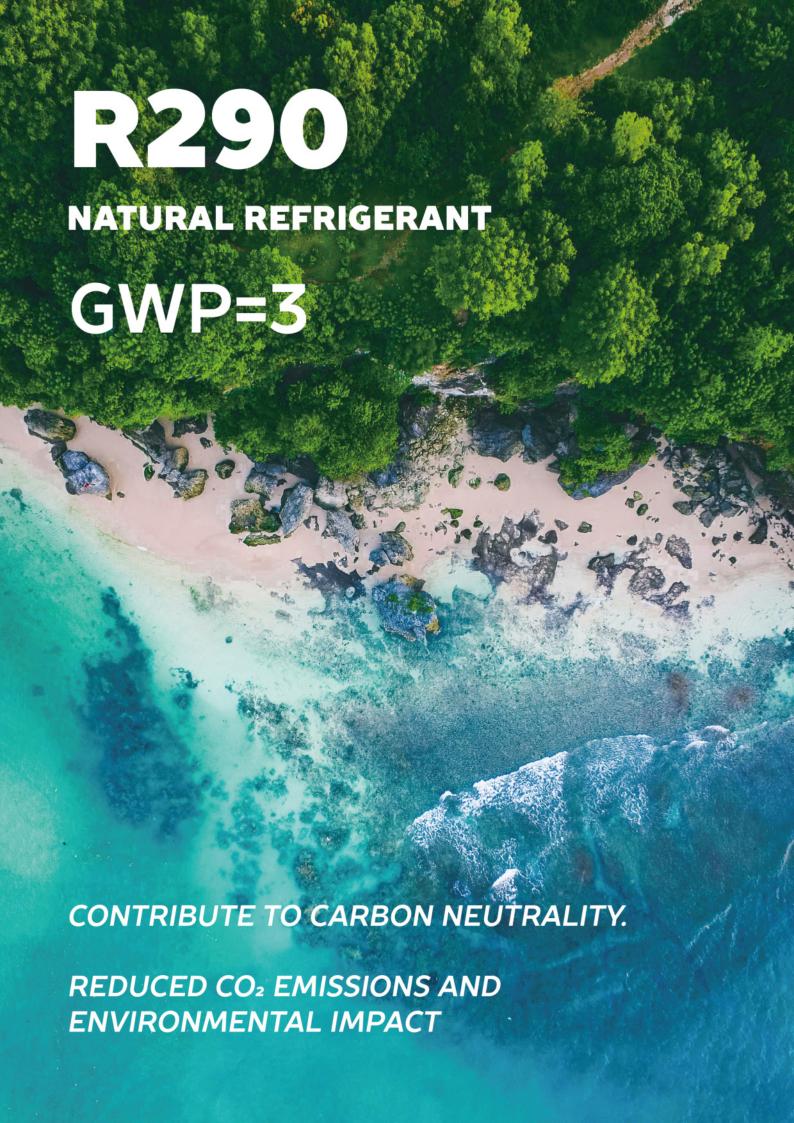
Hien



Founded in 1992, Hien firstly started as an electronic component manufacturer. With a registered capital of 300 million RMB, Hien entered the air source industry in 2000. It is a leading enterprise of air source heat pumps in the area of product R & D, production, sales, and after-sales service. Hien owns one of the largest production bases of heat pumps in China, as well as the CANS certified state-level comprehensive laboratory.

PRODUCTION LINE

With a total of 60,000 m² of construction area and over 1,000 processing equipments, the main factory comprises 6 assembly lines, while the branch factory consists of 3 production workshops. Main products include air source heat pumps for residential, commercial, and industrial use. The capacity of our products ranges from 3 kW to 320 kW, primarily for heating, cooling, and domestic hot water. Heat pump dryers are also used for the production of tobacco, aroma wicks, medicinal herbs, tea, fruits, vegetables, and other products.



AIR TO WATER HEAT PUMP

HEATING+COOLING+DHW

ECOFORCE SERIES

SCOP







High Efficiency A+++ Energy Level



Energy - Saving up to 80%



Wi-Fi App Smart Controlled



There are 5 operation modes to be selected:

- · Heating + Hot Water
- · Cooling + Hot Water
- · Heating
- Cooling
- · DHW

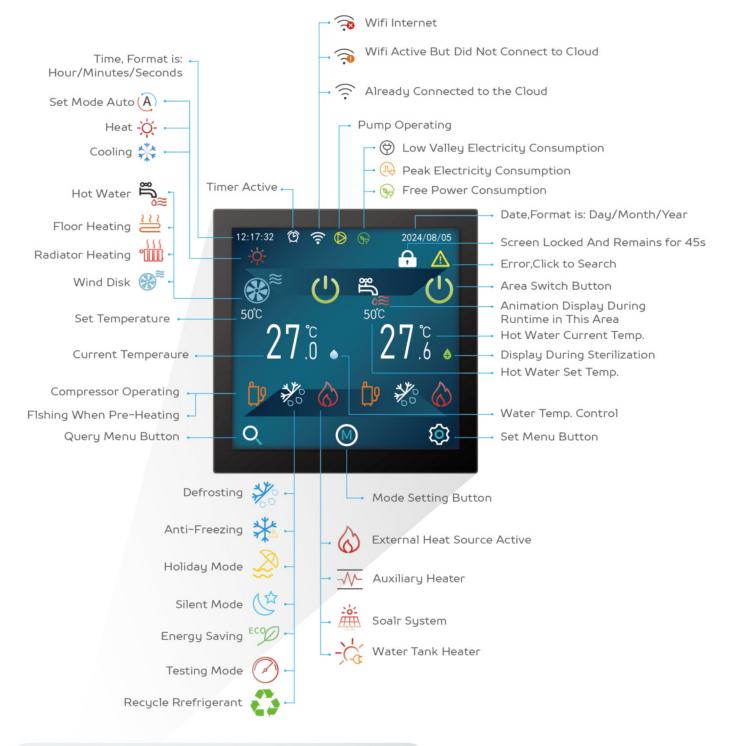


Stable Running at -25°C Ambient Temperature





SMART TOUCH DISPLAY





- Color Screen
- Intuitive Interface
- Touch Key Design
- Builtin Wifi Module
- APP Control

SMART CONTROL FAMILY



RS485

The intelligent controller with RS485 is adopted to realize the linkage control between the heat pump unit and the terminal end. Multiple heat pumps can be controlled and connected to be well monitored.

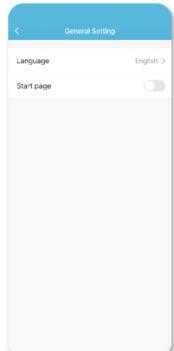
WiFi DTU

To deliver the best user experience, EcoForce series is designed with a DTU module for remote data transferring, and then you can easily monitor the running status of your heating system.







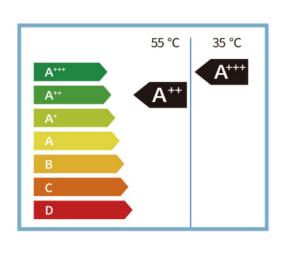


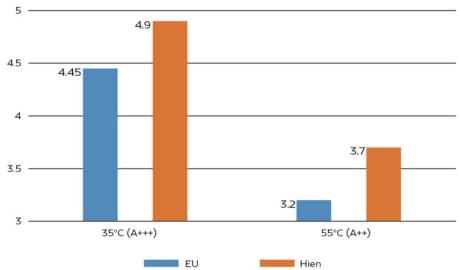
Smart APP control

Smart APP control brings a lot of convenience to users. Temperature adjustment, mode switching, and timersetting can be achieved on your smart phone. Moreover, you can know power consumption statistics and fault record at anytime and anywhere.

SUPER HIGH EFFICIENCY A+++





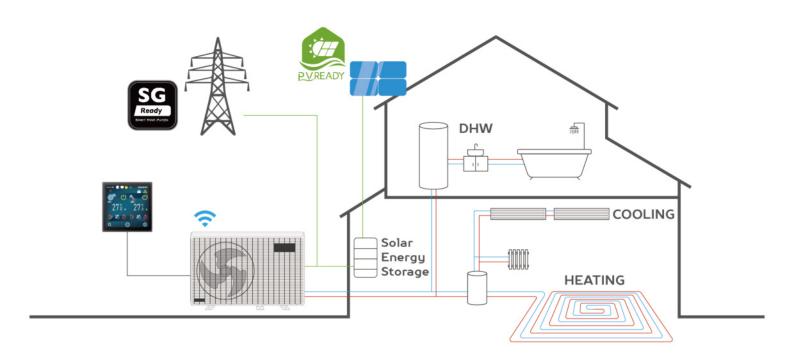


Can be operated in combination with:

- 1. Electric Water Heater
- 2. Conventional Boiler
- 3. Solar Hot Water Systems

Ecoforce Series delivers heat through a heating distribution system, such as radiators,underfloor heating, fan coils, or air conditioners, for reliable heating, cooling, and domestic hot water throughout the seasons. Depending on the season and air temperature, the heat pump automatially adjusts and operates optimally in the heating or cooling modes for optimal energy savings.

Suits a wide variety of applications, including space heating, domestic hot water for residential and commercial projects.



STERILIZING MODE

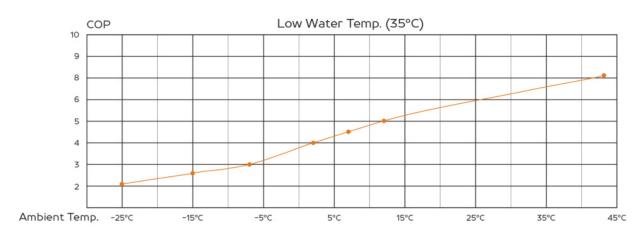
Thanks to its ability to reach temperatures as high as 75°C, this cutting-edge product eliminates harmful Legionella bacteria and viruses, ensuring the highest level of water safety.

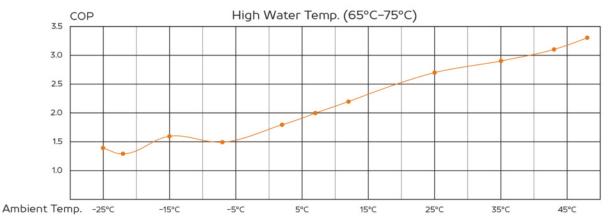
Invest in your health and your family's well-being with our state-of-the-art heat pump. Experience the unparalleled convenience, energy efficiency, and superior performance that this product offers.

Don't compromise on safety and hygiene when it comes to your water supply. Choose our heat pump with its exceptional sterilizing mode, and enjoy the reassurance of pristine water quality every day.

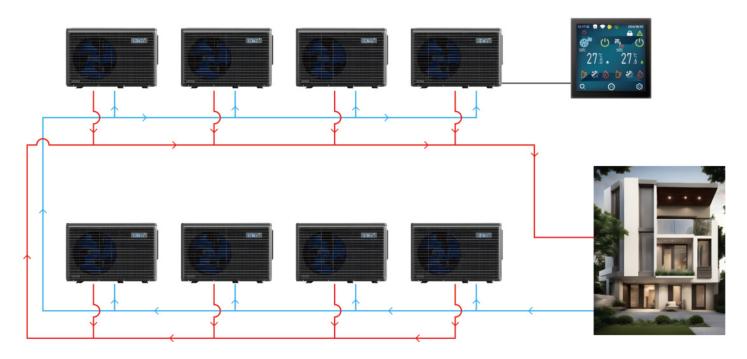


PERFORMANCE CHARTS





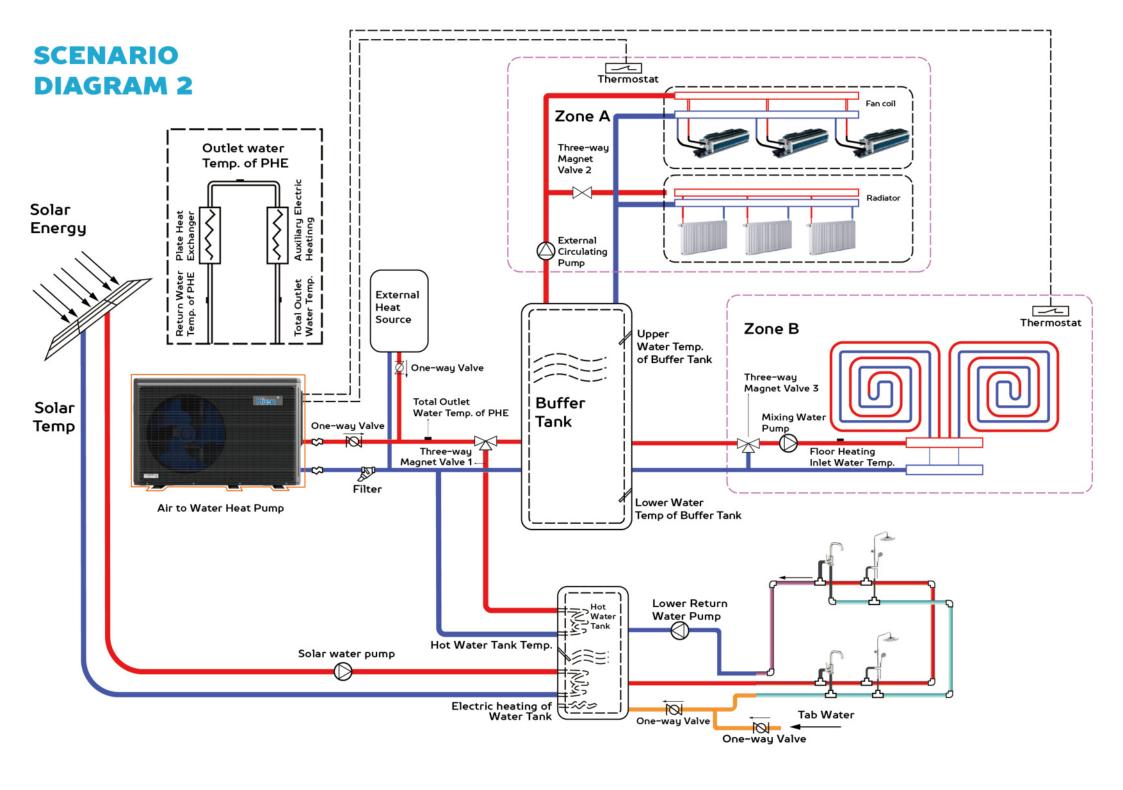
CASCADE SYSTEM DIAGRAM



- · Maximum of 8 units can be controlled with one touch screen.
- · Connect 1 master to 7 slaves for networking.
- · Can be operated independently or in group.
- · Automatically control the start and stop of the machine based on water temperature.
- · Multiple heat pumps can work together to improve the efficiency and energy efficiency of the system.



SCENARIO Thermostat **DIAGRAM 1** Fan coil Zone A Solar Energy Three-way Magnet Valve 2 Radiator Inverter External Circulating Battery Pump External Heat 7 Source Thermostat Zone B Upper Water Temp. of Buffer Tank One-way Valve Three-way Magnet Valve 3 **Total Outlet** Buffer Water Temp. of PHE Mixing Water Tank One-way Valve Pump Three-way Floor Heating Magnet Valve 1 Inlet Water Temp. Filter Lower Water Air to Water Heat Pump Temp of Buffer Tank Outlet water Temp. of PHE Auxiliary Electric Heatinng Lower Return Hot Water Tank Water Pump Hot Water Tank Temp. Return Water Temp. of PHE Total Outlet Water Temp. Electric heating of One-way Valve Water Tank Tab Water M One-way Valve



SPECIFICATIONS















Dc Inverter Heat Pump			WLRK-8IBM/B3	WLRK-10IBM/B3	WLRK-12IBM/B3	WLRK-14IBM/B3	WLRK-12IIBM/B3	WLRK-14IIBM/B3	WLRK-16IIBM/B3
Cooling Conditions			Outdoor Air Temperature : DB 35°C/ WB 24°C, Indoor Water Temperature Inlet/Outlet : 23°C / 18°C.						
Rated Cooling Capacity		kW	1.5 ~ 5.8	2.2 ~ 7.6	2.8 ~ 13.0	3.3 ~ 14.2	2.8 ~ 9.5	3.3 ~ 11.3	3.8 ~ 13.2
Cooling Power Input		kW	0.34 ~ 2.15	0.51 ~ 2.81	0.64 ~ 3.90	0.75 ~ 4.40	0.64 ~ 3.51	0.75 ~ 4.18	0.86 ~ 4.89
Current Input Range		А	1.55 ~ 9.83	2.33 ~ 12.88	2.93 ~ 16.92	3.43 ~ 19.17	1.12 ~ 5.79	1.25 ~ 6.92	1.42 ~ 8.16
Cooling EER		W/W	4.4 ~ 2.7	4.4 ~ 2.7	4.4 ~ 3.33	4.4 ~ 3.22	4.4 ~ 2.7	4.4 ~ 2.7	4.4 ~ 2.7
Heating Conditions			Outdoor Air Temperature : DB 7°C / WB 6°C , Indoor Water Temperature Inlet/Outlet : 30 °C / 35 °C .						
Rated Heating Capacity		kW	3.3 ~ 8.6	3.8 ~ 9.9	4.3 ~ 12.0	4.8 ~ 14.0	4.35 ~ 12.7	4.86 ~ 14.8	5.3 ~ 16.8
Heatinging Power Input		kW	0.55 ~ 1.88	0.64 ~ 2.19	0.72 ~ 2.60	0.81 ~ 3.04	0.73 ~ 2.78	0.81 ~ 3.31	0.88 ~ 3.67
Current Input Range		А	2.51 ~ 8.59	2.93 ~ 10.51	3.30 ~ 11.32	3.71 ~ 13.23	1.21 ~ 4.59	1.35 ~ 5.52	1.48 ~ 6.15
Heating COP		w/w	6.02 ~ 4.58	6.02 ~ 4.52	6.02 ~ 4.61	6.02 ~ 4.60	6.02 ~ 4.58	6.02 ~ 4.58	6.02 ~ 4.58
Heating Conditions			Outdoor Air Temperature : DB 7°C / WB 6°C , Indoor Water Temperature Inlet / Outlet : 50°C / 55°C						
Rated Heating Capacity		kW	3.1 ~ 7.8	3.5 ~ 9.6	3.9 ~ 11.4	4.4 ~ 13.1	4.0 ~ 11.6	4.5 ~ 13.5	4.9 ~ 15.3
Heatinging Power Input		kW	0.67 ~ 2.67	0.76 ~ 3.29	0.85 ~ 3.91	0.96 ~ 4.49	0.87 ~ 3.98	0.98 ~ 4.63	1.12 ~ 5.25
Current Input Range		А	3.12 ~ 12.21	3.52 ~ 15.13	3.93 ~ 17.88	3.16 ~ 21.3	1.45 ~ 6.67	1.68 ~ 7.68	1.86 ~ 8.96
Heating COP		w/w	4.63 ~ 2.92	4.63 ~ 2.92	4.63 ~ 2.92	4.63 ~ 2.92	4.63 ~ 2.92	4.63 ~ 2.92	4.63 ~ 2.92
Voltage		V/Hz	220V ~ 240V ~ /50Hz			380V ~ 420V 3N ~ /50Hz			
Rated Water Flow		m³/h	1.48	1.7	2.06	2.4	2.18	2.55	2.89
Rated of Waterproof		/	IPX4						
Control Mode		/	Heating , Cooling , DHW , Heating + DHW , Cooling + DHW						
Refrigerant		/	R290	R290	R290	R290	R290	R290	R290
Compressor	Form	/	Double - rotor	Double - rotor	Double - rotor	Double - rotor	Double - trotor	Double - rotor	Double - rotor
	Brand	/	Highly	Highly	Highly	Highly	Highly	Highly	Highly
Net	Size	mm	1200*470*765	1200*470*765	1370*500*935	1370*500*935	1370*500*935	1370*500*935	1370*500*935
Weight		kg	100	110	130	138	135	142	148
Sound Pressure Level		dB (A)	≪55						
Fan	Form	/	Inteligent variable frequency fan motor						
Operation ambient temperature		°C	-25 ~ 43						
Max.Outlet Water Temperature		°C	75						
Inlet Pipe Diameter		mm	G1"	G1"	G1"	G1"	G1"	G1"	G1"
Outlet Pipe Diameter		mm	G1"	G1"	G1"	G1"	G1"	G1"	G1"
Packing Size		mm	1270*555*808	1270*555*808	1440*570*1080	1440*570*1080	1440*570*1080	1440*570*1080	1440*570*1080
Wifi Function		/	√	√	4	√	√	4	4
ErP Energy Class		/	35°C A+++/ 55°C A++						
Test Standard /		/	EN 14825						

