

ZPS40K5E-TFD

HFC, R-410A, 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	50
Condensing Temp. (°F)	130	115
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	100
Capacity (BTU/hr)	41200	51000
Power (W):	3900	3200
Current (Amps):	5.5	4.65
EER(BTU/Wh):	10.55	15.9
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.

Electrical

LRA High* (Amps):	41.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	10
Max Operating Current (Amps):	8.0
RLA, MCC/1.4(use for contactor selection)(Amps):	7.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	6.4
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
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No data available in table

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-410A HFC	460	3	60	A/C, 67% Load Of Compressor Model
R-410A HFC	380/420	3	50	A/C, 67% Load Of Compressor Model
R-410A HFC	380/420	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-3447D6-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Pro, IP20, Standard, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-3447D6-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 1

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-3447D6-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H1S
(1) Variable Frequency Drive	EVM-3447D6-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Pro, IP20, With add on EMI filter, No Options, Frame 1
(1) Variable Frequency Drive	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, IP20, Standard, No Options, Frame 1
(1) Variable Frequency Drive	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, IP20, With add on EMI filter, No Options, Frame 1

Electrical Components

Electrical Components	
Part No: 071-0501-27	Stator
Usage Description: Internal Protector	Part No: 546-2090-02
<u>Vendor Part Number</u>	Usage Description: Stator
34HM223	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 4.17
SENSATA	Run Wdg: 0.00

Nomenclature

ZPS40K5E-TFD
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****D:** 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HFC R-410A	60	3 Ø	460 V	R1 A6
HFC R-410A	50	3 Ø	380/420 V	R1 A6
HFC R-410A	50	3 Ø	380/420 V	R1 AC

Nomenclature

[ZPS40K5E-TFD](#)

Date	Data Group	Field	Old Data	New Data
19-Feb-2011	Status	Status	P	A
19-Feb-2011	Status	Status	P	A
20-Aug-2012	RatingRefNo	RatingRefNo	10-885	12-828
20-Aug-2012	RatingRefNo	RatingRefNo	10-886	12-827
18-Feb-2011	Rating	PubCode		Y
19-Oct-2010	Rating	PubCode		PRE
27-May-2016	2 Pt Perf	Amp Cond 1	4.65	5.5
27-May-2016	2 Pt Perf	Amp Cond 2	5.5	4.65
27-May-2016	2 Pt Perf	Cap Cond 1	51000	41200
27-May-2016	2 Pt Perf	Cap Cond 2	41200	51000