



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- 20 °C Suction Gas Return
- 0 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
16.0	14.00												
20.0	13.45	17.35											
25.0	12.65	16.45	21.10	26.90									
30.0	11.75	15.45	20.00	25.50	32.10	39.90							
35.0	10.85	14.40	18.80	24.10	30.40	37.90	46.60	50.50	56.70	62.30			
40.0	9.82	13.30	17.50	22.60	28.60	35.80	44.10	47.80	53.80	59.10	64.80	77.40	
45.0	8.76	12.10	16.15	21.00	26.80	33.50	41.50	45.00	50.70	55.80	61.20	73.30	86.90
50.0	7.66	10.85	14.70	19.30	24.80	31.20	38.80	42.10	47.50	52.30	57.50	69.00	82.00
55.0	6.51	9.59	13.25	17.60	22.80	28.80	35.90	39.10	44.20	48.80	53.70	64.60	76.90
60.0	5.34	8.26	11.70	15.80	20.60	26.40	33.00	36.00	40.80	45.10	49.80	60.10	71.80
65.0	4.14	6.90	10.15	13.95	18.50	23.80	30.10	32.90	37.40	41.40	45.80	55.50	66.50
70.0	2.92	5.52	8.54	12.10	16.30	21.20	27.00	29.60	33.80	37.60	41.70	50.80	61.20
75.0		4.12	6.91	10.20	14.05	18.60	23.90	26.30	30.20	33.80	37.60	46.00	55.80
80.0			5.27	8.24	11.75	15.90	20.80	23.00	26.60	29.80	33.30	41.20	50.20
85.0			3.61	6.28	9.43	13.15	17.60	19.60	22.90	25.80	29.00	36.30	44.60

Cond °C	Power, kW												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
16.0	4.97												
20.0	5.21	5.71											
25.0	5.44	6.04	6.55	6.93									
30.0	5.60	6.30	6.94	7.46	7.83	8.00							
35.0	5.71	6.50	7.25	7.92	8.46	8.81	8.93	8.91	8.78	8.59			
40.0	5.75	6.63	7.50	8.31	9.00	9.54	9.88	9.94	9.96	9.89	9.74	9.17	
45.0	5.74	6.71	7.69	8.63	9.48	10.20	10.75	10.90	11.05	11.10	11.10	10.80	10.15
50.0	5.68	6.74	7.82	8.89	9.90	10.80	11.55	11.80	12.05	12.25	12.35	12.35	12.00
55.0	5.58	6.71	7.90	9.10	10.25	11.30	12.25	12.60	13.00	13.30	13.55	13.80	13.75
60.0	5.43	6.63	7.92	9.24	10.55	11.80	12.90	13.35	13.90	14.30	14.65	15.20	15.40
65.0	5.24	6.52	7.90	9.34	10.80	12.20	13.50	14.00	14.70	15.25	15.70	16.50	17.00
70.0	5.01	6.36	7.84	9.39	11.00	12.55	14.05	14.65	15.45	16.10	16.70	17.75	18.55
75.0		6.17	7.73	9.40	11.10	12.85	14.55	15.20	16.15	16.90	17.65	18.90	20.00
80.0			7.59	9.37	11.20	13.10	15.00	15.70	16.80	17.65	18.50	20.00	21.40
85.0			7.42	9.30	11.30	13.30	15.35	16.20	17.40	18.35	19.30	21.10	22.70

50 Hz

4MJD-33X

R450A Dew Point

Cond °C	Current at 400 V, A												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
16.0	17.41												
20.0	17.61	18.03											
25.0	17.82	18.30	18.76	19.13									
30.0	17.98	18.52	19.08	19.59	19.96	20.12							
35.0	18.09	18.70	19.36	20.00	20.55	20.92	21.05	21.02	20.86	20.63			
40.0	18.15	18.82	19.58	20.36	21.08	21.67	22.05	22.13	22.15	22.07	21.89	21.19	
45.0	18.16	18.90	19.76	20.68	21.57	22.37	23.00	23.19	23.38	23.46	23.44	23.11	22.30
50.0	18.13	18.93	19.89	20.94	22.01	23.02	23.90	24.20	24.57	24.80	24.95	24.97	24.56
55.0	18.04	18.90	19.97	21.16	22.41	23.63	24.75	25.16	25.71	26.09	26.41	26.79	26.78
60.0	17.91	18.84	20.00	21.33	22.75	24.18	25.56	26.07	26.80	27.34	27.82	28.57	28.95
65.0	17.73	18.72	19.98	21.45	23.04	24.69	26.31	26.94	27.84	28.54	29.19	30.29	31.07
70.0	17.50	18.55	19.92	21.52	23.29	25.15	27.02	27.76	28.83	29.69	30.50	31.97	33.14
75.0		18.34	19.80	21.55	23.49	25.56	27.68	28.53	29.78	30.79	31.77	33.59	35.17
80.0			19.64	21.52	23.64	25.92	28.29	29.25	30.67	31.84	32.99	35.17	37.14
85.0			19.43	21.45	23.74	26.24	28.85	29.92	31.52	32.85	34.16	36.70	39.07

Cond °C	Suction Mass Flow, g/s												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
16.0	87.80												
20.0	87.20	110.00											
25.0	85.90	109.00	137.00	170.50									
30.0	84.00	107.50	136.00	170.00	209.00	254.00							
35.0	81.50	105.50	134.50	168.50	208.00	253.00	304.00	327.00	362.00	394.00			
40.0	78.20	103.00	132.00	166.00	206.00	251.00	302.00	324.00	360.00	391.00	425.00	497.00	
45.0	74.10	99.50	129.00	163.50	203.00	248.00	299.00	321.00	357.00	388.00	422.00	494.00	573.00
50.0	69.20	95.20	125.00	159.50	199.00	244.00	296.00	318.00	353.00	385.00	418.00	490.00	569.00
55.0	63.20	90.00	120.50	155.00	195.00	240.00	291.00	313.00	349.00	380.00	413.00	485.00	564.00
60.0	56.00	83.60	114.50	149.50	189.50	235.00	286.00	308.00	343.00	374.00	407.00	479.00	558.00
65.0	47.40	76.00	107.50	143.00	183.00	228.00	279.00	301.00	336.00	368.00	401.00	472.00	552.00
70.0	36.90	66.80	99.20	135.00	175.00	220.00	271.00	294.00	329.00	360.00	393.00	465.00	544.00
75.0		55.50	89.00	125.50	166.00	211.00	263.00	285.00	320.00	351.00	384.00	456.00	536.00
80.0			76.40	114.00	155.00	201.00	252.00	275.00	310.00	341.00	375.00	447.00	527.00
85.0			60.50	99.60	142.00	188.50	241.00	263.00	299.00	331.00	364.00	437.00	519.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/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 (MT), dBA	70
Sound Power (MT), dBA	81
Sound Power with Sound Shell (MT), dBA	67
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	605
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	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