



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
20.0	12.45	16.15	20.60	25.80					
25.0	11.50	15.05	19.25	24.20	30.10				
30.0	10.60	13.95	17.95	22.70	28.30	34.80	37.60	42.20	46.40
35.0	9.73	12.90	16.70	21.20	26.50	32.70	35.50	39.90	43.90
40.0	8.91	11.95	15.50	19.80	24.80	30.70	33.30	37.50	41.30
45.0	8.15	11.00	14.40	18.40	23.20	28.70	31.20	35.20	38.90
50.0	7.45	10.15	13.35	17.10	21.60	26.80	29.20	33.00	36.40
55.0	6.81	9.36	12.35	15.85	20.00	24.90	27.10	30.70	33.90
60.0	6.22	8.64	11.40	14.70	18.55	23.10	25.20	28.50	31.50
62.0			11.05	14.25	18.00	22.40	24.40	27.60	30.60

50 Hz

D3DS-100X

R134a

Cond °C	Power, kW								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
20.0	4.09	4.41	4.65	4.77					
25.0	4.22	4.64	4.97	5.21	5.33				
30.0	4.35	4.86	5.29	5.64	5.87	5.97	5.98	5.93	5.85
35.0	4.50	5.08	5.60	6.05	6.39	6.61	6.66	6.69	6.68
40.0	4.65	5.30	5.90	6.44	6.89	7.22	7.32	7.43	7.47
45.0	4.80	5.51	6.19	6.82	7.36	7.81	7.95	8.13	8.23
50.0	4.97	5.72	6.47	7.18	7.81	8.36	8.55	8.79	8.96
55.0	5.14	5.93	6.74	7.52	8.24	8.88	9.11	9.42	9.65
60.0	5.32	6.14	6.99	7.83	8.64	9.37	9.64	10.00	10.30
62.0			7.09	7.95	8.79	9.55	9.84	10.25	10.55

Cond °C	Current at 400 V, A								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
20.0	9.47	9.88	10.19	10.36					
25.0	9.64	10.18	10.63	10.96	11.12				
30.0	9.82	10.47	11.06	11.54	11.87	12.02	12.01	11.94	11.81
35.0	10.01	10.77	11.49	12.11	12.60	12.92	13.00	13.04	13.01
40.0	10.20	11.06	11.90	12.66	13.32	13.81	13.96	14.12	14.19
45.0	10.41	11.36	12.31	13.21	14.01	14.68	14.91	15.18	15.36
50.0	10.62	11.65	12.70	13.73	14.69	15.53	15.83	16.22	16.49
55.0	10.84	11.94	13.09	14.24	15.34	16.35	16.72	17.23	17.61
60.0	11.08	12.23	13.46	14.73	15.97	17.15	17.59	18.21	18.69
62.0			13.61	14.92	16.22	17.46	17.93	18.60	19.12

Cond °C	Suction Mass Flow, g/s								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
20.0	74.60	95.10	119.00	146.00					
25.0	72.00	92.30	116.00	143.00	174.50				
30.0	69.50	89.70	113.00	140.00	171.00	206.00	222.00	246.00	268.00
35.0	67.10	87.20	110.50	137.00	168.00	203.00	218.00	243.00	265.00
40.0	64.90	84.80	108.00	134.50	165.00	200.00	215.00	240.00	261.00
45.0	62.80	82.70	105.50	132.00	162.00	197.00	212.00	236.00	258.00
50.0	61.00	81.00	103.50	129.50	159.50	194.00	209.00	233.00	255.00
55.0	59.60	79.70	102.00	128.00	157.50	191.50	206.00	230.00	251.00
60.0	58.70	79.00	101.50	126.50	155.50	189.00	204.00	227.00	248.00
62.0			101.00	126.50	155.00	188.50	203.00	226.00	247.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	3
Displacement @ 50 Hz, m <sup>3</sup> /h	49.9
Bore/Stroke, mm	61.9/63.5
Length/Width, mm	680/370
Height, mm	480
Net Weight, kg	162
Gross Weight, kg	173
Rotalock Discharge, inch	1 1/8
Suction, inch	1 3/8
Drive Frequency Range, Hz	25 - 60
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, dBA	72
Sound Power, dBA	83
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	24.4
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
Crankcase Heater	70 W Internal
Enclosure Class	IP 56
Check Valve	For unloaded start operation
Capacity Control	Moduload
Adapter Kit	For Parallel Operation
Oil Control System	ALCO Trax-Oil OM3
Additional Cooling	70 W Vertical Air Flow Fan
Oil Pressure Switch	OPS2 Electronic Switch
Deep Oil Sump	Mounted

**MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
AWM	380-420 V / 3~ / 50 Hz	400	YY/Y	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	YY/Y	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YY/Y	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	YY/Y	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YY/Y	Y	1.00