



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								
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	9.43	11.90	14.90	18.45	22.60	24.40	27.30	29.90	32.60
35.0	8.96	11.35	14.20	17.60	21.60	23.30	26.10	28.60	31.30
40.0	8.49	10.75	13.45	16.70	20.50	22.20	24.90	27.30	29.90
45.0		10.10	12.70	15.75	19.40	21.00	23.60	25.90	28.40
50.0		9.51	11.90	14.80	18.25	19.75	22.20	24.40	26.80
55.0			11.10	13.80	17.05	18.50	20.80	22.90	25.20
60.0				12.85	15.80	17.15	19.35	21.30	23.50
65.0				11.85	14.60	15.85	17.90	19.75	21.70
70.0					13.40	14.50	16.40	18.10	19.95

50 Hz

ZR12M3E-TWD

R134a

Cond °C	Power, kW								
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	3.64	3.71	3.78	3.84	3.89	3.91	3.93	3.95	3.96
35.0	4.06	4.14	4.20	4.26	4.30	4.31	4.33	4.34	4.35
40.0	4.52	4.60	4.67	4.73	4.76	4.78	4.79	4.80	4.80
45.0		5.10	5.18	5.24	5.29	5.30	5.32	5.33	5.33
50.0		5.63	5.73	5.81	5.87	5.89	5.91	5.92	5.93
55.0			6.31	6.42	6.50	6.52	6.55	6.57	6.59
60.0				7.06	7.17	7.21	7.25	7.29	7.31
65.0				7.74	7.89	7.94	8.00	8.05	8.09
70.0					8.65	8.71	8.80	8.87	8.93

Cond °C	Current at 400 V, A								
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	10.60	10.62	10.62	10.64	10.69	10.73	10.80	10.87	10.97
35.0	10.95	10.97	10.97	10.98	11.01	11.04	11.09	11.15	11.23
40.0	11.36	11.39	11.40	11.40	11.42	11.44	11.48	11.52	11.59
45.0		11.88	11.90	11.90	11.92	11.93	11.96	11.99	12.04
50.0		12.46	12.49	12.50	12.51	12.52	12.54	12.57	12.61
55.0			13.17	13.19	13.21	13.22	13.23	13.26	13.29
60.0				13.99	14.01	14.02	14.04	14.06	14.09
65.0				14.89	14.93	14.94	14.96	14.99	15.01
70.0					15.96	15.99	16.01	16.04	16.07

Cond °C	Suction Mass Flow, g/s								
	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
30.0	60.60	75.10	92.10	111.50	134.00	143.50	159.00	172.50	186.50
35.0	60.50	74.90	91.90	111.50	134.00	143.50	159.00	173.00	187.00
40.0	60.40	74.60	91.50	111.00	133.50	143.50	159.00	172.50	187.00
45.0		74.20	90.90	110.50	133.00	142.50	158.00	172.00	186.50
50.0		73.90	90.30	109.50	132.00	141.50	157.00	171.00	185.50
55.0			89.70	108.50	130.50	140.50	156.00	169.50	184.00
60.0				107.50	129.50	139.00	154.50	168.00	182.50
65.0				107.00	128.00	137.50	152.50	166.00	180.50
70.0					127.00	136.00	151.00	164.50	178.50

### **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	1430
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

R134a

### **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**

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