



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

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		13.75	18.30	23.80	30.50	38.50	47.80	58.50	
15.0			17.25	22.50	28.80	36.30	45.10	55.30	66.90
20.0			16.20	21.20	27.10	34.20	42.50	52.10	63.10
25.0				19.90	25.50	32.20	39.90	49.00	59.30
30.0				18.60	23.90	30.10	37.40	45.90	55.60
35.0					22.30	28.10	35.00	42.90	52.00
40.0						26.20	32.50	39.90	48.40
45.0						24.20	30.10	37.00	44.90
50.0							27.70	34.10	41.40
55.0							25.40	31.20	
60.0									

50 Hz

4MF-13X

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		5.12	5.75	6.26	6.63	6.83	6.84	6.63	
15.0			6.16	6.78	7.27	7.61	7.78	7.75	7.49
20.0			6.55	7.28	7.90	8.39	8.72	8.87	8.82
25.0				7.76	8.51	9.16	9.66	10.00	10.15
30.0				8.20	9.10	9.90	10.60	11.10	11.50
35.0					9.65	10.60	11.50	12.20	12.80
40.0						11.30	12.35	13.30	14.10
45.0						11.95	13.20	14.35	15.40
50.0							13.95	15.35	16.65
55.0							14.70	16.30	
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		10.36	11.17	11.85	12.34	12.61	12.61	12.28	
15.0			11.69	12.51	13.17	13.64	13.87	13.81	13.42
20.0			12.20	13.17	14.02	14.71	15.18	15.40	15.31
25.0				13.82	14.87	15.78	16.52	17.03	17.26
30.0				14.43	15.70	16.86	17.87	18.68	19.26
35.0					16.49	17.91	19.21	20.35	21.28
40.0						18.93	20.54	22.01	23.30
45.0						19.90	21.82	23.64	25.32
50.0							23.05	25.24	27.30
55.0							24.20	26.77	
60.0									

50 Hz

4MF-13X

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		58.20	77.60	101.50	130.50	165.50	207.00	255.00	
15.0			75.50	99.00	127.50	161.50	202.00	249.00	304.00
20.0			73.50	96.40	124.00	157.50	196.50	243.00	297.00
25.0				93.80	121.00	153.50	191.50	237.00	290.00
30.0				91.20	117.50	149.00	186.50	231.00	283.00
35.0					114.50	145.00	181.50	225.00	276.00
40.0						141.00	176.50	219.00	268.00
45.0						137.00	171.50	213.00	261.00
50.0							166.50	206.00	254.00
55.0							161.00	200.00	
60.0									

### 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 (LT), dBA	74
Sound Power (LT), dBA	85
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	68
Sound Power (MT), dBA	79
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	1825
Refrigerant's classification	A1

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

Maximum Operating Current, A	30.8
Locked Rotor Current, A	105
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
Adapter Kit	For Parallel Operation
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Oil Pressure Switch	OPS2 Electronic Switch
Sound Attenuation	Sound Shell
Capacity Control	Capacity Steps 50%
Mounting Parts	Rubber
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