



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	6.12	7.31	8.73	10.40					
15.0	5.80	6.97	8.37	10.00	11.90				
20.0	5.47	6.63	8.00	9.59	11.40	13.50			
25.0	5.15	6.27	7.60	9.14	10.90	12.90	15.15		
30.0	4.82	5.91	7.18	8.65	10.35	12.25	14.40	15.35	16.80
35.0	4.50	5.53	6.73	8.13	9.72	11.55	13.60	14.45	15.85
40.0	4.19	5.14	6.27	7.57	9.07	10.75	12.70	13.50	14.85
45.0		4.75	5.78	6.98	8.37	9.94	11.75	12.50	13.75
50.0		4.35	5.28	6.36	7.62	9.06	10.70	11.40	12.55
55.0			4.75	5.71	6.83	8.13	9.61	10.25	11.30
60.0				5.04	6.01	7.14	8.45	9.02	9.94

50 Hz

ZBD30KCE-TFD

R404A Dew Point

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	1.55	1.66	1.76	1.90					
15.0	1.64	1.75	1.85	1.96	2.12				
20.0	1.77	1.88	1.98	2.08	2.21	2.38			
25.0	1.92	2.03	2.13	2.23	2.34	2.49	2.69		
30.0	2.08	2.21	2.32	2.41	2.51	2.64	2.82	2.90	3.05
35.0	2.27	2.42	2.53	2.63	2.72	2.84	2.99	3.06	3.19
40.0	2.48	2.65	2.77	2.87	2.96	3.07	3.20	3.26	3.38
45.0		2.89	3.03	3.14	3.24	3.33	3.45	3.51	3.60
50.0		3.16	3.32	3.44	3.54	3.64	3.74	3.79	3.87
55.0			3.62	3.76	3.87	3.97	4.06	4.11	4.18
60.0				4.11	4.23	4.33	4.42	4.46	4.53

Cond °C	Current at 400 V, A								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	3.43	3.59	3.74	3.92					
15.0	3.55	3.70	3.84	3.99	4.18				
20.0	3.70	3.85	3.98	4.11	4.28	4.49			
25.0	3.88	4.03	4.16	4.29	4.43	4.61	4.86		
30.0	4.08	4.25	4.38	4.50	4.63	4.79	5.01	5.12	5.31
35.0	4.31	4.50	4.65	4.77	4.89	5.03	5.22	5.32	5.48
40.0	4.56	4.78	4.94	5.07	5.19	5.32	5.50	5.58	5.73
45.0		5.09	5.28	5.42	5.55	5.68	5.83	5.91	6.04
50.0		5.43	5.65	5.81	5.95	6.08	6.23	6.30	6.42
55.0			6.05	6.24	6.40	6.54	6.69	6.75	6.87
60.0				6.71	6.89	7.04	7.20	7.27	7.38

Cond °C	Suction Mass Flow, g/s								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	34.40	41.30	49.60	59.50					
15.0	34.00	41.10	49.70	59.80	71.60				
20.0	33.50	40.90	49.60	59.90	72.00	86.00			
25.0	33.10	40.50	49.50	59.90	72.20	86.40	103.00		
30.0	32.60	40.20	49.20	59.80	72.10	86.50	103.00	110.50	122.50
35.0	32.20	39.80	48.80	59.40	71.80	86.30	103.00	110.50	122.50
40.0	31.80	39.30	48.30	58.90	71.30	85.80	103.00	110.50	122.50
45.0		38.80	47.60	58.10	70.50	85.00	102.00	109.50	122.00
50.0		38.30	46.90	57.20	69.40	83.90	101.00	108.50	121.00
55.0			46.20	56.20	68.10	82.40	99.40	107.00	119.50
60.0				55.00	66.70	80.80	97.70	105.50	118.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	11.7
Length/Width, mm	241/246
Height, mm	481
Net Weight, kg	36.7
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	59
Sound Power (MT), dBA	70
Sound Power with Sound Shell (MT), dBA	60
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	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	7.9
Locked Rotor Current, A	51.5
Winding Resistance, ohm	3.64
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	NTC sensor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Oil Control System	ALCO Trax-Oil OM3
Solenoid Valve Kit	220 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Control Kit	EC2-552
Mounting Grommets	Hard Mounts for Paralleling
Digital Driver	EC3-D13
Solenoid valve	Standard
Valve Coil	24V AC
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC3-652

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