



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								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	22.60	27.70	33.80	40.90					
15.0	21.50	26.50	32.30	39.10	46.90				
20.0	20.40	25.20	30.80	37.30	44.70	53.20			
25.0	19.10	23.80	29.20	35.30	42.40	50.40	59.60		
30.0	17.65	22.30	27.40	33.30	40.00	47.60	56.20	60.00	66.10
35.0	16.05	20.50	25.50	31.10	37.40	44.60	52.70	56.20	61.90
40.0		18.60	23.40	28.70	34.70	41.40	49.00	52.40	57.70
45.0			21.10	26.20	31.80	38.10	45.20	48.30	53.30
50.0				23.40	28.70	34.60	41.20	44.10	48.70
55.0				20.40	25.40	30.90	37.10	39.70	44.00
60.0					21.80	27.00	32.60	35.10	39.00

50 Hz

ZBD114K5E-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	5.79	5.94	6.10	6.25					
15.0	6.41	6.56	6.72	6.88	7.05				
20.0	7.11	7.26	7.41	7.56	7.73	7.90			
25.0	7.92	8.05	8.18	8.33	8.48	8.65	8.82		
30.0	8.86	8.96	9.08	9.20	9.33	9.48	9.64	9.70	9.81
35.0	9.96	10.00	10.10	10.20	10.30	10.40	10.55	10.60	10.70
40.0		11.25	11.30	11.35	11.40	11.50	11.60	11.65	11.70
45.0			12.65	12.65	12.70	12.75	12.80	12.85	12.90
50.0				14.20	14.15	14.15	14.15	14.15	14.20
55.0				15.95	15.85	15.75	15.75	15.70	15.70
60.0					17.75	17.60	17.50	17.45	17.40

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	16.99	17.16	17.31	17.44					
15.0	17.46	17.66	17.83	17.98	18.13				
20.0	18.06	18.27	18.45	18.61	18.77	18.94			
25.0	18.82	19.03	19.22	19.38	19.54	19.71	19.90		
30.0	19.79	19.99	20.17	20.32	20.48	20.64	20.82	20.90	21.03
35.0	21.01	21.19	21.34	21.48	21.62	21.76	21.92	21.99	22.11
40.0		22.67	22.79	22.90	23.00	23.11	23.24	23.30	23.40
45.0			24.54	24.61	24.67	24.74	24.83	24.87	24.95
50.0				26.66	26.66	26.68	26.72	26.75	26.79
55.0				29.08	29.03	28.98	28.96	28.96	28.97
60.0					31.80	31.68	31.59	31.56	31.52

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	127.00	157.00	192.00	234.00					
15.0	126.50	156.50	192.00	234.00	283.00				
20.0	125.00	155.50	191.00	233.00	282.00	339.00			
25.0	122.50	154.00	190.00	232.00	281.00	338.00	405.00		
30.0	119.50	151.50	188.00	230.00	279.00	336.00	403.00	432.00	481.00
35.0	114.50	147.50	185.00	227.00	276.00	333.00	400.00	430.00	479.00
40.0		142.50	180.50	224.00	273.00	330.00	397.00	427.00	476.00
45.0			174.00	218.00	268.00	326.00	393.00	424.00	473.00
50.0				211.00	262.00	320.00	389.00	419.00	469.00
55.0				201.00	253.00	313.00	383.00	415.00	466.00
60.0					242.00	305.00	378.00	410.00	464.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	43.3
Length/Width, mm	393/312
Height, mm	552
Net Weight, kg	68.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.37
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 (0)
Sound Pressure @ 1m (MT), dBA	71
Sound Power (MT), dBA	82
Sound Power with Sound Shell (MT), dBA	72
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	2
Max. Internal Free Volume, l	14.0
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-32
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	33.3
Locked Rotor Current, A	174
Winding Resistance, ohm	0.83/0.83/0.83 (T1-T2/T2-T3/T3-T1)
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Solenoid valve	Standard
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### **ACCESSORIES OPTIONAL**

Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Digital Control Kit	EC2-552
Discharge Temperature Protection	Discharge line thermostat
Valve Coil	24V AC
Digital Control Kit	EC3-652
Crankcase Heater	90 W External
Mounting Grommets	Standard
Digital Driver	EC3-D13
Mounting Grommets	Hard Mounts for Paralleling

### **MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04