



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 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	27.30	34.40	42.90	53.00	64.90					
15.0	25.80	32.60	40.70	50.40	61.80	75.20				
20.0	24.20	30.80	38.60	47.90	58.80	71.50	86.20			
25.0	22.70	29.00	36.40	45.30	55.70	67.80	81.80	88.00	98.00	107.00
30.0		27.20	34.30	42.70	52.50	64.10	77.40	83.30	92.80	101.50
35.0		25.30	32.10	40.00	49.40	60.30	73.00	78.60	87.60	95.60
40.0		23.50	29.90	37.40	46.20	56.50	68.50	73.80	82.30	90.00
45.0			27.70	34.70	43.00	52.70	63.90	68.90	77.00	84.20
50.0			25.40	32.00	39.70	48.80	59.40	64.10	71.60	78.40
55.0				29.30	36.50	44.90	54.80	59.10	66.20	72.60
60.0				26.60	33.20	41.00	50.10			
62.0				25.50	31.90	39.40				

50 Hz

4MID-30X 100% Loaded

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	7.18	7.58	7.82	7.91	7.82					
15.0	7.82	8.34	8.72	8.94	8.98	8.83				
20.0	8.40	9.06	9.58	9.95	10.15	10.15	9.94			
25.0	8.92	9.73	10.40	10.95	11.30	11.45	11.45	11.35	11.20	10.95
30.0		10.35	11.20	11.90	12.40	12.80	12.95	12.95	12.85	12.75
35.0		10.90	11.90	12.80	13.55	14.10	14.45	14.50	14.55	14.55
40.0		11.35	12.60	13.65	14.60	15.35	15.90	16.10	16.25	16.35
45.0			13.20	14.50	15.65	16.60	17.40	17.65	18.00	18.20
50.0			13.70	15.25	16.60	17.85	18.85	19.20	19.70	20.00
55.0				15.90	17.55	19.00	20.30	20.70	21.40	21.80
60.0				16.50	18.40	20.10	21.70			
62.0				16.75	18.75	20.60				

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	19.38	19.70	19.93	20.03	19.96					
15.0	19.91	20.35	20.71	20.94	21.00	20.85				
20.0	20.44	21.03	21.54	21.93	22.16	22.18	21.95			
25.0	20.94	21.71	22.41	22.99	23.41	23.63	23.60	23.51	23.29	23.01
30.0		22.37	23.28	24.08	24.73	25.18	25.39	25.39	25.31	25.16
35.0		22.98	24.14	25.19	26.09	26.80	27.28	27.39	27.48	27.46
40.0		23.51	24.95	26.29	27.48	28.48	29.25	29.49	29.75	29.89
45.0			25.70	27.35	28.86	30.19	31.29	31.65	32.12	32.42
50.0			26.37	28.36	30.22	31.90	33.35	33.87	34.55	35.03
55.0				29.29	31.52	33.59	35.43	36.10	37.02	37.71
60.0				30.11	32.76	35.23	37.50			
62.0				30.40	33.22	35.88				

50 Hz

4MID-30X 100% Loaded

R407A Dew Point

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	128.00	162.00	203.00	252.00	311.00					
15.0	125.00	159.00	199.50	248.00	307.00	376.00				
20.0	122.00	155.50	196.00	245.00	303.00	371.00	452.00			
25.0	119.00	152.50	192.50	241.00	298.00	366.00	446.00	482.00	541.00	594.00
30.0		149.00	189.00	237.00	293.00	361.00	441.00	477.00	535.00	588.00
35.0		145.00	185.00	232.00	289.00	356.00	435.00	471.00	529.00	582.00
40.0		141.50	180.50	227.00	283.00	350.00	429.00	465.00	523.00	576.00
45.0			176.00	222.00	278.00	344.00	423.00	458.00	516.00	569.00
50.0			171.50	217.00	272.00	338.00	416.00	451.00	510.00	563.00
55.0				212.00	266.00	331.00	409.00	445.00	503.00	557.00
60.0				206.00	260.00	325.00	403.00			
62.0				204.00	257.00	322.00				

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

Number of cylinders	4
Displacement @ 50 Hz, m <sup>3</sup> /h	78.2
Bore/Stroke, mm	71.5/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	194
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 (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
Sound Pressure @ 1m (HT), dBA	71
Sound Power (HT), dBA	82
Sound Power with Sound Shell (HT), dBA	70
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
Digital Modulation	50-100%
Refrigerant's GWP	2107
Refrigerant's classification	A1

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

Maximum Operating Current, A	46.6
Locked Rotor Current, A	221
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

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
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
Oil Pressure Switch	OPS2 Electronic Switch
Digital Modulation	50-100 %
Copeland Compressor Electronic module	Modbus extension module

### 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