



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

4MK-35X

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	25.40	31.50	39.20	48.50									
15.0	24.10	30.00	37.40	46.50	57.30								
20.0	22.70	28.50	35.60	44.30	54.70	66.90							
25.0	21.30	26.90	33.80	42.10	52.00	63.70	77.30						
30.0	19.95	25.30	31.80	39.70	49.20	60.30	73.20	78.90	88.10	96.40			
35.0	18.55	23.60	29.90	37.40	46.30	56.80	69.00	74.40	83.10	90.90	99.30		
40.0	17.15	22.00	27.80	34.90	43.30	53.20	64.70	69.80	78.00	85.30	93.20		
45.0	15.70	20.30	25.80	32.40	40.30	49.60	60.30	65.10	72.70	79.60	86.90		
50.0	14.30	18.55	23.70	29.90	37.20	45.80	55.80	60.20	67.30	73.70	80.60		
55.0		16.85	21.60	27.30	34.00	42.00	51.20	55.30	61.80	67.70	74.00		
60.0		15.15	19.50	24.70	30.80	38.00	46.50	50.20	56.20	61.60	67.40		
65.0			17.35	22.00	27.60	34.10	41.70	45.10	50.50	55.40	60.60		
70.0			15.25	19.35	24.30	30.00	36.80	39.80	44.70	49.10	53.70		
75.0				16.65	20.90	26.00	31.90	34.50	38.80	42.60	46.80		
80.0				13.90	17.50	21.80	26.90	29.20	32.80	36.10	39.70		
85.0					14.10	17.65	21.90	23.70	26.80	29.60	32.50		

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	20.0	25.0
10.0	7.57	7.90	8.05	7.98									
15.0	8.00	8.48	8.82	8.97	8.88								
20.0	8.38	9.02	9.54	9.89	10.05	9.95							
25.0	8.72	9.49	10.20	10.75	11.15	11.30	11.20						
30.0	9.01	9.92	10.75	11.50	12.15	12.55	12.75	12.75	12.65	12.50			
35.0	9.26	10.30	11.30	12.25	13.05	13.75	14.20	14.30	14.40	14.40	14.35		
40.0	9.46	10.60	11.75	12.85	13.90	14.80	15.55	15.80	16.05	16.25	16.35		
45.0	9.61	10.85	12.15	13.40	14.65	15.80	16.80	17.15	17.60	17.90	18.20		
50.0	9.71	11.05	12.45	13.90	15.30	16.65	17.90	18.40	19.00	19.50	19.90		
55.0		11.20	12.70	14.30	15.90	17.45	18.95	19.50	20.30	21.00	21.50		
60.0		11.25	12.90	14.60	16.40	18.15	19.90	20.60	21.50	22.30	23.00		
65.0			13.00	14.85	16.80	18.75	20.70	21.50	22.60	23.50	24.40		
70.0			13.05	15.00	17.10	19.25	21.40	22.30	23.60	24.60	25.60		
75.0				15.10	17.30	19.65	22.00	23.00	24.40	25.60	26.70		
80.0				15.10	17.45	19.95	22.50	23.50	25.10	26.40	27.70		
85.0					17.45	20.10	22.90	24.00	25.70	27.10	28.60		

Additional restrictions, please see application guidelines

50 Hz

4MK-35X

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	22.77	23.04	23.14	22.98									
15.0	23.06	23.49	23.79	23.89	23.70								
20.0	23.35	23.92	24.42	24.77	24.88	24.69							
25.0	23.62	24.34	25.03	25.61	26.01	26.16	25.96						
30.0	23.88	24.73	25.60	26.41	27.09	27.56	27.75	27.73	27.58	27.33			
35.0	24.12	25.09	26.13	27.16	28.11	28.90	29.46	29.60	29.71	29.69	29.56		
40.0	24.33	25.41	26.61	27.85	29.07	30.17	31.09	31.38	31.74	31.95	32.06		
45.0	24.50	25.68	27.04	28.48	29.95	31.35	32.62	33.07	33.68	34.10	34.44		
50.0	24.62	25.90	27.40	29.04	30.75	32.45	34.06	34.66	35.51	36.14	36.71		
55.0		26.06	27.69	29.52	31.46	33.44	35.39	36.14	37.22	38.07	38.86		
60.0		26.15	27.91	29.91	32.08	34.33	36.60	37.50	38.81	39.86	40.87		
65.0			28.04	30.21	32.59	35.11	37.70	38.73	40.27	41.53	42.75		
70.0			28.08	30.40	33.00	35.78	38.67	39.84	41.60	43.05	44.48		
75.0				30.49	33.28	36.31	39.50	40.81	42.78	44.42	46.06		
80.0				30.47	33.45	36.72	40.20	41.63	43.81	45.64	47.48		
85.0					33.48	36.98	40.74	42.30	44.68	46.70	48.73		

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	135.00	168.00	209.00	260.00									
15.0	133.00	166.00	207.00	258.00	320.00								
20.0	130.50	164.00	205.00	256.00	317.00	390.00							
25.0	127.50	161.00	203.00	254.00	315.00	387.00	473.00						
30.0	124.50	158.50	200.00	251.00	311.00	384.00	468.00	506.00	568.00	623.00			
35.0	121.50	155.50	197.00	247.00	308.00	379.00	464.00	501.00	562.00	617.00	677.00		
40.0	118.00	152.00	193.00	243.00	303.00	374.00	458.00	495.00	556.00	611.00	670.00		
45.0	114.50	148.00	189.00	239.00	298.00	369.00	452.00	489.00	549.00	603.00	662.00		
50.0	111.00	144.00	184.50	234.00	292.00	362.00	444.00	481.00	541.00	595.00	653.00		
55.0		140.00	180.00	228.00	286.00	355.00	436.00	473.00	532.00	585.00	643.00		
60.0		135.50	174.50	222.00	279.00	347.00	427.00	463.00	522.00	575.00	632.00		
65.0			169.00	215.00	271.00	338.00	417.00	452.00	510.00	563.00	620.00		
70.0			162.50	208.00	262.00	328.00	406.00	441.00	498.00	550.00	607.00		
75.0				199.50	253.00	316.00	393.00	428.00	484.00	536.00	593.00		
80.0				190.50	242.00	305.00	380.00	415.00	471.00	523.00	579.00		
85.0					232.00	294.00	370.00	404.00	462.00	514.00	572.00		

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	99.4
Bore/Stroke, mm	80.6/56.0
Length/Width, mm	688/501
Height, mm	452
Net Weight, kg	202
Suction, inch	2 1/8
Discharge, inch	1 3/8
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	71
Sound Power (MT), dBA	82
Sound Power with Sound Shell (MT), dBA	67
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	61.1
Locked Rotor Current, A	272
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch (-P)	OPS2 Sensor
CoreSense Protection (-P)	Motor protection
Mounting Parts	Spring
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

Capacity Control	Capacity Steps 50%
Check Valve	For unloaded start operation
Adapter Kit	For Parallel Operation
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
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