



Minimum Evaporating Temp. With:

— 20 K Suction Superheat
 — 20 °C Suction Gas Return
 — 0 °C Suction Gas Return
— Maximum Evaporating Temperature

Suction Return Temperature 18.3°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW									
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
5.0	11.70	15.60	20.40	26.40	33.50	41.90				
10.0	10.90	14.70	19.35	25.10	31.90	40.00	49.40			
15.0		13.75	18.25	23.70	30.30	38.00	47.00	57.30	69.20	
20.0		12.80	17.15	22.40	28.60	36.00	44.50	54.40	65.70	78.50
25.0			16.05	21.00	27.00	33.90	42.10	51.40	62.20	74.40
30.0				19.65	25.30	31.90	39.60	48.40	58.60	70.20
35.0				18.25	23.60	29.80	37.00	45.40	55.00	66.00
40.0					21.90	27.70	34.50	42.40	51.40	61.70
45.0					20.20	25.60	32.00	39.30	47.80	57.50
50.0						23.50	29.40	36.30	44.10	
55.0						21.40	26.90	33.20	40.50	
60.0							24.30	30.10		
62.0							23.30	28.90		

50 Hz

4MM-20

R449A Dew Point

Cond °C	Power, kW									
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
5.0	5.01	5.64	6.21	6.70	7.08	7.34				
10.0	5.29	6.00	6.68	7.29	7.82	8.23	8.51			
15.0		6.31	7.10	7.84	8.51	9.09	9.55	9.86	10.00	
20.0		6.58	7.47	8.34	9.16	9.91	10.55	11.05	11.45	11.60
25.0			7.80	8.80	9.78	10.70	11.50	12.25	12.85	13.25
30.0				9.22	10.35	11.45	12.45	13.40	14.20	14.90
35.0				9.60	10.90	12.15	13.35	14.50	15.55	16.50
40.0					11.40	12.85	14.25	15.60	16.90	18.10
45.0					11.85	13.45	15.10	16.70	18.20	19.65
50.0						14.10	15.90	17.70	19.50	
55.0						14.65	16.70	18.75	20.70	
60.0							17.45	19.70		
62.0							17.75	20.10		

Cond °C	Current at 400 V, A									
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
5.0	15.32	15.67	16.08	16.49	16.84	17.07				
10.0	15.46	15.90	16.44	17.00	17.53	17.98	18.28			
15.0		16.13	16.79	17.52	18.24	18.91	19.46	19.83	19.97	
20.0		16.35	17.15	18.04	18.96	19.86	20.67	21.33	21.78	21.98
25.0			17.49	18.55	19.68	20.81	21.89	22.84	23.63	24.17
30.0				19.05	20.39	21.76	23.11	24.37	25.48	26.39
35.0				19.51	21.07	22.70	24.32	25.89	27.35	28.63
40.0					21.73	23.60	25.52	27.40	29.21	30.86
45.0					22.34	24.48	26.69	28.90	31.05	33.10
50.0						25.31	27.82	30.36	32.88	
55.0						26.09	28.91	31.79	34.67	
60.0							29.93	33.16		
62.0							30.33	33.69		

50 Hz

4MM-20

R449A Dew Point

Cond °C	Suction Mass Flow, g/s									
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
5.0	52.10	69.50	91.30	118.00	150.50	189.00				
10.0	50.10	67.60	89.40	116.00	148.00	186.50	231.00			
15.0		65.60	87.30	114.00	145.50	183.50	228.00	280.00	340.00	
20.0		63.30	85.00	111.50	143.00	180.00	224.00	276.00	335.00	404.00
25.0			82.60	108.50	140.00	177.00	220.00	271.00	330.00	399.00
30.0				106.00	136.50	173.00	216.00	266.00	325.00	393.00
35.0				103.00	133.00	169.00	212.00	261.00	319.00	386.00
40.0					129.50	165.00	207.00	256.00	313.00	380.00
45.0					126.00	161.00	202.00	250.00	307.00	373.00
50.0						156.00	196.50	244.00	300.00	
55.0						151.50	191.50	238.00	294.00	
60.0							186.00	232.00		
62.0							183.50	230.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	78.2
Bore/Stroke, mm	71.5/56.0
Length/Width, mm	657/501
Height, mm	452
Net Weight, kg	182
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, dBA	76
Sound Power, dBA	87
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	39
Locked Rotor Current, A	175
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

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

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