



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- 20 °C Suction Gas Return
- 0 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Additional restrictions, please see application guidelines

50 Hz

4MID-30X

R513A

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	15.0	20.0	25.0
16.0	19.55												
20.0	18.70	23.40											
25.0	17.65	22.10	27.60	34.30									
30.0	16.50	20.80	26.10	32.40	40.00	49.00							
35.0	15.40	19.50	24.50	30.50	37.60	46.10	56.00	60.30	67.40	73.70			
40.0	14.25	18.15	22.80	28.50	35.20	43.20	52.40	56.50	63.10	69.10	75.50		
45.0	13.05	16.75	21.20	26.50	32.80	40.20	48.80	52.60	58.80	64.40	70.30		
50.0	11.85	15.35	19.50	24.40	30.30	37.20	45.20	48.70	54.40	59.60	65.10		
55.0		13.90	17.75	22.30	27.70	34.10	41.50	44.70	50.00	54.70	59.80		
60.0		12.40	16.00	20.20	25.20	30.90	37.70	40.70	45.50	49.80	54.50		
65.0			14.15	18.00	22.50	27.80	33.90	36.60	41.00	44.90	49.10		
70.0			12.30	15.75	19.80	24.50	30.00	32.40	36.30	39.90	43.60		
75.0				13.45	17.05	21.20	26.10	28.20	31.70	34.80	38.10		
80.0				11.05	14.20	17.85	22.10	23.90	26.90	29.60	32.50		
85.0					11.30	14.40	18.00	19.60	22.10	24.40	26.80		

Cond °C	Power, kW												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
16.0	6.32												
20.0	6.54	7.11											
25.0	6.78	7.46	8.04	8.48									
30.0	6.98	7.77	8.47	9.06	9.51	9.79							
35.0	7.13	8.03	8.85	9.59	10.20	10.65	10.95	11.00	11.05	11.00			
40.0	7.23	8.23	9.19	10.05	10.85	11.50	12.00	12.10	12.30	12.35	12.35		
45.0	7.27	8.38	9.46	10.50	11.45	12.25	12.95	13.20	13.45	13.65	13.80		
50.0	7.25	8.47	9.68	10.85	11.95	13.00	13.85	14.20	14.60	14.90	15.20		
55.0		8.50	9.84	11.15	12.45	13.65	14.70	15.15	15.70	16.10	16.50		
60.0		8.46	9.93	11.40	12.85	14.20	15.50	16.00	16.70	17.25	17.75		
65.0			9.95	11.55	13.15	14.75	16.25	16.80	17.65	18.30	18.95		
70.0			9.90	11.65	13.45	15.20	16.90	17.55	18.50	19.30	20.00		
75.0				11.70	13.60	15.55	17.45	18.20	19.30	20.20	21.10		
80.0				11.60	13.70	15.85	17.95	18.80	20.00	21.00	22.00		
85.0					13.75	16.05	18.35	19.30	20.70	21.80	22.90		

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50 Hz

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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	15.0	20.0	25.0
16.0	25.73												
20.0	25.93	26.44											
25.0	26.16	26.72	27.22	27.61									
30.0	26.35	26.97	27.56	28.07	28.47	28.71							
35.0	26.50	27.19	27.87	28.50	29.05	29.48	29.73	29.78	29.78	29.71			
40.0	26.62	27.37	28.14	28.91	29.62	30.23	30.70	30.84	30.99	31.06	31.06	31.06	
45.0	26.68	27.50	28.38	29.28	30.15	30.95	31.65	31.89	32.19	32.40	32.40	32.55	
50.0	26.68	27.58	28.57	29.60	30.64	31.64	32.57	32.91	33.37	33.72	33.72	34.02	
55.0		27.60	28.70	29.88	31.09	32.30	33.46	33.90	34.52	35.01	35.01	35.46	
60.0		27.56	28.78	30.11	31.50	32.91	34.31	34.85	35.64	36.28	36.28	36.88	
65.0			28.80	30.27	31.85	33.47	35.11	35.76	36.72	37.50	37.50	38.26	
70.0			28.74	30.37	32.13	33.98	35.86	36.62	37.75	38.68	38.68	39.60	
75.0				30.40	32.35	34.42	36.56	37.43	38.73	39.82	39.82	40.89	
80.0				30.35	32.50	34.80	37.19	38.17	39.65	40.89	40.89	42.13	
85.0					32.57	35.10	37.76	38.85	40.51	41.91	41.91	43.31	

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	15.0	20.0	25.0
16.0	109.00												
20.0	107.50	134.50											
25.0	105.50	132.50	166.00	207.00									
30.0	103.50	130.50	164.00	204.00	253.00	312.00							
35.0	101.00	128.00	161.50	202.00	250.00	308.00	376.00	406.00	456.00	501.00			
40.0	98.20	125.50	158.50	198.50	246.00	304.00	371.00	401.00	450.00	494.00	543.00	543.00	
45.0	95.20	122.50	155.50	195.00	243.00	299.00	366.00	395.00	444.00	488.00	536.00	536.00	
50.0	91.70	119.00	152.00	191.00	238.00	294.00	360.00	389.00	437.00	481.00	528.00	528.00	
55.0		115.00	148.00	187.00	233.00	288.00	353.00	383.00	430.00	473.00	520.00	520.00	
60.0		110.50	143.50	182.00	228.00	282.00	346.00	375.00	422.00	465.00	511.00	511.00	
65.0			138.00	176.00	221.00	275.00	339.00	367.00	414.00	456.00	502.00	502.00	
70.0			131.00	169.50	214.00	267.00	330.00	359.00	405.00	447.00	493.00	493.00	
75.0				161.00	206.00	259.00	321.00	349.00	395.00	437.00	483.00	483.00	
80.0				151.50	196.50	249.00	312.00	340.00	386.00	429.00	475.00	475.00	
85.0					186.00	240.00	305.00	334.00	381.00	424.00	472.00	472.00	

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m³/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	69
Sound Power (MT), dBA	80
Sound Power with Sound Shell (MT), dBA	67
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	631
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

Additional restrictions, please see application guidelines

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

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
AWM	380-420 V / 3~ / 50 Hz	400	YY/Y	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	YY/Y	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YY/Y	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	YY/Y	Y	2.19
AWX	380 V / 3~ / 60 Hz	380	YY/Y	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YY/Y	Y	1.00

Additional restrictions, please see application guidelines