



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
4.0	7.45	9.27	11.35	13.75					
5.0	7.45	9.27	11.35	13.75					
10.0	7.33	9.16	11.25	13.60	16.40				
15.0	7.09	8.93	11.00	13.30	16.05				
20.0	6.76	8.60	10.60	12.90	15.55	18.70			
25.0	6.35	8.18	10.15	12.40	15.00	18.00	21.50	23.10	
30.0	5.89	7.70	9.64	11.80	14.30	17.20	20.60	22.10	24.60
35.0	5.39	7.17	9.06	11.15	13.55	16.35	19.60	21.00	23.40
40.0		6.62	8.45	10.45	12.75	15.40	18.50	19.90	22.10
45.0			7.83	9.77	11.95	14.45	17.40	18.70	20.90
50.0			7.22	9.06	11.10	13.50	16.25	17.50	19.55
55.0				8.37	10.30	12.55	15.15	16.30	18.20
60.0					9.52	11.60	14.00	15.10	16.90

50 Hz

ZB45KCE-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	1.74	1.82	1.90	1.99					
5.0	1.76	1.83	1.91	2.00					
10.0	1.89	1.94	2.01	2.07	2.15				
15.0	2.08	2.13	2.17	2.22	2.28				
20.0	2.33	2.36	2.39	2.43	2.47	2.54			
25.0	2.64	2.66	2.68	2.70	2.73	2.78	2.85	2.89	
30.0	3.00	3.01	3.02	3.04	3.06	3.09	3.15	3.18	3.23
35.0	3.41	3.42	3.42	3.43	3.44	3.46	3.51	3.53	3.58
40.0		3.88	3.88	3.88	3.88	3.90	3.93	3.95	3.99
45.0			4.39	4.38	4.38	4.39	4.42	4.43	4.47
50.0			4.94	4.94	4.94	4.94	4.96	4.98	5.01
55.0				5.55	5.54	5.55	5.57	5.58	5.60
60.0					6.20	6.21	6.23	6.24	6.26

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	7.35	7.41	7.39	7.34					
5.0	7.30	7.36	7.35	7.30					
10.0	6.98	7.07	7.07	7.05	7.05				
15.0	6.82	6.93	6.95	6.95	6.96				
20.0	6.83	6.95	6.98	6.98	7.01	7.10			
25.0	6.99	7.11	7.14	7.15	7.17	7.27	7.50	7.63	
30.0	7.30	7.41	7.44	7.44	7.45	7.55	7.76	7.90	8.16
35.0	7.75	7.85	7.86	7.84	7.85	7.92	8.13	8.26	8.51
40.0		8.40	8.40	8.36	8.34	8.40	8.58	8.70	8.94
45.0			9.04	8.97	8.93	8.95	9.10	9.21	9.43
50.0			9.79	9.69	9.60	9.59	9.71	9.80	10.00
55.0				10.48	10.36	10.30	10.37	10.44	10.62
60.0					11.18	11.07	11.09	11.14	11.29

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	33.10	41.40	50.90	62.10					
5.0	33.20	41.50	51.10	62.30					
10.0	33.80	42.40	52.20	63.70	77.30				
15.0	33.90	42.80	52.90	64.60	78.30				
20.0	33.50	42.80	53.10	64.90	78.80	95.40			
25.0	32.70	42.30	52.80	64.90	78.90	95.60	115.50	124.50	
30.0	31.60	41.50	52.20	64.40	78.60	95.30	115.50	124.50	139.50
35.0	30.20	40.40	51.30	63.70	77.90	94.70	115.00	124.00	139.00
40.0		39.10	50.20	62.70	77.00	93.90	114.00	123.50	138.50
45.0			49.00	61.50	75.90	92.90	113.00	122.50	138.00
50.0			47.80	60.40	74.90	91.90	112.50	121.50	137.00
55.0				59.50	73.90	91.00	111.50	121.00	136.50
60.0					73.40	90.50	111.00	120.50	136.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	39.1
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
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	65
Sound Power (MT), dBA	76
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	5.90
High Side PS gauge, bar	32
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	13.1
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (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