



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	11.15	14.95	19.80	25.80	33.10	41.80	52.00			
10.0	10.15	13.85	18.55	24.30	31.20	39.50	49.30	60.70	73.80	
15.0	9.14	12.70	17.20	22.60	29.20	37.10	46.40	57.30	69.80	84.20
20.0		11.55	15.75	20.90	27.20	34.60	43.40	53.70	65.70	79.40
25.0		10.30	14.30	19.20	25.10	32.10	40.40	50.10	61.50	74.50
30.0			12.85	17.40	22.90	29.40	37.20	46.40	57.10	69.50
35.0			11.30	15.55	20.60	26.70	34.00	42.60	52.70	64.40
40.0				13.65	18.35	24.00	30.70	38.70	48.10	59.10
45.0				11.80	16.00	21.20	27.30	34.70	43.50	53.80
50.0					13.70	18.35	23.90	30.70	38.80	48.30
55.0						15.50	20.50	26.60	34.00	42.80
60.0							12.65	17.05	22.50	29.10
62.0								11.50	15.65	20.80

50 Hz

4MTD-22X 100% Loaded

R404A Dew Point

Cond °C	Power, kW									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	5.95	6.83	7.68	8.46	9.13	9.63	9.93			
10.0	6.13	7.12	8.09	9.01	9.83	10.50	11.00	11.30	11.30	
15.0	6.30	7.38	8.47	9.53	10.50	11.35	12.05	12.55	12.80	12.75
20.0		7.61	8.82	10.00	11.15	12.20	13.05	13.75	14.25	14.45
25.0		7.80	9.12	10.45	11.75	12.95	14.05	14.95	15.65	16.10
30.0			9.37	10.85	12.30	13.65	14.95	16.05	17.00	17.70
35.0			9.57	11.15	12.75	14.30	15.80	17.10	18.30	19.25
40.0				11.45	13.20	14.90	16.55	18.10	19.50	20.70
45.0				11.60	13.50	15.40	17.25	19.00	20.60	22.10
50.0					13.75	15.85	17.85	19.80	21.70	23.40
55.0						16.15	18.35	20.50	22.60	24.50
60.0						16.40	18.80	21.20	23.40	
62.0						16.45	18.90	21.40	23.80	

Cond °C	Current at 400 V, A									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	15.78	16.61	17.50	18.38	19.18	19.83	20.26			
10.0	15.93	16.88	17.91	18.96	19.95	20.82	21.51	21.93	22.03	
15.0	16.09	17.16	18.33	19.56	20.75	21.86	22.80	23.52	23.93	23.98
20.0		17.42	18.75	20.16	21.57	22.91	24.12	25.13	25.87	26.27
25.0		17.64	19.14	20.73	22.36	23.95	25.44	26.75	27.82	28.58
30.0			19.47	21.26	23.12	24.96	26.73	28.35	29.76	30.88
35.0			19.73	21.72	23.81	25.91	27.97	29.91	31.66	33.16
40.0				22.09	24.41	26.79	29.14	31.40	33.51	35.39
45.0				22.34	24.91	27.56	30.21	32.80	35.27	37.54
50.0					25.27	28.20	31.16	34.10	36.93	39.59
55.0						28.69	31.97	35.25	38.46	41.52
60.0						29.01	32.61	36.25	39.83	
62.0						29.08	32.82	36.59	40.33	

50 Hz

4MTD-22X 100% Loaded

R404A Dew Point

Cond °C	Suction Mass Flow, g/s									
	-50.0	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
5.0	80.50	105.50	137.00	174.50	219.00	271.00	331.00			
10.0	77.40	103.00	134.50	172.50	217.00	269.00	328.00	396.00	473.00	
15.0	73.70	100.00	131.50	169.50	214.00	265.00	325.00	392.00	469.00	555.00
20.0		96.20	128.00	166.00	210.00	262.00	321.00	388.00	464.00	550.00
25.0		91.80	124.00	161.50	206.00	257.00	316.00	383.00	459.00	545.00
30.0			119.00	156.50	200.00	251.00	310.00	377.00	453.00	539.00
35.0			113.50	151.00	194.50	245.00	303.00	369.00	445.00	531.00
40.0				144.00	187.00	237.00	295.00	361.00	437.00	524.00
45.0				136.50	179.00	229.00	286.00	352.00	428.00	515.00
50.0					170.00	219.00	276.00	342.00	418.00	506.00
55.0						209.00	265.00	332.00	408.00	497.00
60.0						197.50	254.00	321.00	399.00	
62.0						193.00	250.00	317.00	396.00	

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	189
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 (LT), dBA	73
Sound Power (LT), dBA	84
Sound Power with Sound Shell (LT), dBA	72
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	71
Sound Power (MT), dBA	82
Sound Power with Sound Shell (MT), dBA	70
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
Digital Modulation	50-100%
Refrigerant's GWP	3922
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

<p>CoreSense Protection (-P) Oil Pressure Switch (-P) Mounting Parts Copeland Compressor Electronic (-N)</p>	<p>Motor protection OPS2 Sensor Spring Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement</p>
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ACCESSORIES OPTIONAL

<p>Adapter Kit Digital Driver Oil Pressure Switch Digital Modulation Additional Cooling Crankcase Heater Sound Attenuation Check Valve Mounting Parts Copeland Compressor Electronic module</p>	<p>For Parallel Operation EC3-D23 OPS2 Electronic Switch 50-100 % 70 W Vertical Air Flow Fan 100 W Internal Sound Shell For unloaded start operation Rubber Modbus extension module</p>
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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	YYY	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	YYY	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YYY	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	YYY	Y	2.19
AWX	380 V / 3~ / 60 Hz	380	YYY	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YYY	Y	1.00