



Minimum Evaporating Temp. With:

- 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

4MT-22X

R513A

Cond °C	Cooling Capacity, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	23.10	28.70	35.50	43.70					
15.0	22.00	27.40	34.00	41.90	51.10				
20.0	20.80	26.10	32.40	40.00	48.90	59.20			
25.0	19.60	24.70	30.80	38.00	46.50	56.30	67.60		
30.0	18.35	23.20	29.10	36.00	44.10	53.40	64.10	68.80	76.40
35.0	17.05	21.80	27.30	33.90	41.50	50.40	60.50	65.00	72.10
40.0	15.75	20.30	25.60	31.80	39.00	47.30	56.80	61.00	67.70
45.0	14.45	18.70	23.70	29.60	36.30	44.10	53.00	56.90	63.10
50.0	13.10	17.15	21.90	27.30	33.60	40.90	49.10	52.80	58.50
55.0		15.55	19.95	25.00	30.90	37.50	45.20	48.50	53.90
60.0		13.95	18.00	22.70	28.00	34.20	41.20	44.20	49.10
65.0			16.05	20.30	25.20	30.70	37.10	39.80	44.20
70.0			14.05	17.90	22.30	27.20	32.90	35.30	39.30
75.0				15.45	19.30	23.70	28.70	30.80	34.30
80.0				12.95	16.30	20.10	24.40	26.20	29.20
85.0					13.25	16.45	20.00	21.60	24.10

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	6.37	6.66	6.81	6.80					
15.0	6.78	7.21	7.51	7.67	7.66				
20.0	7.16	7.73	8.18	8.50	8.67	8.67			
25.0	7.51	8.20	8.80	9.29	9.64	9.83	9.85		
30.0	7.81	8.64	9.38	10.05	10.55	10.95	11.15	11.20	11.20
35.0	8.07	9.02	9.91	10.70	11.40	12.00	12.40	12.55	12.65
40.0	8.27	9.35	10.40	11.35	12.20	12.95	13.60	13.80	14.05
45.0	8.42	9.63	10.80	11.90	12.95	13.90	14.70	15.00	15.40
50.0	8.51	9.84	11.15	12.40	13.60	14.75	15.75	16.15	16.65
55.0		9.98	11.45	12.85	14.20	15.50	16.70	17.20	17.85
60.0		10.05	11.65	13.20	14.75	16.20	17.60	18.15	18.90
65.0			11.75	13.45	15.15	16.80	18.40	19.05	19.95
70.0			11.80	13.65	15.50	17.35	19.10	19.80	20.80
75.0				13.75	15.75	17.75	19.75	20.50	21.70
80.0				13.75	15.90	18.10	20.20	21.10	22.40
85.0					16.00	18.30	20.70	21.60	23.00

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50 Hz

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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
10.0	16.40	16.56	16.61	16.50					
15.0	16.68	17.00	17.26	17.37	17.29				
20.0	16.97	17.46	17.91	18.25	18.42	18.36			
25.0	17.26	17.92	18.56	19.13	19.54	19.76	19.71		
30.0	17.54	18.37	19.20	19.98	20.65	21.14	21.40	21.42	21.35
35.0	17.80	18.78	19.81	20.81	21.72	22.49	23.05	23.20	23.33
40.0	18.02	19.16	20.37	21.59	22.75	23.79	24.65	24.92	25.26
45.0	18.19	19.49	20.89	22.32	23.72	25.03	26.18	26.59	27.13
50.0	18.31	19.76	21.34	22.98	24.62	26.19	27.65	28.18	28.91
55.0		19.95	21.71	23.56	25.43	27.27	29.02	29.68	30.61
60.0		20.05	21.99	24.04	26.15	28.26	30.30	31.08	32.21
65.0			22.17	24.42	26.77	29.13	31.46	32.37	33.69
70.0			22.23	24.69	27.26	29.89	32.50	33.53	35.04
75.0				24.82	27.62	30.51	33.40	34.55	36.26
80.0				24.82	27.84	30.98	34.16	35.43	37.32
85.0					27.90	31.29	34.75	36.14	38.22

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
10.0	123.00	153.00	190.00	234.00					
15.0	121.50	151.50	188.50	233.00	285.00				
20.0	119.50	150.00	187.00	231.00	284.00	345.00			
25.0	117.00	148.00	185.00	229.00	282.00	343.00	414.00		
30.0	114.50	145.50	183.00	227.00	279.00	340.00	410.00	441.00	492.00
35.0	112.00	143.00	180.50	224.00	276.00	336.00	406.00	437.00	487.00
40.0	108.50	140.00	177.50	221.00	273.00	332.00	402.00	433.00	482.00
45.0	105.00	137.00	174.00	218.00	269.00	328.00	397.00	427.00	477.00
50.0	101.50	133.00	170.50	214.00	264.00	323.00	391.00	422.00	470.00
55.0		129.00	166.00	209.00	259.00	318.00	385.00	415.00	463.00
60.0		124.50	161.50	204.00	254.00	312.00	378.00	408.00	455.00
65.0			156.00	198.50	248.00	305.00	371.00	400.00	447.00
70.0			150.00	192.50	241.00	297.00	362.00	391.00	438.00
75.0				185.00	233.00	289.00	353.00	382.00	428.00
80.0				177.00	225.00	280.00	344.00	373.00	419.00
85.0					218.00	274.00	339.00	368.00	414.00

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	183
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	66
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	44.5
Locked Rotor Current, A	175
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

Adapter Kit	For Parallel Operation
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
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

Additional restrictions, please see application guidelines