



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- 20 °C Suction Gas Return
- 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

ZB38KCE-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	4.38	5.50	6.88	8.53						
15.0	4.17	5.28	6.62	8.22						
20.0	3.97	5.04	6.34	7.90	9.73					
25.0	3.76	4.79	6.05	7.56	9.33	11.40	12.30			
30.0	3.55	4.55	5.76	7.21	8.91	10.90	11.80	13.20	14.45	
35.0	3.33	4.29	5.45	6.84	8.48	10.40	11.25	12.60	13.80	15.10
40.0	3.12	4.03	5.14	6.47	8.04	9.87	10.70	12.00	13.15	14.40
45.0		3.77	4.82	6.08	7.58	9.33	10.10	11.35	12.50	13.70
50.0		3.50	4.49	5.69	7.10	8.77	9.51	10.70	11.75	12.90
55.0			4.16	5.28	6.62	8.19	8.89	10.00	11.05	12.15
60.0				4.87	6.12	7.60	8.26	9.33	10.30	11.35
65.0				4.45	5.61	7.00	7.61	8.62	9.53	10.50
70.0					5.10	6.38	6.95	7.89	8.74	9.66
75.0					4.57	5.75	6.28	7.15	7.94	8.79

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	1.12	1.12	1.12	1.14						
15.0	1.28	1.27	1.28	1.28						
20.0	1.44	1.43	1.44	1.44	1.46					
25.0	1.60	1.60	1.60	1.62	1.64	1.66	1.67			
30.0	1.78	1.78	1.80	1.80	1.82	1.84	1.85	1.86	1.88	
35.0	1.98	1.98	2.00	2.01	2.03	2.04	2.05	2.07	2.08	2.09
40.0	2.19	2.21	2.22	2.24	2.25	2.27	2.28	2.29	2.30	2.31
45.0		2.45	2.47	2.49	2.51	2.53	2.53	2.54	2.55	2.56
50.0		2.71	2.74	2.77	2.79	2.81	2.82	2.83	2.84	2.84
55.0			3.04	3.07	3.10	3.12	3.13	3.14	3.15	3.16
60.0				3.42	3.45	3.47	3.48	3.49	3.50	3.51
65.0				3.79	3.83	3.86	3.87	3.89	3.89	3.90
70.0					4.25	4.29	4.30	4.32	4.33	4.34
75.0					4.72	4.76	4.78	4.80	4.81	4.82

50 Hz

ZB38KCE-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	4.88	4.83	4.81	4.81						
15.0	5.01	4.96	4.94	4.94						
20.0	5.15	5.11	5.09	5.09	5.10					
25.0	5.30	5.27	5.26	5.26	5.27	5.30	5.32			
30.0	5.48	5.46	5.46	5.46	5.47	5.50	5.51	5.54	5.57	
35.0	5.69	5.69	5.69	5.70	5.71	5.73	5.75	5.77	5.79	5.81
40.0	5.93	5.95	5.96	5.98	5.99	6.02	6.03	6.04	6.06	6.08
45.0		6.25	6.28	6.30	6.33	6.35	6.36	6.38	6.39	6.41
50.0		6.61	6.65	6.69	6.72	6.74	6.75	6.77	6.78	6.79
55.0			7.08	7.13	7.17	7.20	7.21	7.23	7.24	7.25
60.0				7.64	7.69	7.73	7.74	7.76	7.77	7.78
65.0				8.22	8.28	8.33	8.35	8.37	8.38	8.39
70.0					8.96	9.02	9.04	9.06	9.08	9.09
75.0					9.72	9.80	9.82	9.85	9.87	9.88

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	24.20	29.90	36.70	44.80						
15.0	24.00	29.80	36.70	44.80						
20.0	23.80	29.60	36.60	44.70	54.10					
25.0	23.60	29.50	36.50	44.60	54.10	64.80	69.50			
30.0	23.30	29.20	36.30	44.50	53.90	64.70	69.40	76.90	83.50	
35.0	23.00	29.00	36.00	44.20	53.70	64.50	69.30	76.80	83.40	90.40
40.0	22.70	28.70	35.70	43.90	53.40	64.30	69.00	76.50	83.20	90.20
45.0		28.30	35.30	43.60	53.10	63.90	68.60	76.10	82.80	89.90
50.0		28.00	34.90	43.10	52.60	63.40	68.10	75.70	82.30	89.40
55.0			34.50	42.60	52.00	62.80	67.50	75.10	81.80	88.90
60.0				42.00	51.40	62.10	66.80	74.40	81.10	88.20
65.0				41.40	50.60	61.30	66.00	73.60	80.30	87.40
70.0					49.80	60.50	65.20	72.70	79.40	86.50
75.0					49.00	59.50	64.20	71.70	78.40	85.60

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /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	1430
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

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
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