



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 20 K Suction Superheat
- 20 K Suction Superheat with add cooling
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	22.10	28.70	36.70	46.30	57.70	70.90					
15.0	20.90	27.30	35.10	44.40	55.30	68.10	82.90				
20.0	19.70	25.90	33.30	42.30	52.80	65.10	79.30	85.60	95.60		
25.0	18.35	24.30	31.40	40.00	50.10	61.90	75.60	81.60	91.20	99.90	109.00
30.0	16.95	22.60	29.40	37.60	47.20	58.50	71.60	77.30	86.60	94.80	103.50
35.0	15.50	20.90	27.30	35.10	44.20	54.90	67.40	72.90	81.70	89.60	98.10
40.0	14.05	19.10	25.20	32.50	41.10	51.20	63.00	68.20	76.60	84.20	92.20
45.0	12.65	17.35	23.00	29.80	37.90	47.40	58.50	63.50	71.40	78.50	86.20
50.0	11.25	15.60	20.80	27.10	34.60	43.50	53.90	58.50	66.00	72.70	80.00
55.0		13.85	18.65	24.40	31.30	39.50	49.20	53.50	60.50	66.80	73.60
60.0			16.45	21.70	28.00	35.50	44.40	48.40	54.90	60.80	67.10
65.0				19.00	24.60	31.40	39.60	43.30	49.20	54.70	60.50

Cond °C	Power, kW										
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	6.75	7.32	7.72	7.93	7.88	7.54					
15.0	7.13	7.84	8.42	8.81	8.99	8.89	8.48				
20.0	7.47	8.32	9.05	9.63	10.00	10.15	10.00	9.86	9.53		
25.0	7.77	8.74	9.63	10.40	10.95	11.35	11.45	11.40	11.25	11.05	10.70
30.0	8.03	9.12	10.15	11.10	11.85	12.45	12.80	12.90	12.90	12.80	12.65
35.0	8.27	9.47	10.65	11.75	12.70	13.50	14.10	14.25	14.45	14.50	14.45
40.0	8.48	9.79	11.10	12.35	13.50	14.50	15.30	15.60	15.90	16.10	16.25
45.0	8.67	10.05	11.50	12.90	14.20	15.40	16.45	16.85	17.30	17.65	17.90
50.0	8.85	10.35	11.90	13.40	14.90	16.30	17.55	18.00	18.65	19.10	19.50
55.0		10.60	12.25	13.90	15.55	17.15	18.60	19.15	19.90	20.50	21.00
60.0			12.60	14.35	16.15	17.95	19.60	20.20	21.10	21.90	22.50
65.0				14.80	16.75	18.70	20.60	21.30	22.30	23.10	23.90

Cond °C	Current at 400 V, A										
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	17.96	18.18	18.24	18.16	17.92	17.53					
15.0	18.23	18.73	19.07	19.26	19.31	19.20	18.94				
20.0	18.46	19.23	19.86	20.33	20.65	20.82	20.84	20.81	20.71		
25.0	18.64	19.70	20.60	21.36	21.96	22.41	22.71	22.78	22.85	22.87	22.85
30.0	18.79	20.12	21.31	22.34	23.22	23.95	24.53	24.72	24.96	25.12	25.23
35.0	18.89	20.51	21.97	23.29	24.45	25.46	26.32	26.62	27.02	27.32	27.58
40.0	18.96	20.86	22.60	24.19	25.63	26.92	28.06	28.48	29.05	29.49	29.88
45.0	18.99	21.16	23.19	25.06	26.78	28.35	29.77	30.29	31.03	31.61	32.15
50.0	18.97	21.43	23.73	25.88	27.89	29.73	31.43	32.07	32.98	33.69	34.37
55.0		21.65	24.24	26.67	28.95	31.08	33.06	33.81	34.88	35.74	36.56
60.0			24.70	27.42	29.98	32.38	34.64	35.50	36.75	37.74	38.70
65.0				28.12	30.96	33.65	36.19	37.16	38.57	39.71	40.81

50 Hz

D4SH-250X

R407C Dew Point

Cond °C	Suction Mass Flow, g/s										
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	111.50	142.50	180.00	224.00	275.00	334.00					
15.0	109.50	141.00	178.50	222.00	273.00	332.00	399.00				
20.0	107.50	138.50	176.00	220.00	271.00	330.00	396.00	425.00	472.00		
25.0	104.50	136.00	173.00	217.00	268.00	326.00	392.00	421.00	468.00	509.00	552.00
30.0	101.00	132.00	169.50	213.00	263.00	321.00	387.00	416.00	462.00	503.00	546.00
35.0	96.80	128.00	165.00	208.00	258.00	315.00	381.00	410.00	455.00	496.00	539.00
40.0	92.60	123.50	159.50	202.00	252.00	308.00	374.00	402.00	448.00	488.00	531.00
45.0	88.10	118.50	154.00	196.00	244.00	301.00	365.00	393.00	438.00	479.00	521.00
50.0	83.40	113.00	148.00	188.50	236.00	292.00	355.00	383.00	428.00	468.00	510.00
55.0		107.50	141.50	181.00	228.00	282.00	345.00	372.00	417.00	456.00	498.00
60.0			134.50	173.00	218.00	271.00	333.00	360.00	404.00	443.00	485.00
65.0				164.50	208.00	260.00	320.00	347.00	390.00	429.00	471.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	4
Displacement @ 50 Hz, m³/h	70.8
Bore/Stroke, mm	68.3/55.6
Length/Width, mm	670/490
Height, mm	495
Net Weight, kg	194
Gross Weight, kg	210
Suction, inch	2 1/8
Discharge, inch	1 1/8
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, dBA	71
Sound Power, dBA	82
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	41
Locked Rotor Current, A	199
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Mounting Springs	4
Oil Pressure Switch	OPS2 Sensor

**ACCESSORIES OPTIONAL**

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

**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	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
AWC	208-230 V / 3~ / 60 Hz	230	YY/Y	Y	2.19
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