

# ZP42K6E-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)	42200	57700
Power (W):	4020	2650
Current (Amps):	5.6	3.9
EER(BTU/Wh):	10.5	21.8
Mass Flow (lbs/hr):	620	706
Sound Data @ 50 / 115		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-04-25	
Mechanical		
Displacement (in^3/Rev):	2.43	
Displacement (ft^3/Hr):		
Overall Length (in):	9.69	
Overall Width (in):	9.69	
Overall Height (in):	16.94	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	17.22
<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>	210

#### 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>	9.7
<b>Max Operating Current (Amps):</b>	8.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	6.9
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	6.2
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA2337
<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
99	100-0605-02	1	SCREW- TAPTITE W/ LOCKWASHER	
99	527-0116-00	1	SPACER-MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
99	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	ROOTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE
99	998-0034-18	1	ADAPTER 1-14 TO 1/2 ID	ROOTALOCK TO SWEAT ADAPTER KIT DISCHARGE
99	998-0230-00	1	CONDUIT ADAPTOR KIT 5/8	

### 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	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, 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-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	EVH-3447D6-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, 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-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1

Category	Part Number	Description
(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-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	EVH-3447D6-	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5%

Electrical Components

Electrical Components	
Part No: 071-0572-26	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
UP18FY142-770	
<u>Vendor Name</u>	
UBUKATA	
Part No: 071-0612-05	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2115-12
<u>Vendor Part Number</u>	Usage Description: Stator
37HM218	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 4.60
SENSATA	Run Wdg: 0.00
<b>Stator</b>	
Part No: 846-2115-12	
Usage Description: Stator	
Resistance: +/-7%	
Start Wdg: 4.60	
Run Wdg: 0.00	

Nomenclature

ZP42K6E-TFD
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Capacity</b>

**42K:** Capacity Multiplier-1000

**Model Variation**

**6:** Model Variation

**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				
<a href="#">ZP42K6E-TFD</a>				
Date	Data Group	Field	Old Data	New Data
16-Oct-2014	Status	Status	P	A
16-Oct-2014	Rating	PubCode		Y
24-Mar-2014	Rating	PubCode		PRE
15-Oct-2014	2 Pt Perf	Amp Cond 2	4.65	3.9
15-Oct-2014	2 Pt Perf	Cap Cond 2	52400	57700
15-Oct-2014	2 Pt Perf	EER Cond 2	16.15	21.8
15-Oct-2014	2 Pt Perf	MassFlow Cond 2	697	706
15-Oct-2014	2 Pt Perf	Watts Cond 2	3240	2650
13-Oct-2014	2 Pt Perf	Amp Cond 1	3.9	5.6
13-Oct-2014	2 Pt Perf	Cap Cond 1	57700	42200