



Minimum Evaporating Temp. With:

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

Suction Return Temperature 18.3°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
4.0	11.65	14.35	17.55						
5.0	11.60	14.30	17.50						
10.0	11.15	13.85	17.00	20.70					
15.0	10.65	13.35	16.45	20.00	24.20				
20.0	10.10	12.75	15.80	19.30	23.40	28.00			
25.0	9.52	12.15	15.10	18.55	22.50	26.90	32.00		
30.0		11.45	14.35	17.70	21.50	25.80	30.70	32.90	36.30
35.0		10.65	13.50	16.75	20.40	24.50	29.30	31.30	34.60
40.0			12.60	15.70	19.25	23.20	27.70	29.70	32.90
45.0			11.60	14.60	18.00	21.80	26.10	28.00	31.00
50.0				13.45	16.65	20.30	24.40	26.20	29.00
55.0					15.25	18.70	22.60	24.30	27.00
60.0					13.75	17.00	20.70	22.20	24.80

50 Hz

ZB66K5E-TFD

R449A Dew Point

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
4.0	2.16	2.19	2.28						
5.0	2.20	2.22	2.31						
10.0	2.57	2.57	2.62	2.73					
15.0	2.99	2.98	3.00	3.08	3.22				
20.0	3.46	3.43	3.44	3.49	3.59	3.78			
25.0	3.97	3.95	3.94	3.97	4.04	4.19	4.41		
30.0		4.51	4.50	4.51	4.57	4.68	4.86	4.96	5.14
35.0		5.12	5.11	5.12	5.16	5.25	5.40	5.48	5.63
40.0			5.78	5.79	5.82	5.89	6.01	6.08	6.21
45.0			6.49	6.51	6.55	6.61	6.71	6.77	6.88
50.0				7.30	7.34	7.40	7.49	7.54	7.64
55.0					8.19	8.25	8.35	8.39	8.48
60.0					9.10	9.18	9.28	9.32	9.40

Cond °C	Current at 400 V, A								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
4.0	8.75	8.77	8.83						
5.0	8.77	8.79	8.84						
10.0	8.99	8.99	9.02	9.10					
15.0	9.27	9.26	9.27	9.33	9.45				
20.0	9.63	9.62	9.62	9.65	9.74	9.90			
25.0	10.07	10.06	10.05	10.07	10.14	10.27	10.49		
30.0		10.58	10.58	10.59	10.64	10.75	10.94	11.04	11.22
35.0		11.20	11.20	11.21	11.25	11.35	11.51	11.60	11.76
40.0			11.93	11.95	11.98	12.07	12.21	12.29	12.43
45.0			12.77	12.79	12.83	12.91	13.04	13.11	13.24
50.0				13.76	13.81	13.88	14.01	14.07	14.19
55.0					14.91	14.99	15.12	15.18	15.29
60.0					16.14	16.24	16.37	16.43	16.54

Cond °C	Suction Mass Flow, g/s								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
4.0	52.10	64.40	79.10						
5.0	52.00	64.40	79.20						
10.0	51.80	64.50	79.60	97.40					
15.0	51.30	64.40	79.80	97.80	119.00				
20.0	50.50	64.00	79.60	97.90	119.00	144.00			
25.0	49.40	63.20	79.20	97.70	119.00	144.50	173.50		
30.0		62.10	78.40	97.20	119.00	144.00	173.50	186.50	208.00
35.0		60.60	77.20	96.30	118.50	143.50	173.50	186.50	208.00
40.0			75.60	94.90	117.00	143.00	172.50	186.00	208.00
45.0			73.30	93.00	115.50	141.50	171.50	185.00	207.00
50.0				90.50	113.50	139.50	170.00	184.00	206.00
55.0					110.50	137.50	168.00	182.00	204.00
60.0					107.00	134.50	166.00	180.00	203.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	25.7
Length/Width, mm	280/280
Height, mm	534
Net Weight, kg	59.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.37
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 (0)
Sound Pressure @ 1m (MT), dBA	66
Sound Power (MT), dBA	77
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
Refrigerant's GWP	1397
Refrigerant's classification	A1

### **COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)**

Maximum Operating Current, A	17.5
Locked Rotor Current, A	111
Winding Resistance, ohm	1.37
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

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

### **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
TFD	460 V / 3~ / 60 Hz	460		Y	1.04