



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	17.95	22.50	27.60	33.20					
15.0	17.30	21.90	27.20	33.10	39.40				
20.0	16.40	21.10	26.40	32.40	38.90	45.90			
25.0	15.30	19.95	25.30	31.40	38.00	45.10	52.60		
30.0	14.15	18.60	23.90	30.00	36.60	43.80	51.40	54.60	59.40
35.0	12.90	17.15	22.30	28.20	34.90	42.10	49.70	52.90	57.80
40.0		15.60	20.50	26.30	32.80	39.90	47.60	50.70	55.70
45.0			18.60	24.10	30.40	37.40	44.90	48.10	53.00
50.0			16.65	21.80	27.80	34.50	41.90	45.00	49.80
55.0				19.40	25.00	31.40	38.60	41.60	46.30
60.0					22.10	28.10	34.90	37.80	42.40

50 Hz

ZBD114K5E-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
10.0	5.02	5.16	5.30	5.38					
15.0	5.56	5.73	5.92	6.08	6.17				
20.0	6.18	6.35	6.56	6.77	6.94	7.02			
25.0	6.92	7.06	7.26	7.50	7.72	7.87	7.92		
30.0	7.83	7.90	8.07	8.30	8.54	8.74	8.87	8.89	8.87
35.0	8.93	8.91	9.02	9.22	9.45	9.68	9.85	9.89	9.92
40.0		10.15	10.15	10.30	10.50	10.70	10.90	10.95	11.00
45.0			11.55	11.55	11.70	11.90	12.05	12.10	12.20
50.0			13.15	13.10	13.10	13.25	13.40	13.45	13.50
55.0				14.90	14.80	14.80	14.90	14.95	15.00
60.0					16.75	16.65	16.65	16.65	16.65

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	15.09	15.37	15.47	15.37					
15.0	15.56	15.91	16.13	16.19	16.07				
20.0	16.16	16.54	16.83	17.01	17.06	16.96			
25.0	16.96	17.33	17.65	17.90	18.07	18.12	18.06		
30.0	18.02	18.34	18.64	18.93	19.16	19.34	19.44	19.45	19.44
35.0	19.43	19.64	19.89	20.16	20.42	20.68	20.89	20.97	21.06
40.0		21.30	21.45	21.66	21.91	22.19	22.48	22.60	22.77
45.0			23.40	23.50	23.70	23.96	24.29	24.42	24.64
50.0			25.80	25.76	25.85	26.06	26.36	26.51	26.75
55.0				28.49	28.44	28.54	28.79	28.92	29.16
60.0					31.53	31.49	31.63	31.74	31.94

50 Hz

ZBD114K5E-TFD

R407A Dew Point

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	84.30	106.00	130.50	158.00					
15.0	84.00	107.00	133.50	163.00	195.00				
20.0	82.60	106.50	134.50	166.00	200.00	238.00			
25.0	80.20	105.00	134.00	167.00	204.00	244.00	287.00		
30.0	77.10	102.00	132.00	166.00	205.00	247.00	293.00	312.00	342.00
35.0	73.50	98.30	128.50	164.00	204.00	248.00	297.00	317.00	349.00
40.0		93.80	124.00	160.00	201.00	247.00	298.00	320.00	353.00
45.0			118.50	154.50	196.50	244.00	297.00	320.00	355.00
50.0			112.00	148.00	190.00	239.00	294.00	317.00	355.00
55.0				140.00	182.50	232.00	288.00	313.00	352.00
60.0					173.00	223.00	281.00	306.00	347.00

### 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	2107
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