



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	7.03	8.81	10.95	13.45						
15.0	6.65	8.39	10.45	12.90						
20.0	6.27	7.96	9.97	12.35	15.10					
25.0	5.91	7.54	9.48	11.75	14.45	17.50	18.85			
30.0	5.55	7.12	8.99	11.20	13.75	16.75	18.05	20.10	22.00	
35.0	5.20	6.70	8.49	10.60	13.10	15.95	17.20	19.20	21.00	22.90
40.0	4.87	6.28	7.99	10.00	12.40	15.15	16.35	18.30	20.00	21.90
45.0		5.87	7.48	9.40	11.65	14.30	15.45	17.30	19.00	20.80
50.0			6.97	8.78	10.95	13.45	14.55	16.30	17.90	19.65
55.0			6.45	8.15	10.20	12.55	13.60	15.30	16.80	18.45
60.0				7.51	9.40	11.65	12.65	14.25	15.70	17.25
65.0					8.62	10.70	11.65	13.15	14.50	16.00
70.0					7.81	9.75	10.60	12.05	13.30	14.70
75.0						8.76	9.57	10.90	12.10	13.40

50 Hz

ZBD58KCE-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	1.68	1.67	1.72	1.82						
15.0	1.92	1.88	1.92	2.01						
20.0	2.17	2.13	2.16	2.23	2.32					
25.0	2.44	2.40	2.42	2.48	2.55	2.63	2.65			
30.0	2.73	2.69	2.71	2.76	2.82	2.88	2.90	2.91	2.91	
35.0	3.05	3.01	3.03	3.07	3.13	3.18	3.19	3.19	3.18	3.15
40.0	3.38	3.36	3.37	3.42	3.47	3.51	3.52	3.52	3.50	3.46
45.0		3.72	3.75	3.80	3.85	3.89	3.89	3.88	3.86	3.82
50.0			4.15	4.21	4.27	4.30	4.31	4.29	4.27	4.22
55.0			4.59	4.66	4.72	4.76	4.76	4.75	4.72	4.67
60.0				5.13	5.21	5.25	5.26	5.25	5.22	5.17
65.0					5.73	5.79	5.79	5.79	5.76	5.71
70.0					6.28	6.36	6.37	6.37	6.35	6.30
75.0						6.97	6.99	7.00	6.98	6.94

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	7.79	7.89	7.99	8.10						
15.0	7.96	8.04	8.12	8.19						
20.0	8.15	8.21	8.27	8.32	8.36					
25.0	8.36	8.41	8.46	8.49	8.51	8.51	8.50			
30.0	8.58	8.64	8.68	8.71	8.71	8.69	8.67	8.63	8.59	
35.0	8.83	8.89	8.94	8.96	8.96	8.93	8.91	8.86	8.81	8.74
40.0	9.10	9.18	9.23	9.26	9.27	9.23	9.20	9.15	9.09	9.02
45.0		9.49	9.57	9.61	9.62	9.59	9.56	9.51	9.45	9.38
50.0			9.94	10.00	10.03	10.01	9.99	9.94	9.88	9.81
55.0			10.36	10.45	10.50	10.50	10.48	10.44	10.39	10.32
60.0				10.94	11.02	11.05	11.04	11.01	10.97	10.91
65.0					11.60	11.66	11.67	11.66	11.63	11.58
70.0					12.25	12.34	12.37	12.38	12.36	12.33
75.0						13.10	13.14	13.17	13.18	13.17

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	38.90	47.90	58.40	70.50						
15.0	38.30	47.40	58.00	70.20						
20.0	37.60	46.80	57.60	69.90	83.90					
25.0	37.00	46.30	57.10	69.50	83.70	99.60	106.50			
30.0	36.50	45.80	56.60	69.10	83.30	99.40	106.50	117.50	127.00	
35.0	35.90	45.20	56.10	68.60	82.90	99.00	106.00	117.00	127.00	137.00
40.0	35.40	44.70	55.50	68.00	82.30	98.50	105.50	116.50	126.50	137.00
45.0		44.10	54.90	67.40	81.70	97.90	105.00	116.00	126.00	136.50
50.0			54.20	66.60	80.90	97.20	104.00	115.50	125.50	136.00
55.0			53.50	65.80	80.00	96.20	103.50	114.50	124.50	135.00
60.0				64.80	78.90	95.10	102.00	113.50	123.50	134.00
65.0					77.70	93.90	101.00	112.50	122.50	133.00
70.0					76.40	92.40	99.50	111.00	121.00	131.50
75.0						90.80	97.90	109.00	119.50	130.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	22.1
Length/Width, mm	264/284
Height, mm	476
Net Weight, kg	60
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	2.51
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 (8.5)
Sound Pressure @ 1m, dBA	65
Sound Power, dBA	76
PED Category	2
Max. Low Side Internal Free Volume, l	12.6
Max. High Side Internal Free Volume, l	1.5
Max. Internal Free Volume, l	14.1
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Low Side TS Max., °C	50
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	15.4
Locked Rotor Current, A	95
Winding Resistance, ohm	1.8
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Solenoid valve	Standard
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ACCESSORIES OPTIONAL

Mounting Grommets	Hard Mounts for Paralleling
Discharge Temperature Protection	Discharge line thermostat
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Digital Control Kit	EC2-552
Crankcase Heater	66 W External
Valve Coil	24V AC
Digital Control Kit	EC3-652
Mounting Grommets	Standard
Digital Driver	EC3-D13

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
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09