

ZR16K5E-PFV

HFC, R-407C, 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) | 14650 | 20200 |
| Power (W): | 1490 | 975 |
| Current (Amps): | 6.5 | 4.4 |
| EER(BTU/Wh): | 9.8 | 20.7 |
| Mass Flow (lbs/hr): | 213 | 248 |
| Sound Data @ | | |
| Sound Power (dBA): | 68 Avg | 73 Max |
| Vibration mils(peak-peak): | 2.0 Avg | 3.0 Max |
| Record Date: | 2010-11-16 | |
| Mechanical | | |
| Displacement (in^3/Rev): | 1.31 | |
| Displacement (ft^3/Hr): | | |
| Overall Length (in): | 9.50 | |
| Overall Width (in): | 9.50 | |
| Overall Height (in): | 15.86 | |
| Mounting Length (in): | 7.50 | |
| Mounting Width (in): | 7.50 | |

| | |
|-------------------------------------|------------|
| Mounting Height (in): | 16.08 |
| Suction Size (in),Type: | 3 / 4 Stub |
| Discharge Size (in),Type: | 1 / 2 Stub |
| Initial Oil Charge (oz): | 25 |
| Oil Recharge (oz): | 19 |
| Net Weight (lbs): | 47.7 |
| Internal Free Volume (in^3): | 128 |
| Horse Power: | 1.3 |

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

| | |
|--|---------|
| LRA High* (Amps): | 40.3 |
| LRA Low*(Amps): | |
| LRA Half Winding (Amps): | |
| MCC (Amps): | 13 |
| Max Operating Current (Amps): | 9.0 |
| RLA, MCC/1.4(use for contactor selection)(Amps): | 9.3 |
| RLA, MCC/1.56(use for breaker & wire size selection)(Amps): | 8.3 |
| RPM: | 3500 |
| Box IP : | 21 |
| UL File No: | SA-2337 |
| UL File Date: | |

*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 | 014-0064-06 | 30.0 | 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 | |
| 13 | 914-0037-10 | 1 | RUN CAP KIT W/CLAMP | |
| 14 | 529-0060-24 | 1 | POWER CABLE-MOLDED PLUG | |

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 |
| Crankcase Heaters | 018-0094-01 | Crankcase Heater, 120V, 40W |
| Crankcase Heaters | 018-0094-04 | Crankcase Heater, 575V, 40W, 21.25" Lead Length |

Electrical Components

| Electrical Components | |
|------------------------------------|------------------------------------|
| Potential | Start Capacitor |
| Part No: 040-0166-37 | Part No: 014-0061-27 |
| Usage Description: Potential Relay | Low MFD: 88.0 |
| <u>Vendor Part Number</u> | Type:Start Capacitor |
| RVA2AE6D-946 | High MFD: 106.0 |
| <u>Vendor Name</u> | Usage Description: Start Capacitor |
| ELECTRICA | Volts: 330 |

Run Capacitor

Part No: 014-0064-06

Low MFD: 30.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Part No: 071-0512-18

Usage Description: Internal Protector

Vendor Part Number

15HM2395

Vendor Name

SENSATA

Stator

Part No: 546-5251-16

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.61

Run Wdg: 1.74

Nomenclature

ZR16K5E-PFV

Family Series

Z: Scroll

Application Range

R: A/C - R-22/407C/134a

Capacity

16K: 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 |
|---------------------------|------|-------|-----------|-------------|
| HCFC R-22 | 60 | 1 Ø | 208/230 V | R1 |

Nomenclature

| Date | Data Group | Field | Old Data | New Data |
|-------------|------------|-----------------|----------|----------|
| 12-May-2010 | Rating | PubCode | PRE | Y |
| 13-Apr-2010 | Rating | PubCode | | PRE |
| 17-Nov-2010 | 2 Pt Perf | Amp Cond 1 | 4.4 | 6.5 |
| 17-Nov-2010 | 2 Pt Perf | Amp Cond 2 | 6.5 | 4.4 |
| 17-Nov-2010 | 2 Pt Perf | Cap Cond 1 | 20200 | 14650 |
| 17-Nov-2010 | 2 Pt Perf | Cap Cond 2 | 14650 | 20200 |
| 17-Nov-2010 | 2 Pt Perf | EER Cond 1 | 20.7 | 9.8 |
| 17-Nov-2010 | 2 Pt Perf | EER Cond 2 | 9.8 | 20.7 |
| 17-Nov-2010 | 2 Pt Perf | MassFlow Cond 1 | 248 | 213 |
| 17-Nov-2010 | 2 Pt Perf | MassFlow Cond 2 | 213 | 248 |