



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- 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	12.5
15.0	5.32	6.66	8.31	10.30	12.75	15.70				
20.0	5.12	6.42	7.99	9.89	12.20	14.95				
25.0	4.88	6.16	7.67	9.48	11.65	14.20	17.25	18.65		
30.0	4.60	5.88	7.34	9.06	11.10	13.55	16.40	17.70	19.75	21.60
35.0	4.26	5.54	6.97	8.62	10.55	12.85	15.55	16.75	18.70	20.50
40.0	3.84	5.15	6.57	8.16	10.00	12.15	14.70	15.85	17.65	19.35
45.0		4.69	6.10	7.65	9.42	11.45	13.85	14.90	16.65	18.20
50.0			5.56	7.08	8.78	10.75	13.00	14.00	15.60	17.10
55.0				6.45	8.10	9.95	12.10	13.05	14.55	15.95
60.0					7.33	9.12	11.15	12.05	13.50	14.80
65.0						8.22	10.15	11.00	12.40	13.60

50 Hz

ZB38KCE-TFD

R407C Dew Point

Cond °C	Power, kW									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
15.0	1.78	1.80	1.82	1.80	1.74	1.61				
20.0	1.96	2.00	2.04	2.05	2.04	1.98				
25.0	2.18	2.21	2.26	2.30	2.32	2.30	2.23	2.19		
30.0	2.44	2.46	2.50	2.55	2.59	2.61	2.59	2.56	2.51	2.45
35.0	2.76	2.75	2.78	2.83	2.88	2.92	2.93	2.92	2.90	2.86
40.0	3.16	3.11	3.11	3.15	3.19	3.24	3.27	3.28	3.28	3.26
45.0		3.57	3.52	3.53	3.56	3.60	3.65	3.66	3.67	3.67
50.0			4.03	3.99	3.99	4.02	4.06	4.08	4.09	4.10
55.0				4.55	4.52	4.52	4.54	4.55	4.57	4.58
60.0					5.15	5.10	5.10	5.10	5.11	5.11
65.0						5.80	5.75	5.74	5.74	5.73

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	12.5
15.0	5.82	5.85	5.86	5.83	5.76	5.62				
20.0	5.94	5.99	6.02	6.03	6.01	5.93				
25.0	6.09	6.13	6.18	6.22	6.23	6.21	6.13	6.08		
30.0	6.28	6.32	6.36	6.42	6.45	6.47	6.44	6.41	6.36	6.29
35.0	6.55	6.56	6.60	6.65	6.70	6.74	6.75	6.74	6.72	6.68
40.0	6.92	6.89	6.90	6.94	7.00	7.05	7.08	7.09	7.09	7.07
45.0		7.34	7.31	7.33	7.37	7.42	7.47	7.48	7.50	7.50
50.0			7.85	7.82	7.84	7.88	7.93	7.94	7.97	7.98
55.0				8.46	8.44	8.45	8.49	8.50	8.53	8.55
60.0					9.19	9.17	9.18	9.19	9.21	9.22
65.0						10.05	10.02	10.02	10.02	10.03

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	12.5
15.0	27.90	34.40	42.20	51.70	63.10	76.50				
20.0	27.90	34.50	42.20	51.50	62.50	75.60				
25.0	27.80	34.50	42.20	51.40	62.20	74.90	89.70	96.30		
30.0	27.40	34.40	42.20	51.30	61.90	74.30	88.70	95.20	105.50	115.00
35.0	26.60	34.00	42.00	51.10	61.60	73.70	87.90	94.20	104.50	113.50
40.0	25.30	33.30	41.60	50.80	61.20	73.20	87.10	93.30	103.00	112.00
45.0		32.00	40.80	50.30	60.70	72.70	86.40	92.40	102.00	111.00
50.0			39.50	49.30	60.00	72.00	85.60	91.60	101.50	110.00
55.0				47.90	58.90	71.00	84.70	90.70	100.50	109.00
60.0					57.20	69.70	83.60	89.60	99.30	108.00
65.0						67.90	82.20	88.30	98.10	107.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.5
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	61
Sound Power (MT), dBA	72
Sound Power with Sound Shell (MT), dBA	67
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	4.20
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	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.74
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
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