



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	7.97	9.94	12.30	15.20				
15.0	7.62	9.55	11.85	14.65				
20.0	7.27	9.15	11.40	14.10	17.25			
25.0	6.90	8.73	10.90	13.50	16.55	20.10		
30.0	6.51	8.29	10.40	12.85	15.75	19.15	23.10	24.90
35.0	6.10	7.81	9.81	12.15	14.95	18.15	22.00	23.60
40.0		7.29	9.19	11.40	14.05	17.10	20.70	22.30
45.0			8.52	10.60	13.10	16.00	19.35	20.90
50.0				9.74	12.05	14.75	17.95	19.35
55.0				8.79	10.95	13.45	16.40	17.75

50 Hz

ZB48KCE-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	2.12	2.11	2.11	2.11				
15.0	2.42	2.42	2.41	2.40				
20.0	2.74	2.75	2.75	2.73	2.72			
25.0	3.10	3.13	3.13	3.11	3.09	3.08		
30.0	3.48	3.54	3.56	3.55	3.52	3.49	3.48	3.48
35.0	3.89	3.98	4.03	4.03	4.01	3.97	3.94	3.93
40.0		4.47	4.54	4.56	4.55	4.52	4.47	4.45
45.0			5.10	5.15	5.16	5.13	5.08	5.06
50.0				5.79	5.82	5.80	5.76	5.73
55.0				6.48	6.54	6.54	6.51	6.48

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	6.04	6.02	6.01	6.03				
15.0	6.34	6.33	6.32	6.31				
20.0	6.69	6.69	6.68	6.66	6.66			
25.0	7.08	7.11	7.10	7.08	7.06	7.05		
30.0	7.51	7.58	7.60	7.58	7.55	7.52	7.50	7.50
35.0	8.00	8.11	8.16	8.17	8.14	8.10	8.05	8.04
40.0		8.72	8.81	8.85	8.83	8.79	8.72	8.70
45.0			9.55	9.62	9.63	9.59	9.52	9.49
50.0				10.50	10.54	10.52	10.46	10.42
55.0				11.49	11.57	11.58	11.53	11.50

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	43.30	53.10	64.80	78.80				
15.0	43.10	53.10	65.00	79.00				
20.0	42.90	53.10	65.00	79.10	95.40			
25.0	42.60	53.00	65.00	79.10	95.40	114.00		
30.0	42.20	52.70	64.80	78.90	95.10	114.00	135.50	145.00
35.0	41.70	52.30	64.50	78.40	94.60	113.50	134.50	144.00
40.0		51.60	63.80	77.70	93.80	112.50	133.50	143.00
45.0			62.70	76.60	92.50	111.00	132.00	141.50
50.0				75.00	90.70	109.00	130.00	139.50
55.0				72.60	88.30	106.50	127.00	136.50

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	18.8
Length/Width, mm	246/250
Height, mm	442
Net Weight, kg	39.2
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Oil Quantity, l	1.77
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 (19)
Sound Pressure @ 1m (MT), dBA	62
Sound Power (MT), dBA	73
Sound Power with Sound Shell (MT), dBA	63
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	5.40
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Refrigerant's GWP	2107
Refrigerant's classification	A1

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

Maximum Operating Current, A	14
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Mounting Grommets	Standard
Discharge Temperature Protection	Internal Thermodisk

### **ACCESSORIES OPTIONAL**

Oil Control System	ALCO Trax-Oil OM3
Crankcase Heater	70 W External
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