



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	12.20	16.50	21.60	27.80	35.10	43.80	53.90	65.70				
15.0	10.90	15.15	20.20	26.10	33.20	41.50	51.20	62.50	75.50			
20.0	9.45	13.70	18.60	24.40	31.10	39.00	48.20	59.00	71.40	85.50	101.50	
25.0	7.94	12.15	16.95	22.50	28.90	36.40	45.10	55.30	67.10	80.60	95.90	102.50
30.0		10.55	15.15	20.40	26.50	33.60	41.80	51.50	62.60	75.40	90.00	96.40
35.0		8.88	13.30	18.30	24.00	30.70	38.40	47.50	57.90	70.00	83.80	89.90
40.0			11.40	16.15	21.50	27.70	34.90	43.30	53.10	64.50	77.50	83.30
45.0			9.51	13.90	18.85	24.60	31.30	39.10	48.20	58.80	71.00	76.50
50.0				11.65	16.20	21.40	27.50	34.70	43.10	52.90	64.40	69.50
55.0				9.43	13.55	18.25	23.80	30.20	37.90	47.00	57.60	62.40
60.0					10.90	15.05	19.95	25.70	32.70	40.90	50.70	
62.0					9.83	13.75	18.40	23.90	30.50	38.40		

50 Hz

4MID-30X 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	6.43	7.29	8.06	8.72	9.28	9.72	10.05	10.20				
15.0	6.61	7.61	8.51	9.31	10.00	10.55	11.00	11.30	11.45			
20.0	6.71	7.86	8.91	9.86	10.70	11.40	12.00	12.45	12.75	12.85	12.85	
25.0	6.72	8.03	9.25	10.35	11.35	12.25	13.00	13.60	14.05	14.35	14.45	14.45
30.0		8.11	9.51	10.80	12.00	13.05	13.95	14.75	15.35	15.80	16.10	16.15
35.0		8.09	9.69	11.20	12.55	13.80	14.90	15.85	16.65	17.30	17.75	17.90
40.0			9.76	11.45	13.05	14.50	15.80	16.95	17.95	18.80	19.45	19.70
45.0			9.73	11.65	13.45	15.10	16.65	18.00	19.25	20.30	21.20	21.50
50.0				11.70	13.75	15.65	17.40	19.05	20.50	21.80	22.90	23.20
55.0				11.65	13.95	16.10	18.10	20.00	21.70	23.20	24.50	25.00
60.0					14.05	16.45	18.75	20.80	22.80	24.60	26.20	
62.0					14.05	16.55	18.95	21.20	23.20	25.10		

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	18.53	19.25	20.00	20.70	21.30	21.74	21.95	21.89				
15.0	18.64	19.51	20.41	21.28	22.07	22.72	23.16	23.35	23.21			
20.0	18.71	19.73	20.80	21.86	22.86	23.73	24.41	24.85	24.99	24.76	24.10	
25.0	18.70	19.89	21.15	22.41	23.63	24.74	25.68	26.39	26.82	26.89	26.56	26.30
30.0		19.97	21.43	22.91	24.37	25.73	26.94	27.94	28.67	29.06	29.07	28.96
35.0		19.94	21.61	23.33	25.04	26.67	28.16	29.46	30.51	31.25	31.61	31.64
40.0			21.68	23.65	25.62	27.53	29.33	30.94	32.33	33.41	34.15	34.33
45.0			21.61	23.84	26.09	28.30	30.41	32.36	34.09	35.54	36.66	36.99
50.0				23.88	26.42	28.94	31.38	33.68	35.77	37.61	39.12	39.62
55.0				23.74	26.59	29.44	32.22	34.88	37.35	39.58	41.51	42.18
60.0					26.57	29.76	32.90	35.93	38.80	41.44	43.79	
62.0					26.50	29.83	33.12	36.31	39.34	42.15		

50 Hz

4MID-30X 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	90.70	119.50	153.50	193.00	239.00	292.00	352.00	421.00				
15.0	85.50	116.00	151.00	191.00	237.00	290.00	351.00	420.00	497.00			
20.0	78.80	111.50	147.50	188.50	235.00	288.00	348.00	417.00	494.00	581.00	678.00	
25.0	70.70	105.50	143.00	184.50	231.00	284.00	345.00	413.00	490.00	577.00	674.00	715.00
30.0		97.80	136.50	179.00	226.00	279.00	340.00	408.00	485.00	571.00	668.00	710.00
35.0		88.90	129.50	172.50	220.00	273.00	333.00	401.00	478.00	565.00	662.00	704.00
40.0			120.50	164.50	213.00	266.00	326.00	394.00	470.00	557.00	654.00	696.00
45.0			110.00	155.50	204.00	257.00	317.00	385.00	461.00	548.00	646.00	688.00
50.0				145.00	194.00	247.00	307.00	375.00	451.00	538.00	637.00	680.00
55.0				132.50	182.50	236.00	296.00	364.00	441.00	528.00	629.00	673.00
60.0					170.00	225.00	285.00	353.00	431.00	520.00	623.00	
62.0					165.00	220.00	280.00	349.00	427.00	518.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /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 (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	70
Sound Power (MT), dBA	81
Sound Power with Sound Shell (MT), dBA	69
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	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