



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

50 Hz

4MT-22X

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
10.0	17.20	21.80	27.50	34.40					
15.0	16.45	20.90	26.40	33.10	41.10				
20.0	15.60	19.90	25.20	31.70	39.30	48.20			
25.0	14.75	18.90	24.00	30.20	37.50	46.00	55.80		
30.0	13.85	17.85	22.80	28.70	35.70	43.80	53.10	57.20	63.80
35.0	12.95	16.80	21.50	27.10	33.80	41.50	50.40	54.30	60.50
40.0	11.95	15.65	20.20	25.50	31.80	39.10	47.60	51.20	57.10
45.0	11.00	14.55	18.80	23.90	29.80	36.70	44.70	48.20	53.70
50.0	9.97	13.35	17.40	22.20	27.80	34.30	41.80	45.00	50.30
55.0		12.15	16.00	20.50	25.70	31.80	38.80	41.90	46.80
60.0		10.95	14.55	18.75	23.60	29.30	35.80	38.60	43.20
65.0			13.05	16.95	21.50	26.70	32.70	35.40	39.60
70.0			11.60	15.20	19.35	24.10	29.70	32.10	36.00
75.0				13.35	17.15	21.50	26.60	28.80	32.30
80.0				11.55	14.95	18.90	23.40	25.40	28.60
85.0					12.75	16.25	20.30	22.10	24.90

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	5.08	5.35	5.52	5.56					
15.0	5.41	5.79	6.08	6.26	6.31				
20.0	5.72	6.21	6.62	6.94	7.14	7.20			
25.0	6.01	6.61	7.14	7.59	7.93	8.15	8.24		
30.0	6.26	6.97	7.62	8.20	8.69	9.07	9.32	9.38	9.43
35.0	6.48	7.30	8.07	8.78	9.41	9.94	10.35	10.50	10.65
40.0	6.66	7.58	8.47	9.31	10.10	10.75	11.35	11.55	11.80
45.0	6.79	7.82	8.83	9.79	10.70	11.55	12.30	12.55	12.95
50.0	6.87	8.00	9.13	10.20	11.25	12.25	13.15	13.50	14.00
55.0		8.13	9.36	10.60	11.75	12.90	14.00	14.40	14.95
60.0		8.18	9.54	10.90	12.20	13.50	14.75	15.20	15.90
65.0			9.64	11.10	12.55	14.00	15.40	15.95	16.75
70.0			9.66	11.25	12.85	14.45	16.00	16.60	17.50
75.0				11.30	13.05	14.80	16.50	17.15	18.15
80.0				11.30	13.15	15.05	16.90	17.65	18.75
85.0					13.15	15.20	17.20	18.00	19.20

50 Hz

4MT-22X

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
10.0	15.29	15.49	15.60	15.57					
15.0	15.47	15.78	16.02	16.15	16.13				
20.0	15.68	16.09	16.46	16.75	16.92	16.90			
25.0	15.89	16.41	16.92	17.37	17.72	17.92	17.93		
30.0	16.11	16.73	17.38	17.99	18.52	18.94	19.19	19.24	19.24
35.0	16.31	17.04	17.82	18.59	19.31	19.95	20.44	20.59	20.75
40.0	16.49	17.33	18.24	19.17	20.08	20.93	21.67	21.92	22.25
45.0	16.63	17.58	18.62	19.72	20.82	21.88	22.86	23.22	23.71
50.0	16.72	17.78	18.96	20.22	21.51	22.78	24.01	24.47	25.13
55.0		17.92	19.24	20.66	22.14	23.63	25.09	25.66	26.48
60.0		17.99	19.45	21.03	22.70	24.41	26.11	26.78	27.77
65.0			19.57	21.31	23.17	25.10	27.05	27.83	28.98
70.0			19.60	21.51	23.55	25.70	27.89	28.78	30.09
75.0				21.59	23.83	26.19	28.63	29.62	31.10
80.0				21.56	23.99	26.57	29.25	30.34	32.00
85.0					24.01	26.81	29.74	30.94	32.76

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	87.20	110.50	140.00	176.00					
15.0	86.30	110.00	139.50	175.50	218.00				
20.0	85.10	109.00	138.50	174.00	217.00	268.00			
25.0	83.60	107.50	137.00	173.00	216.00	266.00	324.00		
30.0	81.80	106.00	135.50	171.00	214.00	264.00	322.00	348.00	389.00
35.0	79.70	104.00	133.50	169.00	211.00	261.00	319.00	345.00	386.00
40.0	77.30	101.50	131.00	166.50	209.00	258.00	316.00	341.00	383.00
45.0	74.40	98.80	128.50	163.50	205.00	255.00	312.00	337.00	379.00
50.0	71.20	95.70	125.00	160.50	202.00	251.00	308.00	333.00	374.00
55.0		92.20	121.50	156.50	198.00	246.00	303.00	328.00	369.00
60.0		88.20	117.50	152.50	193.50	241.00	298.00	323.00	363.00
65.0			113.00	147.50	188.00	236.00	292.00	316.00	357.00
70.0			107.50	142.00	182.00	229.00	285.00	310.00	350.00
75.0				136.00	175.50	222.00	277.00	302.00	342.00
80.0				129.00	168.50	215.00	269.00	294.00	334.00
85.0					160.50	206.00	261.00	286.00	326.00

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	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	605
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

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

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