

ZR12M3E-TWD

HCFC, R-22, 60 Hz, 3 - Phase, 460 V , [Also Available with Variable Frequency Drives](#)

Air Conditioning

Production Status: This compressor and/or application of this compressor is not available to U.S. OEM customers. A field replacement is currently available through a U.S. Copeland Wholesaler. Please check with your local Copeland Representative for international availability.

Summary

Performance		
Evaporator Temp. (°F)	45.00	45
Condensing Temp. (°F)	130.00	100
Return Gas Temp. (°F)	65.00	65
Liquid Temp. (°F)	115.00	85
Capacity (BTU/hr)	125000	148000
Power (W):	11000	7750
Current (Amps):	16.5	13.4
EER(BTU/Wh):	11.4	19.1
Mass Flow (lbs/hr):	1840	1910
Sound Data @		
Sound Power (dBA):	81 Avg	86 Max
Vibration mils(peak-peak):	2.5 Avg	3.5 Max
Record Date:	2007-12-04	
Mechanical		
Displacement (in^3/Rev):	10.10	
Displacement (ft^3/Hr):		
Overall Length (in):	12.60	
Overall Width (in):	14.10	
Overall Height (in):	21.20	
Mounting Length (in):	8.70	
Mounting Width (in):	8.70	

Mounting Height (in):	21.40
Suction Size (in),Type:	1 3 / 4 Rotolock
Discharge Size (in),Type:	1 1 / 4 Rotolock
Initial Oil Charge (oz):	140
Oil Recharge (oz):	137
Oil Type:	3MA
Net Weight (lbs):	221.0
Internal Free Volume (in^3):	1037.0

*Overall compressor height on Copeland Brand Product's specified mounting grommets.

Electrical

LRA High* (Amps):	127
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	25.7
Max Operating Current (Amps):	22.00
RLA, MCC/1.4(use for contactor selection)(Amps):	18.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	16.5
RPM:	3500
Box IP :	54
UL File No:	SA-9747
UL File Date:	1994-07-12
European Pressure Equipment Directive (PED):	
Fluid Group**:	FG 2
PS Low / High Side (BAR):	22.6 / 32.0
TS Min (°C):	-35 / -35
TS Max (°C):	50 / 150
Volume (L) :	2.1 / 15.5

*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

**Fluid Group 1 comprises dangerous fluids defined as: Explosive, extremely flammable, high flammable, very toxic, toxic, oxidizing.

Fluid Group 2 is for non-dangerous fluids defined as: non-explosive, non-toxic, non-flammable.

Capacitors

Type	Part No	Low MFD	High MFD	Volts	User Description
No data available in table					
Alternate Applications					
Refrigerant	Voltage	Phase	Frequency	Application	
R-134a HFC	460	3	60	Air Conditioning	
R-134a HFC	380/420	3	50	Air Conditioning	
R-22 HCFC	380/420	3	50	Air Conditioning	
R-407C HFC	460	3	60	Air Conditioning	
R-407C HFC	380/420	3	50	Air Conditioning	

Nomenclature

ZR12M3E-TWD

Family Series
Z: Scroll
Application Range
R: A/C - R-22/407C/134a
Capacity
12: Capacity
Oil Type
E: Polyol Ester
Motor Type
T: 3 Phase
Motor Protection
W: External Electronic Protection
Voltage
D: 60Hz (460-3) 50Hz (380/420-3)