



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- 25 °C Suction Gas Return with Voltage limit  $\pm 0\%$
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

ZB21KCE-TFD

R134a

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
10.0	2.62	3.30	4.12	5.11						
15.0	2.50	3.16	3.96	4.93						
20.0	2.38	3.02	3.80	4.73	5.83					
25.0	2.25	2.87	3.63	4.53	5.59	6.83	7.37			
30.0	2.13	2.72	3.45	4.32	5.34	6.53	7.06	7.91	8.66	
35.0	2.00	2.57	3.27	4.10	5.08	6.23	6.74	7.55	8.28	9.06
40.0	1.87	2.42	3.08	3.88	4.82	5.91	6.40	7.18	7.89	8.64
45.0		2.26	2.89	3.64	4.54	5.59	6.05	6.80	7.48	8.20
50.0		2.10	2.69	3.41	4.26	5.25	5.70	6.41	7.05	7.74
55.0			2.49	3.17	3.97	4.91	5.33	6.01	6.62	7.27
60.0				2.92	3.67	4.55	4.95	5.59	6.17	6.79
65.0				2.67	3.36	4.19	4.56	5.16	5.71	6.29
70.0					3.05	3.82	4.17	4.73	5.24	5.79
75.0					2.74	3.44	3.76	4.28	4.76	5.27

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	0.67	0.66	0.67	0.67						
15.0	0.76	0.76	0.76	0.76						
20.0	0.85	0.85	0.85	0.86	0.87					
25.0	0.95	0.95	0.95	0.96	0.97	0.98	0.99			
30.0	1.06	1.06	1.06	1.07	1.08	1.10	1.10	1.11	1.12	
35.0	1.18	1.18	1.18	1.20	1.20	1.22	1.22	1.23	1.24	1.25
40.0	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.36	1.37	1.38
45.0		1.46	1.46	1.48	1.49	1.50	1.50	1.51	1.52	1.52
50.0		1.61	1.63	1.64	1.66	1.67	1.67	1.68	1.68	1.69
55.0			1.80	1.82	1.84	1.86	1.86	1.86	1.87	1.88
60.0				2.03	2.05	2.06	2.07	2.08	2.08	2.08
65.0				2.25	2.28	2.29	2.30	2.31	2.31	2.32
70.0					2.53	2.55	2.56	2.56	2.57	2.58
75.0					2.80	2.83	2.84	2.85	2.86	2.86

50 Hz

ZB21KCE-TFD

R134a

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
10.0	2.60	2.57	2.56	2.56						
15.0	2.66	2.64	2.63	2.63						
20.0	2.74	2.72	2.71	2.70	2.71					
25.0	2.82	2.81	2.80	2.80	2.80	2.82	2.83			
30.0	2.91	2.91	2.90	2.90	2.91	2.92	2.93	2.95	2.96	
35.0	3.03	3.02	3.03	3.03	3.04	3.05	3.06	3.07	3.08	3.09
40.0	3.16	3.16	3.17	3.18	3.19	3.20	3.21	3.21	3.22	3.23
45.0		3.32	3.34	3.35	3.37	3.38	3.38	3.39	3.40	3.41
50.0		3.51	3.54	3.56	3.57	3.59	3.59	3.60	3.61	3.61
55.0			3.76	3.79	3.81	3.83	3.84	3.84	3.85	3.86
60.0				4.06	4.09	4.11	4.12	4.13	4.13	4.14
65.0				4.37	4.41	4.43	4.44	4.45	4.46	4.46
70.0					4.77	4.80	4.81	4.82	4.83	4.83
75.0					5.17	5.21	5.22	5.24	5.25	5.25

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
10.0	14.50	17.90	22.00	26.80						
15.0	14.40	17.85	22.00	26.80						
20.0	14.25	17.75	21.90	26.80	32.40					
25.0	14.10	17.65	21.80	26.70	32.40	38.80	41.70			
30.0	13.95	17.50	21.70	26.60	32.30	38.80	41.60	46.10	50.10	
35.0	13.80	17.35	21.60	26.50	32.20	38.70	41.50	46.00	50.00	54.20
40.0	13.60	17.15	21.40	26.30	32.00	38.50	41.30	45.80	49.80	54.00
45.0		16.95	21.20	26.10	31.80	38.30	41.10	45.60	49.60	53.80
50.0		16.75	20.90	25.80	31.50	38.00	40.80	45.30	49.30	53.60
55.0			20.70	25.50	31.20	37.60	40.50	45.00	49.00	53.20
60.0				25.20	30.80	37.20	40.10	44.60	48.60	52.80
65.0				24.80	30.30	36.80	39.60	44.10	48.10	52.40
70.0					29.90	36.20	39.00	43.50	47.60	51.80
75.0					29.30	35.70	38.50	43.00	47.00	51.30

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

Displacement @ 50 Hz, m³/h	8.61
Length/Width, mm	243/244
Height, mm	391
Net Weight, kg	27.3
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.24
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	58
Sound Power (MT), dBA	69
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	2.50
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	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	6
Locked Rotor Current, A	40
Winding Resistance, ohm	4.83
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