



Minimum Evaporating Temp. With:

— 10 K Suction Superheat

— Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

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	13.20	16.55	20.40	25.00	30.30	32.70			
25.0	12.60	15.90	19.75	24.20	29.40	31.70	35.40		
30.0	11.90	15.15	18.90	23.20	28.30	30.50	34.10	37.40	40.90
35.0	11.05	14.30	17.95	22.20	27.10	29.20	32.70	35.90	39.30
40.0	10.10	13.30	16.90	21.00	25.70	27.80	31.20	34.20	37.50
45.0	9.05	12.20	15.75	19.70	24.30	26.30	29.50	32.50	35.60
50.0		11.05	14.45	18.30	22.70	24.70	27.80	30.60	33.60
55.0		9.75	13.10	16.80	21.10	22.90	25.90	28.60	31.50
60.0			11.65	15.25	19.30	21.10	23.90	26.50	29.20
65.0			10.10	13.55	17.45	19.10	21.80	24.30	26.90
70.0				11.80	15.50	17.10	19.65	22.00	24.40
75.0				9.97	13.45	14.95	17.40	19.55	21.90

50 Hz

ZR160KCE-TFD

R134a

Cond °C	Power, kW								
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
20.0	3.81	3.82	3.86	3.92	4.02	4.07			
25.0	4.13	4.16	4.20	4.26	4.36	4.41	4.49		
30.0	4.51	4.54	4.59	4.65	4.75	4.79	4.87	4.95	5.04
35.0	4.96	4.99	5.04	5.10	5.19	5.23	5.31	5.38	5.46
40.0	5.48	5.51	5.56	5.62	5.70	5.74	5.81	5.87	5.95
45.0	6.08	6.11	6.16	6.21	6.28	6.32	6.38	6.44	6.51
50.0		6.81	6.85	6.90	6.96	6.99	7.04	7.09	7.15
55.0		7.62	7.65	7.69	7.74	7.76	7.80	7.84	7.89
60.0			8.56	8.59	8.62	8.64	8.67	8.70	8.74
65.0			9.60	9.61	9.63	9.64	9.66	9.68	9.71
70.0				10.80	10.80	10.80	10.80	10.80	10.80
75.0				12.10	12.05	12.05	12.05	12.05	12.05

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	12.23	12.09	12.01	12.03	12.17	12.26			
25.0	12.68	12.56	12.49	12.49	12.60	12.67	12.82		
30.0	13.10	13.00	12.95	12.95	13.03	13.08	13.20	13.33	13.49
35.0	13.51	13.46	13.42	13.42	13.48	13.53	13.62	13.72	13.86
40.0	13.95	13.94	13.93	13.94	13.99	14.02	14.10	14.18	14.29
45.0	14.44	14.48	14.51	14.53	14.57	14.60	14.66	14.72	14.80
50.0		15.11	15.17	15.21	15.26	15.28	15.33	15.38	15.44
55.0		15.84	15.95	16.02	16.07	16.10	16.13	16.17	16.22
60.0			16.87	16.97	17.04	17.07	17.10	17.13	17.17
65.0			17.95	18.10	18.19	18.22	18.25	18.28	18.31
70.0				19.42	19.55	19.58	19.62	19.65	19.67
75.0				20.97	21.13	21.18	21.22	21.25	21.27

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	77.70	95.50	116.00	139.00	166.00	177.50			
25.0	77.40	95.80	116.50	140.00	167.00	179.00	198.00		
30.0	76.40	95.40	116.50	140.50	168.00	180.00	199.00	216.00	234.00
35.0	74.50	94.30	116.00	140.50	168.00	180.00	199.50	216.00	235.00
40.0	71.80	92.40	115.00	139.50	167.50	179.50	199.00	216.00	235.00
45.0	68.00	89.50	112.50	138.00	166.50	178.50	198.00	216.00	234.00
50.0		85.70	109.50	135.50	164.50	176.50	196.50	214.00	233.00
55.0		80.80	105.50	132.00	161.50	174.00	194.00	212.00	230.00
60.0			100.50	128.00	157.50	170.50	190.50	209.00	227.00
65.0			93.90	122.50	153.00	166.00	186.50	205.00	224.00
70.0				115.50	147.00	160.00	181.00	199.50	219.00
75.0				107.00	139.50	153.00	174.50	193.50	213.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	36.4
Length/Width, mm	281/285
Height, mm	552
Net Weight, kg	64.9
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	3.37
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:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	14.0
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Low Side TS Max., °C	52
Low Side TS Min., °C	-35
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	28
Locked Rotor Current, A	140
Winding Resistance, ohm	1.1
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

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

### **ACCESSORIES OPTIONAL**

Adapter Kit	R1"1/4 -B 1"1/8 For TPTL for
Oil Control System	Parallel Operation
Mounting Grommets	ALCO Trax-Oil OM3
Sound Attenuation	Hard Mounts for Paralleling
Mounting Grommets	Sound Shell (12dBA)
Crankcase Heater	Rubber Grommet For Single
Enclosure Class	90 W External IP66 With Molded Plug

### **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
TF5	200-220 V / 3~ / 50 Hz	200		Y	2.09
TW5	200-220 V / 3~ / 50 Hz	200		Y	2.30
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09
TW7	380 V / 3~ / 60 Hz	380		Y	1.26
TF7	380 V / 3~ / 60 Hz	380		Y	1.26
TW5	200-230 V / 3~ / 60 Hz	230		Y	2.30