



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

6MKD-50X

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	24.30													
20.0	23.10	30.10												
25.0	21.60	28.40	36.80	47.10										
30.0	20.10	26.60	34.60	44.50	56.40	70.50								
35.0	18.50	24.70	32.40	41.80	53.10	66.60	82.40	89.40	100.50	111.00				
40.0	16.90	22.80	30.10	39.10	49.80	62.60	77.60	84.20	95.00	104.50	115.00	138.00		
45.0	15.25	20.90	27.80	36.20	46.40	58.50	72.70	79.00	89.30	98.50	108.50	130.50	155.00	
50.0	13.60	18.95	25.50	33.40	42.90	54.30	67.70	73.70	83.40	92.20	101.50	122.50	146.00	
55.0	11.95	17.00	23.10	30.50	39.50	50.10	62.70	68.40	77.50	85.70	94.60	114.50	137.00	
60.0	10.30	15.00	20.70	27.60	35.90	45.90	57.60	62.90	71.50	79.20	87.60	106.00	127.50	
65.0	8.65	13.05	18.30	24.70	32.40	41.60	52.50	57.40	65.40	72.70	80.50	97.90	118.00	
70.0	7.02	11.05	15.90	21.70	28.80	37.20	47.30	51.90	59.30	66.00	73.30	89.60	108.50	
75.0		9.11	13.50	18.75	25.10	32.90	42.10	46.30	53.10	59.30	66.10	81.20	98.80	
80.0			11.10	15.80	21.50	28.50	36.90	40.70	46.90	52.60	58.80	72.80	89.00	
85.0			8.73	12.85	17.90	24.10	31.60	35.00	40.70	45.80	51.50	64.30	79.30	

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	9.57													
20.0	10.00	11.00												
25.0	10.50	11.65	12.65	13.55										
30.0	10.85	12.20	13.45	14.50	15.40	16.10								
35.0	11.15	12.65	14.10	15.40	16.55	17.50	18.20	18.40	18.60	18.70				
40.0	11.35	13.05	14.65	16.20	17.60	18.80	19.80	20.10	20.60	20.80	21.00	21.10		
45.0	11.50	13.30	15.15	16.90	18.55	20.00	21.30	21.80	22.40	22.80	23.20	23.60	23.70	
50.0	11.50	13.50	15.50	17.45	19.35	21.10	22.70	23.30	24.10	24.70	25.20	26.10	26.60	
55.0	11.40	13.55	15.75	17.95	20.10	22.10	24.00	24.70	25.70	26.40	27.10	28.40	29.30	
60.0	11.20	13.55	15.90	18.30	20.70	22.90	25.10	25.90	27.10	28.10	28.90	30.50	31.80	
65.0	10.95	13.40	15.95	18.55	21.10	23.70	26.10	27.10	28.50	29.60	30.60	32.60	34.30	
70.0	10.55	13.15	15.90	18.65	21.50	24.30	27.00	28.10	29.70	30.90	32.10	34.50	36.50	
75.0		12.80	15.70	18.70	21.70	24.80	27.80	29.00	30.70	32.20	33.60	36.20	38.70	
80.0			15.40	18.60	21.80	25.10	28.40	29.70	31.70	33.30	34.80	37.80	40.70	
85.0			14.95	18.35	21.80	25.40	28.90	30.30	32.50	34.20	35.90	39.30	42.50	

50 Hz

6MKD-50X

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	37.58												
20.0	37.82	38.44											
25.0	38.10	38.83	39.57	40.24									
30.0	38.35	39.20	40.10	40.98	41.76	42.34							
35.0	38.57	39.53	40.60	41.70	42.74	43.63	44.30	44.48	44.65	44.69			
40.0	38.74	39.81	41.05	42.36	43.66	44.88	45.91	46.26	46.69	46.95	47.11	47.10	
45.0	38.85	40.03	41.43	42.96	44.53	46.06	47.47	47.97	48.66	49.15	49.55	50.07	50.11
50.0	38.89	40.19	41.75	43.50	45.33	47.18	48.95	49.62	50.56	51.28	51.92	52.96	53.57
55.0	38.85	40.27	42.00	43.95	46.06	48.22	50.36	51.18	52.38	53.33	54.22	55.77	56.96
60.0	38.73	40.25	42.15	44.32	46.69	49.16	51.67	52.66	54.11	55.29	56.41	58.49	60.24
65.0	38.50	40.14	42.20	44.58	47.21	50.01	52.88	54.03	55.74	57.14	58.51	61.10	63.43
70.0	38.17	39.92	42.14	44.74	47.63	50.74	53.98	55.29	57.26	58.89	60.50	63.60	66.50
75.0		39.57	41.95	44.77	47.93	51.35	54.96	56.43	58.65	60.51	62.36	65.98	69.45
80.0			41.64	44.67	48.09	51.83	55.80	57.43	59.91	61.99	64.08	68.23	72.26
85.0			41.18	44.42	48.11	52.16	56.50	58.29	61.03	63.34	65.67	70.33	74.93

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	152.00												
20.0	150.00	191.00											
25.0	147.00	188.00	239.00	299.00									
30.0	143.50	185.00	235.00	296.00	366.00	448.00							
35.0	139.00	181.00	232.00	292.00	362.00	444.00	537.00	578.00	643.00	701.00			
40.0	134.50	176.50	227.00	287.00	357.00	438.00	531.00	572.00	636.00	694.00	755.00	887.00	
45.0	129.00	171.50	222.00	282.00	352.00	432.00	524.00	565.00	629.00	686.00	747.00	878.00	1025.00
50.0	123.00	166.00	217.00	276.00	345.00	425.00	517.00	557.00	621.00	677.00	738.00	869.00	1014.00
55.0	116.00	159.50	210.00	269.00	338.00	417.00	508.00	548.00	611.00	668.00	728.00	858.00	1003.00
60.0	108.00	152.00	203.00	261.00	329.00	408.00	498.00	538.00	601.00	657.00	716.00	846.00	991.00
65.0	99.00	143.50	194.00	253.00	320.00	398.00	487.00	526.00	589.00	645.00	704.00	833.00	978.00
70.0	88.70	134.00	184.50	243.00	310.00	387.00	475.00	514.00	576.00	632.00	691.00	819.00	964.00
75.0		122.50	173.50	231.00	298.00	374.00	462.00	500.00	562.00	617.00	676.00	805.00	949.00
80.0			161.00	218.00	284.00	360.00	447.00	485.00	547.00	602.00	661.00	789.00	934.00
85.0			146.00	204.00	269.00	345.00	432.00	470.00	532.00	587.00	646.00	775.00	921.00

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	605
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

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

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
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