



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- ▨ Limited superheat 20 K
- Maximum Evaporating Temperature
- 25 °C Suction Gas Return
- | Voltage limit ± 5% above -20°C

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW								
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0	8.48	11.50	15.35	20.00	25.70				
15.0	7.64	10.50	14.05	18.45	23.70	29.90			
20.0	6.89	9.55	12.90	17.00	21.90	27.70	34.30		
25.0		8.70	11.80	15.60	20.20	25.50	31.80	38.90	
30.0		7.91	10.80	14.35	18.55	23.50	29.30	35.90	43.50
35.0			9.82	13.05	16.95	21.50	26.90	33.00	40.00
40.0			8.85	11.85	15.40	19.60	24.50	30.10	36.60
45.0				10.60	13.85	17.70	22.10	27.30	33.20
50.0				9.32	12.25	15.75	19.80	24.50	29.90
55.0					10.65	13.75	17.40	21.60	26.50

50 Hz

D4SF-100X

R404A Dew Point

Cond °C	Power, kW								
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0	4.33	5.11	5.86	6.53	7.10				
15.0	4.37	5.20	6.02	6.78	7.46	8.01			
20.0	4.42	5.32	6.21	7.06	7.84	8.52	9.06		
25.0		5.43	6.40	7.35	8.24	9.04	9.72	10.25	
30.0		5.52	6.57	7.62	8.62	9.56	10.40	11.10	11.60
35.0			6.70	7.85	8.98	10.05	11.00	11.90	12.60
40.0			6.76	8.02	9.27	10.50	11.60	12.65	13.55
45.0				8.11	9.49	10.85	12.15	13.35	14.40
50.0				8.09	9.61	11.10	12.55	13.95	15.20
55.0					9.60	11.25	12.90	14.45	15.90

Cond °C	Current at 400 V, A								
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0	9.57	10.31	11.09	11.84	12.52				
15.0	9.72	10.54	11.43	12.32	13.16	13.89			
20.0	9.81	10.73	11.73	12.76	13.77	14.69	15.47		
25.0		10.85	11.97	13.14	14.32	15.44	16.44	17.27	
30.0		10.91	12.15	13.47	14.82	16.13	17.36	18.44	19.32
35.0			12.27	13.73	15.25	16.77	18.22	19.55	20.71
40.0			12.31	13.93	15.62	17.34	19.02	20.60	22.04
45.0				14.05	15.92	17.84	19.74	21.59	23.30
50.0				14.09	16.14	18.26	20.40	22.50	24.50
55.0					16.27	18.60	20.97	23.33	25.62

Cond °C	Suction Mass Flow, g/s								
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0	47.10	64.10	85.70	112.00	144.50				
15.0	44.20	60.80	81.80	107.50	139.00	176.00			
20.0	41.70	57.90	78.40	103.50	134.00	170.50	213.00		
25.0		55.30	75.30	99.90	129.50	165.00	207.00	255.00	
30.0		52.80	72.40	96.40	125.50	160.00	201.00	248.00	304.00
35.0			69.50	93.00	121.00	155.00	194.50	241.00	296.00
40.0			66.50	89.40	117.00	150.00	188.50	234.00	288.00
45.0				85.50	112.50	144.50	182.50	227.00	280.00
50.0				81.00	107.50	139.00	176.00	220.00	272.00
55.0					101.50	132.50	169.00	212.00	264.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	4
Displacement @ 50 Hz, m <sup>3</sup> /h	56.0
Bore/Stroke, mm	63.5/50.8
Length/Width, mm	680/485
Height, mm	495
Net Weight, kg	178
Gross Weight, kg	194
Rotalock Discharge, inch	1 1/8
Suction, inch	1 5/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	3.3
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 (LT), dBA	72
Sound Power (LT), dBA	83
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	71
Sound Power (MT), dBA	82
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 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	27.1
Locked Rotor Current, A	105
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

**ACCESSORIES OPTIONAL**

Enclosure Class	IP 56
Adapter Kit	For Parallel Operation
Capacity Control	Capacity Steps 50%
Check Valve	For unloaded start operation
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Discharge Temperature Protection	Head PTC sensor
Unloaded start	Available
Deep Oil Sump	Mounted
Oil Pressure Switch	OPS2 Electronic Switch
Oil Control System	ALCO Trax-Oil OM3

**MOTOR OPTIONS**

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
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
AWC	208-230 V / 3~ / 60 Hz	230	YYY	Y	2.19
AWX	380 V / 3~ / 60 Hz	380	YYY	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YYY	Y	1.00