

These high efficiency explosion-proof motors are UL<sup>®</sup> listed for dust ignition proof environments, and are suitable for use in Class I, Group D, Class II, Groups F & G or Class I, Group C. Division 1 hazardous areas. They are ideal for use in applications such as chemical processing, mining, foundry, pulp and paper, waste management, and petro/ chemical.

## Performance Specifications

- 1 to 300 HP
- 1.0 service factor, 40°C ambient
- T3B temperature code (Group D)
- T3C temperature code (Group C)
- 3600, 1800, 1200, or 900 RPM
- 3 phase, 60 Hz; 230/460 volt operation under 25 HP, 460 volt 25 HP and above; 200 & 575 volt available
- Class F insulation, Class B temperature rise
- NEMA design B, continuous duty



## SIEMENS

## **RGZZESD** TEFC Motors



## Features for A Long Life

**Frame & End Shields** – Cast iron frame and end shields for exceptional structural integrity, with sintered condensation drains on 404T – 449T frames. Lifting eyebolts are included for frames 213T to 449T.

**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 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. Two seriesconnected normally-closed Class B thermostats are supplied as standard.

**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 bearings with cast iron inner caps. Alemite grease fittings on the inlets, and pipe plugs on the relief ports for ease of routine maintenance. Frames 143T – 256T are equipped with a shaft seal on the drive end; 284T – 449T frames have a drive end V-ring slinger for added bearing life.

**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 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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MFL-01602-0106 New 5M0106M2 Printed in USA