



Minimum Evaporating Temp. With:

- 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

Additional restrictions, please see application guidelines

50 Hz

4ML-15X

R513A

Cond °C	Cooling Capacity, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	19.60	24.40	30.40	37.60					
15.0	18.50	23.20	28.90	35.80	43.90				
20.0	17.35	21.90	27.40	34.00	41.70	50.60			
25.0	16.25	20.60	25.80	32.10	39.40	47.90	57.70		
30.0	15.10	19.20	24.20	30.10	37.10	45.10	54.30	58.40	64.90
35.0	13.90	17.85	22.60	28.10	34.70	42.20	50.90	54.70	60.80
40.0	12.75	16.45	20.90	26.10	32.20	39.30	47.40	51.00	56.70
45.0	11.60	15.10	19.20	24.10	29.80	36.30	43.90	47.20	52.50
50.0	10.45	13.70	17.50	22.00	27.20	33.30	40.30	43.30	48.20
55.0		12.30	15.80	19.90	24.70	30.20	36.60	39.40	43.80
60.0		10.95	14.10	17.80	22.10	27.10	32.90	35.40	39.40
65.0			12.40	15.70	19.55	24.00	29.20	31.40	35.00
70.0			10.75	13.60	17.00	20.90	25.40	27.40	30.50
75.0				11.55	14.40	17.75	21.60	23.30	26.00
80.0				9.45	11.85	14.60	17.85	19.25	21.50
85.0					9.27	11.50	14.05	15.20	17.05

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	5.25	5.46	5.52	5.42					
15.0	5.57	5.91	6.13	6.20	6.09				
20.0	5.85	6.32	6.68	6.92	7.00	6.90			
25.0	6.10	6.68	7.18	7.58	7.84	7.94	7.85		
30.0	6.31	7.00	7.63	8.18	8.61	8.91	9.03	9.03	8.96
35.0	6.48	7.28	8.03	8.72	9.32	9.80	10.10	10.20	10.30
40.0	6.62	7.51	8.38	9.20	9.96	10.60	11.15	11.30	11.50
45.0	6.73	7.70	8.68	9.63	10.55	11.35	12.05	12.30	12.65
50.0	6.80	7.85	8.93	10.00	11.05	12.00	12.90	13.25	13.70
55.0		7.96	9.13	10.30	11.50	12.60	13.70	14.10	14.65
60.0		8.03	9.28	10.55	11.85	13.15	14.35	14.85	15.55
65.0			9.38	10.75	12.15	13.60	14.95	15.50	16.30
70.0			9.44	10.90	12.40	13.95	15.50	16.10	17.00
75.0				11.00	12.60	14.25	15.95	16.60	17.60
80.0				11.05	12.75	14.50	16.35	17.05	18.15
85.0					12.80	14.70	16.60	17.40	18.60

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50 Hz

4ML-15X

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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
10.0	13.65	13.84	13.87	13.67					
15.0	13.91	14.25	14.46	14.50	14.30				
20.0	14.15	14.64	15.03	15.28	15.33	15.13			
25.0	14.38	15.00	15.56	16.02	16.31	16.39	16.21		
30.0	14.59	15.33	16.06	16.71	17.24	17.59	17.71	17.68	17.55
35.0	14.77	15.63	16.51	17.35	18.10	18.71	19.13	19.23	19.31
40.0	14.93	15.90	16.92	17.94	18.90	19.76	20.47	20.70	20.97
45.0	15.06	16.12	17.28	18.46	19.64	20.74	21.73	22.08	22.54
50.0	15.16	16.31	17.58	18.93	20.30	21.64	22.89	23.36	24.01
55.0		16.45	17.84	19.34	20.89	22.46	23.97	24.55	25.38
60.0		16.54	18.03	19.68	21.41	23.19	24.95	25.64	26.65
65.0			18.17	19.94	21.85	23.83	25.83	26.63	27.81
70.0			18.24	20.14	22.20	24.38	26.61	27.52	28.86
75.0				20.25	22.47	24.83	27.29	28.29	29.80
80.0				20.29	22.65	25.19	27.86	28.96	30.62
85.0					22.73	25.44	28.32	29.51	31.32

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
10.0	104.00	130.00	162.50	201.00					
15.0	102.00	128.00	160.50	199.00	245.00				
20.0	99.70	126.00	158.00	196.50	242.00	295.00			
25.0	97.10	123.50	155.00	193.50	238.00	291.00	353.00		
30.0	94.30	120.50	152.00	190.00	235.00	287.00	348.00	375.00	418.00
35.0	91.30	117.50	148.50	186.00	230.00	282.00	342.00	369.00	411.00
40.0	88.10	114.00	145.00	182.00	225.00	276.00	336.00	362.00	404.00
45.0	84.70	110.00	141.00	177.00	220.00	270.00	329.00	354.00	396.00
50.0	81.10	106.50	136.50	172.00	214.00	263.00	321.00	346.00	387.00
55.0		102.00	131.50	166.50	208.00	256.00	312.00	337.00	377.00
60.0		97.60	126.50	160.50	200.00	247.00	302.00	327.00	366.00
65.0			120.50	153.50	192.50	238.00	292.00	315.00	354.00
70.0			114.50	146.50	184.00	228.00	280.00	303.00	340.00
75.0				138.50	174.00	217.00	266.00	289.00	325.00
80.0				129.50	163.50	204.00	252.00	274.00	309.00
85.0					152.50	191.50	238.00	259.00	293.00

Additional restrictions, please see application guidelines

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	180
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
Refrigerant's GWP	631
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

Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
Copeland Compressor Electronic (-N)	Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement

Additional restrictions, please see application guidelines

ACCESSORIES OPTIONAL

Capacity Control	Capacity Steps 50%
Check Valve	For unloaded start operation
Mounting Parts	Rubber
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Oil Pressure Switch	OPS2 Electronic Switch
Adapter Kit	For Parallel Operation
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

Additional restrictions, please see application guidelines