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 though 75 HP)
- Inverter-Duty Rated
- Multi-Mount on 140 Through 445 & N449 Frames
- Cast Iron Conduit Box as Standard

### EQP Global SD

**LOW VOLTAGE MOTOR**

**SEVERE DUTY**

<table>
<thead>
<tr>
<th>Horsepower</th>
<th>¾ to 700 HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed (60 Hz)</td>
<td>3600, 1800, or 1200 RPM</td>
</tr>
<tr>
<td>(50 Hz)*</td>
<td>3000, 1500, or 1000 RPM</td>
</tr>
<tr>
<td>Voltage (60 Hz)</td>
<td>230/460, 460, or 575 V</td>
</tr>
<tr>
<td>(50 Hz)*</td>
<td>190/380 or 380 V</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Totally Enclosed Fan Cooled</td>
</tr>
<tr>
<td>Frame Size</td>
<td>143T through 5810U</td>
</tr>
<tr>
<td>Protection</td>
<td>IP54</td>
</tr>
<tr>
<td>Construction</td>
<td>Cast Iron (Frame, Brackets, &amp; Conduit Box)</td>
</tr>
<tr>
<td>Insulation</td>
<td>Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)</td>
</tr>
<tr>
<td>Vibration</td>
<td>Typically 0.08 Inches/Second or Less (Unfiltered)</td>
</tr>
<tr>
<td>Mounting</td>
<td>Motors Suitable for Horizontal &amp; Vertical Mounting; Motors also Available with C-Face Mounting</td>
</tr>
<tr>
<td>Environment</td>
<td>Severe Duty, Suitable for Use in Division 2 Hazardous Locations</td>
</tr>
</tbody>
</table>

*50/60 Hz Listed on Nameplate on 1 though 75 HP*
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

© 2010 Toshiba International Corporation • Industrial Division • 13131 West Little York Road • Houston, Texas 77041 USA • Tel +713-466-0277 US 1-800-231-1412 • Rev. 110110