ZR38K5E-TF5

HCFC, R-22, 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	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	38000	49400
Power (W):	3400	2300
Current (Amps):	10.35	8
EER(BTU/Wh):	11.2	21.4
Mass Flow (lbs/hr):	556	632
Sound Data @ 45 / 130		
Sound Power (dBA):	73 Avg	78 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2015-10-13	

Mechanical	
Displacement (in^3/Rev):	3.11
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	19.94
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	17.17
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	34
Net Weight (lbs):	60.5
Internal Free Volume (in^3):	226
Horse Power:	

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

Electrical

LRA High* (Amps):	93.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	19
Max Operating Current (Amps):	14.0
RLA, MCC/1.4(use for contactor selection)(Amps):	13.6
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	12.2
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	

*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	200/220	3	50	Air Conditioning
R-407C HFC	200/220	3	50	Air Conditioning
R-407C HFC	200/230	3	60	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
1	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
14	529-0060-24	1	POWER CABLE-MOLDED PLUG	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322017-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R54BDB	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-322017-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S
(1) Variable Frequency Drive	EVH-322017-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322017-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322017-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322017-N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Basic, IP20, Standard, No Options, Frame 2

Electrical Components

Electrical Components

Part No: 071-0501-10

Usage Description: Internal Protector

Vendor Part Number

34HM111

Vendor Name

SENSATA

Part No: 071-0501-18

Usage Description: Internal Protector

Vendor Part Number

34HM119

Vendor Name

SENSATA

Stator

Part No: 546-2115-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.20

Run Wdg: 0.00

Stator

Part No: 546-2090-05

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.97

Run Wdg: 0.00

Nomenclature

ZR38K5E-TF5

Family Series

Z: Scroll

Application Range

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

Capacity

38K: Capacity Multiplier-1000

Oil Type

E: Polyol Ester

Motor Type

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

5: 60Hz (200/230-3) 50Hz (200/220-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	50	3 Ø	200/220 V	R1 AC
HFC R-407C	50	3 Ø	200/220 V	R1 AC
HFC R-407C	60	3 Ø	200/230 V	R1 AC

Nomenclature

ZR38K5E-TF5

Date	Data Group	Field	Old Data	New Data
15-Apr-2014	RatingRefNo	RatingRefNo	14-93e	08-1165e
13-Oct-2015	Rating	PubCode		Y
15-Apr-2014	2 Pt Perf	Amp Cond 1	9.8	10.35
15-Apr-2014	2 Pt Perf	Amp Cond 2	7.6	8
15-Apr-2014	2 Pt Perf	MassFlow Cond 1	555	556
15-Apr-2014	2 Pt Perf	MassFlow Cond 2	630	632