

RHEEM THERMAL

EASY INTEGRATION - HIGHER EFFICIENCY - LONGER LASTING
DESIGNED AND MANUFACTURED BY RHEEM

COMMERCIAL POOL HEAT PUMP TECHNICAL BOOKLET (HIGH OUTLET TEMPERATURE SERIES)



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Note: Higher heating capacity available. Please consult Rheem or Rheem distributor for more information.

**subject to products*



1.0

NOMENCLATURE



□ □

BRAND

RT—RHEEM

□ □

MODEL

- HP —HEATING POOL
- HW —HOT WATER
- WW—WATER TO WATER
- CH —CHILLER POOL
- CW —CHILLER WATER
- WP —WATER / WATER POOL
- RE —REMOTE EVAPORATOR
- RC —REMOTE CONDENSER
- HH —HYDRONIC HEATING

□ □ □

KW

NOMINAL KILOWATT
AT RATING CONDITIONS

□

EVAP.

- AIR COOLED (NO LETTER REQUIRED)
- T— ABS TITANIUM SHELL & TUBE
- S— SINGLE WALL SHELL & TUBE COPPER
- V— COAXIAL VENTED COPPER
- P— BRAZED PLATE VENTED
- B— BRAZED PLATE

□

REFRIG.

- A—R410a
- D—R134a
- K—R407c
- Y—R32
- F— R1234yf
- G—R513a

□ □

COND.

- AIR COOLED (NO LETTER REQUIRED)
- T— ABS TITANIUM SHELL & TUBE
- S— SINGLE WALL SHELL & TUBE COPPER
- V— COAXIAL VENTED COPPER
- P— BRAZED PLATE VENTED
- B— BRAZED PLATE

□ □

ELECTRICAL

- D— 380-420V/3Ø/50Hz
- J— 220-240V/1Ø/50Hz
- 7— 380V/3Ø/60Hz
- 3— 1 PHASE INVERTER
220-240V/50Hz
- 4— 3 PHASE INVERTER
380-420V/50Hz
- V— 208-230V/1Ø/60Hz
- 6— 460V/3Ø/60Hz

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OPTIONS

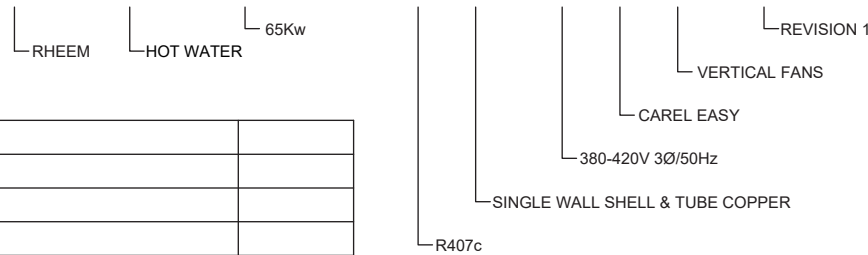
- E— CAREL EASY
- Q— RHEEM IQ
- R— REVERSE CYCLE
- C—CIRCULATION PUMP CONTACTOR / RELAY
WITH REMOTE SENSOR
- V— VERTICAL AIR
- H— HORIZONTAL AIR
- S— SPA UNITS
- O— OPPOSITE HAND
- L— LOW TEMP.
- G— PUMP
- B— BMS CONTROL
- D— DOUBLE COATED EVAP. COIL
- F— EC FAN
- J— COMPRESSOR JACKET
- P— POWDERCOATED FINISH
- A— STACK ABLE UNITS
- W— #304 STAINLESS STEEL FINISH
- Y— SPLIT HEAT PUMP OPTION
- Z— ACOUSTIC LOUVRE
- M— HI STATIC FAN OPTION
- K— COATED COPPER-COPPER EVAP. COIL
- T— THREE PHASE COMP. SOFT STARTER
- N— REVERSE CYCLE HEAT/COOL
- I— HIGH TEMP.

□ □

REVISION

1 TO 99

EXAMPLE R T H W 0 6 5 K S □ D E V □ 1



REV	ECN	DESCRIPTION	DATE
20	0484	ADDED OPTION "I" FOR HIGH TEMP.	26/04/22
19	0481	ADDED MODELS: RUUD, RICHMOND, HYDRONIC.	5/04/22
18	0460	ADDED REFRIGERANT OPTION "F" FOR R1234YF AND "G" FOR R513A	01/11/21
17	0448	ADDED OPTION N FOR REVERSE CYCLE HEAT/COOL	05/08/21
16	0420	ADDED OPTION T FOR 3PHASE COMP. SOFT STARTER	23/03/21
15	0413	ADDED OPTION K FOR COATED COPPER-COPPER EVAP. COIL	16/12/20
14	0400	ADDED OPTION M FOR HI-STATIC EVAP. FAN OPTION	13/08/20



Rheem
THERMAL SYSTEMS GROUP

43 Marigold Street
Revesby NSW 2212
Australia
Phone: 02 9684 3684

NOMENCLATURE			
REF. DWG	Date	Drawn	Issue
26793	04/06/18	J.Bates	20

2.0

EQUIPMENT

SPECIFICATION SHEET &

DRAWING



2.1

AIR TO WATER POOL HEAT PUMP (HIGH OUTLET TEMP SERIES)



POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

RTHP017AT-JQVI-3

ELECTRICAL INPUT

Voltage/Phase	220 -240 Volts / 1 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	18.7 FLA / 80 LRA
Min. Circuit Size	25 Amps
Refrigerant	R410a
Nominal Heating Capacity	17.40 kW
Power Input	3.25 kW
COP	5.35 COP
Noise Level	51 dBa @ 3 m
Rated Load Amps @ 10°C SST / 42°C SCT	17.2 Amps

TECHNICAL DATA

	Compressor	Fan
Reference/Size	20114	500mm
Type	Rotary	Axial
Number Per Unit	1	1
FLA (Full Load Amps, each)	17.5 Amps	1.18 Amps
Voltage / Phase	220 - 240 /1	220 - 240 /1
Pole/RPM	2/2,900	6/890
Air Flow	N/A	1150 L/s

HEAT EXCHANGER (Water Side)

Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	2.08 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	1.39 L/s	2.44 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

GENERAL INFORMATION

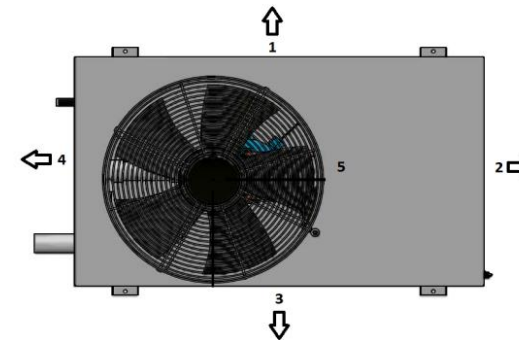
Water Connections	40mm PVC
Drain	20mm PVC
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	120 kg
Size L x W x H	1007 mm x 650 mm x 1088 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.

Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	10.17 kW	11.23 kW	12.20 kW	14.54 kW	15.54 kW	16.87 kW	17.40 kW	18.57 kW	19.97 kW	21.37 kW
	3.04 COP	3.42 COP	3.66 COP	4.41 COP	4.73 COP	5.17 COP	5.35 COP	5.73 COP	6.41 COP	7.09 COP
30 °C	10.14 kW	11.19 kW	12.26 kW	14.36 kW	15.27 kW	16.54 kW	17.05 kW	18.17 kW	19.30 kW	20.43 kW
	2.95 COP	3.29 COP	3.54 COP	4.20 COP	4.48 COP	4.87 COP	5.02 COP	5.35 COP	5.86 COP	6.36 COP
33 °C	10.10 kW	11.14 kW	12.33 kW	14.18 kW	15.01 kW	16.22 kW	16.70 kW	17.76 kW	18.62 kW	19.48 kW
	2.87 COP	3.17 COP	3.41 COP	4.00 COP	4.24 COP	4.56 COP	4.70 COP	4.98 COP	5.30 COP	5.63 COP
36 °C	10.07 kW	11.10 kW	12.39 kW	14.00 kW	14.74 kW	15.89 kW	16.35 kW	17.36 kW	17.95 kW	18.54 kW
	2.78 COP	3.04 COP	3.29 COP	3.79 COP	3.99 COP	4.26 COP	4.37 COP	4.60 COP	4.75 COP	4.90 COP
39 °C	10.04 kW	11.06 kW	12.45 kW	13.82 kW	14.47 kW	15.56 kW	16.00 kW	16.96 kW	17.28 kW	17.60 kW
	2.69 COP	2.91 COP	3.17 COP	3.58 COP	3.74 COP	3.96 COP	4.04 COP	4.22 COP	4.20 COP	4.17 COP
42 °C	-	-	12.52 kW	13.64 kW	14.21 kW	15.24 kW	15.65 kW	16.55 kW	16.60 kW	16.65 kW
	-	-	3.04 COP	3.38 COP	3.50 COP	3.65 COP	3.72 COP	3.85 COP	3.64 COP	3.44 COP

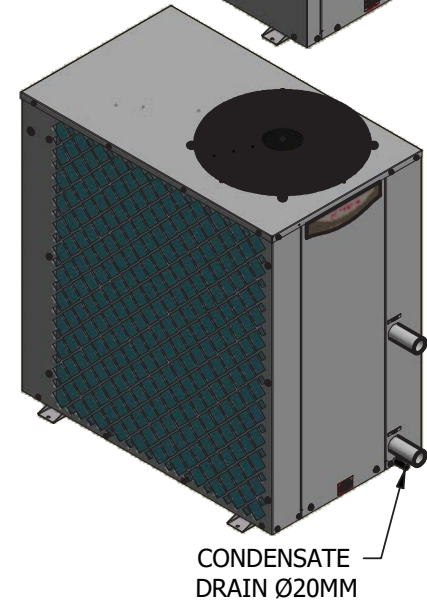
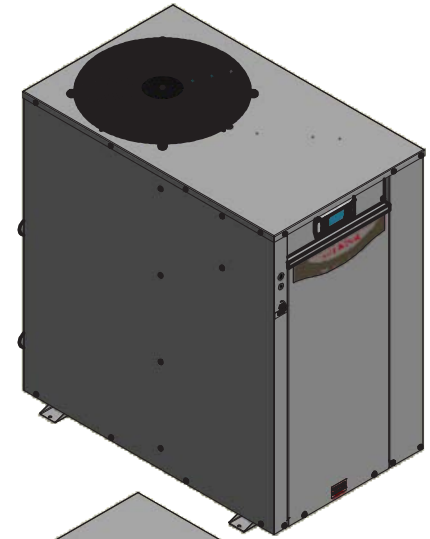
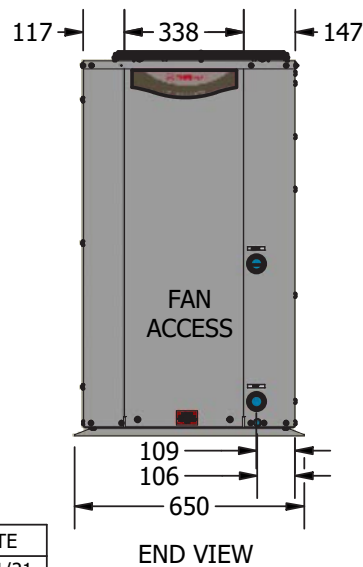
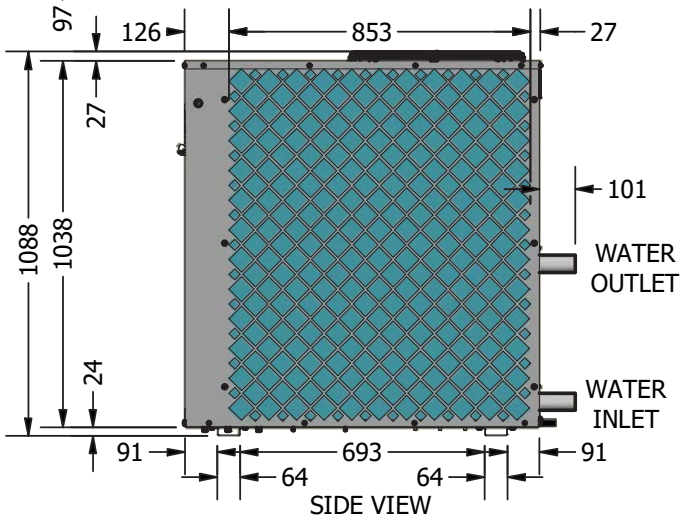
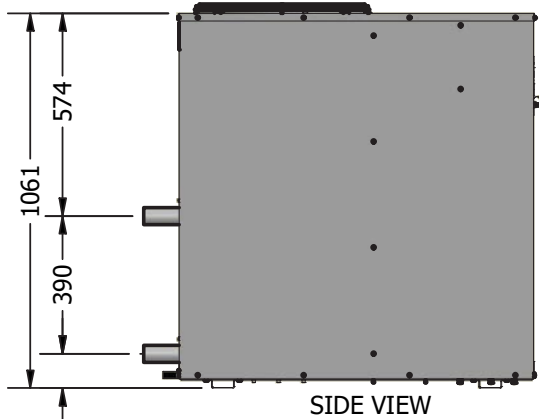
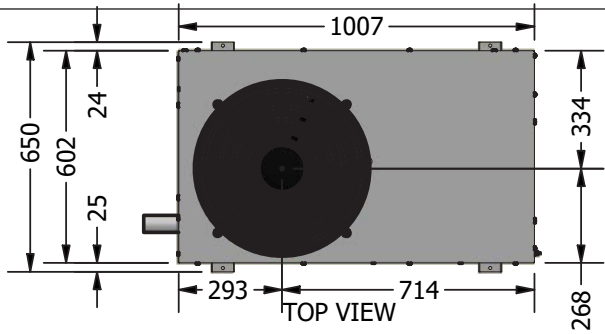


UNIT CLEARANCES


Direction	Description	Minimum Clearance Required
1	Evaporator Coil	350 mm
2	Compressor Access	850 mm
3	Plain Back	Nil
4	Water Connections	500 mm
5	Height Clearance	2500 mm

When units are placed side by side, allow 700mm distance between evaporator coils.

Rating Conditions: 27°C ambient, 60% RH, 27°C Water in



REV	ECN	DESCRIPTION	DATE
01	0458	ITEM 3 Electrical Assembly 47340 was 47335	18/11/21
02	0472	Changed electrical item 1 x 17649 was 2 x 17106	02/02/22

 Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 3	
Description:	RHEEM THERMAL A2W HP 17kW 1P RV R410a		
Part No:	RTHP017AT-JQVI-3	Rev.	2
Material:		Date:	26/08/2021
Drawn By:	JC	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°; Bend size - ± 0.3mm		Scale: N.T.S
	Tubes - Dimensions ± 2, Angle ± 2°		

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

RTHP020AT-DQVI-3

ELECTRICAL INPUT

Voltage/Phase	380-415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	12.13 FLA / 69 LRA
Min. Circuit Breaker Size	20 Amps
Refrigerant	R410a
Nominal / Specified Operation Heating Capacity	21.59 kW
Power Input	4.25 kW
COP	5.08 COP
Noise Level	54 dBa @ 3 m
Nominal Load Amps @ 10°C SST / 42°C SCT	7.4 Amps

TECHNICAL DATA

	Compressor	Fan
Reference/Size	20115	500mm
Type	Rotary	Axial
Number Per Unit	1	1
FLA (Full Load Amps, each)	11.0 Amps	1.18 Amps
Voltage / Phase	380 - 415 / 3	220 - 240 /1
Pole/RPM	2/2,900	6/890
Air Flow	N/A	1150 L/s

HEAT EXCHANGER (Water Side)

Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	2.58 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	1.72 L/s	3.03 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

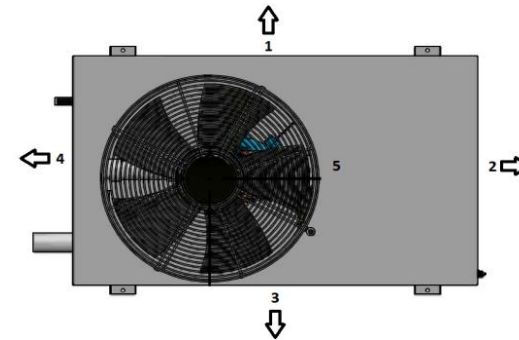
GENERAL INFORMATION

Water Connections	40mm PVC
Drain	20mm PVC
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	130 kg
Size L x W x H	1007 mm x 650 mm x 1090 mm

*Allowable temperature difference may vary from 1-3K for water-in temperatures of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	12.53 kW	13.62 kW	15.51 kW	17.81 kW	19.40 kW	20.96 kW	21.59 kW	22.97 kW	23.77 kW	24.57 kW
	3.23 COP	3.33 COP	3.48 COP	3.97 COP	4.48 COP	4.91 COP	5.08 COP	5.45 COP	5.68 COP	5.91 COP
30 °C	12.42 kW	13.74 kW	16.04 kW	18.83 kW	20.77 kW	22.66 kW	23.43 kW	25.10 kW	26.08 kW	27.05 kW
	3.09 COP	3.21 COP	3.38 COP	3.93 COP	4.51 COP	5.00 COP	5.19 COP	5.61 COP	5.87 COP	6.13 COP
33 °C	12.31 kW	13.87 kW	16.57 kW	19.86 kW	22.13 kW	24.36 kW	25.26 kW	27.24 kW	28.38 kW	29.53 kW
	2.96 COP	3.08 COP	3.27 COP	3.89 COP	4.54 COP	5.08 COP	5.29 COP	5.76 COP	6.05 COP	6.34 COP
36 °C	12.20 kW	13.58 kW	15.27 kW	16.70 kW	18.05 kW	19.51 kW	20.10 kW	21.39 kW	22.14 kW	22.89 kW
	2.82 COP	3.06 COP	3.18 COP	3.75 COP	3.90 COP	4.04 COP	4.10 COP	4.22 COP	4.30 COP	4.38 COP
39 °C	12.09 kW	13.65 kW	15.56 kW	17.18 kW	18.70 kW	20.36 kW	21.02 kW	22.48 kW	23.33 kW	24.18 kW
	2.68 COP	2.95 COP	3.08 COP	3.70 COP	3.87 COP	4.02 COP	4.08 COP	4.22 COP	4.30 COP	4.39 COP
42 °C	-	-	15.85 kW	17.66 kW	19.36 kW	21.20 kW	21.94 kW	23.57 kW	24.52 kW	25.46 kW
	-	-	2.97 COP	3.65 COP	3.83 COP	4.00 COP	4.07 COP	4.21 COP	4.31 COP	4.40 COP

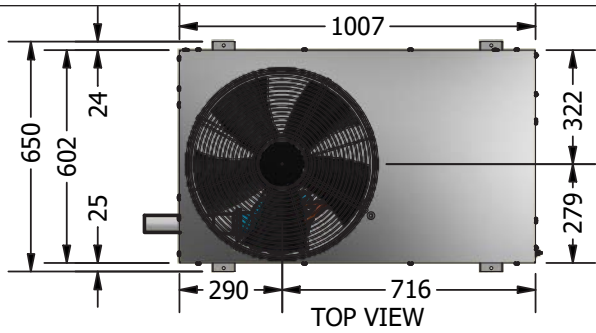


UNIT CLEARANCES

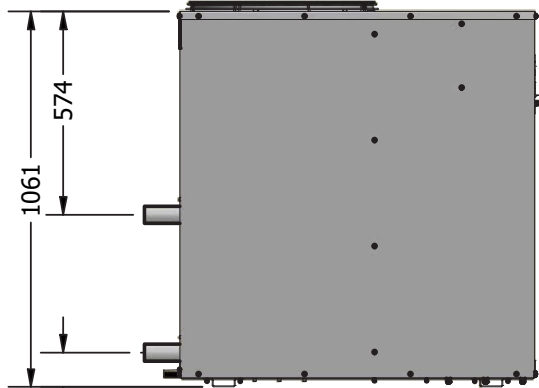
Direction	Description	Clearance Required
1	Evaporator Coil	350 mm
2	Compressor Access	850 mm
3	Plain Back	Nil
4	Water Connections	500 mm
5	Height Clearance	2500 mm

Note: Clearance required is subject to customer's discretion and applications.

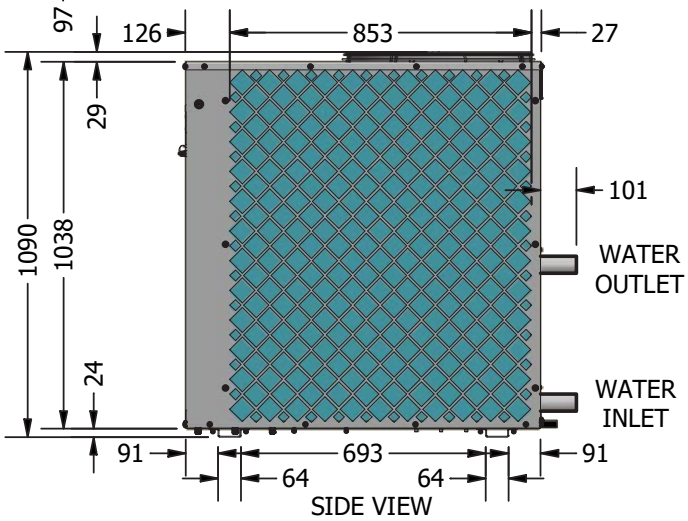
When the units are placed side by side, allow 700mm distance between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C Water in



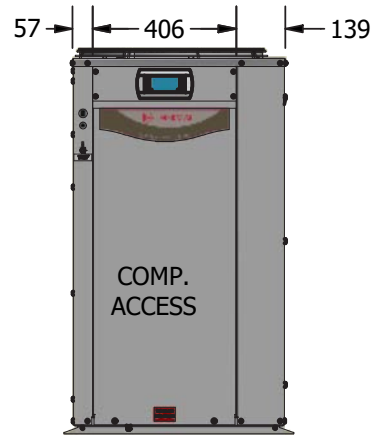
TOP VIEW



SIDE VIEW



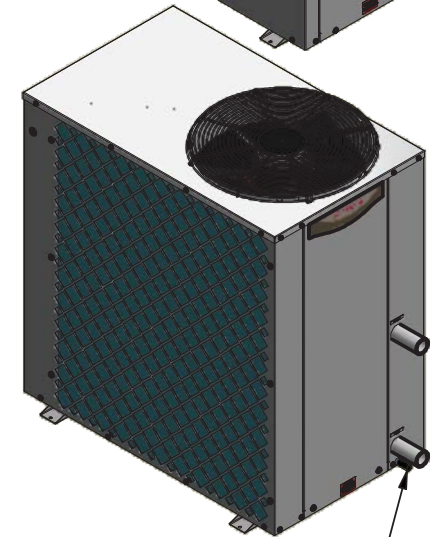
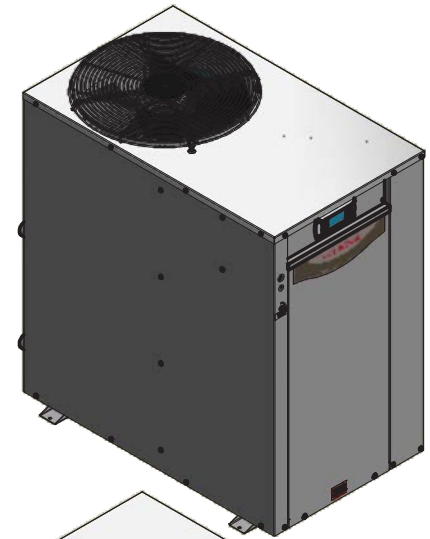
SIDE VIEW



END VIEW



END VIEW



CONDENSATE DRAIN Ø20MM

REV	ECN	DESCRIPTION	DATE
01	0458	ITEM 3 Electrical Assembly 47339 was 47334	18/11/21



Rheem

THERMAL SYSTEMS GROUP

SHEET 1 OF 3

Description:	RHEEM THERMAL A2W HP 20kW 3P RV R410a		
Part No:	RTHP020AT-DQVI-3	Rev.	1
Material:		Date:	26/08/2021
Drawn By:	JC	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - $\pm 0.5\text{mm}$, Angle - $\pm 0.5^\circ$, Bend size - $\pm 0.3\text{mm}$		Scale: N.T.S
	Tubes - Dimensions ± 2 , Angle $\pm 2^\circ$		

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control RTHP024KT-DQVI-3

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	13.38 FLA / 74 LRA
Min. Circuit Breaker Size	20 Amps
Refrigerant	R407C
Nominal Heating Capacity	24.34 kW
Power Input	4.36 kW
COP	5.58 COP
Noise Level	59 dBA @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	8.7 Amps

TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20012	450mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	12.10 Amps	0.64 Amps
Voltage / Phase	380 - 415 / 3	220 - 240 / 1
Pole/RPM	2/2900	6/890
Air Flow	N/A	1600 L/s

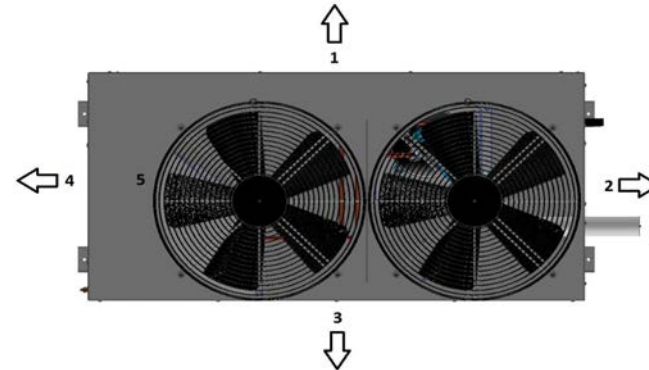
HEAT EXCHANGER (Water Side)		
Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	2.91 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	1.94 L/s	3.42 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

GENERAL INFORMATION	
Water Connections	50mm PVC
Drain	20mm PVC
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	150 kg
Size L x W x H	1200 mm x 565 mm x 985 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
 Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

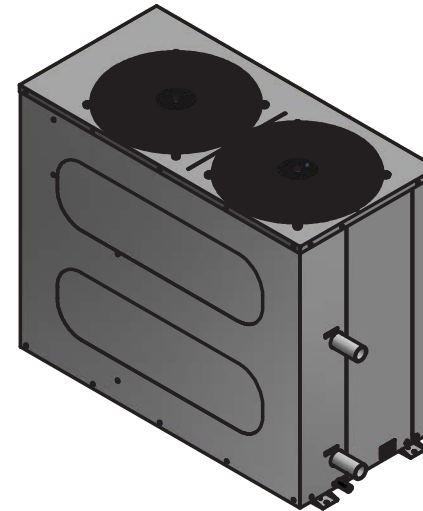
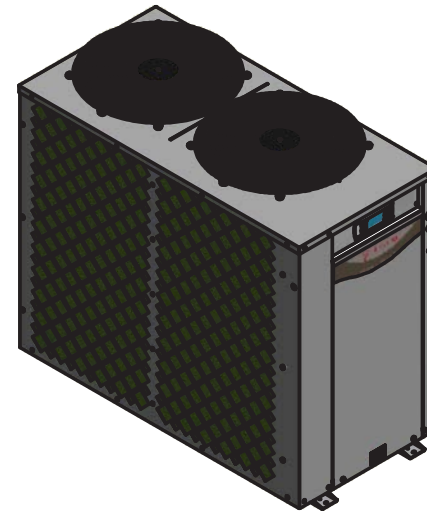
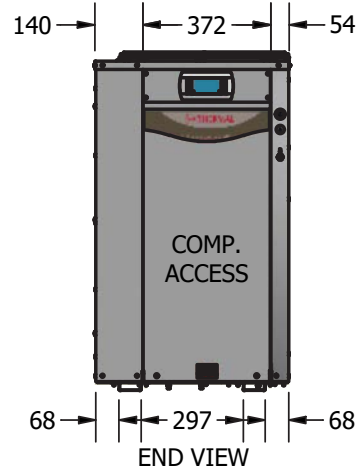
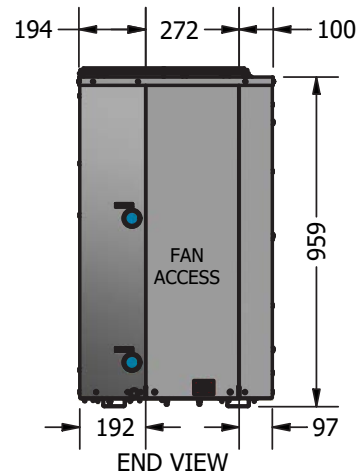
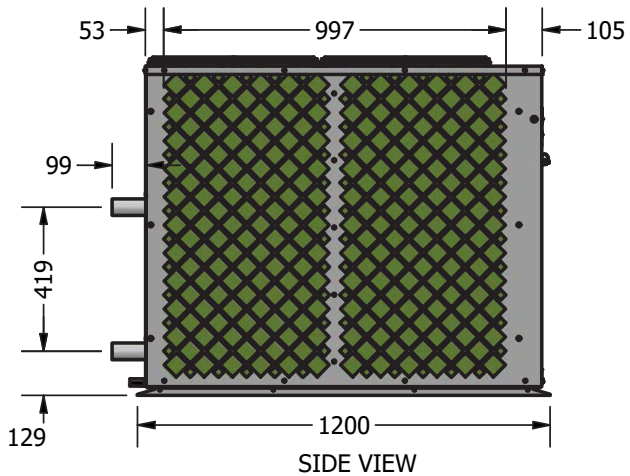
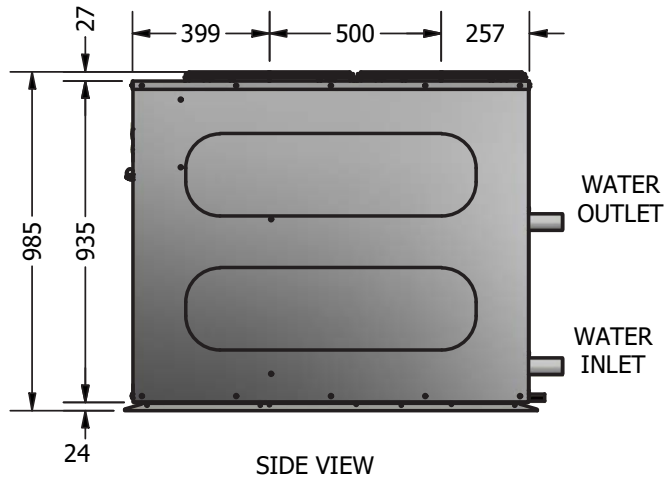
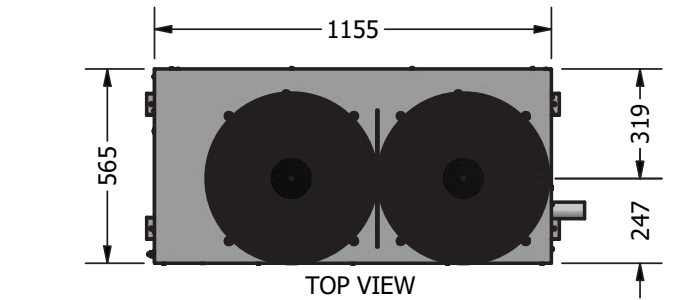
COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	14.70 kW 3.45 COP	16.76 kW 3.91 COP	19.05 kW 4.42 COP	20.92 kW 4.83 COP	22.93 kW 5.27 COP	23.63 kW 5.43 COP	24.34 kW 5.58 COP	25.07 kW 5.74 COP	26.57 kW 6.07 COP	28.14 kW 6.40 COP
30 °C	14.58 kW 3.22 COP	16.59 kW 3.63 COP	18.82 kW 4.10 COP	20.65 kW 4.48 COP	22.60 kW 4.88 COP	23.29 kW 5.02 COP	23.98 kW 5.17 COP	24.70 kW 5.31 COP	26.17 kW 5.61 COP	27.70 kW 5.93 COP
33 °C	14.47 kW 3.00 COP	16.42 kW 3.38 COP	18.59 kW 3.80 COP	20.37 kW 4.15 COP	22.29 kW 4.52 COP	22.95 kW 4.65 COP	23.63 kW 4.78 COP	24.33 kW 4.91 COP	25.77 kW 5.19 COP	27.26 kW 5.48 COP
36 °C	14.38 kW 2.79 COP	16.27 kW 3.14 COP	18.38 kW 3.52 COP	20.11 kW 3.84 COP	21.97 kW 4.18 COP	22.62 kW 4.29 COP	23.29 kW 4.42 COP	23.97 kW 4.54 COP	25.37 kW 4.79 COP	26.83 kW 5.06 COP
39 °C	14.30 kW 2.60 COP	16.13 kW 2.91 COP	18.18 kW 3.26 COP	19.86 kW 3.55 COP	21.67 kW 3.86 COP	22.31 kW 3.97 COP	22.95 kW 4.08 COP	23.61 kW 4.19 COP	24.98 kW 4.42 COP	26.41 kW 4.66 COP
42 °C	-	-	17.99 kW 3.03 COP	19.63 kW 3.29 COP	21.39 kW 3.57 COP	22.00 kW 3.66 COP	22.63 kW 3.76 COP	23.27 kW 3.87 COP	24.60 kW 4.08 COP	25.99 kW 4.30 COP




UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	350 mm
2	Water Connections	500 mm
3	Plain Back	Nil
4	Compressor Access	850 mm
5	Top – Fan Discharge	2500 mm

When units are placed side by side allow 700mm between evaporator coils.
 Rating Conditions: 27°C ambient, 60% RH, 27°C water in



REV	ECN	DESCRIPTION	DATE
01	0458	ITEM 3 Electrical Assembly 47372 was 47080	17/11/21

 Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 3	
		Description: RHEEM THERMAL A2W HP 24W 3P R407C	
Part No:	RTHP024KT-DQVI-3	Rev.:	1
Material:		Date:	18/08/2021
Drawn By:	JC	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°	Scale:	N.T.S

POOL HEAT PUMP SPECIFICATIONS
Titanium Heat Exchanger / Rheem IQ Control **RTHP026KT-DQVI-3**

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	13.38 FLA / 74 LRA
Min. Circuit Breaker Size	20 Amps
Refrigerant	R407C
Nominal Heating Capacity	25.81 kW
Power Input	4.37 kW
COP	5.90 COP
Noise Level	51 dBa @ 3 m
Rated Load Amps @ 12°C SST / 45°C SCT	8.7 Amps

TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20012	450mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	12.10 Amps	0.64 Amps
Voltage / Phase	380 - 415 / 3	220 - 240 / 1
Pole/RPM	2/2900	6/890
Air Flow	N/A	1835 L/s

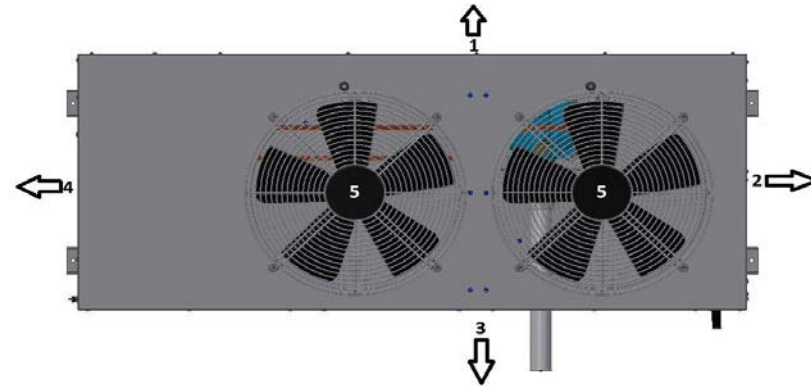
HEAT EXCHANGER (Water Side)		
Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	3.08 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	2.05 L/s	3.63 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

GENERAL INFORMATION	
Water Connections	65mm PVC
Drain	20mm PVC
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	195 kg
Size L x W x H	1536 mm x 617 mm x 983 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

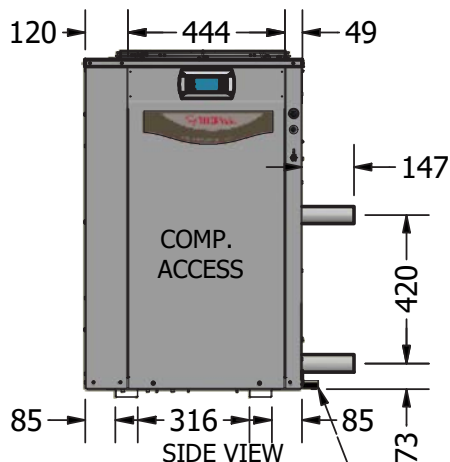
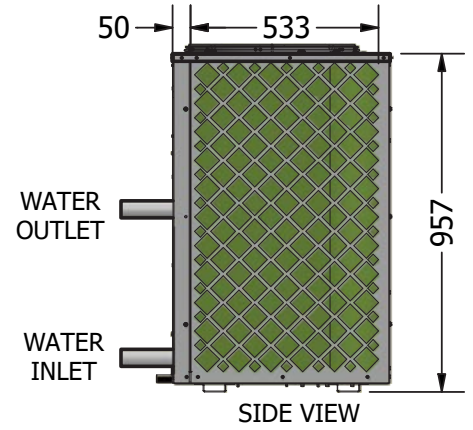
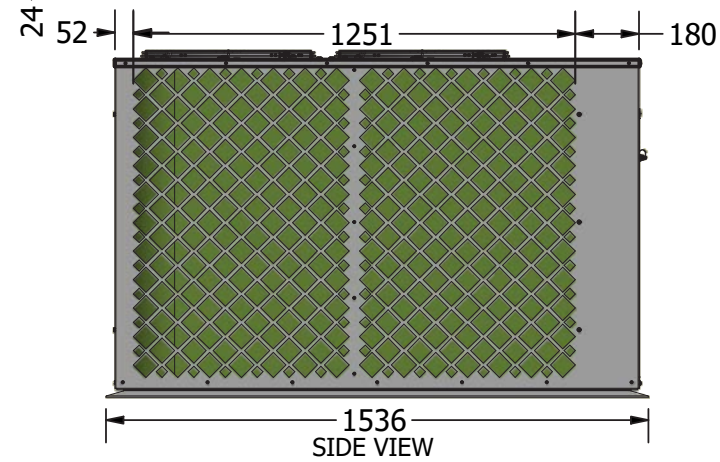
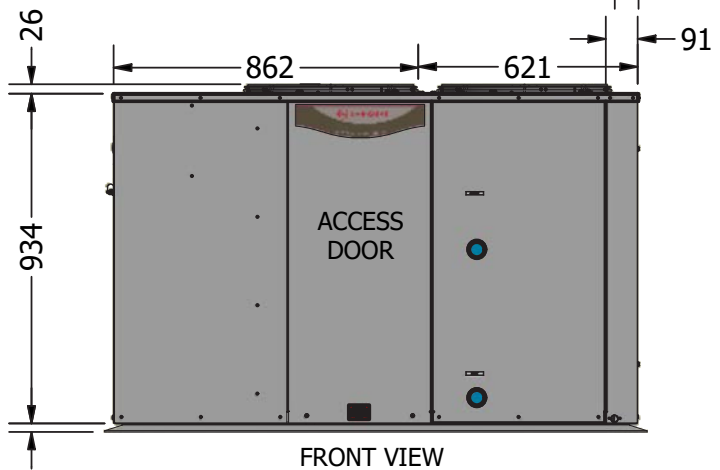
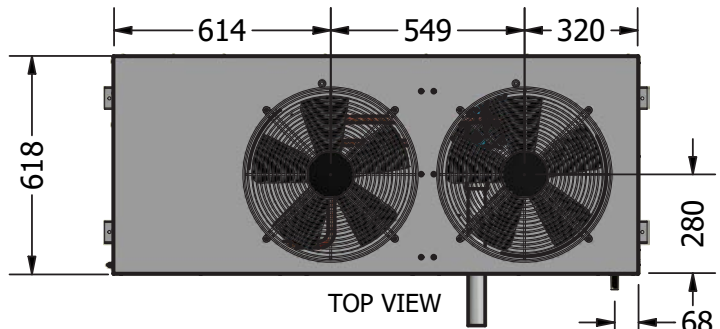
COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	15.71 kW 3.68 COP	17.88 kW 4.16 COP	20.29 kW 4.69 COP	22.25 kW 5.12 COP	24.34 kW 5.58 COP	25.07 kW 5.74 COP	25.81 kW 5.90 COP	26.57 kW 6.07 COP	27.35 kW 6.23 COP	28.14 kW 6.40 COP
30 °C	15.55 kW 3.42 COP	17.67 kW 3.86 COP	20.02 kW 4.35 COP	21.94 kW 4.74 COP	23.98 kW 5.17 COP	24.70 kW 5.31 COP	25.43 kW 5.46 COP	26.17 kW 5.61 COP	26.93 kW 5.77 COP	27.70 kW 5.93 COP
33 °C	15.42 kW 3.18 COP	17.48 kW 3.58 COP	19.77 kW 4.03 COP	21.63 kW 4.39 COP	23.63 kW 4.78 COP	24.33 kW 4.91 COP	25.04 kW 5.05 COP	25.77 kW 5.19 COP	26.51 kW 5.33 COP	27.26 kW 5.48 COP
36 °C	15.29 kW 2.96 COP	17.29 kW 3.32 COP	19.52 kW 3.73 COP	21.34 kW 4.06 COP	23.29 kW 4.42 COP	23.97 kW 4.54 COP	24.66 kW 4.66 COP	25.37 kW 4.79 COP	26.09 kW 4.92 COP	26.83 kW 5.06 COP
39 °C	15.19 kW 2.75 COP	17.13 kW 3.08 COP	19.29 kW 3.45 COP	21.06 kW 3.75 COP	22.95 kW 4.08 COP	23.61 kW 4.19 COP	24.29 kW 4.31 COP	24.98 kW 4.42 COP	25.69 kW 4.54 COP	26.41 kW 4.66 COP
42 °C	-	-	19.07 kW 3.20 COP	20.78 kW 3.47 COP	22.63 kW 3.76 COP	23.27 kW 3.87 COP	23.93 kW 3.97 COP	24.60 kW 4.08 COP	25.29 kW 4.19 COP	25.99 kW 4.30 COP

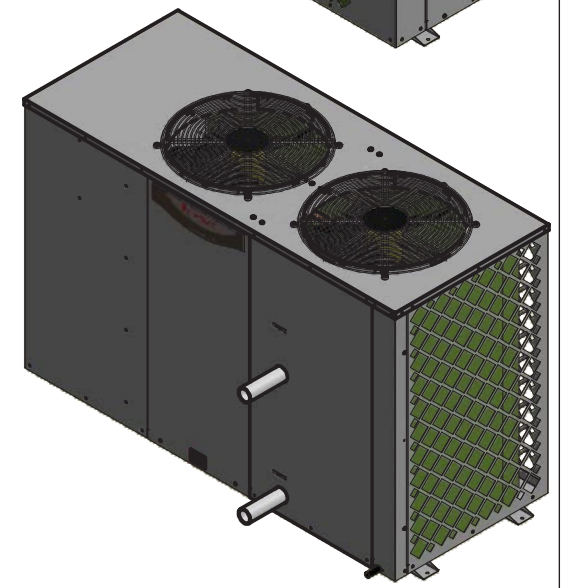
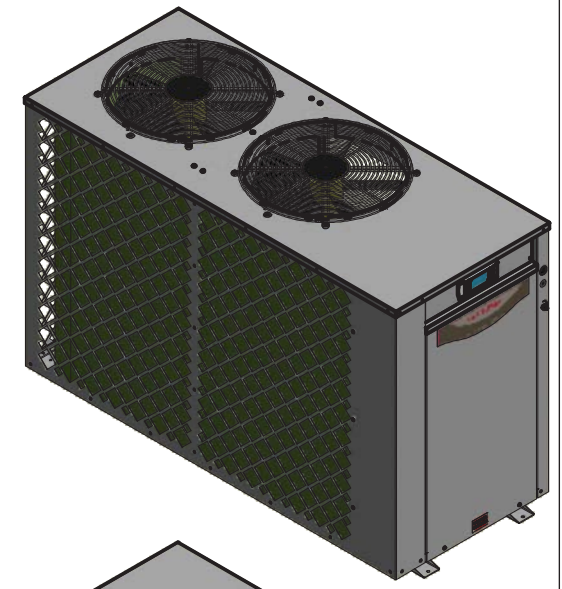


UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	350 mm
2	Evaporator Coil	350 mm
3	Water Connections	500 mm
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

When units are placed side by side allow 700mm between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



CONDENSATE DRAIN Ø20MM



REV	ECN	DESCRIPTION	DATE
01	0463	ITEM 2 REV 1 WAS 0, ITEM 3 47374 WAS 47082	11/11/21

Rheem
THERMAL SYSTEMS GROUP

SHEET 1 OF 3

Description:	POOL HTR 26kW 3PH R407C		
Part No:	RTHP026KT-DQVI-3	Rev.	1
Material:		Date:	26/08/2021
Drawn By:	sudipta.jena	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm		Scale: N.T.S
	Tubes - Dimensions ± 2, Angle ± 2°		

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

RTHP030KT-DQVI-3

ELECTRICAL INPUT

Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	14.9 FLA / 101 LRA
Min. Circuit Breaker Size	20 Amps
Refrigerant	R407C
Nominal Heating Capacity	28.28 kW
Power Input	5.05 kW
COP	5.60 COP
Noise Level	51 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	10.8 Amps

TECHNICAL DATA

	Compressor	Fan
Reference/Size	20014	450mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	13.6 Amps	0.64 Amps
Voltage / Phase	380 - 415 / 3	220 - 240 / 1
Pole/RPM	2/2900	6/890
Air Flow	N/A	1835 L/s

HEAT EXCHANGER (Water Side)

Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	3.38 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	2.25 L/s	3.97 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

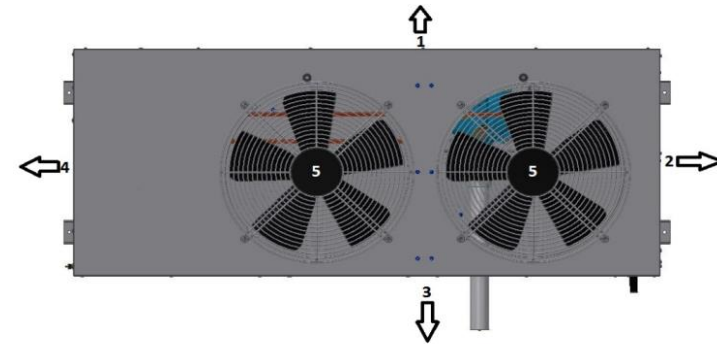
GENERAL INFORMATION

Water Connections	65mm PVC
Drain	20mm PVC
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	250 kg
Size L x W x H	1536 mm x 617 mm x 983 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

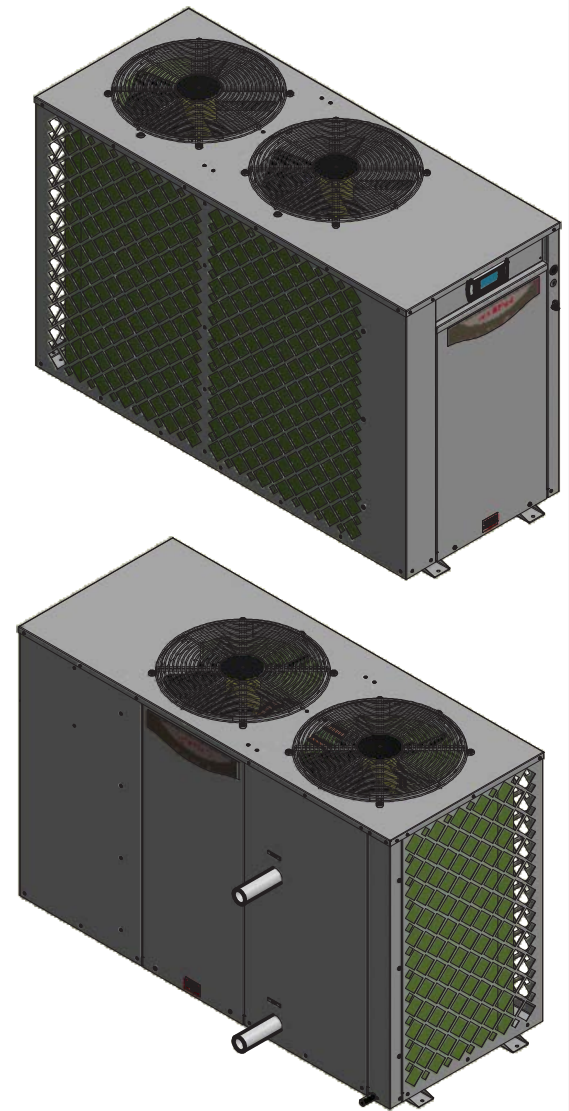
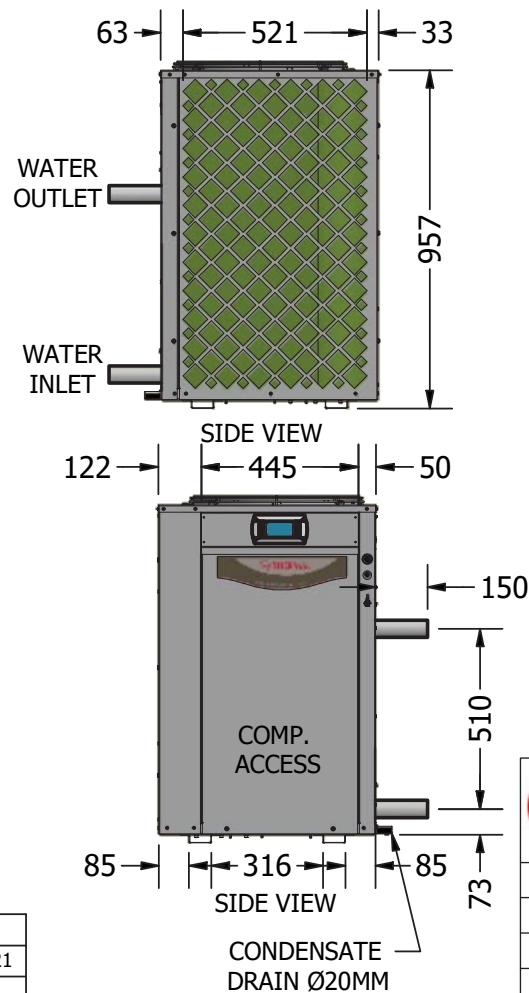
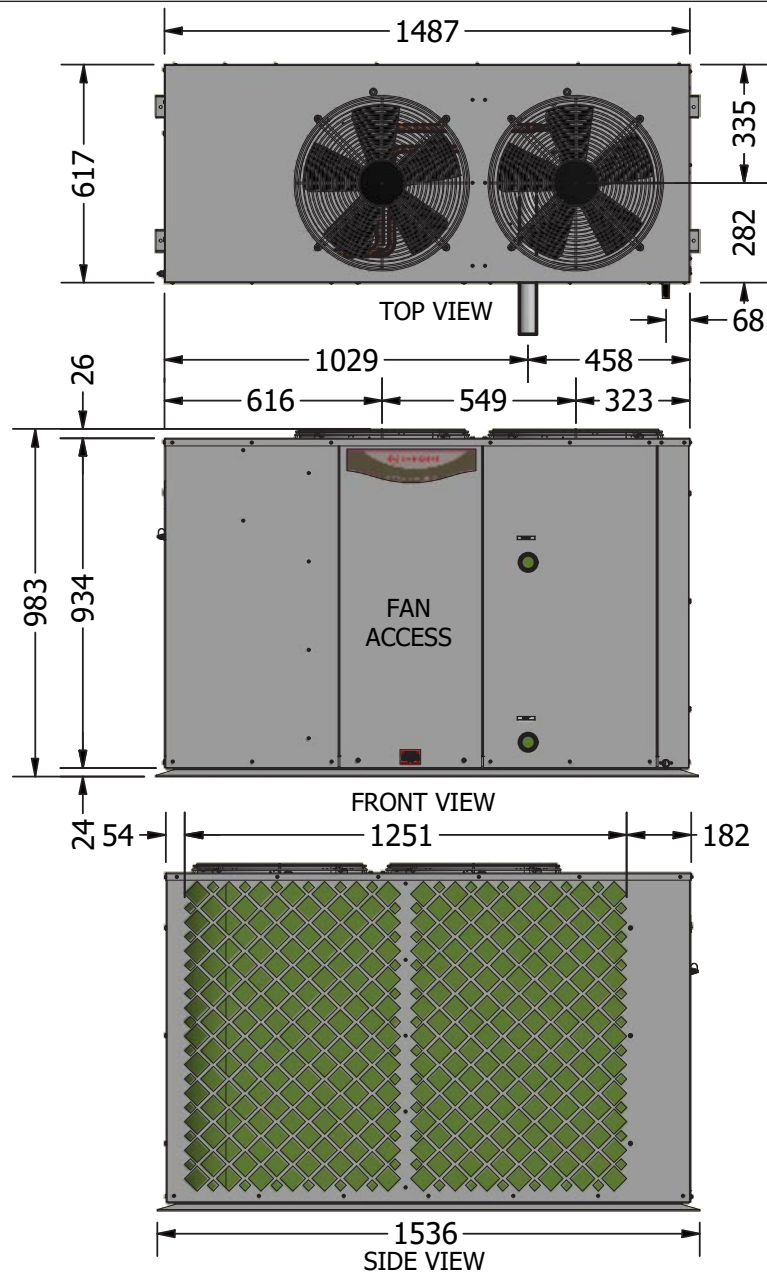
Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	16.89 kW	19.24 kW	21.89 kW	24.10 kW	26.53 kW	27.39 kW	28.28 kW	29.20 kW	31.12 kW	33.16 kW
	3.42 COP	3.89 COP	4.41 COP	4.83 COP	5.29 COP	5.44 COP	5.60 COP	5.77 COP	6.10 COP	6.45 COP
30 °C	16.73 kW	19.02 kW	21.60 kW	23.75 kW	26.11 kW	26.95 kW	27.82 kW	28.71 kW	30.58 kW	32.57 kW
	3.16 COP	3.59 COP	4.06 COP	4.45 COP	4.87 COP	5.02 COP	5.16 COP	5.32 COP	5.63 COP	5.95 COP
33 °C	16.59 kW	18.81 kW	21.31 kW	23.39 kW	25.69 kW	26.50 kW	27.34 kW	28.21 kW	30.03 kW	31.97 kW
	2.92 COP	3.31 COP	3.74 COP	4.10 COP	4.48 COP	4.62 COP	4.75 COP	4.89 COP	5.18 COP	5.48 COP
36 °C	16.48 kW	18.62 kW	21.03 kW	23.04 kW	25.26 kW	26.05 kW	26.87 kW	27.71 kW	29.47 kW	31.35 kW
	2.69 COP	3.05 COP	3.44 COP	3.77 COP	4.12 COP	4.24 COP	4.37 COP	4.50 COP	4.77 COP	5.04 COP
39 °C	16.39 kW	18.44 kW	20.76 kW	22.71 kW	24.85 kW	25.61 kW	26.40 kW	27.21 kW	28.92 kW	30.74 kW
	2.49 COP	2.81 COP	3.17 COP	3.46 COP	3.79 COP	3.90 COP	4.01 COP	4.13 COP	4.38 COP	4.64 COP
42 °C	-	-	20.52 kW	22.38 kW	24.44 kW	25.18 kW	25.94 kW	26.72 kW	28.37 kW	30.13 kW
	-	-	2.92 COP	3.18 COP	3.48 COP	3.58 COP	3.69 COP	3.79 COP	4.02 COP	4.25 COP




UNIT CLEARANCES

Direction	Description	Minimum Clearance Required
1	Evaporator Coil	350 mm
2	Evaporator Coil	350 mm
3	Water Connections	500 mm
4	Compressor Access	500 mm
5	Top – Fan Discharge	3500 mm

When units are placed side by side allow 700mm between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



REV	ECN	DESCRIPTION	DATE
01	0463	ITEM 2 REV 1 WAS 0, ITEM 3 47375 WAS 47083	11/11/21

 Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 3	
Description:	POOL HTR 30kW 3PH R407C		
Part No:	RTHP030KT-DQVI-3	Rev.	1
Material:			Date: 31/07/2021
Drawn By:	JPB	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°		Scale: N.T.S

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control RTHP041KT-DQVI-3

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	18.96 FLA / 101 LRA
Min. Circuit Breaker Size	25 Amps
Refrigerant	R407C
Nominal Heating Capacity	38.34 kW
Power Input	6.74 kW
COP	5.69 COP
Noise Level	62 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	14.4 Amps

TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20016	500mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	16.60 Amps	1.18 Amps
Voltage / Phase	380 - 415 / 3	220 - 240 / 1
Pole/RPM	2/2900	6/890
Air Flow	N/A	2300 L/s

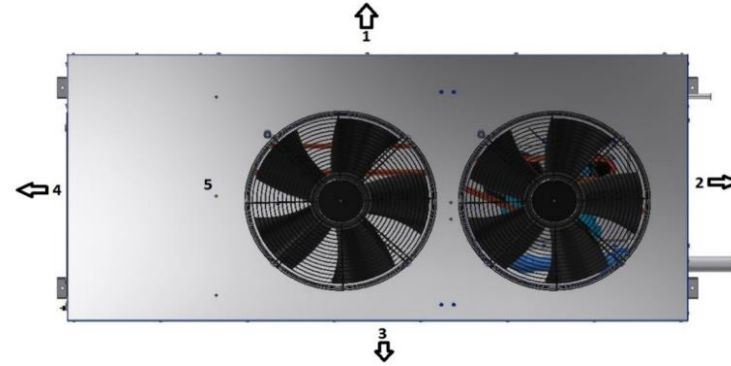
HEAT EXCHANGER (Water Side)	
Type of Water Tube	Titanium Tube / PVC Shell
Design	Shell and Tube
Recommended Pump Flow Rate	4.58 L/s
Design Temperature Difference	2.00 K
Allowable Pump Flow Rate (Min/Max)	3.05 L/s / 5.39 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K / 1.70 K
Max. Outlet Water Temp	45°C
Design Pressure Drop	20 - 40 kPa
Max. Operating Pressure	300 kPa

GENERAL INFORMATION	
Water Connections	80mm PVC
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	250 kg
Size L x W x H	1810 mm x 807 mm x 994 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
 Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

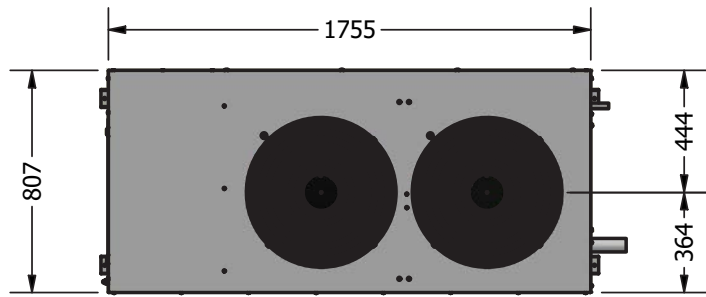
Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	23.21 kW	26.34 kW	29.88 kW	32.82 kW	36.03 kW	37.17 kW	38.34 kW	39.54 kW	42.05 kW	44.70 kW
	3.48 COP	3.95 COP	4.47 COP	4.90 COP	5.36 COP	5.52 COP	5.69 COP	5.85 COP	6.20 COP	6.55 COP
30 °C	22.97 kW	26.02 kW	29.45 kW	32.31 kW	35.43 kW	36.53 kW	37.67 kW	38.83 kW	41.27 kW	43.85 kW
	3.24 COP	3.66 COP	4.14 COP	4.54 COP	4.97 COP	5.12 COP	5.27 COP	5.43 COP	5.75 COP	6.08 COP
33 °C	22.75 kW	25.70 kW	29.04 kW	31.81 kW	34.84 kW	35.91 kW	37.01 kW	38.14 kW	40.51 kW	43.01 kW
	3.02 COP	3.40 COP	3.83 COP	4.20 COP	4.59 COP	4.73 COP	4.87 COP	5.02 COP	5.32 COP	5.64 COP
36 °C	22.53 kW	25.40 kW	28.64 kW	31.32 kW	34.26 kW	35.30 kW	36.36 kW	37.46 kW	39.75 kW	42.18 kW
	2.81 COP	3.15 COP	3.55 COP	3.88 COP	4.24 COP	4.37 COP	4.50 COP	4.64 COP	4.92 COP	5.21 COP
39 °C	22.33 kW	25.12 kW	28.25 kW	30.85 kW	33.69 kW	34.70 kW	35.73 kW	36.79 kW	39.01 kW	41.36 kW
	2.62 COP	2.93 COP	3.29 COP	3.59 COP	3.92 COP	4.04 COP	4.16 COP	4.28 COP	4.54 COP	4.80 COP
42 °C	-	-	27.88 kW	30.40 kW	33.14 kW	34.12 kW	35.11 kW	36.14 kW	38.29 kW	40.56 kW
	-	-	3.05 COP	3.32 COP	3.62 COP	3.72 COP	3.83 COP	3.95 COP	4.18 COP	4.43 COP



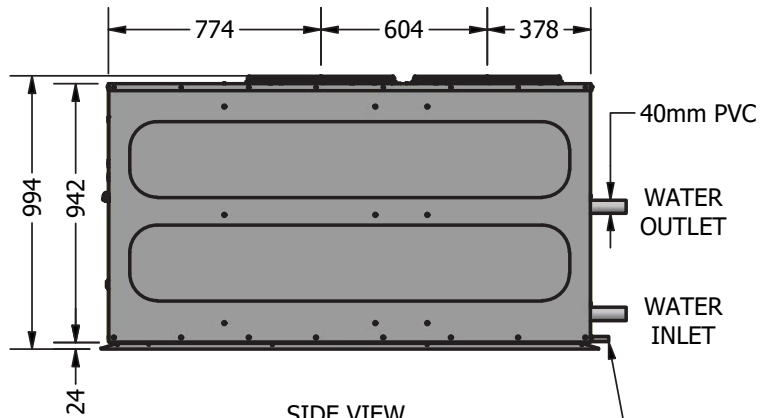
UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	500 mm
3	Plain Back	Nil
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

Note: Clearance required is subject to customer's discretion and applications.

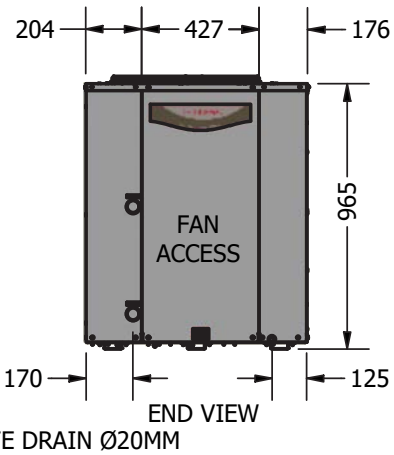
When units are placed side by side, allow 1000mm distance between evaporator coils.
 Rating Conditions: 27°C ambient, 60% RH, 27°C water in



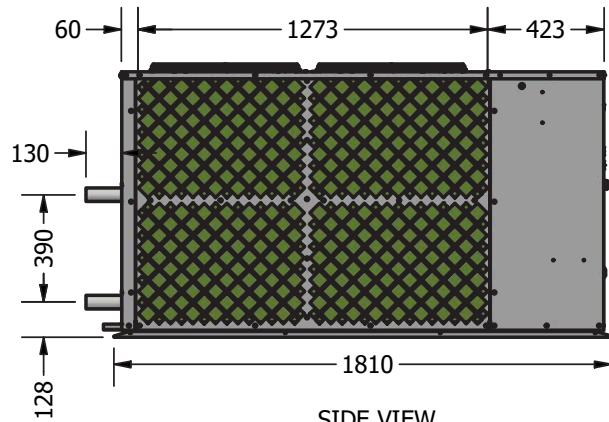
TOP VIEW



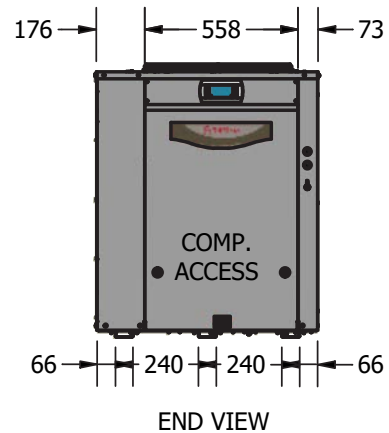
SIDE VIEW



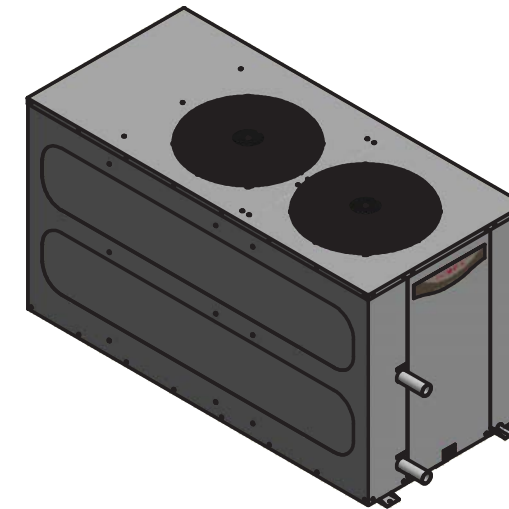
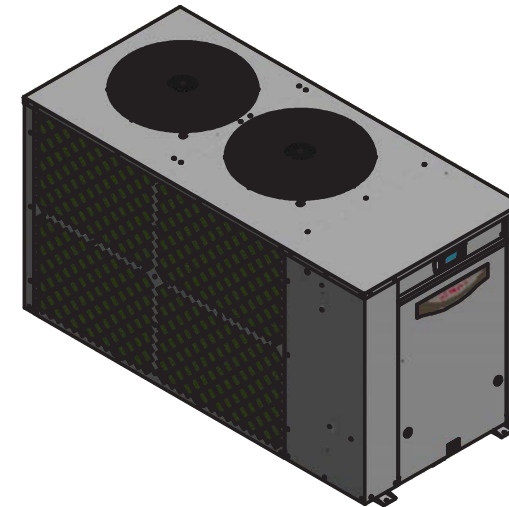
END VIEW




SIDE VIEW



END VIEW



REV	ECN	DESCRIPTION	DATE
01	0458	ITEM 3 Electrical Assembly 47376 was 47007	12/11/21

 Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 3	
		RHEEM THERMAL POOL HTR 41kW 3PH	
Description:	RHEEM THERMAL POOL HTR 41kW 3PH	Rev.	1
Part No:	RTHP041KT-DQVI-3	Date:	21/07/2021
Material:		Checked By:	
Drawn By:	sudipta.jena	Scale:	N.T.S
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°		

POOL HEAT PUMP SPECIFICATIONS
Titanium Heat Exchanger / Rheem IQ Control **RTHP052KT-DQVI-3**

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	24.2 FLA / 118 LRA
Min. Circuit Breaker Size	32 Amps
Refrigerant	R407C
Nominal Heating Capacity	51.28 kW
Power Input	9.38 kW
COP	5.47 COP
Noise Level	69 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	17.4 Amps

TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20018	630mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	21.80 Amps	1.20 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2900	6/890
Air Flow	N/A	4700 L/s

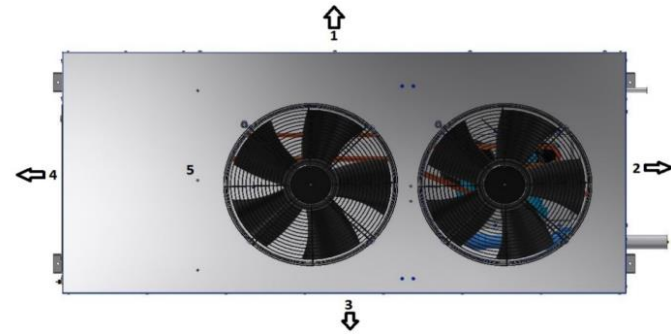
HEAT EXCHANGER (Water Side)	
Type of Water Tube	Titanium Tube / PVC Shell
Design	Shell and Tube
Recommended Pump Flow Rate	6.12 L/s
Design Temperature Difference	2.00 K
Allowable Pump Flow Rate (Min/Max)	4.08 L/s / 7.20 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K / 1.70 K
Max. Outlet Water Temp	45°C
Design Pressure Drop	20 - 40 kPa
Max. Operating Pressure	300 kPa

GENERAL INFORMATION	
Water Connections	80mm PVC
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	350 kg
Size L x W x H	1860 mm x 807 mm x 1355 mm

*Allowable temperature difference may vary from 1-3K for water-in temperatures of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

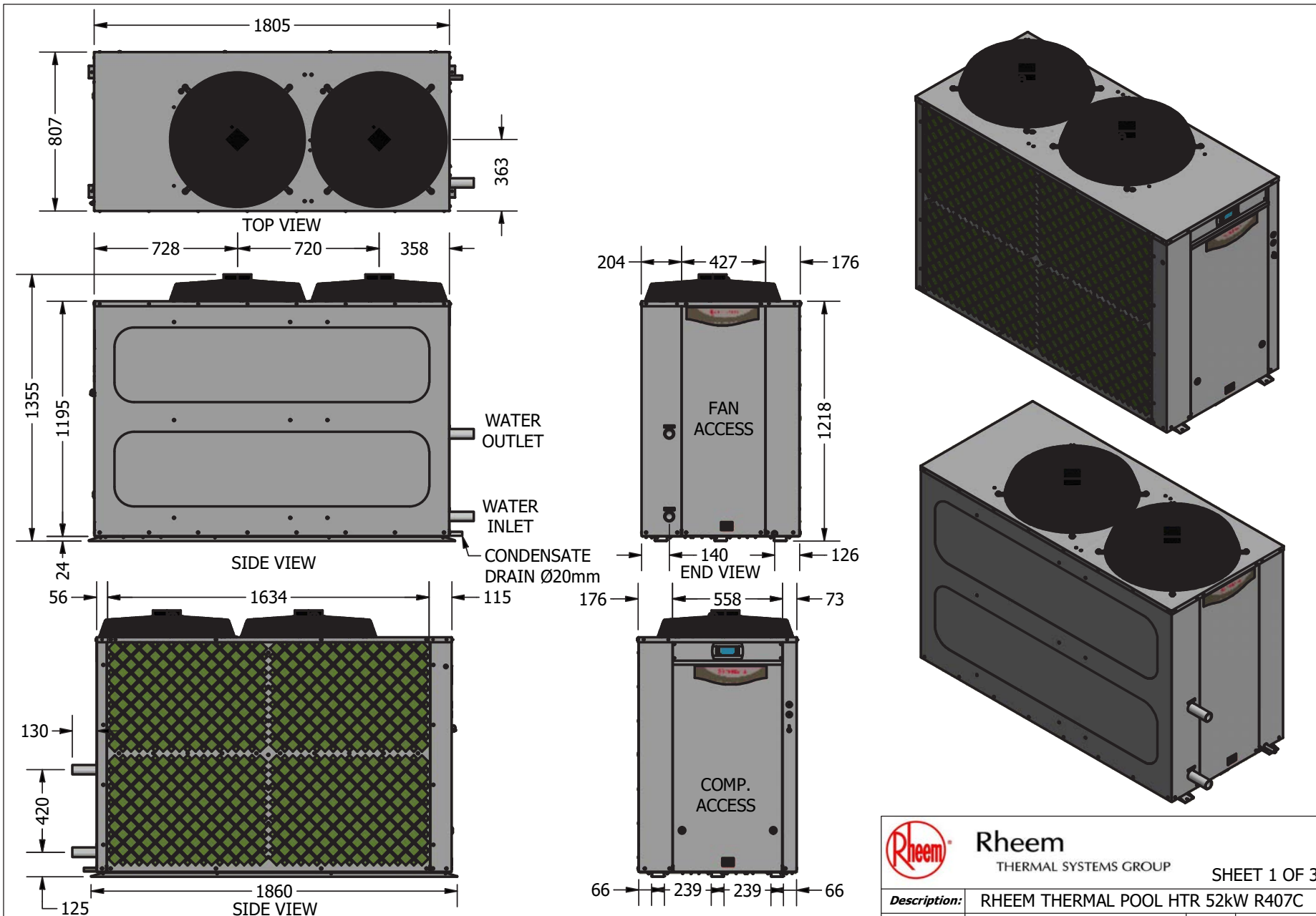
Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	30.75 kW	35.15 kW	40.00 kW	43.96 kW	48.24 kW	49.74 kW	51.28 kW	52.86 kW	56.15 kW	59.61 kW
	3.32 COP	3.78 COP	4.29 COP	4.70 COP	5.15 COP	5.31 COP	5.47 COP	5.63 COP	5.97 COP	6.32 COP
30 °C	30.30 kW	34.65 kW	39.41 kW	43.30 kW	47.48 kW	48.95 kW	50.46 kW	52.00 kW	55.21 kW	58.59 kW
	3.07 COP	3.50 COP	3.98 COP	4.36 COP	4.78 COP	4.92 COP	5.07 COP	5.22 COP	5.54 COP	5.87 COP
33 °C	29.83 kW	34.12 kW	38.79 kW	42.60 kW	46.70 kW	48.13 kW	49.60 kW	51.11 kW	54.24 kW	57.54 kW
	2.84 COP	3.24 COP	3.68 COP	4.03 COP	4.42 COP	4.55 COP	4.69 COP	4.83 COP	5.12 COP	5.43 COP
36 °C	29.34 kW	33.56 kW	38.15 kW	41.88 kW	45.88 kW	47.28 kW	48.71 kW	50.18 kW	53.24 kW	56.45 kW
	2.62 COP	2.99 COP	3.39 COP	3.72 COP	4.07 COP	4.20 COP	4.32 COP	4.45 COP	4.72 COP	5.01 COP
39 °C	28.84 kW	32.99 kW	37.49 kW	41.13 kW	45.04 kW	46.40 kW	47.80 kW	49.23 kW	52.21 kW	55.33 kW
	2.41 COP	2.75 COP	3.12 COP	3.42 COP	3.75 COP	3.86 COP	3.98 COP	4.10 COP	4.35 COP	4.61 COP
42 °C	-	-	36.82 kW	40.37 kW	44.18 kW	45.51 kW	46.87 kW	48.27 kW	51.16 kW	54.19 kW
	-	-	2.87 COP	3.15 COP	3.44 COP	3.55 COP	3.65 COP	3.76 COP	3.99 COP	4.23 COP



UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	500 mm
3	Plain Back	Nil
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

Note: Clearance required is subject to customer's discretion and applications.

When units are placed side by side, allow 1000mm distance between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



REV	ECN	DESCRIPTION	DATE
01	0458	ITEM 3 Electrical Assembly 47377 was 47005	12/11/21

Rheem
 THERMAL SYSTEMS GROUP

SHEET 1 OF 3

Description: RHEEM THERMAL POOL HTR 52kW R407C	
Part No: RTHP052KT-DQV-3	Rev.: 1
Material:	Date: 21/07/2021
Drawn By: sudipta.jena	Checked By:
General Tolerance: Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°	Scale: N.T.S

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

RTHP066KT-DQVI-3

ELECTRICAL INPUT

Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	33.6 FLA / 174 LRA
Min. Circuit Breaker Size	40.0 Amps
Refrigerant	R407C
Nominal Heating Capacity	66.23 kW
Power Input	12.37 kW
COP	5.35 COP
Noise Level	69 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	25.9 Amps

TECHNICAL DATA

	Compressor	Fan
Reference/Size	20056	630mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	31.20 Amps	1.20 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2900	6/890
Air Flow	N/A	4700 L/s

HEAT EXCHANGER (Water Side)

Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	7.91 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	5.27 L/s	9.30 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

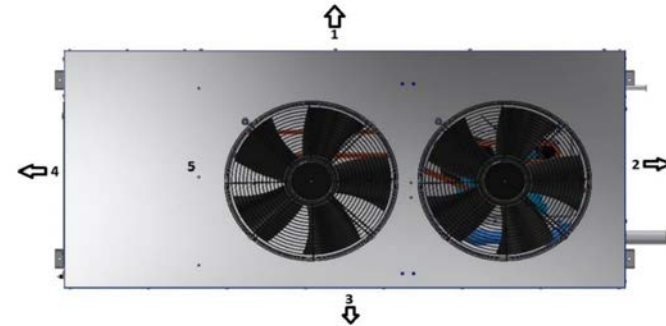
GENERAL INFORMATION

Water Connections	80mm PVC
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	400 kg
Size L x W x H	1860 mm x 807 mm x 1355 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

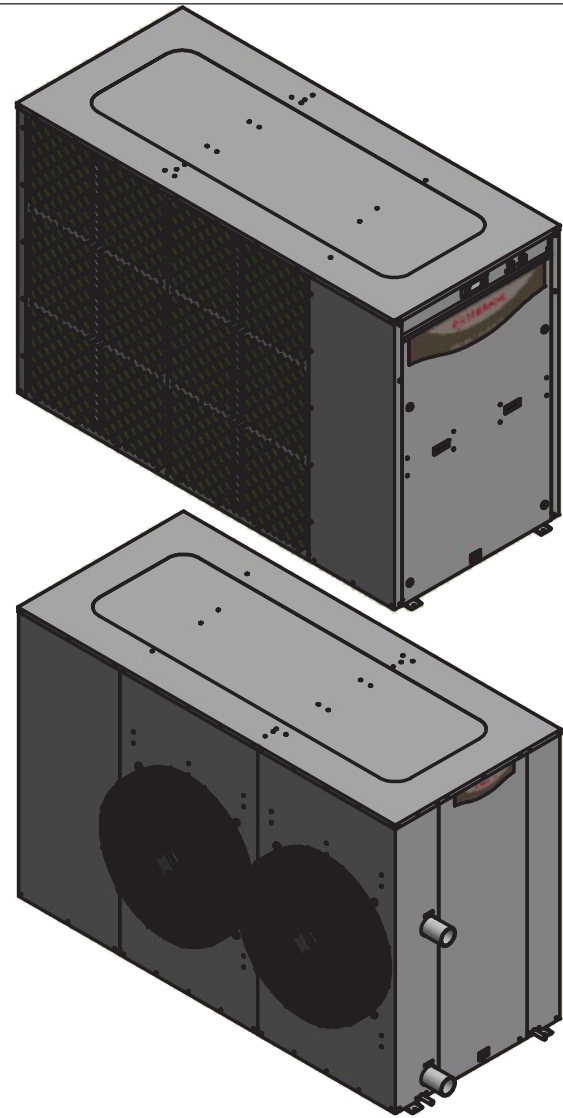
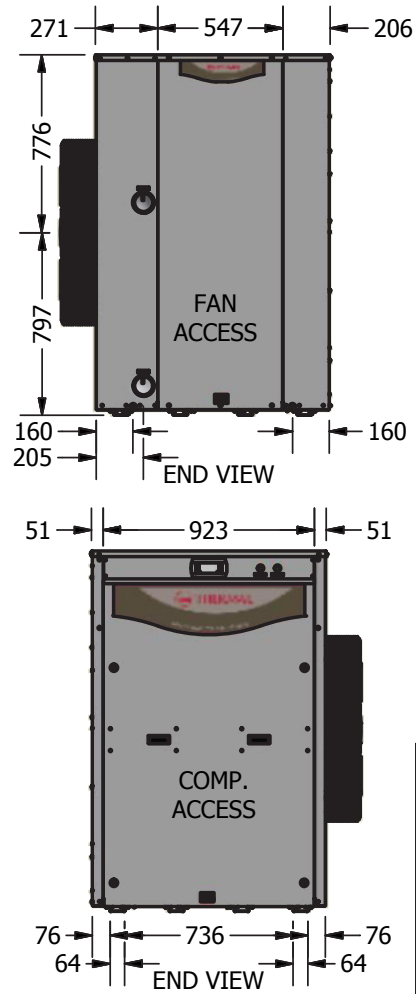
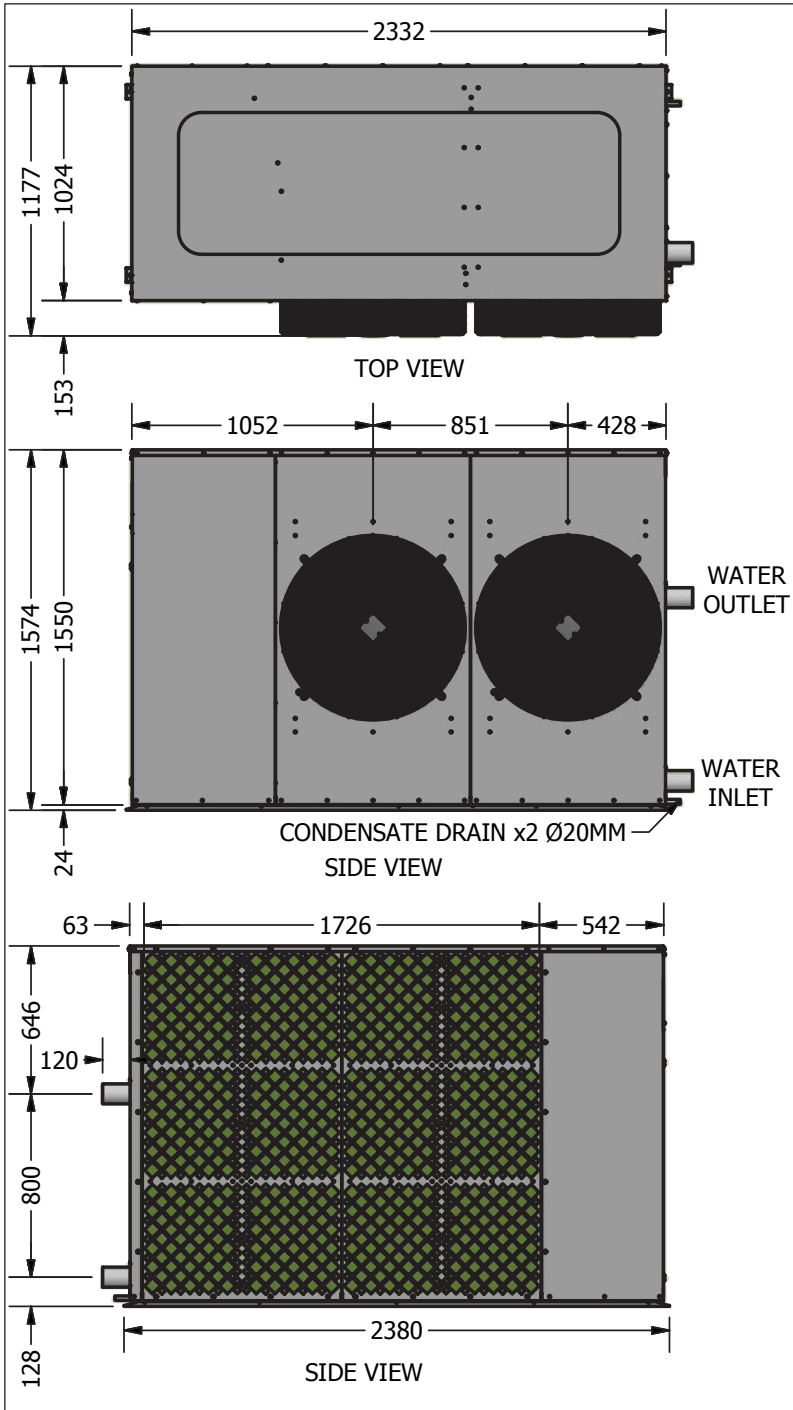
Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	39.74 kW	45.33 kW	51.55 kW	56.68 kW	62.25 kW	64.21 kW	66.23 kW	68.30 kW	72.61 kW	77.15 kW
	3.27 COP	3.72 COP	4.22 COP	4.62 COP	5.05 COP	5.20 COP	5.35 COP	5.51 COP	5.82 COP	6.14 COP
30 °C	39.20 kW	44.69 kW	50.79 kW	55.80 kW	61.25 kW	63.16 kW	65.13 kW	67.15 kW	71.35 kW	75.79 kW
	3.03 COP	3.45 COP	3.91 COP	4.29 COP	4.69 COP	4.83 COP	4.97 COP	5.12 COP	5.42 COP	5.72 COP
33 °C	38.64 kW	44.03 kW	49.99 kW	54.89 kW	60.20 kW	62.07 kW	63.99 kW	65.96 kW	70.06 kW	74.38 kW
	2.81 COP	3.19 COP	3.62 COP	3.97 COP	4.34 COP	4.47 COP	4.61 COP	4.74 COP	5.02 COP	5.31 COP
36 °C	38.06 kW	43.34 kW	49.17 kW	53.96 kW	59.14 kW	60.96 kW	62.82 kW	64.74 kW	68.74 kW	72.94 kW
	2.60 COP	2.95 COP	3.34 COP	3.66 COP	4.01 COP	4.13 COP	4.25 COP	4.38 COP	4.64 COP	4.91 COP
39 °C	37.45 kW	42.63 kW	48.33 kW	53.00 kW	58.04 kW	59.82 kW	61.63 kW	63.50 kW	67.39 kW	71.48 kW
	2.40 COP	2.72 COP	3.08 COP	3.38 COP	3.70 COP	3.81 COP	3.92 COP	4.04 COP	4.28 COP	4.53 COP
42 °C	-	-	47.47 kW	52.02 kW	56.93 kW	58.66 kW	60.42 kW	62.24 kW	66.02 kW	69.99 kW
	-	-	2.84 COP	3.11 COP	3.40 COP	3.50 COP	3.61 COP	3.72 COP	3.94 COP	4.17 COP




UNIT CLEARANCES

Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	500 mm
3	Plain Back	Nil
4	Compressor Access	850 mm
5	Top - Fan Discharge	3500 mm

When units are placed side by side allow 1000mm between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



		Rheem	
THERMAL SYSTEMS GROUP		SHEET 1 OF 3	
Description:	POOL HTR 88kW 3PH R407C		
Part No:	RTHP088KT-DQHI-3	Rev.	
Material:		Date:	25/02/2019
Drawn By:	jbates	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°		Scale: N.T.S

POOL HEAT PUMP SPECIFICATIONS
Titanium Heat Exchanger / Rheem IQ Control **RTHP087KT-DQVI-3**

ELECTRICAL INPUT	
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	40.9 FLA / 225 LRA
Min. Circuit Breaker Size	50.0 Amps
Refrigerant	R407C
Nominal Heating Capacity	87.48 kW
Power Input	16.56 kW
COP	5.28 COP
Noise Level	69 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	28.9 Amps

TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20092	710mm
Type	Scroll	Axial
Number Per Unit	1	2
FLA (Full Load Amps, each)	37.50 Amps	1.70 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2900	6/890
Air Flow	N/A	7334 L/s

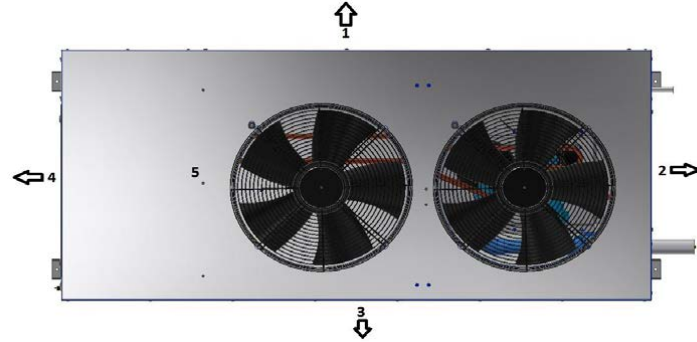
HEAT EXCHANGER (Water Side)		
Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	10.45 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	6.96 L/s	12.29 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

GENERAL INFORMATION	
Water Connections	80 mm PVC
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	550 kg
Size L x W x H	2180 mm x 1134 mm x 1205 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

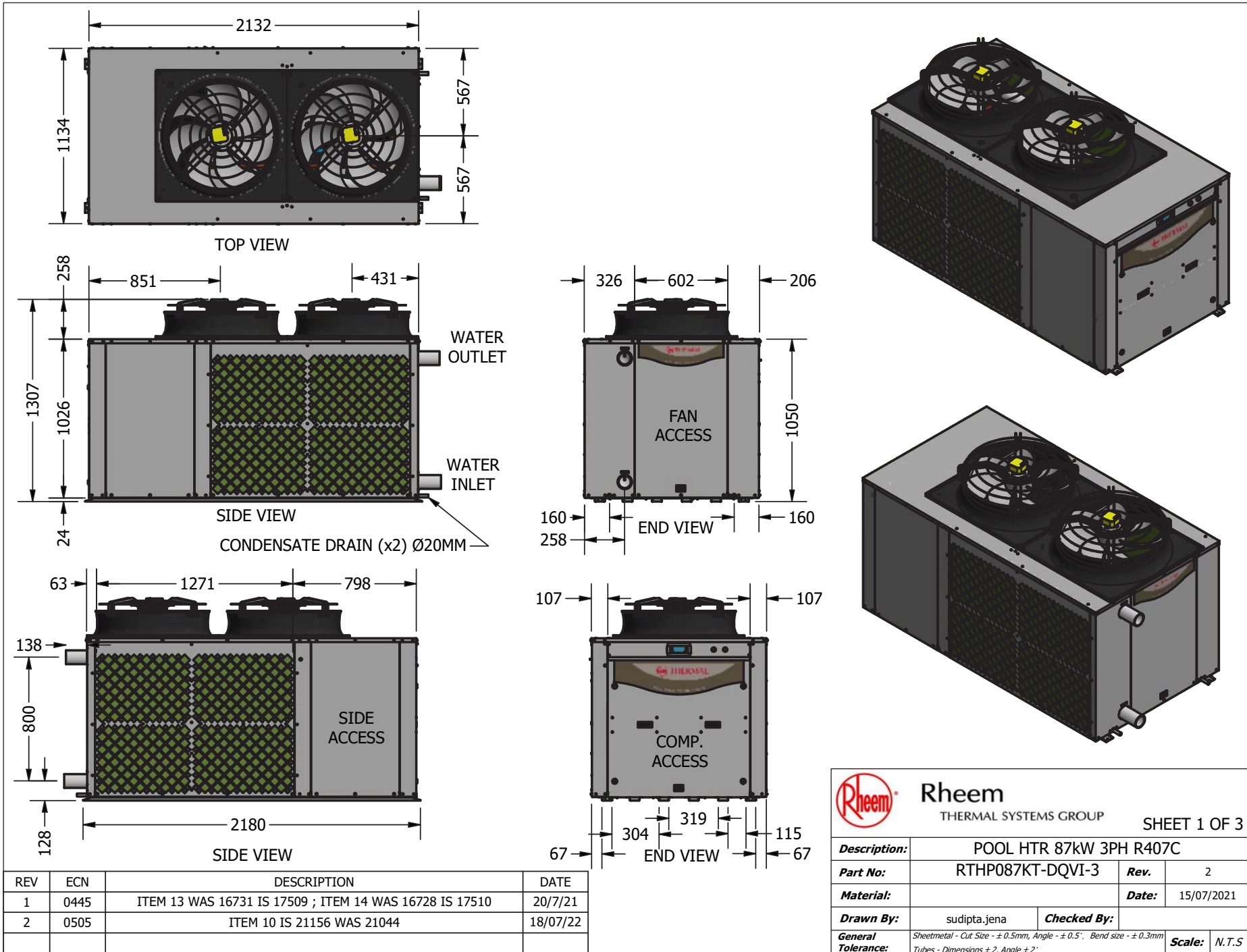
COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	52.98 kW	60.17 kW	68.28 kW	75.00 kW	82.29 kW	84.85 kW	87.48 kW	87.48 kW	90.18 kW	95.77 kW
	3.29 COP	3.71 COP	4.18 COP	4.56 COP	4.98 COP	5.13 COP	5.28 COP	5.28 COP	5.44 COP	5.77 COP
30 °C	52.40 kW	59.40 kW	67.32 kW	73.90 kW	81.05 kW	83.56 kW	86.14 kW	86.14 kW	88.78 kW	94.28 kW
	3.06 COP	3.45 COP	3.88 COP	4.23 COP	4.62 COP	4.75 COP	4.89 COP	4.89 COP	5.03 COP	5.33 COP
33 °C	51.88 kW	58.68 kW	66.40 kW	72.82 kW	79.81 kW	82.28 kW	84.80 kW	84.80 kW	87.40 kW	92.79 kW
	2.85 COP	3.20 COP	3.60 COP	3.92 COP	4.28 COP	4.40 COP	4.53 COP	4.53 COP	4.66 COP	4.93 COP
36 °C	51.43 kW	58.02 kW	65.52 kW	71.78 kW	78.61 kW	81.02 kW	83.49 kW	83.49 kW	86.03 kW	91.32 kW
	2.64 COP	2.97 COP	3.34 COP	3.64 COP	3.96 COP	4.07 COP	4.19 COP	4.19 COP	4.30 COP	4.55 COP
39 °C	51.07 kW	57.43 kW	64.70 kW	70.79 kW	77.45 kW	79.80 kW	82.21 kW	82.21 kW	84.69 kW	89.86 kW
	2.45 COP	2.75 COP	3.09 COP	3.36 COP	3.66 COP	3.76 COP	3.87 COP	3.87 COP	3.98 COP	4.20 COP
42 °C	-	-	63.95 kW	69.86 kW	76.33 kW	78.62 kW	80.98 kW	80.98 kW	83.40 kW	88.45 kW
	-	-	2.86 COP	3.11 COP	3.38 COP	3.48 COP	3.58 COP	3.58 COP	3.68 COP	3.88 COP



UNIT CLEARANCES		
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	850 mm
3	Evaporator Coil	500 mm
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

When units are placed side by side allow 1000mm between evaporator coils.
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



REV	ECN	DESCRIPTION	DATE
1	0445	ITEM 13 WAS 16731 IS 17509 ; ITEM 14 WAS 16728 IS 17510	20/7/21
2	0505	ITEM 10 IS 21156 WAS 21044	18/07/22

Rheem
 THERMAL SYSTEMS GROUP

SHEET 1 OF 3

Description: POOL HTR 87kW 3PH R407C	
Part No: RTHP087KT-DQVI-3	Rev.: 2
Material:	Date: 15/07/2021
Drawn By: sudipta.jena	Checked By:
General Tolerance: Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°	Scale: N.T.S

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

RTHP102KT-DQVI-3

ELECTRICAL INPUT

Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz
Full Load / Locked Rotor (Amps Per Phase)	47.0 FLA / 118 LRA
Min. Circuit Breaker Size	63.0 Amps
Refrigerant	R407C
Nominal Heating Capacity	102.56 kW
Power Input	18.24 kW
COP	5.62 COP
Noise Level	69 dBa @ 3 m
Rated Load Amps @ 10°C SST / 45°C SCT	36.6 Amps

TECHNICAL DATA

	Compressor	Fan
Reference/Size	20018	710mm
Type	Scroll	Axial
Number Per Unit	2	2
FLA (Full Load Amps, each)	21.80 Amps	1.70 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2900	6/890
Air Flow	N/A	7334 L/s

HEAT EXCHANGER (Water Side)

Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	12.25 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	8.16 L/s	14.41 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	

GENERAL INFORMATION

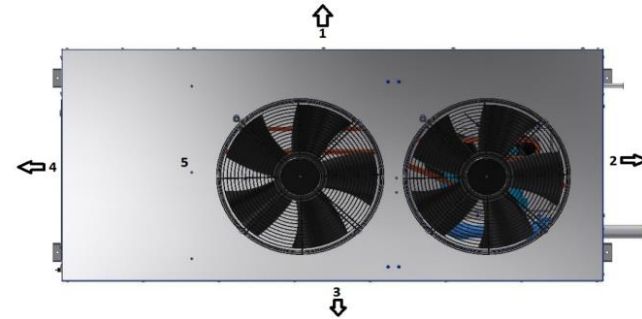
Water Connections	80 mm PVC
Drain	20mm Aluminium
Defrost	Reverse Cycle De-ice
Cabinet Construction	1.2mm Stucco Aluminium
Approx. Shipping Weight	700 kg
Size L x W x H	2180 mm x 1134 mm x 1373 mm

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.

Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	61.49 kW	70.30 kW	79.99 kW	87.92 kW	96.48 kW	99.48 kW	102.56 kW	105.72 kW	112.30 kW	119.22 kW
	3.41 COP	3.89 COP	4.41 COP	4.84 COP	5.30 COP	5.46 COP	5.62 COP	5.79 COP	6.14 COP	6.50 COP
30 °C	60.61 kW	69.30 kW	78.82 kW	86.59 kW	94.97 kW	97.91 kW	100.92 kW	104.01 kW	110.43 kW	117.19 kW
	3.16 COP	3.60 COP	4.08 COP	4.48 COP	4.90 COP	5.05 COP	5.21 COP	5.36 COP	5.69 COP	6.02 COP
33 °C	59.66 kW	68.23 kW	77.59 kW	85.20 kW	93.39 kW	96.26 kW	99.20 kW	102.22 kW	108.48 kW	115.07 kW
	2.91 COP	3.32 COP	3.77 COP	4.13 COP	4.53 COP	4.67 COP	4.81 COP	4.95 COP	5.25 COP	5.56 COP
36 °C	58.68 kW	67.12 kW	76.30 kW	83.76 kW	91.76 kW	94.56 kW	97.43 kW	100.37 kW	106.48 kW	112.89 kW
	2.68 COP	3.06 COP	3.47 COP	3.81 COP	4.17 COP	4.30 COP	4.43 COP	4.56 COP	4.84 COP	5.12 COP
39 °C	57.67 kW	65.98 kW	74.98 kW	82.27 kW	90.08 kW	92.81 kW	95.60 kW	98.47 kW	104.41 kW	110.66 kW
	2.47 COP	2.81 COP	3.19 COP	3.50 COP	3.83 COP	3.95 COP	4.07 COP	4.19 COP	4.44 COP	4.71 COP
42 °C	-	-	73.63 kW	80.75 kW	88.36 kW	91.02 kW	93.74 kW	96.53 kW	102.31 kW	108.38 kW
	-	-	2.93 COP	3.21 COP	3.51 COP	3.62 COP	3.73 COP	3.84 COP	4.07 COP	4.32 COP

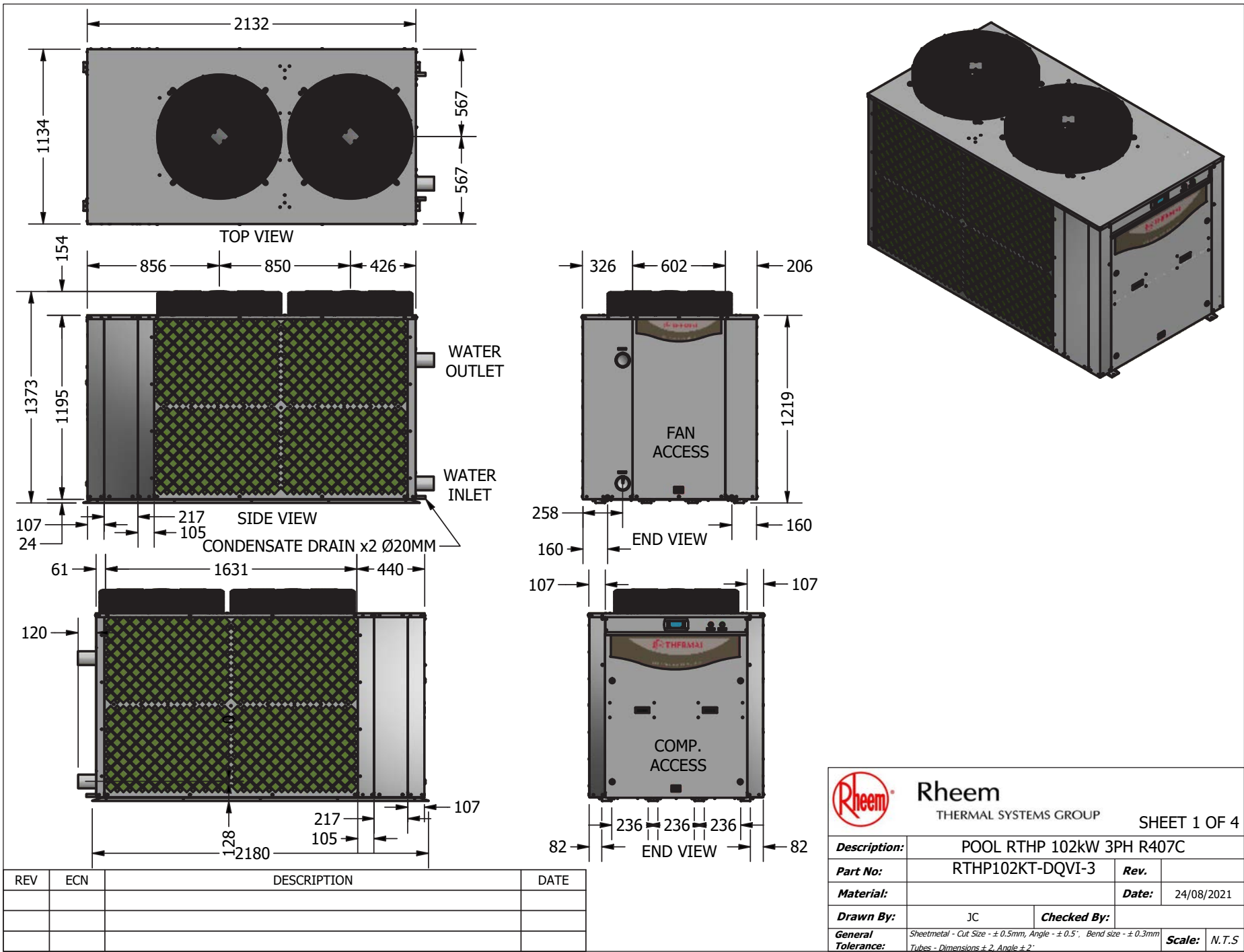


UNIT CLEARANCES


Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	500 mm
3	Evaporator Coil	500 mm
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

When units are placed side by side allow 1000mm between evaporator coils.

Rating Conditions: 27°C ambient, 60% RH, 27°C water in



REV	ECN	DESCRIPTION	DATE

 Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 4	
		Description: POOL RTHP 102kW 3PH R407C	
Part No: RTHP102KT-DQVI-3		Rev.:	
Material:		Date: 24/08/2021	
Drawn By: JC		Checked By:	
General Tolerance: Sheetmetal - Cut Size $\pm 0.5\text{mm}$, Angle $\pm 0.5^\circ$, Bend size $\pm 0.3\text{mm}$ Tubes - Dimensions ± 2 , Angle $\pm 2^\circ$		Scale: N.T.S	

POOL HEAT PUMP SPECIFICATIONS

Titanium Heat Exchanger / Rheem IQ Control

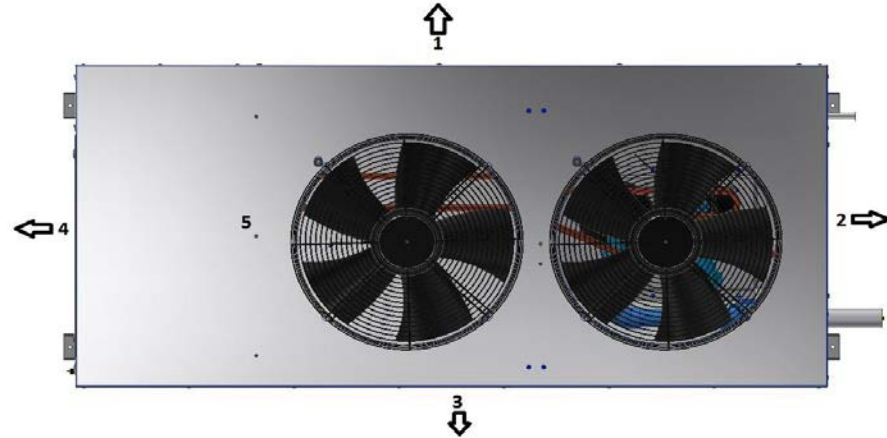
RTHP132KT-DQVI-3

ELECTRICAL INPUT		
Voltage/Phase	380 - 415 Volts / 3 Phase / 50 Hz	
Full Load / Locked Rotor (Amps Per Phase)	65.8 FLA / 174 LRA	
Min. Circuit Breaker Size	80.0 Amps	
Refrigerant	R407C	
Nominal Heating Capacity	132.45 kW	
Power Input	24.22 kW	
COP	5.47 COP	
Noise Level	69 dBa @ 3 m	
Rated Load Amps @ 10°C SST / 45°C SCT	50.4 Amps	
TECHNICAL DATA		
	Compressor	Fan
Reference/Size	20056	710mm
Type	Scroll	Axial
Number Per Unit	2	2
FLA (Full Load Amps, each)	31.20 Amps	1.70 Amps
Voltage / Phase	380 - 415 / 3	380 - 415 / 3
Pole/RPM	2/2900	6/890
Air Flow	N/A	7334 L/s
HEAT EXCHANGER (Water Side)		
Type of Water Tube	Titanium Tube / PVC Shell	
Design	Shell and Tube	
Recommended Pump Flow Rate	15.82 L/s	
Design Temperature Difference	2.00 K	
Allowable Pump Flow Rate (Min/Max)	10.54 L/s	18.61 L/s
Allowable Temperature Difference (Max/Min)*	3.00 K	1.70 K
Max. Outlet Water Temp	45°C	
Design Pressure Drop	20 - 40 kPa	
Max. Operating Pressure	300 kPa	
GENERAL INFORMATION		
Water Connections	125 mm PVC	
Drain	20mm Aluminium	
Defrost	Reverse Cycle De-ice	
Cabinet Construction	1.2mm Stucco Aluminium	
Approx. Shipping Weight	850 kg	
Size L x W x H	2180 mm x 1134 mm x 1373 mm	

*Allowable temperature difference may vary from 1-3K for water-in temperature of upto 33°C.
Allowable temperature difference is 1-2K for water-in temperatures from 36°C and above.

COP TABLE

Water In °C	Ambient Temperature °C									
	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	27 °C	30 °C	35 °C	40 °C
27 °C	79.48 kW 3.34 COP	90.66 kW 3.80 COP	103.10 kW 4.31 COP	113.36 kW 4.72 COP	124.50 kW 5.16 COP	128.42 kW 5.32 COP	132.45 kW 5.47 COP	136.59 kW 5.63 COP	145.21 kW 5.95 COP	154.31 kW 6.27 COP
30 °C	78.41 kW 3.09 COP	89.38 kW 3.52 COP	101.57 kW 3.99 COP	111.61 kW 4.38 COP	122.49 kW 4.79 COP	126.32 kW 4.93 COP	130.25 kW 5.07 COP	134.29 kW 5.22 COP	142.70 kW 5.52 COP	151.57 kW 5.84 COP
33 °C	77.28 kW 2.86 COP	88.05 kW 3.25 COP	99.98 kW 3.69 COP	109.79 kW 4.04 COP	120.41 kW 4.43 COP	124.14 kW 4.56 COP	127.98 kW 4.69 COP	131.92 kW 4.83 COP	140.12 kW 5.12 COP	148.76 kW 5.41 COP
36 °C	76.11 kW 2.64 COP	86.67 kW 3.00 COP	98.34 kW 3.40 COP	107.91 kW 3.73 COP	118.27 kW 4.08 COP	121.91 kW 4.20 COP	125.65 kW 4.33 COP	129.49 kW 4.46 COP	137.47 kW 4.72 COP	145.89 kW 5.00 COP
39 °C	74.91 kW 2.44 COP	85.26 kW 2.77 COP	96.66 kW 3.14 COP	105.99 kW 3.44 COP	116.09 kW 3.76 COP	119.63 kW 3.87 COP	123.27 kW 3.99 COP	127.00 kW 4.11 COP	134.77 kW 4.35 COP	142.96 kW 4.61 COP
42 °C	-	-	94.94 kW 2.89 COP	104.04 kW 3.16 COP	113.86 kW 3.46 COP	117.31 kW 3.56 COP	120.85 kW 3.66 COP	124.48 kW 3.77 COP	132.03 kW 4.00 COP	139.99 kW 4.23 COP

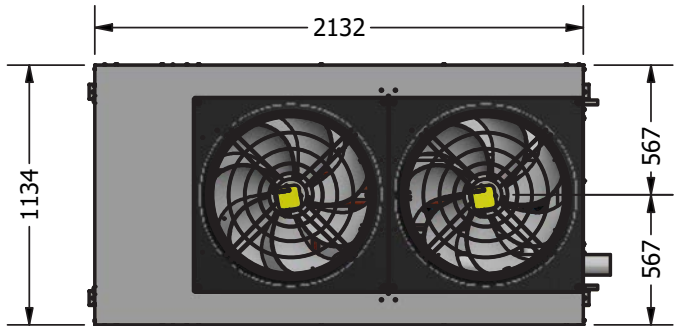


UNIT CLEARANCES

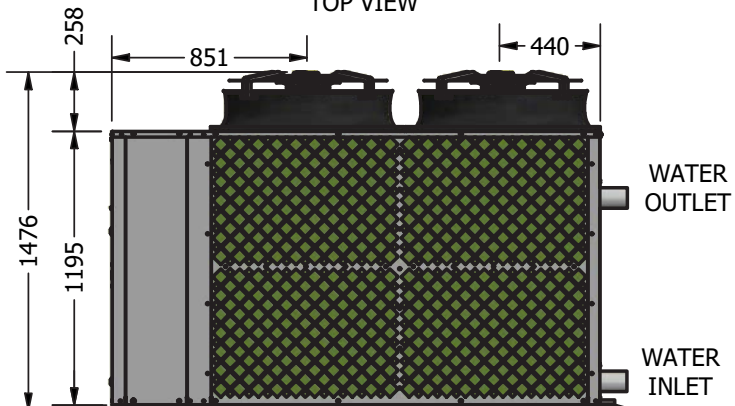
Direction	Description	Minimum Clearance Required
1	Evaporator Coil	500 mm
2	Water Connections	500 mm
3	Evaporator Coil	500 mm
4	Compressor Access	850 mm
5	Top – Fan Discharge	3500 mm

When units are placed side by side allow 1000mm between evaporator coils.

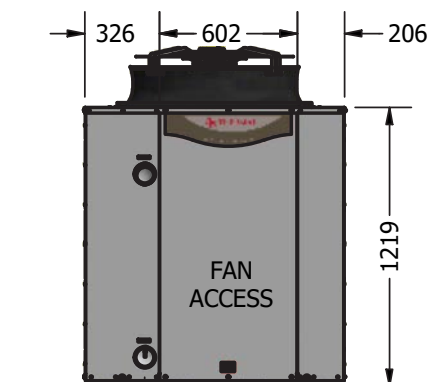
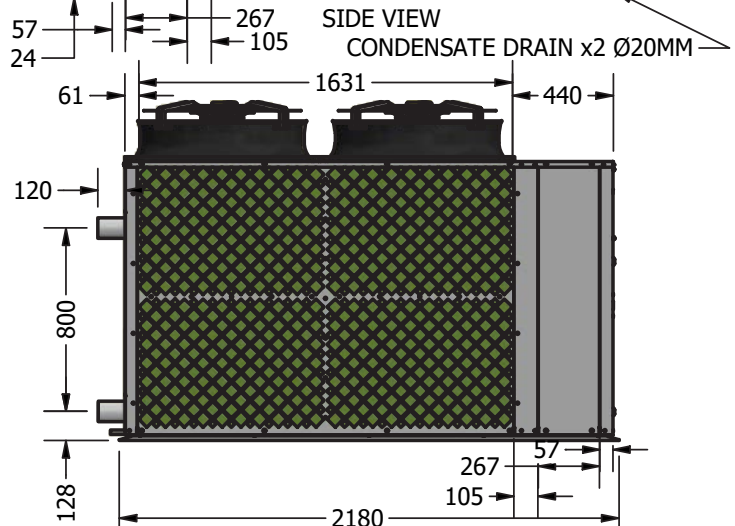
Rating Conditions: 27°C ambient, 60% RH, 27°C water in



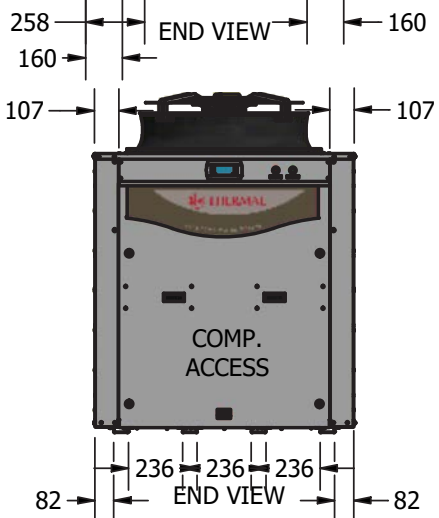
TOP VIEW



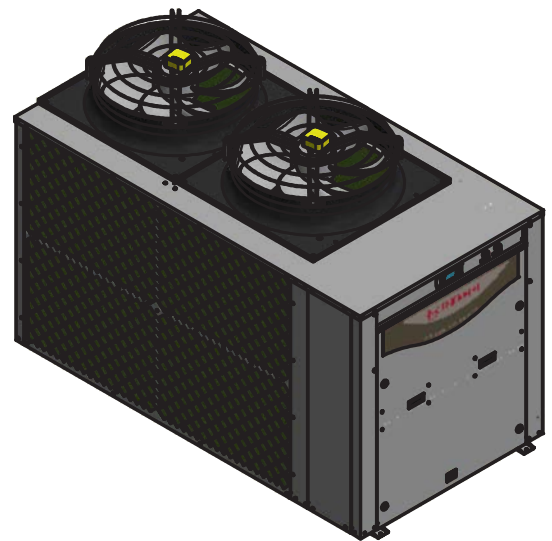
SIDE VIEW



END VIEW



END VIEW



REV	ECN	DESCRIPTION	DATE
1	0514	ITEM 22 WAS 17536 IS 17665, ITEM 10 WAS 21044 IS 21156	2/09/022

Rheem THERMAL SYSTEMS GROUP		SHEET 1 OF 4	
		Description: POOL RTHP 132kW 3PH R407C	
Part No:	RTHP132KT-DQVI-3	Rev.	1
Material:		Date:	5/08/2021
Drawn By:	JC	Checked By:	
General Tolerance:	Sheetmetal - Cut Size - ± 0.5mm, Angle - ± 0.5°, Bend size - ± 0.3mm Tubes - Dimensions ± 2, Angle ± 2°	Scale:	N.T.S

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RHEEM THERMAL

EASY INTEGRATION - HIGHER EFFICIENCY - LONGER LASTING
DESIGNED AND MANUFACTURED BY RHEEM

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Material and data subject to change without notice due to ongoing product improvements.

