

# ZR42K5E-PFV

HFC, R-407C, 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)	40800	54900
Power (W):	3800	2440
Current (Amps):	16.8	10.85
EER(BTU/Wh):	10.75	22.5
Mass Flow (lbs/hr):	594	676
Sound Data @ 45 / 130		
Sound Power (dBA):	70 Avg	75 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2015-10-13	
Mechanical		
Displacement (in^3/Rev):	3.45	
Displacement (ft^3/Hr):		
Overall Length (in):	9.69	
Overall Width (in):	9.69	
Overall Height (in):	19.94	
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>	34
<b>Net Weight (lbs):</b>	68.3
<b>Internal Free Volume (in^3):</b>	194.1
<b>Horse Power:</b>	3.5

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

<b>LRA High* (Amps):</b>	104.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	31
<b>Max Operating Current (Amps):</b>	25.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	22.1
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	19.9
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	

\*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	014-0064-28	55.0	0.0	370	
Start Capacitor	014-0061-27	88.0	106.0	330	OPTIONAL

#### Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
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	
4	914-0037-39	1	RUN CAP KIT	
14	529-0060-24	1	POWER CABLE-MOLDED PLUG	

Accessories

Accessories		
Category	Part Number	Description
Crankcase Heaters	018-0095-00	Crankcase Heater, 240V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-04	Crankcase Heater, 240V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0096-03	Crankcase Heater, 575V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-02	Crankcase Heater, 480V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-00	Crankcase Heater, 240V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0095-09	Crankcase Heater, 277V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-05	Crankcase Heater, 480V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0095-08	Crankcase Heater, 400V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-06	Crankcase Heater, 575V, 70W, 48" Lead Length

Electrical Components

Electrical Components	
Part No: 071-0509-46	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-5010-10
<u>Vendor Part Number</u>	Usage Description: Stator

15HM1649

Vendor Name

T. I.

### Potential

Part No: 040-0166-37

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

### Run Capacitor

Part No: 014-0064-28

Low MFD: 55.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Resistance: +/-7%

Start Wdg: 1.37

Run Wdg: 0.60

### Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

## Nomenclature

ZR42K5E-PFV

#### Family Series

**Z:** Scroll

#### Application Range

**R:** A/C - R-22/407C/134a

#### 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
<a href="#">HCFC R-22</a>	60	1 Ø	208/230 V	R1
Nomenclature				
<a href="#">ZR42K5E-PFV</a>				
Date	Data Group	Field	Old Data	New Data
13-Oct-2015	Rating	PubCode		Y
12-May-2010	Rating	PubCode	PRE	Y
08-Mar-2010	Rating	PubCode		PRE
17-Nov-2010	2 Pt Perf	Amp Cond 1	10.85	16.8
17-Nov-2010	2 Pt Perf	Amp Cond 2	16.8	10.85
17-Nov-2010	2 Pt Perf	Cap Cond 1	54900	40800
17-Nov-2010	2 Pt Perf	Cap Cond 2	40800	54900
17-Nov-2010	2 Pt Perf	EER Cond 1	22.5	10.75
17-Nov-2010	2 Pt Perf	EER Cond 2	10.75	22.5
17-Nov-2010	2 Pt Perf	MassFlow Cond 1	676	594