



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 10 K Suction Superheat
- Maximum Evaporating Temperature
- 25 °C Suction Gas Return

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

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	7.38	9.11	11.15	13.50					
15.0	7.04	8.69	10.60	12.85	15.40				
20.0	6.68	8.24	10.05	12.20	14.60	17.40			
25.0	6.30	7.78	9.50	11.50	13.80	16.40	19.40		
30.0	5.91	7.29	8.91	10.80	12.95	15.45	18.25	19.45	21.40
35.0	5.50	6.79	8.30	10.05	12.10	14.40	17.05	18.20	20.00
40.0	5.08	6.27	7.68	9.31	11.20	13.35	15.80	16.90	18.60
45.0	4.64	5.74	7.03	8.53	10.25	12.30	14.55	15.55	17.15
50.0		5.19	6.36	7.74	9.33	11.20	13.30	14.20	15.70
55.0			5.68	6.92	8.37	10.05	12.00	12.85	14.20
60.0				6.09	7.39	8.90	10.65	11.45	12.70

50 Hz

ZB38KCE-TFD

R404A Dew Point

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	1.85	1.84	1.82	1.80					
15.0	2.10	2.09	2.08	2.06	2.03				
20.0	2.37	2.37	2.36	2.34	2.32	2.28			
25.0	2.67	2.67	2.66	2.65	2.63	2.60	2.56		
30.0	2.99	3.00	3.00	2.99	2.97	2.95	2.92	2.90	2.87
35.0	3.35	3.36	3.36	3.36	3.35	3.33	3.30	3.28	3.26
40.0	3.75	3.76	3.76	3.76	3.76	3.74	3.71	3.70	3.68
45.0	4.18	4.19	4.20	4.20	4.20	4.19	4.16	4.15	4.13
50.0		4.67	4.68	4.68	4.68	4.67	4.65	4.64	4.63
55.0			5.20	5.20	5.20	5.20	5.18	5.17	5.16
60.0				5.77	5.77	5.77	5.76	5.75	5.74

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	6.37	6.36	6.35	6.35					
15.0	6.60	6.60	6.60	6.60	6.60				
20.0	6.88	6.89	6.89	6.89	6.89	6.89			
25.0	7.21	7.22	7.23	7.23	7.23	7.22	7.21		
30.0	7.60	7.62	7.63	7.63	7.62	7.61	7.60	7.59	7.58
35.0	8.08	8.10	8.11	8.11	8.10	8.08	8.06	8.05	8.03
40.0	8.65	8.68	8.69	8.68	8.67	8.64	8.61	8.59	8.57
45.0	9.33	9.36	9.37	9.36	9.34	9.31	9.26	9.24	9.21
50.0		10.16	10.17	10.16	10.13	10.09	10.03	10.00	9.96
55.0			11.10	11.09	11.06	11.00	10.93	10.90	10.85
60.0				12.17	12.12	12.06	11.98	11.94	11.87

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	41.50	51.50	63.30	77.20					
15.0	41.30	51.20	63.00	76.80	92.90				
20.0	40.90	50.80	62.50	76.20	92.20	111.00			
25.0	40.50	50.30	61.80	75.40	91.40	110.00	131.50		
30.0	40.00	49.60	61.10	74.60	90.40	109.00	130.50	140.00	156.00
35.0	39.30	48.90	60.20	73.60	89.30	107.50	129.50	139.00	154.50
40.0	38.50	48.00	59.10	72.40	88.00	106.50	128.00	137.50	153.50
45.0	37.60	46.90	57.90	71.10	86.60	105.00	126.50	136.50	152.50
50.0		45.70	56.60	69.60	85.00	103.50	125.50	135.00	151.50
55.0			55.20	68.00	83.40	102.00	124.00	134.00	150.50
60.0				66.50	82.00	100.50	123.50	133.50	151.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.5
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
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	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	61
Sound Power (MT), dBA	72
Sound Power with Sound Shell (MT), dBA	67
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	4.20
High Side PS gauge, bar	32
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.74
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

### **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>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TF5	200-220 V / 3~ / 50 Hz	200		Y	2.09
TFE	500 V / 3~ / 50 Hz	500		Y	0.80
TW5	200-220 V / 3~ / 50 Hz	200		Y	2.30
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09
TFE	575 V / 3~ / 60 Hz	575		Y	0.80