



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

ZB57KCE-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	6.65	8.37	10.45	12.95						
15.0	6.35	8.02	10.05	12.50						
20.0	6.03	7.66	9.64	12.00	14.80					
25.0	5.71	7.29	9.20	11.50	14.20	17.30	18.70			
30.0	5.39	6.91	8.75	10.95	13.55	16.55	17.90	20.10	22.00	
35.0	5.07	6.52	8.29	10.40	12.90	15.80	17.10	19.15	21.00	23.00
40.0	4.74	6.13	7.81	9.83	12.20	15.00	16.25	18.20	20.00	21.90
45.0		5.73	7.33	9.25	11.50	14.20	15.35	17.25	18.95	20.80
50.0		5.33	6.83	8.65	10.80	13.35	14.45	16.25	17.90	19.65
55.0			6.33	8.03	10.05	12.45	13.50	15.25	16.80	18.45
60.0				7.41	9.31	11.55	12.55	14.20	15.65	17.20
65.0				6.77	8.53	10.65	11.55	13.10	14.50	15.95
70.0					7.75	9.69	10.55	12.00	13.30	14.70
75.0					6.95	8.73	9.54	10.85	12.05	13.35

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	1.74	1.73	1.74	1.76						
15.0	1.98	1.97	1.98	2.00						
20.0	2.22	2.22	2.22	2.24	2.27					
25.0	2.48	2.48	2.49	2.51	2.53	2.57	2.59			
30.0	2.76	2.77	2.78	2.80	2.82	2.85	2.87	2.89	2.92	
35.0	3.06	3.08	3.10	3.12	3.14	3.17	3.18	3.20	3.22	3.24
40.0	3.39	3.42	3.44	3.47	3.49	3.52	3.53	3.55	3.57	3.59
45.0		3.79	3.83	3.86	3.89	3.91	3.93	3.94	3.96	3.97
50.0		4.20	4.25	4.29	4.32	4.35	4.36	4.38	4.39	4.41
55.0			4.72	4.76	4.81	4.84	4.85	4.87	4.88	4.89
60.0				5.29	5.34	5.38	5.40	5.42	5.43	5.44
65.0				5.88	5.94	5.99	6.00	6.02	6.04	6.05
70.0					6.59	6.65	6.67	6.69	6.71	6.72
75.0					7.32	7.38	7.41	7.43	7.45	7.47

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	7.57	7.49	7.45	7.46						
15.0	7.76	7.70	7.66	7.65						
20.0	7.98	7.92	7.89	7.88	7.91					
25.0	8.22	8.17	8.15	8.15	8.17	8.22	8.25			
30.0	8.49	8.47	8.46	8.46	8.48	8.52	8.54	8.58	8.63	
35.0	8.82	8.81	8.82	8.83	8.85	8.89	8.90	8.94	8.97	9.01
40.0	9.19	9.22	9.24	9.26	9.29	9.32	9.34	9.37	9.39	9.43
45.0		9.69	9.73	9.77	9.81	9.84	9.86	9.88	9.90	9.93
50.0		10.24	10.31	10.36	10.41	10.45	10.47	10.49	10.51	10.53
55.0			10.97	11.05	11.11	11.16	11.18	11.20	11.22	11.24
60.0				11.84	11.92	11.98	12.00	12.03	12.04	12.06
65.0				12.74	12.84	12.92	12.94	12.97	12.99	13.01
70.0					13.89	13.98	14.01	14.05	14.07	14.09
75.0					15.07	15.18	15.22	15.27	15.29	15.31

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	36.80	45.40	55.80	68.00						
15.0	36.50	45.30	55.80	68.10						
20.0	36.20	45.10	55.60	68.00	82.30					
25.0	35.80	44.80	55.40	67.80	82.20	98.50	105.50			
30.0	35.40	44.40	55.10	67.60	82.00	98.40	105.50	117.00	127.00	
35.0	35.00	44.00	54.70	67.20	81.70	98.10	105.50	116.50	127.00	137.50
40.0	34.50	43.60	54.30	66.80	81.20	97.70	105.00	116.50	126.50	137.00
45.0		43.00	53.70	66.20	80.60	97.10	104.50	115.50	126.00	136.50
50.0		42.50	53.10	65.60	79.90	96.40	103.50	115.00	125.00	136.00
55.0			52.40	64.80	79.10	95.50	102.50	114.00	124.50	135.00
60.0				63.90	78.10	94.40	101.50	113.00	123.00	134.00
65.0				62.90	77.00	93.20	100.50	112.00	122.00	133.00
70.0					75.70	91.90	99.00	110.50	120.50	131.50
75.0					74.40	90.50	97.60	109.00	119.00	130.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	21.4
Length/Width, mm	258/263
Height, mm	442
Net Weight, kg	43.5
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	1.89
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	68
Sound Power (MT), dBA	79
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	5.70
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	15.9
Locked Rotor Current, A	102
Winding Resistance, ohm	1.72
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Grommets	Standard
Discharge Temperature Protection	External thermistor

ACCESSORIES OPTIONAL

Mounting Grommets	Hard Mounts for Paralleling
Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Enclosure Class	IP66 With Molded Plug
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