



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
4.0	8.38	10.45	12.95	15.90					
5.0	8.35	10.40	12.90	15.85					
10.0	8.04	10.05	12.45	15.30	18.65				
15.0	7.72	9.68	12.00	14.70	17.90				
20.0	7.38	9.28	11.50	14.10	17.20	20.80			
25.0	7.02	8.87	11.00	13.50	16.45	19.90	23.90	25.70	
30.0	6.63	8.43	10.50	12.85	15.65	18.95	22.80	24.50	27.20
35.0	6.22	7.97	9.94	12.20	14.90	18.00	21.60	23.20	25.90
40.0		7.48	9.37	11.55	14.05	17.00	20.50	22.00	24.50
45.0			8.78	10.85	13.20	16.00	19.25	20.70	23.00
50.0			8.15	10.10	12.35	14.95	18.05	19.40	21.60
55.0				9.34	11.45	13.90	16.75	18.05	20.10
60.0					10.50	12.80	15.50	16.65	18.60

50 Hz

ZB48KCE-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	1.98	2.04	2.12	2.20					
5.0	2.00	2.06	2.13	2.22					
10.0	2.20	2.24	2.31	2.38	2.47				
15.0	2.42	2.46	2.51	2.58	2.66				
20.0	2.69	2.71	2.75	2.81	2.88	2.96			
25.0	3.00	3.01	3.04	3.09	3.14	3.22	3.30	3.34	
30.0	3.37	3.38	3.39	3.42	3.47	3.53	3.61	3.64	3.70
35.0	3.81	3.80	3.81	3.83	3.86	3.91	3.97	4.00	4.05
40.0		4.31	4.30	4.31	4.33	4.36	4.41	4.44	4.48
45.0			4.87	4.87	4.88	4.90	4.94	4.96	4.99
50.0			5.54	5.52	5.52	5.53	5.55	5.57	5.59
55.0				6.28	6.26	6.26	6.27	6.28	6.30
60.0					7.12	7.10	7.10	7.10	7.11

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	6.94	6.99	7.05	7.13					
5.0	6.96	7.01	7.07	7.15					
10.0	7.14	7.18	7.24	7.31	7.39				
15.0	7.35	7.38	7.43	7.49	7.57				
20.0	7.60	7.62	7.66	7.72	7.79	7.87			
25.0	7.91	7.92	7.95	8.00	8.06	8.14	8.23	8.28	
30.0	8.30	8.30	8.32	8.36	8.41	8.48	8.56	8.60	8.67
35.0	8.80	8.78	8.79	8.81	8.85	8.91	8.98	9.02	9.08
40.0		9.38	9.37	9.38	9.41	9.45	9.51	9.54	9.60
45.0			10.10	10.09	10.10	10.13	10.18	10.20	10.24
50.0			10.98	10.95	10.94	10.96	10.99	11.01	11.04
55.0				11.99	11.96	11.96	11.97	11.98	12.01
60.0					13.17	13.15	13.14	13.15	13.16

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	37.30	46.70	58.00	71.70					
5.0	37.30	46.70	58.00	71.70					
10.0	37.10	46.60	57.90	71.50	87.70				
15.0	36.90	46.40	57.70	71.20	87.40				
20.0	36.50	46.20	57.50	71.00	87.00	106.00			
25.0	36.10	45.90	57.20	70.60	86.60	105.50	128.50	138.50	
30.0	35.60	45.40	56.80	70.20	86.10	105.00	127.50	138.00	154.50
35.0	34.90	44.90	56.30	69.70	85.50	104.50	127.00	137.00	154.00
40.0		44.20	55.70	69.10	84.80	103.50	126.00	136.50	153.00
45.0			54.90	68.30	84.10	103.00	125.00	135.50	152.00
50.0			53.90	67.40	83.20	102.00	124.50	134.50	151.50
55.0				66.30	82.20	101.00	123.50	133.50	150.50
60.0					81.00	99.90	122.50	133.00	150.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	18.8
Length/Width, mm	246/250
Height, mm	442
Net Weight, kg	39.2
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Oil Quantity, l	1.77
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 (19)
Sound Pressure @ 1m (MT), dBA	62
Sound Power (MT), dBA	73
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	5.40
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	14
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

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
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