



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									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	6.37	8.51	10.95	13.70	16.95	20.70	22.30	25.00	27.50	30.10
35.0	5.86	7.96	10.30	13.00	16.15	19.80	21.40	24.00	26.40	28.90
40.0	5.32	7.37	9.66	12.25	15.30	18.80	20.30	22.90	25.10	27.60
45.0		6.74	8.94	11.45	14.35	17.70	19.20	21.60	23.80	26.20
50.0			8.19	10.55	13.30	16.55	17.95	20.30	22.40	24.60
55.0				9.65	12.25	15.30	16.65	18.85	20.80	23.00
60.0					11.15	13.95	15.25	17.30	19.20	21.20
65.0					9.96	12.60	13.80	15.70	17.50	19.40
67.0						12.05	13.20	15.05	16.80	18.65

50 Hz

ZR81KRE-TFD

R407C Dew Point

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	3.12	3.17	3.20	3.23	3.26	3.31	3.34	3.39	3.44	3.51
35.0	3.53	3.58	3.60	3.63	3.66	3.71	3.74	3.79	3.85	3.91
40.0	4.02	4.05	4.08	4.10	4.12	4.17	4.20	4.24	4.30	4.36
45.0		4.61	4.62	4.63	4.65	4.69	4.71	4.75	4.80	4.86
50.0			5.26	5.25	5.25	5.28	5.29	5.33	5.37	5.43
55.0				5.96	5.95	5.95	5.96	5.99	6.02	6.07
60.0					6.74	6.73	6.73	6.74	6.77	6.80
65.0					7.65	7.61	7.60	7.60	7.61	7.63
67.0						7.99	7.98	7.97	7.97	7.99

Cond °C	Current at 400 V, A									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	13.53	13.60	13.62	13.60	13.58	13.58	13.59	13.63	13.68	13.75
35.0	13.62	13.71	13.75	13.75	13.74	13.76	13.78	13.83	13.89	13.97
40.0	13.82	13.92	13.96	13.97	13.97	14.00	14.02	14.08	14.14	14.23
45.0		14.23	14.27	14.28	14.29	14.31	14.34	14.39	14.46	14.55
50.0			14.70	14.70	14.70	14.72	14.74	14.79	14.85	14.94
55.0				15.25	15.23	15.23	15.25	15.29	15.34	15.42
60.0					15.89	15.87	15.87	15.90	15.94	16.01
65.0					16.70	16.64	16.64	16.64	16.67	16.72
67.0						17.00	16.98	16.98	17.00	17.04

Cond °C	Suction Mass Flow, g/s									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	37.30	49.00	61.90	76.40	92.90	112.00	120.00	133.50	145.50	158.50
35.0	35.90	48.00	61.20	75.90	92.70	112.00	120.50	134.00	146.00	159.00
40.0	34.40	46.70	60.10	75.10	92.00	111.50	120.00	133.50	146.00	159.00
45.0		45.10	58.70	73.80	90.90	110.50	119.00	132.50	145.00	158.50
50.0			57.00	72.20	89.40	109.00	117.50	131.50	144.00	157.00
55.0				70.20	87.40	107.00	115.50	129.50	142.00	155.50
60.0					85.10	104.50	113.50	127.50	140.00	153.50
65.0					82.30	102.00	110.50	124.50	137.50	151.00
67.0						100.50	109.50	123.50	136.00	149.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	18.8
Length/Width, mm	246/257
Height, mm	443
Net Weight, kg	39.2
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	29
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	14
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermodisk
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ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Mounting Grommets	Standard
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

50 Hz

ZR81KRE-TFD

R407C Dew Point

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
TFD	460 V / 3~ / 60 Hz	460		Y	1.04