



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 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	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	11.50	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	11.10	13.30	15.85	18.80	22.20	23.70
40.0	3.88	4.88	6.05	7.40	8.99	10.85	13.00	15.50	18.40	21.70	23.10
45.0		4.80	5.93	7.26	8.80	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

ZFD18KVE-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	1.87	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	2.59	2.75	2.98	3.29			
25.0	2.36	2.53	2.66	2.77	2.88	3.01	3.19	3.43	3.78		
30.0	2.60	2.82	2.98	3.10	3.20	3.31	3.46	3.65	3.93	4.30	4.49
35.0	2.85	3.12	3.32	3.46	3.57	3.67	3.79	3.94	4.16	4.46	4.61
40.0	3.10	3.44	3.68	3.86	3.98	4.08	4.18	4.30	4.46	4.70	4.82
45.0		3.77	4.07	4.28	4.43	4.53	4.62	4.72	4.84	5.02	5.11
50.0							5.12	5.20	5.30	5.43	5.50
55.0									5.82	5.91	5.96

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	5.17	5.27	5.34	5.43	5.55	5.75	6.04				
20.0	5.35	5.49	5.58	5.68	5.79	5.95	6.18	6.53			
25.0	5.55	5.74	5.87	5.97	6.08	6.21	6.41	6.69	7.08		
30.0	5.78	6.02	6.19	6.32	6.43	6.55	6.71	6.94	7.26	7.71	7.93
35.0	6.03	6.34	6.56	6.72	6.84	6.96	7.10	7.28	7.55	7.91	8.10
40.0	6.30	6.70	6.98	7.18	7.32	7.44	7.56	7.72	7.93	8.22	8.37
45.0		7.09	7.44	7.69	7.87	8.00	8.12	8.25	8.41	8.65	8.77
50.0							8.76	8.87	9.00	9.19	9.28
55.0									9.70	9.84	9.91

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	16.00	20.70	26.30	33.30	41.70	52.00					
15.0	16.00	20.70	26.40	33.30	41.80	52.00	64.40				
20.0	16.00	20.70	26.40	33.30	41.80	52.00	64.20	78.90			
25.0	15.95	20.70	26.40	33.30	41.70	51.80	64.00	78.50	95.60		
30.0	15.90	20.70	26.30	33.20	41.50	51.50	63.60	78.00	95.00	115.00	123.50
35.0	15.85	20.60	26.20	33.00	41.20	51.20	63.20	77.40	94.20	114.00	122.50
40.0	15.75	20.40	26.00	32.70	40.90	50.70	62.60	76.70	93.30	113.00	121.50
45.0		20.30	25.80	32.40	40.40	50.20	61.90	75.80	92.30	111.50	120.00
50.0							61.00	74.80	91.10	110.00	118.50
55.0									89.70	108.50	117.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	300/299
Height, mm	481
Net Weight, kg	43.1
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.89
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
High Side PS gauge, bar	32
Low Side PS gauge, bar	21
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	13.8
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	NTC sensor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Valve Coil	24V AC
Solenoid Valve Kit	220 V Ac 12" lead Length
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC2-552
Digital Control Kit	EC3-652
Digital Driver	EC3-D13

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