

# ZR94KCE-TFD

HFC, R-407C, 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	35
Condensing Temp. (°F)	130	120
Return Gas Temp. (°F)	65	55
Liquid Temp. (°F)	115	105
Capacity (BTU/hr)	94000	81200
Power (W):	8310	7330
Current (Amps):	12.8	11.7
EER(BTU/Wh):	11.3	11.1
Mass Flow (lbs/hr):	1370	1135
Sound Data @		
Sound Power (dBA):	79 Avg	84 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2016-06-24	
Mechanical		
Displacement (in^3/Rev):	7.76	
Displacement (ft^3/Hr):		
Overall Length (in):	10.38	
Overall Width (in):	11.23	
Overall Height (in):	18.75	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	19.50
<b>Suction Size (in),Type:</b>	1 1 / 8 Stub
<b>Discharge Size (in),Type:</b>	7 / 8 Stub
<b>Initial Oil Charge (oz):</b>	85
<b>Oil Recharge (oz):</b>	81
<b>Net Weight (lbs):</b>	126.0
<b>Internal Free Volume (in^3):</b>	639
<b>Horse Power:</b>	8.0

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

<b>LRA High* (Amps):</b>	95.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	23
<b>Max Operating Current (Amps):</b>	15.9
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	16.4
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	14.7
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	1996-09-27

\*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-407C HFC	380/420	3	50	Air Conditioning

Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
1	918-0047-00	1	HEATER-CRANKCASE	120V 90W WRAP AROUND
1	918-0047-01	1	HEATER-CRANKCASE	240V 90W WRAP AROUND
1	918-0047-02	1	HEATER-CRANKCASE	480V 90W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
11	998-0010-00	1	SIGHTGLASS KIT	
13	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	DISCHARGE SWEAT TO ROTALOCK
13	998-0034-03	1	ADAP KIT 11/8"SWT / 13/4 RL	SUCTION SWEAT TO ROTALOCK
13	998-0034-07	1	ADAP KIT 11/4 RL / 3/4"SWT	DISCHARGE ROTALOCK TO SWEAT
13	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	DISCHARGE ROTALOCK TO SWEAT
13	998-0034-10	1	ADAP KIT 13/4 RL / 11/8"SWT	SUCTION ROTALOCK TO SWEAT

Accessories

Accessories		
Category	Part Number	Description
(1) Variable Frequency Drive	EVM-344023-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344023-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

### Electrical Components

Electrical Components	
Part No: 071-0573-01	<b>Stator</b>
Usage Description: Internal Protector	Part No: 846-2081-36
<u>Vendor Part Number</u>	Usage Description: Stator
UP28QY122-520	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.80
UBUKATA	Run Wdg: 0.00

### Nomenclature

ZR94KCE-TFD
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>R:</b> A/C - R-22/407C/134a
<b>Capacity</b>
<b>94K:</b> Capacity Multiplier-1000
<b>Oil Type</b>
<b>E:</b> Polyol Ester
<b>Motor Type</b>
<b>T:</b> 3 Phase
<b>Motor Protection</b>
<b>F:</b> Internal Inherent Protection
<b>Voltage</b>

## Miscellaneous

## Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HCFC R-22</a>	60	3 Ø	460 V	R1
<a href="#">HCFC R-22</a>	50	3 Ø	380/420 V	R1
<a href="#">HFC R-134a</a>	60	3 Ø	460 V	R1 AC
<a href="#">HFC R-134a</a>	50	3 Ø	380/420 V	R1 AC
<a href="#">HFC R-407C</a>	50	3 Ø	380/420 V	R1 AC

## Nomenclature

[ZR94KCE-TFD](#)

Date	Data Group	Field	Old Data	New Data
13-Nov-2007	Sound	Sound Ave	79	82
13-Nov-2007	Sound	Sound Max	84	87
13-Nov-2007	Sound	Vibration Max	4.5	4
27-Sep-2007	Sound	Sound Ave	82	79
27-Sep-2007	Sound	Sound Max	87	84
27-Sep-2007	Sound	Vibration Max	4	4.5
07-Feb-2007	Sound	Sound Ave	78	82
07-Feb-2007	Sound	Sound Max	83	87
07-Feb-2007	Sound	Sound Start	83	85
07-Feb-2007	Sound	Sound Start Max	91	93