



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	5.10	6.08	7.29	8.75				
15.0	4.91	5.96	7.25	8.77				
20.0	4.66	5.76	7.08	8.64	10.45			
25.0	4.36	5.48	6.82	8.39	10.20	12.30		
30.0	4.04	5.15	6.48	8.04	9.85	11.90	14.25	15.25
35.0	3.70	4.78	6.08	7.61	9.38	11.40	13.70	14.70
40.0		4.40	5.64	7.11	8.83	10.80	13.05	14.00
45.0			5.18	6.57	8.20	10.10	12.25	13.20
50.0				6.00	7.52	9.30	11.35	12.25
55.0				5.42	6.81	8.46	10.40	11.25

50 Hz

ZBD30KCE-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	1.30	1.30	1.28	1.24				
15.0	1.47	1.48	1.49	1.48				
20.0	1.66	1.68	1.70	1.70	1.68			
25.0	1.87	1.90	1.92	1.93	1.94	1.91		
30.0	2.12	2.13	2.16	2.18	2.19	2.19	2.17	2.15
35.0	2.41	2.42	2.43	2.46	2.48	2.49	2.48	2.47
40.0		2.75	2.76	2.77	2.79	2.81	2.82	2.82
45.0			3.13	3.14	3.15	3.17	3.18	3.18
50.0				3.56	3.56	3.58	3.59	3.59
55.0				4.06	4.04	4.04	4.05	4.05

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	4.61	4.58	4.48	4.29				
15.0	4.81	4.82	4.79	4.69				
20.0	5.01	5.06	5.07	5.04	4.94			
25.0	5.27	5.31	5.36	5.37	5.34	5.24		
30.0	5.59	5.63	5.68	5.72	5.73	5.70	5.61	5.55
35.0	6.03	6.03	6.06	6.11	6.15	6.17	6.14	6.11
40.0		6.54	6.54	6.57	6.62	6.66	6.68	6.68
45.0			7.14	7.14	7.17	7.22	7.27	7.28
50.0				7.84	7.84	7.87	7.92	7.95
55.0				8.70	8.65	8.65	8.68	8.70

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	27.70	32.50	38.40	45.30				
15.0	27.80	33.20	39.60	47.20				
20.0	27.50	33.40	40.40	48.50	57.80			
25.0	26.90	33.20	40.60	49.20	58.90	69.80		
30.0	26.20	32.70	40.50	49.40	59.50	70.80	83.40	88.80
35.0	25.30	32.00	39.90	49.10	59.50	71.20	84.10	89.70
40.0		31.10	39.10	48.40	59.00	70.90	84.20	89.90
45.0			38.10	47.40	58.00	70.10	83.60	89.40
50.0				46.10	56.70	68.70	82.30	88.20
55.0				44.80	55.00	66.90	80.40	86.40

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	11.7
Length/Width, mm	241/246
Height, mm	481
Net Weight, kg	36.7
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
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 (8.5)
Sound Pressure @ 1m (MT), dBA	59
Sound Power (MT), dBA	70
Sound Power with Sound Shell (MT), dBA	60
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	21
Refrigerant's GWP	2107
Refrigerant's classification	A1

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

Maximum Operating Current, A	7.9
Locked Rotor Current, A	51.5
Winding Resistance, ohm	3.64
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	NTC sensor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Oil Control System	ALCO Trax-Oil OM3
Solenoid Valve Kit	220 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Control Kit	EC2-552
Mounting Grommets	Hard Mounts for Paralleling
Digital Driver	EC3-D13
Solenoid valve	Standard
Valve Coil	24V AC
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC3-652

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