

WATER-TO-WATER HEAT PUMP SPECIFICATIONS

Vented Brazed Plate Heat Exchanger / Rheem IQ Control	95501600
Co-axial Tube-in-Tube Heat Exchanger / Rheem IQ Control	9550160V

ELECTRICAL INPUT

Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz	
Full Load / Locked Rotor (Amps Per Phase)	9.6 FLA / 74 LRA	
Min. Circuit Size	20.0 Amps	
Refrigerant	R1234yf	
Refrigeration Effect	Heating	Cooling
Nominal Capacity	16.04 kW	12.97 kW
Power Input	3.07 kW	
COP	5.22 COP	4.22 COP
Noise Level	59 dBa @ 3 m	
Rated Load Amps @ 10°C SST / 48°C SCT	6.7 Amps	

TECHNICAL DATA

Compressor	
Make	Copeland
Type	Scroll 20150
Number Per Unit	1
FLA (Full Load Amps, each)	9.63 Amps
Voltage / Phase	380 - 415 / 3
Pole/RPM	2/2900
Air Flow	N/A

HEAT EXCHANGER (Water Side)

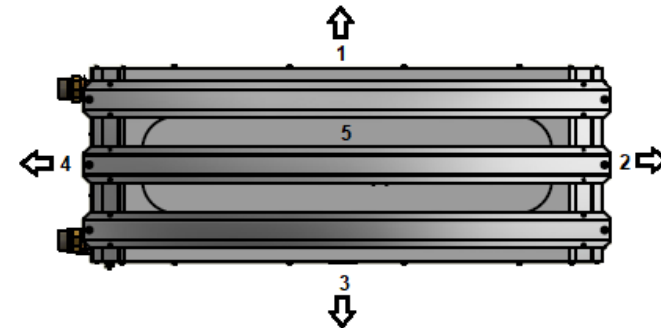
	Hot Side (Condenser)	Cold Side (Evaporator)
Type of Water Tube	Double Wall	Single Wall
Design	Vented Brazed Plate / Co-axial	Shell & Tube
Flow Rate Excl. By Pass	1.20 L/s	1.41 L/s
Max. Outlet Water Temp	70°C*	
Design Pressure Drop	50 kPa	
Max. Operating Pressure	1550 +200/-300 kPa	

GENERAL INFORMATION

Water Connections	Male 1 1/4" BSP
Drain	20mm PVC
Cabinet Construction	1.2mm Stucco Aluminium
Approx. shipping weight	125 kg
Size L x W x H	1050 mm x 600 mm x 975 mm

COP TABLE

Water Out °C	Cold Water In °C							
	12 °C	14 °C	16 °C	18 °C	20 °C	25 °C	30 °C	35 °C
42 °C	12.44 kW 4.31 COP	13.27 kW 4.52 COP	14.14 kW 4.74 COP	15.07 kW 4.98 COP	16.04 kW 5.22 COP	18.73 kW 5.87 COP	21.78 kW 6.59 COP	23.11 kW 6.90 COP
45 °C	12.20 kW 4.02 COP	13.01 kW 4.22 COP	13.86 kW 4.42 COP	14.76 kW 4.63 COP	15.71 kW 4.86 COP	18.33 kW 5.45 COP	21.31 kW 6.11 COP	22.61 kW 6.39 COP
50 °C	11.81 kW 3.58 COP	12.58 kW 3.75 COP	13.39 kW 3.92 COP	14.25 kW 4.10 COP	15.17 kW 4.29 COP	17.68 kW 4.81 COP	20.54 kW 5.37 COP	21.79 kW 5.61 COP
55 °C	11.50 kW 3.26 COP	12.24 kW 3.41 COP	13.02 kW 3.56 COP	13.85 kW 3.72 COP	14.73 kW 3.89 COP	17.16 kW 4.34 COP	19.92 kW 4.83 COP	21.13 kW 5.04 COP
60 °C	11.12 kW 2.90 COP	11.82 kW 3.02 COP	12.57 kW 3.15 COP	13.36 kW 3.29 COP	14.20 kW 3.43 COP	16.51 kW 3.81 COP	19.16 kW 4.23 COP	20.32 kW 4.41 COP
65 °C	10.83 kW 2.64 COP	11.50 kW 2.46 COP	12.21 kW 2.57 COP	12.97 kW 2.68 COP	13.78 kW 2.80 COP	16.00 kW 3.11 COP	18.55 kW 3.46 COP	19.67 kW 3.61 COP
70 °C	N/A	11.10 kW 2.44 COP	11.78 kW 2.53 COP	12.50 kW 2.63 COP	13.26 kW 2.74 COP	15.37 kW 3.02 COP	17.80 kW 3.33 COP	18.86 kW 3.46 COP



UNIT CLEARANCES

Direction	Description	Minimum Clearance Required
1	Plain Back	Nil
2	Side Access	Nil
3	Compressor Access	850mm
4	Water Connections	500mm
5	Top - Height Clearance	350mm

Rating Conditions: 20°C ambient, 60% RH, 39°C Water in, 42°C Water out

* Max outlet temperature when cold water inlet is above 14°C