



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- ▨ Limited superheat 20 K
- Maximum Evaporating Temperature
- 25 °C Suction Gas Return
- | Voltage limit ± 5% above -20°C

Suction Superheat 5.0K

Liquid Subcooling 4.0K

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
10.0	25.50	35.60	48.00	63.10	80.90				
15.0	22.50	32.20	44.10	58.40	75.30	95.20			
20.0	19.60	28.90	40.10	53.60	69.60	88.50	110.50		
25.0	16.75	25.50	36.20	48.90	64.00	81.70	102.50	126.50	
30.0	13.90	22.20	32.20	44.10	58.20	74.90	94.30	117.00	143.00
35.0	11.20	18.95	28.30	39.40	52.50	68.00	86.20	107.50	132.00
40.0	8.62	15.75	24.40	34.60	46.80	61.10	78.00	97.70	120.50
45.0	6.22	12.70	20.60	29.90	41.10	54.30	69.80	88.00	109.50
50.0		9.76	16.85	25.30	35.40	47.40	61.60	78.40	98.10
55.0		7.03	13.25	20.80	29.90	40.70	53.50	68.80	86.90

50 Hz

8SJ-450

R404A Dew Point

Cond °C	Power, kW								
	-45.0	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0	13.50	15.75	17.95	20.10	22.10				
15.0	13.65	16.05	18.50	20.90	23.10	25.20			
20.0	13.75	16.40	19.05	21.70	24.30	26.70	28.80		
25.0	13.80	16.65	19.55	22.50	25.40	28.10	30.60	32.80	
30.0	13.75	16.85	20.00	23.20	26.40	29.50	32.30	35.00	37.30
35.0	13.65	16.95	20.40	23.90	27.40	30.80	34.00	37.10	39.80
40.0	13.35	16.90	20.60	24.40	28.30	32.00	35.60	39.10	42.20
45.0	12.90	16.70	20.70	24.80	29.00	33.10	37.10	40.90	44.50
50.0		16.30	20.60	25.00	29.50	34.00	38.40	42.70	46.70
55.0		15.65	20.30	25.00	29.90	34.70	39.60	44.30	48.80

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
10.0	40.11	41.98	44.09	46.29	48.43				
15.0	40.18	42.24	44.62	47.15	49.70	52.11			
20.0	40.26	42.52	45.17	48.05	51.01	53.91	56.59		
25.0	40.32	42.79	45.71	48.94	52.33	55.72	58.97	61.92	
30.0	40.32	43.00	46.20	49.79	53.61	57.50	61.33	64.92	68.14
35.0	40.21	43.11	46.61	50.56	54.81	59.22	63.62	67.87	71.82
40.0	39.97	43.08	46.88	51.20	55.90	60.82	65.81	70.73	75.41
45.0	39.54	42.89	46.99	51.69	56.83	62.28	67.87	73.45	78.88
50.0		42.47	46.89	51.97	57.57	63.55	69.74	76.00	82.17
55.0		41.81	46.54	52.01	58.08	64.59	71.39	78.33	85.26

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
10.0	187.00	255.00	337.00	433.00	545.00				
15.0	174.50	244.00	326.00	422.00	533.00	660.00			
20.0	161.00	231.00	313.00	409.00	520.00	646.00	790.00		
25.0	146.00	217.00	300.00	395.00	505.00	631.00	773.00	935.00	
30.0	130.00	202.00	285.00	380.00	489.00	614.00	755.00	916.00	1097.00
35.0	113.00	185.50	269.00	364.00	472.00	595.00	736.00	895.00	1075.00
40.0	94.60	167.50	251.00	345.00	453.00	575.00	715.00	873.00	1052.00
45.0	75.10	147.50	231.00	325.00	432.00	554.00	692.00	849.00	1027.00
50.0		126.00	209.00	303.00	410.00	531.00	668.00	825.00	1003.00
55.0		103.00	185.50	280.00	386.00	506.00	643.00	800.00	979.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	8
Displacement @ 50 Hz, m <sup>3</sup> /h	181
Bore/Stroke, mm	74.7/59.2
Length/Width, mm	835/527
Height, mm	610
Net Weight, kg	345
Gross Weight, kg	366
Suction, inch	3 1/8
Discharge, inch	1 5/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	7.6
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	457 x 305 (18)
Sound Pressure @ 1m (MT), dBA	76
Sound Power (MT), dBA	87
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	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	90.8
Locked Rotor Current, A	441
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4
Deep Oil Sump	Mounted

### **ACCESSORIES OPTIONAL**

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Capacity Steps 75/50%
Crankcase Heater	200 W Internal
Discharge Temperature Protection	Head PTC sensor
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation

### **MOTOR OPTIONS**

<i><b>Motor Code</b></i>	<i><b>Power Supply</b></i>	<i><b>Nominal Voltage, V</b></i>	<i><b>Start Connection</b></i>	<i><b>DOL Connection</b></i>	<i><b>Amps Factor</b></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