



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

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
10.0	23.70	29.90	37.40	46.30	56.80					
15.0	22.40	28.40	35.60	44.10	54.20	65.90				
20.0	21.00	26.80	33.70	41.90	51.50	62.70	75.70			
25.0	19.65	25.20	31.80	39.60	48.80	59.50	71.80	77.30	86.00	93.80
30.0	18.25	23.60	29.90	37.30	46.00	56.10	67.90	73.00	81.40	88.80
35.0	16.85	21.90	27.90	34.90	43.20	52.70	63.90	68.80	76.60	83.70
40.0	15.45	20.30	25.90	32.50	40.30	49.30	59.80	64.40	71.80	78.50
45.0	14.00	18.55	23.90	30.10	37.30	45.80	55.60	60.00	67.00	73.20
50.0		16.85	21.80	27.60	34.40	42.20	51.40	55.50	62.00	67.90
55.0		15.15	19.75	25.10	31.30	38.60	47.20	50.90	57.00	62.50
60.0			17.70	22.60	28.30	35.00	42.80			
62.0			16.85	21.60	27.10	33.60				

50 Hz

4MA-22X

R407A Dew Point

Cond °C	Power, kW									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
10.0	6.28	6.57	6.70	6.64	6.34					
15.0	6.77	7.21	7.51	7.63	7.54	7.19				
20.0	7.20	7.78	8.24	8.55	8.66	8.54	8.14			
25.0	7.57	8.29	8.91	9.40	9.71	9.81	9.66	9.52	9.22	8.88
30.0	7.89	8.74	9.52	10.20	10.70	11.00	11.10	11.05	10.95	10.75
35.0	8.16	9.14	10.05	10.90	11.60	12.15	12.50	12.55	12.55	12.50
40.0	8.39	9.50	10.60	11.60	12.50	13.25	13.80	13.95	14.15	14.20
45.0	8.57	9.81	11.05	12.20	13.30	14.25	15.05	15.30	15.65	15.85
50.0		10.10	11.45	12.80	14.05	15.25	16.25	16.60	17.10	17.45
55.0		10.30	11.80	13.35	14.80	16.15	17.40	17.85	18.50	18.95
60.0			12.15	13.85	15.45	17.05	18.50			
62.0			12.30	14.00	15.75	17.40				

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
10.0	16.00	16.28	16.42	16.35	16.01					
15.0	16.44	16.87	17.19	17.33	17.22	16.82				
20.0	16.89	17.47	17.96	18.32	18.46	18.33	17.87			
25.0	17.31	18.05	18.73	19.31	19.71	19.86	19.71	19.55	19.19	18.76
30.0	17.69	18.59	19.48	20.28	20.94	21.38	21.55	21.53	21.38	21.15
35.0	18.02	19.09	20.18	21.21	22.14	22.88	23.38	23.50	23.57	23.53
40.0	18.27	19.52	20.82	22.09	23.29	24.34	25.17	25.43	25.73	25.88
45.0	18.44	19.87	21.38	22.91	24.38	25.74	26.91	27.32	27.84	28.19
50.0		20.12	21.85	23.63	25.39	27.06	28.58	29.14	29.89	30.45
55.0		20.25	22.21	24.25	26.30	28.29	30.17	30.87	31.87	32.63
60.0			22.44	24.74	27.09	29.42	31.66			
62.0			22.49	24.90	27.37	29.83				

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
10.0	111.00	140.50	177.00	220.00	272.00					
15.0	108.50	138.50	174.00	217.00	269.00	330.00				
20.0	106.00	135.50	171.50	214.00	265.00	326.00	397.00			
25.0	103.00	132.50	168.00	211.00	261.00	321.00	392.00	423.00	475.00	521.00
30.0	99.70	129.00	164.50	207.00	257.00	316.00	387.00	418.00	469.00	516.00
35.0	96.10	125.50	160.50	203.00	252.00	311.00	381.00	412.00	463.00	509.00
40.0	92.30	121.50	156.50	198.00	247.00	305.00	374.00	405.00	456.00	502.00
45.0	88.20	117.50	152.00	192.50	241.00	299.00	368.00	398.00	449.00	495.00
50.0		113.00	147.00	187.00	235.00	292.00	360.00	391.00	441.00	487.00
55.0		108.00	141.50	181.00	229.00	285.00	352.00	383.00	433.00	479.00
60.0			136.00	175.00	222.00	277.00	344.00			
62.0			133.50	172.50	219.00	274.00				

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/h	61.7
Bore/Stroke, mm	63.5/56.0
Length/Width, mm	638/501
Height, mm	452
Net Weight, kg	177
Suction, inch	1 5/8
Discharge, inch	1 1/8
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	69
Sound Power (MT), dBA	80
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
Sound Pressure @ 1m (HT), dBA	69
Sound Power (HT), dBA	80
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 55 / 20 °C at 50 Hz
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	2107
Refrigerant's classification	A1

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

Maximum Operating Current, A	36.3
Locked Rotor Current, A	175
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
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
Capacity Control	Capacity Steps 50%
Check Valve	For unloaded start operation
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Oil Pressure Switch	OPS2 Electronic Switch
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