

# ZR68KCE-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)	70000	82000
Power (W):	5950	4250
Current (Amps):	8.7	6.8
EER(BTU/Wh):	11.8	19.3
Mass Flow (lbs/hr):	1030	1060
Sound Data @		
Sound Power (dBA):	75 Avg	80 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2014-03-06	
Mechanical		
Displacement (in^3/Rev):	5.68	
Displacement (ft^3/Hr):		
Overall Length (in):	9.69	
Overall Width (in):	9.69	
Overall Height (in):	17.75	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	18.00
<b>Suction Size (in),Type:</b>	7 / 8 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	60
<b>Oil Recharge (oz):</b>	56
<b>Net Weight (lbs):</b>	86.0
<b>Internal Free Volume (in^3):</b>	362
<b>Horse Power:</b>	5.5

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

<b>LRA High* (Amps):</b>	75.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	14
<b>Max Operating Current (Amps):</b>	12.1
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	10.0
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	9.0
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	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-134a HFC	380/420	3	50	Air Conditioning
R-134a HFC	460	3	60	Air Conditioning
R-22 HCFC	380/420	3	50	Air Conditioning
R-407C HFC	460	3	60	Air Conditioning

Refrigerant	Voltage	Phase	Frequency	Application
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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	

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: 071-0519-15
Usage Description: Internal Protector
<u>Vendor Part Number</u>
35HM250
<u>Vendor Name</u>
SENSATA
Part No: 071-0519-31
Usage Description: Internal Protector
<u>Vendor Part Number</u>

35HM207

Vendor Name

SENSATA

Part No: 071-0573-11

Usage Description: Internal Protector

Vendor Part Number

UP28HY142-720

Vendor Name

UBUKATA

**Stator**

Part No: 546-2011-00

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.47

Run Wdg: 0.00

**Stator**

Part No: 546-2093-30

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.27

Run Wdg: 0.00

**Stator**

Part No: 846-2011-00

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.47

Run Wdg: 0.00

**Stator**

Part No: 546-1209-12

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.27

Run Wdg: 0.00

**Stator**

Part No: 546-2011-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.47

Run Wdg: 0.00

**Stator**

Part No: 546-2093-31

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.27

Run Wdg: 0.00

**Stator**

Part No: 846-2011-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.47

Run Wdg: 0.00

## Nomenclature

ZR68KCE-TFD

**Family Series**

**Z:** Scroll

**Application Range**

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

**Capacity**

**68K:** 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
<a href="#">HCFC R-22</a>	50	3 Ø	380/420 V	R1 AC
<a href="#">HFC R-134a</a>	50	3 Ø	380/420 V	R1 AC
<a href="#">HFC R-134a</a>	60	3 Ø	460 V	R1 AC
<a href="#">HFC R-407C</a>	60	3 Ø	460 V	R1 AC
<a href="#">HFC R-407C</a>	50	3 Ø	380/420 V	R1 AC

### Nomenclature

[ZR68KCE-TFD](#)

Date	Data Group	Field	Old Data	New Data
06-Mar-2014	2 Pt Perf	Amp Cond 1	8.8	8.7