




Kaisai #R290

Heat pumps



- **Kaisai monoblock heat pumps** with main circulation pump built inside provide heating/cooling and domestic hot water.
- When installing the unit, installer should connect the heat pump with other parts including the buffer tank, storage water tank and water pumps.
- External fittings are also needed including the safety valve, water refill valve and hot water valves (three-way valve). Temperature sensor should be added in the storage water tank. Additional electric heater can be installed in the DHW tank or the buffer tank which can get the control signal from the heat pump.

KHX-09PY1 / KHX-14PY3 / KHX-16PY3

Model			KHX-09PY1	KHX-14PY3	KHX-16PY3
					
Heating A7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	8.90 (3.10 ~ 8.90)	14.95 (5.40 ~ 14.95)	22.00 (8.00 ~ 22.00)
	electric energy consumption (range)	kW	1.98 (0.68 ~ 2.10)	3.29 (1.05 ~ 3.85)	4.94 (1.60 ~ 6.90)
	COP	W/W	4.49 (4.76 ~ 4.23)	4.54 (5.09 ~ 4.53)	4.45 (4.99 ~ 4.44)
Heating A2W55 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	6.52	10.95	16.11
	electric energy consumption (range)	kW	2.19	3.65	5.48
	COP	W/W	2.97	3.00	2.94
Heating A-7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	7.18	12.06	17.75
	electric energy consumption (range)	kW	1.87	3.11	4.65
	COP	W/W	3.84	3.88	3.82
Cooling A35W18 ΔT=5	nominal heat capacity (range)	kW	1.20 ~ 5.72	3.60 ~ 10.50	4.20 ~ 15.00
	electric energy consumption (range)	kW	0.65 ~ 2.40	1.12 ~ 4.47	1.80 ~ 7.30
ErP	seasonal energy efficiency η_s average climate 35°C / 55°C	%	205 / 150	202 / 155	201 / 150
	annual energy consumption average climate 35°C / 55°C	kWh	1970 / 2575	3750 / 4828	5076 / 6672
	seasonal energy efficiency η_s cold climate 35°C / 55°C	%	170 / 127	168 / 131	154 / 127
	annual energy consumption cold climate 35°C / 55°C	kWh	3110 / 4019	5913 / 7536	9530 / 10599
Seasonal space heating energy efficiency class (average climate)	TWW at 35°C class		A+++	A+++	A+++
	TWW at 55°C class		A+++	A+++	A+++
SCOP (climate average / cold)	TWW for 35°C	W/W	5.20 / 4.32	5.05 / 4.20	5.03 / 3.85
	TWW for 55°C	W/W	3.83 / 3.40	3.88 / 3.28	3.75 / 3.18
Power supply	voltage / number of phases / frequency	V/Ph Hz	230 / 1N / 50	380 ~ 415 / 3N / 50	380 ~ 415 / 3N / 50
	maximum operating current	A	13.5	10.5	15.8
Hydraulic system	nominal water flow	m ³ /h	1.0	1.7	2.9
	pump head	mH ₂ O	7.5	7.5	12.5
Sound level	sound power level	dB(A)	57	58	62
	sound pressure level (1m)	dB(A)	43	44	47
Outside air temperature range	cooling	°C	-5÷43	-5÷43	-5÷43
	heating	°C	-25÷43	-25÷43	-25÷43
Leaving water temperature range	cooling	°C	5÷15	5÷15	5÷15
	heating	°C	9÷75	9÷75	9÷75
Water connection	diameter	cal	G1	G1	G1
Refrigerant	symbol (GWP) / refrigerant amount	--- / kg	R290(3) / 0.50	R290(3) / 0.85	R290(3) / 1.3
Dimension	of the unit (W×H×L)	mm	1167×795×407	1287×928×458	1250×1330×540
	of the packaging (W×H×L)	mm	1300×940×485	1420×1080×540	1380×1480×570
Weight	net / in packaging	kg	80	160	202

All technical data is compliant with the guidelines specified in the following standards: EN14511; EN14825; EN50564; EN12102; (EU) No. 811:2013; (EU) No. 813:2013; OJ 2014/ C207/02:2014. The SCOP seasonal heating efficiency was determined for temperate climate conditions.

The sound power level in the heating mode was determined in accordance with EN 12102, under the conditions consistent with EN 14825.

The purpose of this document is to provide information and present heat pumps of the Kaisai brand. | Since the technologically advanced production process necessitates its continuous control and improvement, the information contained in this publication may be subject to change. The technical data and prices included in the folder are subject to change. Up-to-date information is always available on www.kaisai.com