

# ZP38K5E-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	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	38100	51500
Power (W):	3630	2370
Current (Amps):	5.2	3.7
EER(BTU/Wh):	10.5	21.7
Mass Flow (lbs/hr):	560	635
Sound Data @ 45 / 130		
Sound Power (dBA):	68 Avg	73 Max
Vibration mils(peak-peak):	2.5 Avg	3.5 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in <sup>3</sup> /Rev):	2.18	
Displacement (ft <sup>3</sup> /Hr):		
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	

<b>Mounting Height (in):</b>	17.17
<b>Suction Size (in),Type:</b>	7 / 8 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	42
<b>Oil Recharge (oz):</b>	36
<b>Net Weight (lbs):</b>	67.0
<b>Internal Free Volume (in^3):</b>	209.5

**Horse Power:**

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

<b>LRA High* (Amps):</b>	41.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	9.5
<b>Max Operating Current (Amps):</b>	8.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	6.8
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	6.1
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	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	380/420	3	50	Air Conditioning

### 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	
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
8	998-0510-90	1	VLV KIT 7/8"SWT / 1 1/4-12UNC	SUCTION ROTALOCK
9	998-7026-00	1	HEATER JUNCTION BOX KIT	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 1 1/4-12 TO 7/8 ID	ROTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE

### 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
(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

Category	Part Number	Description
(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

Usage Description: Internal Protector

Vendor Part Number

34HM223

Vendor Name

SENSATA

Part No: 071-0572-26

Usage Description: Internal Protector

Vendor Part Number

UP18FY142-770

Vendor Name

UBUKATA

Part No: 071-0612-05

Usage Description: Internal Protector

Vendor Part Number

37HM218

Vendor Name

SENSATA

#### Stator

Part No: 546-2112-05

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.64

Run Wdg: 0.00

#### Stator

Part No: 846-2115-12

Usage Description: Stator

#### Stator

Part No: 546-2112-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.64

Run Wdg: 0.00

#### Stator

Part No: 546-2115-12

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.60

Run Wdg: 0.00

Resistance: +/-7%

Start Wdg: 4.60

Run Wdg: 0.00

## Nomenclature

ZP38K5E-TFD

### Family Series

**Z:** Scroll

### Application Range

**P:** A/C - R-410A/B

### Capacity

**38K:** 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
<a href="#">HFC R-410A</a>	50	3 Ø	380/420 V	R1 AC

### Nomenclature

[ZP38K5E-TFD](#)

Date	Data Group	Field	Old Data	New Data
02-Jan-2006	Status	Status	P	A
01-Jun-2007	Sound	Sound Ave	71	68
01-Jun-2007	Sound	Sound Max	76	73
01-Jun-2007	Sound	Vibration Ave	2	2.5
01-Jun-2007	Sound	Vibration Max	3	3.5
22-Jul-2005	Sound	Sound Start	68	69

<b>Date</b>	<b>Data Group</b>	<b>Field</b>	<b>Old Data</b>	<b>New Data</b>
22-Jul-2005	Sound	Sound Start Max	76	77
01-Jul-2005	Sound	Sound Stop	56	63
01-Jul-2005	Sound	Sound Stop Max	64	71