

ZP24K5E-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)	24000	32800
Power (W):	2400	1570
Current (Amps):	10.6	7
EER(BTU/Wh):	10	20.9
Mass Flow (lbs/hr):	353	403
Sound Data @ 45 / 130		
Sound Power (dBA):	66 Avg	71 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	1.39	
Displacement (ft^3/Hr):		
Overall Length (in):	9.69	
Overall Width (in):	9.69	
Overall Height (in):	15.74	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	16.02
Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	25
Oil Recharge (oz):	21
Net Weight (lbs):	48.3
Internal Free Volume (in^3):	124.5

Horse Power:

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

LRA High* (Amps):	64.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	20
Max Operating Current (Amps):	13.4
RLA, MCC/1.4(use for contactor selection)(Amps):	14.3
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	12.8
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	2003-12-16

*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	014-0064-08	40.0	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	918-0052-00	1	CRANKCASE HEATER KIT	240V 40W WRAP AROUND
1	918-0052-01	1	CRANKCASE HEATER KIT	120V 40W WRAP AROUND
2	527-0044-15	1	SPACER - MOUNTING ASSM	
6	940-0001-79	1	RELAY-POTENTIAL KIT	
7	998-0510-38	1	VLV KIT 3/4"SWT/1 1/4-12UNC	SUCTION ROTALOCK
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
13	914-0037-12	1	RUN CAP KIT W/CLAMP	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	998-0034-01	1	ADAP KIT 3/4"SWT / 1 1/4 RL	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-07	1	ADAP KIT 1 1/4 RL / 3/4"SWT	ROTALOCK TO SWEAT ADAPTER KIT SUCTION

Accessories

Accessories		
Category	Part Number	Description
CoreSense	571-0066-00	CoreSense™ Diagnostics Module (2 wire)
CoreSense	571-0066-01	CoreSense Diagnostics (Fixed Speed AC)
CoreSense	571-0067-00	CoreSense™ Diagnostics Module (3 wire)
CoreSense	571-0067-01	CoreSense Diagnostics (Fixed Speed HP)
CoreSense	571-0072-00	CoreSense Diagnostics (Two Stage UT)
Crankcase Heaters	018-0094-00	Crankcase Heater, 240V, 40W
Crankcase Heaters	018-0094-01	Crankcase Heater, 120V, 40W
Crankcase Heaters	018-0094-02	Crankcase Heater
Crankcase Heaters	018-0094-03	Crankcase Heater, 480V, 40W, 21.25" Lead Length
Crankcase Heaters	018-0094-04	Crankcase Heater, 575V, 40W, 21.25" Lead Length

Electrical Components

Electrical Components	
Part No: 071-0512-24	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
15HM2450	
<u>Vendor Name</u>	
SENSATA	
Part No: 071-0642-03	Stator
Usage Description: Internal Protector	Part No: 546-5016-04
<u>Vendor Part Number</u>	Usage Description: Stator
UP14HY5215C	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.78
UBUKATA	Run Wdg: 1.18
Stator	Stator
Part No: 546-5251-12	Part No: 846-5016-04
Usage Description: Stator	Usage Description: Stator

Resistance: +/-7%

Stator

Start Wdg: 1.57

Part No: 846-5127-04

Run Wdg: 1.12

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.78

Run Wdg: 1.18

Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

Resistance: +/-7%

Potential

Start Wdg: 1.78

Part No: 040-0166-37

Run Wdg: 1.18

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

Run Capacitor

Part No: 014-0064-08

Low MFD: 40.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Nomenclature

ZP24K5E-PFV

Family Series

Z: Scroll

Application Range

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

Capacity

24K: 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

Refrigerant	Freq	Phase Nomenclature	Voltage	Application
ZP24K5E-PFV				
Date	Data Group	Field	Old Data	New Data
06-May-2005	Status	Status	P	A
05-May-2005	Sound	Sound Stop	56	60
05-May-2005	Sound	Sound Stop Max	64	69
01-Oct-2008	RatingRefNo	RatingRefNo	05-572	08-1132
06-May-2005	RatingRefNo	RatingRefNo	03-722	05-572
05-May-2005	Rating	PubCode		Y
18-Jun-2003	Rating	PubCode		PRE
19-Sep-2005	Mech	Rech Oil Charge	19	21
11-Dec-2012	2 Pt Perf	MassFlow Cond 2	404	403
01-Oct-2008	2 Pt Perf	Amp Cond 2	7.1	7