



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

ZB30KCE-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	3.56	4.47	5.59	6.93						
15.0	3.39	4.29	5.38	6.68						
20.0	3.23	4.09	5.15	6.42	7.91					
25.0	3.06	3.90	4.92	6.14	7.58	9.26	10.00			
30.0	2.88	3.69	4.68	5.86	7.24	8.86	9.58	10.70	11.75	
35.0	2.71	3.49	4.43	5.56	6.89	8.45	9.14	10.25	11.25	12.30
40.0	2.54	3.28	4.18	5.26	6.53	8.02	8.68	9.74	10.70	11.70
45.0		3.06	3.92	4.94	6.16	7.58	8.21	9.23	10.15	11.10
50.0		2.85	3.65	4.62	5.77	7.12	7.73	8.69	9.57	10.50
55.0			3.38	4.29	5.38	6.66	7.23	8.15	8.97	9.86
60.0				3.96	4.97	6.18	6.71	7.58	8.37	9.21
65.0				3.62	4.56	5.68	6.19	7.00	7.74	8.54
70.0					4.14	5.18	5.65	6.41	7.10	7.85
75.0					3.71	4.67	5.10	5.81	6.45	7.15

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	0.88	0.88	0.88	0.89						
15.0	1.00	1.00	1.00	1.01						
20.0	1.12	1.12	1.12	1.14	1.14					
25.0	1.26	1.26	1.26	1.27	1.28	1.30	1.30			
30.0	1.40	1.40	1.40	1.42	1.42	1.44	1.45	1.46	1.48	
35.0	1.55	1.56	1.56	1.58	1.59	1.60	1.61	1.62	1.63	1.64
40.0	1.72	1.73	1.74	1.76	1.76	1.78	1.78	1.80	1.80	1.82
45.0		1.92	1.94	1.95	1.96	1.98	1.98	2.00	2.00	2.01
50.0		2.13	2.15	2.17	2.18	2.20	2.21	2.21	2.22	2.23
55.0			2.38	2.41	2.43	2.45	2.45	2.46	2.47	2.47
60.0				2.68	2.70	2.72	2.73	2.74	2.74	2.75
65.0				2.97	3.00	3.03	3.03	3.04	3.05	3.06
70.0					3.33	3.36	3.37	3.38	3.39	3.40
75.0					3.70	3.73	3.74	3.76	3.77	3.78

50 Hz

ZB30KCE-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	3.11	3.08	3.06	3.06						
15.0	3.19	3.16	3.15	3.14						
20.0	3.28	3.25	3.24	3.24	3.25					
25.0	3.37	3.36	3.35	3.35	3.36	3.38	3.39			
30.0	3.49	3.48	3.47	3.47	3.48	3.50	3.51	3.53	3.54	
35.0	3.62	3.62	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.70
40.0	3.78	3.79	3.80	3.80	3.82	3.83	3.84	3.85	3.86	3.87
45.0		3.98	4.00	4.01	4.03	4.04	4.05	4.06	4.07	4.08
50.0		4.20	4.23	4.26	4.28	4.29	4.30	4.31	4.32	4.32
55.0			4.51	4.54	4.56	4.58	4.59	4.60	4.61	4.61
60.0				4.86	4.90	4.92	4.93	4.94	4.95	4.95
65.0				5.23	5.27	5.31	5.32	5.33	5.34	5.34
70.0					5.70	5.74	5.76	5.77	5.78	5.79
75.0					6.19	6.24	6.25	6.27	6.28	6.29

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	19.65	24.30	29.90	36.40						
15.0	19.50	24.20	29.80	36.40						
20.0	19.35	24.10	29.70	36.40	44.00					
25.0	19.15	23.90	29.60	36.30	43.90	52.70	56.50			
30.0	18.95	23.80	29.50	36.10	43.80	52.60	56.40	62.50	67.90	
35.0	18.70	23.50	29.30	36.00	43.70	52.50	56.30	62.40	67.80	73.50
40.0	18.45	23.30	29.00	35.70	43.40	52.20	56.10	62.20	67.60	73.30
45.0		23.00	28.70	35.40	43.10	51.90	55.80	61.90	67.30	73.00
50.0		22.70	28.40	35.00	42.70	51.50	55.40	61.50	66.90	72.70
55.0			28.00	34.60	42.30	51.10	54.90	61.00	66.50	72.20
60.0				34.20	41.80	50.50	54.30	60.40	65.90	71.60
65.0				33.60	41.20	49.90	53.70	59.80	65.20	71.00
70.0					40.50	49.10	52.90	59.10	64.50	70.30
75.0					39.80	48.40	52.20	58.30	63.70	69.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	11.7
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	35.4
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	59
Sound Power (MT), dBA	70
Sound Power with Sound Shell (MT), dBA	65
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	4.30
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	10.3
Locked Rotor Current, A	49.3
Winding Resistance, ohm	3.7
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