



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

ZRD61KRE-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	4.69											
15.0	4.64											
20.0	4.40	5.54	6.91									
25.0	4.14	5.24	6.56	8.13	9.99							
30.0	3.88	4.94	6.20	7.70	9.47	11.55	12.45					
35.0	3.61	4.62	5.82	7.25	8.93	10.90	11.80	13.20	14.50	15.85		
40.0	3.34	4.30	5.43	6.78	8.37	10.25	11.10	12.40	13.65	14.95	17.85	
45.0	3.06	3.97	5.04	6.31	7.80	9.57	10.35	11.60	12.75	14.00	16.75	19.90
50.0		3.63	4.64	5.82	7.22	8.87	9.61	10.80	11.90	13.05	15.65	18.60
55.0			4.23	5.32	6.63	8.16	8.85	9.97	11.00	12.05	14.50	17.30
60.0			3.81	4.82	6.02	7.44	8.08	9.11	10.05	11.05	13.35	16.00
65.0				4.31	5.41	6.71	7.29	8.25	9.12	10.05	12.20	14.65
70.0					4.79	5.96	6.49	7.37	8.16	9.03	11.00	
75.0					4.16	5.21	5.69	6.47	7.20	7.98		

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	1.34											
15.0	1.36											
20.0	1.46	1.50	1.56									
25.0	1.57	1.62	1.68	1.74	1.80							
30.0	1.70	1.76	1.82	1.88	1.94	2.02	2.05					
35.0	1.84	1.92	1.98	2.04	2.11	2.17	2.20	2.25	2.30	2.35		
40.0	1.99	2.08	2.16	2.23	2.29	2.36	2.38	2.43	2.47	2.51	2.61	
45.0	2.16	2.27	2.36	2.43	2.50	2.56	2.59	2.63	2.66	2.70	2.79	2.89
50.0		2.46	2.57	2.65	2.73	2.79	2.82	2.85	2.89	2.92	2.99	3.08
55.0			2.80	2.89	2.98	3.04	3.07	3.11	3.14	3.17	3.23	3.31
60.0			3.04	3.15	3.25	3.32	3.35	3.38	3.41	3.44	3.50	3.56
65.0				3.43	3.53	3.62	3.65	3.69	3.72	3.74	3.80	3.85
70.0					3.84	3.94	3.97	4.01	4.04	4.07	4.12	
75.0					4.17	4.28	4.31	4.36	4.40	4.43		

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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	3.89											
15.0	3.94											
20.0	4.16	4.24	4.32									
25.0	4.38	4.46	4.53	4.61	4.70							
30.0	4.58	4.67	4.75	4.82	4.90	5.00	5.04					
35.0	4.78	4.87	4.96	5.04	5.11	5.20	5.23	5.29	5.35	5.41		
40.0	4.97	5.09	5.18	5.26	5.34	5.42	5.45	5.50	5.55	5.60	5.73	
45.0	5.17	5.30	5.41	5.50	5.58	5.66	5.69	5.74	5.78	5.83	5.93	6.07
50.0		5.54	5.66	5.76	5.85	5.93	5.96	6.01	6.04	6.09	6.18	6.29
55.0			5.93	6.05	6.15	6.23	6.26	6.31	6.35	6.39	6.47	6.57
60.0			6.23	6.37	6.48	6.57	6.61	6.65	6.69	6.73	6.81	6.89
65.0				6.72	6.85	6.96	6.99	7.05	7.09	7.13	7.20	7.28
70.0					7.26	7.38	7.43	7.49	7.53	7.57	7.65	
75.0					7.72	7.87	7.92	7.98	8.04	8.08		

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	29.90											
15.0	29.80											
20.0	29.60	36.40	44.40									
25.0	29.20	36.10	44.10	53.40	64.20							
30.0	28.90	35.80	43.80	53.10	63.80	76.00	81.40					
35.0	28.40	35.40	43.40	52.70	63.30	75.50	80.80	89.30	96.80	105.00		
40.0	28.00	35.00	43.00	52.20	62.80	74.80	80.10	88.50	96.00	104.00	121.50	
45.0	27.40	34.50	42.50	51.60	62.10	74.10	79.30	87.70	95.20	103.00	120.50	139.50
50.0		33.90	41.90	51.00	61.40	73.20	78.40	86.80	94.20	102.00	119.50	138.50
55.0			41.30	50.30	60.50	72.30	77.50	85.70	93.10	101.00	118.00	137.50
60.0			40.60	49.50	59.60	71.30	76.40	84.60	91.90	99.70	116.50	136.00
65.0				48.70	58.70	70.20	75.20	83.30	90.60	98.30	115.50	134.50
70.0					57.70	69.00	74.00	82.10	89.30	97.00	114.00	
75.0					56.80	67.90	72.90	80.80	88.00	95.70		

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	14.4
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	38.1
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	4.20
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	11.3
Locked Rotor Current, A	64
Winding Resistance, ohm	2.8
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	Hard Mounts for Paralleling
Digital Tubing Kit	220 V 0.3m Rotalock
Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Solenoid Valve Kit	220 V Ac 12" lead Length
Digital Control Kit	EC2-552
Mounting Grommets	Rubber Grommet For Single
Digital Control	24V AC
Valve Coil	24V AC
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Control Kit	EC3-652
Mounting Grommets	Standard
Solenoid valve	Standard
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Driver	EC3-D13

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