



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	9.83	11.95	14.55	17.65				
15.0	9.38	11.50	14.15	17.30				
20.0	8.86	11.00	13.65	16.75	20.40			
25.0	8.29	10.40	13.00	16.10	19.65	23.70		
30.0	7.69	9.76	12.30	15.30	18.80	22.70	27.20	29.10
35.0	7.08	9.07	11.50	14.45	17.80	21.70	26.00	27.80
40.0		8.36	10.70	13.45	16.70	20.40	24.60	26.40
45.0			9.83	12.45	15.55	19.10	23.10	24.80
50.0				11.40	14.30	17.65	21.50	23.10
55.0				10.35	13.05	16.15	19.75	21.30

50 Hz

ZBD57KCE-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	2.47	2.53	2.57	2.55				
15.0	2.78	2.86	2.92	2.94				
20.0	3.13	3.21	3.28	3.34	3.35			
25.0	3.53	3.59	3.67	3.75	3.79	3.79		
30.0	3.99	4.04	4.11	4.19	4.26	4.29	4.27	4.24
35.0	4.54	4.56	4.62	4.69	4.77	4.82	4.84	4.83
40.0		5.17	5.20	5.26	5.34	5.40	5.44	5.45
45.0			5.88	5.92	5.98	6.05	6.10	6.11
50.0				6.68	6.71	6.77	6.83	6.85
55.0				7.56	7.56	7.60	7.65	7.67

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	5.62	5.66	5.66	5.59				
15.0	5.88	5.94	5.98	5.98				
20.0	6.18	6.25	6.32	6.37	6.35			
25.0	6.57	6.63	6.71	6.79	6.83	6.79		
30.0	7.06	7.09	7.17	7.27	7.34	7.36	7.30	7.24
35.0	7.67	7.67	7.73	7.82	7.92	7.98	7.97	7.94
40.0		8.37	8.40	8.48	8.57	8.66	8.70	8.69
45.0			9.21	9.25	9.34	9.43	9.50	9.51
50.0				10.18	10.24	10.32	10.40	10.42
55.0				11.29	11.29	11.35	11.42	11.45

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	53.30	63.70	76.50	91.60				
15.0	53.00	64.00	77.50	93.20				
20.0	52.30	63.80	77.80	94.10	112.50			
25.0	51.20	63.10	77.60	94.30	113.50	134.50		
30.0	49.90	62.10	76.80	94.00	113.50	135.00	159.00	169.00
35.0	48.30	60.70	75.70	93.10	113.00	135.00	159.00	169.50
40.0		59.20	74.20	91.70	111.50	134.00	158.50	169.00
45.0			72.40	89.90	110.00	132.50	157.50	168.00
50.0				87.80	108.00	130.50	155.50	166.50
55.0				85.60	105.50	128.00	153.00	164.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	21.4
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	43.1
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
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 (19)
Sound Pressure @ 1m (MT), dBA	68
Sound Power (MT), dBA	79
Sound Power with Sound Shell (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	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	20
Refrigerant's GWP	2107
Refrigerant's classification	A1

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

Maximum Operating Current, A	15.9
Locked Rotor Current, A	102
Winding Resistance, ohm	1.72
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge
Oil Control System	ALCO Trax-Oil OM3
Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling

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