



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									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	10.95	14.65	19.35	25.10	32.00	40.20	49.80			
10.0	10.15	13.80	18.30	23.80	30.40	38.10	47.20	57.70	69.80	
15.0	9.38	12.85	17.20	22.40	28.60	36.00	44.60	54.50	65.90	78.90
20.0	8.56	11.95	16.05	21.00	26.90	33.80	41.90	51.30	62.00	74.30
25.0		10.95	14.90	19.55	25.10	31.60	39.20	48.00	58.10	69.60
30.0			13.70	18.10	23.30	29.40	36.50	44.70	54.10	64.90
35.0			12.50	16.60	21.40	27.10	33.70	41.30	50.10	60.20
40.0				15.10	19.55	24.80	30.90	37.90	46.10	55.40
45.0				13.55	17.65	22.50	28.00	34.50	42.00	50.50
50.0					15.75	20.10	25.20	31.00	37.80	45.70
55.0					13.75	17.70	22.20	27.50	33.70	40.80
60.0						15.30	19.30	24.00	29.50	
62.0						14.30	18.15	22.60	27.80	

50 Hz

4MM-20X

R404A Dew Point

Cond °C	Power, kW									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	5.20	6.02	6.78	7.47	8.05	8.49	8.76			
10.0	5.39	6.29	7.15	7.94	8.65	9.23	9.65	9.91	9.95	
15.0	5.56	6.53	7.49	8.40	9.23	9.95	10.55	10.95	11.20	11.20
20.0	5.68	6.75	7.80	8.83	9.79	10.65	11.40	12.00	12.40	12.65
25.0		6.91	8.08	9.22	10.30	11.35	12.25	13.00	13.65	14.05
30.0			8.30	9.57	10.80	11.95	13.05	14.00	14.80	15.45
35.0			8.47	9.87	11.25	12.55	13.80	14.95	16.00	16.80
40.0				10.10	11.60	13.10	14.55	15.85	17.10	18.15
45.0				10.25	11.95	13.60	15.20	16.70	18.15	19.45
50.0					12.20	14.00	15.80	17.50	19.15	20.70
55.0					12.35	14.35	16.30	18.25	20.10	21.80
60.0						14.60	16.75	18.85	20.90	
62.0						14.65	16.90	19.10	21.30	

Cond °C	Current at 400 V, A									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	14.73	15.51	16.31	17.07	17.74	18.27	18.58			
10.0	14.91	15.77	16.68	17.57	18.40	19.11	19.65	19.95	19.96	
15.0	15.08	16.02	17.04	18.08	19.07	19.98	20.74	21.29	21.59	21.56
20.0	15.22	16.25	17.38	18.57	19.74	20.85	21.84	22.66	23.24	23.54
25.0		16.43	17.69	19.03	20.39	21.72	22.95	24.03	24.91	25.53
30.0			17.96	19.46	21.01	22.55	24.03	25.39	26.58	27.53
35.0			18.16	19.83	21.58	23.35	25.08	26.73	28.23	29.52
40.0				20.13	22.08	24.09	26.09	28.02	29.84	31.49
45.0				20.34	22.51	24.76	27.03	29.26	31.41	33.41
50.0					22.84	25.34	27.89	30.43	32.91	35.28
55.0					23.07	25.82	28.66	31.52	34.34	37.08
60.0						26.19	29.32	32.50	35.67	
62.0						26.30	29.55	32.86	36.18	

50 Hz

4MM-20X

R404A Dew Point

Cond °C	Suction Mass Flow, g/s									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	58.30	78.30	103.50	135.00	172.50	218.00	271.00			
10.0	56.40	76.50	101.50	132.50	170.00	215.00	267.00	328.00	399.00	
15.0	54.20	74.50	99.60	130.50	167.00	211.00	263.00	323.00	394.00	475.00
20.0	51.70	72.10	97.20	127.50	164.00	207.00	258.00	318.00	388.00	468.00
25.0		69.50	94.50	124.50	160.50	203.00	254.00	312.00	381.00	461.00
30.0			91.50	121.00	156.50	198.50	248.00	306.00	374.00	453.00
35.0			88.00	117.50	152.50	193.50	242.00	300.00	366.00	444.00
40.0				113.50	147.50	188.50	236.00	292.00	358.00	435.00
45.0				108.50	142.50	182.50	229.00	284.00	350.00	426.00
50.0					136.50	175.50	222.00	276.00	340.00	416.00
55.0					130.50	168.50	214.00	267.00	331.00	406.00
60.0						161.50	206.00	259.00	322.00	
62.0						158.50	203.00	256.00	319.00	

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	78.2
Bore/Stroke, mm	71.5/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	182
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 (LT), dBA	71
Sound Power (LT), dBA	82
Sound Power with Sound Shell (LT), dBA	70
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	70
Sound Power (MT), dBA	81
Sound Power with Sound Shell (MT), dBA	69
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	3922
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

CoreSense Protection (-P)	Motor protection
Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
Copeland Compressor Electronic (-N)	Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement

ACCESSORIES OPTIONAL

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
Adapter Kit	For Parallel Operation
Oil Pressure Switch	OPS2 Electronic Switch
Copeland Compressor Electronic module	Modbus extension module

MOTOR OPTIONS

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