



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	21.70	26.90	33.00	40.20						
15.0	20.70	25.70	31.60	38.60	46.80					
20.0	19.65	24.50	30.30	37.00	44.90	54.00				
25.0	18.60	23.30	28.90	35.40	43.00	51.80	55.60	61.90		
30.0	17.55	22.10	27.40	33.70	41.00	49.40	53.10	59.10	64.50	70.30
35.0	16.45	20.80	25.90	31.90	38.90	47.00	50.60	56.30	61.50	67.00
40.0	15.35	19.50	24.40	30.10	36.80	44.50	48.00	53.50	58.40	63.70
45.0		18.15	22.80	28.20	34.60	42.00	45.30	50.50	55.30	60.30
50.0			21.20	26.30	32.40	39.40	42.50	47.50	52.00	56.80
55.0				24.40	30.10	36.70	39.60	44.40	48.70	53.30
60.0					27.70	33.90	36.70	41.20	45.20	49.60
65.0						31.10	33.70	37.90	41.70	45.80
68.0							29.30	31.80	35.90	39.60

50 Hz

ZR19M3E-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	5.13	5.24	5.58	6.26						
15.0	5.68	5.68	5.84	6.27	7.06					
20.0	6.33	6.28	6.31	6.53	7.05	7.96				
25.0	7.06	7.00	6.96	7.03	7.32	7.94	8.30	8.98		
30.0	7.85	7.84	7.77	7.74	7.86	8.24	8.48	8.96	9.49	10.15
35.0	8.68	8.77	8.72	8.65	8.66	8.84	8.99	9.31	9.68	10.15
40.0	9.52	9.77	9.81	9.74	9.68	9.73	9.80	9.98	10.20	10.55
45.0		10.80	11.00	11.00	10.90	10.90	10.90	11.00	11.10	11.30
50.0			12.25	12.40	12.35	12.30	12.25	12.25	12.30	12.45
55.0				13.90	13.95	13.90	13.85	13.85	13.85	13.85
60.0					15.70	15.75	15.70	15.65	15.65	15.65
65.0						17.75	17.75	17.75	17.70	17.70
68.0						19.05	19.10	19.10	19.05	19.05

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	13.09	13.03	12.91	12.71						
15.0	13.84	13.82	13.75	13.62	13.41					
20.0	14.58	14.59	14.57	14.50	14.35	14.11				
25.0	15.35	15.39	15.41	15.38	15.29	15.12	15.02	14.84		
30.0	16.20	16.26	16.31	16.32	16.28	16.16	16.09	15.95	15.81	15.63
35.0	17.18	17.25	17.32	17.36	17.36	17.30	17.25	17.15	17.04	16.89
40.0	18.34	18.42	18.50	18.56	18.59	18.57	18.54	18.47	18.39	18.28
45.0		19.80	19.88	19.96	20.01	20.02	20.01	19.97	19.91	19.83
50.0			21.52	21.60	21.67	21.71	21.71	21.69	21.65	21.59
55.0				23.54	23.62	23.67	23.68	23.68	23.66	23.62
60.0					25.90	25.96	25.97	25.98	25.97	25.95
65.0						28.62	28.64	28.66	28.66	28.64
68.0						30.42	30.44	30.45	30.46	30.45

50 Hz

ZR19M3E-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	108.00	131.50	159.50	192.00						
15.0	106.50	130.50	158.50	191.00	228.00					
20.0	105.50	129.50	157.50	190.00	227.00	270.00				
25.0	104.00	128.50	156.50	189.00	226.00	269.00	287.00	317.00		
30.0	102.50	127.00	155.00	187.50	225.00	267.00	286.00	316.00	342.00	370.00
35.0	101.00	125.50	153.50	186.00	223.00	266.00	284.00	314.00	341.00	369.00
40.0	99.20	123.50	152.00	184.50	221.00	264.00	283.00	312.00	339.00	367.00
45.0		121.50	150.00	182.00	219.00	262.00	280.00	310.00	337.00	365.00
50.0			147.50	180.00	217.00	260.00	278.00	308.00	335.00	363.00
55.0				177.50	214.00	257.00	276.00	305.00	332.00	361.00
60.0					212.00	254.00	273.00	303.00	330.00	358.00
65.0						251.00	270.00	300.00	327.00	356.00
68.0						250.00	269.00	299.00	326.00	355.00

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

Displacement @ 50 Hz, m³/h	42.8
Length/Width, mm	321/349
Height, mm	579
Net Weight, kg	107
Gross Weight, kg	113
Rotalock Suction, inch	2 1/4
Rotalock Discharge, inch	1 3/4
Stub Suction, inch	1 5/8
Stub Discharge, inch	1 1/8
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	70
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	32
Locked Rotor Current, A	198
Winding Resistance, ohm	0.72
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Mounting Grommets	Standard
Discharge Temperature Protection	Internal Thermistor

50 Hz

ZR19M3E-TWD

R407C Dew Point

### **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**

<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