

**ZHEJIANG HIEN NEW ENERGY
EQUIPMENT CO., LTD.**

DC Inverter Air to Water Heat Pump

Heating + Cooling + DHW

Hien[®]

Hien[®]



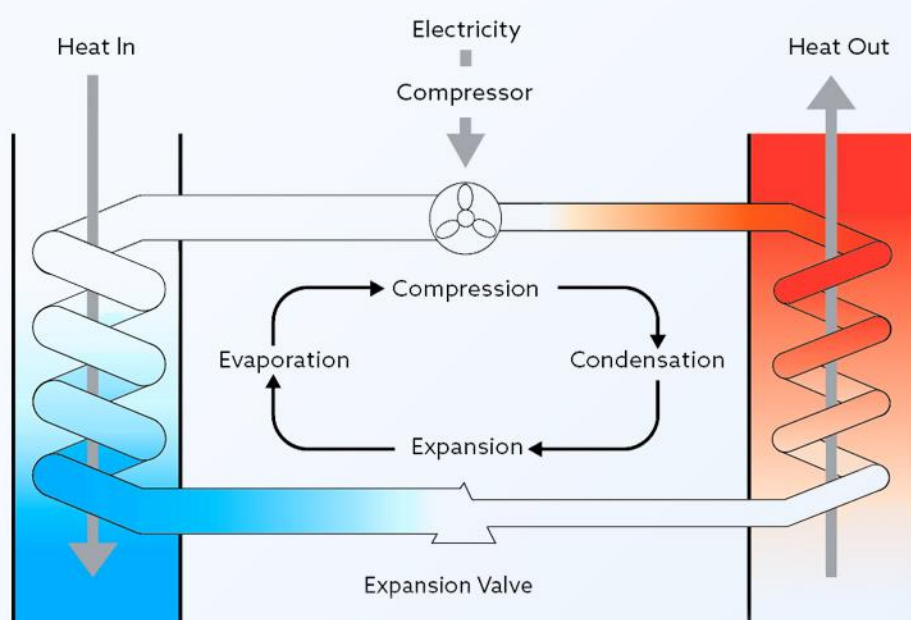
Comfort for your home

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What are DC Inverter Air to Water Heat Pumps?

In brief, air source heat pumps utilize the heat energy in the air and convert it into usable energy to heat homes. Hien heat pumps are 'air to water' systems (as opposed to 'air to air' heat pumps) which means that they capture heat energy from the air and transfer this into 'wet' heating systems, such as radiators or underfloor heating.

CloverLife heat pumps are monobloc units. The heat pump draws air in and transfers it over an evaporator where R32 is exposed to this air. The liquid refrigerant, which has a low boiling point, boils off to a gas and absorbs the latent heat energy with the air. The gas then compressed which increases the heat content in the referee before passing through a heat exchanger. Here, the gas conditions back to a liquid while transferring the heat to the water of the heating system. The liquid refrigerant is then re-circulated through the evaporator and the cycle is repeated.



heat pump work





CloverLife Series Features:

- 1 . Function: heating + cooling + hot water -all-in-one
- 2 . Voltage: 220v-240v -inverter - 1n or 380v-420v -inverter - 3n
- 3 . Compact units available from 6kw to 22kw
- 4 . Using R290 green refrigerant
- 5 . Super low noise as low as 50 dB(A)
- 6 . Energy-saving up to 80%
- 7 . Stable running at -25°C ambient temperature
- 8 . Adopted twin-rotor Panasonic inverter compressor
- 9 . High efficiency A+++energy level
10. Wi-Fi app smart controlled
11. 8 optional languages



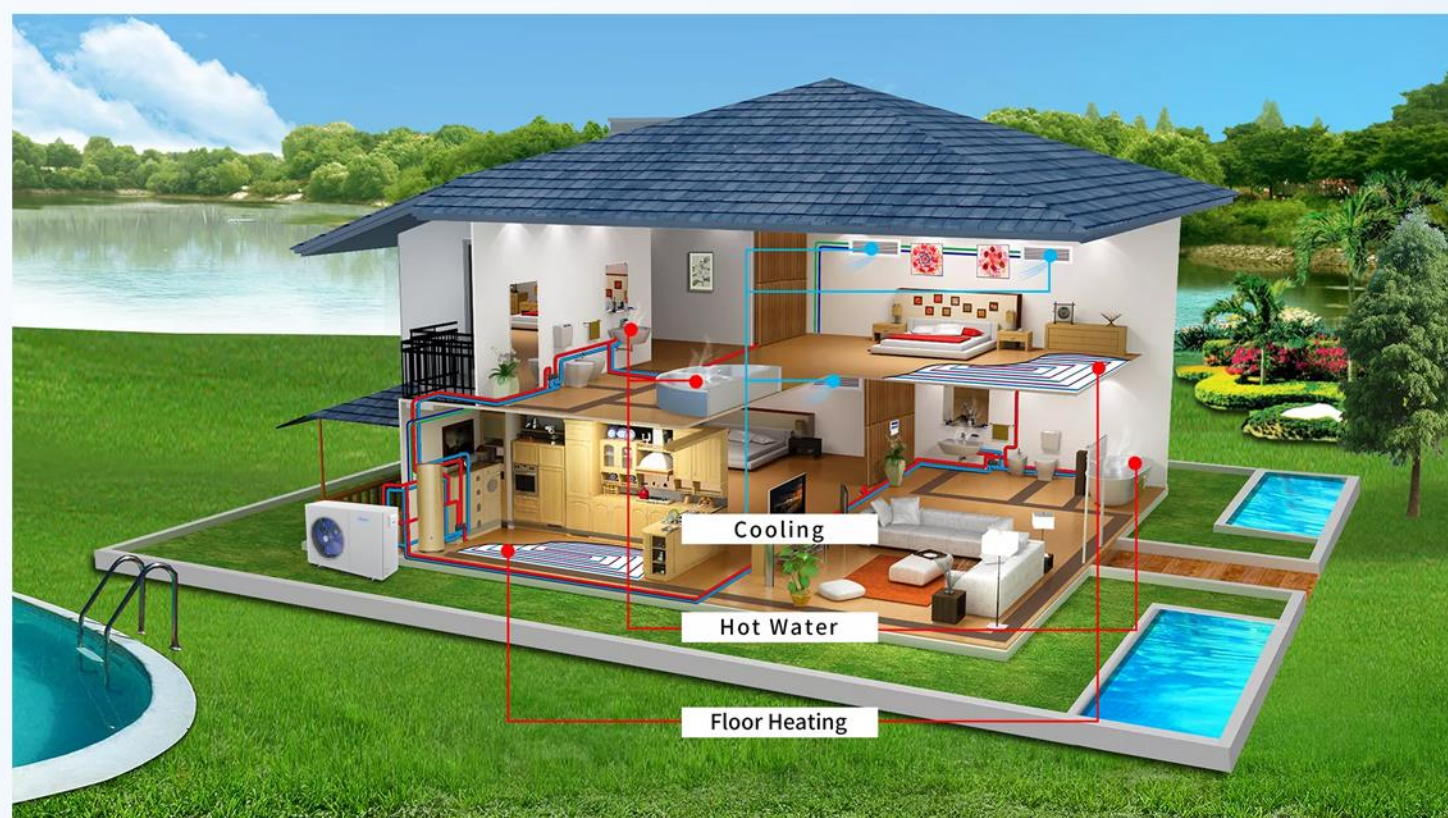


The CloverLife Series can be operated in combination with:

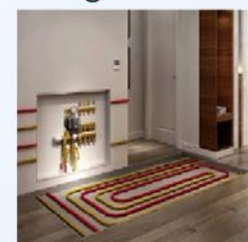
- 1) Electric Water Heater
- 2) Conventional Boiler
- 3) Solar Hot Water Systems

The CloverLife Series delivers the heat through a heating distribution system, such as radiators or underfloor heating or fan coils or air conditioner for reliable heating, cooling and domestic hot water through the seasons. Depending on the season and air temperature, the heat pump automatically adjusts and operates optimally in the heating or cooling modes for optimal energy-saving.

The CloverLife Series suits a wide variety of applications, including space heating, domestic hot water for residential and commercial projects.



35°C



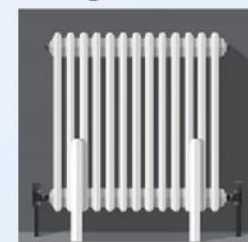
Floor Heating

75°C



Domestic Hot Water

55°C



Radiator Heating

12°C



Fan Coil Cooling



Panasonic EVI DC Inverter Compressor

Being the smart heat pumps, CloverLife perfectly combines eco-friendly R290 refrigerant and advanced new technology of EVI DC inverter to produce 60°C domestic hot water as well as stable house heating even under -25°C low temperature condition reducing power consumption and improve the heating capacity.



Flabellum & Fan Motor

Silent Running, In addition to choosing a high-quality, stable and low noise compressor. CloverLife utilizes a fully upgraded internal design, perfectly keeps an ultra-low operating noise of less than 50dB(A) at a distance of 1-meter, make you in a peaceful and comfortable green life.



Danfoss Plate Type Heat Exchanger

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



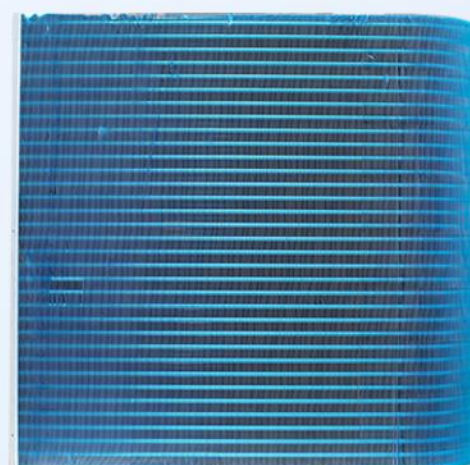
Main Control Board

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



Finned Heat Exchanger

Hydrophilic Aluminium Finned Evaporator. The finned heat exchanger is with corrugated copper tubes to greatly improve thermal efficiency, and with hydrophilic coating surface for sufficient defrosting.



Product parameters



Dc Inverter Heat Pump		New	WLRK-8IBMB1	WLRK-10IBMB1	WLRK-12IBMB1	WLRK-14IBMB1	WLRK-12IIBMB1	WLRK-14IIBMB1	WLRK-16IIBMB1
Cooling Conditions			Outdoor Air Temperature 35℃ DB / -, Indoor Water Tem.Inlet/Outlet :12℃/7℃.						
Rated cooling capacity		kW	1.5↘5.8	2.2↘7.6	2.8↘9.4	3.3↘11.2	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↘3.48	0.75↘4.14	0.64↘3.51	0.75↘4.18	0.86↘4.89
Cooling Running Power		A	1.55↘9.83	2.33↘12.88	2.93↘15.9	3.43↘18.91	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↘2.7	4.4↘2.7	4.4↘2.7	4.4↘2.7	4.4↘2.7
Heating Conditions			Outdoor Air Temperature 7℃/6℃, Indoor Water Tem.Inlet/Outlet: 30℃/35℃.						
Rated heating capacity		kW	3.3↘8.6	3.8↘10.5	4.3↘12.5	4.8↘14.3	4.35↘12.7	4.86↘14.8	5.3↘16.8
Heatinging Power Input		kW	0.55↘1.88	0.64↘2.30	0.72↘2.73	0.81↘3.13	0.73↘2.78	0.81↘3.31	0.88↘3.67
Heatinging Running Power		A	2.51↘8.59	2.93↘10.51	3.30↘12.48	3.71↘14.31	1.21↘4.59	1.35↘5.52	1.48↘6.15
Heating SCOP		W/W	6.02↘4.58	6.02↘4.58	6.02↘4.58	6.02↘4.58	6.02↘4.58	6.02↘4.58	6.02↘4.58
Heating Conditions			Outdoor Air Temperature 7℃/6℃, Indoor Water Tem.Inlet/Outlet: 50℃/55℃						
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
Heatinging Running Power		A	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 SCOP		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 - Inverter- 1N				380V-420V - Inverter- 3N		
Rated Heating water Temperature		℃	Hot water: 55℃ / Heating:45℃ / Cooling:12℃						
Rated Water Flow		m³/h	1.48	1.81	2.15	2.46	2.18	2.55	2.89
Rated of Waterproof		/	IPX4						
Control Mode		/	Heating,Cooling,DHW,Heating+DHW,Cooling+DHW						
Motherboard Control Signal Output		/	Linked switch,RS485,Electric 3-way valve,Water pump.						
Refrigerant		/	R290	R290	R290	R290	R290	R290	R290
Compressor	Form	/	Double-rotor type	Double-rotor type	Double-rotor type	Double-rotor type	Double-rotor type	Double-rotor type	Double-rotor type
	Quantity	/	1	1	1	1	1	1	1
	Brand	/	Highly Inverter	Highly Inverter	Highly Inverter	Highly Inverter	Highly Inverter	Highly Inverter	Highly Inverter
Outdoor unit	Net size	mm	1150*420*770	1150*420*770	1150*420*770	1350*480*930	1150*420*770	1350*480*930	1350*480*930
	Weight	kg	95	96	103	106	105	108	112
	Nosie Level	dB(A)	≤53						≤55
Fan	Form	/	Inteligent variable frequency fan motor						
Operation ambient temperature		℃	(-25℃ -- 43℃)						
Water tank heat exchanger		Liter	/	/	/	/	/	/	/
Water tank working pressure		MPa	≤0.8						
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	1250*525*975	1250*525*975	1250*525*975	1450*550*1000	1250*525*975	1450*550*1000	1450*550*1000
WI-FI function		/	√	√	√	√	√	√	√
ErP Energy class		/	35℃A+++ / 55℃A++						