AIR-TO-WATER HEAT PUMP SPECIFICATIONS

Tube-in-Tube Heat Exchanger / Rheem IQ Control	**953101DV-DQV-1**
Vented Brazed Plate Heat Exchanger / Rheem IQ Control	**953101DP-DQV-1**

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load Amps	85.6 Amps
Locked Rotor (Amps Per Phase)	225.0 Amps
Min. Circuit Breaker Size	100.0 Amps
Refrigerant	R134A
Nominal Heating Capacity	101.08 kW
Power Input	24.44 kW
COP	4.14 COP
Noise Level	68 dBa @ 3 m
Rated Load Amps @ 6°C SST / 51°C SCT	52.7 Amps

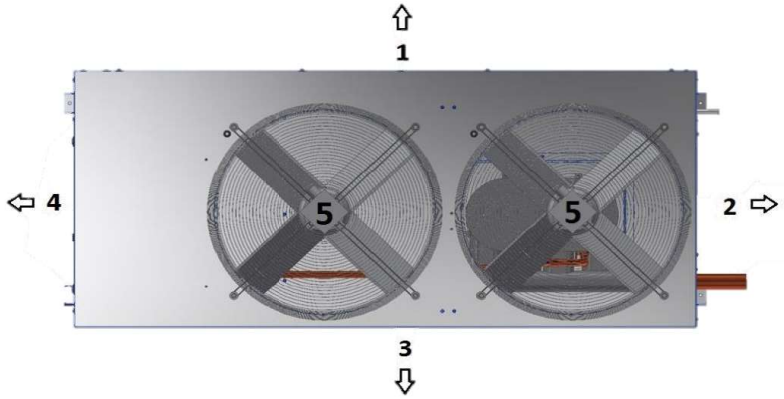
TECHNICAL DATA		
	Compressor	**Fan**
Reference/Size	20092	710mm
Type	Scroll	Axial
Number Per Unit	2	2
FLA (Full Load Amps, each)	39.7 Amps	3.1 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2,900	6/970
Air Flow	N/A	7,222 L/s
External Static Pressure	N/A	5 Pa

HEAT EXCHANGER (Water Side)	
Type of Water Tube	Double Wall
Design	Vented Brazed Plate / Co-axial Tube-in-Tube
Flow Rate Excl. By Pass	6.04 L/s
Max. Outlet Water Temp	65°C / 70°C*
Design Pressure Drop	50 kPa
Max. Operating Pressure	2,450 kPa

GENERAL INFORMATION	
Water Connections	80mm Table E Flange
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	650 kg
953101DV-DQV-1 (L x W x H)	2465mm x 1135mm x 1625mm
953101DP-DQV-1 (L x W x H)	2465mm x 1135mm x 1625mm

COP TABLE

Water Out °C	Ambient Temperature °C										
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C	45 °C
45 °C	69.24 kW	78.59 kW	89.16 kW	97.96 kW	**101.08 kW**	114.52 kW	118.14 kW	126.43 kW	127.65 kW	129.63 kW	132.87 kW
	2.92 COP	3.27 COP	3.68 COP	4.02 COP	**4.14 COP**	4.65 COP	4.79 COP	5.10 COP	5.15 COP	5.22 COP	5.34 COP
50 °C	68.59 kW	77.56 kW	87.65 kW	96.04 kW	99.00 kW	111.78 kW	115.22 kW	123.10 kW	124.25 kW	126.14 kW	129.22 kW
	2.63 COP	2.94 COP	3.29 COP	3.58 COP	3.68 COP	4.12 COP	4.24 COP	4.52 COP	4.56 COP	4.62 COP	4.73 COP
55 °C	68.16 kW	76.83 kW	86.54 kW	94.60 kW	97.44 kW	109.70 kW	112.99 kW	120.54 kW	121.65 kW	123.45 kW	126.40 kW
	2.43 COP	2.70 COP	3.00 COP	3.26 COP	3.35 COP	3.74 COP	3.85 COP	4.09 COP	4.13 COP	4.19 COP	4.28 COP
60 °C	67.81 kW	76.18 kW	85.52 kW	93.25 kW	95.97 kW	107.70 kW	110.85 kW	118.08 kW	119.13 kW	120.86 kW	123.68 kW
	2.24 COP	2.47 COP	2.74 COP	2.97 COP	3.05 COP	3.40 COP	3.49 COP	3.71 COP	3.74 COP	3.79 COP	3.87 COP
65 °C	N/A	75.50 kW	84.37 kW	91.69 kW	94.27 kW	105.35 kW	108.33 kW	115.14 kW	116.14 kW	117.77 kW	120.43 kW
		2.22 COP	2.45 COP	2.64 COP	2.71 COP	3.01 COP	3.08 COP	3.27 COP	3.29 COP	3.34 COP	3.41 COP
70 °C	N/A	N/A	N/A	N/A	92.73 kW	103.17 kW	105.97 kW	112.38 kW	113.32 kW	114.85 kW	117.35 kW
					2.41 COP	2.66 COP	2.73 COP	2.88 COP	2.90 COP	2.94 COP	3.00 COP



UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	1000mm
2	Water Connections	850mm
3	Evaporator Coil	1000mm
4	Compressor Access	850mm
5	Top – Fan Discharge	3500mm

When the units are placed side by side, allow 2000mm distance between evaporator coils.

Rating Conditions: 30°C ambient, 60% RH, 41°C Water in, 45°C Water out

* Max outlet temperature when ambient is above 20°C