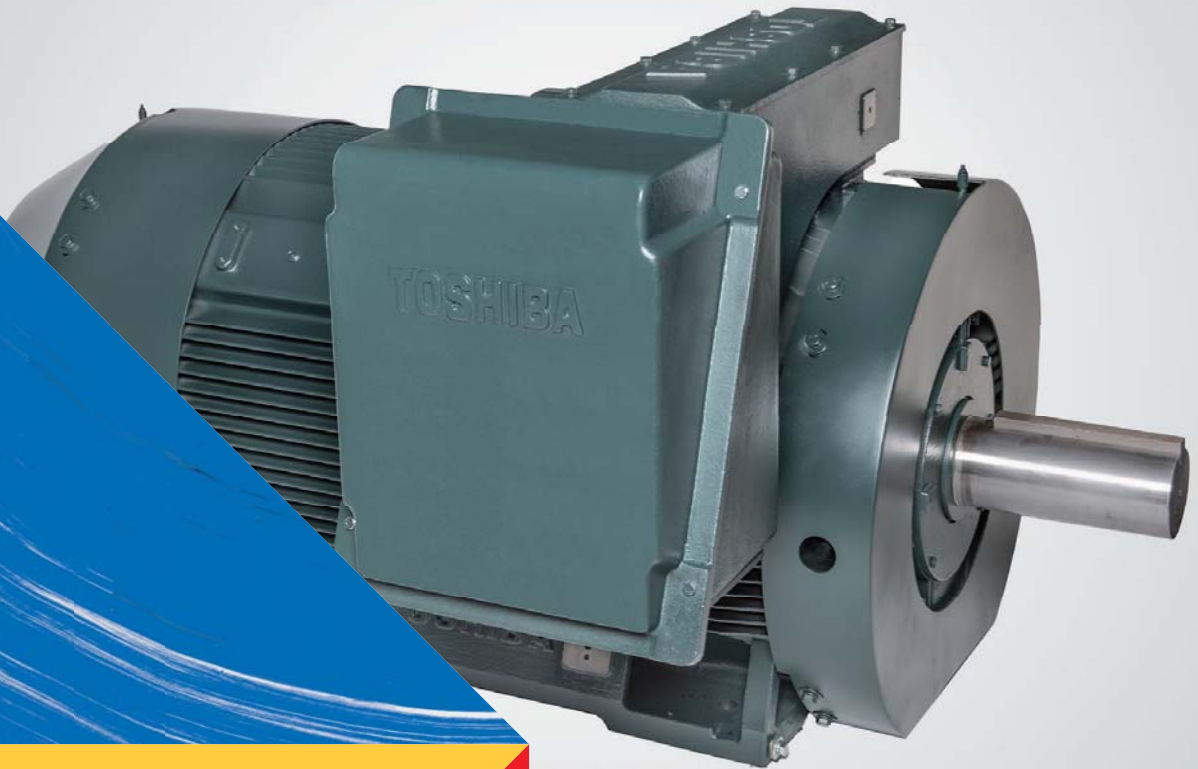


TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

LOW VOLTAGE MOTORS

EQP Global[®] QD 587 Frame



**QUARRY
DUTY**



Multi-Mount Terminal Box Design

- Simple F1, F2 or F3 Field Conversion



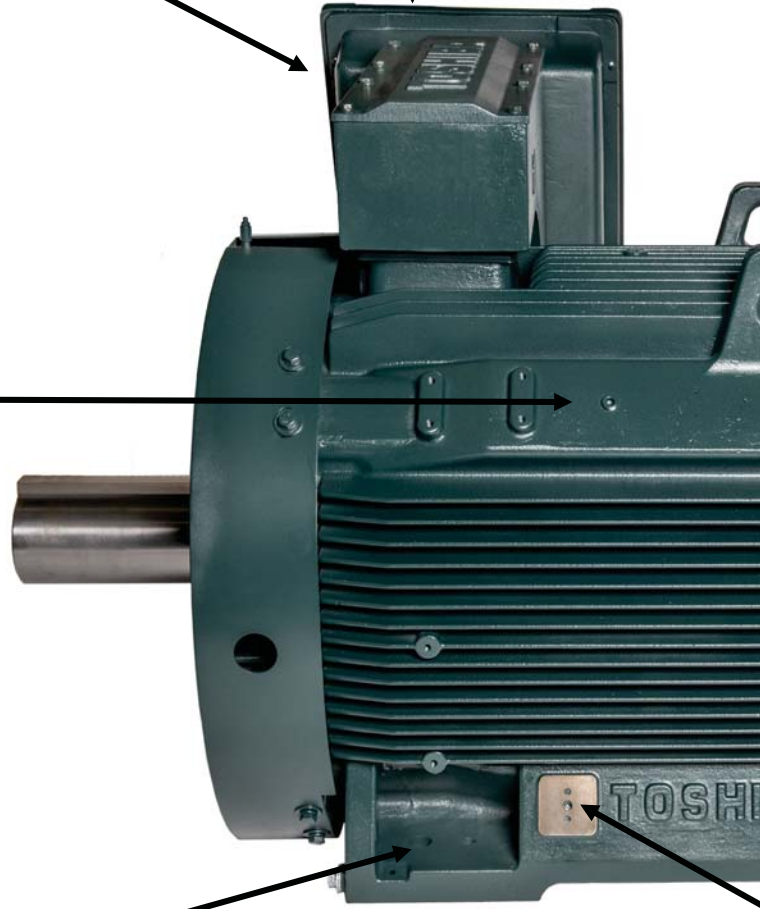
Terminal Box

- Two 3-Inch NPT Conduit Openings



Auxiliary Terminal Box Provision

- Easily Mount Auxiliary Boxes As Needed on DE & NDE
- F1 or F2



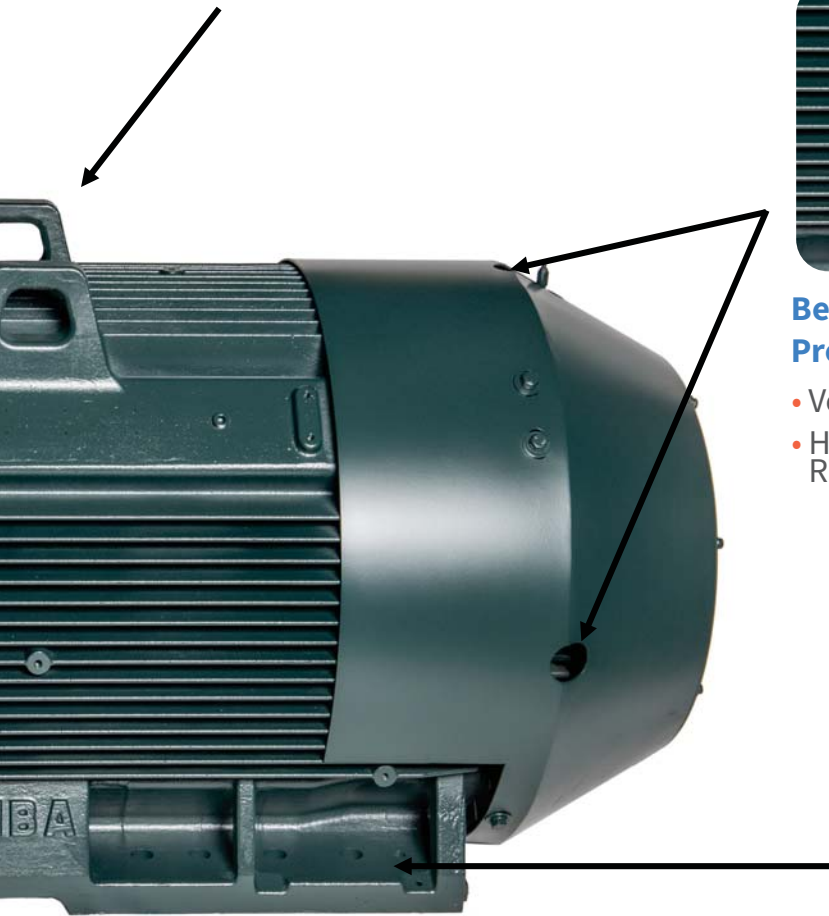
Vertical Jacking and Dowel Provisions

- Four Position Vertical Jacking
- Four Position Dowel Holes

TOSHIBA QUARRY DUTY S/B587 FRAME

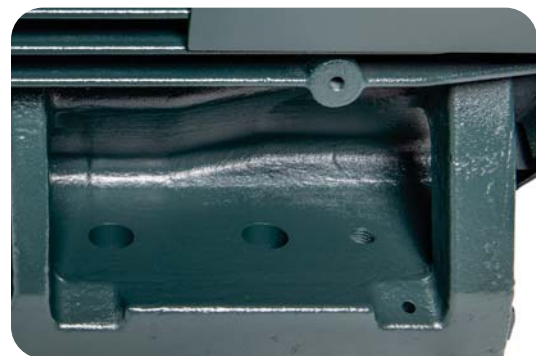
Providing exceptional high starting torques, Toshiba's S/B587 frame Quarry Duty motor utilizes a totally enclosed fan cooled design, oversized superior-grade bearings and high-strength steel shafts, all of which helps it withstand harsh environments and extends its operating life.

Cast Lifting Eye Provisions



Bearing RTD Provision/Vibration Transmitter Provisions on Both Ends F1, F2 & F3

- Vertical Provision for Vibration Sensor on DE & NDE
- Horizontal Provisions for Vibration Sensor or Bearing RTDs on DE & NDE



Multi-Mount

- S586 & S587
- B587/8/9/10



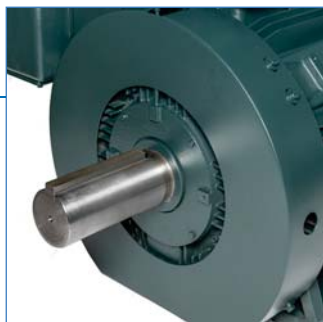
Grounding Pad Provisions

GENERAL FEATURES

- Improved Versatility
- 250 HP to 750 HP
- High Starting Torque
- IP55 Rated
- Cast-Iron Frame & Bearing Brackets
- Multiple Mounting Capability

INDUSTRY SHAFT OPTIONS

- Designed for Drop-In Replacement of Motors Currently in the Market
- Shaft Material AISI 4142 High Strength Steel



TERMINAL BOX

- Easy Field Modification for F1, F2 or F3 Positioning
- Gasketed Cast Iron
- Two 3-Inch NPT Conduit Openings
- UL® Grounding Lug Provision
- Rotatable 90° Increments
- Lead Seal Gasket



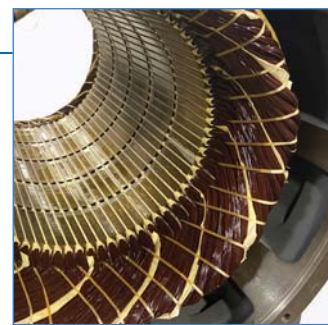
BEARINGS

- Oversized 300 Series Roller Bearings
- L-10 Minimum 40,000 Hours Belted
- Bearing Lock Nuts Provided for Vertical Shaft Mounting



INSULATION

- Low-Loss Electrical Steel
- Phase Paper & Coil Bracing on DE & ODE
- Inverter Rated Magnet Wire Can Withstand 2000V Peak and Rise Time of 0.1 μs
- Exceeds Applicable NEMA MG1 Part 31 Requirements
- Class F System with Class H Magnet Wired, Varnish, Slot Cell & Phase Paper
- Built with C5 Laminations to Withstand Over 1300°C Burnout Temperature



D-FLANGES

- D25 & D32 Flanges Usable on Both Frames; Available As Production Only
- Flanges Designed for Maximum 4.125" Shaft Diameter
- D25 Flange Supports Entire Motor Weight of S587 Frame Only
- D32 Flange Supports the Entire Motor Weight of Both Frames



OPTIONAL FEATURES

- Insulated Bearings
- C or D Flanges
- Drip Covers
- Tropicalized Winding Varnish
- Fungus-Proof Protective Coating
- Shaft Grounding Devices
- Thermal Protection (RTDs, Thermostats, Thermistors)
- Space Heaters
- Auxiliary Boxes (F1 & F2 Locations)

TESTING

- 100% No-Load Commercial Test
- Vibration Test
- Commercial Test Report with Vibration Data

INDUSTRIES SERVED

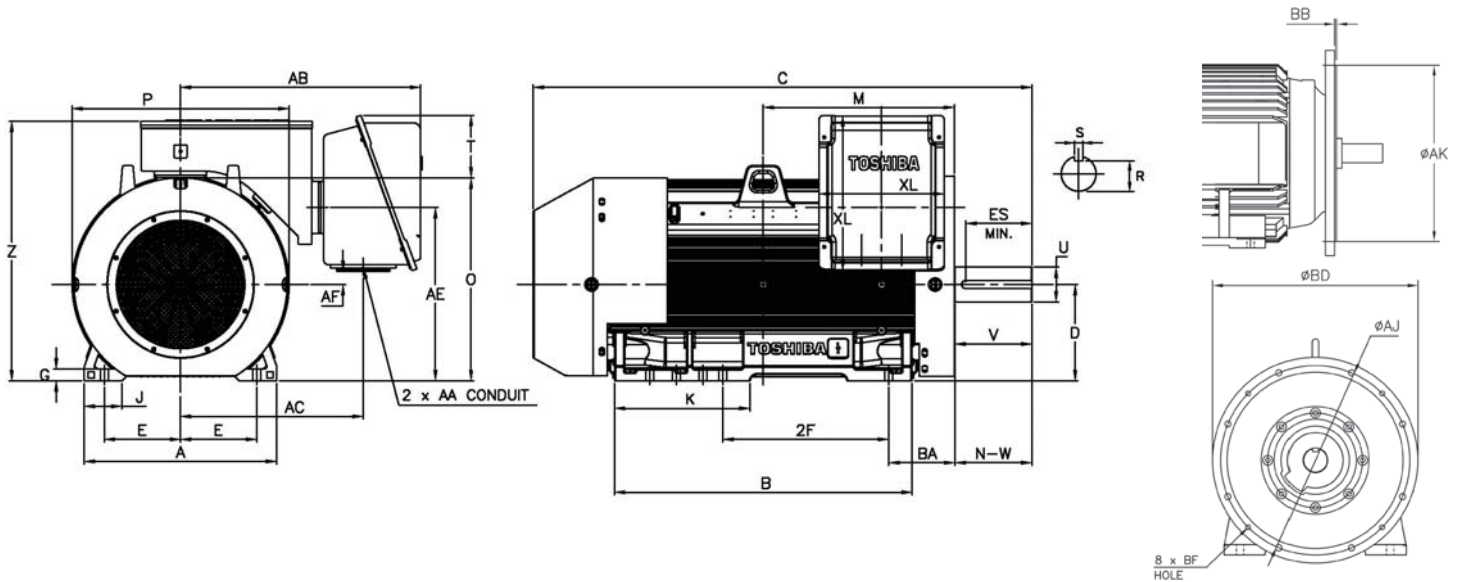
- Mining & Minerals
- Aggregate & Cement

APPLICATIONS

- Conveyors
- Crushers
- Compressors
- Mills
- Centrifuges
- Rotary Kilns
- Flotation Cells



S586/7 & B587/8/9/10 FRAME DIMENSIONS



| Frame | Motor Dimensions | | | | | | | | | | | |
|----------------|------------------|------|------|------|------|-----|------|------|------|------|-----|------|
| | A | B | C | D | G | J | K | M | O | P | T | Z |
| S586/7LQ | 29.0 | 34.5 | 63.4 | 14.5 | 1.6 | 5.7 | 11.3 | 22.9 | 30.6 | 32.7 | 9.3 | 39.2 |
| S586/7L* | 29.0 | 34.5 | 63.4 | 14.5 | 1.6 | 5.7 | 11.3 | 22.9 | 30.6 | 32.7 | 9.3 | 39.2 |
| B587/8/9/10LL | 29.0 | 45.0 | 75.2 | 14.5 | 1.78 | 5.7 | 20.4 | 28.8 | 30.6 | 32.7 | 9.3 | 39.2 |
| B587/8/9/10LQ* | 29.0 | 45.0 | 75.2 | 14.5 | 1.78 | 5.7 | 20.4 | 28.8 | 30.6 | 32.7 | 9.3 | 39.2 |

| Frame | Mounting | | | | Shaft Extension | | | Key Seat | | | Bearings | |
|----------------|----------|-------------|------|------|-----------------|-------|-------|----------|------|-------|-----------|---------|
| | E | 2F | H | BA | N-W | V | U | R | S | ES | LS ROLLER | OS BALL |
| S586/7LQ | 11.5 | 22.0/25.0 | 1.19 | 10.0 | 11.625 | 11.56 | 4.375 | 3.817 | 1.00 | 10.00 | NU324C3 | 6320C3 |
| S586/7L* | 11.5 | 22.0/25.0 | 1.19 | 10.0 | 11.625 | 11.56 | 3.875 | 3.309 | 1.00 | 10.00 | NU322C3 | 6320C3 |
| B587/8/9/10LL | 11.5 | 25/28/32/36 | 1.19 | 10.0 | 11.625 | 11.56 | 5.25 | 4.55 | 1.00 | 10.00 | NU328C3 | 6320C3 |
| B587/8/9/10LQ* | 11.5 | 25/28/32/36 | 1.19 | 10.0 | 11.625 | 11.56 | 4.375 | 3.817 | 1.00 | 10.00 | NU324C3 | 6320C3 |

| Frame | Conduit Box | | | | | | |
|------------------|-------------|------|------|------|------|------|------|
| | AA [NPT] | AB | AC | AE | AF | XL | XN |
| S586/7LQ/L | 3.00 | 36.2 | 27.5 | 26.1 | 1.97 | 23.5 | 18.9 |
| B587/8/9/10LL/LQ | 3.00 | 36.2 | 27.5 | 26.1 | 1.97 | 23.5 | 18.9 |

| Optional Interchangeable D-Flanges | | | | | |
|------------------------------------|------|----|----|----|------|
| Size | BB | AJ | AK | BD | BF |
| D25 | 0.25 | 22 | 18 | 25 | 0.81 |
| D32 | 0.25 | 30 | 28 | 32 | 1 |

* Optional shaft designs available through production

QUARRY DUTY 587 FRAME PERFORMANCE

| Voltage | RPM | HP | Frame | Model # | S.F. | FLA | LRA | LRT% | BDT% | |
|---------|------|--------|---------------|---------------|-------------|------|------|------|------|--|
| 460 | 1800 | 300 | S587LQ | 3004QDSB41A-R | 1.15 | 344 | 2440 | 210 | 285 | |
| | | 350 | S587LQ | 3504QDSB41A-R | 1.15 | 400 | 2746 | 200 | 275 | |
| | | 400 | S587LQ | 4004QDSB41A-R | 1.15 | 458 | 3101 | 200 | 275 | |
| | | 450 | S587LQ | 4504QDSB41A-R | 1.15 | 512 | 3466 | 200 | 270 | |
| | | 500 | B587LL | 5004QDSB41A-R | 1.15 | 589 | 4455 | 220 | 345 | |
| | | 600 | B587LL | 6004QDSB31A-R | 1.15 | 709 | 5193 | 215 | 335 | |
| | | 700 | B587LL | 7004QDSB31A-R | 1.15 | 829 | 6015 | 215 | 335 | |
| | 750 | B587LL | 7504QDSB31A-R | 1.0 | 898 | 6672 | 225 | 345 | | |
| | 1200 | 250 | S587LQ | 2506QDSB41A-R | 1.15 | 313 | 2203 | 190 | 295 | |
| | | 300 | S587LQ | 3006QDSB41A-R | 1.15 | 377 | 2650 | 195 | 295 | |
| | | 350 | S587LQ | 3506QDSB41A-R | 1.15 | 443 | 3118 | 195 | 300 | |
| | | 400 | S587LQ | 4006QDSB41A-R | 1.15 | 514 | 3527 | 195 | 295 | |
| | | 450 | B587LL | 4506QDSB41A-R | 1.15 | 564 | 3860 | 210 | 310 | |
| | | 500 | B587LL | 5006QDSB41A-R | 1.15 | 635 | 4396 | 215 | 315 | |
| | | 600 | B587LL | 6006QDSB31A-R | 1.15 | 773 | 5079 | 210 | 305 | |
| | 900 | 200 | S587LQ | 2008QDSB41A-R | Coming Soon | | | | | |
| | | 250 | S587LQ | 2508QDSB41A-R | Coming Soon | | | | | |
| | | 300 | S587LQ | 3008QDSB41A-R | Coming Soon | | | | | |
| | | 350 | S587LQ | 3508QDSB41A-R | Coming Soon | | | | | |
| | | 400 | B587LL | 4008QDSB41A-R | Coming Soon | | | | | |
| | | 450 | B587LL | 4508QDSB41A-R | Coming Soon | | | | | |
| 500 | | B587LL | 5008QDSB41A-R | Coming Soon | | | | | | |

