



Minimum Evaporating Temp. With:

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

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW											
	-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	20.40	25.90	32.60									
15.0	19.40	24.70	31.10	39.00								
20.0	18.30	23.40	29.60	37.10	46.10							
25.0	17.15	22.10	28.10	35.30	43.80	53.90	58.30					
30.0	15.95	20.70	26.40	33.30	41.50	51.10	55.40	62.30	68.50			
35.0	14.75	19.30	24.80	31.40	39.20	48.30	52.40	59.00	64.90	71.20		
40.0	13.50	17.85	23.10	29.30	36.70	45.40	49.30	55.60	61.20	67.30	80.70	95.90
45.0	12.20	16.35	21.30	27.20	34.30	42.50	46.20	52.10	57.50	63.30	76.00	90.50
50.0	10.90	14.80	19.50	25.10	31.70	39.50	43.00	48.60	53.70	59.20	71.30	85.10
55.0	9.55	13.25	17.70	23.00	29.20	36.50	39.80	45.10	49.80	55.00	66.40	79.50
60.0		11.70	15.85	20.70	26.60	33.40	36.50	41.40	45.90	50.80	61.60	73.90
65.0			13.95	18.50	23.90	30.30	33.10	37.80	42.00	46.50	56.60	68.30
70.0			12.05	16.25	21.20	27.10	29.80	34.10	38.00	42.20	51.60	62.50
75.0				13.95	18.50	23.90	26.40	30.30	33.90	37.80	46.60	56.70
80.0				11.65	15.80	20.70	22.90	26.50	29.80	33.40	41.50	50.90

Cond °C	Power, kW											
	-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	5.14	5.31	5.33									
15.0	5.57	5.86	6.01	5.97								
20.0	5.96	6.36	6.65	6.76	6.67							
25.0	6.30	6.82	7.24	7.51	7.58	7.42	7.28					
30.0	6.61	7.24	7.78	8.20	8.45	8.48	8.42	8.24	8.02			
35.0	6.86	7.60	8.28	8.85	9.26	9.48	9.50	9.45	9.33	9.14		
40.0	7.05	7.91	8.71	9.43	10.00	10.40	10.50	10.60	10.60	10.50	10.10	9.34
45.0	7.19	8.15	9.09	9.96	10.70	11.30	11.45	11.70	11.80	11.80	11.65	11.15
50.0	7.27	8.34	9.40	10.40	11.35	12.10	12.35	12.70	12.90	13.05	13.15	12.90
55.0	7.28	8.46	9.65	10.80	11.90	12.85	13.20	13.65	13.95	14.20	14.55	14.55
60.0		8.51	9.83	11.15	12.35	13.50	13.95	14.50	14.95	15.30	15.85	16.15
65.0			9.93	11.35	12.80	14.10	14.60	15.30	15.85	16.30	17.10	17.65
70.0			9.95	11.55	13.10	14.60	15.20	16.00	16.65	17.25	18.25	19.05
75.0				11.60	13.35	15.05	15.70	16.60	17.35	18.10	19.35	20.40
80.0				11.60	13.50	15.35	16.10	17.15	18.00	18.85	20.30	21.60

50 Hz

4MHD-25X 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	12.5	15.0	20.0	25.0
10.0	17.68	17.86	17.91									
15.0	17.98	18.22	18.37	18.36								
20.0	18.27	18.60	18.85	18.96	18.87							
25.0	18.56	18.97	19.33	19.58	19.65	19.48	19.33					
30.0	18.83	19.34	19.82	20.21	20.45	20.47	20.41	20.21	19.96			
35.0	19.07	19.67	20.28	20.83	21.25	21.47	21.49	21.44	21.30	21.08		
40.0	19.25	19.97	20.72	21.42	22.03	22.46	22.57	22.66	22.66	22.57	22.11	21.23
45.0	19.38	20.22	21.11	21.98	22.78	23.43	23.64	23.88	24.01	24.06	23.89	23.32
50.0	19.43	20.40	21.44	22.49	23.49	24.37	24.68	25.07	25.33	25.52	25.66	25.42
55.0	19.40	20.50	21.70	22.94	24.15	25.27	25.68	26.23	26.63	26.97	27.41	27.51
60.0		20.51	21.88	23.31	24.74	26.11	26.62	27.33	27.88	28.37	29.13	29.57
65.0			21.96	23.60	25.26	26.87	27.49	28.38	29.07	29.71	30.80	31.60
70.0			21.93	23.78	25.67	27.55	28.28	29.34	30.18	30.98	32.41	33.57
75.0				23.85	25.99	28.13	28.97	30.21	31.22	32.18	33.95	35.47
80.0				23.79	26.18	28.60	29.56	30.99	32.15	33.28	35.40	37.30

Cond °C	Suction Mass Flow, g/s											
	-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	113.00	140.50	174.00									
15.0	111.50	139.00	172.50	212.00								
20.0	109.50	137.50	171.00	210.00	256.00							
25.0	107.50	135.50	169.00	208.00	254.00	307.00	330.00					
30.0	105.00	133.00	166.50	206.00	251.00	304.00	326.00	363.00	396.00			
35.0	101.50	130.00	163.50	203.00	248.00	300.00	323.00	359.00	392.00	426.00		
40.0	98.10	126.50	160.00	199.00	244.00	296.00	319.00	355.00	387.00	421.00	496.00	579.00
45.0	93.90	123.00	156.50	195.00	240.00	291.00	314.00	350.00	382.00	416.00	490.00	572.00
50.0	89.10	118.00	152.00	190.50	235.00	286.00	308.00	344.00	376.00	409.00	483.00	566.00
55.0	83.60	113.00	146.50	185.00	229.00	280.00	302.00	338.00	369.00	403.00	476.00	558.00
60.0		107.00	140.50	179.00	223.00	273.00	295.00	330.00	362.00	395.00	468.00	550.00
65.0			133.50	172.00	216.00	266.00	288.00	322.00	354.00	387.00	459.00	541.00
70.0			126.00	164.00	208.00	257.00	279.00	314.00	345.00	378.00	450.00	532.00
75.0				155.00	198.50	248.00	269.00	304.00	335.00	368.00	441.00	522.00
80.0				144.50	188.00	237.00	259.00	294.00	325.00	358.00	431.00	513.00

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	657/501
Height, mm	452
Net Weight, kg	193
Suction, inch	2 1/8
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	69
Sound Power (MT), dBA	80
Sound Power with Sound Shell (MT), dBA	66
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	41.6
Locked Rotor Current, A	199
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch (-P)	OPS2 Sensor
CoreSense Protection (-P)	Motor protection
Mounting Parts	Spring
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
Adapter Kit	For Parallel Operation
Digital Driver	EC3-D23
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 %
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
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