

WATER SOURCE HEAT PUMP UNIT



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 Indoor installation
 Cooling capacity from 9.8 to 323.2 kW
 Heating capacity from 10.6 to 332.8 kW

Characteristics

- Low noise
- Anti-corrosive panel
- Compact design

Available configurations

3 1 F S A 1
 (1) (2) (3) (4) (5)

(1) Number of refrigeration cycles

(2) Version1:

- F Heat running by circulate system of 4-way system
- W Heat running by water changer

(3) Version2:

- S Standard
- R Heat recovery type
- T Specially made by customer request

(4) Refrigerants:

- A R22
- B R407C
- C R134a
- D R410A
- E Other refrigerants

(5) Power Supply:

- 1 220/1/50
- 2 380/3/50
- 3 230/1/60
- 4 460/3/60
- 5 220/3/60
- 6 Other power supply

Applications



Functions and features



Optional

- Total and partial heat recovery
- Copper/nickel heat exchanger or Titanium tube heat exchanger
- Plate type heat exchanger
- Co-axial heat exchanger
- Brine water chiller (between +4 and -7°C, using glycol solution)
- Pump set and hydraulic box

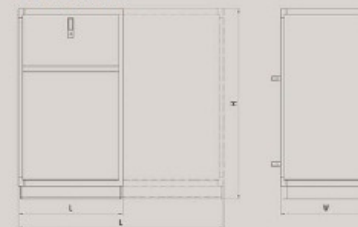
Technical data

Model	Size	31	41	51	61	71	81	91	101	121	122	162	202	242	303	363	404	484	605	726	847	968	
General	Cooling capacity	KW																					
	Power input	KW																					
	Heating capacity	KW																					
	Power input	KW																					
Power regulation stage	%	100										50-100				33-66-100				25-50-75-100			
		20-40-60 -80-100 16.7-33-50 14.2-14.2 increase increase																					
Compressor	Nr.	1 1 1 1 1 1 1 1 1 2 2 2 2 3 3 4 4 5 6 7 8																					
	Type	Scroll P.O.E.																					
	Oil	L 1 1.5 2 2.3 2.5 3 3.2 3.5 3.8 4.6 6 7 7.6 10.5 11.4 14 15.2 19 22.8 26.6 30.4																					
Evaporator	Type	Tube in tube																					
	Water flow	m³/h																					
	Inlet/outlet nozzle	DN 25 25 32 32 32 40 40 40 40 64 50 50 50 65 64 65 65 80 80 100 100																					
	Max water pressure	MPa 1																					
Condenser	Resistance	KPa 9 10 10 10 9 10 10 10 12 12 12 10 11 11 12 11 11 12 12 12 12 12 13 13																					
	Type	Tube in tube																					
	Water flow	m³/h 2 2.6 3.4 3.8 4.6 5.3 5.9 6.8 8.6 7.6 10.6 13.7 17.3 20.5 25.9 27.4 34.5 43 51.6 60.2 68.8																					
	Inlet/outlet nozzle	DN 25 25 32 32 32 40 40 40 40 64 50 50 50 65 64 65 65 80 80 100 100																					
Refrigerant	Max water pressure	MPa 1																					
	Max refrigerant pressure	MPa 1.9																					
	Resistance	KPa 10 10 10 11 12 11 11 11 12 12 12 12 12 10 10 12 12 12 12 12 12 13 13																					
	Nr. of circuits	1 1 1 1 1 1 1 1 1 2 2 2 2 3 3 4 4 5 6 7 8																					
Power supply	Type	R407C																					
	Weight	kg 1.3 1.5 1.7 1.9 2.2 2.3 2.4 2.8 3.2 3.8 4.6 5.6 6.4 8.4 9.6 11.2 12.8 16 19.2 22.4 25.6																					
	220V/1P/50Hz	380V/3P/50Hz																					
	Noise	dB(A) 50 52 53 55 57 59 60 61 61 62 63 65 66 66 68 70 72 73 73 73 73 76																					
Weight	kg 150 151 154 155 198 220 249 235 260 210 280 298 320 462 480 616 640 780 940 1100 1260																						

Note:

Cooling working condition: evaporator water inlet/ outlet temperature 12/7°C, condenser water inlet/ outlet temperature 30/35°C.
 Heating working condition: condenser water inlet/ outlet temperature 40/45°C, evaporator water inlet/ outlet temperature 15/10°C.
 Noise measured at 1m in open field.

Dimensions



Size	31	41	51	61	71	81	91	101	121	122	162
L	670	670	650	650	650	650	650	650	650	650	650
W	450	450	500	500	500	650	650	650	650	650	650
H	1000	1000	1100	1100	1100	1100	1100	1100	1100	1100	1100

Size	202	242	303	363	404	484	605	726	847	968
L	850	850	1340	1340	1340	1340	1990	1990	2640	2640
W	650	650	900	850	850	900	900	900	900	900
H	1100	1800	1800	1800	1800	1800	1825	1825	1825	1825