



Minimum Evaporating Temp. With:

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

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

4MK-35X

R134a

Cond °C	Cooling Capacity, kW											
	-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	30.00	37.40	46.50									
15.0	28.60	35.80	44.50	55.10								
20.0	27.10	34.10	42.50	52.60	64.60							
25.0	25.70	32.40	40.40	50.10	61.50	74.90	80.80					
30.0	24.20	30.60	38.30	47.50	58.40	71.10	76.80	85.90	94.20			
35.0	22.70	28.80	36.10	44.90	55.20	67.20	72.60	81.30	89.10	97.40		
40.0	21.20	27.00	34.00	42.20	51.90	63.30	68.40	76.50	83.90	91.80		
45.0	19.65	25.20	31.70	39.50	48.70	59.40	64.10	71.80	78.70	86.10		
50.0	18.15	23.30	29.50	36.80	45.40	55.30	59.80	66.90	73.40	80.30		
55.0	16.60	21.50	27.30	34.00	42.00	51.30	55.40	62.10	68.10	74.50		
60.0		19.65	25.00	31.30	38.60	47.20	51.00	57.10	62.70	68.60		
65.0			22.70	28.50	35.20	43.10	46.60	52.20	57.30	62.70		
70.0			20.40	25.70	31.80	38.90	42.10	47.20	51.80	56.80		
75.0				22.90	28.40	34.80	37.60	42.20	46.30	50.80		
80.0				20.10	24.90	30.60	33.10	37.20	40.80	44.80		

Cond °C	Power, kW											
	-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	7.11	7.33	7.21									
15.0	7.73	8.18	8.35	8.15								
20.0	8.26	8.91	9.34	9.46	9.17							
25.0	8.71	9.53	10.20	10.60	10.65	10.30	9.99					
30.0	9.08	10.05	10.95	11.60	12.00	12.00	11.85	11.50	11.05			
35.0	9.41	10.50	11.60	12.50	13.20	13.55	13.55	13.45	13.25	12.85		
40.0	9.70	10.90	12.15	13.25	14.20	14.90	15.05	15.20	15.20	15.05		
45.0	9.97	11.25	12.60	13.95	15.15	16.10	16.40	16.80	16.95	17.05		
50.0	10.25	11.55	13.05	14.50	15.95	17.20	17.65	18.20	18.60	18.85		
55.0	10.50	11.85	13.40	15.05	16.65	18.15	18.70	19.45	20.00	20.50		
60.0		12.20	13.75	15.50	17.30	19.00	19.70	20.60	21.30	22.00		
65.0			14.10	15.95	17.85	19.80	20.60	21.70	22.50	23.30		
70.0			14.45	16.35	18.40	20.50	21.40	22.60	23.60	24.60		
75.0				16.75	18.90	21.20	22.10	23.40	24.60	25.70		
80.0				17.20	19.40	21.80	22.80	24.20	25.50	26.70		

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	15.0	20.0	25.0
10.0	22.28	22.51	22.42									
15.0	22.72	23.16	23.36	23.17								
20.0	23.11	23.74	24.21	24.37	24.08							
25.0	23.48	24.27	24.99	25.47	25.57	25.15	24.80					
30.0	23.82	24.76	25.69	26.48	26.96	26.98	26.84	26.41	25.86			
35.0	24.14	25.20	26.34	27.39	28.23	28.69	28.74	28.63	28.35	27.89		
40.0	24.44	25.61	26.92	28.23	29.40	30.27	30.50	30.69	30.69	30.53		
45.0	24.75	25.99	27.45	29.00	30.47	31.73	32.14	32.62	32.88	33.00		
50.0	25.05	26.35	27.94	29.70	31.46	33.08	33.66	34.41	34.93	35.31		
55.0	25.37	26.69	28.40	30.34	32.37	34.33	35.06	36.08	36.83	37.47		
60.0		27.03	28.83	30.93	33.20	35.48	36.37	37.63	38.61	39.50		
65.0			29.23	31.48	33.96	36.54	37.57	39.07	40.26	41.38		
70.0			29.62	31.99	34.67	37.52	38.68	40.40	41.80	43.14		
75.0				32.46	35.32	38.43	39.71	41.63	43.22	44.78		
80.0				32.92	35.93	39.26	40.65	42.77	44.55	46.31		

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	15.0	20.0	25.0
10.0	145.50	182.00	227.00									
15.0	143.50	180.00	225.00	280.00								
20.0	141.50	178.00	223.00	277.00	342.00							
25.0	139.00	175.50	220.00	274.00	339.00	415.00	450.00					
30.0	136.00	173.00	217.00	271.00	335.00	411.00	445.00	501.00	551.00			
35.0	133.50	170.00	214.00	267.00	331.00	406.00	440.00	495.00	545.00	600.00		
40.0	130.00	166.50	210.00	263.00	326.00	400.00	434.00	488.00	538.00	592.00		
45.0	126.50	163.00	206.00	258.00	321.00	394.00	427.00	481.00	531.00	584.00		
50.0	123.00	159.00	202.00	253.00	315.00	387.00	420.00	473.00	522.00	575.00		
55.0	119.00	155.00	197.50	248.00	308.00	380.00	412.00	465.00	513.00	565.00		
60.0		150.00	192.00	242.00	301.00	372.00	404.00	456.00	503.00	555.00		
65.0			186.50	236.00	294.00	363.00	394.00	445.00	492.00	543.00		
70.0			180.50	229.00	286.00	354.00	384.00	435.00	481.00	531.00		
75.0				221.00	277.00	344.00	374.00	423.00	469.00	518.00		
80.0				213.00	268.00	333.00	363.00	412.00	457.00	506.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/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	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	1430
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

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

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
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