



Minimum Evaporating Temp. With:

- 10 K Suction Superheat    — 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 18.3°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	15.45	18.85	23.00	27.80					
15.0	14.70	18.00	21.90	26.60	32.00				
20.0	13.95	17.10	20.90	25.30	30.50	36.40			
25.0	13.15	16.25	19.85	24.00	28.90	34.50	40.80		
30.0	12.35	15.30	18.75	22.70	27.30	32.50	38.50	41.00	45.20
35.0	11.50	14.30	17.55	21.30	25.60	30.50	36.00	38.40	42.30
40.0	10.55	13.25	16.35	19.85	23.80	28.40	33.50	35.70	39.30
45.0	9.53	12.10	15.00	18.25	22.00	26.20	30.90	33.00	36.20
50.0		10.85	13.55	16.60	20.00	23.80	28.20	30.00	33.00
55.0			12.00	14.80	17.90	21.40	25.30	27.00	29.70
60.0				12.85	15.65	18.80	22.30	23.80	26.20

50 Hz

ZBD76K5E-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	3.99	4.10	4.21	4.30					
15.0	4.39	4.51	4.63	4.73	4.81				
20.0	4.84	4.96	5.08	5.20	5.29	5.36			
25.0	5.37	5.48	5.60	5.72	5.82	5.90	5.95		
30.0	5.97	6.08	6.19	6.30	6.41	6.49	6.55	6.57	6.57
35.0	6.68	6.76	6.86	6.97	7.07	7.15	7.22	7.24	7.25
40.0	7.50	7.55	7.63	7.72	7.81	7.89	7.96	7.98	7.99
45.0	8.44	8.46	8.52	8.59	8.66	8.73	8.79	8.80	8.82
50.0		9.51	9.53	9.57	9.62	9.67	9.72	9.73	9.74
55.0			10.70	10.70	10.70	10.75	10.75	10.75	10.75
60.0				11.95	11.95	11.95	11.95	11.95	11.95

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	11.04	11.19	11.31	11.40					
15.0	11.37	11.52	11.66	11.77	11.84				
20.0	11.77	11.92	12.07	12.20	12.29	12.33			
25.0	12.27	12.42	12.57	12.70	12.81	12.88	12.90		
30.0	12.91	13.04	13.18	13.32	13.44	13.52	13.57	13.57	13.56
35.0	13.69	13.81	13.93	14.06	14.18	14.28	14.34	14.35	14.35
40.0	14.66	14.74	14.85	14.96	15.07	15.17	15.24	15.26	15.27
45.0	15.83	15.87	15.95	16.04	16.13	16.22	16.30	16.32	16.34
50.0		17.22	17.26	17.32	17.39	17.47	17.53	17.55	17.57
55.0			18.80	18.83	18.87	18.93	18.98	18.99	19.01
60.0				20.59	20.59	20.62	20.65	20.66	20.67

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	87.70	107.50	131.50	161.00					
15.0	87.00	107.00	131.50	160.50	194.50				
20.0	86.30	106.50	131.00	160.00	194.00	234.00			
25.0	85.50	106.00	130.50	159.50	193.50	233.00	280.00		
30.0	84.40	105.00	129.50	158.50	192.50	232.00	279.00	299.00	333.00
35.0	83.00	104.00	128.50	157.50	191.50	231.00	277.00	298.00	331.00
40.0	81.00	102.50	127.50	156.00	190.00	229.00	275.00	296.00	329.00
45.0	78.30	100.00	125.00	154.00	187.50	227.00	273.00	293.00	327.00
50.0		96.90	122.50	151.50	185.00	224.00	270.00	290.00	324.00
55.0			118.50	147.50	181.50	220.00	266.00	287.00	321.00
60.0				143.00	177.00	217.00	263.00	284.00	318.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	28.8
Length/Width, mm	358/296
Height, mm	534
Net Weight, kg	61.2
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	66
Sound Power (MT), dBA	77
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PEL Category	2
Max. Internal Free Volume, l	13.3
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	24
Locked Rotor Current, A	118
Winding Resistance, ohm	1.24/1.24/1.24 (T1-T2/T2-T3/T3-T1)
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

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

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

### **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