



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return — 10 K Suction Superheat
- 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
10.0	9.75	12.05	14.70	17.90					
15.0	9.36	11.55	14.10	17.15	20.60				
20.0	8.94	11.00	13.50	16.35	19.65	23.40			
25.0	8.48	10.45	12.80	15.50	18.60	22.20	26.30		
30.0	7.99	9.87	12.05	14.60	17.55	20.90	24.70	26.40	29.10
35.0	7.46	9.23	11.30	13.65	16.40	19.55	23.10	24.70	27.20
40.0	6.90	8.55	10.45	12.65	15.20	18.15	21.50	22.90	25.30
45.0	6.31	7.84	9.60	11.65	13.95	16.65	19.75	21.10	23.30
50.0		7.08	8.69	10.55	12.65	15.15	17.95	19.20	21.20
55.0			7.73	9.39	11.30	13.55	16.10	17.20	19.00
60.0				8.20	9.90	11.85	14.15	15.15	16.80

50 Hz

ZB48KCE-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	2.44	2.44	2.45	2.45					
15.0	2.74	2.75	2.75	2.75	2.76				
20.0	3.08	3.08	3.09	3.09	3.09	3.08			
25.0	3.45	3.46	3.46	3.46	3.46	3.45	3.43		
30.0	3.88	3.89	3.89	3.88	3.87	3.86	3.84	3.83	3.81
35.0	4.36	4.37	4.37	4.36	4.35	4.33	4.30	4.28	4.26
40.0	4.91	4.92	4.92	4.91	4.89	4.86	4.82	4.80	4.78
45.0	5.53	5.53	5.53	5.52	5.50	5.46	5.42	5.40	5.36
50.0		6.23	6.23	6.21	6.18	6.14	6.09	6.06	6.02
55.0			7.00	6.98	6.95	6.90	6.84	6.82	6.77
60.0				7.85	7.81	7.76	7.69	7.66	7.61

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	7.01	7.01	7.00	7.00					
15.0	7.27	7.27	7.27	7.28	7.28				
20.0	7.58	7.59	7.59	7.59	7.59	7.59			
25.0	7.94	7.96	7.96	7.96	7.96	7.96	7.95		
30.0	8.38	8.40	8.41	8.41	8.40	8.39	8.37	8.37	8.36
35.0	8.91	8.93	8.94	8.94	8.93	8.91	8.88	8.87	8.85
40.0	9.54	9.56	9.57	9.57	9.55	9.52	9.49	9.47	9.44
45.0	10.28	10.31	10.33	10.32	10.29	10.26	10.21	10.18	10.14
50.0		11.20	11.21	11.20	11.17	11.12	11.05	11.02	10.98
55.0			12.24	12.22	12.18	12.12	12.05	12.01	11.95
60.0				13.41	13.36	13.29	13.20	13.15	13.08

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	54.90	68.00	83.70	102.50					
15.0	54.90	68.00	83.80	102.50	124.00				
20.0	54.80	67.90	83.60	102.00	124.00	149.50			
25.0	54.50	67.60	83.20	101.50	123.50	148.50	178.00		
30.0	54.00	67.10	82.60	101.00	122.50	147.50	177.00	190.50	212.00
35.0	53.30	66.40	81.80	99.90	121.00	146.00	175.50	189.00	210.00
40.0	52.40	65.40	80.60	98.50	119.50	144.50	174.00	187.00	209.00
45.0	51.20	64.10	79.10	96.80	117.50	142.50	171.50	185.00	206.00
50.0		62.40	77.30	94.80	115.50	140.00	169.00	182.50	204.00
55.0			75.10	92.30	113.00	137.00	166.50	179.50	202.00
60.0				89.60	110.00	134.50	164.00	177.50	200.00

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	3922
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
TFE	500 V / 3~ / 50 Hz	500		Y	0.80
TW5	200-220 V / 3~ / 50 Hz	200		Y	2.30
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09
TFE	575 V / 3~ / 60 Hz	575		Y	0.80