



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
4.0	20.90	25.60	31.00						
5.0	20.80	25.50	30.90						
10.0	20.00	24.80	30.20	36.40					
15.0	19.10	23.80	29.30	35.40	42.50				
20.0	17.95	22.70	28.20	34.30	41.30	49.20			
25.0	16.65	21.50	26.90	32.90	39.80	47.50	56.30		
30.0		20.00	25.40	31.40	38.10	45.70	54.20	57.90	63.80
35.0		18.35	23.70	29.60	36.20	43.60	51.90	55.60	61.30
40.0			21.80	27.60	34.10	41.30	49.40	52.90	58.50
45.0			19.70	25.40	31.70	38.80	46.60	50.00	55.40
50.0				23.00	29.20	36.00	43.60	46.90	52.10
55.0					26.30	33.00	40.30	43.50	48.50
60.0					23.20	29.70	36.70	39.80	44.60

50 Hz

ZBD114K5E-TFD

R449A Dew Point

Cond °C	Power, kW								
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
4.0	3.97	4.07	4.19						
5.0	4.04	4.13	4.25						
10.0	4.68	4.76	4.88	5.03					
15.0	5.42	5.48	5.59	5.73	5.90				
20.0	6.26	6.29	6.39	6.52	6.69	6.89			
25.0	7.21	7.22	7.28	7.40	7.57	7.77	8.00		
30.0		8.27	8.30	8.39	8.54	8.73	8.97	9.07	9.24
35.0		9.45	9.44	9.51	9.63	9.81	10.05	10.15	10.30
40.0			10.75	10.75	10.85	11.00	11.20	11.30	11.50
45.0			12.15	12.15	12.20	12.35	12.50	12.60	12.75
50.0				13.70	13.70	13.80	13.95	14.05	14.20
55.0					15.35	15.40	15.55	15.60	15.75
60.0					17.20	17.20	17.30	17.35	17.45

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
4.0	15.90	15.95	16.00						
5.0	15.93	15.98	16.03						
10.0	16.25	16.31	16.38	16.47					
15.0	16.72	16.77	16.86	16.97	17.09				
20.0	17.38	17.41	17.49	17.60	17.76	17.93			
25.0	18.24	18.24	18.30	18.41	18.58	18.77	19.00		
30.0		19.29	19.32	19.42	19.58	19.79	20.05	20.16	20.33
35.0		20.60	20.59	20.66	20.80	21.01	21.28	21.40	21.59
40.0			22.12	22.15	22.27	22.46	22.73	22.86	23.06
45.0			23.96	23.93	24.01	24.18	24.43	24.55	24.76
50.0				26.03	26.05	26.18	26.41	26.52	26.72
55.0					28.42	28.50	28.69	28.79	28.98
60.0					31.15	31.16	31.30	31.39	31.56

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
4.0	93.60	115.00	140.00						
5.0	93.60	115.00	140.00						
10.0	93.10	115.50	141.50	171.50					
15.0	91.70	115.00	142.00	173.00	209.00				
20.0	89.50	114.00	142.00	173.50	211.00	253.00			
25.0	86.30	112.00	140.50	173.50	211.00	255.00	305.00		
30.0		108.50	138.50	172.50	211.00	256.00	307.00	329.00	366.00
35.0		104.00	135.50	170.50	210.00	255.00	308.00	331.00	368.00
40.0			130.50	167.00	208.00	254.00	308.00	331.00	370.00
45.0			124.50	161.50	204.00	252.00	307.00	331.00	370.00
50.0				155.00	198.50	248.00	304.00	329.00	369.00
55.0					191.00	242.00	300.00	326.00	368.00
60.0					181.50	234.00	295.00	322.00	365.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /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 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	1397
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

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

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