# ZR94KCE-TF5

HFC, R-407C, 60 Hz, 3 - Phase, 200/230 V <u>Also Available with Variable Frequency Drives</u>

#### 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

		Performanc	e	
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):			25.6	23.4
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			

Mounting Height (in):	19.50
Suction Size (in),Type:	1 1 / 8 Stub
Discharge Size (in),Type:	7 / 8 Stub
Initial Oil Charge (oz):	85
Oil Recharge (oz):	81
Net Weight (lbs):	125.0
Internal Free Volume (in^3):	639
Horse Power:	8.0

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

LRA High* (Amps):	195.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	45
Max Operating Current (Amps):	31.8
RLA, MCC/1.4(use for contactor selection)(Amps):	32.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	28.8
RPM:	3500
Box IP:	21
UL File No:	SA-2337
UL File Date:	1996-09-27

<sup>\*</sup>Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

# Capacitors

No data available in table

# **Alternate Applications**

Refrigerant	Voltage	Phase	Frequency	Application
R-134a HFC	200/220	3	50	Air Conditioning
R-134a HFC	200/230	3	60	Air Conditioning
R-407C HFC	200/220	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

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322048- E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048- N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048- N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048- E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVH-322048- R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 3

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322048- R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048- R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048- R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048- R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

# **Electrical Components**

Electrical Components					
Part No: 071-0519-33	Stator				
Usage Description: Internal Protector	Part No: 546-2081-43				
Vendor Part Number	Usage Description: Stator				
35HM409	Resistance: +/-7%				
<u>Vendor Name</u>	Start Wdg: 0.40				
Т. І.	Run Wdg: 0.00				

# Nomenclature

# **Family Series**

Z: Scroll

#### **Application Range**

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

# Capacity

**94K:** Capacity Multiplier-1000

# Oil Type

E: Polyol Ester

#### **Motor Type**

T: 3 Phase

#### **Motor Protection**

F: Internal Inherent Protection

Voltage

# Miscellaneous

Alternate Application					
Refrigerant	Freq	Phase	Voltage	Application	
HFC R-134a	50	3 Ø	200/220 V	R1 AC	
HFC R-134a	60	3 Ø	200/230 V	R1 AC	
HFC R-407C	50	3 Ø	200/220 V	R1 AC	

#### Nomenclature

#### ZR94KCE-TF5

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