



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

6MID-40X

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	28.70												
20.0	27.10	34.50											
25.0	25.20	32.20	40.80	51.20									
30.0	23.20	29.90	38.10	47.90	59.50	73.20							
35.0	21.30	27.70	35.40	44.60	55.60	68.40	83.30	89.80	100.50	110.00			
40.0	19.50	25.50	32.70	41.40	51.60	63.70	77.60	83.70	93.50	102.50	112.00		
45.0	17.65	23.30	30.10	38.20	47.70	58.90	71.80	77.50	86.70	94.90	103.50		
50.0	15.90	21.20	27.40	34.90	43.80	54.10	66.10	71.40	79.80	87.40	95.50		
55.0		19.05	24.90	31.70	39.90	49.30	60.30	65.20	72.90	79.90	87.30		
60.0		17.00	22.30	28.60	36.00	44.60	54.60	59.00	66.00	72.40	79.10		
65.0			19.75	25.40	32.10	39.80	48.80	52.70	59.10	64.80	70.90		
70.0			17.25	22.30	28.20	35.00	43.00	46.50	52.20	57.30	62.70		
75.0				19.20	24.30	30.30	37.30	40.30	45.30	49.70	54.40		
80.0				16.10	20.50	25.60	31.50	34.10	38.30	42.10	46.20		
85.0					16.65	20.90	25.80	27.90	31.40	34.60	37.90		

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	9.35												
20.0	9.81	10.65											
25.0	10.30	11.30	12.20	12.95									
30.0	10.80	11.90	12.95	13.90	14.65	15.20							
35.0	11.15	12.45	13.65	14.75	15.75	16.50	17.05	17.20	17.35	17.35			
40.0	11.50	12.90	14.25	15.55	16.75	17.75	18.55	18.85	19.15	19.30	19.40		
45.0	11.80	13.30	14.80	16.30	17.65	18.90	20.00	20.30	20.80	21.10	21.40		
50.0	12.10	13.70	15.30	16.95	18.50	20.00	21.30	21.80	22.40	22.90	23.30		
55.0		14.00	15.75	17.55	19.30	21.00	22.50	23.10	23.90	24.50	25.10		
60.0		14.30	16.20	18.10	20.00	21.90	23.70	24.40	25.30	26.10	26.80		
65.0			16.55	18.60	20.70	22.80	24.80	25.50	26.70	27.60	28.40		
70.0			16.85	19.05	21.30	23.60	25.80	26.70	27.90	28.90	29.90		
75.0				19.50	21.90	24.30	26.70	27.70	29.10	30.30	31.40		
80.0				19.85	22.40	25.00	27.60	28.70	30.20	31.50	32.70		
85.0					22.90	25.70	28.50	29.60	31.30	32.70	34.00		

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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	28.13												
20.0	28.55	29.31											
25.0	29.05	29.92	30.78	31.55									
30.0	29.52	30.51	31.53	32.49	33.33	33.97							
35.0	29.95	31.07	32.25	33.41	34.48	35.39	36.07	36.27	36.45	36.51			
40.0	30.34	31.59	32.93	34.29	35.60	36.79	37.78	38.11	38.51	38.76	38.91		
45.0	30.69	32.06	33.57	35.13	36.68	38.15	39.46	39.93	40.55	40.98	41.33		
50.0	30.97	32.48	34.16	35.93	37.73	39.48	41.11	41.71	42.55	43.18	43.73		
55.0		32.84	34.69	36.67	38.72	40.75	42.71	43.45	44.51	45.34	46.09		
60.0		33.13	35.15	37.35	39.65	41.98	44.26	45.15	46.43	47.45	48.41		
65.0			35.55	37.97	40.52	43.14	45.75	46.78	48.29	49.51	50.68		
70.0			35.87	38.50	41.32	44.23	47.18	48.35	50.09	51.51	52.89		
75.0				38.96	42.04	45.25	48.54	49.86	51.82	53.44	55.03		
80.0				39.32	42.67	46.19	49.81	51.28	53.48	55.30	57.10		
85.0					43.20	47.03	51.00	52.62	55.05	57.07	59.09		

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	160.00												
20.0	155.50	198.50											
25.0	150.50	193.00	245.00	309.00									
30.0	145.00	187.50	239.00	302.00	377.00	466.00							
35.0	140.00	182.00	233.00	295.00	369.00	457.00	559.00	605.00	679.00	745.00			
40.0	134.50	176.00	227.00	288.00	361.00	448.00	549.00	594.00	667.00	733.00	804.00		
45.0	129.00	170.00	220.00	281.00	353.00	438.00	538.00	582.00	654.00	719.00	790.00		
50.0	123.00	164.00	214.00	273.00	344.00	428.00	526.00	570.00	641.00	705.00	775.00		
55.0		158.00	207.00	265.00	335.00	417.00	514.00	557.00	627.00	691.00	759.00		
60.0		151.50	200.00	257.00	326.00	406.00	501.00	544.00	613.00	675.00	743.00		
65.0			192.50	249.00	315.00	395.00	488.00	530.00	597.00	659.00	726.00		
70.0			184.50	239.00	305.00	382.00	474.00	515.00	581.00	642.00	708.00		
75.0				230.00	294.00	369.00	459.00	500.00	565.00	625.00	690.00		
80.0				220.00	283.00	357.00	445.00	485.00	550.00	610.00	674.00		
85.0					274.00	348.00	436.00	476.00	541.00	601.00	667.00		

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	6
Displacement @ 50 Hz, m³/h	121
Bore/Stroke, mm	71.5/57.5
Length/Width, mm	695/547
Height, mm	450
Net Weight, kg	225
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 (MT), dBA	72
Sound Power (MT), dBA	83
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	33-100%
Refrigerant's GWP	631
Refrigerant's classification	A1

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

Maximum Operating Current, A	71.4
Locked Rotor Current, A	304
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
Oil Pressure Switch (-P)	OPS2 Sensor
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
Digital Driver	EC3-D23
Digital Modulation	33-66%
Adapter Kit	For Parallel Operation
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
Discharge Shut-off	Angle valve
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

Additional restrictions, please see application guidelines