



Minimum Evaporating Temp. With:

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

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

50 Hz

6MK-50

R454C Dew Point

Suction Return Temperature 18.3°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW												
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	30.10	38.50	49.30	62.50	78.50								
15.0	28.50	36.70	47.10	59.80	75.00	93.10							
20.0	26.90	34.80	44.80	56.90	71.50	88.60	108.50	131.50					
25.0	25.30	32.90	42.50	54.00	67.80	84.10	103.00	125.00	149.50	160.50			
30.0	23.60	31.00	40.10	51.00	64.10	79.40	97.30	118.00	141.50	151.50	168.00	182.50	
35.0		29.10	37.70	48.00	60.30	74.70	91.50	111.00	133.00	142.50	158.00	172.00	
40.0		27.00	35.20	44.90	56.40	69.80	85.50	103.50	124.50	133.50	148.00	161.00	
45.0			32.60	41.60	52.30	64.90	79.50	96.30	115.50	124.00	137.50	149.50	
50.0				38.30	48.20	59.80	73.20	88.80	106.50	114.50	127.00	138.00	
55.0				35.00	44.00	54.60	66.90	81.10	97.50	105.00	116.50	126.50	
60.0					39.70	49.20	60.40	73.30	88.30	94.80	105.50	115.00	
65.0					35.20	43.80	53.70	65.40	78.80	84.70	94.30	103.00	
70.0						38.20	46.90	57.20	69.20	74.50	83.00	90.70	

Cond °C	Power, kW												
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	12.20	13.30	14.30	15.10	15.65								
15.0	12.85	14.15	15.35	16.45	17.30	17.85							
20.0	13.40	14.90	16.35	17.70	18.85	19.70	20.30	20.40					
25.0	13.95	15.60	17.30	18.85	20.30	21.50	22.40	22.90	23.00	22.90			
30.0	14.40	16.25	18.15	20.00	21.70	23.20	24.40	25.30	25.80	25.90	25.80	25.60	
35.0		16.80	18.95	21.00	23.00	24.80	26.40	27.60	28.50	28.80	29.00	29.00	
40.0		17.30	19.65	22.00	24.20	26.30	28.20	29.80	31.10	31.50	32.00	32.20	
45.0			20.30	22.80	25.30	27.80	30.00	32.00	33.60	34.20	34.90	35.40	
50.0				23.60	26.40	29.10	31.70	34.00	36.10	36.80	37.70	38.40	
55.0				24.30	27.40	30.40	33.30	35.90	38.40	39.30	40.50	41.40	
60.0					28.30	31.60	34.80	37.80	40.60	41.60	43.10	44.20	
65.0					29.10	32.70	36.20	39.60	42.70	43.90	45.60	47.00	
70.0						33.70	37.50	41.20	44.80	46.10	48.10	49.60	

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

50 Hz

6MK-50

R454C Dew Point

Cond °C	Current at 400 V, A												
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	38.87	39.74	40.57	41.27	41.74								
15.0	39.34	40.38	41.43	42.40	43.18	43.70							
20.0	39.79	41.02	42.29	43.53	44.64	45.53	46.11	46.28					
25.0	40.22	41.63	43.14	44.66	46.10	47.37	48.37	49.02	49.22	49.16			
30.0	40.60	42.20	43.96	45.77	47.55	49.20	50.64	51.77	52.50	52.66	52.74	52.65	
35.0		42.73	44.74	46.85	48.97	51.02	52.90	54.52	55.79	56.18	56.62	56.83	
40.0		43.20	45.47	47.88	50.36	52.81	55.14	57.26	59.08	59.70	60.50	61.03	
45.0			46.13	48.86	51.70	54.56	57.35	59.98	62.35	63.20	64.37	65.22	
50.0				49.77	52.98	56.26	59.52	62.65	65.58	66.68	68.21	69.39	
55.0				50.60	54.19	57.89	61.62	65.28	68.78	70.12	72.03	73.53	
60.0					55.31	59.45	63.66	67.85	71.93	73.50	75.80	77.63	
65.0					56.33	60.91	65.61	70.34	75.00	76.83	79.51	81.68	
70.0						62.27	67.47	72.74	78.00	80.08	83.15	85.65	

Cond °C	Suction Mass Flow, g/s												
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	143.00	184.00	236.00	300.00	379.00								
15.0	140.50	181.50	233.00	297.00	375.00	468.00							
20.0	137.50	178.50	230.00	294.00	371.00	463.00	570.00	697.00					
25.0	134.50	176.00	227.00	290.00	366.00	457.00	563.00	688.00	833.00	898.00			
30.0	131.00	172.50	224.00	286.00	361.00	451.00	556.00	679.00	822.00	886.00	989.00	1082.00	
35.0		169.00	220.00	282.00	356.00	444.00	547.00	669.00	811.00	874.00	976.00	1068.00	
40.0		165.00	216.00	276.00	349.00	436.00	538.00	658.00	798.00	860.00	961.00	1053.00	
45.0			211.00	271.00	342.00	427.00	527.00	645.00	783.00	845.00	945.00	1036.00	
50.0				264.00	334.00	417.00	515.00	631.00	768.00	829.00	928.00	1019.00	
55.0				256.00	325.00	406.00	502.00	616.00	751.00	811.00	909.00	999.00	
60.0					315.00	394.00	488.00	600.00	732.00	792.00	890.00	979.00	
65.0					303.00	380.00	472.00	582.00	713.00	772.00	869.00	958.00	
70.0						366.00	455.00	563.00	692.00	751.00	848.00	938.00	

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	6
Displacement @ 50 Hz, m ³ /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
Base mounting (hole dia), mm	381 x 305 (18)
Sound Pressure @ 1m (LT), dBA	80
Sound Power (LT), dBA	91
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
Sound Pressure @ 1m (MT), dBA	76
Sound Power (MT), dBA	87
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	148
Refrigerant's classification	A2L

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)

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

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

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Capacity Steps 67/33 %
Crankcase Heater	100 W Internal
Oil Pressure Switch	OPS2 Electronic Switch
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Sound Attenuation	Sound Shell
Mounting Parts	Rubber
Digital Modulation	33-100 %
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

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only