



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

Additional restrictions, please see application guidelines

50 Hz

4MJ-33X

R513A

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
10.0	23.20	28.70	35.60	43.90									
15.0	21.90	27.30	33.90	42.00	51.60								
20.0	20.60	25.80	32.20	40.00	49.20	60.10							
25.0	19.20	24.30	30.50	37.90	46.70	57.10	69.20						
30.0	17.85	22.70	28.70	35.70	44.10	54.00	65.50	70.60	78.80				
35.0	16.45	21.20	26.80	33.50	41.50	50.80	61.70	66.50	74.30	81.30	88.70		
40.0	15.05	19.55	24.90	31.30	38.80	47.60	57.80	62.30	69.60	76.20	83.20		
45.0	13.60	17.95	23.00	29.00	36.00	44.20	53.80	58.00	64.80	70.90	77.50		
50.0	12.20	16.30	21.10	26.70	33.20	40.80	49.70	53.60	59.90	65.60	71.70		
55.0		14.65	19.10	24.30	30.30	37.40	45.50	49.10	55.00	60.20	65.80		
60.0		13.00	17.10	21.90	27.40	33.80	41.30	44.60	49.90	54.70	59.80		
65.0			15.10	19.45	24.40	30.20	37.00	39.90	44.70	49.00	53.70		
70.0			13.05	16.95	21.40	26.60	32.60	35.20	39.50	43.40	47.50		
75.0				14.45	18.40	22.90	28.20	30.50	34.20	37.60	41.20		
80.0				11.95	15.30	19.20	23.70	25.70	28.90	31.80	34.90		
85.0					12.20	15.45	19.15	20.80	23.50	25.90	28.40		

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
10.0	6.44	6.74	6.90	6.90									
15.0	6.91	7.34	7.64	7.80	7.79								
20.0	7.33	7.88	8.32	8.63	8.79	8.77							
25.0	7.67	8.35	8.93	9.40	9.72	9.88	9.86						
30.0	7.95	8.76	9.48	10.10	10.60	10.90	11.10	11.10	11.05				
35.0	8.17	9.10	9.96	10.70	11.35	11.90	12.25	12.35	12.45	12.45	12.40		
40.0	8.33	9.38	10.35	11.30	12.10	12.80	13.35	13.50	13.75	13.85	13.95		
45.0	8.42	9.59	10.70	11.80	12.75	13.65	14.35	14.60	14.95	15.20	15.35		
50.0	8.45	9.75	11.00	12.20	13.35	14.40	15.35	15.65	16.10	16.45	16.75		
55.0		9.84	11.25	12.60	13.90	15.10	16.20	16.65	17.20	17.65	18.05		
60.0		9.87	11.40	12.90	14.35	15.75	17.05	17.55	18.25	18.80	19.30		
65.0			11.50	13.15	14.80	16.35	17.80	18.40	19.20	19.85	20.50		
70.0			11.55	13.35	15.10	16.85	18.55	19.15	20.10	20.90	21.60		
75.0				13.50	15.40	17.30	19.15	19.90	21.00	21.80	22.60		
80.0				13.55	15.65	17.70	19.75	20.50	21.70	22.70	23.60		
85.0					15.80	18.05	20.30	21.10	22.40	23.50	24.60		

Additional restrictions, please see application guidelines

50 Hz

4MJ-33X

R513A

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
10.0	18.75	18.97	19.08	19.03									
15.0	19.13	19.49	19.75	19.89	19.83								
20.0	19.47	19.97	20.39	20.71	20.86	20.80							
25.0	19.78	20.41	21.00	21.49	21.85	22.03	21.97						
30.0	20.04	20.81	21.56	22.24	22.81	23.22	23.41	23.42	23.36				
35.0	20.26	21.16	22.07	22.94	23.72	24.36	24.82	24.94	25.04	25.05	24.98		
40.0	20.42	21.46	22.53	23.59	24.58	25.46	26.17	26.40	26.68	26.84	26.93		
45.0	20.52	21.70	22.94	24.18	25.39	26.50	27.48	27.82	28.27	28.58	28.83		
50.0	20.56	21.88	23.29	24.72	26.14	27.49	28.73	29.18	29.81	30.27	30.68		
55.0		22.00	23.57	25.19	26.83	28.42	29.92	30.48	31.28	31.90	32.46		
60.0		22.04	23.78	25.60	27.45	29.28	31.05	31.72	32.70	33.47	34.19		
65.0			23.92	25.93	28.00	30.07	32.10	32.89	34.05	34.97	35.85		
70.0			23.98	26.19	28.47	30.79	33.09	33.99	35.32	36.40	37.44		
75.0				26.36	28.86	31.42	33.99	35.01	36.52	37.75	38.96		
80.0				26.45	29.17	31.98	34.81	35.95	37.63	39.02	40.39		
85.0					29.39	32.44	35.55	36.80	38.66	40.21	41.74		

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
10.0	123.50	153.00	190.00	235.00									
15.0	121.00	151.00	188.00	233.00	288.00								
20.0	118.00	148.50	186.00	231.00	286.00	350.00							
25.0	115.00	145.50	183.00	228.00	283.00	347.00	423.00						
30.0	111.50	142.50	180.00	225.00	279.00	344.00	419.00	453.00	508.00				
35.0	107.50	139.00	177.00	222.00	276.00	339.00	414.00	448.00	502.00	552.00	605.00		
40.0	103.50	135.50	173.00	218.00	271.00	335.00	409.00	442.00	496.00	545.00	598.00		
45.0	99.20	131.00	169.00	214.00	267.00	329.00	403.00	436.00	489.00	538.00	590.00		
50.0	94.40	126.50	164.00	209.00	261.00	323.00	396.00	428.00	481.00	529.00	582.00		
55.0		121.50	159.00	203.00	255.00	316.00	388.00	420.00	473.00	520.00	572.00		
60.0		116.00	153.50	197.00	248.00	308.00	379.00	411.00	463.00	510.00	561.00		
65.0			147.00	190.00	241.00	300.00	370.00	401.00	452.00	499.00	549.00		
70.0			139.50	182.50	232.00	290.00	359.00	390.00	440.00	486.00	536.00		
75.0				173.50	222.00	280.00	347.00	378.00	427.00	473.00	522.00		
80.0				163.50	212.00	268.00	335.00	365.00	414.00	460.00	509.00		
85.0					201.00	257.00	324.00	354.00	404.00	450.00	500.00		

Additional restrictions, please see application guidelines

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	190
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
Refrigerant's GWP	631
Refrigerant's classification	A1

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

Maximum Operating Current, A	52.9
Locked Rotor Current, A	230
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

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

Additional restrictions, please see application guidelines

ACCESSORIES OPTIONAL

Check Valve	For unloaded start operation
Capacity Control	Capacity Steps 50%
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Oil Pressure Switch	OPS2 Electronic Switch
Sound Attenuation	Sound Shell
Adapter Kit	For Parallel Operation
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

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