



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 20 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	8.53	11.15	14.30	18.10	22.50	27.70	33.70	40.60			
15.0	7.92	10.50	13.55	17.15	21.40	26.40	32.10	38.70	46.10		
20.0	7.28	9.76	12.70	16.15	20.20	24.90	30.40	36.60	43.70	51.70	55.20
25.0	6.60	9.00	11.80	15.10	18.95	23.40	28.60	34.50	41.20	48.80	52.10
30.0	5.90	8.21	10.90	14.00	17.65	21.80	26.70	32.20	38.60	45.70	48.80
35.0	5.19	7.39	9.92	12.85	16.25	20.20	24.70	29.90	35.80	42.60	45.50
40.0		6.55	8.93	11.65	14.85	18.50	22.70	27.50	33.00	39.30	42.10
45.0		5.71	7.93	10.45	13.35	16.75	20.60	25.10	30.20	36.00	38.50
50.0		4.87	6.92	9.23	11.90	14.95	18.50	22.60	27.20	32.60	34.90
55.0			5.90	7.99	10.40	13.15	16.30	20.00	24.20	29.10	31.30
60.0			4.90	6.76	8.87	11.30	14.15	17.40	21.20		
62.0			4.50	6.27	8.27	10.55	13.25	16.35	20.00		

50 Hz

D3DC-100X

R404A Dew Point

Cond °C	Power, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	3.49	3.89	4.23	4.51	4.68	4.72	4.60	4.31			
15.0	3.62	4.08	4.50	4.85	5.11	5.25	5.24	5.06	4.68		
20.0	3.73	4.25	4.74	5.17	5.52	5.76	5.87	5.81	5.56	5.09	4.84
25.0	3.82	4.40	4.96	5.48	5.92	6.26	6.47	6.53	6.42	6.09	5.90
30.0	3.87	4.52	5.15	5.75	6.28	6.73	7.05	7.24	7.25	7.07	6.93
35.0	3.88	4.59	5.30	5.99	6.61	7.16	7.60	7.91	8.05	8.01	7.94
40.0		4.63	5.41	6.18	6.90	7.55	8.11	8.54	8.82	8.92	8.91
45.0		4.60	5.47	6.32	7.14	7.90	8.57	9.13	9.54	9.79	9.84
50.0		4.52	5.46	6.41	7.32	8.19	8.98	9.66	10.20	10.60	10.70
55.0			5.40	6.43	7.44	8.42	9.33	10.15	10.85	11.35	11.55
60.0			5.26	6.38	7.50	8.58	9.61	10.55	11.40		
62.0			5.18	6.34	7.50	8.63	9.70	10.70	11.60		

Cond °C	Current at 400 V, A										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	9.22	9.57	9.91	10.21	10.41	10.47	10.34	9.97			
15.0	9.32	9.74	10.17	10.56	10.88	11.06	11.07	10.85	10.36		
20.0	9.42	9.92	10.44	10.94	11.37	11.68	11.83	11.77	11.45	10.83	10.48
25.0	9.51	10.09	10.70	11.31	11.86	12.31	12.61	12.71	12.56	12.13	11.86
30.0	9.56	10.22	10.94	11.66	12.34	12.93	13.38	13.65	13.69	13.45	13.26
35.0	9.56	10.32	11.14	11.98	12.79	13.53	14.14	14.58	14.80	14.76	14.66
40.0		10.35	11.28	12.25	13.20	14.09	14.86	15.48	15.89	16.06	16.04
45.0		10.30	11.35	12.45	13.54	14.58	15.53	16.33	16.94	17.32	17.39
50.0		10.15	11.32	12.56	13.80	15.00	16.13	17.12	17.93	18.52	18.68
55.0			11.19	12.56	13.96	15.33	16.63	17.82	18.84	19.65	19.90
60.0			10.92	12.44	14.00	15.55	17.04	18.42	19.65		
62.0			10.78	12.36	13.98	15.60	17.16	18.63	19.95		

Cond °C	Suction Mass Flow, g/s										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	47.50	62.20	80.20	102.00	127.50	157.50	193.00	235.00			
15.0	46.00	61.00	79.00	100.50	126.50	156.50	192.00	233.00	281.00		
20.0	44.10	59.30	77.50	99.10	124.50	154.50	190.00	231.00	279.00	334.00	358.00
25.0	41.90	57.30	75.60	97.10	122.50	152.50	187.50	228.00	276.00	331.00	356.00
30.0	39.40	55.00	73.20	94.70	120.00	149.50	184.50	225.00	272.00	327.00	352.00
35.0	36.60	52.30	70.50	91.90	117.00	146.50	180.50	221.00	268.00	323.00	348.00
40.0		49.30	67.40	88.60	113.50	142.50	176.50	216.00	263.00	318.00	343.00
45.0		45.90	64.00	84.90	109.50	138.00	171.50	211.00	258.00	313.00	338.00
50.0		42.10	60.10	80.80	105.00	133.00	166.00	206.00	252.00	307.00	332.00
55.0			55.90	76.20	99.80	127.50	160.50	199.50	246.00	301.00	326.00
60.0			51.40	71.40	94.60	122.00	154.50	193.50	240.00		
62.0			49.50	69.40	92.50	119.50	152.00	191.00	238.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	3
Displacement @ 50 Hz, m³/h	38.0
Bore/Stroke, mm	60.4/50.8
Length/Width, mm	680/370
Height, mm	480
Net Weight, kg	164
Gross Weight, kg	175
Rotalock Discharge, inch	1 1/8
Suction, inch	1 3/8
Oil Quantity, l	3.7
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Base mounting (hole dia), mm	381 x 305 (18)
Sound Pressure @ 1m (MT), dBA	70
Sound Power (MT), dBA	81
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
Sound Pressure @ 1m (HT), dBA	71
Sound Power (HT), dBA	82
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 55 / 20 °C at 50 Hz
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	3922
Refrigerant's classification	A1

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	20.5
Locked Rotor Current, A	121
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Springs	4
Oil Pressure Switch	OPS2 Sensor

ACCESSORIES OPTIONAL

Unloaded start	Available
Additional Cooling	70 W Vertical Air Flow Fan
Oil Pressure Switch	OPS2 Electronic Switch
Deep Oil Sump	Mounted
Adapter Kit	For Parallel Operation
Oil Control System	ALCO Trax-Oil OM3
Capacity Control	Moduload
Crankcase Heater	70 W Internal
Enclosure Class	IP 56
Check Valve	For unloaded start operation

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
AWM	380-420 V / 3~ / 50 Hz	400	YYY	Y	1.00
EWL	220-240 V / 3~ / 50 Hz	230	Y/DELTA	DELTA	1.73
EWL	380-420 V / 3~ / 50 Hz	400		Y	1.00
EWM	380-420 V / 3~ / 50 Hz	400	Y/DELTA	DELTA	1.00
EWY	500-550 V / 3~ / 50 Hz	525	Y/DELTA	DELTA	0.76
AWR	220-240 V / 3~ / 50 Hz	230	YYY	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YYY	Y	0.76
TWY	500-550 V / 3~ / 50 Hz	525		DELTA	0.76
EWK	220-240 V / 3~ / 60 Hz	230	Y/DELTA	DELTA	2.10
EWK	380-420 V / 3~ / 60 Hz	380		Y	1.20
EWD	440-480 V / 3~ / 60 Hz	460	Y/DELTA	DELTA	1.00
AWX	380 V / 3~ / 60 Hz	380	YYY	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YYY	Y	1.00