ZP51K5E-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	69500
Power (W):	4860	3240
Current (Amps):	21.8	15
EER(BTU/Wh):	10.5	21.4
Mass Flow (lbs/hr):	755	850
Sound Data @ 45 / 130		
Sound Power (dBA):	68 Avg	73 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2015-10-09	

Mechanical	
Displacement (in^3/Rev):	2.94
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

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):	75.8
Internal Free Volume (in^3):	172.1
Horse Power:	

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

Electrical

LRA High* (Amps):	134.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	41.2
Max Operating Current (Amps):	31.0
RLA, MCC/1.4(use for contactor selection)(Amps):	29.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	26.4
RPM:	3500
Box IP :	21
UL File No:	SA-2337
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	014-0064-27	80.0	0.0	370	OPTIONAL
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
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 / 11/4-12UNC	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	CoreSenseTM Diagnostics Module (2 wire)
CoreSense	571-0066-01	CoreSense Diagnostics (Fixed Speed AC)
CoreSense	571-0067-00	CoreSenseTM 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: 071-0510-10

Usage Description: Internal Protector

Vendor Part Number

16HM143

Vendor Name

SENSATA

Part No: 071-0510-28

Usage Description: Internal Protector

Vendor Part Number

16HM184

Vendor Name

SENSATA

Part No: 071-0640-09

Usage Description: Internal Protector

Vendor Part Number

UP5PFY0315E06

Vendor Name

Stator

Part No: 546-5010-09

Usage Description: Stator

UBUKATA

Resistance: +/-7%

Stator

Part No: 546-5022-11

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.93

Run Wdg: 0.42

Stator

Start Wdg: 0.83

Part No: 546-5128-11

Run Wdg: 0.44

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.93

Run Wdg: 0.42

Stator

Part No: 846-5022-11

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.93

Run Wdg: 0.42

Potential

Part No: 040-0166-37

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

Run Capacitor

Part No: 014-0064-27

Low MFD: 80.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

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

ZP51K5E-PFV

Family Series

Z: Scroll

Application Range

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

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
No data available in table				

Nomenclature

ZP51K5E-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
14-Sep-2004	Sound	Sound Max	71	73
01-Oct-2008	RatingRefNo	RatingRefNo	04-1768	08-1126
13-Oct-2004	RatingRefNo	RatingRefNo	03-730	04-1768
06-Jan-2005	Rating	PubCode		Y
16-Jul-2004	Rating	PubCode		PRE