



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

50 Hz

6MK-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
10.0	28.20	35.80	45.30	56.80									
15.0	27.00	34.30	43.40	54.60	67.90								
20.0	25.60	32.70	41.50	52.20	65.10	80.20							
25.0	24.30	31.10	39.60	49.80	62.10	76.50	93.40						
30.0	22.80	29.50	37.60	47.30	59.00	72.80	88.80	95.90	107.50	117.50			
35.0	21.40	27.70	35.50	44.80	55.90	69.00	84.20	90.90	101.50	111.50	122.00		
40.0	19.90	26.00	33.30	42.20	52.70	65.00	79.40	85.80	96.00	105.00	115.00		
45.0	18.35	24.10	31.10	39.50	49.40	61.00	74.60	80.60	90.20	98.80	108.00		
50.0	16.80	22.30	28.90	36.80	46.10	57.00	69.70	75.30	84.30	92.30	101.00		
55.0		20.40	26.60	34.00	42.70	52.90	64.70	69.90	78.30	85.80	93.80		
60.0		18.50	24.30	31.20	39.20	48.70	59.60	64.40	72.20	79.20	86.60		
65.0			22.00	28.30	35.70	44.40	54.50	58.90	66.10	72.50	79.30		
70.0			19.60	25.40	32.20	40.10	49.30	53.40	59.90	65.70	71.90		
75.0				22.50	28.60	35.80	44.10	47.80	53.60	58.90	64.50		
80.0				19.55	25.00	31.40	38.90	42.10	47.40	52.10	57.10		
85.0					21.40	27.00	33.60	36.40	41.10	45.20	49.60		

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
10.0	8.81	9.42	9.83	9.98									
15.0	9.45	10.25	10.85	11.25	11.35								
20.0	10.00	11.00	11.80	12.45	12.80	12.90							
25.0	10.50	11.65	12.65	13.55	14.15	14.55	14.65						
30.0	10.85	12.20	13.45	14.50	15.40	16.10	16.45	16.55	16.55	16.45			
35.0	11.15	12.65	14.10	15.40	16.55	17.50	18.20	18.40	18.60	18.70	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		
45.0	11.50	13.30	15.15	16.90	18.55	20.00	21.30	21.80	22.40	22.80	23.20		
50.0	11.50	13.50	15.50	17.45	19.35	21.10	22.70	23.30	24.10	24.70	25.20		
55.0		13.55	15.75	17.95	20.10	22.10	24.00	24.70	25.70	26.40	27.10		
60.0		13.55	15.90	18.30	20.70	22.90	25.10	25.90	27.10	28.10	28.90		
65.0			15.95	18.55	21.10	23.70	26.10	27.10	28.50	29.60	30.60		
70.0			15.90	18.65	21.50	24.30	27.00	28.10	29.70	30.90	32.10		
75.0				18.70	21.70	24.80	27.80	29.00	30.70	32.20	33.60		
80.0				18.60	21.80	25.10	28.40	29.70	31.70	33.30	34.80		
85.0					21.80	25.40	28.90	30.30	32.50	34.20	35.90		

50 Hz

6MK-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
10.0	37.23	37.61	37.86	37.87									
15.0	37.52	38.03	38.44	38.67	38.64								
20.0	37.82	38.44	39.01	39.46	39.70	39.64							
25.0	38.10	38.83	39.57	40.24	40.74	41.00	40.93						
30.0	38.35	39.20	40.10	40.98	41.76	42.34	42.64	42.66	42.57	42.38			
35.0	38.57	39.53	40.60	41.70	42.74	43.63	44.30	44.48	44.65	44.69	44.61		
40.0	38.74	39.81	41.05	42.36	43.66	44.88	45.91	46.26	46.69	46.95	47.11		
45.0	38.85	40.03	41.43	42.96	44.53	46.06	47.47	47.97	48.66	49.15	49.55		
50.0	38.89	40.19	41.75	43.50	45.33	47.18	48.95	49.62	50.56	51.28	51.92		
55.0		40.27	42.00	43.95	46.06	48.22	50.36	51.18	52.38	53.33	54.22		
60.0		40.25	42.15	44.32	46.69	49.16	51.67	52.66	54.11	55.29	56.41		
65.0			42.20	44.58	47.21	50.01	52.88	54.03	55.74	57.14	58.51		
70.0			42.14	44.74	47.63	50.74	53.98	55.29	57.26	58.89	60.50		
75.0				44.77	47.93	51.35	54.96	56.43	58.65	60.51	62.36		
80.0				44.67	48.09	51.83	55.80	57.43	59.91	61.99	64.08		
85.0					48.11	52.16	56.50	58.29	61.03	63.34	65.67		

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
10.0	143.00	182.00	231.00	291.00									
15.0	141.50	180.50	229.00	289.00	361.00								
20.0	140.00	179.00	228.00	287.00	359.00	445.00							
25.0	137.50	177.00	226.00	285.00	357.00	442.00	542.00						
30.0	135.00	174.50	223.00	282.00	353.00	438.00	538.00	583.00	655.00	721.00			
35.0	132.00	171.50	220.00	279.00	350.00	434.00	533.00	577.00	649.00	715.00	785.00		
40.0	128.50	168.00	216.00	275.00	345.00	429.00	527.00	571.00	643.00	708.00	778.00		
45.0	124.50	164.00	212.00	271.00	340.00	423.00	521.00	564.00	635.00	700.00	769.00		
50.0	120.00	159.50	208.00	266.00	335.00	417.00	513.00	557.00	627.00	691.00	759.00		
55.0		154.50	203.00	260.00	328.00	409.00	505.00	548.00	617.00	680.00	749.00		
60.0		149.00	196.50	254.00	321.00	401.00	496.00	538.00	607.00	669.00	737.00		
65.0			190.00	246.00	313.00	392.00	485.00	527.00	595.00	657.00	724.00		
70.0			182.50	238.00	304.00	382.00	474.00	515.00	582.00	643.00	709.00		
75.0				228.00	293.00	370.00	461.00	501.00	568.00	628.00	694.00		
80.0				218.00	282.00	357.00	447.00	487.00	553.00	612.00	678.00		
85.0					269.00	343.00	432.00	472.00	537.00	597.00	662.00		

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	230
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
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	416
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

Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Capacity Control	Capacity Steps 67/33 %
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
Digital Modulation	33-100 %
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	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