

## RGZEESD TEFC Motors



NEMA Premium® Efficiency TEFC motors are the motors that can pay for themselves through energy savings. According to NEMA, electric motors consume 10 to 25 times their purchase price in electricity each year of operation. It is easy to see that increases in motor efficiency can significantly reduce operating costs. These motors are ideal for severe operating atmospheres in applications such as: chemical processing, mining, foundry, pulp and paper, waste management and petro/chemical.

### Performance Specifications

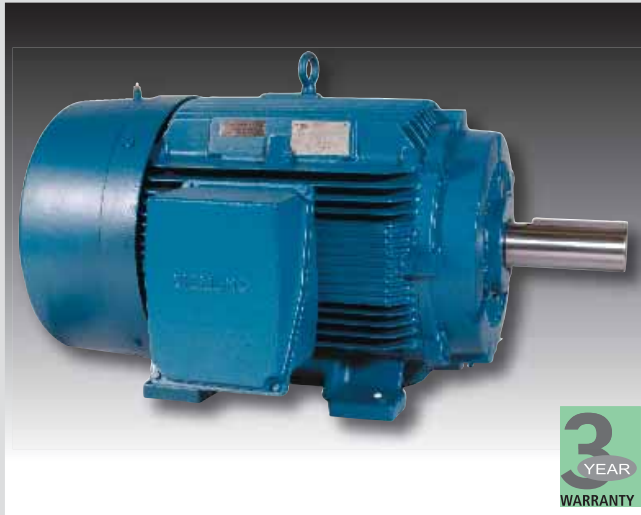
- 1 to 400 HP
- 1.15 service factor, 40°C ambient
- 3600, 1800 or 1200 RPM
- 3 phase, 60 Hz; 230/460 volt operation under 25 HP, 460 volt 25 HP and above; 200 and 575 volt available
- Meets or exceeds NEMA Premium Efficiencies
- Class F insulation, Class B temperature rise
- NEMA Design B, Continuous Duty
- 0.06 IPS vibration
- 143T through S449 frame



# nema MOTORS

## SIEMENS

# RGZEESD TEFC Motors



## Features for Long Life:

**Frame & End Shields** – Cast iron construction for exceptional structural integrity with condensation T-drains. Lifting eyebolts are included for all frames.

**Rotor** – A unique offset rotor bar design provides improved efficiency while larger bars and end rings reduce resistance for lower rotor losses. Each die cast aluminum rotor assembly is dynamically balanced for extended bearing life, and includes a high-strength carbon steel (C1045) shaft for maximum rotor performance.

**Stator/Windings** – Manufactured with premium electrical-grade steel laminations and copper electrical magnet wire to lower losses for improved efficiencies. A unique stator core design lowers flux density while increasing cooling capacity. Large conductor cross section reduces resistance, also lowering stator losses.

**Insulation** – Proprietary inverter-rated Class F non-hygroscopic insulation system with NEMA Class B temperature rise, provides an extra margin of thermal life. Varnish system application ensures maximum wire penetration to provide protection from moisture, corrosion and electrical shock. This insulation system meets or exceeds NEMA MG1-2003, Part 31 making all motors suitable for operation with variable frequency drives.

**Cooling** – A bi-directional, non-sparking fan is locked and keyed to the shaft. Its low-inertia design reduces windage losses, improves airflow, reduces noise and provides dependable cooling. Cast iron fan covers are provided on all frame sizes.

**Bearings** – Regreasable, oversized single-shielded with cast iron inner caps. Alemite grease fittings on the inlets and pipe plugs on the relief ports for ease of routine maintenance. All motors are equipped with drive end and opposite drive end shaft V-ring slingers for added bearing protection. Provisions for Inpro/Seal® bearing isolators are standard on both ends.

**Lubrication** – A specially formulated, high temperature tested, polyurea-based grease is used to provide more than four times the lubrication life of other polyurea greases.

**Oversized Conduit Box** – Cast iron construction that is larger than industry standards, diagonally split, neoprene-gasketed and rotatable in 90° increments for quick and easy connections. Includes a ground lug and non-wicking, clearly and permanently marked leads.

**Corrosion Resistance** – Cast iron construction, zinc-plated hardware, epoxy enamel paint and stainless steel nameplate resist rust and corrosion.

**Modifiable** – All Siemens motors are available with a wide variety of modifications to meet your specific motor needs.

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