



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 25 °C Suction Gas Return with Voltage limit  $\pm 0$  %
- Maximum Evaporating Temperature
- 10 K Suction Superheat

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

ZB19KCE-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	2.08	2.62	3.27	4.05						
15.0	1.98	2.51	3.14	3.91						
20.0	1.88	2.39	3.01	3.75	4.62					
25.0	1.78	2.28	2.88	3.59	4.43	5.41	5.85			
30.0	1.68	2.16	2.74	3.42	4.24	5.18	5.60	6.27	6.87	
35.0	1.58	2.04	2.59	3.25	4.03	4.94	5.34	5.99	6.57	7.19
40.0	1.48	1.92	2.44	3.07	3.82	4.69	5.08	5.70	6.25	6.85
45.0		1.79	2.29	2.89	3.60	4.43	4.80	5.39	5.93	6.50
50.0		1.66	2.14	2.70	3.38	4.17	4.52	5.08	5.59	6.14
55.0			1.98	2.51	3.15	3.89	4.22	4.76	5.25	5.77
60.0				2.31	2.91	3.61	3.93	4.43	4.89	5.38
65.0				2.12	2.67	3.32	3.62	4.10	4.53	4.99
70.0					2.42	3.03	3.30	3.75	4.15	4.59
75.0					2.17	2.73	2.98	3.40	3.77	4.18

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	0.54	0.54	0.54	0.55						
15.0	0.62	0.61	0.61	0.62						
20.0	0.69	0.69	0.69	0.70	0.71					
25.0	0.77	0.77	0.78	0.78	0.79	0.80	0.80			
30.0	0.86	0.86	0.86	0.87	0.88	0.89	0.89	0.90	0.91	
35.0	0.95	0.96	0.96	0.97	0.98	0.99	0.99	1.00	1.01	1.01
40.0	1.06	1.06	1.07	1.08	1.08	1.10	1.10	1.10	1.11	1.12
45.0		1.18	1.19	1.20	1.21	1.22	1.22	1.23	1.23	1.24
50.0		1.31	1.32	1.34	1.34	1.36	1.36	1.36	1.36	1.37
55.0			1.46	1.48	1.50	1.50	1.51	1.52	1.52	1.52
60.0				1.64	1.66	1.68	1.68	1.68	1.69	1.70
65.0				1.83	1.84	1.86	1.86	1.88	1.88	1.88
70.0					2.05	2.07	2.07	2.08	2.09	2.09
75.0					2.28	2.30	2.30	2.31	2.32	2.32

50 Hz

ZB19KCE-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	2.31	2.29	2.28	2.28						
15.0	2.37	2.35	2.34	2.34						
20.0	2.44	2.42	2.41	2.41	2.41					
25.0	2.51	2.50	2.49	2.49	2.49	2.51	2.52			
30.0	2.59	2.59	2.58	2.58	2.59	2.60	2.61	2.62	2.63	
35.0	2.69	2.69	2.69	2.70	2.70	2.71	2.72	2.73	2.74	2.75
40.0	2.81	2.81	2.82	2.83	2.84	2.85	2.85	2.86	2.87	2.88
45.0		2.96	2.97	2.98	2.99	3.00	3.01	3.02	3.02	3.03
50.0		3.13	3.15	3.16	3.18	3.19	3.20	3.20	3.21	3.21
55.0			3.35	3.37	3.39	3.41	3.41	3.42	3.43	3.43
60.0				3.61	3.64	3.66	3.66	3.67	3.68	3.68
65.0				3.89	3.92	3.94	3.95	3.96	3.97	3.97
70.0					4.24	4.27	4.28	4.29	4.30	4.30
75.0					4.60	4.64	4.65	4.66	4.67	4.67

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	11.50	14.20	17.45	21.30						
15.0	11.40	14.15	17.45	21.30						
20.0	11.30	14.10	17.40	21.30	25.70					
25.0	11.20	14.00	17.30	21.20	25.70	30.80	33.00			
30.0	11.05	13.90	17.25	21.10	25.60	30.80	33.00	36.50	39.70	
35.0	10.95	13.75	17.10	21.00	25.50	30.70	32.90	36.50	39.60	43.00
40.0	10.80	13.60	16.95	20.90	25.40	30.50	32.80	36.30	39.50	42.90
45.0		13.45	16.80	20.70	25.20	30.40	32.60	36.20	39.40	42.70
50.0		13.30	16.60	20.50	25.00	30.10	32.40	36.00	39.10	42.50
55.0			16.40	20.20	24.70	29.90	32.10	35.70	38.90	42.20
60.0				19.95	24.40	29.50	31.80	35.30	38.50	41.90
65.0				19.65	24.10	29.20	31.40	35.00	38.10	41.50
70.0					23.70	28.70	31.00	34.50	37.70	41.10
75.0					23.30	28.30	30.50	34.10	37.30	40.70

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	6.83
Length/Width, mm	242/242
Height, mm	389
Net Weight, kg	25.8
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.12
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	55
Sound Power (MT), dBA	66
Sound Power with Sound Shell (MT), dBA	59
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	2.50
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	5.4
Locked Rotor Current, A	32
Winding Resistance, ohm	5.8
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge
Oil Control System	ALCO Trax-Oil OM3

## **MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
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