

ZR108KCE-TF5

HFC, R-407C, 60 Hz, 3 - Phase, 200/230 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)	106000	91200
Power (W):	9220	8110
Current (Amps):	28	25.4
EER(BTU/Wh):	11.5	11.25
Mass Flow (lbs/hr):	1545	1275
Sound Data @		
Sound Power (dBA):	80 Avg	85 Max
Vibration mils(peak-peak):	3.0 Avg	4.0 Max
Record Date:	2017-03-22	
Mechanical		
Displacement (in^3/Rev):	8.72	
Displacement (ft^3/Hr):		
Overall Length (in):	10.38	
Overall Width (in):	11.23	
Overall Height (in):	21.00	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	21.75
Suction Size (in),Type:	1 3 / 8 Stub
Discharge Size (in),Type:	7 / 8 Stub
Initial Oil Charge (oz):	110
Oil Recharge (oz):	106
Net Weight (lbs):	132.0
Internal Free Volume (in^3):	809
Horse Power:	9.0

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

LRA High* (Amps):	225.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	47
Max Operating Current (Amps):	33.6
RLA, MCC/1.4(use for contactor selection)(Amps):	33.6
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	30.1
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	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	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	998-0034-04	1	ADAP KIT 13/8"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-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: 071-0505-27	Stator
Usage Description: Internal Protector	Part No: 546-2081-26
<u>Vendor Part Number</u>	Usage Description: Stator
32HM596-124	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 0.34
SENSATA	Run Wdg: 0.00

Nomenclature

ZR108KCE-TF5
Family Series
Z: Scroll
Application Range
R: A/C - R-22/407C/134a
Capacity
108K: 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				
ZR108KCE-TF5				
Date	Data Group	Field	Old Data	New Data
07-Feb-2007	Sound	Discharge Pulse Ave	3	0
07-Feb-2007	Sound	Vibration Max	4.5	4
18-Jul-2005	Sound	Vibration Ave	2.5	3
18-Jul-2005	Sound	Vibration Max	3.5	4.5
09-Jan-2003	Sound	Sound Start	0	83
09-Jan-2003	Sound	Sound Start Max	0	91
09-Jan-2003	Sound	Sound Stop	0	75
09-Jan-2003	Sound	Sound Stop Max	0	83
20-Jul-2007	RatingRefNo	RatingRefNo	04-767	07-595
24-Sep-2004	RatingRefNo	RatingRefNo	01-929	04-767