SD100 IEEE841
TEFC Motors

NEMA PREMIUM • IEEE 841 • CAST IRON FRAME

The new SD100 line of IEEE841 motors exceeds IEEE841-2001 standards for energy efficiency, high performance, variable speed operation, rugged construction and long service life for the most demanding applications. They are ideal for use in chemical processing, mining, foundry, pulp and paper, waste management and petro/ chemical applications.

Performance Specifications

- 1 to 20 HP
- 1.15 service factor, 40°C ambient
- 3600, 1800, 1200 or 900 RPM
- 3 phase, 60 Hz; 460 and 575 volt operation
- Exceeds IEEE841-2001 standards
- Exceeds NEMA Premium efficiency standards
- Class F insulation, Class B temperature rise @ 1.0 SF
- NEMA Design B, Continuous Duty
- 0.06 IPS vibration / 0.005" foot flatness or better
- 143T through 256T Frame

NEMA Premium

nema MOTORS

SIEMENS

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Features for a Long Life:

Frame & End Shields – Cast iron construction for exceptional structural integrity and corrosion resistance, equipped with integrally cast feet and condensation T-drains. 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 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 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. Cast iron fan covers are provided on all frame sizes.

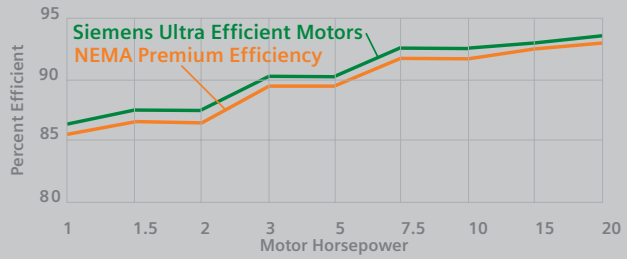
Bearings – Regreasable, oversized single-shielded with cast iron inner caps. Alemite grease inlet fittings and automatic grease relief fittings for ease of routine maintenance. Inpro/Seal® bearing isolators are standard on both bearing housings.

Lubrication – A specially formulated, high temperature-tested grease is used to provide more than four times the lubrication life of other polyurea greases. Seamless, grease-filled lubrication pipes are included.

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, structural foam fan, zinc-plated hardware, epoxy enamel paint and embossed stainless steel nameplate resist rust and corrosion. Internal surfaces coated with epoxy enamel.

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



Siemens SD100 IEEE841 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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NMFL-00106-0106 New 2M0106M2 Printed in USA