

ZR57K3E-TFD

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

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Summary

Performance		
Evaporator Temp. (°F)	45	45
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	65
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	58500	68500
Power (W):	5000	3440
Current (Amps):	7.3	5.6
EER(BTU/Wh):	11.7	19.9
Mass Flow (lbs/hr):	860	880
Sound Data @		
Sound Power (dBA):	74 Avg	79 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2014-03-06	
Mechanical		
Displacement (in ³ /Rev):	4.71	
Displacement (ft ³ /Hr):		
Overall Length (in):	9.69	
Overall Width (in):	9.69	
Overall Height (in):	17.24	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	17.99
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	66
Oil Recharge (oz):	62
Net Weight (lbs):	85.0
Internal Free Volume (in^3):	257
Horse Power:	4.8

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

LRA High* (Amps):	62.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	12.8
Max Operating Current (Amps):	11.0
RLA, MCC/1.4(use for contactor selection)(Amps):	9.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	8.2
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	1993-07-26

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

Capacitors

Type	Part No	Low MFD	High MFD	Volts	User Description
No data available in table					

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
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

Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
1	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
1	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	

Accessories

Accessories		
Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344012-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@11A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
Crankcase Heaters	018-0095-09	Crankcase Heater, 277V, 70W, 21" Lead Length
Crankcase Heaters	018-0095-08	Crankcase Heater, 400V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-07	Crankcase Heater, 120V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-06	Crankcase Heater, 575V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-05	Crankcase Heater, 480V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-04	Crankcase Heater, 240V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-03	Crankcase Heater, 240V, 70W, 32" Lead Length
Crankcase Heaters	018-0095-02	Crankcase Heater, 575V, 70W, 21" Lead Length
Crankcase Heaters	018-0095-01	Crankcase Heater, 480V, 70W, 21" Lead Length

Electrical Components

Electrical Components

Part No: 071-0519-16

Usage Description: Internal Protector

Vendor Part Number

35HM254

Vendor Name

SENSATA

Stator

Part No: 546-2093-45

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.80

Run Wdg: 0.00

Stator

Part No: 546-2093-44

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.80

Run Wdg: 0.00

Nomenclature

ZR57K3E-TFD

Family Series

Z: Scroll

Application Range

R: A/C - R-22/407C/134a

Capacity

57K: Capacity Multiplier-1000

Oil Type

E: Polyol Ester

Motor Type

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

D: 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

Alternate Application

Refrigerant

Freq

Phase

Voltage

Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	50	3 Ø	380/420 V	R1 AC
HFC R-407C	60	3 Ø	460 V	R1 AC

Nomenclature

[ZR57K3E-TFD](#)

Date	Data Group	Field	Old Data	New Data
06-Mar-2014	2 Pt Perf	Amp Cond 2	5.5	5.6