ZPS51K5E-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	115
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	100
Capacity (BTU/hr)	52000	64100
Power (W):	4860	4010
Current (Amps):	22.15	18.55
EER(BTU/Wh):	10.7	16
Mass Flow (lbs/hr):	767	853
Sound Data @ 45 / 130		
Sound Power (dBA):	70 Avg	75 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-22	

Mechanical	
Displacement (in^3/Rev):	2.96
Displacement (ft^3/Hr):	359.7
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

Mounting Height (in):	17.17
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	36
Net Weight (lbs):	76.5
Internal Free Volume (in^3):	170.2
Horse Power:	

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

Electrical

LRA High* (Amps):	139.9
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	42
Max Operating Current (Amps):	37.0
RLA, MCC/1.4(use for contactor selection)(Amps):	30.0
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	26.9
RPM:	3500
Box IP :	21
UL File No:	SA2337
UL File Date:	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	014-0064-14	40.0	0.0	440	
Start Capacitor	014-0061-27	88.0	106.0	330	OPTIONAL

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-410A HFC	208/230	1	60	A/C, 67% Load Of Compressor Model

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	914-0037-18	1	RUN CAP KIT W/CLAMP	
2	914-0036-03	1	CAP START KIT	
5	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
5	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
5	918-0041-02	1	HEATER-CRANKCASE	480V 40W WRAP AROUND
6	529-0060-24	1	POWER CABLE-MOLDED PLUG	3-PIN MOLDED PLUG
6	529-0138-01	1	CABLE-POWER ASSM	2-PIN MODULATION PLUG
99	940-0140-03	1	RELAY-QUICK CONNECT KIT	
99	998-0069-01	1	ADAPTER & SEAL KIT	
99	998-0230-00	1	CONDUIT ADAPTOR KIT 5/8	

Accessories

Accessories

Category	Part Number	Description
Crankcase Heaters	018-0095-00	Crankcase Heater, 240V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-06	Crankcase Heater, 240V, 40W, 31.75" Lead Length
Crankcase Heaters	018-0096-05	Crankcase Heater, 480V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0096-04	Crankcase Heater, 240V, 40W, 48.25" Lead Length

Category	Part Number	Description
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	018-0096-00	Crankcase Heater, 240V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0095-09	Crankcase Heater, 277V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length

Electrical Components

Electrical Components

Part No: 071-0510-15

Usage Description: Internal Protector

Vendor Part Number

16HM170

Vendor Name

SENSATA

Part No: 071-0510-30

Usage Description: Internal Protector

Vendor Part Number

16HM170-43

Vendor Name

T. I.

Part No: 071-0707-00

Usage Description: Internal Protector

Vendor Part Number

UP16FY0510-A0

Vendor Name

UBUKATA

Stator

Part No: 546-5022-38

Usage Description: Stator

Stator

Part No: 546-5022-15

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.69

Run Wdg: 0.42

Stator

Part No: 846-5022-15

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.69

Run Wdg: 0.42

Potential

Part No: 040-0166-02

Usage Description: Potential Relay

Vendor Part Number

RVA4AG6D-934

Vendor Name

ELECTRICA

Run Capacitor

Part No: 014-0064-14

Low MFD: 40.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

Resistance: +/-7%

Start Wdg: 1.69

Run Wdg: 0.42

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

ZPS51K5E-PFV

Family Series

Z: Scroll

Application Range

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

Modulation

S: Two Step

Capacity

51K: 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
HFC R-410A	60	1 Ø	208/230 V	R1 A6

Nomenclature

ZPS51K5E-PFV

Date	Data Group	Field	Old Data	New Data
05-May-2010	Status	Status	P	A
05-May-2010	Status	Status	P	A
01-Jul-2010	Sound	Sound Ave	70	72
01-Jul-2010	Sound	Sound Max	75	77
05-May-2010	Sound	Sound Ave	68	70
05-May-2010	Sound	Sound Ave	68	70
05-May-2010	Sound	Sound Max	73	75
05-May-2010	Sound	Sound Max	73	75
13-Sep-2013	RatingRefNo	RatingRefNo	12-209	13-1006
13-Sep-2013	RatingRefNo	RatingRefNo	12-212	13-1005