

Parameter list

FULL-INVERTER POOL HEAT PUMP - ABS Plastic Casing

Model	PW010-KZXYC-H	PW015-KZXYC-H	PW020-KZXYC-H	PW030-KZXYC-H	PW040-KZXYC-H	PW050-KZXYC-H	PW060-KZXYC-H	PW070-KZXYC-H	PW080-KZXYC-H
Advised pool volume (m ³)	15-30	20-40	25-50	30-60	40-75	50-90	55-100	60-120	70-130
Operating air temperature (°C)	-7 ~43								
Performance Condition: Air 27°C, Water 26°C, Humidity 80%									
Heating capacity (kW)	7.50-1.92	9.50-2.10	11.00-2.50	14.00-3.15	17.00-3.75	20.00-4.00	24.00-4.80	28.0-5.6	32.5-6.5
Heating Capacity (Btu)	25500-6528	32300-7140	37400-8500	47600-10710	57800-13090	68000-13600	81600-16320	95500-19100	110900-22100
Consumed power (kW)	1.15-0.13	1.46-0.14	1.83-0.17	2.15-0.21	2.62-0.25	3.33-0.27	4.00-0.32	4.75-0.37	5.42-0.43
COP	6.5-14.8	6.5-15.0	6.0-14.7	6.5-15.0	6.5-15.0	6.0-14.8	6.0-15.0	6.0-15.0	6.0-15.0
COP at 50% capacity	10.50	11.00	11.00	10.50	11.00	11.00	11.00	11.00	11.00
Performance Condition: Air 15°C, Water 26°C, Humidity 70%									
Heating capacity (kW)	5.80-1.42	7.2-1.50	8.5-1.65	10.7-2.40	13.0-2.65	15.6-2.85	18.7-3.42	21.8-4.36	25.4-5.07
Heating Capacity (Btu)	19720-4828	24480-5100	28900-5610	36380-8160	44200-9010	53040-9690	63580-11630	74380-14880	86665-17300
Consumed power (kW)	1.15-0.20	1.43-0.21	1.77-0.23	2.12-0.34	2.58-0.36	3.25-0.40	3.89-0.49	4.54-0.62	5.29-0.72
COP	5.0-7.1	5.0-7.2	4.8-7.2	5.0-7.1	5.0-7.4	4.8-7.0	4.8-7.0	4.8-7.0	4.8-7.0
COP at 50% capacity	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Performance Condition: Air 35°C, Water 28°C, Humidity 80%									
Cooling capacity (kW)	4.0	5.2	6.0	7.2	8.6	10.1	11.8	13.8	15.6
Sound pressure at 1m dB(A)	38-48	38-48	40-50	42-51	43-52	43-53	44-54	45-56	45-57
Sound pressure of 50% capacity at 1m dB(A)	40	40	41	43	44	44	45	48	49
Sound pressure at 10m dB(A)	18-25	18-25	19-26	22-27	23-30	24-31	25-32	26-34	26-35
Heat exchanger	Spiral titanium tube in PVC								
Casing	ABS Plastic Casing								
Refrigerant	R32								
Power supply	230V/1 Ph/50Hz								
Compressor	Panasonic								
Four-way valve	Sanhua								
Expansion valve	Sanhua								
Frequency driver board	CHICO								
Operating water temperature (°C)*heating	9 ~40								
Operating water temperature (°C)*cooling	9 ~35								
Water Connection (mm)	Ø50								
Rated input current at air 15°C (A)	5.1-0.9	6.3-0.9	7.8-1.0	9.3-1.5	11.3-1.6	14.3-1.8	17.8-2.3	20.8-2.8	24.2-3.3
Advised water flux (m ³ /h)	2-4	2-4	3-5	4-6	6-9	8-10	9-12	10-14	12-16
Water Pressure Drop (max) kPa	2	3	4	5	5	6	8	20	25
Net weight/Gross weight (kg)	62/70	62/70	64/72	77/87	81/91	81/91	90/100	110/122	115/127
Product size (mm)	1000*396*640			1125*416*765			1156*430*905		
Packaging size (mm) (carton)	1040*410*780			1165*430*905			1230*440*1030		
Packaging size (mm) (Plywood)	1060*430*780			1185*450*905			1250*464*1045		
Loading quantity (20GP/40GP/40HQ)	84/174/174			52/96/96			42/90/90		

Notes:

1. Warranty: 2 years for the whole unit, 5 years for compressor and 7 years for heat exchanger, since on board date EX China.

2. Lead time: 35/40 working days after the 30% deposit, balance before Ex Auckland

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The Tricky Business of Sizing a Pool Heater

One of the important parts of putting in a pool heater is making sure it is the correct size to maintain the comfortable temperature you want. For most people, the ideal warmth for a pool is between 28° and 30°C. The main obstacle with heating a pool is not the volume of water in the pool, but the amount of heat loss through evaporative cooling that occurs across the service. The job of the pool heater is to replace the heat loss that occurs across the surface, and so the surface size of the pool and the average outdoor temperature are the most crucial factors that a professional installer needs to consider. Average wind levels are also important, since wind increases the amount of evaporative cooling.

In cases of heating the interior of a home, HVAC installers must find a heating system (furnace, boiler, heat pump, etc.) that provides sufficient heat for comfort, but not too much that the system will start to short-cycle, i.e. turn itself off prematurely because it raised the indoor temperature too fast. The same isn't true of pool heaters, however. A pool heater can be undersized: if it cannot replace the heat lost through evaporative cooling, the pool's temperature will fall below the ideal. However, there is no such thing as oversizing a pool heater. The larger the heater's output, the faster it heats the water in the pool, and it will not begin short-cycling.

Nonetheless, although a larger pool heater doesn't pose the same problems that an oversized indoor heater does, it will cost you more money to install a larger heating system. You want to have your pool heater land in the right zone for comfort and your budget plans.