



Minimum Evaporating Temp. With:

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

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

4MJ-33X

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	26.70	33.30	41.40									
15.0	25.50	31.90	39.70	49.00								
20.0	24.20	30.40	37.90	46.80	57.40							
25.0	22.90	28.90	36.00	44.60	54.70	66.60	71.90					
30.0	21.60	27.30	34.20	42.30	52.00	63.20	68.30	76.40	83.70			
35.0	20.20	25.70	32.20	40.00	49.20	59.90	64.60	72.30	79.20	86.60		
40.0	18.85	24.10	30.30	37.60	46.30	56.40	60.90	68.10	74.70	81.70		
45.0	17.45	22.40	28.30	35.20	43.40	52.90	57.10	63.90	70.10	76.60		
50.0	16.00	20.70	26.30	32.80	40.40	49.30	53.30	59.70	65.40	71.60		
55.0	14.55	19.00	24.20	30.30	37.40	45.70	49.40	55.30	60.70	66.40		
60.0		17.25	22.10	27.80	34.40	42.10	45.50	51.00	55.90	61.20		
65.0			20.00	25.20	31.30	38.40	41.50	46.50	51.10	55.90		
70.0			17.90	22.70	28.20	34.70	37.50	42.10	46.20	50.70		
75.0				20.10	25.10	30.90	33.50	37.60	41.30	45.30		
80.0				17.45	21.90	27.10	29.40	33.10	36.40	40.00		

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		
45.0	8.93	10.05	11.10	12.10	13.00	13.80	14.05	14.40	14.70	14.90		
50.0	9.08	10.30	11.55	12.70	13.75	14.70	15.10	15.55	15.95	16.25		
55.0	9.17	10.55	11.90	13.20	14.45	15.60	16.05	16.65	17.10	17.55		
60.0		10.70	12.20	13.65	15.10	16.45	16.95	17.65	18.25	18.80		
65.0			12.45	14.10	15.65	17.20	17.80	18.65	19.30	19.95		
70.0			12.65	14.45	16.20	17.90	18.55	19.55	20.30	21.10		
75.0				14.75	16.65	18.55	19.30	20.40	21.30	22.20		
80.0				15.00	17.05	19.15	19.95	21.20	22.20	23.20		

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		
45.0	21.05	22.21	23.41	24.58	25.69	26.68	27.04	27.52	27.87	28.16		
50.0	21.19	22.52	23.90	25.29	26.63	27.89	28.36	29.02	29.51	29.96		
55.0	21.26	22.76	24.34	25.94	27.53	29.06	29.64	30.47	31.12	31.73		
60.0		22.92	24.70	26.53	28.37	30.17	30.87	31.88	32.69	33.46		
65.0			24.99	27.05	29.15	31.23	32.04	33.24	34.22	35.15		
70.0			25.19	27.49	29.85	32.22	33.16	34.55	35.68	36.79		
75.0				27.85	30.48	33.14	34.20	35.79	37.09	38.38		
80.0				28.11	31.02	33.98	35.17	36.96	38.43	39.89		

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	129.50	162.00	202.00									
15.0	128.00	160.50	201.00	249.00								
20.0	126.00	159.00	198.50	247.00	304.00							
25.0	124.00	156.50	196.50	244.00	301.00	369.00	400.00					
30.0	121.50	154.50	194.00	241.00	298.00	366.00	396.00	445.00	490.00			
35.0	119.00	151.50	191.00	238.00	294.00	361.00	391.00	440.00	485.00	533.00		
40.0	115.50	148.50	187.50	235.00	290.00	357.00	386.00	435.00	479.00	527.00		
45.0	112.50	145.00	184.00	230.00	286.00	351.00	381.00	429.00	472.00	520.00		
50.0	108.50	141.00	180.00	226.00	281.00	345.00	374.00	422.00	465.00	512.00		
55.0	104.00	137.00	175.00	221.00	275.00	339.00	368.00	414.00	457.00	504.00		
60.0		132.00	170.00	215.00	268.00	331.00	360.00	406.00	449.00	495.00		
65.0			164.50	209.00	261.00	324.00	352.00	397.00	439.00	485.00		
70.0			158.00	202.00	254.00	315.00	343.00	388.00	429.00	474.00		
75.0				194.00	245.00	306.00	333.00	377.00	418.00	463.00		
80.0				185.50	236.00	296.00	322.00	367.00	407.00	451.00		

### **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	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	1430
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

### 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

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