

Technical Documentation

# **RF00545C**

## **Rolled Steel TEFC | AEGH**

Date: December 1, 2016



### Technical Data Sheet

Motor Type: AEGH

Catalogue No: RF00545C

#### Nameplate Information

|           |            |                |             |             |              |                |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP        | Pole       | RPM            | Frame       | Voltage     | Hz           | Phase          |
| 5         | 4          | 1740           | 184TC       | 575         | 60           | 3              |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb.   | Rated Altitude |
| TEFC      | F          | 1.15           | Continuous  | B           | -40 to 40 °C | <3300 ft       |

#### Typical Performance

| Efficiency (%)    |                             |                                 |                                      | Power Factor (%)    |           |                                |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-----------|--------------------------------|
| Full Load         |                             | 3/4 Load                        | 1/2 Load                             | Full Load           | 3/4 Load  | 1/2 Load                       |
| Nom.              | Min.                        |                                 |                                      |                     |           |                                |
| 89.5              | 87.5                        | 90.0                            | 89.0                                 | 80.0                | 73.5      | 61.0                           |
| Torque            |                             |                                 |                                      | Current (A)         |           |                                |
| Full Load (lb-ft) | Locked Rotor (% FLT)        | Pull Up (% FLT)                 | Break Down (% FLT)                   | No Load             | Full Load | Locked Rotor                   |
| 15.09             | 215                         | 210                             | 300                                  | 1.3                 | 5.2       | 37                             |
| NEMA KVA Code     | Inertia (WR <sup>2</sup> )  |                                 |                                      | Safe Stall Time (s) |           | Noise Level Sound Press. dB(A) |
|                   | Rotor (lb-ft <sup>2</sup> ) | NEMA Load (lb-ft <sup>2</sup> ) | Max. Allowable (lb-ft <sup>2</sup> ) | Cold                | Hot       |                                |
| J                 | 0.416                       | 26.8                            | 99                                   | 30                  | 21        | 55                             |

#### VFD Duty Information

| Speed Range     |                 |                | VFD     |              | S.F.     |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type         |          |
| 6-60Hz          | 3-60Hz          | 60-120Hz       | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

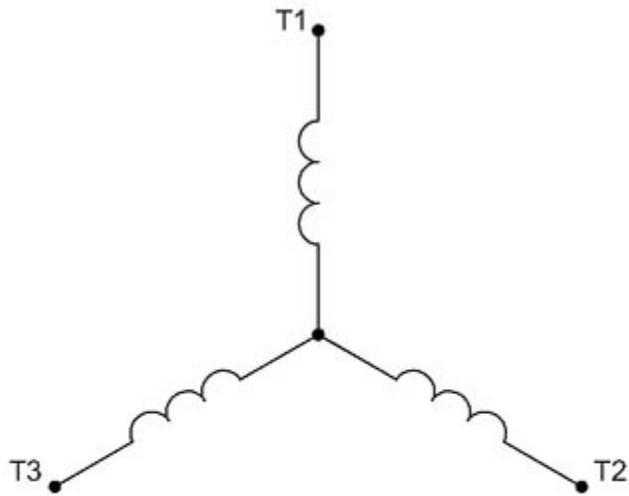
#### Additional Information

| Bearings |        | Approx. Weight |
|----------|--------|----------------|
| DE       | NDE    | lbs            |
| 6206ZZ   | 6205ZZ | 82             |

#### Hazardous Locations Information

|                            |       |
|----------------------------|-------|
| N/A                        |       |
| 0                          |       |
| 0                          |       |
| Temp Code (Sinewave / VFD) | 0 / 0 |

**Connection Diagram**

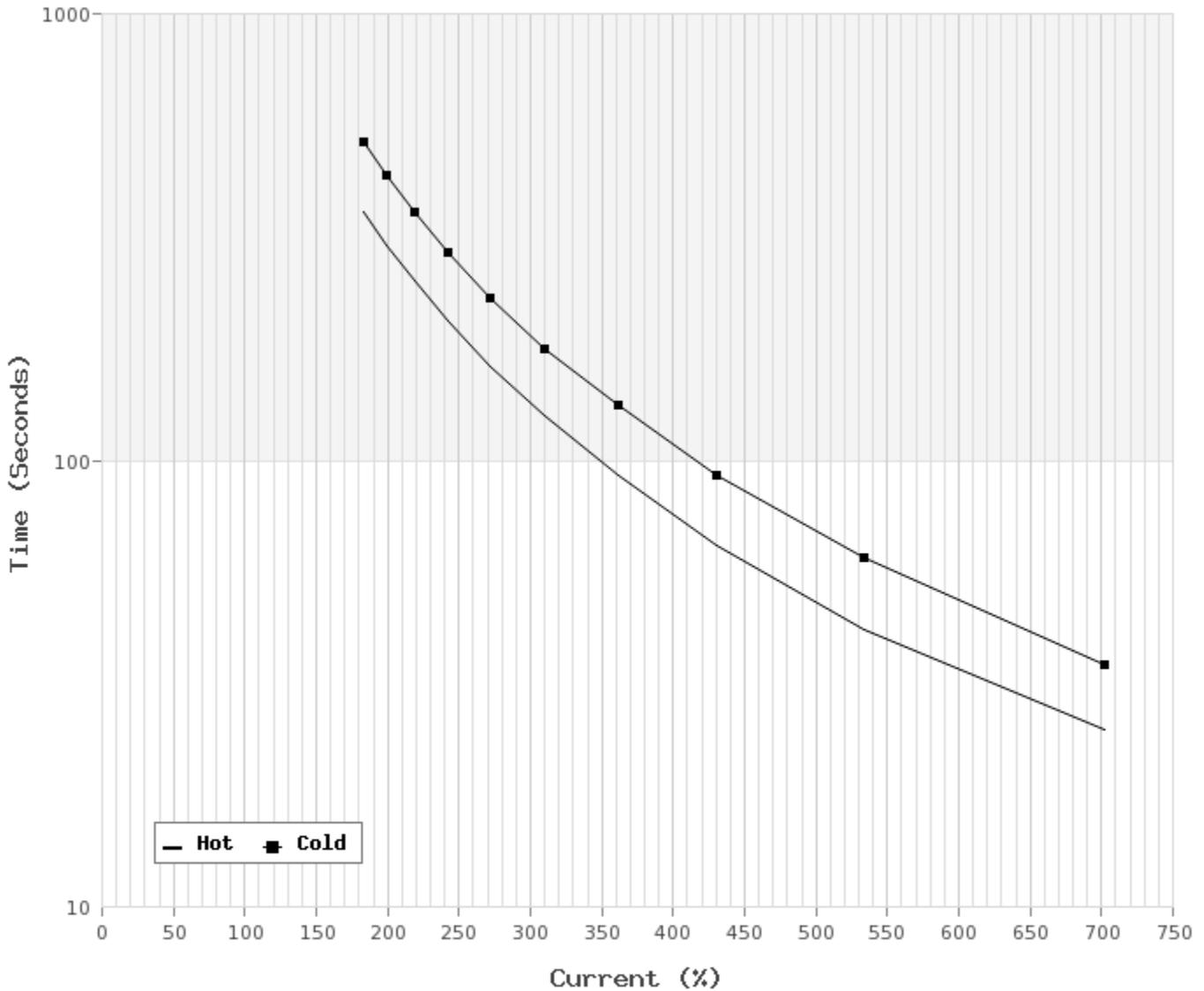


| 3 LEAD  |       | SINGLE VOLTAGE |    |    | WYE |
|---------|-------|----------------|----|----|-----|
| VOLTAGE | CONN. | L1             | L2 | L3 |     |
| -       | WYE   | 1              | 2  | 3  |     |

WD\_3Y

**Thermal Limit Curves**

|                  |               |                        |      |                           |             |
|------------------|---------------|------------------------|------|---------------------------|-------------|
| Motor Type: AEGH |               | Catalogue No: RF00545C |      | Family: Rolled Steel TEFC |             |
| HP               | 5             | Safe Stall Time        |      | Full Load A               | 0.0 / 5.2 A |
| Voltage          | 0 / 575V 60Hz | Hot                    | 21 s | Locked Rotor A            | 707 %       |
| RPM              | 1800          | Cold                   | 30 s | Locked Rotor A            | 0.0 / 37 A  |



**T-N and I-N Curves**

|                  |           |                        |             |                           |        |
|------------------|-----------|------------------------|-------------|---------------------------|--------|
| Motor Type: AEGH |           | Catalogue No: RF00545C |             | Family: Rolled Steel TEFC |        |
| HP               | 5         | Full Load T            | 15.09 lb-ft | Full Load A               | 5.2 A  |
| Voltage          | 575V 60Hz | Locked Rotor T         | 215 %       | Locked Rotor A            | 37.0 A |
| RPM              | 1800      | Pull Up T              | 210 %       | Break Down T              | 300 %  |

