



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

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	1.61	2.03	2.53	3.10								
15.0	1.54	1.96	2.45	3.03	3.69							
20.0	1.45	1.87	2.35	2.92	3.57	4.33						
25.0	1.35	1.76	2.23	2.79	3.43	4.17	4.50	5.02				
30.0	1.25	1.64	2.10	2.64	3.26	3.98	4.30	4.82	5.28	5.77		
35.0	1.13	1.51	1.95	2.47	3.07	3.77	4.08	4.58	5.03	5.51		
40.0	1.02	1.38	1.80	2.29	2.87	3.55	3.84	4.33	4.76	5.23	6.25	
45.0	0.92	1.25	1.64	2.11	2.66	3.30	3.59	4.05	4.47	4.92	5.91	7.05
50.0		1.13	1.50	1.93	2.45	3.06	3.33	3.77	4.17	4.60	5.55	6.65
55.0			1.36	1.76	2.23	2.80	3.06	3.48	3.86	4.27	5.18	6.23
60.0			1.23	1.58	2.03	2.55	2.79	3.18	3.54	3.93	4.79	5.79
65.0				1.44	1.83	2.31	2.53	2.89	3.23	3.59	4.40	5.35
70.0					1.65	2.08	2.28	2.61	2.92	3.25	4.01	
75.0					1.49	1.87	2.05	2.34	2.62	2.93		

50 Hz

ZR24KRE-TFD

R450A Dew Point

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	0.43	0.41	0.39	0.36								
15.0	0.48	0.46	0.45	0.43	0.42							
20.0	0.53	0.52	0.50	0.49	0.48	0.49						
25.0	0.59	0.58	0.56	0.55	0.55	0.55	0.56	0.57				
30.0	0.66	0.65	0.63	0.62	0.61	0.62	0.63	0.64	0.66	0.68		
35.0	0.76	0.73	0.71	0.69	0.69	0.69	0.70	0.71	0.73	0.75		
40.0	0.87	0.84	0.81	0.78	0.77	0.77	0.77	0.78	0.80	0.82	0.88	
45.0	1.01	0.96	0.93	0.89	0.87	0.86	0.86	0.87	0.88	0.90	0.96	1.04
50.0		1.12	1.07	1.02	0.99	0.98	0.97	0.98	0.98	1.00	1.04	1.12
55.0			1.25	1.19	1.14	1.11	1.10	1.10	1.10	1.11	1.15	1.22
60.0			1.46	1.38	1.32	1.28	1.27	1.25	1.25	1.25	1.28	1.33
65.0				1.62	1.54	1.48	1.46	1.43	1.42	1.42	1.42	1.47
70.0					1.80	1.71	1.68	1.64	1.62	1.61	1.60	
75.0					2.10	1.99	1.95	1.90	1.87	1.84		

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	1.45	1.39	1.33	1.27								
15.0	1.59	1.54	1.50	1.46	1.42							
20.0	1.71	1.67	1.64	1.61	1.59	1.58						
25.0	1.82	1.78	1.76	1.74	1.73	1.73	1.74	1.75				
30.0	1.93	1.90	1.87	1.85	1.85	1.86	1.87	1.88	1.90	1.93		
35.0	2.05	2.01	1.98	1.97	1.96	1.97	1.98	2.00	2.02	2.05		
40.0	2.20	2.15	2.11	2.08	2.07	2.08	2.09	2.11	2.13	2.16	2.23	
45.0	2.38	2.31	2.26	2.22	2.20	2.20	2.20	2.22	2.24	2.26	2.33	2.44
50.0		2.52	2.44	2.39	2.35	2.33	2.33	2.34	2.35	2.37	2.44	2.53
55.0			2.67	2.59	2.53	2.49	2.49	2.48	2.49	2.50	2.55	2.63
60.0			2.95	2.84	2.75	2.69	2.68	2.66	2.65	2.66	2.69	2.75
65.0				3.15	3.03	2.94	2.91	2.88	2.86	2.85	2.86	2.90
70.0					3.37	3.25	3.21	3.15	3.12	3.09	3.07	
75.0					3.79	3.62	3.57	3.49	3.44	3.39		

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	9.38	11.60	14.15	17.10									
15.0	9.35	11.65	14.30	17.30	20.70								
20.0	9.21	11.60	14.30	17.40	20.90	24.80							
25.0	8.97	11.40	14.20	17.30	20.90	24.90	26.60	29.40					
30.0	8.66	11.15	13.95	17.15	20.70	24.80	26.60	29.40	31.90	34.50			
35.0	8.30	10.80	13.60	16.85	20.50	24.60	26.40	29.30	31.80	34.50			
40.0	7.92	10.40	13.25	16.45	20.10	24.30	26.10	29.00	31.50	34.30	40.20		
45.0	7.56	10.00	12.80	16.00	19.65	23.80	25.70	28.60	31.20	33.90	39.90	46.50	
50.0		9.63	12.35	15.50	19.15	23.30	25.10	28.00	30.60	33.40	39.40	46.20	
55.0			11.95	15.00	18.60	22.70	24.50	27.40	30.00	32.80	38.90	45.70	
60.0			11.65	14.55	18.00	22.10	23.90	26.80	29.40	32.10	38.20	45.10	
65.0				14.20	17.50	21.50	23.20	26.10	28.60	31.40	37.50	44.40	
70.0					17.15	20.90	22.60	25.40	27.90	30.70	36.70		
75.0					16.95	20.50	22.10	24.80	27.30	30.00			

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	5.92
Length/Width, mm	239/245
Height, mm	364
Net Weight, kg	25.3
Stub Suction, inch	3/4
Stub Discharge, inch	1/2
Oil Quantity, l	0.74
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 (MT), dBA	54
Sound Power (MT), dBA	65
Sound Power with Sound Shell (MT), dBA	55
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	2.50
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	605
Refrigerant's classification	A1

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

Maximum Operating Current, A	4.9
Locked Rotor Current, A	26
Winding Resistance, ohm	7.1
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
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**ACCESSORIES OPTIONAL**

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

**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