



Minimum Evaporating Temp. With:	
— 20 K Suction Superheat	— 20 K Suction Superheat Liquid injection
— 20 °C Suction Gas Return Liquid injection	
— Maximum Evaporating Temperature	

Suction Return Temperature 18.3°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	4.15	5.20	6.47	7.99	9.79	11.90					
15.0	4.12	5.17	6.43	7.93	9.70	11.80	14.25				
20.0	4.09	5.13	6.38	7.85	9.60	11.65	14.05	16.80			
25.0	4.04	5.09	6.31	7.76	9.47	11.45	13.80	16.50	19.60		
30.0	4.00	5.03	6.24	7.66	9.33	11.30	13.55	16.20	19.25	22.70	24.20
35.0	3.94	4.96	6.15	7.54	9.17	11.05	13.30	15.85	18.80	22.20	23.70
40.0	3.88	4.88	6.04	7.40	8.99	10.85	13.00	15.50	18.35	21.70	23.10
45.0		4.80	5.93	7.25	8.79	10.60	12.70	15.10	17.90	21.10	22.50
50.0							12.35	14.70	17.40	20.50	21.90
55.0									16.90	19.90	21.20

50 Hz

ZF18KVE-TFD EVI

R449A 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	1.68	1.78	1.88	2.00	2.17	2.41					
15.0	1.90	2.01	2.11	2.22	2.36	2.55	2.83				
20.0	2.12	2.26	2.37	2.48	2.60	2.76	2.98	3.29			
25.0	2.36	2.53	2.66	2.77	2.88	3.01	3.19	3.44	3.78		
30.0	2.60	2.82	2.98	3.10	3.21	3.32	3.46	3.66	3.93	4.31	4.49
35.0	2.85	3.13	3.32	3.46	3.57	3.67	3.79	3.94	4.16	4.46	4.61
40.0	3.11	3.45	3.69	3.86	3.98	4.08	4.18	4.30	4.47	4.70	4.82
45.0		3.78	4.07	4.28	4.43	4.54	4.63	4.72	4.85	5.03	5.12
50.0							5.13	5.21	5.30	5.43	5.50
55.0									5.83	5.92	5.97

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	5.02	5.08	5.14	5.23	5.38	5.61					
15.0	5.18	5.27	5.34	5.43	5.56	5.75	6.04				
20.0	5.36	5.49	5.59	5.68	5.79	5.95	6.19	6.53			
25.0	5.56	5.74	5.87	5.98	6.08	6.22	6.41	6.69	7.09		
30.0	5.78	6.03	6.20	6.32	6.43	6.55	6.72	6.94	7.27	7.72	7.94
35.0	6.03	6.35	6.57	6.73	6.85	6.96	7.10	7.29	7.55	7.92	8.10
40.0	6.31	6.70	6.98	7.18	7.33	7.45	7.57	7.72	7.93	8.23	8.38
45.0		7.10	7.45	7.70	7.88	8.01	8.13	8.25	8.42	8.66	8.78
50.0							8.77	8.88	9.01	9.20	9.29
55.0									9.72	9.86	9.93

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	16.05	20.80	26.50	33.50	42.00	52.40					
15.0	16.10	20.80	26.50	33.50	42.00	52.40	64.80				
20.0	16.10	20.80	26.60	33.50	42.00	52.30	64.70	79.40			
25.0	16.05	20.80	26.60	33.50	41.90	52.10	64.40	79.10	96.30		
30.0	16.00	20.80	26.50	33.40	41.70	51.90	64.10	78.60	95.70	115.50	124.50
35.0	15.95	20.70	26.30	33.20	41.50	51.50	63.60	78.00	94.90	115.00	123.50
40.0	15.85	20.60	26.20	32.90	41.10	51.10	63.00	77.20	94.00	113.50	122.50
45.0		20.40	25.90	32.60	40.70	50.50	62.30	76.30	93.00	112.50	121.00
50.0							61.50	75.30	91.80	111.00	119.50
55.0									90.40	109.50	118.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	246/251
Height, mm	442
Net Weight, kg	39.5
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	67
Sound Power (LT), dBA	78
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	5.70
High Side PS gauge, bar	28.8
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	13.7
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
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
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)

50 Hz

ZF18KVE-TFD EVI

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MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00