



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
10.0	12.40	15.45	19.05	23.30						
15.0	11.75	14.70	18.20	22.30	27.10					
20.0	11.15	14.00	17.35	21.30	26.00	31.40				
25.0	10.50	13.25	16.50	20.30	24.80	30.00	32.30	35.90		
30.0	9.88	12.55	15.65	19.30	23.60	28.60	30.80	34.30	37.50	40.80
35.0	9.25	11.80	14.75	18.30	22.40	27.10	29.20	32.60	35.70	38.90
40.0	8.61	11.05	13.90	17.25	21.10	25.70	27.70	30.90	33.80	37.00
45.0		10.25	13.00	16.15	19.90	24.20	26.10	29.20	32.00	35.00
50.0			12.05	15.05	18.60	22.70	24.50	27.50	30.10	32.90
55.0				13.95	17.30	21.20	22.90	25.70	28.20	30.90
60.0					15.95	19.60	21.20	23.80	26.20	28.80
65.0						18.00	19.50	22.00	24.20	26.60
68.0							17.00	18.50	20.80	25.30

50 Hz

ZR11M3E-TWD

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
10.0	3.03	2.99	2.96	2.94						
15.0	3.39	3.35	3.31	3.28	3.26					
20.0	3.77	3.73	3.70	3.66	3.63	3.62				
25.0	4.19	4.16	4.13	4.09	4.06	4.03	4.03	4.02		
30.0	4.65	4.63	4.61	4.58	4.54	4.51	4.50	4.49	4.48	4.48
35.0	5.15	5.15	5.14	5.12	5.09	5.06	5.05	5.03	5.02	5.01
40.0	5.71	5.73	5.74	5.73	5.71	5.68	5.67	5.66	5.64	5.63
45.0		6.37	6.40	6.41	6.40	6.38	6.38	6.36	6.35	6.34
50.0			7.14	7.16	7.17	7.17	7.17	7.16	7.15	7.14
55.0				8.00	8.04	8.05	8.05	8.05	8.05	8.04
60.0					8.99	9.02	9.03	9.04	9.05	9.05
65.0						10.10	10.10	10.15	10.15	10.15
68.0						10.80	10.85	10.85	10.90	10.90

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
10.0	11.33	11.19	11.10	11.06						
15.0	11.47	11.34	11.24	11.19	11.18					
20.0	11.66	11.53	11.44	11.38	11.36	11.37				
25.0	11.90	11.79	11.71	11.65	11.62	11.61	11.62	11.64		
30.0	12.22	12.13	12.06	12.00	11.97	11.95	11.95	11.96	11.97	11.99
35.0	12.63	12.56	12.50	12.45	12.42	12.40	12.39	12.39	12.39	12.40
40.0	13.13	13.09	13.05	13.02	12.99	12.96	12.95	12.94	12.94	12.93
45.0		13.73	13.72	13.70	13.68	13.66	13.65	13.63	13.62	13.61
50.0			14.52	14.52	14.51	14.49	14.48	14.47	14.45	14.43
55.0				15.49	15.50	15.49	15.48	15.46	15.44	15.42
60.0					16.64	16.65	16.64	16.63	16.61	16.59
65.0						17.99	17.99	17.98	17.97	17.95
68.0						18.88	18.89	18.89	18.87	18.85

50 Hz

ZR11M3E-TWD

R407C Dew Point

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
10.0	61.60	75.60	92.00	111.00						
15.0	60.70	74.80	91.20	110.50	132.50					
20.0	59.70	73.90	90.40	109.50	131.50	156.50				
25.0	58.80	73.00	89.50	108.50	130.50	155.50	166.50	184.00		
30.0	57.80	72.00	88.60	107.50	129.50	154.50	165.50	183.00	198.50	215.00
35.0	56.70	71.00	87.60	106.50	128.50	153.50	164.50	182.00	197.50	214.00
40.0	55.60	69.90	86.50	105.50	127.50	152.50	163.00	180.50	196.50	213.00
45.0		68.80	85.30	104.50	126.00	151.00	162.00	179.50	195.00	212.00
50.0			84.00	103.00	124.50	149.50	160.50	178.00	193.50	210.00
55.0				101.50	123.50	148.00	159.00	176.50	192.50	209.00
60.0					122.00	147.00	158.00	175.50	191.00	208.00
65.0						145.50	156.50	174.00	190.00	207.00
68.0						145.00	156.00	173.50	189.50	207.00

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	25.1
Length/Width, mm	319/357
Height, mm	525
Net Weight, kg	96
Gross Weight, kg	107
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	66
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	21.2
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	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	20
Locked Rotor Current, A	123
Winding Resistance, ohm	1.04
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

50 Hz

ZR11M3E-TWD

R407C Dew Point

### **ACCESSORIES OPTIONAL**

Crankcase Heater	49 W External
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)

### **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