



Minimum Evaporating Temp. With:

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

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

4MJD-33X 100% Loaded

R134a

Cond °C	Cooling Capacity, kW											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	25.60	32.20	40.20									
15.0	24.30	30.60	38.40	47.80								
20.0	22.90	29.00	36.50	45.50	56.20							
25.0	21.40	27.40	34.60	43.20	53.50	65.50	70.90					
30.0	20.00	25.70	32.60	40.80	50.60	62.20	67.30	75.60	83.10			
35.0	18.50	24.00	30.50	38.40	47.80	58.70	63.60	71.60	78.70	86.40		
40.0	17.00	22.20	28.50	35.90	44.80	55.30	59.90	67.40	74.30	81.60	97.70	116.00
45.0	15.50	20.40	26.40	33.40	41.80	51.70	56.10	63.30	69.70	76.70	92.10	109.50
50.0	13.95	18.65	24.20	30.90	38.80	48.10	52.30	59.10	65.20	71.70	86.40	103.00
55.0	12.40	16.85	22.10	28.30	35.70	44.50	48.40	54.80	60.50	66.70	80.60	96.40
60.0		15.00	19.90	25.70	32.60	40.80	44.50	50.50	55.90	61.70	74.70	89.70
65.0			17.75	23.10	29.50	37.10	40.50	46.10	51.10	56.60	68.80	82.90
70.0			15.55	20.50	26.40	33.40	36.50	41.70	46.40	51.40	62.80	76.00
75.0				17.85	23.20	29.60	32.50	37.20	41.60	46.20	56.80	69.10
80.0				15.20	20.00	25.80	28.50	32.80	36.70	41.00	50.70	62.10

Cond °C	Power, kW											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	6.23	6.43	6.48									
15.0	6.80	7.13	7.33	7.37								
20.0	7.31	7.77	8.11	8.31	8.34							
25.0	7.75	8.35	8.83	9.19	9.40	9.43	9.38					
30.0	8.13	8.86	9.49	10.00	10.40	10.60	10.65	10.65	10.60			
35.0	8.46	9.32	10.10	10.75	11.30	11.75	11.85	11.95	12.00	12.00		
40.0	8.72	9.71	10.65	11.45	12.20	12.80	13.00	13.20	13.40	13.50	13.55	13.40
45.0	8.93	10.05	11.10	12.10	13.00	13.80	14.05	14.40	14.70	14.90	15.20	15.25
50.0	9.08	10.30	11.55	12.70	13.75	14.70	15.10	15.55	15.95	16.25	16.75	17.10
55.0	9.17	10.55	11.90	13.20	14.45	15.60	16.05	16.65	17.10	17.55	18.30	18.85
60.0		10.70	12.20	13.65	15.10	16.45	16.95	17.65	18.25	18.80	19.75	20.60
65.0			12.45	14.10	15.65	17.20	17.80	18.65	19.30	19.95	21.20	22.20
70.0			12.65	14.45	16.20	17.90	18.55	19.55	20.30	21.10	22.50	23.80
75.0				14.75	16.65	18.55	19.30	20.40	21.30	22.20	23.80	25.40
80.0				15.00	17.05	19.15	19.95	21.20	22.20	23.20	25.10	26.80

Cond °C	Current at 400 V, A											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	18.46	18.67	18.74									
15.0	18.95	19.27	19.48	19.52								
20.0	19.41	19.86	20.21	20.42	20.45							
25.0	19.84	20.41	20.92	21.31	21.54	21.57	21.51					
30.0	20.22	20.93	21.60	22.18	22.62	22.88	22.92	22.91	22.82			
35.0	20.55	21.41	22.25	23.02	23.67	24.17	24.31	24.46	24.52	24.50		
40.0	20.83	21.84	22.85	23.82	24.70	25.44	25.69	26.00	26.20	26.34	26.40	26.14
45.0	21.05	22.21	23.41	24.58	25.69	26.68	27.04	27.52	27.87	28.16	28.55	28.64
50.0	21.19	22.52	23.90	25.29	26.63	27.89	28.36	29.02	29.51	29.96	30.68	31.13
55.0	21.26	22.76	24.34	25.94	27.53	29.06	29.64	30.47	31.12	31.73	32.79	33.60
60.0		22.92	24.70	26.53	28.37	30.17	30.87	31.88	32.69	33.46	34.87	36.05
65.0			24.99	27.05	29.15	31.23	32.04	33.24	34.22	35.15	36.91	38.47
70.0			25.19	27.49	29.85	32.22	33.16	34.55	35.68	36.79	38.91	40.85
75.0				27.85	30.48	33.14	34.20	35.79	37.09	38.38	40.86	43.19
80.0				28.11	31.02	33.98	35.17	36.96	38.43	39.89	42.75	45.48

Cond °C	Suction Mass Flow, g/s											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	141.50	175.00	215.00									
15.0	139.50	173.00	213.00	260.00								
20.0	137.00	170.50	211.00	258.00	313.00							
25.0	134.50	168.00	208.00	255.00	310.00	373.00	401.00					
30.0	131.50	165.00	205.00	252.00	306.00	369.00	397.00	441.00	480.00			
35.0	127.50	161.50	202.00	248.00	302.00	365.00	392.00	436.00	475.00	516.00		
40.0	123.50	158.00	197.50	244.00	298.00	360.00	387.00	430.00	469.00	510.00	600.00	701.00
45.0	119.00	153.50	193.50	239.00	293.00	354.00	381.00	424.00	463.00	504.00	593.00	694.00
50.0	114.00	148.50	188.50	234.00	287.00	348.00	375.00	418.00	456.00	497.00	586.00	685.00
55.0	108.50	143.00	183.00	228.00	281.00	341.00	368.00	410.00	448.00	489.00	577.00	677.00
60.0		137.00	176.50	222.00	274.00	334.00	360.00	402.00	440.00	480.00	568.00	667.00
65.0			170.00	215.00	266.00	326.00	352.00	393.00	431.00	471.00	558.00	657.00
70.0			162.00	207.00	258.00	316.00	342.00	384.00	421.00	461.00	548.00	646.00
75.0				198.00	249.00	307.00	332.00	374.00	411.00	450.00	537.00	636.00
80.0				188.00	238.00	296.00	322.00	363.00	400.00	439.00	527.00	626.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /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	1430
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

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