



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							
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	5.79	6.39	7.24	8.36				
15.0	4.95	5.57	6.43	7.54				
20.0	4.28	4.93	5.79	6.87	8.19			
25.0	3.75	4.42	5.27	6.32	7.59	9.08		
30.0	3.34	4.01	4.85	5.87	7.08	8.48	10.10	10.80
35.0	2.99	3.67	4.50	5.47	6.61	7.94	9.45	10.10
40.0		3.38	4.17	5.10	6.17	7.40	8.80	9.41
45.0			3.85	4.73	5.72	6.86	8.13	8.69
50.0				4.32	5.23	6.26	7.41	7.91
55.0				3.84	4.67	5.58	6.60	7.04

50 Hz

ZBD21KCE-TFD

R407A Dew Point

Cond °C	Power, kW							
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	1.16	1.16	1.14	1.12				
15.0	1.22	1.22	1.22	1.20				
20.0	1.28	1.30	1.31	1.31	1.30			
25.0	1.36	1.40	1.42	1.44	1.44	1.44		
30.0	1.48	1.52	1.56	1.58	1.60	1.60	1.58	1.58
35.0	1.60	1.66	1.71	1.74	1.76	1.78	1.78	1.77
40.0		1.82	1.88	1.93	1.96	1.98	1.98	1.98
45.0			2.08	2.14	2.18	2.20	2.21	2.21
50.0				2.37	2.42	2.45	2.46	2.47
55.0				2.62	2.68	2.72	2.74	2.74

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	2.81	2.81	2.82	2.84				
15.0	2.94	2.95	2.96	2.97				
20.0	3.06	3.08	3.10	3.12	3.14			
25.0	3.19	3.23	3.25	3.28	3.30	3.31		
30.0	3.34	3.38	3.42	3.45	3.47	3.49	3.51	3.52
35.0	3.49	3.56	3.61	3.65	3.68	3.70	3.71	3.72
40.0		3.75	3.82	3.87	3.91	3.93	3.95	3.95
45.0			4.06	4.12	4.17	4.20	4.22	4.23
50.0				4.41	4.47	4.52	4.54	4.55
55.0				4.74	4.81	4.87	4.90	4.91

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	31.40	34.10	38.10	43.40				
15.0	28.00	31.00	35.20	40.60				
20.0	25.30	28.60	33.00	38.60	45.30			
25.0	23.20	26.80	31.40	37.10	43.80	51.60		
30.0	21.60	25.50	30.30	36.00	42.70	50.40	59.10	62.90
35.0	20.50	24.60	29.50	35.30	41.90	49.50	57.90	61.60
40.0		23.90	29.00	34.70	41.30	48.60	56.80	60.30
45.0			28.40	34.10	40.50	47.60	55.50	58.80
50.0				33.20	39.40	46.20	53.70	56.90
55.0				31.70	37.70	44.10	51.10	54.10

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/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 Power with Sound Shell (MT), dBA	59
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	2107
Refrigerant's classification	A1

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
-------------------	----------

ACCESSORIES OPTIONAL

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

MOTOR OPTIONS

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
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