



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
20.0	13.55	16.65	20.30	24.60	29.60	35.40			
25.0	12.80	15.80	19.30	23.40	28.10	33.50	39.70		
30.0	12.05	14.90	18.25	22.10	26.60	31.60	37.40	39.90	43.90
35.0	11.20	13.95	17.10	20.80	24.90	29.70	35.10	37.40	41.20
40.0	10.30	12.90	15.90	19.35	23.20	27.70	32.70	34.80	38.30
45.0		11.80	14.65	17.85	21.40	25.50	30.10	32.20	35.30
50.0			13.25	16.20	19.55	23.30	27.50	29.40	32.30
55.0			11.75	14.45	17.50	20.90	24.80	26.40	29.10
60.0				12.60	15.35	18.40	21.90	23.30	25.70

50 Hz

ZBD76KCE-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
20.0	4.65	4.77	4.88	4.99	5.08	5.15			
25.0	5.16	5.27	5.38	5.49	5.59	5.67	5.71		
30.0	5.74	5.84	5.94	6.05	6.15	6.24	6.29	6.31	6.32
35.0	6.42	6.50	6.59	6.69	6.79	6.87	6.93	6.95	6.97
40.0	7.20	7.26	7.33	7.42	7.50	7.58	7.64	7.66	7.68
45.0		8.13	8.18	8.25	8.32	8.39	8.44	8.46	8.47
50.0			9.15	9.19	9.24	9.29	9.33	9.35	9.36
55.0			10.25	10.25	10.30	10.30	10.35	10.35	10.35
60.0				11.50	11.45	11.45	11.45	11.45	11.45

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
20.0	11.14	11.29	11.43	11.55	11.64	11.69			
25.0	11.62	11.77	11.91	12.04	12.14	12.21	12.24		
30.0	12.22	12.36	12.49	12.62	12.74	12.82	12.87	12.87	12.86
35.0	12.97	13.08	13.21	13.33	13.45	13.54	13.61	13.62	13.62
40.0	13.89	13.97	14.07	14.19	14.30	14.39	14.47	14.49	14.50
45.0		15.04	15.12	15.21	15.31	15.40	15.48	15.50	15.52
50.0			16.37	16.43	16.51	16.59	16.66	16.68	16.71
55.0			17.84	17.87	17.92	17.98	18.04	18.05	18.08
60.0				19.54	19.56	19.59	19.63	19.64	19.66

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
20.0	83.20	102.50	126.00	154.00	187.00	225.00			
25.0	82.40	102.00	125.50	153.50	186.00	225.00	269.00		
30.0	81.40	101.50	125.00	152.50	185.50	223.00	268.00	288.00	320.00
35.0	80.00	100.50	124.00	152.00	184.00	222.00	266.00	286.00	318.00
40.0	78.10	98.80	122.50	150.50	182.50	220.00	264.00	284.00	316.00
45.0		96.60	120.50	148.50	180.50	218.00	262.00	282.00	314.00
50.0			118.00	146.00	178.00	215.00	259.00	279.00	311.00
55.0			114.00	142.00	174.50	212.00	256.00	276.00	308.00
60.0				137.50	170.50	208.00	253.00	273.00	306.00

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	28.8
Length/Width, mm	293/285
Height, mm	533
Net Weight, kg	61.7
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.25
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 (8.5)
Sound Pressure @ 1m (MT), dBA	66
Sound Power (MT), dBA	77
Sound Power with Sound Shell (MT), dBA	67
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	2
Max. Low Side Internal Free Volume, l	12.6
Max. High Side Internal Free Volume, l	1.5
Max. Internal Free Volume, l	14.1
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	20.4
Locked Rotor Current, A	118
Winding Resistance, ohm	1.27
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Solenoid valve	Standard
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### ACCESSORIES OPTIONAL

Oil Control System	ALCO Trax-Oil OM3
Valve Coil	220V
Digital Control Kit	EC2-552
Mounting Grommets	Standard
Mounting Grommets	Hard Mounts for Paralleling
Crankcase Heater	66 W External
Discharge Temperature Protection	Discharge line thermostat
Sound Attenuation	Sound Shell (10dBA)
Digital Control Kit	EC3-652
Valve Coil	24V AC
Digital Driver	EC3-D13

### 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