



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	14.55	18.00	22.10	26.90						
15.0	13.85	17.20	21.20	25.80	31.30					
20.0	13.15	16.40	20.20	24.70	30.00	36.10				
25.0	12.45	15.60	19.30	23.60	28.70	34.50	37.10	41.30		
30.0	11.75	14.75	18.30	22.50	27.30	33.00	35.50	39.50	43.10	46.90
35.0	11.00	13.90	17.30	21.30	26.00	31.40	33.80	37.60	41.10	44.70
40.0	10.25	13.00	16.25	20.10	24.50	29.70	32.00	35.70	39.00	42.50
45.0		12.10	15.20	18.85	23.10	28.00	30.20	33.70	36.90	40.30
50.0			14.10	17.55	21.60	26.30	28.30	31.70	34.70	38.00
55.0				16.20	20.00	24.50	26.40	29.60	32.50	35.60
60.0					18.45	22.60	24.50	27.50	30.20	33.10
65.0						20.70	22.50	25.30	27.90	30.60
68.0							19.55	21.20	23.90	26.40

50 Hz

ZR12M3E-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	3.41	3.37	3.37	3.45						
15.0	3.83	3.77	3.73	3.75	3.85					
20.0	4.28	4.22	4.16	4.13	4.17	4.30				
25.0	4.76	4.72	4.66	4.61	4.59	4.65	4.70	4.81		
30.0	5.27	5.27	5.23	5.16	5.12	5.12	5.14	5.20	5.28	5.39
35.0	5.80	5.86	5.86	5.80	5.74	5.71	5.71	5.72	5.76	5.83
40.0	6.35	6.49	6.54	6.52	6.47	6.41	6.40	6.39	6.40	6.43
45.0		7.16	7.28	7.31	7.29	7.23	7.21	7.19	7.18	7.18
50.0			8.07	8.18	8.20	8.16	8.14	8.11	8.09	8.08
55.0				9.11	9.19	9.20	9.19	9.17	9.14	9.12
60.0					10.25	10.35	10.35	10.35	10.35	10.30
65.0						11.60	11.60	11.65	11.65	11.65
68.0						12.35	12.40	12.45	12.50	12.50

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	9.67	9.87	10.07	10.30						
15.0	10.09	10.25	10.38	10.53	10.73					
20.0	10.55	10.69	10.78	10.87	10.98	11.15				
25.0	11.06	11.19	11.26	11.31	11.36	11.44	11.50	11.60		
30.0	11.63	11.77	11.84	11.86	11.87	11.89	11.91	11.96	12.02	12.11
35.0	12.25	12.43	12.51	12.53	12.51	12.49	12.49	12.50	12.52	12.56
40.0	12.94	13.17	13.29	13.32	13.30	13.25	13.23	13.21	13.21	13.22
45.0		14.00	14.17	14.24	14.23	14.17	14.15	14.11	14.09	14.07
50.0			15.17	15.29	15.31	15.27	15.24	15.20	15.16	15.13
55.0				16.48	16.55	16.54	16.52	16.49	16.45	16.41
60.0					17.95	18.00	17.99	17.97	17.94	17.91
65.0						19.64	19.66	19.66	19.65	19.63
68.0						20.72	20.75	20.78	20.78	20.77

50 Hz

ZR12M3E-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	72.30	88.10	106.50	128.00						
15.0	71.50	87.40	106.00	127.50	152.50					
20.0	70.60	86.70	105.50	127.00	152.00	180.00				
25.0	69.70	85.80	104.50	126.00	151.00	179.50	192.00	212.00		
30.0	68.60	84.80	103.50	125.00	150.00	178.50	191.00	211.00	228.00	247.00
35.0	67.40	83.70	102.50	124.00	149.00	177.50	190.00	210.00	227.00	246.00
40.0	66.10	82.40	101.00	123.00	148.00	176.00	188.50	208.00	226.00	245.00
45.0		81.00	99.80	121.50	146.50	175.00	187.00	207.00	225.00	244.00
50.0			98.20	120.00	144.50	173.00	185.50	206.00	223.00	242.00
55.0				118.00	143.00	171.50	184.00	204.00	222.00	241.00
60.0					141.00	169.50	182.00	202.00	220.00	239.00
65.0						167.50	180.00	200.00	219.00	238.00
68.0						166.50	179.00	199.50	218.00	237.00

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	1774
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

R407C Dew Point

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