



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	18.00	22.20	27.30	33.20						
15.0	17.15	21.20	26.10	31.90	38.60					
20.0	16.25	20.20	25.00	30.50	37.00	44.50				
25.0	15.40	19.25	23.80	29.10	35.40	42.60	45.80	50.90		
30.0	14.50	18.20	22.60	27.70	33.70	40.60	43.70	48.60	53.00	57.80
35.0	13.60	17.10	21.30	26.20	31.90	38.60	41.50	46.30	50.50	55.00
40.0	12.65	16.05	20.00	24.70	30.20	36.50	39.30	43.90	47.90	52.30
45.0		14.90	18.70	23.10	28.30	34.40	37.10	41.40	45.30	49.40
50.0			17.35	21.50	26.50	32.20	34.70	38.90	42.50	46.50
55.0				19.90	24.50	30.00	32.40	36.30	39.80	43.50
60.0					22.60	27.70	29.90	33.60	36.90	40.50
65.0						25.30	27.40	30.90	34.00	37.30
68.0							23.90	25.90	29.20	35.40

50 Hz

ZR16M3E-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	4.39	4.44	4.57	4.81						
15.0	4.81	4.83	4.90	5.05	5.33					
20.0	5.29	5.30	5.33	5.41	5.60	5.92				
25.0	5.84	5.85	5.86	5.90	6.01	6.24	6.36	6.60		
30.0	6.45	6.49	6.50	6.51	6.57	6.71	6.80	6.97	7.16	7.39
35.0	7.13	7.21	7.24	7.24	7.27	7.35	7.41	7.53	7.66	7.83
40.0	7.87	8.01	8.08	8.10	8.11	8.16	8.19	8.26	8.35	8.47
45.0		8.90	9.03	9.08	9.10	9.12	9.14	9.18	9.24	9.32
50.0			10.10	10.20	10.25	10.25	10.25	10.30	10.30	10.35
55.0				11.40	11.50	11.55	11.55	11.60	11.60	11.65
60.0					12.95	13.00	13.05	13.05	13.05	13.10
65.0						14.65	14.70	14.70	14.75	14.75
68.0						15.70	15.75	15.80	15.85	15.85

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	10.58	10.64	10.72	10.86						
15.0	11.13	11.18	11.23	11.33	11.50					
20.0	11.71	11.76	11.80	11.86	11.98	12.20				
25.0	12.35	12.41	12.44	12.48	12.56	12.72	12.82	12.99		
30.0	13.07	13.14	13.18	13.21	13.27	13.38	13.45	13.59	13.74	13.93
35.0	13.88	13.99	14.04	14.07	14.11	14.19	14.25	14.36	14.48	14.63
40.0	14.82	14.97	15.04	15.08	15.11	15.18	15.22	15.30	15.40	15.53
45.0		16.10	16.21	16.27	16.31	16.36	16.39	16.46	16.54	16.64
50.0			17.57	17.66	17.71	17.77	17.79	17.85	17.91	18.00
55.0				19.28	19.35	19.41	19.44	19.49	19.55	19.62
60.0					21.25	21.33	21.36	21.41	21.46	21.53
65.0						23.54	23.58	23.63	23.69	23.75
68.0						25.01	25.06	25.12	25.18	25.24

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	89.30	109.00	132.00	158.50						
15.0	88.30	108.00	131.00	157.50	188.50					
20.0	87.20	107.00	130.00	156.50	187.50	222.00				
25.0	86.00	106.00	129.00	155.50	186.00	221.00	237.00	261.00		
30.0	84.70	104.50	127.50	154.50	185.00	220.00	235.00	260.00	281.00	304.00
35.0	83.30	103.00	126.00	153.00	183.50	218.00	234.00	258.00	280.00	303.00
40.0	81.70	101.50	124.50	151.00	181.50	217.00	232.00	256.00	278.00	301.00
45.0		99.90	123.00	149.50	179.50	215.00	230.00	254.00	276.00	299.00
50.0			121.00	147.00	177.50	212.00	228.00	252.00	274.00	297.00
55.0				145.00	175.00	210.00	225.00	250.00	271.00	295.00
60.0					172.50	207.00	223.00	247.00	269.00	292.00
65.0						205.00	220.00	245.00	267.00	290.00
68.0						203.00	219.00	243.00	266.00	289.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	35.5
Length/Width, mm	319/357
Height, mm	532
Net Weight, kg	95
Gross Weight, kg	101
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	69
Sound Power (HT), dBA	80
Sound Power with Sound Shell (HT), dBA	68
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	7 / 54 / 18 °C at 50 Hz
PED Category	2
Max. Low Side Internal Free Volume, l	15.2
Max. High Side Internal Free Volume, l	2.1
Max. Internal Free Volume, l	17.3
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	27
Locked Rotor Current, A	167
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

**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