# ZR57K3E-TF5

HCFC, R-22, 60 Hz, 3 - Phase, 200/230 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

|                            |       | Performano | e          |         |
|----------------------------|-------|------------|------------|---------|
| Evaporator Temp. (°F)      |       |            | 45         | 45      |
| Condensing Temp. (°F)      |       |            | 130        | 100     |
| Return Gas Temp. (°F)      |       |            | 65         | 65      |
| Liquid Temp. (°F)          |       |            | 115        | 85      |
| Capacity (BTU/hr)          |       |            | 58500      | 68500   |
| Power (W):                 |       |            | 4980       | 3430    |
| Current (Amps):            |       |            | 14.5       | 11.1    |
| EER(BTU/Wh):               |       |            | 11.7       | 20      |
| Mass Flow (lbs/hr):        |       |            | 860        | 880     |
| Sound Data @               |       |            |            |         |
| Sound Power (dBA):         |       |            | 74 Avg     | 79 Max  |
| Vibration mils(peak-peak): |       |            | 2.0 Avg    | 3.0 Max |
| Record Date:               |       |            | 2014-03-06 |         |
|                            |       | Mechanica  | ı          |         |
| Displacement (in^3/Rev):   | 4.71  |            |            |         |
| Displacement (ft^3/Hr):    |       |            |            |         |
| Overall Length (in):       | 9.69  |            |            |         |
| Overall Width (in):        | 9.69  |            |            |         |
| Overall Height (in):       | 17.24 |            |            |         |
| Mounting Length (in):      | 7.50  |            |            |         |
| Mounting Width (in):       | 7.50  |            |            |         |

| Mounting Height (in):        | 17.99      |
|------------------------------|------------|
| Suction Size (in),Type:      | 7 / 8 Stub |
| Discharge Size (in),Type:    | 1 / 2 Stub |
| Initial Oil Charge (oz):     | 66         |
| Oil Recharge (oz):           | 62         |
| Net Weight (lbs):            | 85.0       |
| Internal Free Volume (in^3): | 257        |
| Horse Power:                 | 4.8        |

 $<sup>{}^*\</sup>text{Overall compressor height on Copeland Brand Product's } \textbf{\textit{specifical}} \textbf{\textit{m}} \textbf{\textit{ounting grommets}}.$ 

| LRA High* (Amps):   | 123.0      |
|---|------------|
| LRA Low*(Amps):   |            |
| LRA Half Winding (Amps):                                    |            |
| MCC (Amps):   | 27         |
| Max Operating Current (Amps):                               | 18.0       |
| RLA, MCC/1.4(use for contactor selection)(Amps):            | 19.3       |
| RLA, MCC/1.56(use for breaker & wire size selection)(Amps): | 17.3       |
| RPM:  | 3500       |
| Box IP:   | 21         |
| UL File No:   | SA-2337    |
| UL File Date:   | 1993-07-26 |

<sup>\*</sup>Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

### Capacitors

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No data available in table

# **Alternate Applications**

| Refrigerant | Voltage | Phase | Frequency | Application      |
|-------------|---------|-------|-----------|------------------|
| R-22 HCFC   | 200/220 | 3     | 50        | Air Conditioning |
| R-407C HFC  | 200/220 | 3     | 50        | Air Conditioning |
| R-407C HFC  | 200/230 | 3     | 60        | Air Conditioning |

# Service Parts

| mponent (3-0043-00 | • | Description          | Comment              |
|--------------------|---|----------------------|----------------------|
| 3-0043-00          | 1 |                      |                      |
|                    | ı | HEATER-CRANKCASE     | 240V 70W WRAP AROUND |
| 3-0043-01          | 1 | HEATER-CRANKCASE     | 480V 70W WRAP AROUND |
| 7-0116-00          | 1 | SPACER-MOUNTING ASSM |                      |
|                    |   |                      |                      |

### Accessories

|                                 |                       | Accessories   |
|---------------------------------|-----------------------|---|
| Category                        | Part Number           | Description   |
| (1) Variable<br>Frequency Drive | EVM-322025-<br>E20ENN | EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, Standard, No Options, Frame 2                                  |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R21BDB | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S           |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R54BEN | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2 |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R54BDN | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2              |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R21BEN | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2 |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R21BDN | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2              |
| (1) Variable<br>Frequency Drive | EVH-322025-<br>R54BDB | EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X           |
| (1) Variable<br>Frequency Drive | EVM-322025-<br>E20EFN | EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, With add on EMI filter, No Options, Frame 2                    |
| (1) Variable<br>Frequency Drive | EVM-322025-<br>N20MFN | EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, With add on EMI filter, No Options, Frame 2                  |
| (1) Variable<br>Frequency Drive | EVM-322025-<br>N20MNN | EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, Standard, No Options, Frame 2                                |

### **Electrical Components**

Part No: 071-0519-02

Usage Description: Internal Protector

Vendor Part Number

35HM111

Vendor Name

ТΙ

Part No: 071-0519-38

Usage Description: Internal Protector

Vendor Part Number

35HM16230

Vendor Name

SENSATA

**Stator** 

Part No: 546-2062-42

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.69

Run Wdg: 0.00

**Stator** 

Part No: 546-2011-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.73

Run Wdg: 0.00

#### Nomenclature

#### ZR57K3E-TF5

# **Family Series**

Z: Scroll

#### **Application Range**

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

Capacity

**57K:** Capacity Multiplier-1000

Oil Type

E: Polyol Ester

**Motor Type** 

T: 3 Phase

#### **Motor Protection**

F: Internal Inherent Protection

Voltage

**5:** 60Hz (200/230-3) 50Hz (200/220-3)

# Miscellaneous

#### Alternate Application Refrigerant Freq Phase Voltage Application 200/220 V HCFC R-22 50 3 Ø R1 AC HFC R-407C 50 3 Ø 200/220 V R1 AC HFC R-407C 60 3 Ø 200/230 V R1 AC

#### Nomenclature

# ZR57K3E-TF5

| Date Data Group Field Old Data | New Data |
|--------------------------------|----------|
|--------------------------------|----------|

No data available in table