



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

ZR42KRE-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
10.0	3.39	4.20	5.20	6.37								
15.0	3.22	4.02	4.99	6.14	7.48							
20.0	3.04	3.82	4.77	5.89	7.19	8.68						
25.0	2.85	3.61	4.53	5.61	6.88	8.33	8.96	9.96				
30.0	2.65	3.39	4.27	5.32	6.54	7.94	8.56	9.53	10.40	11.30		
35.0	2.45	3.15	4.00	5.01	6.19	7.54	8.13	9.07	9.91	10.80		
40.0	2.25	2.91	3.73	4.69	5.82	7.11	7.68	8.59	9.39	10.25	12.10	
45.0	2.04	2.67	3.44	4.36	5.43	6.67	7.21	8.08	8.85	9.66	11.45	13.40
50.0		2.41	3.14	4.01	5.03	6.20	6.72	7.54	8.28	9.06	10.75	12.65
55.0			2.84	3.65	4.61	5.72	6.21	6.99	7.69	8.43	10.05	11.85
60.0			2.53	3.28	4.18	5.22	5.68	6.42	7.08	7.78	9.31	11.00
65.0				2.91	3.74	4.71	5.14	5.83	6.45	7.11	8.55	10.15
70.0					3.29	4.18	4.58	5.23	5.80	6.42	7.77	
75.0					2.83	3.65	4.01	4.61	5.14	5.71		

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
10.0	0.82	0.82	0.82	0.84								
15.0	0.92	0.91	0.92	0.93	0.96							
20.0	1.03	1.02	1.02	1.02	1.04	1.08						
25.0	1.16	1.14	1.14	1.14	1.15	1.18	1.20	1.23				
30.0	1.30	1.28	1.28	1.27	1.28	1.30	1.30	1.33	1.36	1.39		
35.0	1.45	1.44	1.43	1.42	1.42	1.43	1.44	1.46	1.48	1.50		
40.0	1.62	1.62	1.60	1.60	1.58	1.58	1.59	1.60	1.62	1.64	1.70	
45.0	1.81	1.81	1.80	1.78	1.78	1.77	1.77	1.78	1.78	1.80	1.84	1.91
50.0		2.02	2.01	2.00	1.99	1.98	1.98	1.98	1.98	1.98	2.02	2.07
55.0			2.25	2.24	2.23	2.21	2.21	2.20	2.20	2.20	2.22	2.26
60.0			2.52	2.51	2.49	2.47	2.47	2.46	2.45	2.45	2.46	2.48
65.0				2.80	2.78	2.76	2.76	2.75	2.74	2.73	2.73	2.74
70.0					3.11	3.09	3.08	3.06	3.05	3.04	3.03	
75.0					3.46	3.44	3.43	3.41	3.40	3.39		

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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
10.0	2.76	2.75	2.76	2.78								
15.0	3.04	3.03	3.03	3.04	3.08							
20.0	3.29	3.27	3.27	3.28	3.31	3.36						
25.0	3.52	3.50	3.50	3.50	3.52	3.56	3.58	3.62				
30.0	3.74	3.73	3.71	3.71	3.72	3.75	3.77	3.80	3.84	3.88		
35.0	3.97	3.95	3.93	3.93	3.93	3.95	3.96	3.99	4.02	4.05		
40.0	4.21	4.19	4.17	4.15	4.15	4.16	4.17	4.18	4.21	4.23	4.31	
45.0	4.46	4.44	4.42	4.40	4.39	4.39	4.39	4.40	4.42	4.44	4.49	4.58
50.0		4.72	4.69	4.67	4.65	4.64	4.64	4.65	4.66	4.67	4.71	4.78
55.0			5.01	4.98	4.96	4.94	4.94	4.93	4.94	4.94	4.97	5.02
60.0			5.37	5.34	5.31	5.28	5.28	5.27	5.26	5.26	5.28	5.31
65.0				5.75	5.72	5.68	5.67	5.66	5.65	5.64	5.64	5.66
70.0					6.19	6.15	6.13	6.11	6.09	6.08	6.07	
75.0					6.73	6.68	6.66	6.64	6.62	6.60		

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
10.0	20.90	25.30	30.60	36.80								
15.0	20.70	25.20	30.70	36.90	44.10							
20.0	20.40	25.10	30.60	37.00	44.20	52.20						
25.0	20.10	24.90	30.40	36.90	44.20	52.30	55.80	61.30				
30.0	19.75	24.50	30.20	36.70	44.10	52.30	55.80	61.40	66.20	71.30		
35.0	19.30	24.20	29.90	36.50	43.90	52.20	55.80	61.30	66.20	71.40		
40.0	18.80	23.70	29.50	36.10	43.60	52.00	55.60	61.20	66.10	71.30	82.30	
45.0	18.25	23.10	29.00	35.60	43.20	51.60	55.30	60.90	65.90	71.10	82.20	94.10
50.0		22.50	28.40	35.10	42.70	51.20	54.90	60.60	65.60	70.90	82.00	94.10
55.0			27.70	34.40	42.10	50.70	54.30	60.10	65.20	70.50	81.70	93.90
60.0			26.90	33.70	41.40	50.00	53.70	59.60	64.70	70.00	81.40	93.70
65.0				32.80	40.60	49.30	53.00	58.90	64.10	69.50	81.00	93.50
70.0					39.70	48.40	52.20	58.20	63.40	68.90	80.60	
75.0					38.60	47.60	51.40	57.50	62.80	68.40		

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

Displacement @ 50 Hz, m <sup>3</sup> /h	9.94
Length/Width, mm	239/245
Height, mm	400
Net Weight, kg	28.4
Gross Weight, kg	31.4
Stub Suction, inch	3/4
Stub Discharge, inch	1/2
Oil Quantity, l	1.12
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)
Sound Pressure @ 1m (HT), dBA	56
Sound Power (HT), dBA	67
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 50 / 15 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	2.60
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	8.9
Locked Rotor Current, A	46
Winding Resistance, ohm	4.03
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
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### **ACCESSORIES OPTIONAL**

Oil Control System	ALCO Trax-Oil OM3
Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge
Mounting Grommets	Standard

### **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
TFD	460 V / 3~ / 60 Hz	460		Y	1.04

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