



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	11.55	14.65	18.30	22.70	27.70	29.90	33.50	36.70	40.00
35.0	11.00	13.90	17.45	21.60	26.50	28.60	32.10	35.20	38.40
40.0	10.45	13.20	16.55	20.50	25.20	27.30	30.60	33.50	36.70
45.0		12.40	15.60	19.35	23.80	25.80	29.00	31.80	34.80
50.0		11.65	14.60	18.15	22.40	24.30	27.30	30.00	32.90
55.0			13.65	16.95	20.90	22.70	25.50	28.10	30.90
60.0				15.75	19.45	21.10	23.80	26.20	28.80
65.0				14.55	17.95	19.45	22.00	24.20	26.70
70.0					16.45	17.85	20.10	22.20	24.50

50 Hz

ZR16M3E-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	4.39	4.44	4.51	4.61	4.76	4.83	4.95	5.07	5.21
35.0	5.00	5.06	5.12	5.20	5.31	5.36	5.46	5.55	5.66
40.0	5.61	5.68	5.74	5.81	5.90	5.94	6.01	6.08	6.16
45.0		6.32	6.39	6.45	6.53	6.56	6.62	6.67	6.74
50.0		6.98	7.07	7.15	7.22	7.25	7.30	7.34	7.39
55.0			7.80	7.90	7.98	8.01	8.05	8.09	8.13
60.0				8.72	8.81	8.85	8.89	8.93	8.96
65.0				9.62	9.74	9.78	9.84	9.88	9.91
70.0					10.75	10.80	10.90	10.95	11.00

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	13.12	13.12	13.13	13.17	13.24	13.29	13.38	13.47	13.58
35.0	13.55	13.54	13.54	13.55	13.60	13.63	13.69	13.75	13.83
40.0	14.04	14.04	14.03	14.04	14.06	14.08	14.12	14.17	14.23
45.0		14.61	14.61	14.62	14.64	14.65	14.68	14.72	14.77
50.0		15.25	15.28	15.30	15.33	15.34	15.37	15.40	15.44
55.0			16.03	16.08	16.13	16.15	16.18	16.22	16.26
60.0				16.96	17.04	17.07	17.12	17.16	17.21
65.0				17.93	18.06	18.11	18.18	18.23	18.29
70.0					19.19	19.26	19.36	19.44	19.52

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	74.40	92.20	113.00	137.00	164.50	176.50	195.00	212.00	229.00
35.0	74.30	91.90	113.00	137.00	164.50	176.50	195.50	212.00	230.00
40.0	74.10	91.50	112.50	136.50	164.00	176.00	195.00	212.00	230.00
45.0		91.10	111.50	135.50	163.00	175.00	194.00	211.00	229.00
50.0		90.80	111.00	134.50	162.00	174.00	193.00	210.00	228.00
55.0			110.00	133.50	160.50	172.50	191.50	208.00	226.00
60.0				132.00	159.00	170.50	189.50	206.00	224.00
65.0				131.50	157.00	169.00	187.50	204.00	222.00
70.0					156.00	167.00	185.50	202.00	219.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/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. Internal Free Volume, l	20.2
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	1430
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

50 Hz

ZR16M3E-TWD

R134a

ACCESSORIES OPTIONAL

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

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