



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

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	9.05	11.40	14.15	17.45						
15.0	8.63	10.90	13.60	16.80						
20.0	8.19	10.40	13.05	16.15	19.75					
25.0	7.76	9.86	12.40	15.45	18.95	22.90	24.70			
30.0	7.32	9.33	11.80	14.70	18.10	22.00	23.70	26.40	28.80	
35.0	6.90	8.79	11.10	13.90	17.20	20.90	22.60	25.20	27.50	30.00
40.0	6.48	8.25	10.45	13.10	16.25	19.85	21.50	24.00	26.20	28.60
45.0		7.72	9.79	12.30	15.30	18.75	20.30	22.70	24.90	27.20
50.0			9.12	11.50	14.30	17.60	19.05	21.40	23.50	25.70
55.0			8.45	10.65	13.30	16.40	17.80	20.00	22.00	24.10
60.0				9.81	12.30	15.20	16.50	18.65	20.50	22.50
65.0					11.25	14.00	15.20	17.20	19.00	20.90
70.0					10.20	12.75	13.90	15.75	17.40	19.20
75.0						11.50	12.55	14.25	15.80	17.50

50 Hz

ZB76KCE-TFD

R134a

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	2.16	2.16	2.24	2.38						
15.0	2.48	2.45	2.51	2.63						
20.0	2.81	2.78	2.82	2.92	3.03					
25.0	3.18	3.13	3.16	3.24	3.34	3.43	3.46			
30.0	3.57	3.52	3.54	3.61	3.70	3.77	3.79	3.80	3.79	
35.0	3.98	3.94	3.96	4.02	4.10	4.15	4.16	4.16	4.14	4.10
40.0	4.42	4.39	4.42	4.48	4.54	4.59	4.60	4.59	4.56	4.51
45.0		4.87	4.90	4.97	5.04	5.08	5.08	5.06	5.03	4.97
50.0			5.43	5.50	5.57	5.62	5.62	5.60	5.56	5.50
55.0			5.99	6.08	6.16	6.20	6.21	6.19	6.15	6.08
60.0				6.69	6.79	6.84	6.85	6.83	6.80	6.73
65.0					7.46	7.54	7.55	7.54	7.50	7.44
70.0					8.18	8.28	8.29	8.29	8.27	8.21
75.0						9.07	9.09	9.11	9.09	9.04

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	9.53	9.66	9.80	9.95						
15.0	9.67	9.76	9.87	9.98						
20.0	9.84	9.92	10.00	10.08	10.15					
25.0	10.07	10.13	10.19	10.25	10.29	10.32	10.33			
30.0	10.34	10.39	10.44	10.48	10.51	10.52	10.51	10.49	10.46	
35.0	10.65	10.70	10.75	10.79	10.81	10.79	10.78	10.75	10.71	10.66
40.0	11.01	11.07	11.13	11.17	11.18	11.16	11.14	11.10	11.05	10.99
45.0		11.49	11.56	11.61	11.63	11.61	11.59	11.54	11.49	11.43
50.0			12.05	12.12	12.15	12.14	12.12	12.08	12.03	11.96
55.0			12.60	12.69	12.75	12.75	12.74	12.71	12.66	12.60
60.0				13.34	13.42	13.45	13.45	13.42	13.39	13.33
65.0					14.17	14.23	14.24	14.23	14.21	14.16
70.0					14.98	15.09	15.11	15.13	15.12	15.09
75.0						16.03	16.07	16.11	16.13	16.12

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	50.10	61.80	75.70	91.60						
15.0	49.60	61.50	75.50	91.60						
20.0	49.20	61.10	75.20	91.50	110.00					
25.0	48.60	60.60	74.70	91.20	110.00	130.50	139.50			
30.0	48.10	60.00	74.20	90.70	109.50	130.50	139.50	153.50	166.00	
35.0	47.60	59.30	73.50	90.00	109.00	130.00	139.00	153.50	166.00	179.50
40.0	47.20	58.70	72.70	89.10	108.00	129.50	138.50	153.00	166.00	179.00
45.0		58.00	71.80	88.20	107.00	128.50	137.50	152.50	165.00	178.50
50.0			70.90	87.10	106.00	127.50	136.50	151.50	164.50	178.00
55.0			70.00	85.90	104.50	126.00	135.50	150.00	163.00	177.00
60.0				84.60	103.00	124.50	133.50	148.50	161.50	175.50
65.0					101.50	122.50	132.00	147.00	160.00	174.00
70.0					99.80	121.00	130.00	145.00	158.00	172.00
75.0						119.00	128.00	143.00	156.00	170.50

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	29.1
Length/Width, mm	264/284
Height, mm	533
Net Weight, kg	61.2
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.25
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	66
Sound Power (MT), dBA	77
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	2
Max. Internal Free Volume, l	13.3
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
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	20.4
Locked Rotor Current, A	118
Winding Resistance, ohm	1.24
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Mounting Grommets	Hard Mounts for Paralleling
Crankcase Heater	66 W External
Rotalock valves	suction and discharge
Crankcase Heater	90 W External
Enclosure Class	IP66 With Molded Plug

### **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