



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		17.65	23.10	29.70	37.80	47.30	58.40	71.30	
15.0			21.90	28.30	35.90	45.00	55.60	67.80	
20.0			20.70	26.80	34.10	42.70	52.70	64.40	
25.0				25.30	32.20	40.30	49.90	60.90	73.70
30.0					30.30	38.00	47.00	57.50	69.50
35.0					28.40	35.60	44.10	54.00	65.40
40.0						33.30	41.20	50.50	61.20
45.0							38.30	47.00	57.00
50.0							35.40	43.50	52.80
55.0								39.90	48.60
60.0								36.30	
62.0									

50 Hz

4MMD-20X 100% Loaded

R407A 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		6.63	7.33	7.94	8.44	8.78	8.95	8.91	
15.0			7.80	8.55	9.18	9.69	10.05	10.20	
20.0			8.26	9.14	9.93	10.60	11.10	11.45	
25.0				9.71	10.65	11.50	12.20	12.75	13.05
30.0					11.35	12.35	13.25	14.00	14.55
35.0					12.00	13.20	14.30	15.25	16.00
40.0						14.00	15.30	16.45	17.45
45.0							16.25	17.60	18.85
50.0							17.10	18.70	20.20
55.0								19.75	21.50
60.0								20.70	
62.0									

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		16.40	17.02	17.63	18.15	18.52	18.67	18.53	
15.0			17.44	18.21	18.94	19.53	19.93	20.06	
20.0			17.89	18.84	19.77	20.60	21.26	21.67	
25.0				19.49	20.63	21.70	22.63	23.34	23.77
30.0					21.50	22.82	24.03	25.05	25.81
35.0					22.36	23.94	25.43	26.77	27.87
40.0						25.03	26.82	28.48	29.93
45.0							28.17	30.16	31.98
50.0							29.45	31.79	33.98
55.0								33.35	35.91
60.0								34.81	
62.0									

50 Hz

4MMD-20X 100% Loaded

R407A 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		82.40	108.00	139.50	178.00	224.00	278.00	341.00	
15.0			106.00	137.50	175.00	220.00	274.00	336.00	
20.0			104.00	135.00	172.50	217.00	270.00	331.00	
25.0				132.50	169.50	213.00	265.00	326.00	398.00
30.0					166.00	209.00	261.00	321.00	392.00
35.0					162.50	205.00	256.00	316.00	386.00
40.0						201.00	251.00	310.00	379.00
45.0							246.00	304.00	372.00
50.0							240.00	297.00	366.00
55.0								291.00	358.00
60.0								284.00	
62.0									

### 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	71
Sound Power (MT), dBA	82
Sound Power with Sound Shell (MT), dBA	70
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	2107
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