



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

50 Hz

4MJ-33X

R450A Dew Point

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	16.10	20.20	25.40	31.70									
15.0	15.50	19.55	24.60	30.70	38.00								
20.0	14.85	18.85	23.70	29.60	36.70	44.90							
25.0	14.10	18.00	22.70	28.40	35.20	43.20	52.40						
30.0	13.30	17.10	21.70	27.20	33.70	41.30	50.10	54.00	60.20				
35.0	12.45	16.10	20.50	25.80	32.00	39.30	47.70	51.40	57.30	62.60	68.20		
40.0	11.50	15.05	19.30	24.40	30.30	37.20	45.20	48.70	54.30	59.30	64.70		
45.0	10.55	13.95	18.05	22.80	28.50	35.00	42.60	45.90	51.20	55.90	61.00		
50.0	9.49	12.80	16.70	21.20	26.60	32.70	39.80	43.00	48.00	52.40	57.20		
55.0		11.55	15.25	19.60	24.60	30.40	37.00	40.00	44.60	48.80	53.20		
60.0		10.30	13.80	17.85	22.50	28.00	34.20	36.90	41.20	45.10	49.20		
65.0			12.25	16.05	20.40	25.50	31.20	33.70	37.70	41.30	45.10		
70.0			10.65	14.20	18.25	22.90	28.20	30.50	34.20	37.40	40.90		
75.0				12.30	16.05	20.30	25.10	27.20	30.50	33.50	36.70		
80.0				10.35	13.75	17.60	21.90	23.80	26.80	29.50	32.30		
85.0					11.40	14.85	18.75	20.40	23.10	25.50	28.00		

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	4.53	4.82	4.95	4.87									
15.0	4.91	5.30	5.56	5.64	5.49								
20.0	5.21	5.71	6.10	6.33	6.36	6.13							
25.0	5.44	6.04	6.55	6.93	7.13	7.11	6.80						
30.0	5.60	6.30	6.94	7.46	7.83	8.00	7.91	7.79	7.52				
35.0	5.71	6.50	7.25	7.92	8.46	8.81	8.93	8.91	8.78	8.59	8.31		
40.0	5.75	6.63	7.50	8.31	9.00	9.54	9.88	9.94	9.96	9.89	9.74		
45.0	5.74	6.71	7.69	8.63	9.48	10.20	10.75	10.90	11.05	11.10	11.10		
50.0	5.68	6.74	7.82	8.89	9.90	10.80	11.55	11.80	12.05	12.25	12.35		
55.0		6.71	7.90	9.10	10.25	11.30	12.25	12.60	13.00	13.30	13.55		
60.0		6.63	7.92	9.24	10.55	11.80	12.90	13.35	13.90	14.30	14.65		
65.0			7.90	9.34	10.80	12.20	13.50	14.00	14.70	15.25	15.70		
70.0			7.84	9.39	11.00	12.55	14.05	14.65	15.45	16.10	16.70		
75.0				9.40	11.10	12.85	14.55	15.20	16.15	16.90	17.65		
80.0				9.37	11.20	13.10	15.00	15.70	16.80	17.65	18.50		
85.0					11.30	13.30	15.35	16.20	17.40	18.35	19.30		

50 Hz

4MJ-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
10.0	17.05	17.34	17.50	17.45									
15.0	17.36	17.71	17.97	18.06	17.91								
20.0	17.61	18.03	18.39	18.62	18.64	18.38							
25.0	17.82	18.30	18.76	19.13	19.33	19.28	18.91						
30.0	17.98	18.52	19.08	19.59	19.96	20.12	20.01	19.86	19.53				
35.0	18.09	18.70	19.36	20.00	20.55	20.92	21.05	21.02	20.86	20.63	20.28		
40.0	18.15	18.82	19.58	20.36	21.08	21.67	22.05	22.13	22.15	22.07	21.89		
45.0	18.16	18.90	19.76	20.68	21.57	22.37	23.00	23.19	23.38	23.46	23.44		
50.0	18.13	18.93	19.89	20.94	22.01	23.02	23.90	24.20	24.57	24.80	24.95		
55.0		18.90	19.97	21.16	22.41	23.63	24.75	25.16	25.71	26.09	26.41		
60.0		18.84	20.00	21.33	22.75	24.18	25.56	26.07	26.80	27.34	27.82		
65.0			19.98	21.45	23.04	24.69	26.31	26.94	27.84	28.54	29.19		
70.0			19.92	21.52	23.29	25.15	27.02	27.76	28.83	29.69	30.50		
75.0				21.55	23.49	25.56	27.68	28.53	29.78	30.79	31.77		
80.0				21.52	23.64	25.92	28.29	29.25	30.67	31.84	32.99		
85.0					23.74	26.24	28.85	29.92	31.52	32.85	34.16		

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	81.60	103.00	129.50	162.00									
15.0	81.50	103.00	130.00	162.50	202.00								
20.0	81.00	103.00	130.00	163.00	202.00	249.00							
25.0	80.00	102.50	129.50	162.50	202.00	249.00	304.00						
30.0	78.70	101.00	129.00	162.00	202.00	248.00	303.00	328.00	367.00				
35.0	76.80	99.70	127.50	161.00	200.00	247.00	302.00	326.00	366.00	402.00	440.00		
40.0	74.40	97.60	125.50	159.00	198.50	245.00	300.00	324.00	364.00	399.00	437.00		
45.0	71.40	94.90	123.00	156.50	196.00	243.00	297.00	321.00	361.00	396.00	434.00		
50.0	67.80	91.60	120.00	153.50	193.00	239.00	294.00	318.00	357.00	392.00	430.00		
55.0		87.60	116.00	149.50	189.00	235.00	289.00	313.00	352.00	387.00	425.00		
60.0		82.80	111.50	145.00	184.50	230.00	284.00	308.00	346.00	381.00	419.00		
65.0			106.00	139.50	179.00	225.00	278.00	302.00	340.00	374.00	412.00		
70.0			99.20	133.00	172.00	218.00	271.00	294.00	332.00	366.00	403.00		
75.0				125.00	164.00	209.00	262.00	285.00	323.00	357.00	394.00		
80.0				115.00	154.50	199.50	252.00	275.00	313.00	347.00	384.00		
85.0					143.00	188.50	241.00	264.00	302.00	336.00	373.00		

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	605
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

<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