



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

50 Hz

4MK-35X

R450A Dew Point

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	18.65	23.50	29.50	36.80									
15.0	17.95	22.70	28.60	35.80	44.40								
20.0	17.20	21.90	27.70	34.60	42.90	52.70							
25.0	16.30	20.90	26.50	33.30	41.40	50.80	61.70						
30.0	15.30	19.80	25.30	31.80	39.60	48.70	59.20	63.80	71.20	77.90			
35.0	14.25	18.65	23.90	30.20	37.70	46.40	56.40	60.90	68.00	74.30	81.10		
40.0	13.15	17.35	22.50	28.50	35.60	43.90	53.50	57.70	64.50	70.50	77.00		
45.0	12.00	16.05	20.90	26.70	33.40	41.30	50.40	54.40	60.80	66.50	72.60		
50.0	10.80	14.70	19.30	24.80	31.20	38.60	47.20	50.90	57.00	62.40	68.10		
55.0		13.30	17.65	22.80	28.80	35.80	43.80	47.30	53.00	58.00	63.40		
60.0		11.90	16.00	20.80	26.40	32.90	40.30	43.60	48.90	53.50	58.50		
65.0			14.25	18.70	23.90	29.90	36.80	39.80	44.60	48.90	53.50		
70.0			12.55	16.60	21.30	26.80	33.10	35.90	40.30	44.20	48.40		
75.0				14.50	18.75	23.70	29.40	31.90	35.90	39.50	43.30		
80.0				12.40	16.15	20.60	25.60	27.90	31.40	34.60	38.00		
85.0					13.55	17.40	21.80	23.80	26.90	29.70	32.70		

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	5.85	6.12	6.21	6.04									
15.0	6.34	6.77	7.05	7.11	6.89								
20.0	6.74	7.31	7.77	8.06	8.09	7.80							
25.0	7.05	7.76	8.39	8.88	9.16	9.15	8.80						
30.0	7.30	8.12	8.91	9.60	10.10	10.35	10.30	10.20	9.88	9.50			
35.0	7.47	8.41	9.34	10.20	10.95	11.45	11.70	11.70	11.60	11.40	11.05		
40.0	7.59	8.62	9.69	10.75	11.65	12.40	12.95	13.05	13.15	13.10	13.00		
45.0	7.66	8.77	9.96	11.15	12.30	13.25	14.05	14.30	14.55	14.70	14.75		
50.0	7.68	8.86	10.15	11.50	12.80	14.00	15.05	15.40	15.85	16.15	16.35		
55.0		8.91	10.30	11.75	13.25	14.65	15.95	16.40	17.05	17.50	17.85		
60.0		8.91	10.40	11.95	13.60	15.20	16.75	17.30	18.10	18.70	19.20		
65.0			10.40	12.10	13.90	15.70	17.40	18.10	19.05	19.75	20.40		
70.0			10.40	12.20	14.10	16.10	18.00	18.80	19.85	20.70	21.60		
75.0				12.25	14.30	16.40	18.55	19.40	20.60	21.60	22.60		
80.0				12.25	14.40	16.65	19.00	19.90	21.30	22.40	23.50		
85.0					14.50	16.90	19.35	20.40	21.90	23.10	24.30		

50 Hz

4MK-35X

R450A Dew Point

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	21.43	21.62	21.66	21.45									
15.0	21.73	22.05	22.27	22.30	22.02								
20.0	21.99	22.43	22.82	23.07	23.08	22.72							
25.0	22.21	22.76	23.32	23.78	24.05	24.01	23.57						
30.0	22.40	23.04	23.75	24.42	24.95	25.22	25.14	24.98	24.59	24.12			
35.0	22.55	23.28	24.13	24.99	25.76	26.34	26.61	26.61	26.47	26.21	25.81		
40.0	22.66	23.47	24.45	25.50	26.50	27.37	27.98	28.13	28.23	28.19	28.03		
45.0	22.74	23.61	24.72	25.93	27.17	28.31	29.25	29.55	29.89	30.06	30.12		
50.0	22.78	23.72	24.92	26.31	27.75	29.16	30.43	30.87	31.44	31.82	32.10		
55.0		23.77	25.08	26.61	28.27	29.93	31.50	32.08	32.88	33.46	33.95		
60.0		23.78	25.18	26.85	28.70	30.61	32.49	33.20	34.22	34.99	35.70		
65.0			25.23	27.03	29.06	31.21	33.38	34.22	35.45	36.41	37.32		
70.0			25.22	27.15	29.35	31.73	34.17	35.14	36.57	37.73	38.83		
75.0				27.20	29.57	32.16	34.87	35.96	37.59	38.93	40.22		
80.0				27.19	29.71	32.50	35.47	36.68	38.51	40.02	41.50		
85.0					29.78	32.77	35.99	37.31	39.32	41.00	42.67		

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	94.60	119.50	150.00	188.00									
15.0	94.40	119.50	151.00	189.50	236.00								
20.0	93.60	119.50	151.50	190.50	237.00	293.00							
25.0	92.30	118.50	151.00	190.50	238.00	293.00	359.00						
30.0	90.40	117.00	150.00	189.50	237.00	293.00	359.00	388.00	435.00	478.00			
35.0	87.90	115.00	148.50	188.00	236.00	292.00	357.00	387.00	434.00	477.00	523.00		
40.0	84.90	112.50	146.00	186.00	234.00	290.00	355.00	385.00	432.00	474.00	521.00		
45.0	81.40	109.00	143.00	183.00	230.00	287.00	352.00	381.00	428.00	471.00	517.00		
50.0	77.30	105.50	139.00	179.00	227.00	282.00	348.00	377.00	424.00	466.00	512.00		
55.0		101.00	134.50	174.50	222.00	277.00	342.00	371.00	418.00	460.00	506.00		
60.0		95.80	129.50	169.00	216.00	271.00	335.00	364.00	411.00	453.00	498.00		
65.0			123.50	162.50	209.00	263.00	327.00	356.00	402.00	444.00	489.00		
70.0			116.50	155.50	201.00	255.00	318.00	346.00	392.00	433.00	478.00		
75.0				147.00	192.00	245.00	307.00	335.00	380.00	421.00	465.00		
80.0				138.00	182.00	234.00	295.00	322.00	366.00	407.00	451.00		
85.0					170.50	221.00	281.00	308.00	352.00	392.00	436.00		

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	605
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	YYY	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	YYY	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YYY	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	YYY	Y	2.19
AWX	380 V / 3~ / 60 Hz	380	YYY	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YYY	Y	1.00