



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

ZB45KCE-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	5.43	6.75	8.36	10.30						
15.0	5.19	6.49	8.06	9.93						
20.0	4.94	6.20	7.73	9.55	11.70					
25.0	4.67	5.90	7.38	9.15	11.25	13.70	14.75			
30.0	4.39	5.58	7.01	8.72	10.75	13.10	14.15	15.85	17.35	
35.0	4.11	5.25	6.63	8.27	10.20	12.50	13.50	15.15	16.60	18.15
40.0	3.82	4.91	6.23	7.80	9.66	11.85	12.80	14.40	15.80	17.30
45.0		4.57	5.82	7.32	9.09	11.20	12.10	13.65	15.00	16.45
50.0		4.21	5.40	6.82	8.50	10.50	11.40	12.85	14.15	15.55
55.0			4.97	6.30	7.90	9.79	10.65	12.00	13.25	14.60
60.0				5.78	7.27	9.06	9.86	11.15	12.35	13.65
65.0				5.25	6.64	8.31	9.07	10.30	11.45	12.65
70.0					5.99	7.55	8.26	9.42	10.50	11.65
75.0					5.34	6.78	7.43	8.52	9.52	10.60

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	1.23	1.24	1.25	1.25						
15.0	1.42	1.42	1.44	1.44						
20.0	1.60	1.62	1.63	1.64	1.65					
25.0	1.80	1.82	1.84	1.85	1.86	1.87	1.88			
30.0	2.01	2.03	2.05	2.07	2.08	2.10	2.10	2.11	2.11	
35.0	2.25	2.27	2.29	2.31	2.32	2.34	2.34	2.35	2.36	2.36
40.0	2.50	2.53	2.55	2.57	2.59	2.61	2.61	2.62	2.63	2.63
45.0		2.82	2.85	2.87	2.89	2.91	2.91	2.92	2.93	2.93
50.0		3.15	3.17	3.20	3.22	3.24	3.25	3.26	3.26	3.27
55.0			3.55	3.57	3.60	3.62	3.62	3.63	3.64	3.65
60.0				3.99	4.02	4.04	4.05	4.06	4.07	4.07
65.0				4.47	4.49	4.52	4.52	4.54	4.54	4.55
70.0					5.02	5.05	5.06	5.07	5.08	5.08
75.0					5.62	5.65	5.66	5.67	5.68	5.68

50 Hz

ZB45KCE-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	2.84	2.83	2.81	2.78						
15.0	3.00	3.00	2.99	2.97						
20.0	3.15	3.15	3.15	3.13	3.11					
25.0	3.28	3.29	3.29	3.28	3.27	3.24	3.22			
30.0	3.39	3.41	3.42	3.42	3.41	3.39	3.38	3.36	3.34	
35.0	3.50	3.52	3.53	3.54	3.54	3.53	3.52	3.50	3.49	3.47
40.0	3.60	3.62	3.64	3.65	3.66	3.65	3.65	3.64	3.63	3.61
45.0		3.72	3.74	3.75	3.76	3.77	3.77	3.76	3.75	3.74
50.0		3.81	3.83	3.85	3.86	3.87	3.87	3.87	3.87	3.87
55.0			3.92	3.94	3.96	3.97	3.98	3.98	3.98	3.98
60.0				4.03	4.05	4.07	4.08	4.08	4.09	4.09
65.0				4.12	4.15	4.17	4.17	4.18	4.19	4.19
70.0					4.24	4.26	4.27	4.28	4.29	4.30
75.0					4.33	4.36	4.37	4.38	4.39	4.40

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	30.10	36.70	44.60	53.90						
15.0	29.90	36.60	44.70	54.10						
20.0	29.60	36.50	44.60	54.10	65.20					
25.0	29.30	36.20	44.40	54.00	65.10	77.80	83.40			
30.0	28.90	35.90	44.20	53.80	65.00	77.80	83.40	92.30	100.00	
35.0	28.40	35.50	43.80	53.50	64.70	77.50	83.20	92.10	100.00	108.50
40.0	27.80	34.90	43.30	53.00	64.30	77.20	82.80	91.80	99.90	108.50
45.0		34.30	42.70	52.40	63.70	76.60	82.30	91.40	99.50	108.00
50.0		33.60	42.00	51.70	62.90	75.90	81.60	90.80	98.90	107.50
55.0			41.10	50.80	62.10	75.10	80.80	90.00	98.20	107.00
60.0				49.80	61.10	74.10	79.80	89.10	97.40	106.00
65.0				48.70	59.90	72.90	78.70	88.00	96.30	105.50
70.0					58.60	71.60	77.40	86.80	95.20	104.50
75.0					57.20	70.20	76.00	85.50	94.10	103.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	17.1
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	39.1
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	62
Sound Power (MT), dBA	73
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	5.90
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	13.1
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (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