



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

ZR160KRE-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	14.40	17.65	21.60	26.40	32.00	34.60								
25.0	13.50	16.70	20.60	25.20	30.70	33.10	37.10							
30.0	12.60	15.75	19.50	24.00	29.30	31.60	35.50	38.90	42.60					
35.0	11.70	14.75	18.40	22.70	27.80	30.00	33.70	37.00	40.60					
40.0	10.75	13.70	17.25	21.40	26.20	28.40	31.90	35.00	38.40	46.00				
45.0	9.76	12.65	16.00	19.95	24.60	26.60	29.90	33.00	36.20	43.40	51.60			
50.0		11.50	14.75	18.45	22.80	24.80	27.90	30.80	33.80	40.60	48.50	57.40		
55.0		10.35	13.40	16.95	21.00	22.90	25.80	28.50	31.40	37.80	45.20	53.60	63.20	
60.0			12.00	15.30	19.15	20.90	23.60	26.10	28.80	34.80	41.70	49.70	58.70	68.90
65.0			10.55	13.60	17.20	18.75	21.30	23.60	26.10	31.70	38.20	45.60	54.10	63.70
70.0				11.85	15.10	16.55	18.90	21.00	23.30	28.50	34.50	41.40	49.30	58.30
75.0				10.05	12.95	14.30	16.40	18.35	20.40	25.20	30.60	37.00	44.30	52.70
80.0							13.80	15.55	17.45	21.70	26.70	32.50	39.20	47.00
85.0										18.10	22.60	27.80	33.90	41.00

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	4.00	3.99	3.99	4.01	4.04	4.06								
25.0	4.40	4.41	4.43	4.45	4.50	4.52	4.56							
30.0	4.85	4.86	4.89	4.93	4.98	5.01	5.05	5.10	5.15					
35.0	5.34	5.37	5.40	5.44	5.50	5.52	5.57	5.62	5.67					
40.0	5.90	5.93	5.96	6.00	6.06	6.09	6.14	6.18	6.23	6.36				
45.0	6.55	6.57	6.60	6.64	6.69	6.71	6.76	6.80	6.85	6.97	7.12			
50.0		7.29	7.32	7.35	7.39	7.41	7.45	7.49	7.54	7.65	7.78	7.95		
55.0		8.12	8.13	8.15	8.18	8.20	8.23	8.27	8.30	8.40	8.52	8.67	8.86	
60.0			9.06	9.06	9.08	9.09	9.11	9.14	9.16	9.24	9.34	9.48	9.65	9.86
65.0			10.10	10.10	10.10	10.10	10.10	10.10	10.15	10.20	10.25	10.40	10.55	10.70
70.0				11.25	11.25	11.20	11.20	11.20	11.20	11.25	11.30	11.40	11.50	11.65
75.0				12.55	12.50	12.50	12.45	12.45	12.45	12.45	12.45	12.50	12.60	12.75
80.0							13.85	13.85	13.80	13.80	13.75	13.80	13.85	13.95
85.0										15.25	15.20	15.20	15.20	15.25

Additional restrictions, please see application guidelines

50 Hz

ZR160KRE-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	12.20	12.19	12.20	12.21	12.25	12.27								
25.0	12.75	12.76	12.77	12.80	12.84	12.87	12.92							
30.0	13.25	13.27	13.29	13.32	13.38	13.40	13.45	13.50	13.56					
35.0	13.75	13.77	13.80	13.83	13.89	13.91	13.96	14.01	14.07					
40.0	14.27	14.29	14.32	14.36	14.41	14.44	14.49	14.53	14.59	14.72				
45.0	14.86	14.88	14.91	14.95	15.00	15.02	15.06	15.11	15.16	15.29	15.45			
50.0		15.58	15.60	15.63	15.67	15.69	15.73	15.77	15.82	15.93	16.08	16.28		
55.0		16.42	16.43	16.45	16.48	16.50	16.53	16.56	16.60	16.70	16.84	17.01	17.24	
60.0			17.44	17.45	17.47	17.48	17.50	17.52	17.55	17.64	17.75	17.91	18.11	18.36
65.0			18.67	18.66	18.66	18.67	18.68	18.69	18.71	18.77	18.87	19.00	19.17	19.40
70.0				20.13	20.11	20.11	20.10	20.11	20.11	20.15	20.22	20.32	20.47	20.66
75.0				21.89	21.85	21.83	21.81	21.80	21.80	21.81	21.85	21.92	22.03	22.20
80.0							23.85	23.83	23.81	23.79	23.79	23.83	23.91	24.04
85.0										26.12	26.09	26.09	26.14	26.22

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	94.50	113.00	135.50	162.00	192.50	206.00								
25.0	93.10	112.50	135.00	162.00	193.00	206.00	228.00							
30.0	91.50	111.50	134.50	161.50	192.50	206.00	228.00	248.00	269.00					
35.0	89.60	110.00	134.00	161.00	192.50	206.00	228.00	248.00	268.00					
40.0	87.30	108.50	132.50	160.00	191.50	205.00	227.00	247.00	268.00	313.00				
45.0	84.70	106.50	131.00	159.00	190.50	204.00	226.00	246.00	266.00	312.00	363.00			
50.0		104.00	129.00	157.00	188.50	202.00	224.00	244.00	265.00	310.00	361.00	417.00		
55.0		101.00	126.50	154.50	186.50	200.00	222.00	242.00	262.00	308.00	358.00	415.00	478.00	
60.0			123.00	151.50	183.50	197.00	219.00	239.00	259.00	304.00	355.00	411.00	474.00	544.00
65.0			119.00	148.00	179.50	193.50	215.00	235.00	255.00	300.00	351.00	407.00	471.00	541.00
70.0				143.00	175.00	189.00	211.00	230.00	251.00	296.00	346.00	403.00	466.00	537.00
75.0				137.00	169.00	183.00	205.00	224.00	245.00	290.00	341.00	398.00	461.00	533.00
80.0							198.00	218.00	239.00	284.00	335.00	393.00	458.00	530.00
85.0										280.00	332.00	391.00	458.00	533.00

Additional restrictions, please see application guidelines

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

Displacement @ 50 Hz, m³/h	36.4
Length/Width, mm	281/284
Height, mm	552
Net Weight, kg	64.9
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	68
Sound Power (HT), dBA	79
Sound Conditions (HT, Temperatures:	5 / 50 / 15 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
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	30
Locked Rotor Current, A	140
Winding Resistance, ohm	1.1
Default Enclosure Class	IP 21/65

### **ACCESSORIES INCLUDED**

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

Additional restrictions, please see application guidelines

### ACCESSORIES OPTIONAL

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

### 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