



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

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
23.0	2.68									
25.0	2.62									
30.0	2.47	3.09	3.83	4.70						
35.0	2.29	2.91	3.63	4.46	5.44	6.59				
40.0		2.72	3.41	4.21	5.13	6.19	6.67	7.43	8.13	8.87
45.0		2.50	3.18	3.94	4.81	5.80	6.24	6.94	7.58	8.27
50.0			2.93	3.66	4.48	5.40	5.80	6.45	7.03	7.66
55.0				3.36	4.13	4.98	5.36	5.95	6.48	7.05
60.0				3.03	3.76	4.55	4.89	5.44	5.92	6.44
65.0					3.36	4.10	4.41	4.91	5.35	5.81
70.0					2.93	3.62	3.91	4.36	4.75	5.17
75.0						3.11	3.37	3.78	4.14	4.51

Additional restrictions, please see application guidelines

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
23.0	0.91									
25.0	0.94									
30.0	1.01	1.03	1.04	1.05						
35.0	1.10	1.12	1.14	1.16	1.17	1.18				
40.0		1.24	1.27	1.28	1.30	1.30	1.31	1.32	1.32	1.34
45.0		1.36	1.40	1.42	1.44	1.45	1.45	1.46	1.46	1.47
50.0			1.54	1.58	1.60	1.61	1.61	1.62	1.62	1.62
55.0				1.75	1.77	1.78	1.79	1.80	1.80	1.80
60.0				1.94	1.96	1.98	1.98	1.99	1.99	2.00
65.0					2.18	2.20	2.20	2.21	2.21	2.21
70.0					2.41	2.43	2.44	2.44	2.44	2.44
75.0						2.68	2.69	2.70	2.70	2.70

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
23.0	2.57									
25.0	2.62									
30.0	2.74	2.75	2.77	2.78						
35.0	2.86	2.88	2.91	2.92	2.93	2.95				
40.0		3.02	3.05	3.07	3.09	3.10	3.11	3.12	3.13	3.15
45.0		3.17	3.21	3.24	3.26	3.27	3.28	3.29	3.30	3.31
50.0			3.39	3.42	3.45	3.46	3.47	3.48	3.48	3.49
55.0				3.63	3.66	3.68	3.68	3.69	3.70	3.70
60.0				3.86	3.90	3.92	3.93	3.93	3.94	3.94
65.0					4.17	4.19	4.20	4.21	4.21	4.22
70.0					4.47	4.51	4.51	4.52	4.53	4.53
75.0						4.86	4.87	4.88	4.89	4.89

Additional restrictions, please see application guidelines

50 Hz

ZBD21KCE-TFD

R513A

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
23.0	16.10									
25.0	16.05									
30.0	15.75	19.80	24.70	30.50						
35.0	15.35	19.60	24.50	30.40	37.30	45.60				
40.0		19.25	24.30	30.20	37.00	45.10	48.80	54.80	60.30	66.20
45.0		18.70	23.90	29.90	36.70	44.70	48.30	54.20	59.50	65.40
50.0			23.40	29.40	36.30	44.20	47.70	53.50	58.80	64.50
55.0				28.80	35.70	43.60	47.10	52.80	58.00	63.60
60.0				27.90	35.00	42.90	46.40	52.00	57.10	62.60
65.0					33.90	41.90	45.40	51.00	56.00	61.50
70.0					32.40	40.60	44.10	49.70	54.80	60.20
75.0						38.80	42.40	48.10	53.20	58.70

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	8.35
Length/Width, mm	243/243
Height, mm	432
Net Weight, kg	30.2
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.24
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 (19)
Sound Pressure @ 1m (MT), dBA	58
Sound Power (MT), dBA	69
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	1
Max. Low Side Internal Free Volume, l	4.1
Max. High Side Internal Free Volume, l	0.5
Max. Internal Free Volume, l	4.60
High Side PS gauge, bar	32
Low Side PS gauge, bar	21
Refrigerant's GWP	631
Refrigerant's classification	A1

Additional restrictions, please see application guidelines

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

Maximum Operating Current, A	6.7
Locked Rotor Current, A	40
Winding Resistance, ohm	4.83
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Mounting Grommets	Standard
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ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Hard Mounts for Paralleling
Solenoid valve	Standard
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Valve Coil	24V AC
Solenoid Valve Kit	220 V Ac 12" lead Length
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC2-552
Digital Control Kit	EC3-652
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

Additional restrictions, please see application guidelines