



Minimum Evaporating Temp. With:

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

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Additional restrictions, please see application guidelines

50 Hz

4MH-25X

R513A

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	20.0	25.0
10.0	18.60	23.10	28.70	35.50									
15.0	17.65	22.00	27.50	34.10	41.90								
20.0	16.65	20.90	26.20	32.60	40.10	48.90							
25.0	15.60	19.75	24.90	31.00	38.20	46.60	56.40						
30.0	14.55	18.55	23.40	29.30	36.20	44.20	53.50	57.60	64.20	70.10			
35.0	13.45	17.30	21.90	27.50	34.00	41.70	50.50	54.30	60.50	66.10	72.00		
40.0	12.30	16.00	20.40	25.60	31.80	39.00	47.30	50.90	56.80	62.00	67.60		
45.0	11.15	14.65	18.80	23.80	29.50	36.30	44.00	47.40	52.90	57.80	63.00		
50.0	10.00	13.30	17.20	21.80	27.20	33.50	40.70	43.80	48.90	53.50	58.30		
55.0		11.95	15.55	19.85	24.80	30.60	37.20	40.20	44.80	49.00	53.50		
60.0		10.55	13.90	17.80	22.40	27.60	33.70	36.40	40.70	44.50	48.60		
65.0			12.25	15.80	19.90	24.70	30.20	32.60	36.40	39.90	43.60		
70.0			10.55	13.75	17.40	21.60	26.50	28.70	32.10	35.20	38.50		
75.0				11.70	14.90	18.60	22.90	24.70	27.80	30.40	33.30		
80.0				9.61	12.35	15.50	19.15	20.80	23.30	25.70	28.10		
85.0					9.81	12.45	15.45	16.80	18.90	20.80	22.80		

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	20.0	25.0
10.0	5.25	5.52	5.65	5.59									
15.0	5.62	6.01	6.26	6.36	6.26								
20.0	5.94	6.44	6.82	7.06	7.13	6.99							
25.0	6.21	6.82	7.33	7.70	7.93	7.97	7.80						
30.0	6.42	7.14	7.77	8.29	8.66	8.87	8.89	8.84	8.69	8.50			
35.0	6.58	7.40	8.16	8.81	9.34	9.72	9.92	9.94	9.92	9.83	9.69		
40.0	6.69	7.62	8.48	9.27	9.95	10.50	10.85	11.00	11.05	11.10	11.05		
45.0	6.75	7.77	8.76	9.67	10.50	11.20	11.75	11.95	12.15	12.25	12.35		
50.0	6.76	7.88	8.97	10.00	11.00	11.85	12.60	12.85	13.15	13.40	13.55		
55.0		7.93	9.13	10.30	11.40	12.40	13.35	13.65	14.10	14.40	14.70		
60.0		7.92	9.23	10.50	11.75	12.95	14.00	14.40	14.95	15.40	15.75		
65.0			9.28	10.70	12.05	13.40	14.65	15.10	15.75	16.25	16.75		
70.0			9.27	10.80	12.30	13.75	15.15	15.70	16.50	17.10	17.65		
75.0				10.85	12.50	14.10	15.65	16.25	17.15	17.85	18.50		
80.0				10.85	12.60	14.35	16.05	16.75	17.75	18.50	19.30		
85.0					12.65	14.55	16.40	17.15	18.25	19.15	20.00		

Additional restrictions, please see application guidelines

50 Hz

4MH-25X

R513A

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	20.0	25.0
10.0	17.57	17.80	17.92	17.87									
15.0	17.83	18.15	18.38	18.47	18.36								
20.0	18.08	18.49	18.83	19.05	19.11	18.96							
25.0	18.30	18.79	19.25	19.61	19.84	19.88	19.67						
30.0	18.49	19.07	19.64	20.15	20.54	20.77	20.78	20.72	20.53	20.29			
35.0	18.64	19.31	20.00	20.65	21.21	21.63	21.86	21.89	21.86	21.75	21.56		
40.0	18.75	19.52	20.32	21.11	21.84	22.45	22.91	23.03	23.15	23.17	23.12		
45.0	18.82	19.68	20.59	21.53	22.43	23.24	23.91	24.13	24.40	24.56	24.65		
50.0	18.84	19.79	20.82	21.90	22.97	23.97	24.87	25.19	25.61	25.90	26.13		
55.0		19.84	21.00	22.22	23.46	24.66	25.78	26.19	26.76	27.19	27.56		
60.0		19.84	21.11	22.48	23.89	25.29	26.63	27.14	27.86	28.42	28.94		
65.0			21.16	22.68	24.26	25.86	27.42	28.03	28.91	29.60	30.26		
70.0			21.15	22.81	24.56	26.36	28.15	28.85	29.88	30.71	31.51		
75.0				22.86	24.79	26.79	28.80	29.61	30.79	31.76	32.69		
80.0				22.84	24.94	27.14	29.39	30.28	31.62	32.72	33.81		
85.0					25.02	27.42	29.89	30.88	32.38	33.61	34.84		

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	20.0	25.0
10.0	98.80	123.00	153.00	190.00									
15.0	97.40	122.00	152.50	189.50	234.00								
20.0	95.60	120.50	151.00	188.50	233.00	285.00							
25.0	93.40	118.50	149.50	186.50	231.00	284.00	345.00						
30.0	90.90	116.50	147.00	184.50	229.00	281.00	342.00	369.00	413.00	453.00			
35.0	88.00	113.50	144.50	182.00	226.00	278.00	339.00	366.00	409.00	449.00	491.00		
40.0	84.80	110.50	141.50	178.50	223.00	274.00	335.00	361.00	405.00	444.00	486.00		
45.0	81.30	107.00	138.00	175.00	219.00	270.00	330.00	356.00	399.00	438.00	480.00		
50.0	77.40	103.00	134.00	170.50	214.00	265.00	324.00	350.00	393.00	431.00	473.00		
55.0		98.90	129.50	166.00	209.00	259.00	317.00	343.00	386.00	424.00	465.00		
60.0		94.20	124.50	160.50	203.00	252.00	310.00	336.00	377.00	415.00	456.00		
65.0			119.00	154.50	196.00	245.00	302.00	327.00	368.00	405.00	446.00		
70.0			113.00	147.50	188.00	236.00	292.00	317.00	358.00	395.00	434.00		
75.0				140.00	180.00	227.00	282.00	306.00	346.00	383.00	422.00		
80.0				131.50	170.50	217.00	271.00	295.00	335.00	371.00	410.00		
85.0					161.50	207.00	261.00	286.00	326.00	362.00	402.00		

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	71.4
Bore/Stroke, mm	68.3/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	187
Suction, inch	2 1/8
Discharge, inch	1 1/8
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 (MT), dBA	69
Sound Power (MT), dBA	80
Sound Power with Sound Shell (MT), dBA	66
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	631
Refrigerant's classification	A1

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

Maximum Operating Current, A	41.6
Locked Rotor Current, A	199
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
Oil Pressure Switch (-P)	OPS2 Sensor
Copeland Compressor Electronic (-N)	Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement

Additional restrictions, please see application guidelines

ACCESSORIES OPTIONAL

Check Valve	For unloaded start operation
Capacity Control	Capacity Steps 50%
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Oil Pressure Switch	OPS2 Electronic Switch
Adapter Kit	For Parallel Operation
Copeland Compressor Electronic module	Modbus extension module

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

Additional restrictions, please see application guidelines