



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 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	10.10	12.35	15.05	18.20					
15.0	9.64	11.90	14.50	17.50	21.00				
20.0	9.09	11.35	13.85	16.75	20.10	24.00			
25.0	8.46	10.70	13.15	15.95	19.15	22.80	27.00		
30.0	7.72	9.95	12.35	15.05	18.10	21.50	25.50	27.30	30.10
35.0	6.88	9.12	11.50	14.10	16.95	20.20	23.90	25.60	28.20
40.0	5.92	8.19	10.55	13.05	15.75	18.80	22.30	23.80	26.20
45.0		7.15	9.46	11.90	14.50	17.35	20.60	22.00	24.20
50.0			8.29	10.65	13.10	15.80	18.75	20.10	22.10
55.0			7.01	9.29	11.65	14.15	16.90	18.10	19.95
60.0				7.84	10.10	12.45	14.95	16.05	17.75

50 Hz

ZB50KCE-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	2.58	2.62	2.65	2.67					
15.0	2.87	2.91	2.94	2.97	2.99				
20.0	3.20	3.24	3.27	3.29	3.31	3.33			
25.0	3.58	3.61	3.63	3.66	3.67	3.68	3.69		
30.0	4.03	4.04	4.06	4.07	4.08	4.08	4.08	4.08	4.08
35.0	4.55	4.55	4.55	4.54	4.54	4.53	4.52	4.52	4.51
40.0	5.15	5.13	5.11	5.09	5.07	5.05	5.02	5.01	4.99
45.0		5.80	5.76	5.72	5.68	5.64	5.59	5.58	5.55
50.0			6.51	6.44	6.38	6.31	6.25	6.22	6.18
55.0			7.37	7.27	7.18	7.09	7.00	6.96	6.91
60.0				8.22	8.09	7.97	7.85	7.80	7.73

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	7.74	7.77	7.79	7.80					
15.0	7.96	7.99	8.02	8.04	8.05				
20.0	8.22	8.26	8.29	8.31	8.33	8.34			
25.0	8.56	8.59	8.61	8.63	8.65	8.66	8.67		
30.0	8.99	9.00	9.02	9.03	9.04	9.05	9.05	9.04	9.04
35.0	9.53	9.53	9.52	9.52	9.52	9.51	9.50	9.49	9.48
40.0	10.20	10.17	10.15	10.13	10.10	10.08	10.05	10.03	10.01
45.0		10.97	10.91	10.86	10.81	10.76	10.71	10.69	10.66
50.0			11.84	11.76	11.67	11.59	11.51	11.48	11.43
55.0			12.95	12.82	12.70	12.58	12.46	12.42	12.35
60.0				14.09	13.92	13.76	13.60	13.53	13.44

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	56.80	69.80	85.40	104.00					
15.0	56.50	70.00	85.80	104.50	127.00				
20.0	55.70	69.80	85.90	104.50	127.00	153.00			
25.0	54.30	69.10	85.60	104.50	126.50	152.50	183.50		
30.0	52.20	67.70	84.70	104.00	126.00	152.00	182.50	196.50	219.00
35.0	49.10	65.60	83.30	103.00	125.50	151.00	181.50	195.50	218.00
40.0	45.00	62.60	81.10	101.50	124.00	150.00	180.50	194.00	216.00
45.0		58.40	78.00	98.90	122.00	148.50	179.00	192.50	215.00
50.0			73.80	95.70	119.50	146.00	177.00	190.50	213.00
55.0			68.10	91.30	116.00	143.50	175.00	189.00	212.00
60.0				85.70	112.00	140.50	173.00	187.50	211.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	19.8
Length/Width, mm	263/284
Height, mm	480
Net Weight, kg	59
Stub Suction, inch	1 1/8
Stub Discharge, inch	7/8
Oil Quantity, l	2.65
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	64
Sound Power (MT), dBA	75
Sound Power with Sound Shell (MT), dBA	66
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	10.5
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	14.6
Locked Rotor Current, A	100
Winding Resistance, ohm	1.75
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Mounting Grommets	Standard
Discharge Temperature Protection	Internal Thermistor

ACCESSORIES OPTIONAL

Crankcase Heater	66 W External
Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge
Oil Control System	ALCO Trax-Oil OM3

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