



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
10.0	13.50	17.05	21.30	26.40						
15.0	12.80	16.35	20.50	25.40						
20.0	12.15	15.60	19.65	24.40	30.00					
25.0	11.40	14.80	18.75	23.40	28.80	35.00	37.80			
30.0	10.65	13.95	17.80	22.30	27.60	33.60	36.20	40.50	44.20	
35.0	9.85	13.05	16.80	21.20	26.20	32.00	34.60	38.70	42.40	46.30
40.0	9.00	12.10	15.75	19.95	24.80	30.40	32.90	36.80	40.40	44.10
45.0		11.10	14.60	18.65	23.30	28.70	31.10	34.90	38.30	41.90
50.0			13.40	17.30	21.80	26.90	29.20	32.80	36.10	39.50
55.0			12.10	15.80	20.10	25.00	27.20	30.60	33.70	37.10
60.0				14.25	18.30	23.00	25.00	28.30	31.30	34.50
65.0					16.40	20.80	22.80	25.90	28.70	31.80
70.0					14.40	18.60	20.40	23.40	26.10	28.90
75.0						16.20	17.95	20.70	23.20	25.90

50 Hz

ZBD114K5E-TFD

R134a

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
10.0	3.51	3.58	3.67	3.78						
15.0	3.90	3.97	4.06	4.17						
20.0	4.32	4.39	4.47	4.58	4.71					
25.0	4.79	4.85	4.93	5.03	5.15	5.31	5.38			
30.0	5.31	5.37	5.44	5.53	5.65	5.79	5.86	5.97	6.08	
35.0	5.90	5.95	6.01	6.10	6.20	6.34	6.40	6.51	6.60	6.71
40.0	6.58	6.62	6.67	6.74	6.84	6.96	7.02	7.12	7.21	7.31
45.0		7.39	7.43	7.49	7.57	7.67	7.73	7.81	7.90	7.99
50.0			8.29	8.33	8.40	8.49	8.54	8.61	8.69	8.77
55.0			9.28	9.30	9.35	9.43	9.46	9.53	9.60	9.67
60.0				10.40	10.45	10.50	10.50	10.60	10.65	10.70
65.0					11.65	11.70	11.75	11.75	11.80	11.85
70.0					13.05	13.10	13.10	13.10	13.15	13.20
75.0						14.60	14.60	14.65	14.65	14.70

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
10.0	15.40	15.19	15.13	15.19						
15.0	15.61	15.40	15.35	15.40						
20.0	15.85	15.65	15.60	15.66	15.80					
25.0	16.14	15.96	15.91	15.97	16.11	16.28	16.35			
30.0	16.51	16.34	16.30	16.36	16.50	16.66	16.73	16.83	16.91	
35.0	16.99	16.82	16.79	16.85	16.99	17.15	17.22	17.31	17.38	17.43
40.0	17.58	17.42	17.40	17.47	17.60	17.76	17.82	17.91	17.97	18.02
45.0		18.16	18.15	18.22	18.35	18.50	18.57	18.65	18.71	18.75
50.0			19.06	19.14	19.27	19.42	19.47	19.55	19.61	19.64
55.0			20.15	20.24	20.37	20.51	20.57	20.64	20.69	20.72
60.0				21.54	21.67	21.82	21.87	21.94	21.98	22.01
65.0					23.20	23.35	23.40	23.46	23.50	23.52
70.0					24.98	25.12	25.17	25.23	25.27	25.28
75.0						27.17	27.22	27.27	27.30	27.31

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
10.0	74.60	92.70	114.00	138.50						
15.0	73.80	92.30	113.50	138.50						
20.0	72.70	91.60	113.50	138.50	167.00					
25.0	71.50	90.80	113.00	138.50	167.00	199.50	213.00			
30.0	69.90	89.70	112.00	138.00	166.50	199.50	213.00	236.00	256.00	
35.0	68.00	88.10	111.00	137.00	166.00	199.00	213.00	236.00	256.00	277.00
40.0	65.50	86.10	109.50	135.50	165.00	198.00	212.00	235.00	255.00	276.00
45.0		83.50	107.00	133.50	163.50	196.50	211.00	234.00	254.00	275.00
50.0			104.00	131.00	161.00	194.50	209.00	232.00	252.00	274.00
55.0			100.00	127.50	158.00	192.00	206.00	229.00	250.00	271.00
60.0				123.00	153.50	188.00	203.00	226.00	247.00	268.00
65.0					148.00	183.00	198.00	221.00	242.00	264.00
70.0					141.00	176.50	191.50	215.00	237.00	259.00
75.0						168.00	183.50	208.00	229.00	252.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	43.3
Length/Width, mm	393/312
Height, mm	552
Net Weight, kg	68.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
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	71
Sound Power (HT), dBA	82
Sound Power with Sound Shell (HT), dBA	72
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	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-32
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	33.3
Locked Rotor Current, A	174
Winding Resistance, ohm	0.83/0.83/0.83 (T1-T2/T2-T3/T3-T1)
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Solenoid valve	Standard
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ACCESSORIES OPTIONAL

Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Digital Control Kit	EC2-552
Discharge Temperature Protection	Discharge line thermostat
Valve Coil	24V AC
Digital Control Kit	EC3-652
Crankcase Heater	90 W External
Mounting Grommets	Standard
Digital Driver	EC3-D13
Mounting Grommets	Hard Mounts for Paralleling

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
TFD	460 V / 3~ / 60 Hz	460		Y	1.04