



Minimum Evaporating Temp. With:

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

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Additional restrictions, please see application guidelines

50 Hz

ZRD72KRE-TFD

R513A

Cond °C	Cooling Capacity, kW											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
14.0	5.59											
15.0	5.54											
20.0	5.26	6.60	8.21									
25.0	4.95	6.27	7.82	9.65	11.80							
30.0	4.64	5.91	7.41	9.17	11.25	13.65	14.70					
35.0	4.31	5.53	6.97	8.66	10.65	12.95	13.95	15.60	17.10	18.65		
40.0	3.97	5.15	6.52	8.12	10.00	12.20	13.15	14.75	16.15	17.65	21.00	
45.0	3.63	4.75	6.05	7.57	9.34	11.40	12.35	13.80	15.15	16.60	19.80	23.40
50.0		4.34	5.57	6.99	8.66	10.60	11.50	12.90	14.15	15.50	18.55	22.00
55.0			5.08	6.41	7.97	9.79	10.60	11.90	13.10	14.40	17.25	20.50
60.0			4.58	5.81	7.25	8.95	9.71	10.95	12.05	13.25	15.90	19.00
65.0				5.21	6.53	8.09	8.79	9.92	10.95	12.05	14.55	17.45
70.0					5.79	7.21	7.85	8.89	9.84	10.85	13.15	
75.0					5.05	6.33	6.90	7.84	8.70	9.64		

Cond °C	Power, kW											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
14.0	1.54											
15.0	1.56											
20.0	1.70	1.78	1.88									
25.0	1.84	1.92	2.02	2.14	2.29							
30.0	1.99	2.07	2.17	2.29	2.43	2.58	2.65					
35.0	2.17	2.25	2.34	2.46	2.59	2.74	2.80	2.90	2.99	3.09		
40.0	2.37	2.45	2.55	2.66	2.78	2.92	2.98	3.07	3.16	3.24	3.43	
45.0	2.59	2.68	2.78	2.89	3.01	3.14	3.19	3.28	3.36	3.44	3.60	3.78
50.0		2.94	3.04	3.15	3.27	3.39	3.44	3.53	3.60	3.67	3.82	3.99
55.0			3.34	3.45	3.56	3.69	3.74	3.81	3.88	3.95	4.09	4.24
60.0			3.67	3.78	3.90	4.02	4.07	4.14	4.21	4.27	4.40	4.53
65.0				4.16	4.28	4.40	4.45	4.52	4.58	4.64	4.76	4.89
70.0					4.71	4.83	4.88	4.95	5.01	5.07	5.18	
75.0					5.19	5.31	5.36	5.43	5.49	5.54		

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50 Hz

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Cond °C	Current at 400 V, A											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
14.0	4.10											
15.0	4.15											
20.0	4.40	4.53	4.70									
25.0	4.64	4.77	4.92	5.10	5.31							
30.0	4.89	5.01	5.15	5.32	5.51	5.73	5.82					
35.0	5.15	5.26	5.39	5.55	5.73	5.93	6.02	6.16	6.28	6.40		
40.0	5.43	5.54	5.67	5.82	5.99	6.17	6.25	6.38	6.49	6.60	6.84	
45.0	5.73	5.84	5.97	6.12	6.28	6.45	6.53	6.65	6.75	6.85	7.07	7.30
50.0		6.18	6.32	6.46	6.62	6.79	6.86	6.97	7.06	7.16	7.36	7.57
55.0			6.71	6.86	7.01	7.18	7.24	7.35	7.44	7.53	7.72	7.91
60.0			7.16	7.31	7.47	7.63	7.70	7.80	7.88	7.97	8.15	8.32
65.0				7.83	7.99	8.16	8.22	8.32	8.41	8.49	8.66	8.83
70.0					8.60	8.76	8.83	8.93	9.02	9.10	9.26	
75.0					9.28	9.46	9.53	9.63	9.72	9.80		

Cond °C	Suction Mass Flow, g/s											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
14.0	35.60											
15.0	35.60											
20.0	35.30	43.40	52.70									
25.0	35.00	43.20	52.60	63.40	75.80							
30.0	34.50	42.80	52.40	63.20	75.70	89.80	96.00					
35.0	33.90	42.40	52.00	62.90	75.40	89.50	95.70	105.50	114.00	123.50		
40.0	33.30	41.90	51.50	62.50	74.90	89.00	95.20	105.00	113.50	123.00	143.00	
45.0	32.50	41.20	51.00	61.90	74.30	88.40	94.50	104.50	113.00	122.00	142.50	164.50
50.0		40.50	50.30	61.20	73.60	87.60	93.80	103.50	112.00	121.50	141.50	164.00
55.0			49.50	60.50	72.80	86.70	92.80	102.50	111.00	120.50	140.50	162.50
60.0			48.80	59.60	71.90	85.70	91.80	101.50	110.00	119.00	139.00	161.50
65.0				58.70	70.90	84.60	90.60	100.00	109.00	118.00	138.00	160.50
70.0					69.90	83.50	89.50	99.00	107.50	116.50	136.50	
75.0					69.00	82.50	88.40	97.90	106.50	115.50		

Additional restrictions, please see application guidelines

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	17.1
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	39.9
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
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 (19)
Max. Internal Free Volume, l	5.90
High Side PS gauge, bar	29
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	631
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.1
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	External thermistor
Discharge Temperature Protection	NTC sensor

Additional restrictions, please see application guidelines

### ACCESSORIES OPTIONAL

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

### MOTOR OPTIONS

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04

Additional restrictions, please see application guidelines