# CR47KQE-PFV

HCFC, R-22, 60 Hz, 1 - Phase, 208/230 V , Also Available with Variable Frequency Drives

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 | 45 |
| **Condensing Temp. (°F)** | 130 | 100 |
| **Return Gas Temp. (°F)** | 65 | 65 |
| **Liquid Temp. (°F)** | 115 | 85 |
| **Capacity (BTU/hr)** | 41800 | 55000 |
| **Power (W):** | 3990 | 3430 |
| **Current (Amps):** | 19 | 16.7 |
| **EER(BTU/Wh):** | 10.5 | 16.1 |
| **Mass Flow (lbs/hr):** | 610 | 685 |
| **Sound Data @** | | |
| **Sound Power (dBA):** | 78 Avg | 83 Max |
| **Vibration mils(peak-peak):** | 4.0 Avg | 5.0 Max |
| **Record Date:** | 2018-08-21 | |

| Mechanical | |
|---|---|
| **Displacement (in^3/Rev):** | 4.95 |
| **Displacement (ft^3/Hr):** | |
| **Overall Length (in):** | 10.38 |
| **Overall Width (in):** | 9.09 |
| **Overall Height (in):** | 14.81 |
| **Mounting Length (in):** | 7.50 |
| **Mounting Width (in):** | 7.50 |

| | |
|---|---|
| **Mounting Height (in):** | 15.19 |
| **Suction Size (in),Type:** | 7 / 8 Stub |
| **Discharge Size (in),Type:** | 1 / 2 Stub |
| **Initial Oil Charge (oz):** | 45 |
| **Oil Recharge (oz):** | 43 |
| **Net Weight (lbs):** | 77.0 |
| **Internal Free Volume (in^3):** | |
| **Horse Power:** | |

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

**Electrical**

| | |
|---|---|
| **LRA High* (Amps):** | 132.0 |
| **LRA Low*(Amps):** | |
| **LRA Half Winding (Amps):** | |
| **MCC (Amps):** | 34.5 |
| **Max Operating Current (Amps):** | |
| **RLA, MCC/1.4(use for contactor selection)(Amps):** | 24.6 |
| **RLA, MCC/1.56(use for breaker & wire size selection)(Amps):** | 22.1 |
| **RPM:** | |
| **Box IP :** | |
| **UL File No:** | |
| **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 | 014-0064-15 | 45.0 | 0.0 | 440 | |
| Start Capacitor | 014-0006-13 | 189.0 | 227.0 | 330 | HIGH TORQUE |
| Start Capacitor | 014-0061-13 | 64.0 | 77.0 | 330 | LOW TORQUE |

**Alternate Applications**

| Refrigerant | Voltage | Phase | Frequency | Application |
|---|---|---|---|---|
| R-407C HFC | 208/230 | 1 | 60 | Air Conditioning |
| R-407C HFC | 200 | 1 | 50 | Air Conditioning |

## Service Parts

**Service Parts**

| Reference | Component | Quantity | Description | Comment |
|---|---|---|---|---|
| 99 | 005-1210-00 | 1 | COVER-TERMINAL BOX | |
| 99 | 527-0044-00 | 1 | SPACER-MOUNTING ASSM | |
| 99 | 914-0006-03 | 1 | CAP START KIT | |
| 99 | 914-0037-19 | 1 | RUN CAP KIT | |
| 99 | 918-0088-00 | 1 | HEATER-CRANKCASE KIT | 40/49W 240/265V FLEXIBLE |
| 99 | 940-0001-59 | 1 | RELAY KIT | |

## Accessories

**Accessories**

| Category | Part Number | Description |
|---|---|---|
| (1) Variable Frequency Drive | EVH-322031-R21BDN | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2 |
| (1) Variable Frequency Drive | EVH-322031-R21BEN | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2 |
| (1) Variable Frequency Drive | EVH-322031-R54BDN | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2 |
| (1) Variable Frequency Drive | EVH-322031-R54BEN | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2 |
| (1) Variable Frequency Drive | EVH-322031-R21BDB | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S |
| (1) Variable Frequency Drive | EVH-322031-R54BDB | EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X |

## Electrical Components

**Electrical Components**

Part No: 071-0546-07

Usage Description: Internal Protector

Vendor Part Number

15HM1645

Vendor Name

T.I.

### Stator

Part No: 546-5081-55

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.15

Run Wdg: 0.46

### Stator

Part No: 546-5081-58

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.15

Run Wdg: 0.46

### Potential

Part No: 040-0166-18

Usage Description: Potential Relay

Vendor Part Number

RVA4AH6D-950

Vendor Name

ELECTRICA

### Start Capacitor

Part No: 014-0006-13

Low MFD: 189.0

Type:Start Capacitor

High MFD: 227.0

Usage Description: Start Capacitor

Volts: 330

### Start Capacitor

Part No: 014-0061-13

Low MFD: 64.0

Type:Start Capacitor

High MFD: 77.0

Usage Description: Start Capacitor

Volts: 330

### Run Capacitor

Part No: 014-0064-15

Low MFD: 45.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

## Nomenclature

CR47KQE-PFV

**Family Series**

**C:** CR Compressors

**Application Range**

**R:** R-22/ High Temp. A/C & Heat Pump

**Capacity**

**47K:** Capacity

**Model Variation**

**Q:** Quiet Compressor

**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 (200-1)

## Miscellaneous

Alternate Application

| Refrigerant | Freq | Phase | Voltage | Application |
|---|---|---|---|---|
| HCFC R-22 | 50 | 1 Ø | 200 V | R1 |
| HCFC R-22 | 60 | 1 Ø | 208/230 V | R1 |
| HFC R-407C | 50 | 1 Ø | 200 V | R1 AC |
| HFC R-407C | 60 | 1 Ø | 208/230 V | R1 AC |

Nomenclature

CR47KQE-PFV

| Date | Data Group | Field | Old Data | New Data |
|---|---|---|---|---|
| 14-Jan-2014 | Sound | Vibration Ave | 3 | 4 |
| 14-Jan-2014 | Sound | Vibration Max | 4 | 5 |
| 21-Aug-2018 | Rating | PubCode | | Y |