



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 0 °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								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	24.70	31.40	39.30	48.90	60.10				
15.0	23.40	29.80	37.50	46.60	57.30				
20.0	22.10	28.20	35.60	44.30	54.50	66.50			
25.0	20.70	26.70	33.70	42.00	51.70	63.00	76.20	82.00	
30.0		25.10	31.70	39.60	48.80	59.60	72.00	77.50	86.30
35.0		23.40	29.80	37.20	45.90	56.10	67.80	73.00	81.40
40.0			27.80	34.80	43.00	52.60	63.60	68.50	76.40
45.0			25.80	32.40	40.10	49.00	59.40	64.00	71.40
50.0				29.90	37.10	45.40	55.10	59.40	66.30
55.0					34.10	41.80	50.80	54.80	61.20
60.0					31.00	38.10	46.40	50.10	

50 Hz

4MA-22X

R407F Dew Point

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	6.60	6.94	7.11	7.08	6.83				
15.0	7.09	7.58	7.91	8.05	7.97				
20.0	7.53	8.18	8.67	8.98	9.08	8.96			
25.0	7.92	8.73	9.39	9.87	10.15	10.25	10.05	9.91	
30.0		9.24	10.05	10.75	11.20	11.45	11.50	11.45	11.30
35.0		9.70	10.70	11.55	12.20	12.70	12.95	12.95	12.90
40.0			11.30	12.35	13.20	13.85	14.30	14.45	14.55
45.0			11.85	13.10	14.15	15.05	15.70	15.90	16.15
50.0				13.80	15.05	16.15	17.05	17.35	17.70
55.0					15.95	17.25	18.35	18.75	19.25
60.0					16.80	18.35	19.65	20.20	

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
10.0	16.41	16.74	16.91	16.89	16.61				
15.0	16.88	17.36	17.71	17.87	17.79				
20.0	17.33	17.99	18.52	18.88	19.01	18.87			
25.0	17.74	18.59	19.33	19.91	20.27	20.36	20.14	19.95	
30.0		19.17	20.13	20.94	21.54	21.89	21.94	21.86	21.62
35.0		19.72	20.91	21.97	22.83	23.45	23.78	23.82	23.76
40.0			21.66	22.98	24.12	25.03	25.66	25.82	25.95
45.0			22.38	23.98	25.41	26.62	27.56	27.85	28.18
50.0				24.94	26.68	28.21	29.48	29.91	30.44
55.0					27.92	29.79	31.41	31.97	32.73
60.0					29.13	31.35	33.33	34.05	

50 Hz

4MA-22X

R407F Dew Point

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
10.0	105.50	134.00	169.00	211.00	262.00				
15.0	103.00	132.00	166.50	208.00	258.00				
20.0	100.50	129.00	163.50	205.00	254.00	313.00			
25.0	97.80	126.50	160.50	201.00	250.00	308.00	377.00	407.00	
30.0		123.50	157.50	197.50	246.00	303.00	371.00	401.00	451.00
35.0		120.00	153.50	193.50	241.00	297.00	364.00	394.00	443.00
40.0			150.00	189.00	236.00	291.00	357.00	387.00	436.00
45.0			145.50	184.50	230.00	285.00	350.00	380.00	428.00
50.0				179.50	225.00	278.00	343.00	372.00	420.00
55.0					218.00	272.00	335.00	364.00	411.00
60.0					212.00	264.00	327.00	356.00	

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/h	61.7
Bore/Stroke, mm	63.5/56.0
Length/Width, mm	638/501
Height, mm	452
Net Weight, kg	177
Suction, inch	1 5/8
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	68
Sound Power (MT), dBA	79
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
Sound Pressure @ 1m (HT), dBA	68
Sound Power (HT), dBA	79
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 55 / 20 °C at 50 Hz
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1825
Refrigerant's classification	A1

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

Maximum Operating Current, A	36.3
Locked Rotor Current, A	175
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
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
Capacity Control	Capacity Steps 50%
Check Valve	For unloaded start operation
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Oil Pressure Switch	OPS2 Electronic Switch
Copeland Compressor Electronic module	Modbus extension module

### **MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
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