

Inverter Duty High Efficiency
Severe Duty TEFC motors
are ideal for both variable
torque and constant torque
loads, designed for inverter or
vector applications. These
motors are well suited to be
used in adjustable speed
applications such as: centrifugal
fans, pumps, blowers, mixers,
machine tools, chemical
processing, mining, foundry,
pulp and paper, waste
management and petrol
chemical.

Performance Specifications

- 1 to 400 HP
- Variable Torque –
 Zero to base speed
- Constant Torque 1000:1, 10:1, 6:1, 4:1
- 1.15 service factor on sine wave power, 40°C ambient
- 1.0 service factor on inverter power
- 3600, 1800, 1200 or 900 RPM
- 3 phase, 60 Hz, 460 volt; 200, 230 & 575 volt available
- Meets or exceeds EPAct Efficiency standards
- Class F insulation, Class B temperature rise
- Continuous Duty
- 143T through S449 frame



SIEMENS

RGZESDITEFC & TEBC Motors



Features for Long Life

Frame & End Shields – Cast iron construction for exceptional structural integrity with condensation T-drains. Lifting eyebolts are included for frames 213T to S449.

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-duty Class F non-hygroscopic (corona resistant) insulation system with NEMA Class B temperature rise, provides an extra margin of thermal life. All motors are equipped with two series connected, normally closed, Class F thermostats for detection of overload conditions and/or excessive heating. Suitable for operation from adjustable speed drives with an insulation system that meets or exceeds NEMA MG1-2003, Part 31.

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. For added bearing protection, 143T-256T frames have a drive end shaft seal and 284T-S449 frames have a drive end shaft V-ring slinger.

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, neoprenegasketed 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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