



Minimum Evaporating Temp. With:

- 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

Cond °C	Cooling Capacity, kW								
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0		18.30	24.00	30.90	39.20	49.00	60.50	73.80	
15.0			22.70	29.30	37.30	46.70	57.60	70.30	84.90
20.0			21.40	27.70	35.30	44.30	54.70	66.90	80.80
25.0				26.10	33.30	41.90	51.80	63.40	76.70
30.0				24.60	31.40	39.40	48.90	59.90	72.60
35.0					29.40	37.00	46.00	56.40	68.40
40.0						34.60	43.00	52.90	64.20
45.0							40.10	49.40	60.10
50.0							37.20	45.90	55.90
55.0									
60.0									

50 Hz

4MMD-20X 100% Loaded

R407F Dew Point

Cond °C	Power, kW								
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0		6.80	7.55	8.19	8.70	9.05	9.20	9.13	
15.0			8.04	8.81	9.47	9.98	10.30	10.45	10.35
20.0			8.54	9.45	10.25	10.95	11.45	11.80	11.90
25.0				10.10	11.05	11.90	12.60	13.15	13.50
30.0				10.70	11.85	12.85	13.80	14.55	15.10
35.0					12.60	13.80	14.90	15.90	16.70
40.0						14.70	16.00	17.20	18.25
45.0							17.05	18.50	19.80
50.0							18.05	19.75	21.30
55.0									
60.0									

Cond °C	Current at 400 V, A								
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0		16.21	17.00	17.72	18.30	18.70	18.85	18.70	
15.0			17.50	18.38	19.16	19.77	20.17	20.30	20.11
20.0			18.05	19.10	20.08	20.93	21.60	22.03	22.15
25.0				19.86	21.06	22.16	23.10	23.84	24.30
30.0				20.62	22.05	23.41	24.65	25.71	26.52
35.0					23.03	24.67	26.22	27.61	28.80
40.0						25.90	27.77	29.52	31.08
45.0							29.29	31.40	33.36
50.0							30.73	33.23	35.60
55.0									
60.0									

50 Hz

4MMD-20X 100% Loaded

R407F Dew Point

Cond °C	Suction Mass Flow, g/s								
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0		77.40	102.00	131.50	167.50	211.00	262.00	322.00	
15.0			99.50	129.00	164.50	207.00	258.00	317.00	386.00
20.0			97.10	126.00	161.50	204.00	253.00	312.00	381.00
25.0				123.50	158.00	199.50	249.00	307.00	375.00
30.0				120.50	154.50	195.50	244.00	301.00	369.00
35.0					151.00	191.00	239.00	296.00	363.00
40.0						186.50	234.00	290.00	356.00
45.0							229.00	284.00	349.00
50.0							223.00	278.00	343.00
55.0									
60.0									

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/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	70
Sound Power (MT), dBA	81
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
Digital Modulation	50-100%
Refrigerant's GWP	1825
Refrigerant's classification	A1

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

Maximum Operating Current, A	39
Locked Rotor Current, A	175
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**

Check Valve	For unloaded start operation
Mounting Parts	Rubber
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
Oil Pressure Switch	OPS2 Electronic Switch
Digital Modulation	50-100 %
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
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	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