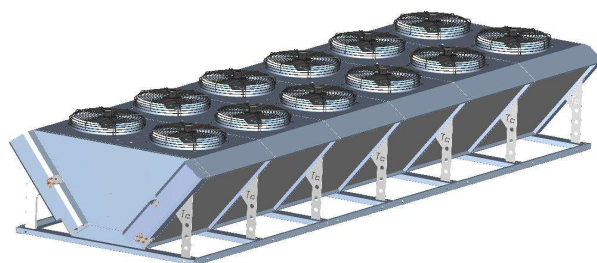


Condenser Catalogue



Thermocoil

Thermocoil (Pty) Ltd is a Cape Town, South Africa based refrigeration and air-conditioning heat exchanger manufacturer. The technology behind Thermocoil is German, having close ties with Thermofin of Germany. This technology agreement has led to Thermocoil manufacturing the most efficient copper-aluminum heat exchangers using the most advanced manufacturing equipment, materials and processes.

Our standard ranges for Freon refrigeration include:

Evaporators: TEB, TEMB, TEDB, TDD and gravity coils (BC & DC)

Condensers: TCHM, TCVM, TCV & TCD

Condensing units: TCPH, TCPV, TCCP & TCHS

R744 Thermocoil offers an extended equipment range for high pressure R744 (CO₂) applications.

Evaporators: TRB & TRMB & Gas Coolers: TOD & TOV

For SS tube coils Thermocoil has a registered welding procedure in place with registered welders to apply these specific processes.

Customized Air coolers & Dry coolers with the standard product format or a special format to suit customer and site-specific needs.

Thermocoil also manufactures heat exchangers to OEM specifications, replacement heat exchangers and designs and produces heat exchangers for customized installations for both Freon and Chilled Water/Glycol installations.



CONDENSERS

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Thermocoil reserves the right to modify or update any information within this catalogue without prior notice

Design

Heat exchanger

Featuring tube spacing of 25 x 21.65 mm or 40 x 34.6 mm in a staggered layout with inner grooved copper tube. Fins are made of pure aluminium. The heat exchangers are soldered under inert gas and are thus non-oxidizing.

Fin spacing

Ø3/8": 2.1mm to 2.2mm standard for fan diameters 250 to 630, and Ø12mm: 2.4mm for sizes 800

Casing

Hot – galvanized steel sheet with powder coating RAL 5009 (Azure Blue)

Fans

Low noise level axial fans with maintenance-free motors, protection class IP54, ISO F. Sizes 250/350/400/450/500/630/800

Ambient motor temperature -30°C to +55°C.

Standard winding protection by thermo contacts.

Axial fans

The Thermocoil TCHM series and above condensers are equipped with speed-variable external rotor motors. Depending on the demand, either phase-shaving, transformer or frequency controllers may be delivered. As a more economical option step control of fans is also available.

Power consumption can be reduced considerably by the use of electrically commutated fans. The fans are infinitely variable and work at minimum power consumption within the complete speed range.

Thermocoil also offers state-of-the-art EC

Capacity Data

The capacities Q_N shown in the catalogue refer to the refrigerant R404A, at a temperature difference $\Delta T_1=15K$ between the inlet air temperature (30°C) and the condensation temperature (45°C) and installation at geodetic height NN (sea level) with copper tubes and aluminium fins.

For the use of other refrigerants with different temperature differences, different installation levels and different fin materials the Nominal capacity Q_N can be calculated according to the formula:

$$Q_N = \frac{Q_C}{F_1 \times F_2 \times F_3 \times F_4}$$

Q_N = Condenser Nominal / Catalogue Capacity
 Q_C = Condenser Capacity

F_1 = Correction Factor for Temperature Difference
 ΔT_1 between 7K and 20K

$$F_1 = \frac{\Delta T_1}{15}$$

F_2 = Correction factor for Refrigerant

Refrigerant	R22	R134a	R404A	R407A	R407C	R507
F2	0.96	0.93	1.00	0.83	0.87	1.00

F_3 = Correction factor for geodetic height

Metres above Sea Level	0	500	1000	1500	2000	2500
F3	1	0.97	0.94	0.91	0.88	0.85

F_4 = Correction factor for fin material

F4 : Material	
1.00	Aluminium
0.97	Coated Aluminium
1.03	Copper

The technical data is acquired by theoretical means and is subject to the usual tolerance. Subject to change without prior notice.

QUICK FIND LIST SORTED BY CAPACITY

1 kW to 17.5 kW

Type	Code	kW	Style	Air Discharge	Length (A) mm	Depth (B) mm	Height (C) mm	Page
TCHS	025.A-1100	1.1	Small Condenser	Horizontal	340	481	305	22
TCHS	025.B-1500	1.5	Small Condenser	Horizontal	340	481	305	22
TCHS	025.C-1900	1.9	Small Condenser	Horizontal	340	481	305	22
TCHS	025.C-2100	2.1	Small Condenser	Horizontal	400	481	305	22
TCHS	025.B-3200	3.2	Small Condenser	Horizontal	620	481	305	22
TCHS	031.A-3200	3.2	Small Condenser	Horizontal	500	580	375	22
TCHS	031.B-4000	4.0	Small Condenser	Horizontal	500	580	375	22
TCHM	035.1-11-A-N	4.9	Base Mount	Horizontal	646	750	562	8
TCVM	035.1-11-A-N	4.9	Leg Mount	Vertical	648	582	736	10
TCHS	031.C-5000	5.0	Small Condenser	Horizontal	500	580	375	22
TCPV	035.1-11-A-N	5.3	Wall Mount Pack	Vertical	750	507	936	20
TCCP	035.1-11-A-N	5.3	Cool Pack	Horizontal	475	420	722	21
TCHS	031.E-6000	6.0	Small Condenser	Horizontal	500	580	375	22
TCHS	035.C-N	6.4	Small Condenser	Horizontal	550	155	410	22
TCHM	035.1-11-B-N	6.7	Base Mount	Horizontal	646	750	562	8
TCVM	035.1-11-B-N	6.7	Leg Mount	Vertical	648	582	736	10
TCPV	035.1-11-B-N	6.9	Wall Mount Pack	Vertical	750	507	936	20
TCHS	031.A-7000	7.0	Small Condenser	Horizontal	1000	600	375	22
TCCP	035.1-11-B-N	7.3	Cool Pack	Horizontal	475	420	722	21
TCHM	035.1-11-C-N	7.6	Base Mount	Horizontal	646	750	562	8
TCVM	035.1-11-C-N	7.6	Leg Mount	Vertical	648	582	736	10
TCPV	035.1-11-C-N	8.3	Wall Mount Pack	Vertical	750	507	936	20
TCPH	035.1-11-B-N	8.6	Floor Mount Pack	Horizontal	767	904	940	18
TCCP	035.1-11-C-N	8.7	Cool Pack	Horizontal	475	420	722	21
TCHM	040.1-11-B-N	9.0	Base Mount	Horizontal	746	900	605	8
TCVM	040.1-11-B-N	9.0	Leg Mount	Vertical	746	625	794	10
TCPV	040.1-11-B-N	9.5	Wall Mount Pack	Vertical	750	507	936	20
TCPH	035.1-11-C-N	9.8	Floor Mount Pack	Horizontal	767	904	940	18
TCHM	035.1-12-A-N	10.2	Base Mount	Horizontal	1146	750	562	8
TCVM	035.1-12-A-N	10.2	Leg Mount	Vertical	1146	582	736	10
TCHM	040.1-11-C-N	10.3	Base Mount	Horizontal	746	900	605	8
TCVM	040.1-11-C-N	10.3	Leg Mount	Vertical	746	625	794	10
TCPH	040.1-11-B-N	10.6	Floor Mount Pack	Horizontal	767	904	940	18
TCPV	040.1-11-C-N	11.0	Wall Mount Pack	Vertical	750	507	936	20
TCHM	040.1-11-E-N	11.7	Base Mount	Horizontal	746	900	605	8
TCVM	040.1-11-E-N	11.7	Leg Mount	Vertical	746	625	794	10
TCPH	040.1-11-C-N	12.2	Floor Mount Pack	Horizontal	767	904	940	18
TCPV	040.1-11-E-N	13.3	Wall Mount Pack	Vertical	750	507	936	20
TCHM	035.1-12-B-N	13.7	Base Mount	Horizontal	1146	750	562	8
TCVM	035.1-12-B-N	13.7	Leg Mount	Vertical	1146	582	736	10
TCCP	040.1-11-B-N	13.9	Cool Pack	Horizontal	475	420	893	21
TCPH	050.1-11-B-N	14.0	Floor Mount Pack	Horizontal	767	904	940	19
TCCP	050.1-11-A-N	14.2	Cool Pack	Horizontal	475	420	893	21
TCHM	045.1-11-B-N	15.1	Base Mount	Horizontal	916	950	705	9
TCVM	045.1-11-B-N	15.1	Leg Mount	Vertical	916	950	705	11
TCPV	035.1-12-B-N	15.2	Wall Mount Pack	Vertical	1352	507	936	20
TCHM	035.1-12-C-N	15.9	Base Mount	Horizontal	1146	750	562	8
TCVM	035.1-12-C-N	15.9	Leg Mount	Vertical	1146	582	736	10
TCPH	050.1-11-C-N	16.5	Floor Mount Pack	Horizontal	767	904	940	19
TCHM	045.1-11-C-N	17.5	Base Mount	Horizontal	916	950	705	9
TCVM	045.1-11-C-N	17.5	Leg Mount	Vertical	916	950	705	11

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

Continued...

QUICK FIND LIST SORTED BY CAPACITY

17.6 kW to 100 kW

Type	Code	kW	Style	Air Discharge	Length (A) mm	Depth (B) mm	Height (C) mm	Page
TCPV	035.1-12-C-N	17.6	Wall Mount Pack	Vertical	1352	507	936	20
TCHM	040.1-12-B-N	17.9	Base Mount	Horizontal	1346	900	605	8
TCVM	040.1-12-B-N	17.9	Leg Mount	Vertical	1348	625	794	10
TCCP	050.1-11-B-N	19.8	Cool Pack	Horizontal	475	420	893	21
TCHM	050.1-11-B-N	20.2	Base Mount	Horizontal	1044	1050	912	9
TCVM	050.1-11-B-N	20.2	Leg Mount	Vertical	1044	1050	912	11
TCPH	050.1-11-E-N	20.6	Floor Mount Pack	Horizontal	767	904	940	19
TCHM	040.1-12-C-N	20.7	Base Mount	Horizontal	1346	900	605	8
TCVM	040.1-12-C-N	20.7	Leg Mount	Vertical	1348	625	794	10
TCHM	045.1-11-E-N	21.5	Base Mount	Horizontal	916	950	705	9
TCVM	045.1-11-E-N	21.5	Leg Mount	Vertical	916	950	705	11
TCPH	040.1-12-B-N	22.8	Floor Mount Pack	Horizontal	1538	904	940	18
TCCP	050.1-11-C-N	22.9	Cool Pack	Horizontal	475	420	893	21
TCPV	035.1-13-B-N	23.3	Wall Mount Pack	Vertical	2033	507	936	20
TCHM	040.1-12-E-N	23.4	Base Mount	Horizontal	1346	900	605	8
TCVM	040.1-12-E-N	23.4	Leg Mount	Vertical	1348	625	794	10
TCHM	050.1-11-C-N	23.7	Base Mount	Horizontal	1044	1050	912	9
TCVM	050.1-11-C-N	23.7	Leg Mount	Vertical	1044	1050	912	11
TCPH	040.1-12-C-N	26.4	Floor Mount Pack	Horizontal	1538	904	940	18
TCPV	035.1-13-C-N	27.1	Wall Mount Pack	Vertical	2033	507	936	20
TCHM	050.1-11-E-N	29.1	Base Mount	Horizontal	1044	1050	912	9
TCVM	050.1-11-E-N	29.1	Leg Mount	Vertical	1044	1050	912	11
TCPH	050.1-12-B-N	30.9	Floor Mount Pack	Horizontal	1538	904	940	19
TCHM	045.1-12-B-N	31.2	Base Mount	Horizontal	1616	950	705	9
TCVM	045.1-12-B-N	31.2	Leg Mount	Vertical	1616	950	705	11
TCPH	050.1-12-C-N	35.8	Floor Mount Pack	Horizontal	1538	904	940	19
TCHM	045.1-12-C-N	36.7	Base Mount	Horizontal	1616	950	705	9
TCVM	045.1-12-C-N	36.7	Leg Mount	Vertical	1616	950	705	11
TCPH	050.1-12-E-N	40.4	Floor Mount Pack	Horizontal	1538	904	940	19
TCHM	050.1-12-B-N	41.6	Base Mount	Horizontal	1844	1050	912	9
TCVM	050.1-12-B-N	41.6	Leg Mount	Vertical	1844	1050	912	11
TCHM	045.1-12-E-N	43.0	Base Mount	Horizontal	1616	950	705	9
TCVM	045.1-12-E-N	43.0	Leg Mount	Vertical	1616	950	705	11
TCHM	050.1-12-C-N	47.3	Base Mount	Horizontal	1844	1050	912	9
TCVM	050.1-12-C-N	47.3	Leg Mount	Vertical	1844	1050	912	11
TCPH	050.1-13-C-N	53.7	Floor Mount Pack	Horizontal	2300	904	940	19
TCHM	050.1-12-E-N	58.2	Base Mount	Horizontal	1844	1050	912	9
TCVM	050.1-12-E-N	58.2	Leg Mount	Vertical	1844	1050	912	11
TCPH	050.1-13-E-N	60.6	Floor Mount Pack	Horizontal	2300	904	940	19
TCHM	050.1-13-B-N	62.9	Base Mount	Horizontal	2644	1050	938	9
TCVM	050.1-13-B-N	62.9	Leg Mount	Vertical	2644	1050	938	11
TCHM	050.1-13-C-N	73.8	Base Mount	Horizontal	2644	1050	938	9
TCVM	050.1-13-C-N	73.8	Leg Mount	Vertical	2644	1050	938	11
TCHM	050.1-13-E-N	87.4	Base Mount	Horizontal	2644	1050	938	9
TCVM	050.1-13-E-N	87.4	Leg Mount	Vertical	2644	1050	938	11
TCV	050.1-13-C-N	88.9	Deck Condenser	Vertical	4000	912	938	12
TCD	063.1-12-B-L	90.4	Vee	Vertical	1800	1060	1080	15
TCD	050.1-22-B-N	99.8	Vee	Vertical	1780	1625	945	14

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

Continued...

QUICK FIND LIST SORTED BY CAPACITY

101 kW to 862 kW

Type	Code	kW	Style	Air Discharge	Length (A) mm	Depth (B) mm	Height (C) mm	Page
TCV	063.1-12-B-N	101.6	Deck Condenser	Vertical	2500	1164	950	12
TCD	063.1-12-B-N	102.7	Vee	Vertical	1800	1060	1080	15
TCV	050.1-22-A-N	104.9	Deck Condenser	Vertical	2200	1712	938	12
TCD	063.1-12-C-L	105.7	Vee	Vertical	1800	1060	1080	15
TCD	050.1-22-C-N	116.1	Vee	Vertical	1780	1625	945	14
TCV	050.1-22-C-N	121.4	Deck Condenser	Vertical	2800	1712	938	12
TCD	063.1-12-C-N	127.9	Vee	Vertical	1800	1060	1080	15
TCD	063.1-13-B-L	138.6	Vee	Vertical	2600	1060	1080	15
TCV	063.1-13-B-N	148.1	Deck Condenser	Vertical	3540	1164	950	12
TCD	050.1-23-B-N	150.8	Vee	Vertical	2580	1625	945	14
TCD	080.1-21-B-N	151.1	Vee	Vertical	2200	2200	2115	17
TCD	063.1-13-C-L	157.4	Vee	Vertical	2600	1060	1080	15
TCV	050.1-23-A-N	161.2	Deck Condenser	Vertical	3150	1712	938	12
TCD	063.1-13-B-N	163.5	Vee	Vertical	2600	1060	1080	15
TCV	080.1-12-B-N	175.1	Deck Condenser	Vertical	4200	1170	1480	13
TCD	080.1-21-C-N	175.5	Vee	Vertical	2200	2200	2115	17
TCD	050.1-23-C-N	176.8	Vee	Vertical	2580	1625	945	14
TCD	063.1-14-B-L	180.5	Vee	Vertical	3400	1060	1080	15
TCD	063.1-13-C-N	187.3	Vee	Vertical	2600	1060	1080	15
TCV	080.1-12-E-N	196.2	Deck Condenser	Vertical	4200	1490	1480	13
TCD	050.1-24-B-N	201.9	Vee	Vertical	3380	1625	945	14
TCV	063.1-22-B-N	203.2	Deck Condenser	Vertical	2500	2213	950	12
TCD	063.1-14-B-N	205.2	Vee	Vertical	3400	1060	1080	15
TCD	063.1-14-C-L	210.2	Vee	Vertical	3400	1060	1080	15
TCD	050.1-24-C-N	240.3	Vee	Vertical	3380	1625	945	14
TCD	050.1-25-B-N	254.7	Vee	Vertical	4180	1625	945	14
TCV	080.1-13-B-N	256.0	Deck Condenser	Vertical	6100	1170	1480	13
TCD	063.1-14-C-N	257.7	Vee	Vertical	3400	1060	1080	15
TCD	063.1-22-B-N	266.0	Vee	Vertical	2200	2200	2115	16
TCV	080.1-13-E-N	291.6	Deck Condenser	Vertical	6100	1490	1480	13
TCV	063.1-23-B-N	296.3	Deck Condenser	Vertical	3600	2213	950	12
TCD	080.1-22-B-N	297.5	Vee	Vertical	3200	2200	2115	17
TCD	050.1-25-C-N	299.3	Vee	Vertical	4180	1625	945	14
TCD	063.1-22-C-N	308.1	Vee	Vertical	2200	2200	2115	16
TCV	080.1-22-B-N	350.1	Deck Condenser	Vertical	4200	2290	1480	13
TCD	050.1-26-C-N	353.5	Vee	Vertical	4980	1625	945	14
TCD	080.1-22-C-N	354.9	Vee	Vertical	3200	2200	2115	17
TCD	063.1-23-B-N	398.6	Vee	Vertical	3200	2200	2115	16
TCD	080.1-23-B-N	457.5	Vee	Vertical	4200	2200	2115	17
TCD	063.1-23-C-N	462.1	Vee	Vertical	3200	2200	2115	16
TCV	080.1-23-B-N	511.9	Deck Condenser	Vertical	6100	2290	1480	13
TCD	063.1-24-B-N	527.4	Vee	Vertical	4200	2200	2115	16
TCD	080.1-23-C-N	535.3	Vee	Vertical	4200	2200	2115	17
TCD	080.1-24-B-N	597.3	Vee	Vertical	5200	2200	2115	17
TCD	063.1-24-C-N	617.8	Vee	Vertical	4200	2200	2115	16
TCD	063.1-25-B-N	639.5	Vee	Vertical	5200	2200	2115	16
TCD	080.1-24-C-N	709.6	Vee	Vertical	5200	2200	2115	17
TCD	063.1-25-C-N	762.5	Vee	Vertical	5200	2200	2115	16
TCD	080.1-25-B-N	763.2	Vee	Vertical	5200	2200	2115	17
TCD	080.1-25-C-N	862.2	Vee	Vertical	5200	2200	2115	17

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

QUICK FIND LIST

5.3 kW to 60.6 kW

CONDENSING UNITS - SORTED BY CAPACITY

Type	Code	kW	Style	Air Discharge	Length (A) mm	Depth (B) mm	Height (C) mm	Page
TCCP	035.1-11-A-N	5.3	Weatherproof	Horizontal	655	475	420	23
TCPV	035.1-11-A-N	5.3	Weatherproof	Vertical	750	507	936	22
TCPV	035.1-11-B-N	6.9	Weatherproof	Vertical	750	507	936	22
TCCP	035.1-11-B-N	7.3	Weatherproof	Horizontal	655	475	420	23
TCPV	035.1-11-C-N	8.3	Weatherproof	Vertical	750	507	936	22
TCPH	035.1-11-B-N	8.6	Weatherproof	Horizontal	767	904	940	20
TCCP	035.1-11-C-N	8.7	Weatherproof	Horizontal	655	475	420	23
TCPV	040.1-11-B-N	9.6	Weatherproof	Vertical	835	557	936	22
TCPH	035.1-11-C-N	9.8	Weatherproof	Horizontal	767	904	940	20
TCPH	040.1-11-B-N	10.6	Weatherproof	Horizontal	767	904	940	20
TCPV	040.1-11-C-N	11.1	Weatherproof	Vertical	835	557	936	22
TCPH	040.1-11-C-N	12.2	Weatherproof	Horizontal	767	904	940	20
TCCP	040.1-11-B-N	13.9	Weatherproof	Horizontal	755	475	420	23
TCPH	050.1-11-B-N	14.0	Weatherproof	Horizontal	767	904	940	21
TCPV	040.1-11-E-N	14.1	Weatherproof	Vertical	835	557	936	22
TCCP	050.1-11-A-N	14.2	Weatherproof	Horizontal	755	475	420	23
TCPV	035.1-12-B-N	15.2	Weatherproof	Vertical	1352	507	936	22
TCPH	050.1-11-C-N	16.5	Weatherproof	Horizontal	767	904	940	21
TCPV	035.1-12-C-N	17.6	Weatherproof	Vertical	1352	507	936	22
TCCP	050.1-11-B-N	19.8	Weatherproof	Horizontal	755	475	420	23
TCPH	050.1-11-E-N	20.6	Weatherproof	Horizontal	767	904	940	21
TCPV	040.1-12-B-N	22.6	Weatherproof	Vertical	1437	557	936	22
TCPH	040.1-12-B-N	22.8	Weatherproof	Horizontal	1538	904	940	21
TCCP	050.1-11-C-N	22.9	Weatherproof	Horizontal	755	475	420	23
TCPV	035.1-13-B-N	23.3	Weatherproof	Vertical	2033	507	936	22
TCPV	040.1-12-C-N	26.0	Weatherproof	Vertical	1437	557	936	22
TCPH	040.1-12-C-N	26.4	Weatherproof	Horizontal	1538	904	940	21
TCPV	035.1-13-C-N	27.1	Weatherproof	Vertical	2033	507	936	22
TCPV	040.1-12-E-N	29.8	Weatherproof	Vertical	1437	557	936	22
TCPV	040.1-13-B-N	30.5	Weatherproof	Vertical	2118	557	936	22
TCPH	050.1-12-B-N	30.9	Weatherproof	Horizontal	1538	904	940	21
TCPH	050.1-12-C-N	35.8	Weatherproof	Horizontal	1538	904	940	21
TCPV	040.1-13-C-N	36.8	Weatherproof	Vertical	2118	557	936	22
TCPV	040.1-13-E-N	40.2	Weatherproof	Vertical	2118	557	936	22
TCPH	050.1-12-E-N	40.4	Weatherproof	Horizontal	1538	904	940	21
TCCP	050.1-21-C-N	45.8	Weatherproof	Horizontal	1300	420	1693	23
TCCP	050.1-21-E-N	54.3	Weatherproof	Horizontal	1300	420	1693	23
TCPH	050.1-13-C-N	53.7	Weatherproof	Horizontal	2300	904	940	21
TCPH	050.1-13-E-N	60.6	Weatherproof	Horizontal	2300	904	940	21

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

HORIZONTAL AIR DISCHARGE

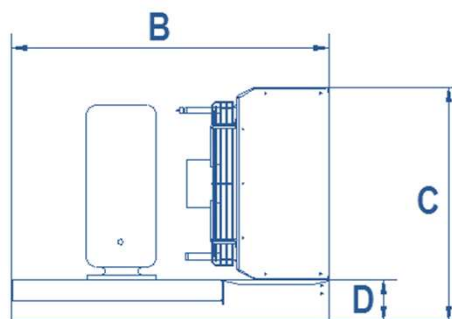
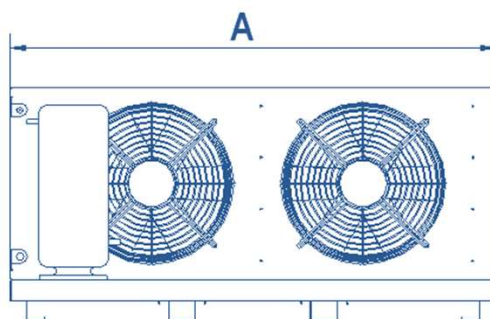
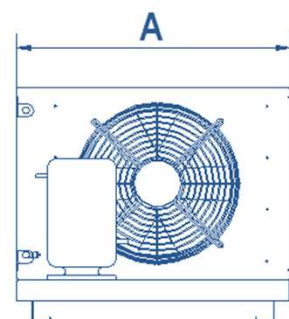
TCHM 035

TCHM 040

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Recom. Receiver Size	Dimensions				Nett Weight		
												Length (A)	Depth (B)	Height (C)	Base Height (D)	Condenser	Base	Receiver
DIA 350 FANS	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	mm	kg	kg	kg
035.1-11-A-N	4.9	8.1	2498	3.1	1	220	0.58	1.34	5/8	5/8	6.5	646	750	562	100	19	14	3.7
035.1-11-B-N	6.7	12.2	2333	2.9	1	220	0.58	1.88	5/8	5/8	6.5	646	750	562	100	20	14	3.7
035.1-11-C-N	7.6	16.2	2190	2.7	1	220	0.58	2.60	5/8	5/8	6.5	646	750	562	100	22	14	3.7
035.1-12-A-N	10.2	16.2	4993	3.1	2	220	0.58	2.50	5/8	5/8	8	1146	750	562	100	28	26	4.2
035.1-12-B-N	13.7	24.3	4664	2.9	2	220	0.58	3.76	5/8	5/8	8	1146	750	562	100	34	26	4.2
035.1-12-C-N	15.9	32.4	4378	2.7	2	220	0.58	5.01	5/8	5/8	9	1146	750	562	100	36	26	5

DIA 400 FANS

040.1-11-B-N	9.0	16.2	3310	3.2	1	220	0.73	2.65	5/8	5/8	8	746	900	605	100	26	20	4.2
040.1-11-C-N	10.3	21.6	3090	3	1	220	0.73	3.54	5/8	5/8	9	746	900	605	100	28	20	5
040.1-11-E-N	11.7	32.4	2760	2.7	1	220	0.73	5.31	5/8	5/8	9	746	900	605	100	32	20	5
040.1-12-B-N	17.9	32.4	6625	3.2	2	220	0.73	5.14	5/8	5/8	12	1346	900	605	100	44	38	6
040.1-12-C-N	20.7	43.2	6180	3	2	220	0.73	6.86	5/8	5/8	12	1346	900	605	100	48	38	6
040.1-12-E-N	23.4	64.8	5530	2.7	2	220	0.73	10.29	7/8	3/4	12	1346	900	605	100	54	38	6



FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

FAN Rating D400 Fan 220V		
Frequency	Hz	50
Speed	RPM	1430
Power Draw	Watts	160
Current Draw	Amps	0.73

Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

HORIZONTAL AIR DISCHARGE

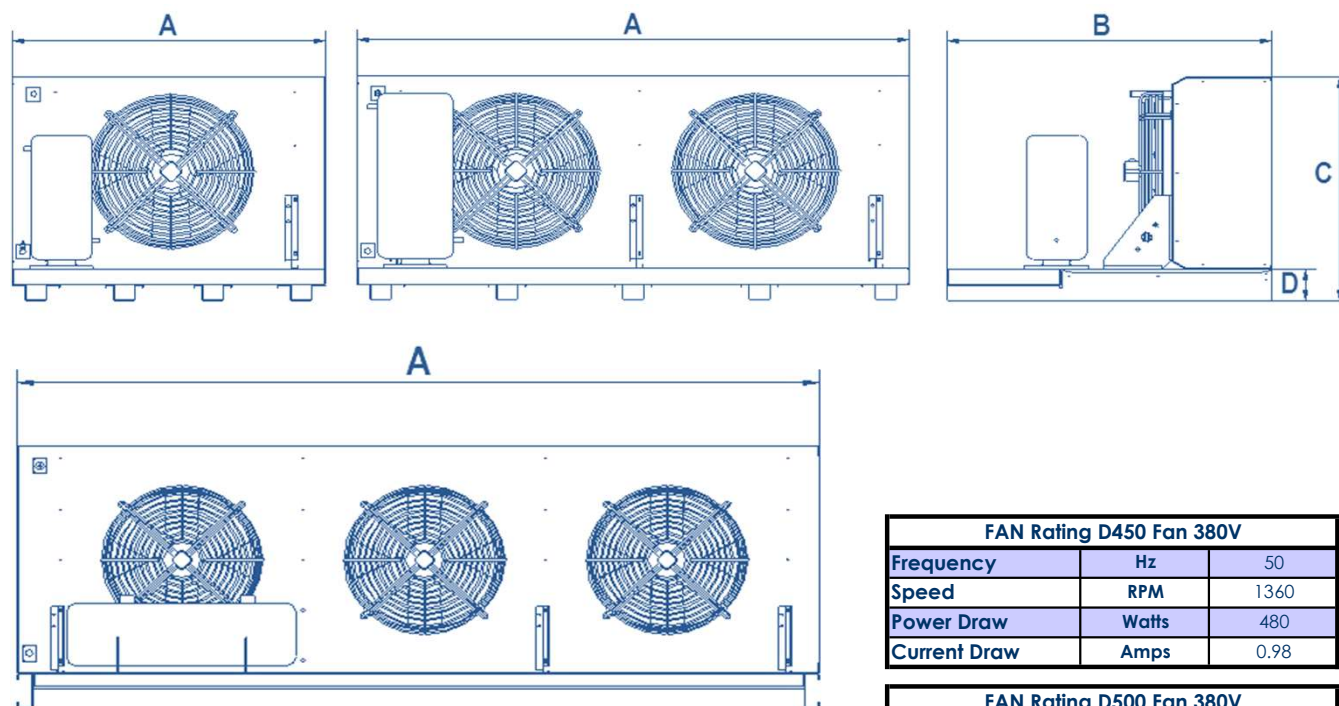
TCHM 045

TCHM 050

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Recom. Receiver Size	Dimensions				Nett Weight		
	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	mm	kg	kg	kg
DIA 450 FANS																		
045.1-11-B-N	15.1	22.7	5875	3.9	1	380	0.98	3.60	5/8	5/8	9	916	950	705	100	39	24	5
045.1-11-C-N	17.5	30.2	5556	3.7	1	380	0.98	4.80	5/8	5/8	9	916	950	705	100	42	24	5
045.1-11-E-N	21.5	45.4	4949	3.3	1	380	0.98	7.00	5/8	5/8	12	916	950	705	100	47	24	6
045.1-12-B-N	31.2	45.4	11751	3.9	2	380	0.98	7.20	7/8	3/4	12	1616	950	705	100	70	38	6
045.1-12-C-N	36.7	60.5	11113	3.7	2	380	0.98	9.40	7/8	7/8	18	1616	950	705	100	75	38	9
045.1-12-E-N	43.0	90.7	9898	3.3	2	380	0.98	14.00	7/8	7/8	18	1616	950	705	100	85	38	9

DIA 500 FANS

050.1-11-B-N	20.2	34.6	7236	3.1	1	380	1.41	5.57	3/4	3/4	12	1044	1050	912	100	50	32	6
050.1-11-C-N	23.7	46.1	6912	3	1	380	1.41	7.43	3/4	3/4	12	1044	1050	912	100	55	32	6
050.1-11-E-N	29.1	69.1	6336	2.8	1	380	1.41	11.15	3/4	3/4	12	1044	1050	912	100	65	32	6
050.1-12-B-N	41.6	69.1	14436	3.1	2	380	1.41	10.89	1 1/8	7/8	18	1844	1050	912	100	86	45	9
050.1-12-C-N	47.3	92.2	13752	3	2	380	1.41	14.52	1 1/8	7/8	18	1844	1050	912	100	102	45	9
050.1-12-E-N	58.2	138.2	12672	2.8	2	380	1.41	21.78	1 1/8	7/8	18	1844	1050	912	100	125	45	9
050.1-13-B-N	62.9	103.7	21672	3.1	3	380	1.41	16.20	1 1/8	7/8	25	2644	1050	938	100	126	112	24
050.1-13-C-N	73.8	138.2	20628	3	3	380	1.41	21.60	1 1/8	7/8	30	2644	1050	938	100	140	112	25
050.1-13-E-N	87.4	207.4	19008	2.8	3	380	1.41	32.40	1 3/8	1 1/8	35	2644	1050	938	100	168	112	28



Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D450 Fan 380V		
Frequency	Hz	50
Speed	RPM	1360
Power Draw	Watts	480
Current Draw	Amps	0.98

FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1390
Power Draw	Watts	720
Current Draw	Amps	1.41

VERTICAL AIR DISCHARGE

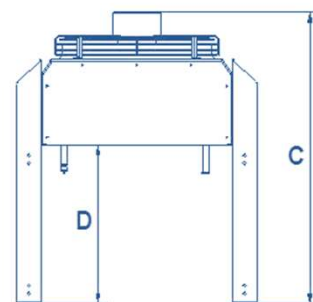
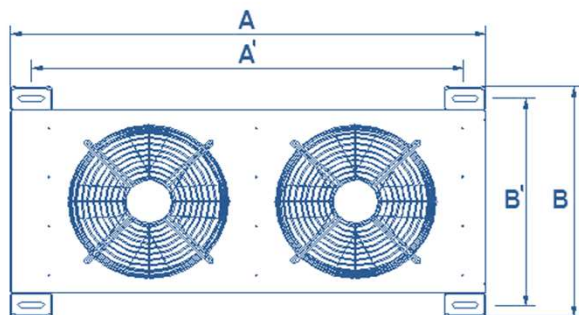
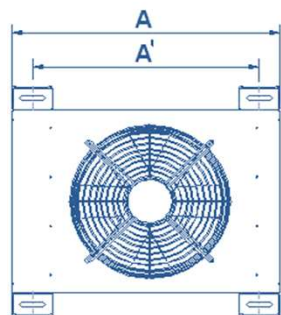
TCVM 035

TCVM 040

	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Recom. Receiver Size	Dimensions						Net Weight
	R404A 15K TD Sea Lvl.											Length (A)	Mount Length (A')	Depth (B)	Mount Depth (B')	Height (C)	Clearance (D) *	
DIA 350 FANS	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	mm	mm	mm	kg
035.1-11-A-N	4.9	8.1	2498	3.1	1	220	0.58	1.34	5/8	5/8	6.5	648	548	582	522	736	400	19
035.1-11-B-N	6.7	12.2	2333	2.9	1	220	0.58	1.88	5/8	5/8	6.5	648	548	582	522	736	400	20
035.1-11-C-N	7.6	16.2	2190	2.7	1	220	0.58	2.60	5/8	5/8	6.5	648	548	582	522	736	400	22
035.1-12-A-N	10.2	16.2	4993	3.1	2	220	0.58	2.50	5/8	5/8	8	1146	548	582	522	736	400	28
035.1-12-B-N	13.7	24.3	4664	2.9	2	220	0.58	3.76	5/8	5/8	8	1146	548	582	522	736	400	34
035.1-12-C-N	15.9	32.4	4378	2.7	2	220	0.58	5.01	5/8	5/8	9	1146	548	582	522	736	400	36

DIA 400 FANS

040.1-11-B-N	9.0	16.2	3310	3.2	1	220	0.73	2.65	5/8	5/8	8	746	646	625	565	794	400	26
040.1-11-C-N	10.3	21.6	3090	3	1	220	0.73	3.54	5/8	5/8	9	746	646	625	565	794	400	28
040.1-11-E-N	11.7	32.4	2760	2.7	1	220	0.73	5.31	5/8	5/8	9	746	646	625	565	794	400	32
040.1-12-B-N	17.9	32.4	6625	3.2	2	220	0.73	5.14	5/8	5/8	12	1348	1248	625	565	794	400	44
040.1-12-C-N	20.7	43.2	6180	3	2	220	0.73	6.86	5/8	5/8	12	1348	1248	625	565	794	400	48
040.1-12-E-N	23.4	64.8	5530	2.7	2	220	0.73	10.29	7/8	3/4	12	1348	1248	625	565	794	400	54



FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

FAN Rating D400 Fan 220V		
Frequency	Hz	50
Speed	RPM	1430
Power Draw	Watts	160
Current Draw	Amps	0.73

* 400mm is standard clearance, 700mm is also available.

Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

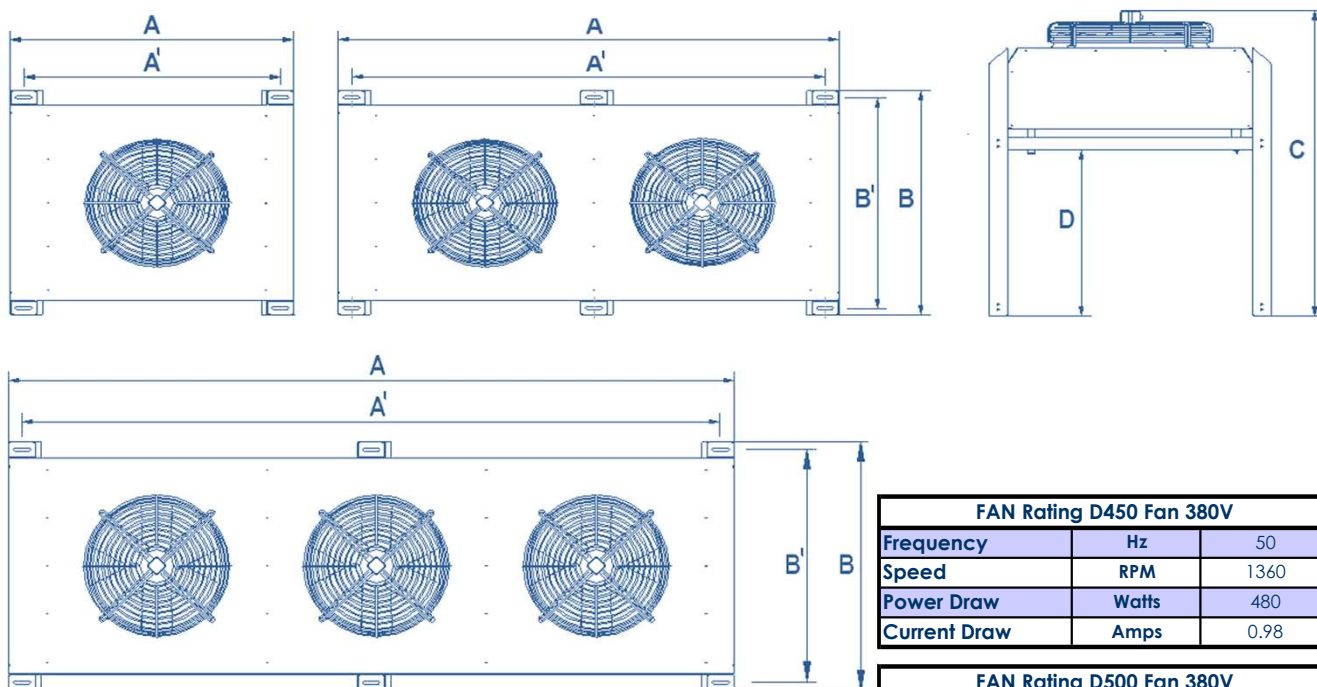
VERTICAL AIR DISCHARGE

TCVM 045

TCVM 050

DIA 450 FANS	Nominal Capacity											Dimensions						
	R404A	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Recom. Receiver Size	Length (A)	Mount Length (A')	Depth (B)	Mount Depth (B')	Height (C)	Clearance (D) *	Net Weight
	15K TD																	
	Sea Lvl.																	
	kW	m²	m³/hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	mm	mm	mm	kg
045.1-11-B-N	15.1	22.7	5875	3.9	1	380	0.98	3.60	5/8	5/8	9	916	816	950	890	705	400	39
045.1-11-C-N	17.5	30.2	5556	3.7	1	380	0.98	4.80	5/8	5/8	9	916	816	950	890	705	400	42
045.1-11-E-N	21.5	45.4	4949	3.3	1	380	0.98	7.00	5/8	5/8	12	916	816	950	890	705	400	47
045.1-12-B-N	31.2	45.4	11751	3.9	2	380	0.98	7.20	7/8	3/4	12	1616	1516	950	890	705	400	70
045.1-12-C-N	36.7	60.5	11113	3.7	2	380	0.98	9.40	7/8	7/8	18	1616	1516	950	890	705	400	75
045.1-12-E-N	43.0	90.7	9898	3.3	2	380	0.98	14.00	7/8	7/8	18	1616	1516	950	890	705	400	85

DIA 500 FANS																		
050.1-11-B-N	20.2	34.6	7236	3.1	1	380	1.41	5.57	3/4	3/4	12	1044	944	1050	990	912	400	50
050.1-11-C-N	23.7	46.1	6912	3	1	380	1.41	7.43	3/4	3/4	12	1044	944	1050	990	912	400	55
050.1-11-E-N	29.1	69.1	6336	2.8	1	380	1.41	11.15	3/4	3/4	12	1044	944	1050	990	912	400	65
050.1-12-B-N	41.6	69.1	14436	3.1	2	380	1.41	10.89	1 1/8	7/8	18	1844	1744	1050	990	912	400	86
050.1-12-C-N	47.3	92.2	13752	3	2	380	1.41	14.52	1 1/8	7/8	18	1844	1744	1050	990	912	400	102
050.1-12-E-N	58.2	138.2	12672	2.8	2	380	1.41	21.78	1 1/8	7/8	18	1844	1744	1050	990	912	400	125
050.1-13-B-N	62.9	103.7	21672	3.1	3	380	1.41	16.20	1 1/8	7/8	25	2644	2544	1050	990	938	400	126
050.1-13-C-N	73.8	138.2	20628	3	3	380	1.41	21.60	1 1/8	7/8	30	2644	2544	1050	990	938	400	140
050.1-13-E-N	87.4	207.4	19008	2.8	3	380	1.41	32.40	1 3/8	1 1/8	35	2644	2544	1050	990	938	400	168



* 400mm is standard clearance, 700mm is also available.

Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

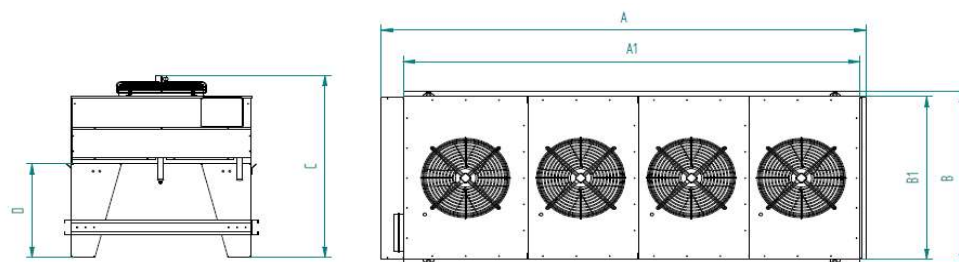
FAN Rating D450 Fan 380V		
Frequency	Hz	50
Speed	RPM	1360
Power Draw	Watts	480
Current Draw	Amps	0.98

FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1390
Power Draw	Watts	720
Current Draw	Amps	1.41

VERTICAL AIR DISCHARGE DECK CONDENSER

TCVB/TCHB 050

DIA 500 FANS	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Layout	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Dimensions						Net Weight
	kW	m ²	m ³ /hr	m/s	Qty	V	V	A	L	In"	In"	Length (A)	Coil Length (A1)	Depth (B)	Coil Depth (B1)	Height (C)	Clearance (D) *	kg
050.1-1-A-N	21.5	46	7956	2.8	1	1 x 1	380	1.41	4.2	5/8	5/8	979	750	1160	1040	1214	600	61
050.1-1-B-N	27.6	69	7704	2.7	1	1 x 1	380	1.41	6.2	7/8	7/8	979	750	1160	1040	1214	600	74
050.1-1-C-N	31.7	92	7452	2.7	1	1 x 1	380	1.41	8.6	7/8	7/8	979	750	1160	1040	1214	600	90
050.1-2-A-N	43.1	92	15876	2.8	2	1 x 2	380	2.82	8.1	7/8	7/8	1729	1500	1160	1040	1214	600	124
050.1-2-B-N	55.5	139	15372	2.7	2	1 x 2	380	2.82	9.6	7/8	7/8	1729	1500	1160	1040	1214	600	155
050.1-2-C-N	63.7	185	14868	2.6	2	1 x 2	380	2.82	15.1	1 1/8	1 1/8	1729	1500	1160	1040	1214	600	182
050.1-3-A-N	70.1	139	23904	2.8	3	1 x 3	380	4.23	11.0	1 1/8	1 1/8	2479	2250	1160	1040	1214	600	189
050.1-3-B-N	91.2	208	23148	2.8	3	1 x 3	380	4.23	16.4	1 1/8	1 1/8	2479	2250	1160	1040	1214	600	234
050.1-3-C-N	104.8	277	22500	2.5	3	1 x 3	380	4.23	21.9	1 3/8	1 3/8	2479	2250	1160	1040	1214	600	277
050.1-4-A-N	87.0	185	31752	3.1	4	1 x 4	380	5.64	14.2	1 1/8	1 1/8	3229	3000	1160	1040	1214	600	257
050.1-4-B-N	111.6	277	30852	2.9	4	1 x 4	380	5.64	21.3	1 3/8	1 3/8	3229	3000	1160	1040	1214	600	313
050.1-4-C-N	127.4	370	29772	2.8	4	1 x 4	380	5.64	28.4	1 3/8	1 3/8	3229	3000	1160	1040	1214	600	369
050.1-5-A-N	107.5	231	39780	2.8	5	1 x 5	380	7.05	17.6	1 3/8	1 3/8	3979	3750	1160	1040	1214	600	320
050.1-5-B-N	139.0	347	38484	2.7	5	1 x 5	380	7.05	26.5	1 5/8	1 5/8	3979	3750	1160	1040	1214	600	396
050.1-5-C-N	160.1	462	37224	2.8	5	1 x 5	380	7.05	36.7	1 5/8	1 5/8	3979	3750	1160	1040	1214	600	468
050.1-6-A-N	129.5	277	47664	2.8	6	1 x 6	380	8.46	25.7	1 3/8	1 3/8	4729	4500	1160	1040	1214	600	385
050.1-6-B-N	165.3	416	46260	2.7	6	1 x 6	380	8.46	38.6	1 5/8	1 5/8	4729	4500	1160	1040	1214	600	474.8
050.1-6-C-N	187.8	555	44604	2.6	6	1 x 6	380	8.46	51.5	1 5/8	1 5/8	4729	4500	1160	1040	1214	600	560
050.1-7-A-N	152.3	324	55692	2.8	7	1 x 7	380	9.87	30.0	1 5/8	1 5/8	5479	5250	1160	1000	1214	600	455
050.1-7-B-N	194.4	485	53856	2.7	7	1 x 7	380	9.87	44.9	1 5/8	1 5/8	5479	5250	1160	1000	1214	600	555.8
050.1-7-C-N	222.0	647	52236	2.7	7	1 x 7	380	9.87	59.9	2 1/8	2 1/8	5479	5250	1160	1000	1214	600	682
050.1-8-A-N	174.0	370	63504	2.8	8	1 x 8	380	11.28	34.2	1 5/8	1 5/8	5479	5250	1160	1040	1214	600	520
050.1-8-B-N	223.2	555	61524	2.7	8	1 x 8	380	11.28	51.3	2 1/8	2 1/8	5479	5250	1160	1040	1214	600	666
050.1-8-C-N	254.7	740	43560	2.7	8	1 x 8	380	11.28	68.4	2 1/8	2 1/8	5479	5250	1160	1040	1214	600	781



* 650mm is standard clearance.

* Leg inserts of 650mm, 1000mm & 1150mm to increase clearance optional

* Leg inserts to be fitted on site - not suitable for transport

Fin Spacing: 2.2mm

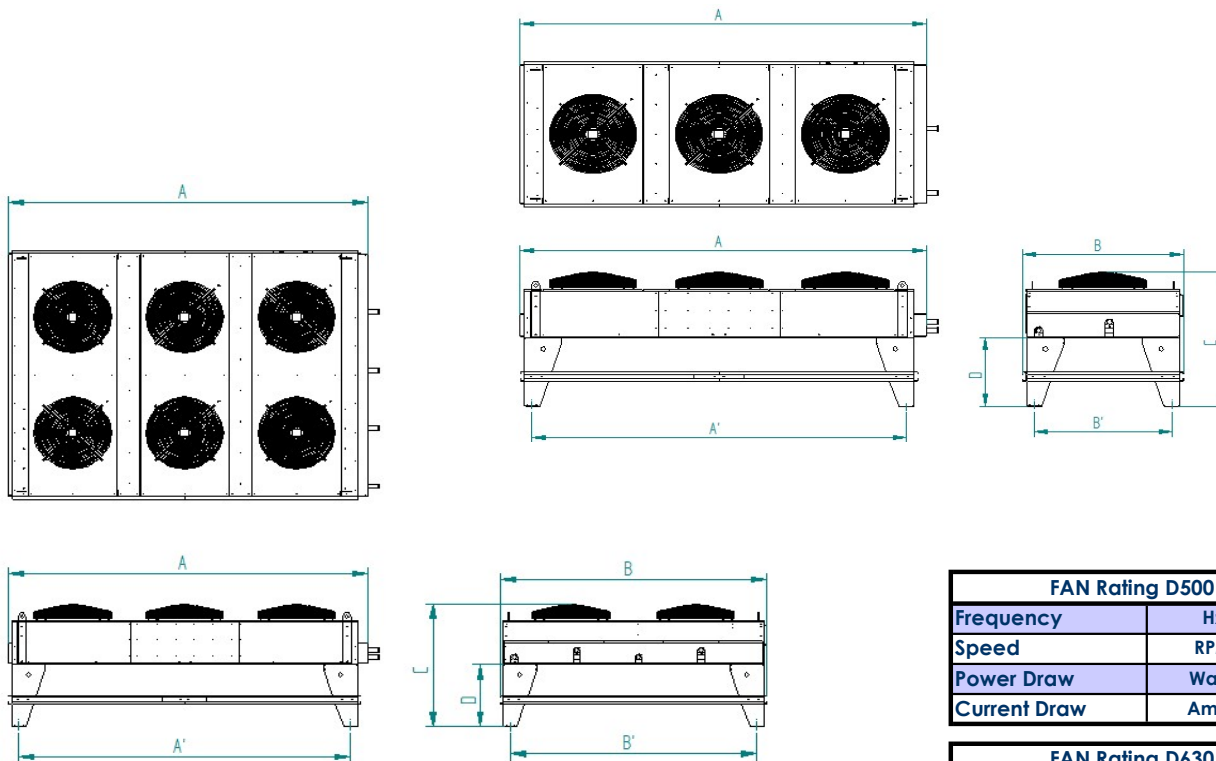
Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1320
Power Draw	Watts	720
Current Draw	Amps	1.41

VERTICAL AIR DISCHARGE DECK CONDENSER

TCV/H 063.2

DIA 630 FANS	Nominal Capacity												Dimensions							
	R404A	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Layout	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Fin length/fan	Length (A)	Mount Length (A')	Depth (B)	Mount Depth (B')	Height (C)	Clearance (D) *	Net Weight	
	15K TD																			
	Sea Lvl.																			
	kW	m²	m³/hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	mm	mm	mm	mm	kg	
063.2-11-B-N	48.4	91.5	15732	3.9	1	1 X1	380	4.78	9.70	7/8	7/8	1000	1224	976	1280	1100	1180	600	138	
063.2-11-C-N	56.6	122	14976	3.7	1	1 X1	380	4.78	12.90	1 1/8	1 1/8	1000	1224	976	1280	1100	1180	600	158	
063.2-12-B-N	96.8	183.1	31464	3.9	2	1 X 2	380	4.78	18.80	1 3/8	1 3/8	2000	2227	1980	1280	1100	1180	600	284	
063.2-12-C-N	113.2	244.1	29988	3.7	2	1 X 2	380	4.78	25.10	1 3/8	1 3/8	2000	2227	1980	1280	1100	1180	600	318	
063.2-13-B-N	145.1	274.6	47196	3.9	3	1 X 3	380	4.78	27.90	1 5/8	1 5/8	3000	3231	2984	1280	1100	1180	600	574	
063.2-13-C-N	171.3	366	44964	3.9	3	1 X 3	380	4.78	37.20	1 5/8	1 5/8	3000	3231	2984	1280	1100	1180	600	214	
063.2-14-B-N	169.1	366.1	51120	3.2	4	1 X 4	380	4.78	37.01	1 5/8	1 5/8	4000	4256	3988	1280	1100	1180	600	138	
063.2-14-C-N	225.9	488.2	48852	3	4	1 X 4	380	4.78	49.35	2 1/8	2 1/8	4000	4256	3988	1280	1100	1180	600	242	
063.2-15-B-N	204.3	457.7	64008	4	5	1 X 5	380	4.78	46.12	2 1/8	2 1/8	5000	5258	4992	1280	1100	1180	600	138	
063.2-15-C-N	244.5	610.2	61272	3	5	1 X 5	380	4.78	61.50	2 1/8	2 1/8	5000	5258	4992	1280	1100	1180	600	270	
063.2-16-B-N	255.8	549.2	76536	3.2	6	1 X 6	380	4.78	55.23	2 1/8	2 1/8	6000	6258	5996	1280	1100	1180	600	138	
063.2-16-C-N	297.3	732.3	73260	3	6	1 X 6	380	4.78	73.65	2 1/8	2 1/8	6000	6258	5996	1280	1100	1180	600	298	
063.2-22-B-N	193.6	366	62928	3.9	4	2 X 2	380	4.78	37 3/5	2*1 3/8	2*1 3/8	2000	2227	1980	2400	2220	1180	600	138	
063.2-22-C-N	226.4	488.2	59976	3.7	4	2 X 2	380	4.78	50.10	2*1 3/8	2*1 3/8	2000	2227	1980	2400	2220	1180	600	242	
063.2-23-B-N	290.3	549.2	94356	3.9	6	2 X 3	380	4.78	55.80	2*1 5/8	2*1 5/8	3000	3231	2984	2400	2220	1180	600	138	
063.2-23-C-N	342.7	732.3	89892	3.7	6	2 X 3	380	4.78	74.40	2*1 5/8"	2*1 5/8"	3000	3231	2984	2400	2220	1180	600	298	



FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1390
Power Draw	Watts	720
Current Draw	Amps	1.41

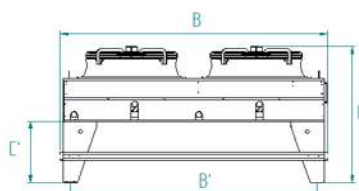
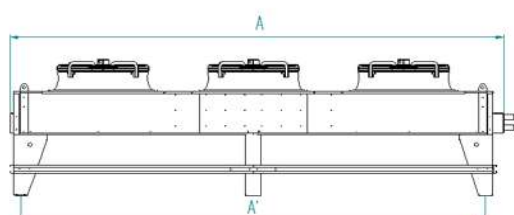
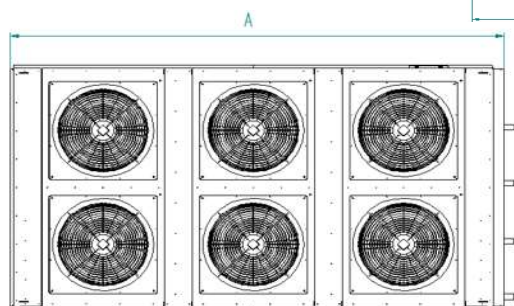
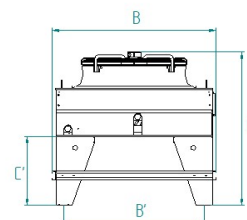
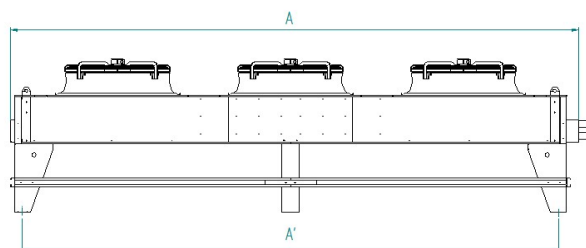
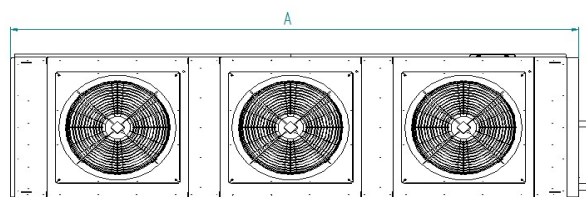
FAN Rating D630 Fan 380V		
Frequency	Hz	50
Speed	RPM	1320
Power Draw	Watts	2630
Current Draw	Amps	4.78

* 400mm is standard clearance, Sheet metal spacers to raise, also available
 * Sheet metal spacers needs to be inserted during site fitment.
 Fin Spacing: 2.2mm
 Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

VERTICAL AIR DISCHARGE DECK CONDENSER

TCV/H 080.2

DIA 800 FANS	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Layout	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Fin length	Dimensions						
	15K TD												Length (A)	Mount Length (A')	Depth (B)	Mount Depth (B')	Height (C)	Clearance (D)	Net Weight
	Sea Lvl.																		
	kW	m²	m³/hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	mm	mm	mm	mm	kg
080.2-12-B-N	136.9	256.3	44856	4	2	1 x 2	380	3.90	26.1	1 5/8	1 5/8	2800	3027	2780	1280	1100	1336	600	327
080.2-12-C-N	161.4	341.7	42732	3.8	2	1 x 2	380	3.90	34.8	1 5/8	1 5/8	2800	3027	2780	1280	1100	1336	600	363
080.2-13-B-N	197.9	384.4	67284	4	3	1 x 3	380	3.90	38.8	1 5/8	1 5/8	4200	4427	4180	1280	1100	1336	600	491
080.2-13-C-N	238.8	512.6	64076	3.8	3	1 x 3	380	3.90	51.8	2 1/8	2 1/8	4200	4427	4180	1280	1100	1336	600	587
080.2-14-B-N	273.7	512.6	89695	4	4	1 x 4	380	3.90	51.6	2 1/8	2 1/8	5600	5827	5580	1280	1100	1336	600	674
080.2-14-C-N	322.8	683.5	85482	3.8	4	1 x 4	380	3.90	68.8	2 1/8	2 1/8	5600	5827	5580	1280	1100	1336	600	746
080.2-22-B-N	273.8	512.6	89712	4	4	2 x 2	380	3.90	52.2	2*1 5/8	2*1 5/8	2800	3027	2780	2400	2220	1336	600	576
080.2-22-C-N	322.8	683.5	85464	3.8	4	2 x 2	380	3.90	65.6	2*1 5/8	2*1 5/8	2800	3027	2780	2400	2220	1336	600	636
080.2-23-B-N	395.8	768.9	134568	4	6	2 X 3	380	3.90	77.7	2*1 5/8	2*1 5/8	4200	4427	4180	2400	2220	1336	600	865
080.2-23-C-N	477.6	1025.2	128152	3.8	6	2 X 3	380	3.90	103.6	2*2 1/8	2*2 1/8	4200	4427	4128	2400	2220	1336	600	1025
080.2-24-B-N	547.4	768.9	179390	4	8	2 X 3	380	3.90	77.7	2*2 1/8	2*2 1/8	5600	5827	5580	2400	2220	1336	600	1186
080.2-24-C-N	645.6	1025.2	170964	3.8	8	2 X 3	380	3.90	103.6	2*2 1/8	2*2 1/8	5600	5827	5580	2400	2220	1336	600	1306



Fin Spacing: 2.4mm

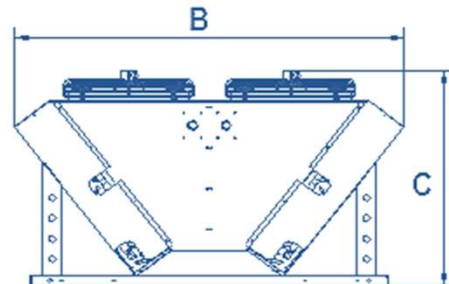
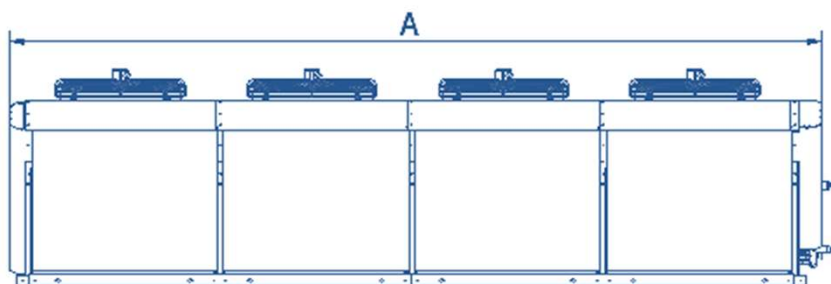
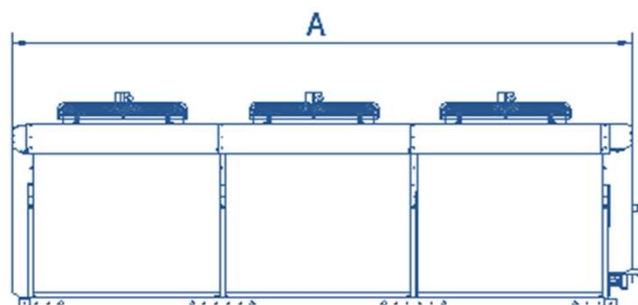
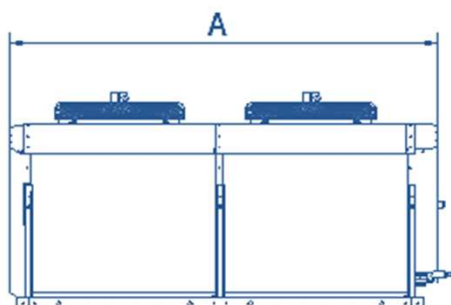
Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D800 Fan 380V AC		
Frequency	Hz	50
Speed	RPM	900
Power Draw	Watts	2330
Current Draw	Amps	4.85

VERTICAL AIR DISCHARGE VEE SHAPED CONDENSER

TCD 050 (2 FAN ROWS)

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Rows Deep Per Side	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Dimensions			Net Weight
DIA 500 Fans	kW	m ²	m ³ /hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	kg
050.1-22-B-N	99.8	99.8	27900	3.0	4	3	380	1.41	21.6	1 3/8"	1 1/8"	1780	1625	945	235
050.1-22-C-N	116.1	116.1	26496	2.9	4	4	380	1.41	28.9	1 3/8"	1 1/8"	1780	1625	945	270
050.1-23-B-N	150.8	150.8	41868	3.0	6	3	380	1.41	32.1	1 5/8"	1 3/8"	2580	1625	945	320
050.1-23-C-N	176.8	176.8	39744	2.9	6	4	380	1.41	42.7	1 5/8"	1 3/8"	2580	1625	945	385
050.1-24-B-N	201.9	201.9	55800	3.0	8	3	380	1.41	42.5	1 5/8"	1 3/8"	3380	1625	945	440
050.1-24-C-N	240.3	240.3	52992	2.9	8	4	380	1.41	56.6	2 1/8"	1 5/8"	3380	1625	945	490
050.1-25-B-N	254.7	254.7	69768	3.0	10	3	380	1.41	52.9	2 1/8"	1 5/8"	4180	1625	945	535
050.1-25-C-N	299.3	299.3	66240	2.9	10	4	380	1.41	70.5	2 1/8"	1 5/8"	4180	1625	945	600
050.1-26-C-N	353.5	353.5	79488	3.0	12	4	380	1.41	84.4	2 1/8"	2 1/8"	4980	1625	945	735



Fin Spacing: 2.2mm

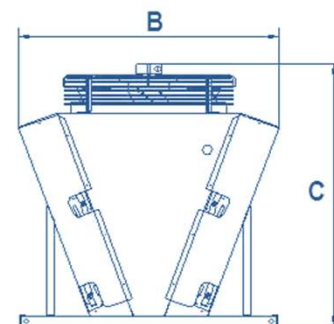
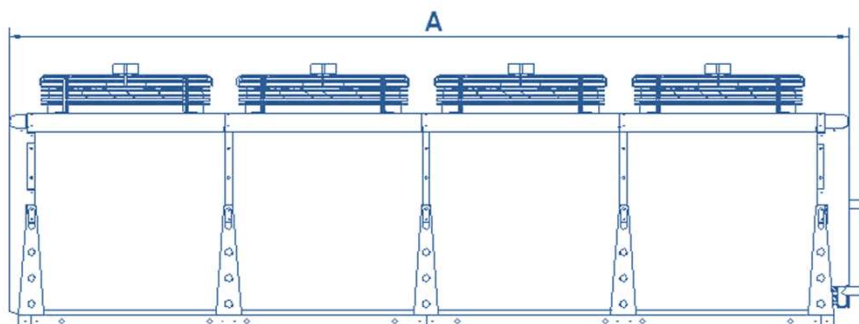
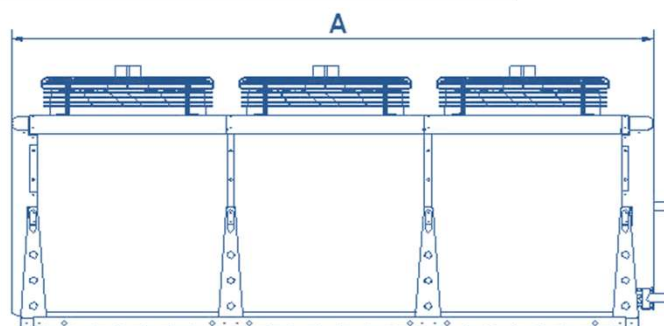
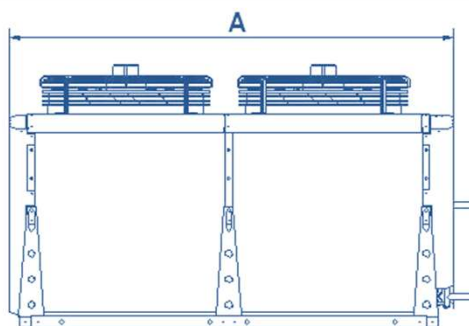
Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1390
Power Draw	Watts	720
Current Draw	Amps	1.41

VERTICAL AIR DISCHARGE VEE SHAPED CONDENSER

TCD 063 (1 FAN ROW)

	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Rows Deep Per Side	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Dimensions			Net Weight
	R404A 15K TD Sea Lvl.											Length (A)	Depth (B)	Height (C)	
DIA 630 Fans *	kW	m ²	m ³ /hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	kg
063.1-12-B-L	90.4	227.6	24120	2.6	2	3	380	2.48	21.6	7/8"	7/8"	1800	1060	1080	180
063.1-12-B-N	102.7	227.6	32472	3.5	2	3	380	4.78	21.6	7/8"	7/8"	1800	1060	1080	180
063.1-12-C-L	105.7	303.4	22968	2.5	2	4	380	2.48	28.9	11/8"	11/8"	1800	1060	1080	230
063.1-12-C-N	127.9	303.4	31212	3.4	2	4	380	4.78	28.9	11/8"	11/8"	1800	1060	1080	230
063.1-13-B-L	138.6	341.3	36072	2.6	3	3	380	2.48	32.1	11/8"	11/8"	2600	1060	1080	270
063.1-13-B-N	163.5	341.3	48816	3.5	3	3	380	4.78	32.1	11/8"	11/8"	2600	1060	1080	270
063.1-13-C-L	157.4	455.1	34416	2.5	3	4	380	2.48	42.7	13/8"	13/8"	2600	1060	1080	340
063.1-13-C-N	187.3	455.1	46836	3.4	3	4	380	4.78	42.7	13/8"	13/8"	2600	1060	1080	340
063.1-14-B-L	180.5	455.1	48096	2.6	4	3	380	2.48	42.7	13/8"	13/8"	3400	1060	1080	355
063.1-14-B-N	205.2	455.1	64944	3.5	4	3	380	4.78	42.7	13/8"	13/8"	3400	1060	1080	355
063.1-14-C-L	210.2	606.8	45720	2.5	4	4	380	2.48	56.6	13/8"	13/8"	3400	1060	1080	450
063.1-14-C-N	257.7	606.8	62424	3.4	4	4	380	4.78	56.6	13/8"	13/8"	3400	1060	1080	450



* Available in Low (L) or Normal (N) Power fan ratings - see fan data below

Fin Spacing: 2.2mm
Capacities based on
80°C Hot Gas,
45°C Condensing,
30°C Ambient Temps.

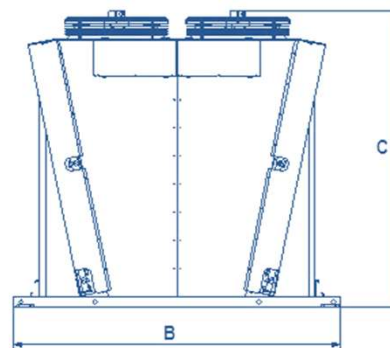
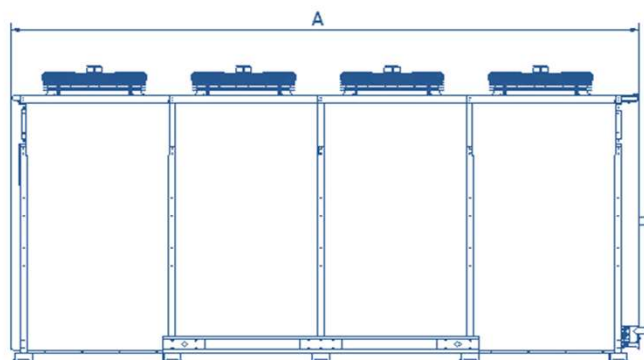
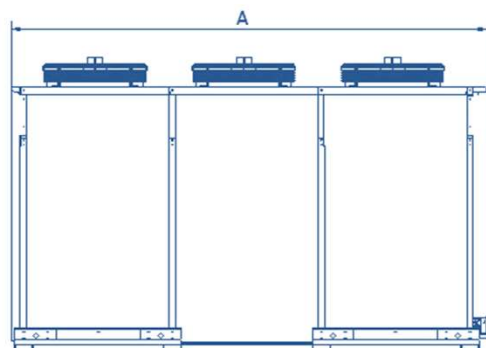
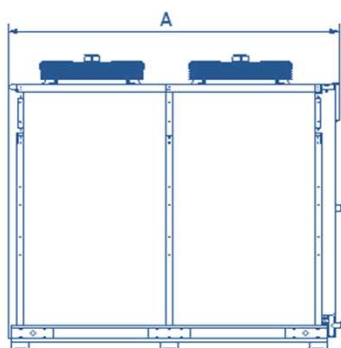
FAN Rating D630 Fan Type "L"		
Frequency	Hz	50
Speed	RPM	1330
Power Draw	Watts	1250
Current Draw	Amps	2.48

FAN Rating D630 Fan Type "N"		
Frequency	Hz	50
Speed	RPM	1320
Power Draw	Watts	2630
Current Draw	Amps	4.78

VERTICAL AIR DISCHARGE VEE SHAPED CONDENSER

TCD 063 (2 FAN ROWS)

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Rows Deep Per Side	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Dimensions			Net Weight
DIA 630 Fans	kW	m ²	m ³ /hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	kg
063.1-22-B-N	266.0	640	70236	2.7	4	3	380	4.78	60.4	1 5/8"	1 5/8"	2200	2200	2115	500
063.1-22-C-N	308.1	853.2	68508	2.6	4	4	380	4.78	80.5	1 5/8"	1 5/8"	2200	2200	2115	540
063.1-23-B-N	398.6	960	105372	2.7	6	3	380	4.78	89.0	1 5/8"	1 5/8"	3200	2200	2115	810
063.1-23-C-N	462.1	1280	102744	2.6	6	4	380	4.78	119.6	2 1/8"	2 1/8"	3200	2200	2115	870
063.1-24-B-N	527.4	1280	140256	2.7	8	3	380	4.78	118.1	2 1/8"	2 1/8"	4200	2200	2115	1125
063.1-24-C-N	617.8	1706	136980	2.6	8	4	380	4.78	158.6	2 1/8"	2 1/8"	4200	2200	2115	1200
063.1-25-B-N	639.5	1600	175320	2.7	10	3	380	4.78	147.2	2 1/8"	2 1/8"	5200	2200	2115	1440
063.1-25-C-N	762.5	2133.4	171216	2.6	10	4	380	4.78	197.7	2 1/8"	2 1/8"	5200	2200	2115	1520



Fin Spacing: 2.2mm

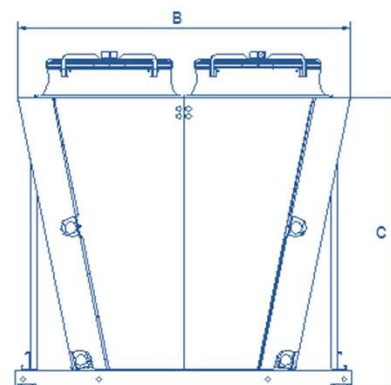
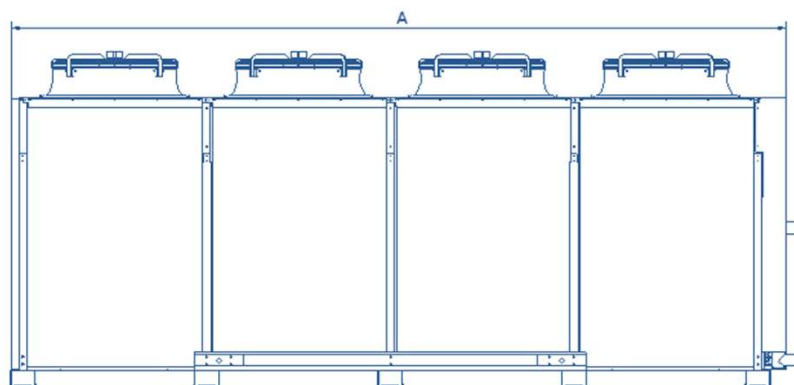
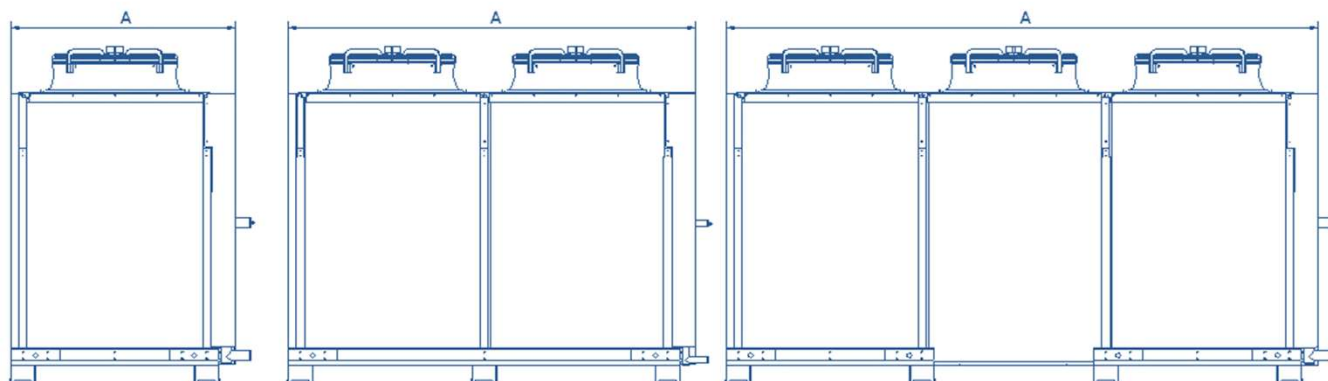
Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D630 Fan 380V		
Frequency	Hz	50
Speed	RPM	1320
Power Draw	Watts	2630
Current Draw	Amps	4.78

VERTICAL AIR DISCHARGE VEE SHAPED CONDENSER

TCD 080 (2 FAN ROWS)

	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Rows Deep Per Side	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Dimensions			Net Weight
	R404A 15K TD Sea Lvl.											Length (A)	Depth (B)	Height (C)	
DIA 800 Fans	kW	m ²	m ³ /hr	m/s	Qty	V	V	A	L	In"	In"	mm	mm	mm	kg
080.1-21-B-N	151.1	353	42372	2.7	2	3	380	3.90	36.1	1 1/8	7/8	2200	2200	2115	500
080.1-21-C-N	175.5	470.8	41148	2.6	2	4	380	3.90	48.6	1 1/8	7/8	2200	2200	2115	540
080.1-22-B-N	297.5	706	84600	2.7	4	3	380	3.90	67.5	1 5/8	1 3/8	3200	2200	2115	810
080.1-22-C-N	354.9	941.6	82476	2.6	4	4	380	3.90	92.8	1 5/8	1 3/8	3200	2200	2115	870
080.1-23-B-N	457.5	1059	126900	2.7	6	3	380	3.90	103.5	2 1/8	1 5/8	4200	2200	2115	1125
080.1-23-C-N	535.3	1412	123408	2.6	6	4	380	3.90	141.2	2 1/8	1 5/8	4200	2200	2115	1200
080.1-24-B-N	597.3	1412	169524	2.7	8	3	380	3.90	137.4	2 5/8	1 5/8	5200	2200	2115	1440
080.1-24-C-N	709.6	1883	164952	2.6	8	4	380	3.90	187.6	2 5/8	1 5/8	5200	2200	2115	1520
080.1-25-B-N	763.2	1765	211896	2.7	10	3	380	3.90	173.9	2 5/8	2 1/8	5200	2200	2115	1440
080.1-25-C-N	862.2	2353	206208	2.6	10	4	380	3.90	233.6	2 5/8	2 1/8	5200	2200	2115	1520



Fin Spacing: 2.4mm
Capacities based on
80°C Hot Gas,
45°C Condensing,
30°C Ambient Temps.

FAN Rating D800 AC Fan		
Frequency	Hz	50
Speed	RPM	880
Power Draw	Watts	1940
Current Draw	Amps	3.9

FAN Rating D800 EC Fan		
Frequency	Hz	50
Speed	RPM	1020
Power Draw	Watts	2560
Current Draw	Amps	3.9

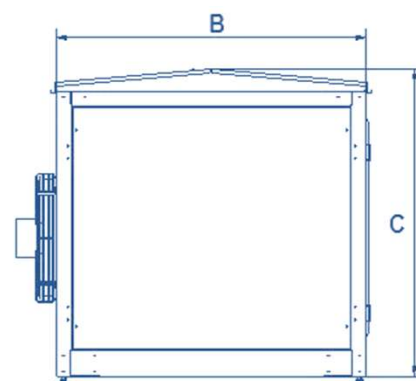
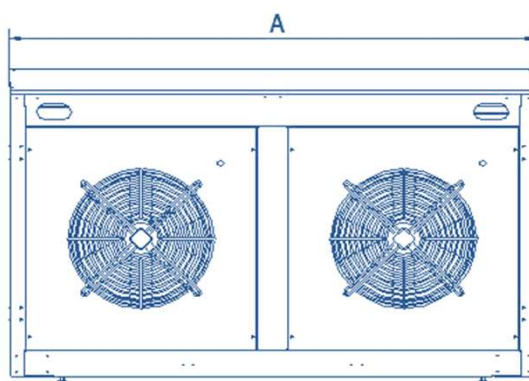
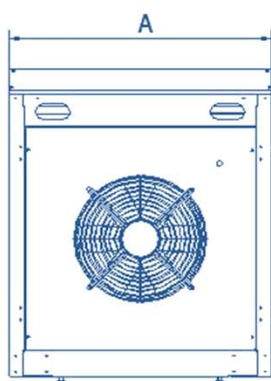
HORIZONTAL AIR DISCHARGE PACK UNIT

TCPH 035 TCPH 040

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Receiver Size	Dimensions			Nett Weight
	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	Length (A) mm	Depth (B) mm	Height (C) mm	kg
DIA 350 FANS															
035.1-11-B-N	8.6	20.5	2729	1.9	1	220	0.58	3.29	5/8"	5/8"	6 1/2	767	904	940	104
035.1-11-C-N	9.8	27.4	2657	1.9	1	220	0.58	4.39	5/8"	5/8"	6 1/2	767	904	940	107

DIA 400 FANS

040.1-11-B-N	10.6	20.5	3716	2.5	1	220	0.73	3.29	5/8"	5/8"	9	767	904	940	106
040.1-11-C-N	12.2	27.4	3568	2.5	1	220	0.73	4.39	5/8"	5/8"	9	767	904	940	108
040.1-12-B-N	22.8	47.4	7762	2.4	2	220	0.73	7.33	3/4"	5/8"	12	1538	904	940	173
040.1-12-C-N	26.4	63.2	7524	2.3	2	220	0.73	9.77	3/4"	5/8"	12	1538	904	940	180



TCPH Horizontal packs can be ordered with or without roofs, for stacking.
It is not recommended that more than two packs high are stacked.

Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

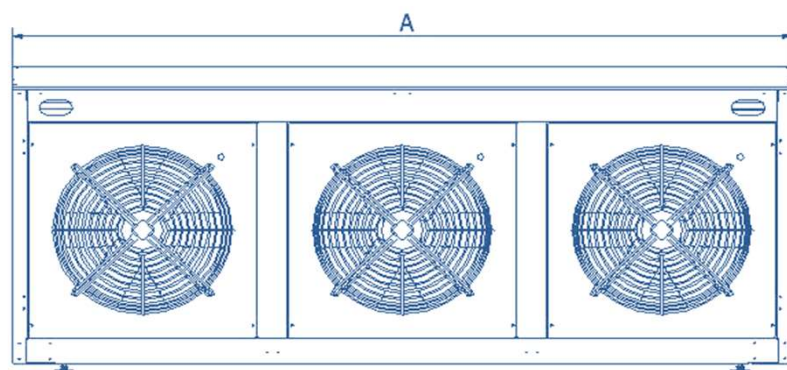
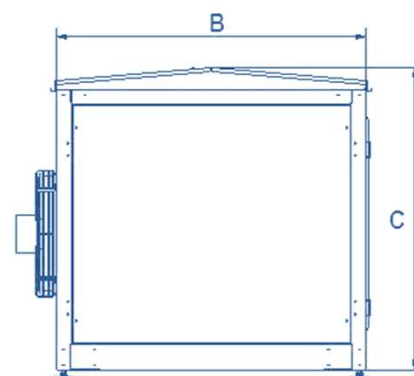
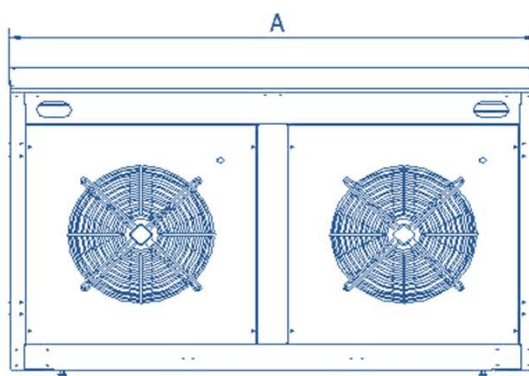
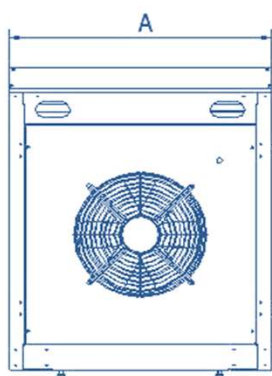
FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

FAN Rating D400 Fan 220V		
Frequency	Hz	50
Speed	RPM	1430
Power Draw	Watts	160
Current Draw	Amps	0.73

HORIZONTAL AIR DISCHARGE PACK UNIT

TCPH 050

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Receiver Size	Dimensions			Nett Weight
	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	Length (A)	Depth (B)	Height (C)	kg
DIA 500 FANS															
050.1-11-B-N	14.0	20.5	5778	4.1	1	380	1.41	3.29	5/8"	5/8"	12	767	904	940	110
050.1-11-C-N	16.5	27.4	5276	3.7	1	380	1.41	4.39	5/8"	5/8"	12	767	904	940	113
050.1-11-E-N	20.6	51	5101	3.6	1	380	1.41	6.59	5/8"	5/8"	12	767	904	940	118
050.1-12-B-N	30.9	47.4	12749	3.9	2	380	1.41	7.33	3/4"	5/8"	18	1538	904	940	182
050.1-12-C-N	35.8	63.2	11745	3.6	2	380	1.41	9.77	3/4"	5/8"	18	1538	904	940	189
050.1-12-E-N	40.4	94.8	10144	3.1	2	380	1.41	14.66	7/8"	3/4"	18	1538	904	940	202
050.1-13-C-N	53.7	94.8	17618	3.6	3	380	1.41	15.15	11/8"	7/8"	35	2300	904	940	265
050.1-13-E-N	60.6	142.2	15216	3.1	3	380	1.41	22.73	11/8"	11/8"	35	2300	904	940	286



TCPH Horizontal packs can be ordered with or without roofs, for stacking.
It is not recommended that more than two packs high are stacked.

Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D500 Fan 380V		
Frequency	Hz	50
Speed	RPM	1390
Power Draw	Watts	720
Current Draw	Amps	1.41

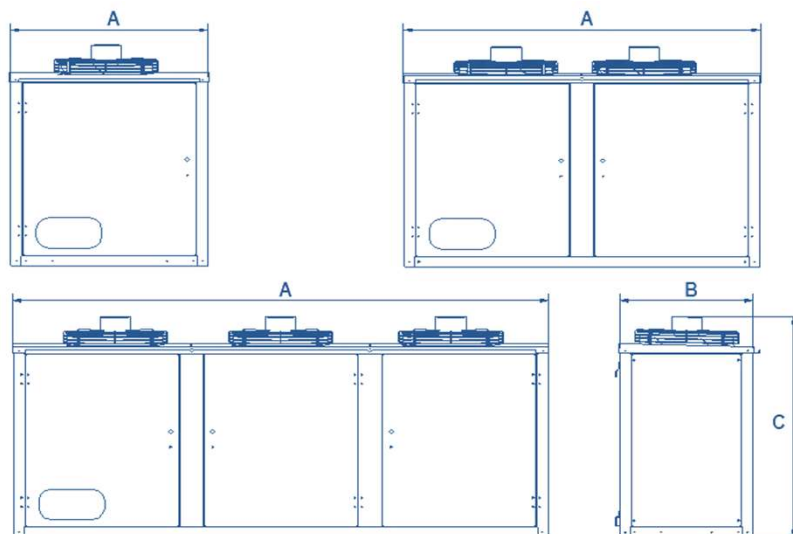
VERTICAL AIR DISCHARGE PACK UNIT

TCPV 035 TCPV 040

	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Receiver Size	Dimensions			Nett Weight
	R404A 15K TD Sea Lvl.											Length (A)	Depth (B)	Height (C)	
DIA 350 FANS	kW	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	kg
035.1-11-A-N	5.3	9.5	2556	2.8	1	220	0.58	1.44	5/8"	5/8"	6 1/2	750	507	936	53
035.1-11-B-N	6.9	14.2	2412	2.7	1	220	0.58	2.17	5/8"	5/8"	6 1/2	750	507	936	55
035.1-11-C-N	8.3	19	2268	2.5	1	220	0.58	2.89	5/8"	5/8"	8	750	507	936	57
035.1-12-B-N	15.2	29.5	4896	2.6	2	220	0.58	4.34	5/8"	5/8"	8	1352	507	936	81
035.1-12-C-N	17.6	39.3	4644	2.5	2	220	0.58	5.78	5/8"	5/8"	8	1352	507	936	86
035.1-13-B-N	23.3	46.7	7488	2.5	3	220	0.58	6.28	5/8"	5/8"	12	2033	507	936	104
035.1-13-C-N	27.1	62.2	7128	2.4	3	220	0.58	8.80	5/8"	5/8"	12	2033	507	936	110

DIA 400 FANS

040.1-11-B-N	9.6	16.9	3492	3.2	1	220	0.73	2.57	5/8"	5/8"	6 1/2	835	557	936	61
040.1-11-C-N	11.1	22.6	3276	3.0	1	220	0.73	3.42	5/8"	5/8"	6 1/2	835	557	936	64
040.1-11-E-N	14.1	33.9	2916	2.7	1	220	0.73	5.14	5/8"	5/8"	8	835	557	936	68
040.1-12-B-N	22.6	39.2	8006	3.2	2	220	1.46	2.57	5/8"	5/8"	6 1/2	1437	557	936	93
040.1-12-C-N	26.0	52.3	7488	3.0	2	220	1.46	3.42	5/8"	5/8"	6 1/2	1437	557	936	97
040.1-12-E-N	29.8	78.4	6755	2.7	2	220	1.46	5.14	5/8"	5/8"	8	1437	557	936	104
040.1-13-B-N	30.5	51.9	10587	3.2	3	220	2.19	2.57	7/8"	7/8"	8	2118	557	936	123
040.1-13-C-N	36.8	69.2	10188	3.0	3	220	2.19	3.42	7/8"	7/8"	8	2118	557	936	127
040.1-13-E-N	40.2	103.7	8496	2.7	3	220	2.19	2.57	7/8"	7/8"	8	2118	557	936	134



FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

FAN Rating D400 Fan 220V		
Frequency	Hz	50
Speed	RPM	1430
Power Draw	Watts	160
Current Draw	Amps	0.73

TCPV Vertical packs are wall mounted as standard, but can be ordered with feet for floor mounting if required.

* Hydro Fin material being standard

Fin Spacing: 2.1mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

HORIZONTAL AIR DISCHARGE COOL-PACK UNIT

TCCP 035
TCCP 040
TCCP 050

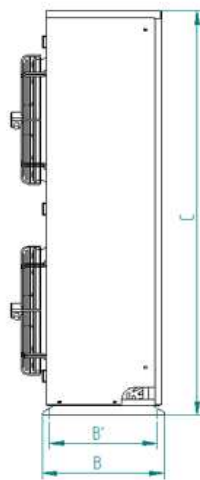
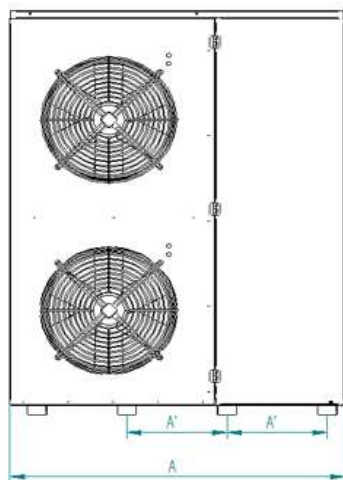
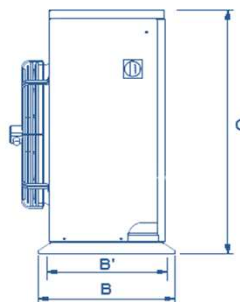
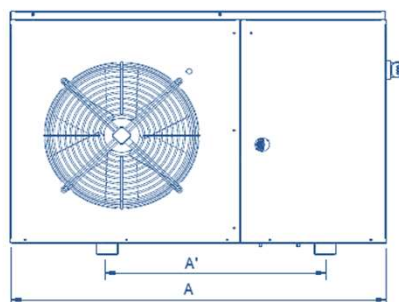
DIA 350 FANS	Nominal Capacity	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Receiver Size	Dimensions					
	R404A											Length (A)	Mount Length (A')	Depth (B)	Mount Depth (B')	Height (C)	Net Weight
	15K TD																
	Sea Lvl.																
kW	m²	m³/hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	mm	mm	kg	
035.1-11-A-N	5.3	9.5	2556	2.8	1	220	0.58	1.48	5/8	5/8	1.8	1000	655	475	420	722	55
035.1-11-B-N	7.3	14.2	2412	2.7	1	220	0.58	2.21	5/8	5/8	1.8	1000	655	475	420	722	56
035.1-11-C-N	8.7	19	2304	2.5	1	220	0.58	2.95	5/8	5/8	1.8	1000	655	475	420	722	57

DIA 400 FANS

040.1-11-B-N	13.9	33.4	4068	1.9	1	220	0.73	5.01	5/8	5/8	2.4	1300	755	475	420	893	70
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DIA 500 FANS

050.1-11-A-N	14.2	22.3	7308	3.4	1	220	2.95	3.34	5/8	5/8	2.4	1300	755	475	420	893	68
050.1-11-B-N	19.8	33.4	6984	3.3	1	220	2.95	5.01	5/8	5/8	3	1300	755	475	420	893	71
050.1-11-C-N	22.9	44.5	6660	3.1	1	220	2.95	5.74	5/8	5/8	3	1300	755	475	420	893	74
050.1-21-C-N	45.8	86.7	13140	3.2	2	220	2.95	12.20	7/8	7/8	3	1300	755	475	420	1693	88
050.1-21-C-N	54.3	130	12060	2.9	2	220	2.95	19.52	1 1/8	7/8	3	1300	755	475	420	1693	105



FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

FAN Rating D400 Fan 220V		
Frequency	Hz	50
Speed	RPM	1430
Power Draw	Watts	160
Current Draw	Amps	0.73

FAN Rating D500 Fan 220V		
Frequency	Hz	50
Speed	RPM	1300
Power Draw	Watts	680
Current Draw	Amps	2.95

Fin Spacing: 2.1mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

HORIZONTAL AIR DISCHARGE SMALL CONDENSERS

TCHS 025
TCHS 031
TCHS 035

	Nominal Capacity R404A 15K TD Sea Lvl.	Surface Area	Airflow	Face Velocity	Fan Qty	Fan Voltage	Current (per fan)	Tube Volume	Inlet Connection	Outlet Connection	Receiver Size	Dimensions			
	W	m ²	m ³ /hr	m/s	Qty	V	A	L	In"	In"	L	mm	mm	mm	kg
DIA 250 FANS															
025.A-1100	1100	1.9	720	2.8	1	220	0.42	0.46	3/8"	3/8"	1.1	340	481	305	7.2
025.B-1500	1500	2.9	648	2.4	1	220	0.42	0.70	3/8"	3/8"	1.1	340	481	305	7.8
025.C-1900	1900	3.9	612	2.3	1	220	0.42	0.90	3/8"	3/8"	1.1	340	481	305	8.3
025.C-2100	2100	5.1	612	1.8	1	220	0.42	1.10	3/8"	3/8"	1.8	400	481	305	9.4
025.B-3200	3200	6.0	1224	2.3	2	220	0.42	1.28	1/2"	3/8"	1.8	620	481	305	11.5

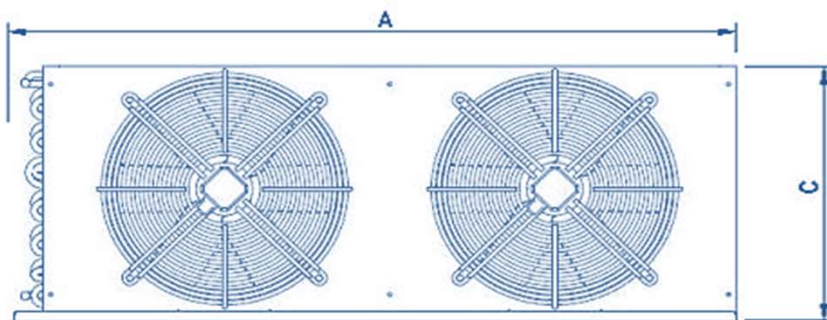
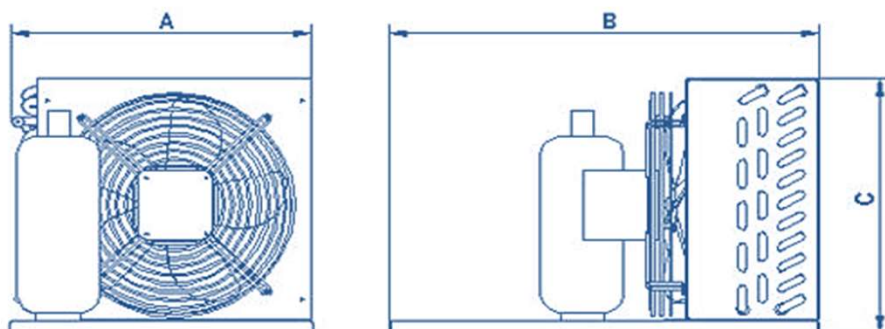
DIA 310 FANS

031.A-3200	3200	5.1	1584	3.1	1	220	0.38	0.84	3/8"	3/8"	1.8	500	580	375	11.4
031.B-4000	4000	7.7	1440	2.8	1	220	0.38	1.26	3/8"	3/8"	1.8	500	580	375	12.8
031.C-5000	5000	10.2	1332	2.6	1	220	0.38	1.68	3/8"	3/8"	2.4	500	580	375	14.2
031.E-6000	6000	16.4	1260	2.3	1	220	0.38	2.77	5/8"	3/8"	2.4	500	580	375	14.2
031.A-7000	7000	11.5	3312	2.9	2	220	0.38	1.84	5/8"	1/2"	2.4	1000	600	375	17.3

DIA 350 FANS

035.1-11-C-N	6400.0	13	1800	2.8	1	220	0.58	2.17	5/8"	1/2"	2.4	550	155*	410*	14.1
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* Coil Housing Only



Fin Spacing: 2.2mm

Capacities based on 80°C Hot Gas, 45°C Condensing, 30°C Ambient Temps.

FAN Rating D250 Fan 220V		
Frequency	Hz	50
Speed	RPM	1300
Power Draw	Watts	16
Current Draw	Amps	0.42

FAN Rating D315 Fan 220V		
Frequency	Hz	50
Speed	RPM	1340
Power Draw	Watts	86
Current Draw	Amps	0.38

FAN Rating D350 Fan 220V		
Frequency	Hz	50
Speed	RPM	1400
Power Draw	Watts	130
Current Draw	Amps	0.58

Condenser Selection Example

Total Heat Rejection (Using R404A) 19,500 Watts
 Condensing Temperature +45°C
 Location Pretoria
 Standard Aluminium Fins

Altitude in Pretoria 1371m
 Ambient Temperature in Pretoria +34°C

Correction Factor 1

Correction factor for Temperature Difference: $F_1 = \frac{\Delta T_1}{15} = \frac{11}{15} = 0.7333$

Correction Factor 2

Correction factor for Refrigerant: $F_2 = 1.00$

Refrigerant	R22	R134a	R404A	R407A	R407C	R507
F2	0.96	0.93	1.00	0.83	0.87	1.00

Correction Factor 3

Correction factor for Geodetic Height (Altitude): $F_3 = 0.92$

Metres above Sea Level	0	500	1000	1500	2000	2500
F3	1	0.97	0.94	0.91	0.88	0.85

Correction Factor 4

Correction factor for Fin Material: $F_4 = 1.00$

F4 : Material	
1.00	Aluminium
0.97	Coated Aluminium
1.03	Copper

Capacity Required

$$\frac{\text{Total Heat Rejection}}{F_1 \times F_2 \times F_3 \times F_4}$$

$$= \frac{19,500}{0.7333 \times 1.0 \times 0.92 \times 1.00}$$

$$= 28,900 \text{ Watts}$$

From the catalogue, depending on what air flow configuration is required, the selected condenser, with a rated capacity of 29.1kW, would be a

TCHM050.1-11-E-N (Horizontal Airflow) or
TCVM050.1-11-E-N (Vertical Airflow)

AMBIENT TEMPERATURES AND ALTITUDES

Southern Africa

Town	Ambient Temp °C	Height m
Alexander Bay	32	0
Aliwal North	35	1337
Barberton	35	852
Bathurst	34	259
Beaufort West	35	863
Berlin	30	1341
Bethlehem	32	1615
Bloemfontein	34	1371
Bremersdorp	32	626
Cape Town	32	0
Carltonville	32	1341
Carolina	33	1690
Ceres	36	457
Clanwilliam	43	76
Craddock	35	873
De Aar	35	1243
Dundee	32	1250
Durban	32	0
East London	32	0
Ermelo	32	1675
Estcourt	34	1181
Eshowe	33	502
Fauresmith	35	932
Fort Beaufort	39	457
Francistown	37	1004
Fraserburg	35	1280
Gaberone	38	1007
George	31	0
Germiston	31	1665
Graaff-Reinet	40	750
Grahamstown	36	539
Grooffontein	35	1263
Hanover	34	1337
Harrismith	31	1628
Hope Town	35	1219
Howick	35	1052
Johannesburg	32	1752
Keetmanshoop	39	1004
Kimberley	35	1196
King Williamstown	37	375
Klerksdorp	34	1324
Knysna	31	0

AMBIENT TEMPERATURES AND ALTITUDES

Southern Africa

Town	Ambient Temp °C	Height m
Kroonstad	32	1348
Krugersdorp	31	1699
Ladysmith	32	1000
Lindley	33	1540
Louis Trichardt	35	961
Lydenburg	33	1470
Mafikeng	35	1272
Maseru	33	1571
Mbabane	32	1163
Middleburg	31	1447
Montagu	34	223
Messina	35	548
Midrand	33	1510
Nelspruit	34	731
Newcastle	32	1185
Oudtshoorn	37	334
Phalaborwa	36	405
Pietermaritzburg	32	762
Pietersburg	34	1301
Piet Retief	33	1271
Port Elizabeth	32	0
Port Shepstone	30	0
Potschefstroom	33	1352
Potgietersrus	34	1176
Pretoria	34	1371
Queenstown	37	1077
Robertson	35	172
Roodeplaat	35	1066
Rustenburg	35	1234
Thabazimbi	37	1028
Uitenhage	37	110
Umtata	34	701
Upington	38	804
Ventersdorp	32	1484
Vereeniging	33	1417
Victoria West	35	1269
Vryburg	36	1186
Warmbad	35	115
Welkom	34	1375
Wepener	32	1439
Windhoek	34	1728
Worcester	37	201



Available At



Cape Town	021 511 0866
Johannesburg - Randburg	011 791 6090
Johannesburg - Selby	011 493 8734
Durban	031 569 6382
Pietermaritzburg	033 342 4244
Pretoria	012 327 5585
Nelspruit	013 752 465
Port Elizabeth	041 453 4407
East London	043 722 1760
Windhoek	00264 61262002