

# ZPS30K5E-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)          | 30600      | 37900   |
| Power (W):                 | 2980       | 2430    |
| Current (Amps):            | 13.3       | 10.9    |
| EER(BTU/Wh):               | 10.3       | 15.55   |
| Mass Flow (lbs/hr):        | 451        | 505     |
| Sound Data @ 45 / 130      |            |         |
| Sound Power (dBA):         | 70 Avg     | 75 Max  |
| Vibration mils(peak-peak): | 2.0 Avg    | 3.0 Max |
| Record Date:               | 2017-04-24 |         |
| Mechanical                 |            |         |
| Displacement (in^3/Rev):   | 1.78       |         |
| Displacement (ft^3/Hr):    | 216.7      |         |
| Overall Length (in):       | 9.56       |         |
| Overall Width (in):        | 9.56       |         |
| Overall Height (in):       | 15.27      |         |
| Mounting Length (in):      | 7.50       |         |
| Mounting Width (in):       | 7.50       |         |

|                                     |            |
|-------------------------------------|------------|
| <b>Mounting Height (in):</b>        | 16.02      |
| <b>Suction Size (in),Type:</b>      | 3 / 4 Stub |
| <b>Discharge Size (in),Type:</b>    | 1 / 2 Stub |
| <b>Initial Oil Charge (oz):</b>     | 25         |
| <b>Oil Recharge (oz):</b>           | 21         |
| <b>Net Weight (lbs):</b>            | 49.6       |
| <b>Internal Free Volume (in^3):</b> | 115.72     |

**Horse Power:**

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

**Electrical**

|                                                                        |            |
|------------------------------------------------------------------------|------------|
| <b>LRA High* (Amps):</b>                                               | 83.0       |
| <b>LRA Low*(Amps):</b>                                                 |            |
| <b>LRA Half Winding (Amps):</b>                                        |            |
| <b>MCC (Amps):</b>                                                     | 24.4       |
| <b>Max Operating Current (Amps):</b>                                   | 23.0       |
| <b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>                | 17.4       |
| <b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b> | 15.6       |
| <b>RPM:</b>                                                            | 3500       |
| <b>Box IP :</b>                                                        | 21         |
| <b>UL File No:</b>                                                     | SA2337     |
| <b>UL File Date:</b>                                                   | 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                       |
|-------------|---------|-------|-----------|-----------------------------------|
| R-410A HFC  | 208/230 | 1     | 60        | A/C, 67% Load Of Compressor Model |

Service Parts

| Service Parts |             |          |                             |                       |
|---------------|-------------|----------|-----------------------------|-----------------------|
| Reference     | Component   | Quantity | Description                 | Comment               |
| 1             | 914-0037-12 | 1        | RUN CAP KIT W/CLAMP         |                       |
| 4             | 527-0044-15 | 1        | SPACER - MOUNTING ASSM      |                       |
| 5             | 918-0052-00 | 1        | CRANKCASE HEATER KIT        | 240V 40W WRAP AROUND  |
| 5             | 918-0052-01 | 1        | CRANKCASE HEATER KIT        | 120V 40W WRAP AROUND  |
| 5             | 918-0052-03 | 1        | STAR CCH KIT                | 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            | 998-0069-01 | 1        | ADAPTER & SEAL KIT          |                       |
| 99            | 998-0230-00 | 1        | CONDUIT ADAPTOR KIT 5/8     |                       |
| 99            | 998-0510-38 | 1        | VLV KIT 3/4"SWT/1 1/4-12UNC | SUCTION               |

Accessories

| Accessories       |             |                                                 |
|-------------------|-------------|-------------------------------------------------|
| Category          | Part Number | Description                                     |
| 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 | 018-0094-04 | Crankcase Heater, 575V, 40W, 21.25" Lead Length |
| Crankcase Heaters | 018-0094-00 | Crankcase Heater, 240V, 40W                     |

Electrical Components

| Electrical Components                 |
|---------------------------------------|
| Part No: 071-0512-50                  |
| Usage Description: Internal Protector |
| <u>Vendor Part Number</u>             |

15HM2312

Vendor Name

SENSATA

Part No: 071-0642-09

Usage Description: Internal Protector

Vendor Part Number

UP14FY3005-C

Vendor Name

UBUKATA

### Stator

Part No: 846-5016-16

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.50

Run Wdg: 0.85

### Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

### Stator

Part No: 546-5016-16

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.50

Run Wdg: 0.85

### Potential

Part No: 040-0166-37

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

ZPS30K5E-PFV

### Family Series

**Z:** Scroll

### Application Range

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

### Modulation

**S:** Two Step

### Capacity

**30K:** 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 |
| <a href="#">HFC R-410A</a>   | 60          | 1 Ø         | 208/230 V | R1 A6       |
| Nomenclature                 |             |             |           |             |
| <a href="#">ZPS30K5E-PFV</a> |             |             |           |             |
| Date                         | Data Group  | Field       | Old Data  | New Data    |
| 01-Dec-2010                  | Status      | Status      | P         | A           |
| 01-Dec-2010                  | Status      | Status      | P         | A           |
| 21-Jan-2011                  | Sound       | Sound Ave   | 68        | 70          |
| 21-Jan-2011                  | Sound       | Sound Ave   | 68        | 70          |
| 21-Jan-2011                  | Sound       | Sound Max   | 73        | 75          |
| 21-Jan-2011                  | Sound       | Sound Max   | 73        | 75          |
| 20-Mar-2012                  | RatingRefNo | RatingRefNo | 10-460    | 12-216      |
| 20-Mar-2012                  | RatingRefNo | RatingRefNo | 10-459    | 12-215      |
| 01-Dec-2010                  | Rating      | PubCode     |           | Y           |
| 10-May-2010                  | Rating      | PubCode     |           | PRE         |