



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	2.07	2.63	3.30	4.09	5.03	6.12					
15.0	1.98	2.52	3.16	3.92	4.81	5.85	7.05				
20.0	1.90	2.41	3.02	3.74	4.58	5.57	6.71	8.02			
25.0	1.81	2.30	2.88	3.56	4.36	5.28	6.36	7.60	9.00		
30.0	1.72	2.19	2.73	3.37	4.12	4.99	6.00	7.16	8.49	10.00	10.65
35.0	1.63	2.07	2.58	3.18	3.87	4.69	5.63	6.71	7.96	9.37	9.99
40.0	1.54	1.94	2.42	2.97	3.62	4.37	5.24	6.25	7.41	8.73	9.31
45.0	1.44	1.82	2.25	2.76	3.35	4.04	4.84	5.77	6.85	8.07	8.61
50.0	1.32	1.68	2.07	2.53	3.07	3.69	4.42	5.28	6.26	7.39	7.89
55.0	1.20	1.52	1.88	2.29	2.77	3.33	3.99	4.76	5.65	6.69	7.15
60.0						2.95	3.53	4.22	5.03	5.96	6.38

50 Hz

ZF09K4E-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	1.03	1.08	1.13	1.21	1.30	1.40					
15.0	1.12	1.16	1.21	1.28	1.36	1.47	1.58				
20.0	1.22	1.25	1.30	1.36	1.45	1.54	1.66	1.78			
25.0	1.33	1.36	1.40	1.46	1.54	1.64	1.74	1.86	2.00		
30.0	1.46	1.48	1.52	1.58	1.66	1.74	1.85	1.96	2.10	2.24	2.30
35.0	1.61	1.62	1.66	1.72	1.78	1.87	1.97	2.08	2.21	2.35	2.41
40.0	1.78	1.78	1.82	1.86	1.93	2.01	2.11	2.22	2.34	2.48	2.53
45.0	1.96	1.96	1.99	2.03	2.09	2.17	2.26	2.37	2.49	2.62	2.68
50.0	2.17	2.17	2.19	2.22	2.28	2.35	2.44	2.54	2.66	2.79	2.85
55.0	2.40	2.39	2.41	2.44	2.49	2.56	2.64	2.74	2.85	2.98	3.03
60.0						2.78	2.86	2.96	3.07	3.19	3.24

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	4.18	4.21	4.24	4.28	4.34	4.40					
15.0	4.21	4.23	4.27	4.31	4.36	4.43	4.51				
20.0	4.25	4.27	4.31	4.35	4.40	4.47	4.55	4.65			
25.0	4.31	4.33	4.36	4.40	4.46	4.53	4.61	4.70	4.82		
30.0	4.38	4.40	4.43	4.47	4.53	4.60	4.68	4.78	4.89	5.03	5.09
35.0	4.48	4.49	4.52	4.56	4.62	4.69	4.77	4.87	4.99	5.13	5.19
40.0	4.60	4.61	4.64	4.68	4.73	4.80	4.89	4.99	5.11	5.25	5.31
45.0	4.75	4.76	4.78	4.82	4.87	4.94	5.03	5.13	5.26	5.40	5.46
50.0	4.93	4.93	4.95	4.99	5.04	5.11	5.19	5.30	5.43	5.58	5.64
55.0	5.14	5.14	5.16	5.19	5.24	5.31	5.40	5.50	5.63	5.78	5.85
60.0						5.54	5.63	5.74	5.87	6.02	6.09

50 Hz

ZF09K4E-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	11.55	14.65	18.45	23.00	28.40	34.80					
15.0	11.50	14.65	18.45	23.00	28.30	34.70	42.10				
20.0	11.50	14.65	18.40	22.90	28.30	34.60	41.90	50.60			
25.0	11.50	14.65	18.40	22.90	28.10	34.40	41.70	50.30	60.30		
30.0	11.50	14.65	18.40	22.80	28.00	34.20	41.50	50.00	59.90	71.60	76.80
35.0	11.50	14.65	18.35	22.70	27.90	34.00	41.10	49.60	59.50	71.20	76.40
40.0	11.50	14.60	18.25	22.60	27.60	33.70	40.80	49.20	59.10	70.70	75.90
45.0	11.45	14.55	18.15	22.40	27.40	33.30	40.30	48.60	58.50	70.20	75.50
50.0	11.40	14.45	18.00	22.10	27.00	32.90	39.80	48.10	57.90	69.70	75.00
55.0	11.25	14.30	17.80	21.80	26.60	32.30	39.20	47.40	57.30	69.20	74.60
60.0						31.80	38.60	46.80	56.90	69.00	74.60

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	8.03
Length/Width, mm	243/244
Height, mm	391
Net Weight, kg	27
Gross Weight, kg	30
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.5
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	62
Sound Power (LT), dBA	73
Sound Power with Sound Shell (LT), dBA	65
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	4.10
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	6
Locked Rotor Current, A	40
Winding Resistance, ohm	4.83
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