Commercial Water Source Heat Pump

ECO

Building intelligent control to improve management reliability

Modbus is an open protocol that is widely used, especially in BMS building control systems. The unit can be connected to the BMS system through the Modbus protocol to realize remote control of multiple air cooling and heat pump modules.

Professional compressor for heat pump water heater: Adopt Copeland or Panasonic top quality scroll compressor specially for heat pump water heater, with much wider operation range for different ambient temperature. Special design for high suction & exhaust temperature, and system high condensing temperature & pressure, Higher efficiency, Lower noise, Higher reliability, Longer service life.

Multiple protection functions

To ensure the safe operation of the system, a modular structure is adopted, and the units are started in stages to reduce the impact of the starting current of the units on the power grid. The unit is equipped with high and low pressure switches, antifreeze protection devices, water flow switches, overload protection devices, power supply phase sequence protection devices, etc., and is equipped with an operation control device. When a fault occurs, the controller will automatically alarm in real time.

Water side heat exchanger

High-efficiency shell & coil heat exchanger for hot water side is adopted, with water in the tube and fluorine outside the tube. High heat exchange efficiency, small size, excellent water quality, strong antifreeze ability, stable and reliable.

6℃ ~ 30℃

Wide running range

Heat source side temperature from 6℃ to 30℃ .

Gas-liquid separator

A large gas-liquid separator is used to prevent liquid from entering the compressor under low temperature conditions, ensuring more reliable system operation.

Wifi function for option

Control your heat pump in your smartphone anywhere, anytime.

R410A refrigerant or R134A refrigerant, ODP=0

Note: R410A for WS60 series; R134A for WS80 series

R410A refrigerant

R134A refrigerant

info@versolgroup.com www.versolgroup.com

SANHUA Electronic expansion valve

High precision electronic expansion valve: use electronic expansion valve for controlling, reach 500 steps adjustment, adjust super heat degrees accurately, achieve high efficiency operation system.

SANHUA

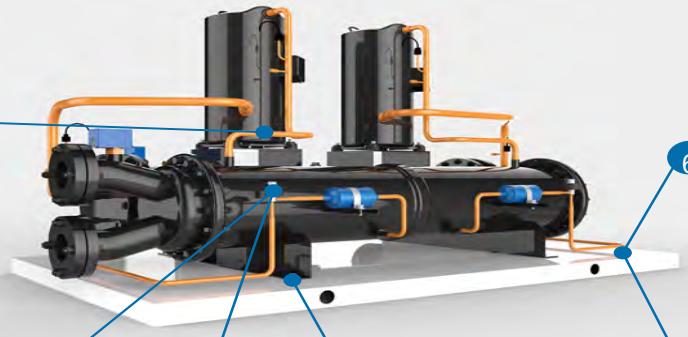
Modular design, more flexible installation

Unit modules of different capacity specifications can be freely combined, and a maximum of 16 units can be connected in parallel, with strong compatibility and scalability. According to the site characteristics of the installation site, the user can choose a variety of combination connection methods to realize the parallel use of 1-16 modules, and the maximum cooling capacity is as high as 2080kW, fully meeting different needs. The air-cooled module units of the same system are started in stages and run in a balanced manner, reducing the impact of the starting current of the units on the power grid.

Master-Slave

Electric control

The electric control adopts famous and high-quality components, and the quality is guaranteed; at the same time, the electric control box is set on the front, which is quick to install and easy to maintain.



1 R-134A REFRIGERANT

The new environmental refrigerant R134A is safety and environmental protection. The system pressure can be lower than common ones, which can effectively increase the heat pump working range for heating the water temperature to highest 80 degrees Celsius..

6

Locker with key, for safe of control for professional engineers

2

PVC thermal contraction protection for electronic expansion valve, so that the EEV can work normally with long time.

3

Electronic expansion valve, high precision, reach 500 steps adjustment, adjust the super heater degrees accurately, achieve high efficiency operation system.

4

Stainless steel 304 for all fasteners and other important parts, not easy to rust and corrosion, more durable.

5

Schneider AC Contactor and Relay, capacity selection 1.5 times according to the heat pump current, to ensure the stable operation for long time.

info@versolgroup.com www.versolgroup.com

Water Source Heat Pump Water Heater ET-CH Standard

Model	/	ET8I-CH	ET10I-CH	ET12I-CH	ET20I-CH	ET12-CH	ET20-CH	ET28-CH	ET20-CH	ET55-CH	ET80-CH	ET120-CH	ET190-CH	ET240-CH
Rated Heating Capacity	KW	7.9	9.8	11.8	19.8	11.9	19.8	28.1	39.5	54.3	79.2	118.85	188.8	238.4
Rated Power	KW	1.64	2.03	2.45	4.09	2.45	4.09	5.79	8.18	11.28	16.45	24.61	38.92	49.36
Rated Current	A	8.77	11.53	13.92	23.24	4.62	7.77	10.99	15.54	21.97	31.12	46.74	73.92	93.75
Maximum Power	KW	2.21	2.71	3.25	5.42	3.28	5.52	7.81	11.04	15.22	22.14	33.22	52.51	66.63
Maximum Current	A	11.82	15.32	17.38	30.79	6.23	10.48	14.83	20.97	29.65	41.99	63.09	99.72	126.55
Performance Coefficient	COP	4.82	4.83	4.82	4.84	4.86	4.84	4.85	4.83	4.81	4.81	4.83	4.85	4.83
Rated Hot Water Produce Capacity	L/H	172	215	258	430	258	430	602	860	1182	1720	2580	4085	5150
Rated Hot Water Output Tempemperature	℃	55												
Maximum Hot Water Output Temperature	℃	60												
Power Supply		1N 220V~240V/50Hz				3N 380V~420V/50Hz								
Compressor	Type	Rotor Type		Hermetic Scroll Type										
	Start Mode	Directly Start(Soft Start For Option)												
Hot Water Side Heat Exchanger	Type	Shell & Tube Heat Exchanger Or Tube In Tube Heat Exchanger												
	Water Flow M^3/h	1.4	1.8	2.1	3.4	2.1	3.4	4.8	6.9	9.4	13.8	20.6	32.7	41.2
Heat Source Side Heat Exchanger	Type	Plate Type Heat Exchanger		Tube In Tube Heat Exchanger							Shell & Tube Heat Exchanger			
	Water flow M^3/h	1.1	1.4	1.6	2.7	1.6	2.7	3.8	5.4	7.3	10.7	16.1	25.5	32.3
Refrigerant	Type	R410A												
Noise	≤DB(A)	51	51	52	55	52	55	58	58	62	64	68	72	73
Weight	KG	55	58	65	93	65	93	128	180	220	700	780	1400	1500
Unit Dimensions	MM	956x556x680							1050x840x800		1650x1050x1200		2000x1100x1250	

Hot Water Heating Standard Condition: Hot Water Side Initial Water Temperature 15℃ , Final Water Temperature 55℃ ;
Heat Source Side Water Input Temperature 15℃ .

* Dimensions Are Indicative Subject To Changes As Per R&D Updates

info@versolgroup.com www.versolgroup.com

High temperature Water source heat pump water heater (ET-CH High Temp

Model			ET8I-CH	ET14I-CH	ET8-CH	ET14-CH	ET19-CH	ET28-CH	ET40-CH	ET50-CH	ET65-CH	ET85-CH	ET100-CH	ET130-CH
Rated Heating Capacity		KW	8.5	14	8.5	14	19	28	40	50	66	84	100	132
Rated Power		KW	1.91	3.10	1.90	3.07	4.21	6.19	8.97	11.29	14.83	18.96	22.42	29.86
Rated Current		A	8.36	13.61	3.57	5.77	7.92	11.65	16.86	21.22	27.88	35.65	42.15	56.14
Maximum Power		KW	2.44	3.97	2.43	3.93	5.39	7.93	11.48	14.45	18.98	24.27	28.70	38.23
Maximum Current		A	11.35	18.48	4.60	7.43	10.19	14.99	21.70	27.30	35.88	45.87	54.24	72.25
Performance Coefficient		COP	4.46	4.51	4.47	4.56	4.51	4.52	4.46	4.43	4.45	4.43	4.46	4.42
Rated Hot Water Yields	△ t40	L/H	183	301	183	301	409	602	860	1075	1419	1806	2150	2838
	△ t60	L/H	122	201	122	201	272	401	573	717	946	1204	1433	1892
Setting Water Temperature		℃	70℃ (Default) 28-80℃ (Adjustable)											
Power Supply			1N 220V/50Hz (Special power supply for option)		3N 380V/50Hz(Special Power Supply For Option)									
Compressor	Type		Hermetic Scroll Type											
	Start mode		Direct(Soft Start For Option)											
Application Side Heat Exchanger	Type		Shell & Tube Heat Exchanger (Tube In Tube Heat Exchanger Or Plate Type Heat Exchanger For Option)						Shell & Tube Heat Exchanger Or Tube In Tube Heat Exchanger					
	Water Flow	M^3/h	1.5	2.4	1.5	2.4	3.3	4.8	6.9	8.6	11.4	14.4	17.2	22.7
Heat Source Side Heat Exchanger	Type		Shell & Tube Heat Exchanger Or Tube In Tube Heat Exchanger											
	Water flow	M^3/h	1.1	1.9	1.1	1.9	2.5	3.8	5.4	6.7	8.8	11.3	13.4	17.7
Refrigerant	Type		R134A											
Noise		DB(A)	≤53	≤55	≤55	≤55	≤58	≤58	≤62	≤65	≤65	≤70	≤75	≤75
Net weight		KG	68	95	65	95	135	195	320	480	885	985	1180	1210
Gross weight		KG	78	105	75	105	145	215	340	515	920	1020	1215	1245
Unit dimensions		MM	956x556x680					1050x840x800		1650x1050x1200			2000x1100x1250	

Hot Water Heating Standard Condition: Hot Water Side Initial Water Temperature 15℃, Final Water Temperature 75℃;
Heat Source Sside Water Input Temperature 15℃.

* Dimensions Are Indicative Subject To Changes As Per R&D Updates

Water Heating & Cooling Solutions

Solar Water Heaters

Heat changers

Storage Calorifiers

Heat Pump

Hot Water Boilers

Gas Fired Calorifiers

Electric Calorifiers

Steam Boilers

Corporate offices

Sales offices

Versol Poland | Versol Italy | Versol UK | Versol USA | Versol Middle East | Versol Australia |Versol Canada | Versol india