



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return      — 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	13.75	18.55	24.50	31.70	40.40	50.70	62.90	77.00				
15.0	12.30	16.95	22.60	29.50	37.80	47.60	59.10	72.50	87.90			
20.0	10.80	15.30	20.70	27.30	35.10	44.30	55.20	67.90	82.50	99.30	118.00	
25.0	9.29	13.65	18.80	25.00	32.30	41.00	51.20	63.20	77.00	92.90	111.00	119.00
30.0		11.95	16.80	22.60	29.50	37.60	47.20	58.30	71.40	86.30	103.50	111.00
35.0		10.25	14.85	20.20	26.60	34.10	43.00	53.40	65.60	79.70	95.90	103.00
40.0			12.85	17.80	23.70	30.60	38.80	48.50	59.80	73.00	88.20	94.90
45.0			10.85	15.40	20.70	27.10	34.60	43.50	53.90	66.20	80.40	86.70
50.0				13.05	17.80	23.50	30.30	38.40	48.00	59.30	72.60	78.40
55.0				10.70	14.95	19.95	26.00	33.30	42.00	52.40	64.60	70.10
60.0					12.10	16.45	21.80	28.20	36.00	45.40	56.60	
62.0					11.00	15.10	20.10	26.20	33.60	42.60		

50 Hz

4MJD-33X 100% Loaded

R404A Dew Point

Cond °C	Power, kW											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	7.21	8.17	9.06	9.81	10.40	10.75	10.85	10.60				
15.0	7.39	8.48	9.53	10.45	11.25	11.85	12.20	12.25	12.00			
20.0	7.51	8.73	9.92	11.05	12.05	12.90	13.50	13.85	13.85	13.50	12.75	
25.0	7.57	8.91	10.25	11.55	12.75	13.80	14.65	15.30	15.60	15.60	15.20	14.90
30.0		9.04	10.50	12.00	13.35	14.65	15.75	16.65	17.25	17.55	17.50	17.35
35.0		9.10	10.70	12.35	13.90	15.40	16.70	17.85	18.80	19.40	19.70	19.70
40.0			10.85	12.60	14.35	16.05	17.60	19.00	20.20	21.10	21.80	21.90
45.0			10.90	12.80	14.75	16.60	18.40	20.00	21.50	22.70	23.70	24.00
50.0				12.95	15.00	17.10	19.10	21.00	22.70	24.20	25.50	25.90
55.0				13.00	15.25	17.50	19.70	21.80	23.80	25.60	27.20	27.80
60.0					15.40	17.80	20.20	22.50	24.80	26.90	28.80	
62.0					15.40	17.90	20.40	22.80	25.20	27.30		

Cond °C	Current at 400 V, A											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	19.32	20.25	21.20	22.08	22.81	23.31	23.49	23.29				
15.0	19.54	20.61	21.73	22.81	23.77	24.55	25.04	25.18	24.88			
20.0	19.68	20.89	22.18	23.48	24.69	25.74	26.55	27.04	27.13	26.73	25.77	
25.0	19.73	21.09	22.56	24.07	25.54	26.88	28.01	28.86	29.34	29.37	28.87	28.51
30.0		21.20	22.86	24.60	26.32	27.96	29.42	30.63	31.51	31.98	31.95	31.79
35.0		21.20	23.07	25.04	27.03	28.97	30.77	32.35	33.64	34.55	35.00	35.03
40.0			23.17	25.38	27.65	29.90	32.04	34.01	35.71	37.07	38.01	38.24
45.0			23.17	25.63	28.18	30.74	33.24	35.60	37.72	39.54	40.97	41.41
50.0				25.76	28.61	31.50	34.36	37.10	39.66	41.94	43.87	44.52
55.0				25.78	28.92	32.15	35.38	38.53	41.52	44.27	46.71	47.58
60.0					29.13	32.69	36.29	39.85	43.29	46.53	49.48	
62.0					29.17	32.88	36.63	40.36	43.98	47.40		

50 Hz

4MJD-33X 100% Loaded

R404A Dew Point

Cond °C	Suction Mass Flow, g/s											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	102.00	134.50	173.50	220.00	275.00	338.00	411.00	493.00				
15.0	96.50	130.00	169.50	216.00	270.00	333.00	405.00	487.00	579.00			
20.0	90.00	124.50	164.50	211.00	265.00	327.00	399.00	480.00	572.00	675.00	789.00	
25.0	82.70	118.00	158.50	205.00	259.00	320.00	391.00	472.00	563.00	665.00	779.00	828.00
30.0		110.50	151.50	198.00	251.00	313.00	383.00	462.00	553.00	655.00	768.00	817.00
35.0		102.50	144.00	190.50	243.00	304.00	373.00	452.00	542.00	643.00	757.00	806.00
40.0			135.50	182.00	234.00	294.00	362.00	441.00	530.00	631.00	744.00	793.00
45.0			126.00	172.00	224.00	283.00	351.00	428.00	516.00	617.00	731.00	781.00
50.0				162.00	213.00	271.00	338.00	415.00	502.00	603.00	718.00	768.00
55.0				150.50	201.00	259.00	324.00	400.00	488.00	589.00	705.00	756.00
60.0					189.00	246.00	311.00	387.00	475.00	577.00	696.00	
62.0					184.50	241.00	306.00	382.00	470.00	573.00		

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	4
Displacement @ 50 Hz, m <sup>3</sup> /h	87.7
Bore/Stroke, mm	75.7/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	196
Suction, inch	2 1/8
Discharge, inch	1 3/8
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 Power with Sound Shell (LT), dBA	73
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	71
Sound Power (MT), dBA	82
Sound Power with Sound Shell (MT), dBA	71
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	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	52.9
Locked Rotor Current, A	221
Default Enclosure Class	IP 54 (IEC 34)

### ACCESSORIES INCLUDED

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

### ACCESSORIES OPTIONAL

Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
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
Oil Pressure Switch	OPS2 Electronic Switch
Digital Modulation	50-100 %
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