

ZPS40K5E-TF5

HFC, R-410A, 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	115
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	100
Capacity (BTU/hr)	41200	51000
Power (W):	3920	3180
Current (Amps):	11	9.2
EER(BTU/Wh):	10.55	16
Mass Flow (lbs/hr):	607	679
Sound Data @ 45 / 130		
Sound Power (dBA):	72 Avg	77 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-22	
Mechanical		
Displacement (in^3/Rev):	2.39	
Displacement (ft^3/Hr):	290.0	
Overall Length (in):	9.56	
Overall Width (in):	9.56	
Overall Height (in):	16.94	
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):	36
Net Weight (lbs):	67.0
Internal Free Volume (in^3):	207.5
Horse Power:	

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

LRA High* (Amps):	83.1
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	21.9
Max Operating Current (Amps):	18.0
RLA, MCC/1.4(use for contactor selection)(Amps):	15.6
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	14.0
RPM:	3500
Box IP :	21
UL File No:	SA2337
UL File Date:	2003-12-17

*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-410A HFC	200/220	3	50	A/C, 67% Load Of Compressor Model
R-410A HFC	200/230	3	60	A/C, 67% Load Of Compressor Model
R-410A HFC	200/220	3	50	Air Conditioning

Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
4	527-0116-00	1	SPACER-MOUNTING ASSM	
5	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
5	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
5	918-0041-02	1	HEATER-CRANKCASE	480V 40W WRAP AROUND
6	529-0060-24	1	POWER CABLE-MOLDED PLUG	3-PIN MOLDED PLUG
6	529-0138-01	1	CABLE-POWER ASSM	2-PIN MODULATION PLUG
99	998-0069-01	1	ADAPTER & SEAL KIT	
99	998-0230-00	1	CONDUIT ADAPTOR KIT 5/8	
99	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK VALVE MAY BE MOUNTED ON THE COMPRESSOR OR THE ACCUMULATOR
99	998-0510-98	1	VLV KIT 1/2"SWT /1-14UNC	DISCHARGE ROTALOCK

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

Category	Part Number	Description
(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

Electrical Components

Electrical Components	
Part No: 071-0501-10	Stator
Usage Description: Internal Protector	Part No: 546-2090-03
<u>Vendor Part Number</u>	Usage Description: Stator
34HM111	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.03
SENSATA	Run Wdg: 0.00

Nomenclature

ZPS40K5E-TF5
Family Series
Z: Scroll
Application Range
P: A/C - R-410A/B
Modulation
S: Two Step
Capacity
40K: 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
HFC R-410A	50	3 Ø	200/220 V	R1 A6
HFC R-410A	60	3 Ø	200/230 V	R1 A6
HFC R-410A	50	3 Ø	200/220 V	R1 AC

Nomenclature

[ZPS40K5E-TF5](#)

Date	Data Group	Field	Old Data	New Data
01-Dec-2010	Status	Status	P	A
01-Dec-2010	Status	Status	P	A
11-Jul-2012	RatingRefNo	RatingRefNo	10-540	12-787
11-Jul-2012	RatingRefNo	RatingRefNo	10-541	12-786
01-Dec-2010	Rating	PubCode		Y
06-Jul-2010	Rating	PubCode		PRE
27-May-2016	2 Pt Perf	Amp Cond 1	9.2	11
27-May-2016	2 Pt Perf	Amp Cond 2	11	9.2
27-May-2016	2 Pt Perf	Cap Cond 1	51000	41200
27-May-2016	2 Pt Perf	Cap Cond 2	41200	51000