



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return Liquid injection
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	3.04	3.88	4.87	6.01	7.32	8.81					
15.0	2.88	3.70	4.66	5.76	7.03	8.47	10.10				
20.0	2.73	3.52	4.44	5.50	6.72	8.11	9.68	11.45			
25.0	2.59	3.34	4.21	5.22	6.39	7.72	9.22	10.95	12.85		
30.0	2.45	3.15	3.98	4.93	6.03	7.30	8.74	10.35	12.20	14.25	15.10
35.0	2.32	2.97	3.73	4.63	5.66	6.85	8.21	9.76	11.50	13.45	14.30
40.0	2.19	2.78	3.48	4.31	5.27	6.38	7.66	9.11	10.75	12.60	13.40
45.0	2.06	2.59	3.22	3.97	4.85	5.88	7.06	8.42	9.97	11.70	12.45
50.0	1.94	2.40	2.95	3.62	4.42	5.35	6.44	7.69	9.13	10.75	11.50
55.0	1.82	2.20	2.68	3.26	3.96	4.79	5.78	6.92	8.25	9.76	10.45
60.0						4.20	5.08	6.11	7.31	8.71	9.32

50 Hz

ZF13K4E-TFD

R404A Dew Point

Cond °C	Power, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	1.32	1.38	1.44	1.54	1.65	1.78					
15.0	1.44	1.49	1.56	1.64	1.76	1.88	2.03				
20.0	1.56	1.62	1.68	1.78	1.88	2.00	2.15	2.31			
25.0	1.71	1.76	1.84	1.92	2.02	2.14	2.28	2.44	2.62		
30.0	1.87	1.93	2.00	2.08	2.19	2.30	2.44	2.59	2.76	2.95	3.03
35.0	2.06	2.12	2.19	2.28	2.37	2.49	2.62	2.76	2.93	3.11	3.19
40.0	2.27	2.33	2.41	2.49	2.59	2.70	2.83	2.97	3.13	3.30	3.37
45.0	2.51	2.58	2.65	2.74	2.84	2.95	3.07	3.21	3.36	3.52	3.60
50.0	2.78	2.85	2.93	3.02	3.12	3.23	3.35	3.48	3.62	3.78	3.85
55.0	3.08	3.16	3.24	3.33	3.43	3.54	3.66	3.79	3.93	4.08	4.15
60.0						3.90	4.01	4.14	4.28	4.42	4.49

Cond °C	Current at 400 V, A										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	4.15	4.19	4.24	4.32	4.41	4.52					
15.0	4.22	4.27	4.33	4.40	4.50	4.62	4.75				
20.0	4.32	4.37	4.43	4.51	4.61	4.73	4.87	5.03			
25.0	4.44	4.49	4.56	4.64	4.75	4.87	5.01	5.17	5.35		
30.0	4.58	4.64	4.72	4.81	4.91	5.04	5.18	5.34	5.53	5.73	5.82
35.0	4.76	4.83	4.91	5.00	5.11	5.24	5.38	5.55	5.73	5.94	6.03
40.0	4.98	5.05	5.14	5.24	5.35	5.48	5.63	5.79	5.98	6.19	6.28
45.0	5.25	5.32	5.41	5.51	5.63	5.76	5.91	6.08	6.27	6.48	6.57
50.0	5.56	5.64	5.73	5.84	5.96	6.10	6.25	6.42	6.61	6.82	6.91
55.0	5.93	6.01	6.11	6.22	6.35	6.49	6.64	6.81	7.00	7.21	7.30
60.0						6.93	7.09	7.27	7.46	7.67	7.76

50 Hz

ZF13K4E-TFD

R404A Dew Point

Cond °C	Suction Mass Flow, g/s										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	16.90	21.70	27.30	33.80	41.40	50.10					
15.0	16.75	21.50	27.20	33.80	41.40	50.20	60.30				
20.0	16.55	21.40	27.10	33.70	41.40	50.30	60.50	72.20			
25.0	16.45	21.30	26.90	33.60	41.30	50.20	60.50	72.40	86.00		
30.0	16.35	21.10	26.80	33.40	41.10	50.00	60.40	72.30	86.10	102.00	109.00
35.0	16.35	21.00	26.50	33.10	40.70	49.70	60.00	72.10	86.00	102.00	109.00
40.0	16.40	20.90	26.30	32.70	40.30	49.20	59.50	71.60	85.70	102.00	109.50
45.0	16.50	20.80	26.00	32.20	39.70	48.50	58.80	71.00	85.20	102.00	109.50
50.0	16.70	20.70	25.70	31.70	38.90	47.60	57.90	70.10	84.50	101.50	109.00
55.0	17.10	20.70	25.30	31.00	38.00	46.50	56.80	69.00	83.60	101.00	109.00
60.0						45.30	55.50	67.80	82.70	100.50	109.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	11.7
Length/Width, mm	246/251
Height, mm	442
Net Weight, kg	38
Gross Weight, kg	41
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 (LT), dBA	65
Sound Power (LT), dBA	76
Sound Power with Sound Shell (LT), dBA	69
Sound Conditions (LT, Temperatures:	-35 / 40 / 20 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	6.10
High Side PS gauge, bar	28.8
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	8
Locked Rotor Current, A	51.5
Winding Resistance, ohm	3.64
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Current Sensing Relay	External
Liquid Injection	DTC Valve
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
TF5	200-220 V / 3~ / 50 Hz	200		Y	2.09
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09