



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	10.05	13.50	17.85	23.10	29.50	37.00	45.80	55.90	
15.0	9.36	12.70	16.80	21.90	27.90	35.00	43.40	53.00	
20.0	8.66	11.85	15.80	20.60	26.30	33.00	40.90	50.00	
25.0		11.00	14.75	19.30	24.70	31.10	38.50	47.10	56.90
30.0		10.15	13.75	18.00	23.10	29.10	36.10	44.10	53.40
35.0			12.70	16.70	21.50	27.10	33.60	41.20	49.90
40.0			11.65	15.40	19.85	25.10	31.20	38.30	46.40
45.0				14.10	18.25	23.10	28.80	35.40	42.90
50.0					16.65	21.10	26.40	32.40	39.50
55.0					15.00	19.15	23.90	29.50	36.00
60.0						17.15	21.50	26.60	
62.0						16.35	20.50	25.40	

50 Hz

4MF-13X

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	4.41	5.00	5.54	6.02	6.38	6.60	6.63	6.43	
15.0	4.60	5.27	5.91	6.50	6.99	7.35	7.54	7.51	
20.0	4.77	5.52	6.26	6.96	7.58	8.09	8.43	8.59	
25.0		5.73	6.58	7.40	8.16	8.81	9.32	9.65	9.77
30.0		5.90	6.86	7.80	8.70	9.50	10.20	10.70	11.00
35.0			7.10	8.17	9.20	10.15	11.00	11.70	12.20
40.0			7.28	8.48	9.66	10.80	11.80	12.70	13.40
45.0				8.74	10.05	11.35	12.55	13.65	14.55
50.0					10.40	11.85	13.25	14.50	15.65
55.0					10.70	12.30	13.90	15.35	16.70
60.0						12.70	14.45	16.15	
62.0						12.85	14.65	16.45	

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	9.49	10.20	10.90	11.53	12.01	12.29	12.30	11.99	
15.0	9.72	10.53	11.36	12.14	12.80	13.29	13.53	13.48	
20.0	9.93	10.84	11.80	12.74	13.59	14.29	14.78	14.99	
25.0		11.12	12.22	13.33	14.37	15.30	16.04	16.52	16.70
30.0		11.35	12.60	13.88	15.13	16.29	17.28	18.06	18.54
35.0			12.93	14.39	15.85	17.25	18.51	19.57	20.38
40.0			13.19	14.84	16.52	18.16	19.70	21.06	22.20
45.0				15.22	17.13	19.02	20.84	22.51	23.99
50.0					17.65	19.81	21.91	23.91	25.72
55.0					18.08	20.51	22.91	25.23	27.40
60.0						21.11	23.82	26.47	
62.0						21.32	24.16	26.94	

50 Hz

4MF-13X

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	46.80	63.00	83.50	108.50	139.00	175.00	218.00	268.00	
15.0	45.10	61.30	81.50	106.00	136.00	171.50	214.00	263.00	
20.0	43.30	59.40	79.30	103.50	133.00	168.00	209.00	258.00	
25.0		57.40	77.10	101.00	130.00	164.00	205.00	252.00	307.00
30.0		55.20	74.70	98.30	126.50	160.00	200.00	247.00	301.00
35.0			72.10	95.30	123.00	156.00	195.00	241.00	294.00
40.0			69.30	92.20	119.50	151.50	190.00	235.00	288.00
45.0				88.80	115.50	147.00	184.50	229.00	280.00
50.0					111.50	142.00	179.00	222.00	273.00
55.0					107.00	137.00	173.00	215.00	265.00
60.0						131.50	166.50	208.00	
62.0						129.50	164.00	205.00	

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /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	72
Sound Power (LT), dBA	83
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	69
Sound Power (MT), dBA	80
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	2107
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

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
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