



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

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
10.0	37.50	47.10	58.70	72.60	88.90					
15.0	35.60	44.90	56.10	69.40	85.10	103.50				
20.0	33.80	42.70	53.40	66.20	81.10	98.60	119.00			
25.0	31.80	40.40	50.70	62.80	77.10	93.70	113.00	121.50	135.00	147.00
30.0		38.00	47.80	59.30	72.80	88.60	107.00	115.00	127.50	139.50
35.0		35.60	44.90	55.70	68.50	83.40	100.50	108.00	120.50	131.50
40.0		33.20	41.90	52.10	64.10	78.00	94.20	101.50	113.00	123.00
45.0			38.80	48.30	59.50	72.60	87.70	94.40	105.00	115.00
50.0			35.70	44.50	54.90	67.00	81.00	87.30	97.30	106.50
55.0				40.70	50.20	61.30	74.30	80.10	89.40	97.80
60.0				36.80	45.40	55.60	67.40			
62.0				35.20	43.50	53.20				

50 Hz

4MKD-35X 100% Loaded

R407A Dew Point

Cond °C	Power, kW									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
10.0	10.20	10.85	11.40	11.85	12.15					
15.0	11.00	11.80	12.50	13.05	13.50	13.80				
20.0	11.75	12.75	13.60	14.30	14.90	15.40	15.70			
25.0	12.50	13.65	14.70	15.60	16.40	17.05	17.55	17.70	17.85	17.95
30.0		14.55	15.80	16.95	17.90	18.75	19.45	19.65	19.95	20.20
35.0		15.40	16.90	18.20	19.45	20.50	21.40	21.70	22.10	22.50
40.0		16.20	17.90	19.50	20.90	22.20	23.40	23.80	24.40	24.80
45.0			18.85	20.70	22.40	24.00	25.40	25.90	26.60	27.20
50.0			19.65	21.80	23.80	25.60	27.30	28.00	28.90	29.60
55.0				22.80	25.10	27.30	29.30	30.00	31.10	31.90
60.0				23.70	26.30	28.80	31.10			
62.0				24.00	26.80	29.40				

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
10.0	25.17	25.67	26.14	26.54	26.83					
15.0	25.77	26.47	27.15	27.75	28.24	28.57				
20.0	26.45	27.40	28.31	29.15	29.87	30.44	30.82			
25.0	27.18	28.40	29.59	30.70	31.69	32.53	33.18	33.37	33.59	33.69
30.0		29.44	30.93	32.34	33.64	34.78	35.73	36.05	36.44	36.70
35.0		30.46	32.29	34.05	35.68	37.16	38.44	38.89	39.49	39.91
40.0		31.42	33.63	35.76	37.76	39.61	41.27	41.86	42.68	43.28
45.0			34.89	37.43	39.84	42.09	44.15	44.91	45.97	46.77
50.0			36.03	39.01	41.86	44.56	47.05	47.98	49.30	50.33
55.0				40.46	43.79	46.95	49.92	51.04	52.64	53.90
60.0				41.73	45.57	49.24	52.71			
62.0				42.17	46.22	50.11				

50 Hz

4MKD-35X 100% Loaded

R407A Dew Point

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
10.0	176.00	222.00	278.00	345.00	426.00					
15.0	173.00	219.00	275.00	342.00	422.00	517.00				
20.0	170.00	216.00	272.00	338.00	418.00	512.00	622.00			
25.0	166.50	213.00	268.00	334.00	413.00	506.00	616.00	665.00	745.00	817.00
30.0		209.00	264.00	329.00	407.00	499.00	608.00	657.00	736.00	809.00
35.0		204.00	259.00	323.00	400.00	492.00	600.00	648.00	727.00	799.00
40.0		199.50	253.00	317.00	393.00	483.00	590.00	638.00	717.00	788.00
45.0			247.00	310.00	385.00	474.00	579.00	627.00	705.00	777.00
50.0			240.00	302.00	376.00	463.00	568.00	615.00	693.00	764.00
55.0				294.00	366.00	452.00	555.00	602.00	679.00	750.00
60.0				285.00	355.00	440.00	542.00			
62.0				281.00	351.00	435.00				

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	99.4
Bore/Stroke, mm	80.6/56.0
Length/Width, mm	688/501
Height, mm	452
Net Weight, kg	202
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	73
Sound Power (MT), dBA	84
Sound Power with Sound Shell (MT), dBA	72
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
Sound Pressure @ 1m (HT), dBA	73
Sound Power (HT), dBA	84
Sound Power with Sound Shell (HT), dBA	72
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 55 / 20 °C at 50 Hz
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Digital Modulation	50-100%
Refrigerant's GWP	2107
Refrigerant's classification	A1

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	61.1
Locked Rotor Current, A	255
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
Adapter Kit	For Parallel Operation
Digital Modulation	50-100 %
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
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