

The new GP100A series of general purpose TEFC motors exceeds NEMA Premium® efficiency standards to significantly reduce operating costs and pay for themselves in a short time through energy savings. These industry workhorses are ideal for use in material handling, pump, fan, compressor and other industrial applications.

## **Performance Specifications**

- 1 to 20 HP
- 1.15 service factor, 40°C ambient
- 3600, 1800 or 1200 RPM
- 3 phase, 60 Hz; 208-230/460 and 575 volt operation
- Exceeds NEMA Premium efficiency standards
- Class F insulation, Class B temperature rise @ 1.0 SF
- NEMA Design B, Continuous Duty
- 143T through 256T frame



**SIEMENS** 

## **GP100A**TEFC Motors



## Features for a Long Service Life:

Frame & End Shields – Die cast aluminum construction for exceptional heat dissipation and structural integrity, equipped with bolt-on feet and condensation drain holes. Lifting provisions are included for frames 180T to 256T. Unique frame fin design maximizes cooling.

**Copper Rotor** – Siemens exclusive, leading-edge, die cast copper rotor design provides industry-leading efficiencies. Each die cast copper 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 electricalgrade 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 and lowers stator losses.

Insulation – Proprietary inverter-rated NEMA Class F non-hygroscopic insulation system with Class B temperature rise @ 1.0 SF 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 air flow, reduces noise and provides dependable cooling. Structural foam fan covers are provided on all frame sizes.

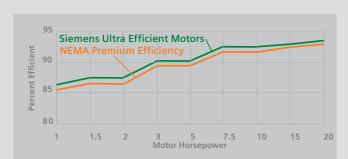
**Bearings** – Lubricated for life, oversized, complete with external bearing protection.

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

**Oversized Conduit Box** – Cast aluminum 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** – Die cast aluminum construction, structural foam fan and fan cover, zinc-plated hardware, epoxy enamel paint and aluminum nameplate resist corrosion.

**Modifiable** – Siemens GP100A motors are available with a variety of modifications and kits.



Siemens GP100A Motors are NEMA Premium Ultra Efficient – Look to these motors for the ultimate in energy cost savings with higher efficiencies than NEMA Premium standards.

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