



Minimum Evaporating Temp. With:

— 20 K Suction Superheat
 — 20 °C Suction Gas Return
 — 0 °C Suction Gas Return
— Maximum Evaporating Temperature

Suction Return Temperature 18.3°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
10.0	12.20	16.40	21.60	28.10	35.80	45.10	56.10					
15.0	11.35	15.40	20.50	26.70	34.10	43.00	53.50	65.70				
20.0	10.40	14.40	19.25	25.20	32.30	40.80	50.80	62.50	76.00			
25.0		13.30	18.00	23.70	30.50	38.60	48.10	59.30	72.10	86.90	93.40	103.50
30.0			16.70	22.10	28.60	36.30	45.30	55.90	68.10	82.20	88.40	98.30
35.0			15.35	20.50	26.60	33.90	42.50	52.50	64.10	77.40	83.30	92.70
40.0				18.85	24.60	31.50	39.60	49.00	59.90	72.60	78.10	87.00
45.0				17.10	22.50	29.00	36.60	45.40	55.70	67.60	72.90	81.30
50.0					20.40	26.40	33.50	41.80	51.40	62.60	67.60	75.50
55.0					18.20	23.80	30.30	38.10	47.10	57.50	62.10	69.60

50 Hz

4DH-250

R449A 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
10.0	5.78	6.47	7.05	7.52	7.84	7.98	7.93					
15.0	5.96	6.76	7.48	8.09	8.57	8.89	9.02	8.94				
20.0	6.07	6.99	7.85	8.61	9.25	9.74	10.05	10.20	10.10			
25.0		7.16	8.15	9.06	9.87	10.55	11.05	11.40	11.50	11.40	11.25	11.00
30.0			8.39	9.46	10.45	11.30	12.00	12.55	12.85	13.00	12.95	12.85
35.0			8.56	9.79	10.95	11.95	12.90	13.65	14.20	14.55	14.65	14.70
40.0				10.05	11.40	12.60	13.70	14.70	15.50	16.10	16.25	16.45
45.0				10.25	11.75	13.20	14.50	15.70	16.70	17.55	17.85	18.20
50.0					12.10	13.70	15.20	16.65	17.90	19.00	19.35	19.90
55.0					12.35	14.15	15.90	17.50	19.00	20.40	20.90	21.50

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
10.0	18.22	18.68	19.14	19.54	19.85	19.99	19.92					
15.0	18.37	18.91	19.48	20.02	20.48	20.80	20.94	20.83				
20.0	18.47	19.10	19.79	20.47	21.10	21.62	21.98	22.11	21.98			
25.0		19.25	20.07	20.91	21.72	22.44	23.03	23.42	23.56	23.40	23.23	22.88
30.0			20.30	21.31	22.31	23.25	24.08	24.73	25.16	25.32	25.29	25.14
35.0			20.48	21.66	22.87	24.04	25.11	26.05	26.78	27.26	27.37	27.44
40.0				21.96	23.38	24.79	26.14	27.36	28.41	29.22	29.48	29.76
45.0				22.20	23.85	25.51	27.13	28.65	30.02	31.19	31.59	32.10
50.0					24.25	26.17	28.08	29.91	31.62	33.15	33.70	34.45
55.0					24.57	26.77	28.98	31.14	33.20	35.10	35.81	36.80

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
10.0	56.20	75.70	100.00	130.50	167.00	212.00	264.00					
15.0	54.00	73.60	98.10	128.00	165.00	209.00	261.00	323.00				
20.0	51.50	71.30	95.80	125.50	162.00	206.00	258.00	319.00	391.00			
25.0		68.60	93.10	123.00	159.00	202.00	254.00	315.00	386.00	471.00	508.00	569.00
30.0			90.00	119.50	155.50	198.00	249.00	310.00	381.00	465.00	502.00	563.00
35.0			86.40	116.00	151.50	193.50	244.00	304.00	375.00	459.00	496.00	557.00
40.0				111.50	146.50	188.50	239.00	298.00	369.00	452.00	489.00	550.00
45.0				106.50	141.50	183.00	233.00	292.00	362.00	445.00	482.00	543.00
50.0					135.50	176.50	226.00	284.00	354.00	437.00	474.00	535.00
55.0					128.50	169.50	218.00	276.00	346.00	429.00	466.00	528.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	70.8
Bore/Stroke, mm	68.3/55.6
Length/Width, mm	670/535
Height, mm	495
Net Weight, kg	209
Gross Weight, kg	225
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	72.1
Sound Power, dBA	83.1
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	41.5
Locked Rotor Current, A	199
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

ACCESSORIES OPTIONAL

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Capacity Steps 50%
Crankcase Heater	100 W Internal
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Deep Oil Sump	Mounted
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
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	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
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
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