



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	15.70	19.60	24.20	29.60	36.00	38.90			
25.0	15.05	18.90	23.40	28.70	34.90	37.70	42.20		
30.0	14.30	18.05	22.50	27.60	33.60	36.30	40.70	44.60	48.80
35.0	13.35	17.10	21.40	26.40	32.20	34.80	39.00	42.80	46.80
40.0	12.35	16.05	20.20	25.00	30.70	33.10	37.20	40.80	44.70
45.0	11.20	14.85	18.90	23.60	29.00	31.40	35.20	38.70	42.50
50.0		13.55	17.50	22.00	27.20	29.40	33.10	36.50	40.10
55.0		12.15	15.95	20.30	25.20	27.40	30.90	34.10	37.50
60.0			14.35	18.50	23.20	25.30	28.60	31.70	34.90
65.0			12.65	16.60	21.10	23.10	26.20	29.10	32.10
70.0				14.65	18.90	20.70	23.70	26.40	29.30
75.0				12.65	16.60	18.35	21.10	23.60	26.30

50 Hz

ZR190KCE-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	4.73	4.83	4.94	5.08	5.26	5.35			
25.0	5.12	5.21	5.31	5.42	5.56	5.64	5.76		
30.0	5.60	5.68	5.76	5.84	5.96	6.02	6.12	6.23	6.35
35.0	6.17	6.24	6.30	6.37	6.46	6.50	6.59	6.67	6.78
40.0	6.82	6.89	6.94	6.99	7.06	7.09	7.16	7.23	7.31
45.0	7.57	7.64	7.68	7.72	7.77	7.79	7.84	7.90	7.96
50.0		8.49	8.53	8.56	8.59	8.61	8.64	8.68	8.73
55.0		9.45	9.49	9.52	9.53	9.54	9.57	9.59	9.63
60.0			10.55	10.60	10.60	10.60	10.60	10.65	10.65
65.0			11.75	11.80	11.80	11.80	11.80	11.80	11.80
70.0				13.10	13.10	13.10	13.10	13.10	13.10
75.0				14.60	14.60	14.60	14.55	14.55	14.55

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	16.46	16.51	16.52	16.52	16.56	16.59			
25.0	17.54	17.61	17.62	17.60	17.60	17.62	17.66		
30.0	18.42	18.52	18.53	18.51	18.49	18.50	18.51	18.55	18.61
35.0	19.15	19.28	19.32	19.30	19.27	19.26	19.27	19.28	19.32
40.0	19.78	19.95	20.02	20.02	19.98	19.97	19.96	19.96	19.98
45.0	20.34	20.57	20.68	20.70	20.68	20.66	20.65	20.64	20.65
50.0		21.18	21.34	21.39	21.39	21.38	21.37	21.36	21.35
55.0		21.83	22.04	22.15	22.18	22.17	22.16	22.16	22.15
60.0			22.85	23.01	23.07	23.08	23.09	23.09	23.08
65.0			23.79	24.02	24.13	24.16	24.18	24.19	24.20
70.0				25.22	25.40	25.44	25.49	25.52	25.54
75.0				26.66	26.91	26.98	27.06	27.11	27.15

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	92.40	113.00	137.00	164.50	197.00	211.00			
25.0	92.50	114.00	138.00	166.50	198.50	213.00	236.00		
30.0	91.80	114.00	138.50	167.00	199.50	214.00	237.00	258.00	280.00
35.0	90.30	113.00	138.50	167.00	200.00	214.00	237.00	258.00	280.00
40.0	87.80	111.50	137.50	166.50	199.50	214.00	237.00	258.00	280.00
45.0	84.30	108.50	135.50	165.00	198.50	213.00	236.00	257.00	279.00
50.0		105.00	132.50	162.50	196.50	211.00	234.00	255.00	277.00
55.0		100.50	128.50	159.50	193.50	208.00	232.00	253.00	275.00
60.0			124.00	155.00	189.50	205.00	228.00	249.00	272.00
65.0			117.50	150.00	185.00	200.00	224.00	245.00	267.00
70.0				143.50	179.00	194.50	218.00	240.00	262.00
75.0				135.50	172.00	187.50	212.00	233.00	256.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	43.3
Length/Width, mm	281/285
Height, mm	552
Net Weight, kg	66.2
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	3.38
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	71
Sound Power (HT), dBA	82
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	35
Locked Rotor Current, A	174
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

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

ACCESSORIES OPTIONAL

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

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
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