



Minimum Evaporating Temp. With:

10 K Suction Superheat

Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Additional restrictions, please see application guidelines

50 Hz

ZR144KRE-TFD

R513A

Cond °C	Cooling Capacity, kW													
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0	30.0	35.0	40.0
20.0	12.90	15.80	19.35	23.60	28.70	30.90								
25.0	12.10	14.95	18.45	22.60	27.50	29.70	33.30							
30.0	11.30	14.10	17.50	21.50	26.20	28.40	31.80	34.90	38.20					
35.0	10.45	13.20	16.50	20.40	24.90	27.00	30.30	33.20	36.40					
40.0	9.58	12.25	15.45	19.15	23.50	25.50	28.60	31.50	34.50	41.30				
45.0	8.69	11.30	14.35	17.90	22.10	23.90	26.90	29.60	32.50	39.00	46.40			
50.0		10.30	13.20	16.55	20.50	22.30	25.10	27.70	30.40	36.60	43.60	51.60		
55.0		9.22	12.00	15.20	18.90	20.60	23.20	25.70	28.30	34.00	40.70	48.30	56.90	
60.0			10.70	13.70	17.20	18.75	21.30	23.50	26.00	31.40	37.60	44.80	52.90	62.10
65.0			9.40	12.20	15.40	16.85	19.20	21.30	23.60	28.60	34.50	41.20	48.80	57.50
70.0				10.60	13.55	14.85	17.00	18.95	21.00	25.70	31.10	37.40	44.50	52.60
75.0				8.91	11.60	12.80	14.75	16.50	18.45	22.70	27.70	33.50	40.10	47.70
80.0							12.40	14.00	15.70	19.60	24.10	29.40	35.50	42.50
85.0										16.35	20.40	25.20	30.80	37.20

Cond °C	Power, kW													
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0	30.0	35.0	40.0
20.0	3.71	3.68	3.67	3.68	3.71	3.73								
25.0	4.03	4.01	4.01	4.03	4.08	4.10	4.14							
30.0	4.38	4.37	4.38	4.41	4.46	4.49	4.54	4.58	4.63					
35.0	4.78	4.78	4.80	4.83	4.89	4.91	4.96	5.00	5.05					
40.0	5.25	5.25	5.27	5.30	5.35	5.38	5.42	5.47	5.51	5.62				
45.0	5.79	5.78	5.80	5.83	5.88	5.91	5.95	5.98	6.03	6.13	6.24			
50.0		6.40	6.41	6.44	6.48	6.50	6.54	6.57	6.61	6.70	6.80	6.92		
55.0		7.12	7.12	7.13	7.16	7.18	7.21	7.24	7.27	7.34	7.43	7.53	7.64	
60.0			7.93	7.93	7.94	7.95	7.97	7.99	8.01	8.07	8.14	8.22	8.31	8.42
65.0			8.85	8.84	8.83	8.84	8.84	8.85	8.87	8.90	8.95	9.00	9.07	9.16
70.0				9.87	9.85	9.84	9.83	9.83	9.83	9.84	9.86	9.89	9.93	9.99
75.0				11.05	11.00	11.00	10.95	10.95	10.95	10.90	10.90	10.90	10.90	10.95
80.0							12.20	12.20	12.15	12.10	12.05	12.05	12.00	12.00
85.0										13.45	13.40	13.30	13.25	13.20

Additional restrictions, please see application guidelines

50 Hz

ZR144KRE-TFD

R513A

Cond °C	Current at 400 V, A													
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0	30.0	35.0	40.0
20.0	10.11	10.06	10.04	10.04	10.06	10.07								
25.0	10.39	10.36	10.35	10.37	10.41	10.43	10.47							
30.0	10.71	10.69	10.70	10.73	10.78	10.80	10.85	10.89	10.94					
35.0	11.09	11.09	11.11	11.14	11.20	11.23	11.28	11.32	11.38					
40.0	11.56	11.57	11.59	11.63	11.69	11.72	11.77	11.81	11.87	11.99				
45.0	12.15	12.15	12.17	12.21	12.26	12.29	12.34	12.38	12.43	12.55	12.68			
50.0		12.86	12.87	12.90	12.95	12.97	13.02	13.06	13.10	13.20	13.33	13.47		
55.0		13.71	13.71	13.73	13.77	13.79	13.82	13.85	13.89	13.98	14.08	14.21	14.35	
60.0			14.72	14.72	14.74	14.75	14.77	14.79	14.82	14.88	14.97	15.07	15.19	15.33
65.0			15.90	15.88	15.88	15.88	15.89	15.90	15.91	15.95	16.01	16.08	16.17	16.28
70.0				17.25	17.21	17.20	17.19	17.19	17.19	17.20	17.22	17.26	17.32	17.39
75.0				18.83	18.76	18.74	18.71	18.69	18.67	18.64	18.63	18.63	18.65	18.68
80.0							20.46	20.42	20.38	20.31	20.26	20.22	20.19	20.18
85.0										22.22	22.12	22.03	21.95	21.89

Cond °C	Suction Mass Flow, g/s													
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0	30.0	35.0	40.0
20.0	84.60	101.50	121.50	145.00	172.50	184.50								
25.0	83.30	100.50	121.00	145.00	173.00	185.00	205.00							
30.0	81.80	99.70	120.50	145.00	173.00	185.00	205.00	222.00	241.00					
35.0	80.00	98.50	120.00	144.50	172.50	185.00	205.00	222.00	241.00					
40.0	77.90	97.00	119.00	143.50	172.00	184.50	204.00	222.00	240.00	281.00				
45.0	75.50	95.20	117.50	142.50	171.00	183.50	203.00	221.00	240.00	280.00	326.00			
50.0		92.90	115.50	141.00	169.50	182.00	202.00	219.00	238.00	279.00	325.00	376.00		
55.0		90.00	113.00	138.50	167.50	180.00	200.00	217.00	236.00	277.00	323.00	374.00	430.00	
60.0			110.00	136.00	165.00	177.50	197.00	215.00	234.00	274.00	320.00	371.00	428.00	490.00
65.0			106.00	132.50	161.50	174.00	194.00	211.00	230.00	271.00	317.00	368.00	425.00	487.00
70.0				127.50	157.00	169.50	189.50	207.00	226.00	267.00	313.00	364.00	421.00	484.00
75.0				121.50	151.50	164.00	184.00	202.00	221.00	262.00	308.00	360.00	417.00	481.00
80.0							178.00	196.00	215.00	257.00	303.00	356.00	414.00	480.00
85.0										253.00	301.00	355.00	416.00	483.00

Additional restrictions, please see application guidelines

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	33.2
Length/Width, mm	281/284
Height, mm	533
Net Weight, kg	61.2
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	3.25
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 (0)
Sound Pressure @ 1m (HT), dBA	64
Sound Power (HT), dBA	75
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	5 / 50 / 15 °C at 50 Hz
PED Category	2
Max. Internal Free Volume, l	12.8
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Low Side TS Max., °C	53
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	27
Locked Rotor Current, A	118
Winding Resistance, ohm	1.23
Default Enclosure Class	IP 21/65

ACCESSORIES INCLUDED

Enclosure Class	IP21
Oil Charge	
Discharge Temperature Protection	ASTP Therm-O-Disc In Scroll
Oil Service Valve	Schraeder Valve
Check Valve	Discharge Low Leak Check Valve

Additional restrictions, please see application guidelines

ACCESSORIES OPTIONAL

Mounting Grommets	Hard Mounts for Paralleling
Sound Attenuation	Sound Shell (12dBA)
Adapter Kit	R1"1/4 -B 1"1/8 For TPTL for
Oil Control System	Parallel Operation
Mounting Grommets	ALCO Trax-Oil OM3
Crankcase Heater	Rubber Grommet For Single
Enclosure Class	67 W External
	IP 65

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