

POWER WORLD

THE POWER TO PROMOTE WORLD DEVELOPMENT!



HOT WATER HEAT PUMP

Save 75% on your daily energy costs



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2023 PRODUCT CATALOGUE



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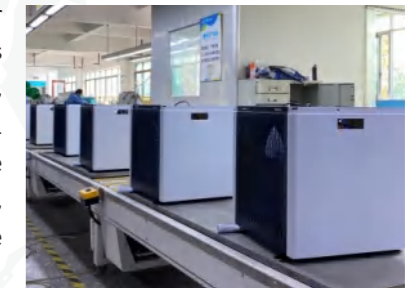
Factory Advantages



POWER WORLD has strong technical and R&D strength, a complete heat pump industry chain, an industrial park of 40,000 square meters, 8 flexible production lines, an annual output of more than 100,000 sets of heat pump units, and 4 comprehensive laboratories for air source heat pumps, and the comprehensive laboratory complies with EU EN14511 standard, and laboratory performance experiments meet national GMPI standards. The scale, technology, and quantity are ahead of the industry. It is one of the largest air source heat pump manufacturers in China.

Technology Strength

We always focus on technological innovation and quality management. At present, our company has 35 senior technical engineers and 500+ experienced production workers and has obtained 400+ product patents. The products have passed CE, IEC, ERP, SAA, CB, ROHS, MCS, and other certifications, and passed the European EN14825 and EN14511 energy efficiency certificates. The EHPA requirements are enforced. In addition, because our heat pumps have the advantages of safety, high efficiency, environmental protection, low energy consumption, etc., POWER WORLD has become an energy solution enterprise recommended by the Chinese government to replace traditional boiler projects.



ABOUT POWER WORLD

Background

POWER WORLD Machinery Equipment Co., Ltd. was established in 2004, focusing on heat pump for 18 years, listed company with stock code 870092.

POWER WORLD is a high-tech enterprise focusing on the R&D, production, and sales of air source heat pump products. The headquarter is located in Shenzhen, a developed commercial city. The factory is located in Dongguan, a prosperous manufacturing industry, and there are branches in various places. The main products include air source EVI DC Inverter house heat pumps, swimming pool heat pumps, hot water heat pumps, 80°C high-temperature hot water heat pumps, industrial and agricultural heat pump dryers, etc. Among them, the export volume of EVI DC inverter house heat pump and swimming pool heat pump has always been among the best, ranking first in China for many years.

- Top 10 Air Source Heat Pump Brands in China
- Top 10 brands of water heaters in Guangdong
- Top 10 outstanding brands in China's heat pump industry
- Outstanding industrial and agricultural drying brands in China's heat pump industry
- Outstanding contribution unit of coal-to-clean energy
- Air source Northern heating demonstration award in China
- "Leading Brand in China's Heat Pump Industry" for 6 consecutive years.
- China Home Appliance Industry "Plug" Award
- National High-tech Enterprise
- Leading Brand of air source heat pumps in China



Market Strategy



After more than ten years of technological innovation and market strategy development, POWER WORLD's products are not only popular in China as the Top 10 leading brands in China's air source heat pump industry but also in more than 60 countries and regions and have established more than 1000 perfect sales and service networks around the world, providing customers with professional and competitive price energy solutions.

Company Vision

Build a world-class brand enterprise and become a power to promote world development. POWER WORLD has been focusing on continuous technological innovation to improve the quality of products and services, and is committed to providing customers with high-quality air source products and the best energy solutions.



40,000 m²
500+
400+

FOUR COMPREHENSIVE LABORATORIES

- Power world has 4 comprehensive laboratories that meet the EU EN14511 standard, leading the industry in scale, technology and quantity.



CERTIFICATES & AWARDS

- The following certificates only represent some of POWER WORLD.



CORPORATE HISTORY

2004

POWER WORLD was established, research and development, production and sales of air source heat pumps.

2007 — 2008

Obtained ISO9001:2000 quality management certification.

Obtained CCTV, Guangdong Satellite TV, Shenzhen City, and other authoritative media reports, the top 200 most growing enterprises.

2011 — 2012

Optimized and increased air source testing equipment, improved laboratory testing capabilities; Refreshed the record of double sales compared to 2010;

The first batch of shortlisted national energy-saving projects.

2013 — 2014

Won the most potential Shenzhen brand honorary title of "Shenzhen Famous Brand"; Won the 2014 China Home Appliance Industry "Plug" Award.

2017 — 2018

Won the "2017 Observing Contract and Valuing Credit" award;

Won the five-star after-sales service system certification;

Won the "Industry Leading Brand" award by China Heat Pump Association;

Power World and Danfoss reached a "strategic cooperation";

Obtained agricultural machinery subsidies for drying products;

2005 — 2006

Obtained more than 40 patents.

Recognized as a high-tech enterprise and independent innovation product in Shenzhen.

2009 — 2010

Obtained the EU CE, China Compulsory Certification 3C Certification, and other authoritative certifications; Has 350 service outlets nationwide.

2015 — 2016

Won the honorary title of "National High-tech Enterprise";

The product passed the energy-saving certification;

Won the honorary title of "Top Ten Brands of Guangdong Water Heaters", on November 29th Dongguan Branch of POWER WORLD was established and became a listed company(New OTC Market), stock code 870092.

2020 — 2022

Won the Excellent Industrial and Agricultural Drying Brand in China's Heat Pump Industry;

Consecutively Recognized as "China's High-tech Enterprise";

Won the Outstanding Brand Award in China's Drying Industry;

Won the China Heat Pump Outstanding Contribution Award;

Won the China Heat Pump Association Industry Leading Brand Award.

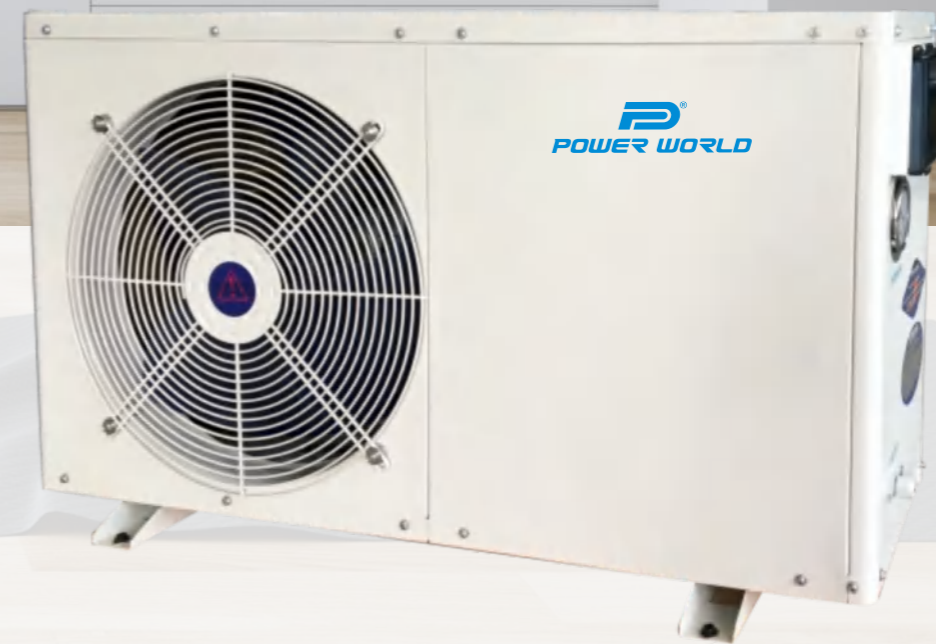
HOT WATER HEAT PUMP

- * RESIDENTIAL SERIES
- * ALL-IN-ONE WATER HEATERS
- * COMMERCIAL SERIES
- * 80°C HIGH-TEMPERATURE



RESIDENTIAL SERIES

HOT WATER HEAT PUMP



Operating Temps
-7°C ~43°C



R410A Refrigerant



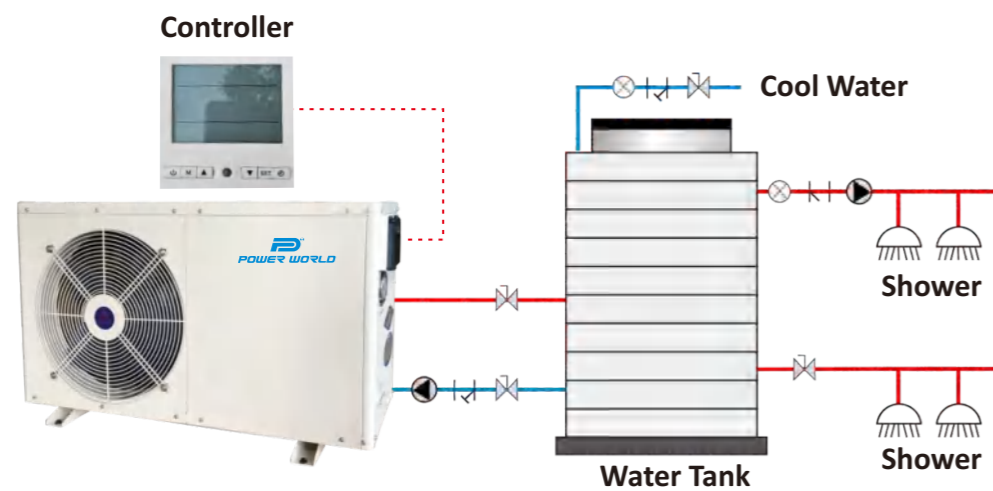
Max outlet water 60°C

RESIDENTIAL SERIES

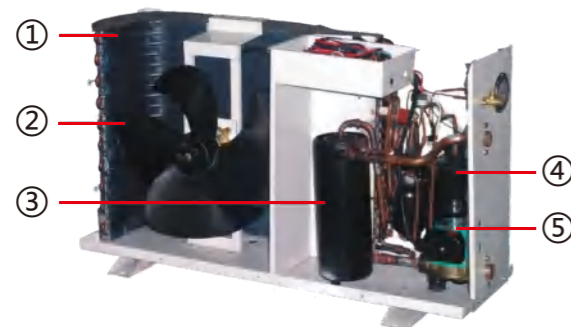
This series of hot water heat pumps are specially designed for residential/apartment sanitary hot water. Compared with ordinary air source heat pumps, this unit has a built-in circulating pump, which is easy to install and reduces costs.

- Four-way valve for automatic defrosting
- High efficient tube in shell heat exchanger
- Panasonic rotary compressor guarantees unit running stably
- Built-in water pump, directly connected to the water tank, easy to install
- Easy and clear LCD control panel

INSTALLATION DIAGRAM



INSIDE APPEARANCE



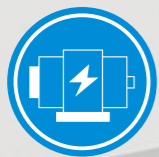
- ① evaporator
- ② fan blade
- ③ water-refrigerant heat exchanger
- ④ compressor
- ⑤ circulation pump

Model	PW010-KFXRS/IMT	PW015-KFXRS/IMT	PW020-KFXRS/IMT	PW030-KFXRS/IMT
Heating capacity (kW)	3.5	4.9	6.8	9.5
Input power (kW)	0.98	1.34	1.87	2.64
COP	3.57	3.66	3.64	3.60
Rated current (A)	4.5	6.2	8.6	12.1
Max input power (kW)	1.27	1.74	1.87	2.64
Max current (A)	5.9	8.1	11.2	15.7
Rated outlet water temperature (°C)	55	55	55	55
Highest outlet water temperature(°C)	60	60	60	60
Power supply	220V/1ph/50Hz			
Anti-electric shock rate	I	I	I	I
IP Grade (Level of protection)	IPX4	IPX4	IPX4	IPX4
Refrigerant	R410A			
Operation Ambient temp (°C)	-7~43°C			
Production capacity (L/H)	75	105	146	204
Diameter of pipe (mm)	Dn20	Dn20	Dn20	Dn25
water circulation (m³/H)	1	2	2	2
Water pressure drop (kPa)	20	25	25	30
Noise (dB(A))	≤50	≤50	≤50	≤51
Net weight/Gross weight(kg)	53/58	55/60	59/64	65/71
Body size(W*D*H)	820×320×520	960×350×550	960×350×550	1030×350×625
Loading quantity (20GP/40GP/40HQ)	90/192/192	90/192/192	90/192/192	90/192/192
Condenser type	High efficiency tube in shell heat exchanger			
Operating water temperature (°C)	9~60°C			
Compressor brand	Panasonic			
Four-way valve brand	Sanhua			
Expansion valve brand	Sanhua			
Water pump built in	wilo			
Test condition: Inlet water temperature 15°C, Outlet water temperature 55°C, Dry bulb temperature 20°C, Wet bulb temperature 15°C.				

Note:

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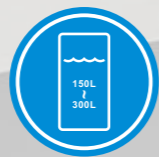
ALL-IN-ONE WATER HEATER



2KW~3KW



Ambient Temps
-7°C ~43°C



Tank capacity
150L~300L



Outlet water
9°C~60°C

ALL-IN-ONE WATER HEATER

All-in-one water heat pump is one of the most economical systems to heat the water for family usage-offering hot water in the bathroom and kitchen by using free renewable energy from the air. Its efficiency can be up to 3-4 times more than a conventional gas boiler or electrical heater.

WASTE HEAT RECYCLING

The standard heat exchanger of the hot-water heat pump enables direct connection to a second heat generator, such as a solar heating system or boiler.

AIR DEHUMIDIFICATION

Dehumidified air in the laundry room supports laundry drying and prevents moisture-induced damage.

CIRCULATING COOLING

The room air is extracted from the storage room or a wine cellar, subsequently cooled and dehumidified in the heat pump, and finally re-introduced into the room. Recreation rooms, boiler rooms, or utility rooms are ideal installation sites.

VARIABLE CHANGE OVER OF INTAKE AIR

A duct system with integrated bypass flaps allows for variable utilization of the heat contained in the outside air or room air for the production of hot water.



Schematic Diagram

- ① All in one heat pump
- ② Domestic water
- ③ Shower water
- ④ Washing water
- ⑤ Cold water inlet
- ⑥ Hot water outlet
- ⑦ Air outlet
- ⑧ Air inlet



Model	PW010-KZJRS (A)	
Rated heating capacity	2KW / 2.8KW	
Rated hot water(L/h)	43 / 65	
Rated input power(KW)	0.5KW / 0.7KW	
COP	4	
Rated temperature outlet(°C)	55°C	
Maxt temperature outlet(°C)	60°C/55°C	
Power supply	220V/1ph/50hz	
Compressor quantity(pc)	1	
Compressor type	GMCC Rotary	
Refrigerant	R134 A / R410A	
Noise (dB(A))	48	
Tank volume(L)	150L / 200L / 250L / 300L	
Case material	Galvanized steel	
Working area (°C)	-7~43°C	
Water connections(Inch)	G3/4"	
Diameter(mm)	φ570	φ640
Height(mm)	1758	1858
Net weight(kg)	75	95
Gross weight(kg)	88	112
Container loading qty	27/54/54	24/48/48
Measuring conditions	L(mm)	635
	W(mm)	635
	H(mm)	1800
Measuring conditions	Dry bulb 20°C Wet bulb 15°C,Inlet water 15°C Outlet water 55°C	

COMMERCIAL SERIES

HOT WATER HEAT PUMP



COMMERCIAL SERIES

Commercial Hot Water Heat Pumps adopt environmental-friendly refrigerant R410A. They are widely suitable for sanitary hot water in residential or commercial places. It can supply 55°C (Max 60°C) hot water stably 24 hours a day and works well in areas above -7°C.



Operating Temps
-7°C ~43°C



R410A
Refrigerant

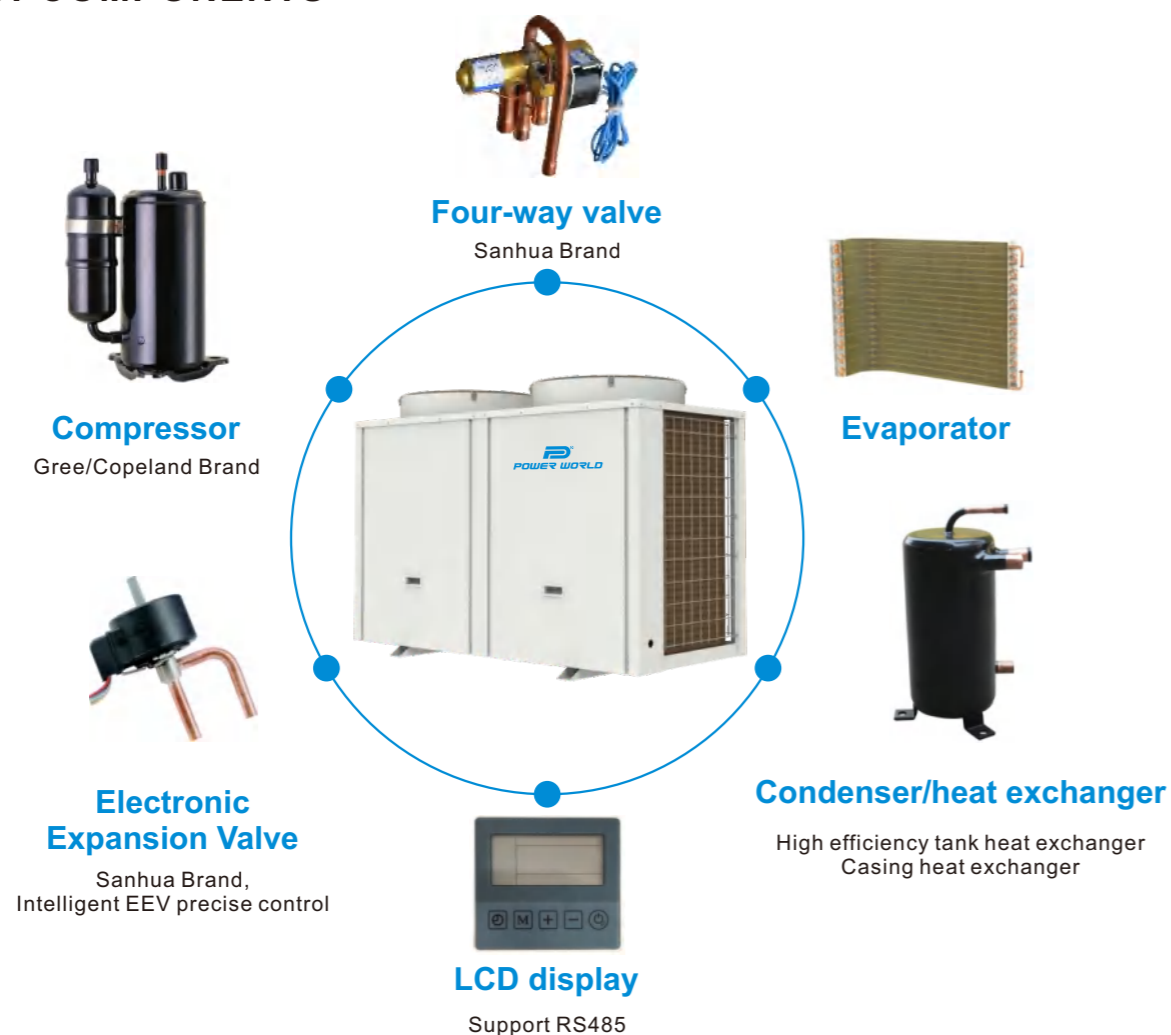


Max outlet
water 60°C



LCD
Display

KEY COMPONENTS



Model	PW030 -KFXRS	PW050 -KFXRS	PW100 -KFXRS	PW150 -KFXRS	PW200 -KFXRS	PW250 -KFXRS	PW300 -KFXRS	PW500 -KFXRS
Compressor brand	Gree	Copeland						
Four-way valve brand	Sanhua							
Expansion valve brand	Sanhua							
Heating capacity (kW)	10.8	19	39	54	78	96	108	172
Input power (kW)	2.8	4.5	9.4	12.8	18.2	22.6	25.5	40.5
COP	3.86	4.22	4.15	4.22	4.29	4.25	4.24	4.25
Rated current (A)	12.7	8.5	17.6	24	34.1	42.4	45	72.4
Max input power (kW)	4.2	6.8	14	18.3	24	33.5	36.5	59
Max current (A)	19	12.3	25	32.7	42	51	65.2	105.5
Rated outlet water temperature (°C)	55	55	55	55	55	55	55	55
Highest outlet water temperature (°C)	60	60	60	60	60	60	60	60
Power supply	220V/50Hz	380V/3N~/50Hz						
Anti-electric shock rate	I	I	I	I	I	I	I	I
IP Grade (Level of protection)	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Refrigerant	R410A							
Operation Ambient temp (°C)	-7~43°C							
Production capacity (L/H)	232	408	838	1161	1677	2064	2322	3698
Diameter of pipe (mm)	G3/4"	G1"	G1-1/2"	G1-1/2"	G2"	Dn65	Dn65	Dn65
water circulation (m³/H)	1.86	3.27	6.71	9.29	13.42	16.51	18.58	29.58
Water pressure drop (kPa)	70	70	75	85	90	80	70	70
Noise (dB(A))	55	56	60	63	65	66	68	78
Net weight/Gross weight(kg)	75	135	300	256	372	470	485	1300
Body size(W*D*H)	810×695×865	740×805×1165	1500×750×1075	1530×790×1100	1705×1005×1230	2005×1050×1400		2400×1300×2670
Loading quantity (20GP/40GP/40HQ)	18/78/78	14/28/56	6/14/28	6/14/28	6/12/12	5/10/10		/
Condenser type	High efficiency tank heat exchanger				Casing heat exchanger			
Operating water temperature (°C)	9~60°C							
Test condition: Inlet water temperature 15°C, Outlet water temperature 55°C, Dry bulb temperature 20°C, Wet bulb temperature 15°C.								

Note:

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80°C HIGH TEMPERATURE

HOT WATER HEAT PUMP

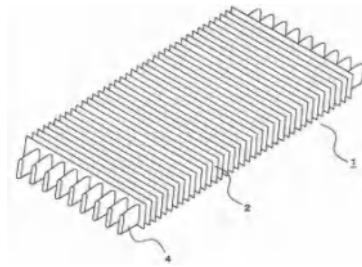


80°C HIGH-TEMPERATURE

Under the Power World's high-temperature technology and EVI technology, this series of hot water heat pumps can run stably at an ambient temperature of -5°C~43°C, the outlet water temps up to 80°C, and the operating cost is low, which can meet the high-temperature water needs of slaughterhouses, electroplating plants, printing and dyeing plants, chemical, pharmaceutical, and aquaculture industries.

Copeland compressor, EVI technology

Copeland scroll compressor, with EVI technology, supplement more capacity through economizer for high temperature hot water outlet.

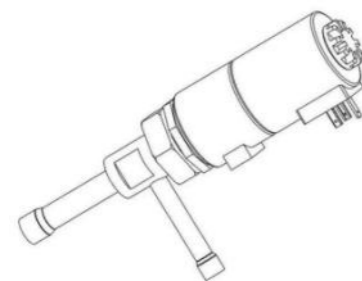
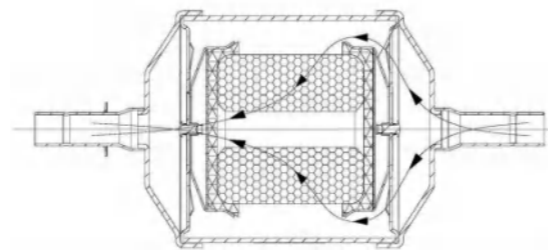


High efficient tube in tube/ shell and tube heat exchanger

Option for tube in tube and shell & tube heat exchanger, high heat transfer efficiency and easy maintenance for scales problem.

Drier-filter for more reliable system.

Drier-filter remove possible dust and moisture in refrigerant circuit, it ensures more reliable and stable system.



Electronic expansion valve

With accurate control of refrigerant flow automatically, excellent efficiency at different ambient temperature.

Model	PF030 -KFGRS-S	PF030 -KFGRS	PF050 -KFGRS	PF100 -KFGRS	PF150 -KFGRS	PF200 -KFGRS	PF250 -KFGRS	PF300 -KFGRS
Compressor Brand	Copeland(EVI)							
Four-way valve Brand	Sanhua							
Expansion valve Brand	Sanhua							
Heating capacity (kW)	7.4	8.3	13.8	27.6	41.1	55.1	65.3	82.6
Input power (kW)	2.9	3.3	5.4	10.8	16	21.5	25.4	32.3
COP	2.55	2.52	2.56	2.56	2.57	2.56	2.57	2.56
Rated current (A)	13.2	6.6	10.8	21.6	32.2	43	51	64.6
Max input power (kW)	3.92	4.46	7.3	14.6	21.6	29.0	34.3	43.6
Max current (A)	17.8	8.9	14.6	29.2	43.5	58.1	69.0	87.2
Rated outlet water temperature(°C)	75	75	75	75	75	75	75	75
Highest outlet water temperature(°C)	80	80	80	80	80	85	85	85
Power supply	220V/50Hz	380V/50Hz						
Anti-electric shock Rate	I	I	I	I	I	I	I	I
IP Grade (Level of protection)	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Refrigerant	R134A							
Operation Ambient Temp(°C)	-5~43°C							
Production capacity (L/H)	106	119	198	396	598	790	987	1184
Diameter of pipe (mm)	Dn25	Dn25	Dn25	Dn32	Dn50	Dn50	Dn65	Dn65
water circulation (m³/H)	3	3	5	10	15	20	25	30
Water pressure drop (kPa)	25	25	30	35	38	46	48	52
Noise (dB(A))	≤55	≤55	≤58	≤66	≤68	≤68	≤70	≤75
Net weight/Gross weight(kg)	105/111	105/111	150/160	310/330	372/412	482/532	582/642	612/675
Body size(W*D*H)	1110X490X1260	1110X490X1260	1110X490X1410	1580X800X1600	1580X800X1600	1850X1000X1950	2000X1100X2080	2300X1100X2300
Loading quantity (20GP/40GP/40HQ)	28/56/56	28/56/56	12/24/52	6/12/12	6/12/12	6/12/12	4/10/10	0/0/5
Condenser type	High efficiency tank heat exchanger				Casing heat exchanger			
Operating water temperature(°C)	9~80°C							
Test condition: Inlet water temperature 15°C, Outlet water temperature 75°C, Dry bulb temperature 20°C, Wet bulb temperature 15°C.								

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GLOBAL PROJECT INSTALLATION CASES

HOUSE HEATING COOLING AND DHW HP INSTALLATION



SWIMMING POOL HEAT PUMP INSTALLATION

