



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- Maximum Evaporating Temperature

Suction Superheat 11.1K

Liquid Subcooling 8.3K

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
20.0	9.83	12.65	16.10	20.30								
25.0	9.29	12.05	15.40	19.50	24.30							
30.0	8.71	11.40	14.65	18.60	23.30	28.80	31.20	35.10				
35.0	8.08	10.70	13.85	17.65	22.10	27.40	29.70	33.50	36.90	40.60		
40.0	7.43	9.95	13.00	16.60	20.90	26.00	28.20	31.80	35.10	38.60	46.30	55.10
45.0	6.75	9.17	12.05	15.55	19.65	24.40	26.60	30.00	33.20	36.50	43.90	52.40
50.0	6.05	8.37	11.15	14.40	18.30	22.90	24.90	28.20	31.20	34.40	41.40	49.50
55.0	5.34	7.55	10.15	13.25	16.95	21.30	23.20	26.30	29.10	32.10	38.80	46.50
60.0		6.72	9.18	12.10	15.55	19.60	21.40	24.30	27.00	29.80	36.20	43.40
65.0			8.18	10.90	14.10	17.90	19.55	22.30	24.80	27.50	33.50	40.30
70.0			7.17	9.67	12.65	16.15	17.70	20.30	22.60	25.10	30.70	37.20
75.0				8.45	11.15	14.40	15.85	18.20	20.30	22.70	27.90	33.90
80.0				7.23	9.69	12.60	13.95	16.10	18.10	20.20	25.10	30.70

50 Hz

3DC-100

R134a

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
20.0	3.00	3.17	3.25	3.24								
25.0	3.21	3.45	3.61	3.68	3.65							
30.0	3.40	3.70	3.94	4.09	4.15	4.10	4.05	3.93				
35.0	3.54	3.91	4.23	4.47	4.62	4.67	4.66	4.60	4.52	4.40		
40.0	3.65	4.09	4.48	4.80	5.04	5.19	5.22	5.23	5.21	5.15	4.93	4.56
45.0	3.72	4.23	4.69	5.10	5.43	5.68	5.75	5.82	5.85	5.85	5.76	5.52
50.0	3.75	4.32	4.86	5.35	5.77	6.12	6.23	6.37	6.46	6.51	6.54	6.43
55.0	3.74	4.38	4.99	5.56	6.07	6.51	6.67	6.87	7.01	7.13	7.27	7.29
60.0		4.38	5.07	5.72	6.32	6.86	7.05	7.32	7.52	7.69	7.96	8.10
65.0			5.10	5.83	6.53	7.16	7.40	7.73	7.98	8.21	8.59	8.87
70.0			5.09	5.90	6.68	7.41	7.69	8.08	8.39	8.67	9.18	9.58
75.0				5.92	6.78	7.61	7.92	8.38	8.74	9.09	9.71	10.25
80.0				5.88	6.83	7.75	8.11	8.63	9.04	9.44	10.20	10.85

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
20.0	8.73	8.90	8.97	8.89								
25.0	8.89	9.14	9.31	9.36	9.26							
30.0	9.03	9.36	9.63	9.80	9.83	9.70	9.59	9.35				
35.0	9.16	9.55	9.91	10.19	10.37	10.39	10.34	10.22	10.05	9.83		
40.0	9.25	9.71	10.16	10.55	10.85	11.02	11.05	11.03	10.96	10.83	10.40	9.68
45.0	9.33	9.85	10.37	10.86	11.29	11.61	11.70	11.78	11.80	11.78	11.55	11.07
50.0	9.38	9.95	10.55	11.14	11.68	12.14	12.29	12.47	12.58	12.65	12.63	12.38
55.0	9.41	10.02	10.69	11.36	12.02	12.61	12.82	13.10	13.30	13.46	13.65	13.62
60.0		10.06	10.79	11.55	12.31	13.03	13.30	13.67	13.96	14.20	14.58	14.77
65.0			10.85	11.69	12.55	13.39	13.72	14.18	14.54	14.88	15.45	15.85
70.0			10.88	11.79	12.74	13.70	14.08	14.63	15.07	15.48	16.23	16.84
75.0				11.84	12.88	13.95	14.38	15.01	15.52	16.02	16.95	17.75
80.0				11.85	12.97	14.14	14.62	15.33	15.91	16.49	17.58	18.58

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
20.0	54.80	69.20	86.60	107.50								
25.0	53.90	68.60	86.10	107.00	131.00							
30.0	52.70	67.60	85.30	106.00	130.50	158.50	170.50	190.50				
35.0	51.20	66.20	84.10	105.00	129.50	157.00	169.50	189.00	206.00	225.00		
40.0	49.30	64.60	82.50	103.50	127.50	155.50	167.50	187.00	204.00	223.00	263.00	308.00
45.0	47.10	62.50	80.50	101.50	125.50	153.00	165.50	184.50	202.00	220.00	260.00	305.00
50.0	44.60	60.20	78.20	99.00	123.00	150.50	162.50	181.50	199.00	217.00	257.00	301.00
55.0	41.70	57.40	75.40	96.10	120.00	147.00	159.00	178.00	195.00	213.00	253.00	297.00
60.0		54.30	72.30	92.80	116.50	143.50	155.00	174.00	191.00	209.00	248.00	292.00
65.0			68.70	89.00	112.50	139.00	150.50	169.00	186.00	204.00	242.00	286.00
70.0			64.60	84.70	107.50	134.00	145.50	164.00	180.50	198.00	236.00	280.00
75.0				79.90	102.50	128.00	139.50	157.50	174.00	191.50	230.00	273.00
80.0				74.50	96.50	122.00	133.00	151.00	167.00	184.50	222.00	265.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	3
Displacement @ 50 Hz, m <sup>3</sup> /h	38.0
Bore/Stroke, mm	60.4/50.8
Length/Width, mm	680/370
Height, mm	480
Net Weight, kg	164
Gross Weight, kg	175
Rotalock Discharge, inch	1 1/8
Suction, inch	1 3/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	3.7
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	69
Sound Power, dBA	80
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	20.5
Locked Rotor Current, A	121
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

### **ACCESSORIES OPTIONAL**

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Moduload
Crankcase Heater	70 W Internal
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Deep Oil Sump	Mounted
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Oil Control System	ALCO Trax-Oil OM3

### **MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
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
EWY	500-550 V / 3~ / 50 Hz	525	Y/DELTA	DELTA	0.76
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
TWY	500-550 V / 3~ / 50 Hz	525		DELTA	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
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