TOSHIBA

Leading Innovation

3 THREE YEAR WARRANTY

Horsepower	3 to 400 HP
Speed (60 Hz)	3600, 1800, or 1200 RPM
Voltage (60 Hz)	460 or 575 V
Enclosure	Totally Enclosed Fan Cooled
Frame Size	180T through N449 (HP & LP)
Construction	All Cast Iron
Insulation	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Thrust	Normal (HP), Medium (LP)
Thrust Ratings	520 to 1750 Pounds
Bearings	Thrust-Series for Minimum L-10 at 17,500 Hours
Environment	Severe Duty, Suitable for Use in Division 2 Hazardous Locations

Toshiba's Vertical P-Base motor series is designed with the mill & chemical and material processing industries in mind.

This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings – leading to a longer life and greater reliability.

In addition, our LP design meets API 610 specifications for chemical processing applications, and all motors include a patented lubrication system that provides improved flow and circulation of grease and oil for longer bearing life.

The Vertical P-Base motor can be used in indoor and outdoor applications and is available in normal thrust and medium thrust designs.

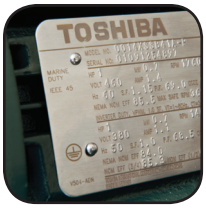
- EISA Efficiency Compliant
- Patented Lubrication System
- Normal & Medium Thrust Loads
- Inverter-Duty Rated
- IEEE 841 Designs Available
- Oil Mist Options Available

VERTICAL P-BASE

LOW VOLTAGE MOTOR
MILL & CHEMICAL DUTY

VERTICAL P-BASE

BUILT FOR MILL & CHEMICAL APPLICATIONS

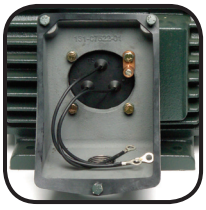


Nameplate

- Stainless Steel
- NEMA Premium® Design
- Inverter-Duty Rating on Nameplate (1 to 200 HP, 4- & 6-Pole)

Construction

- All Cast Iron Design for Mill & Chemical Applications with Cast Iron Drip Cover
- Motor Construction/Design Produce Vibration Levels Below IEEE 841
- Shaft/Slinger Bearing Protection (DE)
- Labyrinth Seal Standard on Top Bracket
- LP Design Meets API 610 Specifications
- Protective Coating on All Internal Machined Surfaces
- IP54 Protection
- IEEE 841 Design Available



Conduit Box

- Gasketed Cast Iron Construction
- UL Ground Lug
- Lead-Separation Protection
- Terminal Lugs on Frame 210 & Larger
- Rotatable (90°)
- NPT Drill & Tap Conduit Opening

Bearing System

- Low Temperature Rise for Extended Life
- L-10 Bearing Life of 17,520 Hours Based on Maximum Thrust Loading
- Low Friction Double-Lip Seal for Grease & Oil Mist Designs
- Open Regreasable Bearings with Inner Bearing Caps

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

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www.toshiba.com/motors