



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 ± 0 %
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

ZB48KCE-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	6.01	7.51	9.35	11.55						
15.0	5.79	7.25	9.03	11.15						
20.0	5.56	6.97	8.69	10.75	13.15					
25.0	5.31	6.69	8.34	10.30	12.65	15.30	16.50			
30.0	5.06	6.39	7.98	9.86	12.10	14.65	15.80	17.60	19.25	
35.0	4.79	6.08	7.60	9.40	11.50	13.95	15.05	16.80	18.35	20.00
40.0	4.51	5.75	7.21	8.93	10.95	13.25	14.25	15.90	17.40	19.00
45.0		5.41	6.81	8.44	10.35	12.50	13.50	15.05	16.45	17.95
50.0		5.06	6.39	7.93	9.72	11.80	12.70	14.15	15.50	16.90
55.0			5.95	7.40	9.08	11.00	11.90	13.25	14.50	15.80
60.0				6.86	8.44	10.25	11.05	12.35	13.50	14.70
65.0				6.31	7.77	9.45	10.20	11.40	12.45	13.60
70.0					7.08	8.64	9.32	10.40	11.40	12.45
75.0					6.38	7.80	8.43	9.43	10.35	11.30

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	1.42	1.42	1.40	1.38						
15.0	1.60	1.62	1.61	1.60						
20.0	1.80	1.82	1.82	1.82	1.82					
25.0	2.02	2.04	2.05	2.05	2.06	2.08	2.09			
30.0	2.25	2.28	2.29	2.30	2.31	2.33	2.35	2.37	2.40	
35.0	2.51	2.54	2.56	2.57	2.59	2.61	2.62	2.65	2.68	2.72
40.0	2.81	2.84	2.86	2.87	2.89	2.91	2.93	2.96	2.99	3.02
45.0		3.17	3.19	3.21	3.22	3.25	3.26	3.29	3.32	3.36
50.0		3.55	3.57	3.58	3.60	3.62	3.64	3.67	3.70	3.73
55.0			3.99	4.01	4.02	4.04	4.06	4.08	4.11	4.15
60.0				4.48	4.49	4.51	4.52	4.55	4.57	4.61
65.0				5.02	5.02	5.04	5.05	5.07	5.09	5.12
70.0					5.62	5.63	5.64	5.65	5.67	5.70
75.0					6.29	6.29	6.29	6.31	6.32	6.35

50 Hz

ZB48KCE-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	6.20	6.16	6.11	6.06						
15.0	6.34	6.31	6.27	6.24						
20.0	6.47	6.46	6.44	6.41	6.40					
25.0	6.62	6.61	6.60	6.59	6.59	6.60	6.61			
30.0	6.78	6.79	6.79	6.79	6.79	6.81	6.82	6.85	6.88	
35.0	6.98	6.99	7.00	7.01	7.02	7.05	7.06	7.09	7.12	7.16
40.0	7.22	7.24	7.26	7.27	7.29	7.32	7.33	7.37	7.40	7.44
45.0		7.55	7.57	7.59	7.61	7.64	7.66	7.69	7.72	7.77
50.0		7.93	7.95	7.96	7.99	8.02	8.04	8.07	8.10	8.15
55.0			8.40	8.42	8.44	8.47	8.49	8.52	8.56	8.60
60.0				8.96	8.98	9.01	9.03	9.06	9.09	9.13
65.0				9.61	9.62	9.65	9.66	9.69	9.71	9.75
70.0					10.37	10.39	10.40	10.42	10.45	10.48
75.0					11.25	11.26	11.26	11.28	11.30	11.32

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	33.20	40.80	49.90	60.70						
15.0	33.30	40.90	50.00	60.80						
20.0	33.30	41.00	50.20	60.90	73.20					
25.0	33.30	41.10	50.20	60.90	73.20	87.20	93.30			
30.0	33.20	41.10	50.20	60.90	73.10	87.00	93.00	102.50	111.00	
35.0	33.10	41.00	50.20	60.80	72.90	86.70	92.60	102.00	110.50	119.50
40.0	32.80	40.90	50.10	60.60	72.70	86.30	92.20	101.50	110.00	119.00
45.0		40.70	49.90	60.40	72.30	85.80	91.60	101.00	109.00	118.00
50.0		40.30	49.60	60.10	71.90	85.20	91.00	100.00	108.50	117.00
55.0			49.30	59.70	71.40	84.50	90.20	99.30	107.50	115.50
60.0				59.20	70.80	83.80	89.40	98.30	106.00	114.50
65.0				58.60	70.10	82.90	88.40	97.10	105.00	113.00
70.0					69.30	81.90	87.30	95.90	103.50	111.50
75.0					68.30	80.80	86.20	94.60	102.00	110.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /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	1430
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

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