

# ZP51K6E-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)	51000	68600
Power (W):	4790	3160
Current (Amps):	21.5	14.4
EER(BTU/Wh):	10.65	21.75
Mass Flow (lbs/hr):	745	840
Sound Data @ 50 / 115		
Sound Power (dBA):	68 Avg	73 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-04-25	
Mechanical		
Displacement (in^3/Rev):	2.90	
Displacement (ft^3/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>	75.8
<b>Internal Free Volume (in^3):</b>	173.5

**Horse Power:**

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

**Electrical**

<b>LRA High* (Amps):</b>	144.2
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	38
<b>Max Operating Current (Amps):</b>	31.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	27.1
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	24.4
<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
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
No data available in table				

Service Parts

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	914-0036-03	1	CAP START KIT	
99	914-0037-51	1	RUN CAP KIT	
99	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
99	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
99	940-0001-79	1	RELAY-POTENTIAL KIT	
99	943-0120-00	1	SECURE START 1PH SINGLE PACK	
99	971-0066-00	1	MODULE-P210 ASSM	CORESENSE DIAGNOSTICS 2-WIRE

Accessories

Accessories		
Category	Part Number	Description
CoreSense	971-0066-00	CoreSense™ Diagnostics Module (2-Wire Module, 1-Phase Only)
CoreSense	971-0067-00	CoreSense™ Diagnostics Module (3-Wire Module, 1-Phase Only)
Crankcase Heaters	998-7026-00	Crankcase Heater Enclosure Box
Crankcase Heaters	018-0094-00	Crankcase Heater, 240V, 40W
Crankcase Heaters	018-0094-01	Crankcase Heater, 120V, 40W
Crankcase Heaters	018-0094-03	Crankcase Heater, 480V, 40W, 21.25" Lead Length
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

Category	Part Number	Description
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Electrical Components

Electrical Components

Part No: 071-0510-00

Usage Description: Internal Protector

Vendor Part Number

16HM106

Vendor Name

SENSATA

Part No: 071-0510-33

Usage Description: Internal Protector

Vendor Part Number

16HM106

Vendor Name

SENSATA

Part No: 071-0707-03

Usage Description: Internal Protector

Vendor Part Number

UP16PAO510A0

Vendor Name

UBAKATA

Stator

Part No: 546-5022-24

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.76

Run Wdg: 0.41

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

Stator

Part No: 546-5022-20

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.76

Run Wdg: 0.41

Stator

Part No: 846-5022-20

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.76

Run Wdg: 0.41

Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

Usage Description: Run Capacitor

Volts: 370

Nomenclature

ZP51K6E-PFV
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Capacity</b>
<b>51K:</b> Capacity Multiplier-1000
<b>Model Variation</b>
<b>6:</b> Model Variation
<b>Oil Type</b>
<b>E:</b> Polyol Ester
<b>Motor Type</b>
<b>P:</b> 1 Phase/Capacitor Run, Permanent Split Capacitor
<b>Motor Protection</b>
<b>F:</b> Internal Inherent Protection
<b>Voltage</b>
<b>V:</b> 60Hz (208/230-1) 50Hz (-)

Miscellaneous

Alternate Application				
<b>Refrigerant</b>	<b>Freq</b>	<b>Phase</b>	<b>Voltage</b>	<b>Application</b>
No data available in table				
Nomenclature				
<a href="#">ZP51K6E-PFV</a>				
<b>Date</b>	<b>Data Group</b>	<b>Field</b>	<b>Old Data</b>	<b>New Data</b>
29-Jan-2014	Status	Status	P	A
22-Jan-2014	Status	Status	A	P
29-Jan-2014	RatingRefNo	RatingRefNo	14-15	13-171
22-Jan-2014	RatingRefNo	RatingRefNo	13-171	14-15
20-Mar-2014	Rating	PubCode		Y

Date	Data Group	Field	Old Data	New Data
14-Jan-2014	Rating	PubCode		PRE
06-Mar-2013	Rating	PubCode		N
04-Dec-2013	Mech	Rech Oil Charge	38	36
18-Dec-2013	Elec	Hi LRA	142.3	144.2