



Minimum Evaporating Temp. With:

- 10 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							
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	6.37	7.66	9.24	11.10				
15.0	6.09	7.43	9.06	11.00				
20.0	5.75	7.12	8.77	10.70	12.95			
25.0	5.37	6.74	8.40	10.35	12.55	15.10		
30.0	4.96	6.32	7.95	9.87	12.10	14.60	17.40	18.60
35.0	4.55	5.87	7.45	9.32	11.50	13.95	16.70	17.85
40.0		5.40	6.92	8.71	10.80	13.20	15.85	17.00
45.0			6.36	8.07	10.05	12.35	14.90	16.05
50.0				7.39	9.26	11.40	13.90	14.95
55.0				6.70	8.43	10.45	12.75	13.80

50 Hz

ZB38KCE-TFD

R407A Dew Point

Cond °C	Power, kW							
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	1.56	1.58	1.58	1.55				
15.0	1.75	1.79	1.82	1.81				
20.0	1.96	2.01	2.05	2.07	2.06			
25.0	2.21	2.26	2.30	2.34	2.36	2.34		
30.0	2.50	2.53	2.58	2.63	2.66	2.67	2.65	2.62
35.0	2.84	2.86	2.90	2.94	2.99	3.02	3.02	3.01
40.0		3.24	3.26	3.30	3.35	3.39	3.41	3.41
45.0			3.68	3.71	3.75	3.79	3.83	3.84
50.0				4.18	4.21	4.25	4.29	4.30
55.0				4.72	4.73	4.76	4.80	4.81

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	4.10	4.18	4.30	4.47				
15.0	4.25	4.30	4.39	4.53				
20.0	4.47	4.50	4.57	4.67	4.82			
25.0	4.76	4.78	4.82	4.89	5.01	5.18		
30.0	5.12	5.13	5.16	5.21	5.29	5.42	5.61	5.70
35.0	5.57	5.57	5.58	5.61	5.67	5.77	5.92	5.99
40.0		6.10	6.10	6.11	6.14	6.21	6.33	6.39
45.0			6.70	6.70	6.72	6.77	6.85	6.90
50.0				7.40	7.40	7.43	7.49	7.52
55.0				8.20	8.19	8.20	8.23	8.26

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	34.60	40.90	48.60	57.60				
15.0	34.40	41.30	49.60	59.20				
20.0	33.90	41.30	50.00	60.10	71.60			
25.0	33.10	40.90	50.00	60.60	72.50	85.80		
30.0	32.20	40.20	49.70	60.60	72.90	86.60	101.50	108.00
35.0	31.10	39.30	49.00	60.10	72.80	86.90	102.50	109.00
40.0		38.20	48.00	59.30	72.20	86.50	102.50	109.00
45.0			46.90	58.20	71.10	85.60	102.00	108.50
50.0				56.80	69.70	84.30	100.50	107.50
55.0				55.40	68.10	82.60	98.90	106.00

### **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	62
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	2107
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