

# ZP42K5E-PFV

HFC, R-410A, 60 Hz, 1 - Phase, 208/230 V

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)	42000	57100
Power (W):	4070	2670
Current (Amps):	18.35	12
EER(BTU/Wh):	10.3	21.35
Mass Flow (lbs/hr):	618	702
Sound Data @ 45 / 130		
Sound Power (dBA):	68 Avg	73 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in <sup>3</sup> /Rev):	2.43	
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>	72.9
<b>Internal Free Volume (in^3):</b>	183.3

**Horse Power:**

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

<b>LRA High* (Amps):</b>	117.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	34
<b>Max Operating Current (Amps):</b>	31.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	24.3
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	21.8
<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
Run Capacitor	014-0064-34	70.0	0.0	370	
Start Capacitor	014-0061-27	88.0	106.0	330	OPTIONAL

**Alternate Applications**

Refrigerant	Voltage	Phase	Frequency	Application
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No data available in table

## 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	
5	914-0037-51	1	RUN CAP KIT	
6	940-0001-79	1	RELAY-POTENTIAL KIT	
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

## Accessories

### Accessories

Category	Part Number	Description
CoreSense	571-0066-00	CoreSense™ Diagnostics Module (2 wire)
CoreSense	571-0066-01	CoreSense Diagnostics (Fixed Speed AC)
CoreSense	571-0067-00	CoreSense™ Diagnostics Module (3 wire)
CoreSense	571-0067-01	CoreSense Diagnostics (Fixed Speed HP)
CoreSense	571-0072-00	CoreSense Diagnostics (Two Stage UT)
Crankcase Heaters	018-0096-00	Crankcase Heater, 240V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-02	Crankcase Heater, 480V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-03	Crankcase Heater, 575V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-04	Crankcase Heater, 240V, 40W, 48.25" Lead Length

### Electrical Components

#### Electrical Components

Part No: 071-0509-36

Usage Description: Internal Protector

Vendor Part Number

15HM1636

Vendor Name

T.I.

Part No: 071-0640-00

Usage Description: Internal Protector

Vendor Part Number

UP5MY0515-A01

Vendor Name

UBUKATA

Part No: 071-0640-01

Usage Description: Internal Protector

Vendor Part Number

UP5LY0515-C01

Vendor Name

UBUKATA

Part No: 071-0640-20

Usage Description: Internal Protector

Vendor Part Number

UP5NY0315-C01

Vendor Name

UBUKATA

### Stator

Part No: 846-5010-07

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.82

Run Wdg: 0.52

### Stator

Part No: 846-5129-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.86

Run Wdg: 0.63

### Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

### Stator

Part No: 546-5010-07

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.82

Run Wdg: 0.52

### Stator

Part No: 846-5022-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.81

Run Wdg: 0.50

### Potential

Part No: 040-0166-37

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

### Run Capacitor

Part No: 014-0064-34

Low MFD: 70.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

## Nomenclature

ZP42K5E-PFV

### Family Series

**Z:** Scroll

### Application Range

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

### Capacity

**42K:** Capacity Multiplier-1000

### Oil Type

**E:** Polyol Ester

**Motor Type**

**P:** 1 Phase/Capacitor Run, Permanent Split Capacitor

**Motor Protection**

**F:** Internal Inherent Protection

**Voltage**

**V:** 60Hz (208/230-1) 50Hz (-)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
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No data available in table

Nomenclature

[ZP42K5E-PFV](#)

Date	Data Group	Field	Old Data	New Data
07-Jan-2005	Status	Status	P	A
07-Jan-2005	Sound	Sound Start	68	69
07-Jan-2005	Sound	Sound Start Max	76	77
07-Jan-2005	Sound	Sound Stop	56	63
07-Jan-2005	Sound	Sound Stop Max	64	71
13-Nov-2007	RatingRefNo	RatingRefNo	04-1882	07-1042
07-Jan-2005	RatingRefNo	RatingRefNo	04-560	04-1882
06-Jan-2005	Rating	PubCode		Y
15-Apr-2004	Rating	PubCode		O
15-Aug-2009	Mech	CFH		295.31304