



Minimum Evaporating Temp. With:

— 20 °C Suction Gas Return

— Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

4MLD-15X 100% Loaded

R134a

Cond °C	Cooling Capacity, kW							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	20.30	25.90	32.70					
15.0	19.15	24.60	31.20	39.10				
20.0	18.00	23.20	29.60	37.20	46.10			
25.0	16.85	21.90	28.00	35.20	43.80	53.70	58.10	
30.0	15.70	20.50	26.30	33.20	41.40	50.90	55.10	61.90
35.0	14.50	19.10	24.60	31.20	39.00	48.00	52.00	58.50
40.0	13.35	17.70	22.90	29.20	36.50	45.10	48.90	55.10
45.0	12.20	16.35	21.20	27.10	34.00	42.10	45.70	51.60
50.0	11.05	14.95	19.55	25.00	31.50	39.10	42.50	48.10
55.0	9.97	13.55	17.85	22.90	29.00	36.10	39.30	44.50
60.0		12.25	16.15	20.80	26.40	33.10	36.00	40.90
65.0			14.50	18.75	23.90	30.00	32.80	37.30
70.0			12.85	16.70	21.40	26.90	29.50	33.60
75.0				14.65	18.80	23.90	26.20	30.00
80.0				12.65	16.30	20.80	22.90	26.30

Cond °C	Power, kW							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	4.96	5.17	5.26					
15.0	5.34	5.66	5.88	5.95				
20.0	5.70	6.13	6.47	6.68	6.74			
25.0	6.03	6.58	7.03	7.37	7.57	7.61	7.57	
30.0	6.34	6.99	7.57	8.03	8.38	8.56	8.59	8.57
35.0	6.63	7.38	8.07	8.67	9.14	9.48	9.57	9.65
40.0	6.89	7.74	8.54	9.26	9.88	10.35	10.50	10.70
45.0	7.12	8.08	8.99	9.83	10.60	11.20	11.40	11.70
50.0	7.32	8.38	9.40	10.35	11.25	12.00	12.30	12.65
55.0	7.49	8.65	9.78	10.85	11.85	12.80	13.10	13.55
60.0		8.89	10.10	11.30	12.45	13.50	13.90	14.45
65.0			10.45	11.75	13.00	14.20	14.65	15.30
70.0			10.70	12.15	13.55	14.85	15.35	16.10
75.0				12.50	14.00	15.45	16.00	16.85
80.0				12.80	14.45	16.05	16.65	17.55

50 Hz

4MLD-15X 100% Loaded

R134a

Cond °C	Current at 400 V, A							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	13.36	13.54	13.60					
15.0	13.69	13.99	14.19	14.25				
20.0	14.02	14.44	14.79	15.01	15.06			
25.0	14.34	14.90	15.39	15.77	16.00	16.02	15.96	
30.0	14.66	15.34	15.98	16.53	16.94	17.16	17.19	17.15
35.0	14.96	15.77	16.56	17.28	17.87	18.30	18.41	18.51
40.0	15.24	16.18	17.12	18.01	18.79	19.43	19.63	19.86
45.0	15.50	16.57	17.67	18.72	19.70	20.54	20.83	21.20
50.0	15.72	16.94	18.18	19.41	20.58	21.63	22.00	22.52
55.0	15.91	17.27	18.67	20.07	21.43	22.69	23.16	23.81
60.0		17.55	19.11	20.69	22.24	23.72	24.28	25.07
65.0			19.52	21.28	23.02	24.71	25.36	26.30
70.0			19.88	21.81	23.76	25.66	26.40	27.48
75.0				22.30	24.44	26.57	27.40	28.62
80.0				22.73	25.08	27.42	28.34	29.71

Cond °C	Suction Mass Flow, g/s							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	112.00	140.50	175.00					
15.0	110.50	139.00	173.00	213.00				
20.0	108.00	137.00	171.00	211.00	257.00			
25.0	105.50	134.50	168.50	208.00	254.00	306.00	328.00	
30.0	103.00	132.00	165.50	205.00	250.00	302.00	325.00	361.00
35.0	100.00	129.00	162.50	202.00	247.00	298.00	321.00	356.00
40.0	97.20	126.00	159.50	198.00	243.00	294.00	316.00	351.00
45.0	94.00	122.50	156.00	194.00	238.00	289.00	311.00	346.00
50.0	90.70	119.00	152.00	189.50	233.00	283.00	305.00	340.00
55.0	87.30	115.50	148.00	185.00	228.00	277.00	299.00	333.00
60.0		112.00	143.50	180.00	222.00	270.00	292.00	326.00
65.0			139.00	174.50	215.00	263.00	284.00	318.00
70.0			134.00	168.50	209.00	255.00	276.00	310.00
75.0				162.50	202.00	247.00	268.00	301.00
80.0				156.50	194.00	239.00	259.00	291.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	71.4
Bore/Stroke, mm	68.3/56.0
Length/Width, mm	638/501
Height, mm	452
Net Weight, kg	186
Suction, inch	1 5/8
Discharge, inch	1 1/8
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	68
Sound Power (MT), dBA	79
Sound Power with Sound Shell (MT), dBA	65
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	50-100%
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	35.4
Locked Rotor Current, A	156
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
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Oil Pressure Switch	OPS2 Electronic Switch
Digital Modulation	50-100 %
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
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
AWC	208-230 V / 3~ / 60 Hz	230	YY/Y	Y	2.19
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