



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

6MKD-50X

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	34.40												
20.0	32.90	41.50											
25.0	30.90	39.20	49.40	61.70									
30.0	28.90	36.90	46.70	58.40	72.30	88.40							
35.0	26.80	34.50	43.80	55.00	68.10	83.40	101.00	109.00	121.50	132.50			
40.0	24.80	32.10	40.90	51.40	63.80	78.20	94.80	102.00	114.00	124.50	135.50		
45.0	22.60	29.60	38.00	47.80	59.40	72.90	88.40	95.20	106.00	116.00	126.50		
50.0	20.50	27.10	34.90	44.10	54.90	67.40	81.90	88.20	98.30	107.50	117.00		
55.0		24.60	31.80	40.40	50.30	61.90	75.10	81.00	90.30	98.70	107.50		
60.0		22.00	28.70	36.50	45.60	56.20	68.30	73.60	82.10	89.70	97.80		
65.0			25.50	32.60	40.90	50.40	61.30	66.10	73.80	80.70	88.00		
70.0			22.30	28.70	36.00	44.50	54.20	58.50	65.40	71.50	77.90		
75.0				24.70	31.10	38.50	47.10	50.80	56.80	62.10	67.80		
80.0				20.60	26.10	32.50	39.80	43.00	48.10	52.60	57.50		
85.0					21.10	26.30	32.40	35.00	39.30	43.00	47.00		

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	11.65												
20.0	12.20	13.35											
25.0	12.75	14.15	15.35	16.40									
30.0	13.25	14.85	16.30	17.55	18.65	19.50							
35.0	13.65	15.45	17.10	18.65	20.00	21.20	22.00	22.30	22.60	22.70			
40.0	13.95	15.90	17.85	19.65	21.30	22.70	23.90	24.30	24.80	25.20	25.40		
45.0	14.10	16.30	18.45	20.50	22.40	24.10	25.70	26.20	26.90	27.40	27.90		
50.0	14.20	16.55	18.90	21.20	23.40	25.40	27.30	28.00	28.90	29.60	30.20		
55.0		16.75	19.30	21.80	24.30	26.60	28.80	29.60	30.70	31.60	32.40		
60.0		16.80	19.55	22.30	25.00	27.60	30.10	31.10	32.40	33.50	34.50		
65.0			19.70	22.70	25.70	28.60	31.30	32.40	34.00	35.20	36.40		
70.0			19.70	22.90	26.20	29.30	32.40	33.60	35.40	36.80	38.20		
75.0				23.10	26.50	30.00	33.40	34.70	36.70	38.30	39.80		
80.0				23.10	26.80	30.50	34.20	35.60	37.80	39.60	41.30		
85.0					26.90	30.90	34.90	36.40	38.80	40.70	42.60		

Additional restrictions, please see application guidelines

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	38.88												
20.0	39.22	40.04											
25.0	39.62	40.63	41.64	42.56									
30.0	39.99	41.18	42.43	43.64	44.71	45.56							
35.0	40.30	41.68	43.16	44.66	46.07	47.30	48.26	48.55	48.86	49.00			
40.0	40.55	42.11	43.83	45.61	47.35	48.97	50.37	50.84	51.45	51.84	52.12		
45.0	40.72	42.47	44.43	46.49	48.56	50.56	52.39	53.05	53.95	54.60	55.15		
50.0	40.81	42.74	44.93	47.27	49.68	52.05	54.31	55.16	56.35	57.26	58.08		
55.0		42.92	45.33	47.95	50.69	53.44	56.13	57.16	58.64	59.81	60.90		
60.0		42.98	45.62	48.52	51.58	54.72	57.83	59.04	60.82	62.24	63.60		
65.0			45.78	48.96	52.35	55.86	59.40	60.80	62.86	64.54	66.17		
70.0			45.81	49.26	52.98	56.86	60.82	62.40	64.76	66.69	68.59		
75.0				49.42	53.45	57.71	62.09	63.86	66.50	68.69	70.85		
80.0				49.41	53.77	58.39	63.20	65.14	68.08	70.52	72.95		
85.0					53.90	58.90	64.12	66.25	69.47	72.17	74.86		

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	191.50												
20.0	188.50	239.00											
25.0	185.00	235.00	297.00	372.00									
30.0	180.50	231.00	293.00	368.00	457.00	563.00							
35.0	176.00	227.00	289.00	364.00	452.00	557.00	679.00	733.00	821.00	900.00			
40.0	170.50	222.00	284.00	358.00	446.00	550.00	671.00	725.00	812.00	890.00	974.00		
45.0	165.00	217.00	278.00	352.00	440.00	542.00	662.00	715.00	801.00	879.00	963.00		
50.0	159.00	210.00	272.00	345.00	432.00	533.00	652.00	705.00	790.00	867.00	949.00		
55.0		204.00	265.00	338.00	423.00	523.00	641.00	693.00	777.00	853.00	935.00		
60.0		196.00	257.00	329.00	413.00	512.00	628.00	679.00	762.00	837.00	918.00		
65.0			248.00	319.00	402.00	500.00	613.00	664.00	746.00	820.00	900.00		
70.0			238.00	308.00	390.00	485.00	597.00	647.00	728.00	801.00	880.00		
75.0				296.00	376.00	470.00	580.00	629.00	709.00	781.00	859.00		
80.0				282.00	361.00	453.00	562.00	611.00	690.00	762.00	839.00		
85.0					347.00	439.00	548.00	597.00	676.00	749.00	827.00		

Additional restrictions, please see application guidelines

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

Number of cylinders	6
Displacement @ 50 Hz, m³/h	153
Bore/Stroke, mm	80.6/57.5
Length/Width, mm	773/547
Height, mm	450
Net Weight, kg	236
Suction, inch	2 5/8
Discharge, inch	1 5/8
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	75
Sound Power (MT), dBA	86
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
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	92.9
Locked Rotor Current, A	393
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

CoreSense Protection (-P)	Motor protection
Mounting Parts	Spring
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
Mounting Parts	Rubber
Digital Modulation	33-66%
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
Oil Pressure Switch	OPS2 Electronic Switch
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Copeland Compressor Electronic module	Modbus extension module

### MOTOR OPTIONS

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
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
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