



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	5.30									
25.0	5.18									
30.0	4.89	6.18	7.72	9.55						
35.0	4.59	5.83	7.30	9.04	11.10	13.45				
40.0		5.46	6.85	8.50	10.45	12.70	13.70	15.30	16.75	18.30
45.0		5.10	6.40	7.93	9.74	11.85	12.80	14.35	15.70	17.15
50.0			5.94	7.35	9.03	11.00	11.90	13.30	14.60	15.95
55.0				6.77	8.30	10.10	10.90	12.25	13.40	14.70
60.0				6.21	7.57	9.20	9.93	11.15	12.20	13.40
65.0					6.84	8.28	8.94	10.00	11.00	12.05
70.0					6.14	7.38	7.95	8.89	9.76	10.70
75.0						6.49	6.97	7.77	8.52	9.34

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	1.78									
25.0	1.84									
30.0	2.00	2.08	2.17	2.28						
35.0	2.17	2.26	2.36	2.46	2.58	2.74				
40.0		2.47	2.57	2.67	2.78	2.92	2.99	3.10	3.21	3.33
45.0		2.70	2.81	2.91	3.01	3.14	3.20	3.29	3.39	3.50
50.0			3.07	3.18	3.29	3.40	3.45	3.54	3.62	3.71
55.0				3.48	3.59	3.70	3.75	3.82	3.90	3.97
60.0				3.82	3.93	4.04	4.09	4.16	4.22	4.29
65.0					4.31	4.43	4.47	4.54	4.60	4.66
70.0					4.72	4.85	4.89	4.96	5.02	5.07
75.0						5.31	5.36	5.43	5.49	5.54

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	4.50									
25.0	4.61									
30.0	4.87	5.01	5.15	5.31						
35.0	5.15	5.28	5.41	5.56	5.73	5.95				
40.0		5.57	5.70	5.84	5.99	6.17	6.26	6.41	6.55	6.71
45.0		5.88	6.02	6.15	6.29	6.45	6.53	6.66	6.78	6.92
50.0			6.37	6.51	6.64	6.79	6.86	6.97	7.08	7.19
55.0				6.90	7.05	7.19	7.25	7.35	7.45	7.55
60.0				7.34	7.50	7.65	7.72	7.81	7.90	7.99
65.0					8.02	8.18	8.25	8.35	8.43	8.52
70.0					8.59	8.78	8.85	8.96	9.05	9.14
75.0						9.45	9.53	9.65	9.75	9.84

Additional restrictions, please see application guidelines

50 Hz ZBD45KCE-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	31.80									
25.0	31.70									
30.0	31.20	39.70	49.80	61.90						
35.0	30.70	39.20	49.40	61.50	76.00	93.10				
40.0		38.70	48.80	60.90	75.30	92.50	100.00	113.00	124.00	136.50
45.0		38.10	48.10	60.10	74.40	91.40	99.10	111.50	123.00	136.00
50.0			47.40	59.10	73.20	90.10	97.70	110.50	122.00	134.50
55.0				58.10	71.90	88.50	96.00	108.50	120.00	132.50
60.0				57.20	70.50	86.60	94.10	106.50	117.50	130.00
65.0					69.10	84.70	91.90	104.00	115.00	127.50
70.0					67.90	82.70	89.70	101.50	112.50	124.50
75.0						81.00	87.60	98.80	109.50	121.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	241/246
Height, mm	481
Net Weight, kg	39.9
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.89
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 (MT), dBA	61
Sound Power (MT), dBA	72
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	6.3
Max. High Side Internal Free Volume, l	0.5
Max. Internal Free Volume, l	6.80
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	12.3
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	NTC sensor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
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