



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											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	10.45	14.20	18.95	24.70	31.60	39.90	49.60	60.90				
15.0	9.26	12.95	17.50	23.00	29.60	37.50	46.70	57.50	69.90			
20.0	8.05	11.65	15.95	21.20	27.50	34.90	43.70	54.00	65.80	79.30	94.70	
25.0	6.82	10.30	14.40	19.40	25.30	32.40	40.60	50.30	61.60	74.50	89.20	95.50
30.0		8.91	12.85	17.50	23.10	29.70	37.50	46.60	57.30	69.50	83.50	89.60
35.0		7.53	11.20	15.60	20.80	27.00	34.30	42.80	52.80	64.40	77.70	83.50
40.0			9.61	13.65	18.50	24.20	31.00	39.00	48.40	59.30	71.80	77.40
45.0			8.01	11.75	16.15	21.40	27.70	35.10	43.80	54.00	65.90	71.10
50.0				9.81	13.80	18.60	24.30	31.10	39.20	48.70	59.80	64.70
55.0				7.93	11.50	15.75	20.90	27.10	34.50	43.30	53.70	58.30
60.0					9.19	12.95	17.50	23.00	29.80	37.80	47.40	
62.0					8.29	11.80	16.15	21.40	27.80	35.60		

50 Hz

4MHD-25X 100% Loaded

R404A Dew Point

Cond °C	Power, kW											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	5.78	6.58	7.33	7.98	8.51	8.86	9.00	8.89				
15.0	5.97	6.86	7.73	8.52	9.20	9.72	10.05	10.15	9.95			
20.0	6.07	7.07	8.05	8.98	9.81	10.50	11.00	11.30	11.35	11.10	10.45	
25.0	6.10	7.20	8.30	9.37	10.35	11.20	11.90	12.40	12.70	12.65	12.30	12.05
30.0		7.25	8.48	9.68	10.80	11.85	12.75	13.45	13.95	14.15	14.10	13.95
35.0		7.23	8.58	9.92	11.20	12.45	13.50	14.45	15.15	15.65	15.80	15.80
40.0			8.61	10.10	11.55	12.95	14.25	15.35	16.30	17.05	17.50	17.55
45.0			8.58	10.20	11.85	13.40	14.90	16.25	17.40	18.40	19.10	19.30
50.0				10.25	12.05	13.80	15.50	17.05	18.45	19.70	20.70	21.00
55.0				10.25	12.20	14.15	16.05	17.80	19.45	20.90	22.20	22.60
60.0					12.30	14.45	16.50	18.55	20.40	22.10	23.70	
62.0					12.35	14.55	16.70	18.80	20.80	22.60		

Cond °C	Current at 400 V, A											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	18.13	18.75	19.39	20.00	20.51	20.86	21.01	20.89				
15.0	18.30	19.04	19.81	20.56	21.23	21.76	22.11	22.20	21.99			
20.0	18.38	19.24	20.15	21.06	21.91	22.64	23.20	23.53	23.56	23.25	22.53	
25.0	18.34	19.34	20.42	21.51	22.55	23.50	24.28	24.86	25.16	25.13	24.71	24.42
30.0		19.34	20.60	21.88	23.14	24.31	25.34	26.18	26.76	27.03	26.93	26.78
35.0		19.23	20.67	22.17	23.65	25.07	26.37	27.49	28.37	28.95	29.19	29.17
40.0			20.64	22.36	24.09	25.77	27.35	28.77	29.96	30.88	31.47	31.59
45.0			20.48	22.45	24.44	26.40	28.28	30.01	31.54	32.80	33.76	34.03
50.0				22.42	24.69	26.95	29.14	31.20	33.08	34.71	36.05	36.48
55.0				22.26	24.83	27.40	29.92	32.33	34.58	36.59	38.33	38.93
60.0					24.85	27.75	30.62	33.39	36.02	38.43	40.59	
62.0					24.82	27.86	30.87	33.79	36.58	39.16		

50 Hz

4MHD-25X 100% Loaded

R404A Dew Point

Cond °C	Suction Mass Flow, g/s											
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	77.60	103.00	134.50	171.50	215.00	266.00	324.00	390.00				
15.0	72.70	99.20	131.00	168.00	212.00	262.00	320.00	386.00	461.00			
20.0	67.10	94.50	126.50	164.00	208.00	258.00	316.00	381.00	456.00	539.00	632.00	
25.0	60.70	89.00	121.50	159.00	203.00	253.00	310.00	376.00	450.00	533.00	626.00	666.00
30.0		82.60	115.50	153.50	197.00	247.00	304.00	370.00	444.00	527.00	620.00	660.00
35.0		75.40	109.00	147.00	190.50	240.00	297.00	362.00	436.00	520.00	613.00	654.00
40.0			101.50	139.50	183.00	233.00	289.00	354.00	428.00	512.00	606.00	647.00
45.0			92.90	131.00	174.50	224.00	281.00	345.00	419.00	504.00	599.00	640.00
50.0				122.00	165.00	214.00	271.00	336.00	410.00	495.00	592.00	634.00
55.0				111.50	155.00	204.00	261.00	326.00	401.00	487.00	585.00	629.00
60.0					144.00	193.00	250.00	316.00	392.00	481.00	583.00	
62.0					139.50	189.00	246.00	313.00	390.00	480.00		

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	4
Displacement @ 50 Hz, m <sup>3</sup> /h	71.4
Bore/Stroke, mm	68.3/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	193
Suction, inch	2 1/8
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 (LT), dBA	75
Sound Power (LT), dBA	86
Sound Power with Sound Shell (LT), dBA	73
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	69
Sound Power (MT), dBA	80
Sound Power with Sound Shell (MT), dBA	68
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	41.6
Locked Rotor Current, A	199
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch (-P)	OPS2 Sensor
CoreSense Protection (-P)	Motor protection
Mounting Parts	Spring
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
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Oil Pressure Switch	OPS2 Electronic Switch
Digital Modulation	50-100 %
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	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