



Minimum Evaporating Temp. With:

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

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

6MID-40X

R450A Dew Point

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	20.90												
20.0	19.85	25.50											
25.0	18.55	24.00	30.80	39.10									
30.0	17.20	22.40	28.90	36.90	46.40	57.80							
35.0	15.80	20.80	27.00	34.60	43.70	54.40	67.10	72.70	81.70	89.90			
40.0	14.40	19.15	25.00	32.20	40.80	51.00	63.00	68.40	77.00	84.70	93.00	111.50	
45.0	12.95	17.50	23.00	29.80	37.90	47.50	58.90	64.00	72.10	79.50	87.40	105.00	124.50
50.0	11.55	15.80	21.00	27.30	34.90	44.00	54.70	59.50	67.20	74.20	81.60	98.20	117.00
55.0	10.15	14.10	18.95	24.90	32.00	40.50	50.50	55.00	62.20	68.80	75.80	91.50	109.50
60.0	8.76	12.45	16.95	22.40	29.00	36.90	46.20	50.40	57.20	63.30	69.90	84.70	101.50
65.0	7.42	10.80	14.90	19.90	26.00	33.20	41.90	45.80	52.10	57.80	64.00	77.80	93.70
70.0	6.13	9.21	12.95	17.45	23.00	29.60	37.50	41.10	47.00	52.30	58.00	70.90	85.80
75.0		7.65	10.95	15.00	19.95	26.00	33.20	36.50	41.80	46.70	52.00	63.90	77.80
80.0			9.06	12.60	17.00	22.30	28.80	31.80	36.70	41.10	46.00	56.90	69.70
85.0			7.20	10.25	14.05	18.75	24.50	27.20	31.50	35.50	39.90	49.90	61.70

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	7.52												
20.0	7.87	8.53											
25.0	8.27	9.07	9.78	10.35									
30.0	8.62	9.56	10.45	11.20	11.85	12.30							
35.0	8.93	9.98	11.00	11.95	12.80	13.50	13.95	14.10	14.20	14.25			
40.0	9.18	10.35	11.50	12.65	13.70	14.60	15.35	15.55	15.85	16.05	16.15	16.15	
45.0	9.37	10.65	11.95	13.25	14.50	15.60	16.60	16.95	17.40	17.70	17.95	18.30	18.30
50.0	9.51	10.90	12.35	13.75	15.20	16.50	17.75	18.20	18.80	19.25	19.70	20.30	20.70
55.0	9.59	11.05	12.60	14.20	15.80	17.35	18.80	19.35	20.10	20.70	21.30	22.20	22.90
60.0	9.60	11.15	12.85	14.55	16.30	18.05	19.70	20.40	21.30	22.00	22.70	24.00	25.00
65.0	9.54	11.20	12.95	14.80	16.75	18.65	20.50	21.30	22.30	23.20	24.00	25.60	26.90
70.0	9.42	11.15	13.00	15.00	17.05	19.15	21.20	22.10	23.30	24.30	25.20	27.10	28.70
75.0		11.00	12.95	15.05	17.25	19.50	21.80	22.70	24.10	25.20	26.30	28.40	30.40
80.0			12.80	15.00	17.35	19.80	22.30	23.30	24.70	26.00	27.20	29.60	31.80
85.0			12.60	14.90	17.35	19.95	22.60	23.70	25.30	26.60	28.00	30.60	33.20

50 Hz

6MID-40X

R450A Dew Point

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	26.70												
20.0	26.97	27.59											
25.0	27.30	28.02	28.69	29.24									
30.0	27.61	28.44	29.25	29.99	30.60	31.02							
35.0	27.90	28.82	29.77	30.70	31.54	32.23	32.72	32.84	32.93	32.92			
40.0	28.14	29.16	30.25	31.35	32.42	33.38	34.18	34.44	34.76	34.94	35.05	34.99	
45.0	28.34	29.44	30.67	31.95	33.24	34.46	35.57	35.97	36.50	36.88	37.19	37.58	37.61
50.0	28.50	29.68	31.02	32.48	33.98	35.46	36.87	37.40	38.15	38.72	39.23	40.06	40.57
55.0	28.59	29.85	31.31	32.93	34.64	36.38	38.08	38.75	39.70	40.46	41.17	42.43	43.41
60.0	28.62	29.94	31.52	33.30	35.21	37.20	39.20	39.99	41.15	42.09	43.00	44.68	46.14
65.0	28.57	29.96	31.65	33.58	35.69	37.91	40.20	41.12	42.49	43.61	44.71	46.81	48.73
70.0	28.44	29.89	31.68	33.76	36.06	38.52	41.09	42.13	43.70	45.00	46.29	48.81	51.19
75.0		29.72	31.61	33.83	36.32	39.01	41.86	43.02	44.79	46.27	47.75	50.67	53.50
80.0			31.44	33.79	36.46	39.38	42.49	43.78	45.74	47.39	49.05	52.38	55.66
85.0			31.15	33.63	36.48	39.62	42.99	44.40	46.55	48.37	50.22	53.94	57.66

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	130.50												
20.0	129.00	162.00											
25.0	126.00	159.50	200.00	248.00									
30.0	122.50	156.00	197.00	245.00	302.00	367.00							
35.0	119.00	152.50	193.00	241.00	298.00	363.00	437.00	470.00	522.00	568.00			
40.0	114.50	148.50	189.00	237.00	293.00	358.00	432.00	464.00	515.00	561.00	610.00	715.00	
45.0	109.50	143.50	184.00	232.00	287.00	351.00	425.00	457.00	508.00	554.00	602.00	707.00	823.00
50.0	104.00	138.50	178.50	226.00	281.00	344.00	417.00	449.00	500.00	545.00	593.00	697.00	813.00
55.0	98.40	132.50	172.50	219.00	274.00	337.00	409.00	440.00	491.00	536.00	583.00	687.00	802.00
60.0	91.90	126.00	165.50	212.00	266.00	328.00	399.00	430.00	480.00	525.00	572.00	675.00	790.00
65.0	84.90	119.00	158.50	204.00	257.00	318.00	389.00	420.00	469.00	513.00	560.00	662.00	777.00
70.0	77.30	111.50	150.00	195.00	247.00	307.00	377.00	407.00	456.00	500.00	547.00	648.00	762.00
75.0		103.00	141.00	185.00	236.00	295.00	364.00	394.00	443.00	486.00	532.00	633.00	747.00
80.0			131.50	174.50	224.00	282.00	350.00	380.00	428.00	471.00	517.00	618.00	732.00
85.0			120.50	162.50	211.00	268.00	335.00	365.00	412.00	455.00	501.00	602.00	716.00

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	605
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

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