



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return      — 20 °C Suction Gas Return with add cooling
- 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	13.60	18.50	25.00	33.30	43.50	55.90	70.70			
10.0	12.55	17.30	23.50	31.30	40.90	52.60	66.60	83.10	102.50	
15.0	11.45	16.05	21.90	29.20	38.30	49.30	62.40	77.90	96.10	117.00
20.0	10.30	14.70	20.20	27.10	35.60	45.90	58.20	72.80	89.90	110.00
25.0		13.30	18.55	25.00	32.90	42.50	54.00	67.60	83.70	102.50
30.0		11.85	16.80	22.80	30.10	39.00	49.70	62.40	77.50	95.10
35.0			14.95	20.50	27.30	35.50	45.40	57.20	71.20	87.70
40.0			13.05	18.20	24.40	31.90	41.00	51.90	64.90	80.20
45.0				15.80	21.40	28.30	36.60	46.60	58.50	72.80
50.0					18.45	24.60	32.10	41.10	52.10	65.20
55.0					15.40	20.80	27.50	35.70	45.60	57.60
60.0						17.05	22.90	30.20	39.00	
62.0						15.55	21.10	27.90	36.40	

50 Hz

6MMD-30X 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	7.93	9.17	10.35	11.45	12.40	13.10	13.50			
10.0	8.29	9.64	10.95	12.20	13.30	14.25	14.90	15.20	15.20	
15.0	8.59	10.05	11.55	12.95	14.25	15.35	16.25	16.85	17.10	16.95
20.0	8.83	10.45	12.05	13.65	15.15	16.45	17.60	18.45	19.00	19.15
25.0		10.70	12.50	14.25	15.95	17.55	18.90	20.00	20.90	21.30
30.0		10.95	12.90	14.85	16.75	18.55	20.20	21.60	22.70	23.50
35.0			13.15	15.30	17.45	19.50	21.40	23.10	24.50	25.70
40.0			13.30	15.70	18.05	20.40	22.50	24.50	26.30	27.80
45.0				15.95	18.55	21.10	23.60	25.90	28.00	29.80
50.0					18.90	21.80	24.50	27.10	29.60	31.80
55.0					19.15	22.30	25.30	28.30	31.10	33.60
60.0						22.60	26.00	29.30	32.40	
62.0						22.70	26.20	29.60	32.90	

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	23.15	24.23	25.35	26.41	27.28	27.85	28.00			
10.0	23.41	24.63	25.96	27.29	28.48	29.43	30.03	30.14	29.67	
15.0	23.65	25.02	26.55	28.14	29.65	30.98	32.01	32.63	32.72	32.16
20.0	23.86	25.37	27.10	28.94	30.77	32.48	33.94	35.06	35.69	35.75
25.0		25.66	27.59	29.68	31.82	33.90	35.80	37.40	38.59	39.25
30.0		25.88	28.00	30.34	32.79	35.23	37.56	39.64	41.38	42.64
35.0			28.31	30.89	33.65	36.46	39.20	41.77	44.05	45.91
40.0			28.51	31.33	34.39	37.56	40.72	43.77	46.58	49.03
45.0				31.63	34.99	38.51	42.09	45.60	48.95	52.00
50.0					35.42	39.30	43.28	47.27	51.14	54.78
55.0					35.68	39.90	44.30	48.75	53.14	57.36
60.0						40.31	45.10	50.02	54.93	
62.0						40.41	45.37	50.46	55.58	

50 Hz

6MMD-30X 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	98.10	131.00	173.00	225.00	288.00	363.00	450.00			
10.0	95.50	128.50	170.50	222.00	284.00	358.00	443.00	542.00	655.00	
15.0	92.30	126.00	168.00	219.00	280.00	352.00	437.00	534.00	646.00	772.00
20.0	88.10	122.50	164.50	215.00	275.00	346.00	430.00	526.00	636.00	761.00
25.0		118.50	160.50	211.00	270.00	340.00	422.00	517.00	625.00	749.00
30.0		113.50	155.50	205.00	264.00	333.00	413.00	507.00	614.00	737.00
35.0			149.50	199.00	257.00	325.00	404.00	496.00	602.00	724.00
40.0			142.50	192.00	249.00	316.00	394.00	485.00	590.00	711.00
45.0				183.00	240.00	306.00	383.00	472.00	576.00	697.00
50.0					229.00	294.00	370.00	459.00	562.00	683.00
55.0					216.00	281.00	356.00	445.00	548.00	669.00
60.0						267.00	342.00	431.00	535.00	
62.0						261.00	337.00	426.00	531.00	

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	6
Displacement @ 50 Hz, m <sup>3</sup> /h	121
Bore/Stroke, mm	71.5/57.5
Length/Width, mm	695/547
Height, mm	450
Net Weight, kg	221
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	78
Sound Power (LT), dBA	89
Sound Power with Sound Shell (LT), dBA	74
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	72
Sound Power (MT), dBA	83
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	33-100%
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	59.7
Locked Rotor Current, A	255
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

CoreSense Protection (-P)	Motor protection
Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
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
Digital Driver	EC3-D23
Digital Modulation	33-66%
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Oil Pressure Switch	OPS2 Electronic Switch
Sound Attenuation	Sound Shell
Mounting Parts	Rubber
Copeland Compressor Electronic module	Modbus extension module
Discharge Shut-off	Angle valve

### **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