



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Superheat 10.0K

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	7.17	9.01	11.20	13.75				
15.0	6.81	8.58	10.70	13.15				
20.0	6.44	8.14	10.15	12.50	15.30			
25.0	6.07	7.69	9.62	11.90	14.55	17.65		
30.0	5.69	7.24	9.07	11.25	13.80	16.75	20.20	21.70
35.0	5.30	6.77	8.51	10.60	13.00	15.80	19.10	20.60
40.0		6.29	7.94	9.89	12.20	14.85	18.00	19.35
45.0			7.35	9.19	11.35	13.90	16.85	18.15
50.0				8.45	10.50	12.85	15.65	16.85
55.0				7.67	9.56	11.80	14.35	15.50

50 Hz

ZB45KCE-TFD

R407A Dew Point

Cond °C	Power, kW							
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	1.82	1.79	1.76	1.75				
15.0	2.09	2.08	2.05	2.02				
20.0	2.39	2.39	2.37	2.34	2.31			
25.0	2.72	2.73	2.72	2.69	2.66	2.63		
30.0	3.07	3.10	3.11	3.09	3.05	3.02	3.00	3.00
35.0	3.44	3.49	3.52	3.51	3.49	3.45	3.42	3.41
40.0		3.91	3.95	3.97	3.96	3.93	3.89	3.88
45.0			4.41	4.46	4.46	4.45	4.41	4.40
50.0				4.96	4.99	5.00	4.98	4.96
55.0				5.48	5.54	5.57	5.57	5.57

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	6.18	6.16	6.14	6.13				
15.0	6.41	6.39	6.37	6.35				
20.0	6.69	6.68	6.66	6.63	6.61			
25.0	7.01	7.03	7.01	6.99	6.95	6.92		
30.0	7.39	7.43	7.43	7.41	7.37	7.33	7.31	7.31
35.0	7.82	7.88	7.91	7.91	7.88	7.84	7.79	7.78
40.0		8.40	8.46	8.48	8.47	8.43	8.38	8.36
45.0			9.06	9.12	9.13	9.11	9.06	9.04
50.0				9.81	9.86	9.87	9.84	9.82
55.0				10.56	10.65	10.70	10.70	10.69

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	38.90	48.10	58.90	71.40				
15.0	38.50	47.70	58.40	70.90				
20.0	38.00	47.20	57.90	70.30	84.60			
25.0	37.50	46.60	57.30	69.70	84.00	100.50		
30.0	36.90	46.00	56.70	69.00	83.20	99.50	118.00	126.50
35.0	36.20	45.30	55.90	68.20	82.40	98.60	117.00	125.50
40.0		44.50	55.10	67.30	81.40	97.60	116.00	124.00
45.0			54.10	66.30	80.30	96.40	115.00	123.00
50.0				65.00	78.90	94.90	113.00	121.00
55.0				63.30	77.20	93.10	111.50	119.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/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	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	5.90
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	2107
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

Mounting Grommets	Standard
Discharge Temperature Protection	Internal Thermodisk

ACCESSORIES OPTIONAL

Oil Control System	ALCO Trax-Oil OM3
Crankcase Heater	70 W External
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