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

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):	173.5
Horse Power:	

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

Electrical

LRA High* (Amps):	144.2
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	38
Max Operating Current (Amps):	31.0
RLA, MCC/1.4(use for contactor selection)(Amps):	27.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	24.4
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	014-0064-34	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	CoreSenseTM Diagnostics Module (2-Wire Module, 1-Phase Only)
CoreSense	971-0067-00	CoreSenseTM 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

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: 546-5022-20

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.76

Run Wdg: 0.41

Stator

Part No: 546-5022-24

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

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: 014-0064-34

Low MFD: 70.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Nomenclature

ZP51K6E-PFV

Family Series

Z: Scroll

Application Range

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

Capacity

51K: Capacity Multiplier-1000

Model Variation

6: Model Variation

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

ZP51K6E-PFV

Date	Data Group	Field	Old Data	New Data
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