



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

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	24.00	29.90	37.20									
15.0	22.80	28.60	35.60	44.00								
20.0	21.70	27.20	34.00	42.10	51.60							
25.0	20.50	25.80	32.30	40.10	49.20	59.90	64.70					
30.0	19.25	24.40	30.60	38.00	46.70	56.90	61.40	68.70	75.30			
35.0	18.00	22.90	28.90	35.90	44.20	53.80	58.10	65.00	71.30	78.00		
40.0	16.75	21.50	27.10	33.70	41.60	50.70	54.80	61.30	67.20	73.50		
45.0	15.45	19.95	25.30	31.50	38.90	47.50	51.30	57.50	63.00	69.00		
50.0	14.20	18.45	23.40	29.30	36.20	44.30	47.90	53.60	58.80	64.40		
55.0	12.90	16.90	21.60	27.10	33.50	41.00	44.40	49.70	54.60	59.70		
60.0		15.40	19.75	24.80	30.80	37.70	40.80	45.80	50.20	55.00		
65.0			17.90	22.60	28.00	34.40	37.20	41.80	45.90	50.30		
70.0			16.00	20.30	25.30	31.10	33.60	37.80	41.50	45.50		
75.0				18.00	22.50	27.70	30.00	33.70	37.10	40.70		
80.0				15.70	19.70	24.30	26.40	29.70	32.70	35.90		

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	5.56	5.77	5.83									
15.0	6.00	6.33	6.53	6.56								
20.0	6.41	6.86	7.20	7.38	7.37							
25.0	6.78	7.35	7.82	8.15	8.31	8.26	8.18					
30.0	7.11	7.80	8.41	8.89	9.22	9.35	9.34	9.25	9.11			
35.0	7.40	8.21	8.95	9.58	10.10	10.40	10.45	10.50	10.45	10.35		
40.0	7.64	8.57	9.44	10.25	10.90	11.40	11.55	11.70	11.75	11.75		
45.0	7.82	8.87	9.88	10.80	11.65	12.35	12.55	12.85	13.00	13.10		
50.0	7.95	9.12	10.25	11.35	12.35	13.20	13.50	13.90	14.20	14.40		
55.0	8.02	9.31	10.60	11.85	13.00	14.05	14.40	14.95	15.30	15.65		
60.0		9.44	10.85	12.25	13.55	14.80	15.25	15.90	16.40	16.85		
65.0			11.05	12.60	14.10	15.50	16.05	16.80	17.40	17.95		
70.0			11.15	12.85	14.50	16.10	16.75	17.60	18.30	18.95		
75.0				13.05	14.90	16.65	17.35	18.35	19.15	19.95		
80.0				13.20	15.15	17.15	17.90	19.05	19.95	20.80		

50 Hz

4MI-30X

R134a

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	17.84	18.07	18.17									
15.0	18.17	18.49	18.69	18.73								
20.0	18.51	18.92	19.24	19.42	19.40							
25.0	18.85	19.36	19.81	20.14	20.29	20.21	20.11					
30.0	19.17	19.79	20.37	20.86	21.19	21.32	21.30	21.19	21.01			
35.0	19.45	20.20	20.93	21.58	22.10	22.44	22.51	22.55	22.49	22.36		
40.0	19.70	20.57	21.45	22.28	23.00	23.56	23.73	23.91	23.99	24.00		
45.0	19.89	20.90	21.94	22.95	23.88	24.67	24.94	25.27	25.49	25.63		
50.0	20.01	21.17	22.37	23.58	24.72	25.76	26.12	26.62	26.97	27.27		
55.0	20.04	21.36	22.75	24.15	25.52	26.80	27.28	27.94	28.44	28.88		
60.0		21.47	23.04	24.66	26.26	27.80	28.38	29.21	29.86	30.46		
65.0			23.25	25.08	26.93	28.73	29.43	30.44	31.23	31.99		
70.0			23.35	25.41	27.51	29.59	30.40	31.59	32.55	33.46		
75.0				25.64	27.99	30.35	31.29	32.66	33.78	34.87		
80.0				25.74	28.37	31.02	32.08	33.64	34.93	36.19		

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	116.00	145.50	181.50									
15.0	114.50	144.00	180.00	224.00								
20.0	112.50	142.50	178.00	222.00	274.00							
25.0	110.50	140.00	176.00	219.00	271.00	332.00	360.00					
30.0	108.50	138.00	173.50	217.00	268.00	329.00	356.00	401.00	441.00			
35.0	105.50	135.00	171.00	214.00	265.00	325.00	352.00	396.00	436.00	480.00		
40.0	103.00	132.50	167.50	210.00	261.00	320.00	347.00	391.00	431.00	474.00		
45.0	99.70	129.00	164.50	206.00	256.00	316.00	342.00	386.00	425.00	468.00		
50.0	96.30	125.50	160.50	202.00	251.00	310.00	336.00	379.00	419.00	461.00		
55.0	92.60	121.50	156.50	197.50	246.00	304.00	330.00	372.00	411.00	453.00		
60.0		117.50	151.50	192.00	240.00	297.00	323.00	365.00	403.00	445.00		
65.0			146.50	186.50	234.00	290.00	315.00	357.00	395.00	436.00		
70.0			141.50	180.50	227.00	282.00	307.00	348.00	385.00	426.00		
75.0				174.00	220.00	274.00	298.00	339.00	376.00	416.00		
80.0				167.00	212.00	265.00	289.00	329.00	366.00	405.00		

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	4
Displacement @ 50 Hz, m <sup>3</sup> /h	78.2
Bore/Stroke, mm	71.5/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	188
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	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	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	46.6
Locked Rotor Current, A	230
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

## ACCESSORIES OPTIONAL

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