



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
20.0	13.45	16.75	20.60	25.00	30.10	36.00				
25.0	12.85	16.15	19.90	24.20	29.10	34.80	37.30	41.30		
30.0	12.20	15.45	19.10	23.30	28.00	33.50	35.90	39.80	43.20	46.90
35.0	11.50	14.65	18.20	22.30	26.90	32.10	34.40	38.10	41.40	45.00
40.0	10.75	13.85	17.30	21.20	25.60	30.60	32.90	36.40	39.60	43.00
45.0		12.95	16.30	20.10	24.30	29.10	31.20	34.60	37.60	40.90
50.0			15.30	18.90	22.90	27.50	29.50	32.80	35.60	38.70
55.0				17.65	21.50	25.90	27.80	30.90	33.60	36.50
60.0					20.10	24.20	26.00	28.90	31.50	34.20
65.0					18.60	22.50	24.20	26.90	29.30	31.90

50 Hz

ZR12M3E-TWD

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Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
20.0	4.35	4.37	4.38	4.40	4.43	4.49				
25.0	4.87	4.90	4.90	4.90	4.91	4.94	4.96	5.01		
30.0	5.43	5.47	5.48	5.47	5.46	5.47	5.47	5.50	5.53	5.57
35.0	6.02	6.07	6.09	6.09	6.07	6.06	6.06	6.07	6.08	6.10
40.0	6.64	6.73	6.76	6.77	6.76	6.73	6.73	6.72	6.72	6.73
45.0		7.42	7.49	7.51	7.51	7.49	7.48	7.46	7.46	7.45
50.0			8.27	8.32	8.33	8.31	8.31	8.29	8.28	8.27
55.0				9.19	9.23	9.23	9.22	9.21	9.20	9.18
60.0					10.20	10.20	10.20	10.20	10.20	10.20
65.0					11.25	11.30	11.30	11.30	11.30	11.30

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
20.0	11.38	11.42	11.43	11.45	11.49	11.57				
25.0	11.85	11.88	11.89	11.88	11.89	11.93	11.96	12.02		
30.0	12.36	12.41	12.42	12.40	12.39	12.40	12.41	12.45	12.49	12.56
35.0	12.94	13.02	13.03	13.02	13.00	12.98	12.98	13.00	13.03	13.07
40.0	13.59	13.70	13.74	13.74	13.71	13.69	13.68	13.68	13.70	13.72
45.0		14.47	14.54	14.56	14.55	14.52	14.51	14.51	14.51	14.52
50.0			15.45	15.50	15.51	15.49	15.48	15.47	15.47	15.48
55.0				16.55	16.59	16.60	16.60	16.59	16.59	16.59
60.0					17.81	17.85	17.86	17.87	17.87	17.87
65.0					19.18	19.26	19.28	19.30	19.32	19.33

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
20.0	74.60	91.90	111.50	134.00	159.50	189.00				
25.0	73.90	91.60	111.50	134.00	159.50	188.50	201.00	222.00		
30.0	72.90	90.90	111.00	133.50	159.00	188.00	201.00	221.00	239.00	258.00
35.0	71.40	89.80	110.00	132.50	158.00	187.00	199.50	220.00	237.00	256.00
40.0	69.50	88.30	108.50	131.50	157.00	185.50	198.00	218.00	235.00	254.00
45.0		86.40	107.00	130.00	155.00	183.50	196.00	216.00	233.00	252.00
50.0			105.00	128.00	153.00	181.50	193.50	213.00	231.00	249.00
55.0				125.50	151.00	179.00	191.00	210.00	228.00	246.00
60.0					148.50	176.00	188.00	207.00	224.00	243.00
65.0					145.50	173.00	185.00	204.00	221.00	239.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	28.8
Length/Width, mm	319/357
Height, mm	525
Net Weight, kg	91
Gross Weight, kg	97
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	4.1
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	220 x 220 (8.5)
Sound Pressure @ 1m (HT), dBA	67
Sound Power (HT), dBA	78
Sound Power with Sound Shell (HT), dBA	67
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	7 / 54 / 18 °C at 50 Hz
PED Category	2
Max. Internal Free Volume, l	19.8
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Low Side TS Max., °C	52
Low Side TS Min., °C	-35
Refrigerant's GWP	1810
Refrigerant's classification	A1

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

Maximum Operating Current, A	22
Locked Rotor Current, A	127
Winding Resistance, ohm	1.02
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

50 Hz

ZR12M3E-TWD

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ACCESSORIES OPTIONAL

Sound Attenuation
Mounting Grommets
Crankcase Heater
Oil Control System

Sound Shell (10dBA)
Hard Mounts for Paralleling
49 W External
ALCO Trax-Oil OM3

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TWD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TWD	460 V / 3~ / 60 Hz	460		Y	1.04