

ZP57K5E-TFD

HFC, R-410A, 60 Hz, 3 - Phase, 460 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 | 50 |
| Condensing Temp. (°F) | 130 | 100 |
| Return Gas Temp. (°F) | 65 | 70 |
| Liquid Temp. (°F) | 115 | 85 |
| Capacity (BTU/hr) | 57500 | 78000 |
| Power (W): | 5320 | 3550 |
| Current (Amps): | 7.6 | 5.5 |
| EER(BTU/Wh): | 10.8 | 22 |
| Mass Flow (lbs/hr): | 846 | 959 |
| Sound Data @ 45 / 130 | | |
| Sound Power (dBA): | 71 Avg | 76 Max |
| Vibration mils(peak-peak): | 2.0 Avg | 3.0 Max |
| Record Date: | 2017-03-01 | |
| Mechanical | | |
| Displacement (in^3/Rev): | 3.26 | |
| Displacement (ft^3/Hr): | | |
| Overall Length (in): | 9.69 | |
| Overall Width (in): | 9.69 | |
| Overall Height (in): | 16.91 | |
| Mounting Length (in): | 7.50 | |
| Mounting Width (in): | 7.50 | |

| | |
|-------------------------------------|------------|
| Mounting Height (in): | 17.66 |
| 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): | 75.6 |
| Internal Free Volume (in^3): | 204 |

Horse Power:

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

Electrical

| | |
|--|------------|
| LRA High* (Amps): | 66.1 |
| LRA Low*(Amps): | |
| LRA Half Winding (Amps): | |
| MCC (Amps): | 13.6 |
| Max Operating Current (Amps): | 10.2 |
| RLA, MCC/1.4(use for contactor selection)(Amps): | 9.7 |
| RLA, MCC/1.56(use for breaker & wire size selection)(Amps): | 8.7 |
| RPM: | 3500 |
| Box IP : | 21 |
| UL File No: | SA-2337 |
| 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 |
|----------------------------|---------|---------|----------|-------|------------------|
| No data available in table | | | | | |

Alternate Applications

| Refrigerant | Voltage | Phase | Frequency | Application |
|-------------|---------|-------|-----------|------------------|
| R-410A HFC | 380/420 | 3 | 50 | Air Conditioning |

Service Parts

| Reference | Component | Quantity | Description | Comment |
|-----------|-------------|----------|---------------------------------|--|
| 1 | 918-0041-00 | 1 | HEATER-CRANKCASE | 240V 40W WRAP AROUND |
| 1 | 918-0041-01 | 1 | HEATER-CRANKCASE | 120V 40W WRAP AROUND |
| 2 | 527-0116-00 | 1 | SPACER-MOUNTING ASSM | |
| 7 | 998-0510-98 | 1 | VLV KIT 1/2"SWT/1-14UNC | DISCHARGE ROTALOCK |
| 8 | 998-0510-90 | 1 | VLV KIT 7/8"SWT / 11/4-12UNC | SUCTION ROTALOCK |
| 9 | 998-7026-00 | 1 | HEATER JUNCTION BOX KIT | |
| 99 | 529-0060-24 | 1 | POWER CABLE-MOLDED PLUG | |
| 99 | 998-0034-02 | 1 | SERV ADAPTOR KIT 7/8 STUB | SWEAT TO ROTALOCK ADAPTER KIT SUCTION |
| 99 | 998-0034-08 | 1 | ADPTR 11/4-12 TO 7/8 ID | ROTALOCK TO SWEAT ADAPTER KIT SUCTION |
| 99 | 998-0034-15 | 1 | SERV ADAPTOR KIT 1/2 STUB | SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE |

Accessories

| Accessories | | |
|------------------------------|-------------------|---|
| Category | Part Number | Description |
| (1) Variable Frequency Drive | EVH-344012-R54BDB | EVH, 3Ø, 380-480v, Output 380-480v@11A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X |
| 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 | 018-0096-00 | 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 |
| Crankcase Heaters | 018-0096-03 | Crankcase Heater, 575V, 40W, 21.75" Lead Length |

Electrical Components

| Electrical Components | |
|---------------------------------------|---------------------------|
| Part No: 071-0672-01 | Stator |
| Usage Description: Internal Protector | Part No: 546-2090-40 |
| <u>Vendor Part Number</u> | Usage Description: Stator |
| 34HM523 | Resistance: +/-7% |
| <u>Vendor Name</u> | Start Wdg: 2.52 |
| SENSATA | Run Wdg: 0.00 |

Nomenclature

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|--------------------------|
| ZP57K5E-TFD |
| Family Series |
| Z: Scroll |
| Application Range |
| P: A/C - R-410A/B |

Capacity**57K:** Capacity Multiplier-1000**Oil Type****E:** Polyol Ester**Motor Type****T:** 3 Phase**Motor Protection****F:** Internal Inherent Protection**Voltage****D:** 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

Alternate Application

| Refrigerant | Freq | Phase | Voltage | Application |
|----------------------------|------|-------|-----------|-------------|
| HFC R-410A | 50 | 3 Ø | 380/420 V | R1 AC |

Nomenclature

[ZP57K5E-TFD](#)

| Date | Data Group | Field | Old Data | New Data |
|-------------|-------------|-------------|----------|----------|
| 18-Jul-2011 | Status | Status | P | A |
| 18-Jul-2011 | RatingRefNo | RatingRefNo | 11-269 | 11-502 |
| 11-Apr-2011 | RatingRefNo | RatingRefNo | 10-907 | 11-269 |
| 11-Sep-2012 | Rating | PubCode | | Y |
| 11-Oct-2010 | Rating | PubCode | | PRE |
| 26-Feb-2010 | Rating | PubCode | | N |
| 19-Dec-2010 | Elec | Hi LRA | N/A | 66.1 |
| 19-Dec-2010 | Elec | Max OpCur | 12.8 | 10.2 |
| 19-Dec-2010 | Elec | MCC | N/A | 13.6 |
| 19-Dec-2010 | Elec | RLA | N/A | 9.7 |