

Solid Shaft Motors

Vertical A.C. Motors, High Thrust



Horsepower: 3 – 5000 HP

Speeds: 3600 – 400 RPM

Design Voltages: 3 Phase/200-6900 Vac/50 or 60 Hz

Enclosures: Weather Protected Type I, Weather Protected Type II, Totally Enclosed Fan Cooled, and Hazardous Location

Frame Sizes: 182-9608



Product Overview and Options

More than 100 years of vertical motor design experience ensures U.S. MOTORS® brand solid shaft high-thrust motors satisfy the requirements for water/wastewater treatment industry use. These motors are constructed of high quality materials and are manufactured in a state-of-the-art, ISO9000-2000 facility.

Product Features:

- Class F insulation, Class B rise at full load
- 1.15 Service Factor - typical for WPI and WP II enclosures
- Service Factor - typical for TEFC and hazardous location enclosures

Options:

- Specific ambient temperatures
- Balanced to meet API 541 Fourth Edition specifications



Vertical Solid Shaft
High Thrust Motor

Upgrades

Inverter Duty – Premium efficiency coupled with an Inverter Grade® insulation system provide performance and reliability on sine wave or pulse-width modified variable frequency drive inverter power. The insulation system delivers superior pulse endurance to withstand waveform stresses produced by pulse width modulated drives.

- Pulse resistant magnetic wire
- Additional lacing on end turns

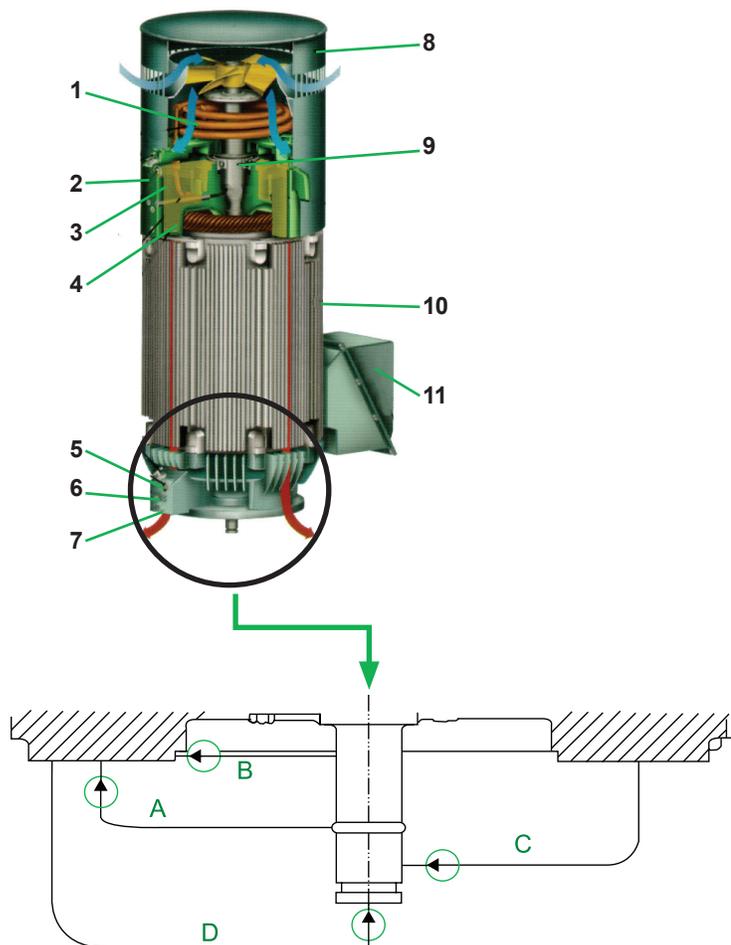
CORRO-DUTY® Motors – Additional features for harsh environments

- Cast-iron construction
- Internal and external corrosion resistant treatments

Product Overview and Options *continued*

Typical Solid Shaft Motor Construction:

1. Optional Cooling Coils
2. Bearing Temperature Probe Provision
3. Oil Sight Glass
4. Oversize Oil Sump
5. Oil Sight Glass
6. Bearing Temperature Probe Provision
7. Oil Drain
8. Heavy Steel or Cast Iron Fan Cover Guard
9. Precision Bearings (Multiple Options)
10. Rugged Cast Iron Frame, Brackets
11. Multiple Conduit Box Options



KEY

- A. Face Runout (0.001 in max tolerance)
- B. Register Runout (0.004 in max tolerance)
- C. Shaft Runout (0.001 in max tolerance)
- D. End Play (0.005 in max tolerance)

Enclosure and Warranty Information

Standard efficient – 12 month limited warranty from the date of installation or 18 months from the date of manufacture, whichever comes first.*

Energy efficient – 24 month limited warranty from the date of installation or 30 months from the date of manufacture, whichever comes first.*

Premium efficient – including Inverter Duty – 36 month limited warranty from the date of installation or 42 months from the date of manufacture, whichever comes first.*

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*For details, refer to: http://www.usmotors.com/FL600/Limited_Warranty.pdf

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NIDEC MOTOR CORPORATION

8050 W. Florissant Avenue | St. Louis, MO 63136
Phone: 888-637-7333 | Fax: 866-422-7758