### **TOSHIBA** Leading Innovation >>>



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| Horsepower      | 125 to 600 HP  |
|-----------------|--|
| Speed (60 Hz)   | 1800, 1200, or 900 RPM                               |
| Voltage (60 Hz) | 460 or 575 V   |
| Enclosure       | Totally Enclosed Fan Cooled                          |
| Frame Size      | 505U through 5810U                                   |
| Protection      | IP55   |
| Construction    | Cast Iron (Frame, Bearing Brackets, & Conduit Box)   |
| Insulation      | Class F, Exceeds NEMA MG1 Part 31<br>(Inverter Duty) |
| Vibration       | Typically 0.10 Inches/Second or Less (Unfiltered)    |
| Environment     | Severe Duty  |
|                 |  |

#### Toshiba's Quarry Duty motor has a proven track record of exceeding the extreme demands of the aggregate & cement and mining & mineral industries.

The Quarry Duty motor utilizes a totally enclosed fan cooled design and provides exceptional high-starting torque, oversized superior-grade roller bearings, and shafts built with high strength 4142 steel to withstand the harshest environments. The roller bearings on the motor's drive-end allow for heavy radial loads normally associated with belt-driven applications. These key features allow our Quarry Duty motors to provide optimum reliability, performance, and efficiency for the toughest aggregate and mining operations.

- High-Starting Torque
- High Efficiency/NEMA Premium Efficiency Designs
- Cast Iron Construction
- 4142 Shaft Steel
- Bearing Lock Nuts for Vertical Mounting







# >>> QUARRY DUTY

## **BUILT FOR MINING OR AGGREGATE APPLICATIONS**





#### Nameplate

- Stainless Steel
- Etched Lettering
- Four-Rivet Mounting



#### Construction

- Cast Iron Frame & Bearing Brackets
- Totally Enclosed Fan Cooled
- 4142 High Strength Shaft Steel
- Corrosion-Resistant Grade-8 Hardware as Standard
- IP55 Protection



#### **Conduit Box**

- Gasketed Cast Iron Construction
- Provision for Grounding
- Lead Seal Protection
- Terminal Lugs
- Rotatable (90°)
- NPT Conduit Opening



#### **Bearing System**

- Oversized DE Roller Bearings
- Bearing Lock Nuts for Vertical Mounting
- DE Ring Shaft Slinger
- Efficient Flow-Through Grease Path for Improved Purging & Circulation



#### **Insulation System**

- Major Components Made from Class H Rated Materials
- Low-Loss Electrical Steel
- Exceeds NEMA MG1 Part 31
- 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 & Vibration Test on All Motors
- 100% of Bearings are Ball-Pass Frequency Tested
- Commercial Test Report with Vibration Data Supplied with All Motors









#### www.toshiba.com/tic

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