

# TOSHIBA

Leading Innovation >>>



**Efficiency, Quality, & Performance (EQP) — The EQP Global™ SD is Toshiba's next-generation NEMA Premium® efficiency motor series.**

This cutting-edge motor product line is designed to meet or exceed the competitive demands of the global market, as well as the requirements of the Energy Independence & Security Act of 2007 (EISA), while maintaining the high reliability and quality expected from Toshiba.

The EQP Global SD motor series is designed for severe duty applications. Building on over 20 years of success with our EQPIII motor series, the EQP Global SD features multiple new design enhancements that make it one of the lowest cost-of-ownership products in the industry.

Our EQP philosophy extends beyond great products. We provide solutions and Global Supply Chain Management Systems (GSCMS) to meet the evolving needs of our global customers.

- NEMA Premium® Efficiency (1 through 500 HP)
- Meets or Exceeds Energy Independence & Security Act of 2007 (EISA)
- Addresses Global Motor Specifications Including CE, NEMA, & IEC
- Dual-Frequency 50/60 Hz Design (50/60 Hz Listed on Nameplate on 1 through 75 HP)
- Inverter-Duty Rated
- Multi-Mount on 140 Through 445 & N449 Frames
- Cast Iron Conduit Box as Standard



**3** Year Warranty

Horsepower	¼ to 700 HP
Speed (60 Hz) (50 Hz)*	3600, 1800, or 1200 RPM 3000, 1500, or 1000 RPM
Voltage (60 Hz) (50 Hz)*	230/460, 460, or 575 V 190/380 or 380 V
Enclosure	Totally Enclosed Fan Cooled
Frame Size	143T through 5810U
Protection	IP54
Construction	Cast Iron (Frame, Brackets, & Conduit Box)
Insulation	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Vibration	Typically 0.08 Inches/Second or Less (Unfiltered)
Mounting	Motors Suitable for Horizontal & Vertical Mounting; Motors also Available with C-Face Mounting
Environment	Severe Duty, Suitable for Use in Division 2 Hazardous Locations

\*50/60 Hz Listed on Nameplate on 1 through 75 HP



**EQP Global SD**  
LOW VOLTAGE MOTOR  
SEVERE DUTY

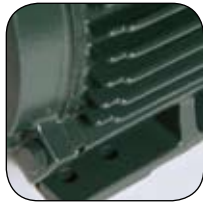


## EQP GLOBAL - BUILT FOR SEVERE DUTY APPLICATIONS



### Nameplate

- Stainless Steel
- NEMA Premium® Design
- Etched Lettering
- Dual-Frequency 50/60 Hz on Nameplate
- Inverter Duty Rating on Nameplate (1 to 200 HP, 4- & 6-Pole)



### Construction

- Cast Iron Frame & Bearing Brackets
- Shaft Slinger Protection
- Multi-Mount on 140 Through 445 & N449 Frames
- Gasket Provided Between Motor Frame & Conduit Box
- Typical Unfiltered Vibration Levels of 0.08 Inches/Second or Less
- IP54 Protection
- Multiple Drain Provisions for Horizontal & Vertical Mounting



### Conduit Box

- Gasketed Cast Iron Construction
- Provision for Grounding
- Terminal Lugs on 280 Frame & Larger
- Rotatable (90°)
- NPT Drill & Tap Conduit Opening



### Bearing System

- Oversized 300 Series Bearings on All Frames (DE & ODE)
- Regreasable 280 Frame and Larger
- Locked Drive-End Bearing 210 Frame & Larger
- Low Temperature-Rise for Extended Life
- L-10 Life of 150,000 Hours for Direct-Coupled Applications
- L-10 Life of 40,000 Hours for Belted Applications



### Insulation System

- Major Components Made from Class H Rated Materials
- Low-Loss Electrical Steel
- Exceeds NEMA MG1 Part 31
- 20:1 Constant Torque & 60:1 Variable Torque (1 to 200 HP, 4- & 6-Pole)
- Voltage Withstand Capability of 2000 V in 0.1 μs
- Large Thermal Margins for Extended Life & Reliability
- Phase Paper & Coil Bracing on Both Ends on All Motor Ratings



### Testing

- 100% No-Load Commercial Test per IEEE 112 on All Motors
- On 440 Frame & Larger:
  - » Commercial Test & Vibration Test
  - » 100% of Bearings are Ball-Pass Frequency Tested

