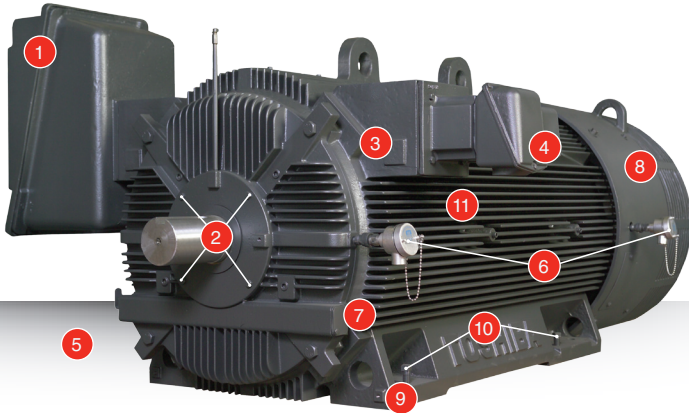


# TOSHIBA

Leading Innovation >>>



The Dura-Bull TX<sup>®</sup> offers what our customers care about most—superior performance, tri-mount capability, low maintenance, short delivery times, and competitive pricing. Its low temperature, low vibration design, advanced insulation system for drive applications, API 541 and API 547 4th Edition capabilities, along with its other standard features, provide additional value that our customers have come to expect from Toshiba.

Whether our customers need copper or die-cast aluminum rotors, or anti-friction or sleeve bearings, the Dura-Bull TX is the ideal solution.

## > ONE CALL. ONE SOLUTION.

Toshiba International Corporation is proud to be a single-source solution for our customers, offering a complete lineup of electric motors, adjustable speed drives, and motor controls for a variety of applications. Most products are completely designed, engineered, and manufactured at our one million square foot manufacturing facility located in Houston, Texas. This gives us the flexibility to customize our motors to perform beyond a wide variety of industrial and application requirements. We also have the capability to test our products together, as a complete system, before it goes out into the field—ensuring the highest level of quality, performance, and reliability.

- |     |   |
|-----|---|
| 1.  | Oversized Cast Iron Top-Mount T-Box Capability with 90-Step Rotational & Field-Replaceable F1 & F2 Positioning            |
| 2.  | Four-Position Air Gap Inspection Holes  |
| 3.  | Vibration Provision Mounting Pads   |
| 4.  | Boxes (Space Heater & Multi-Functional All Cast Iron Auxiliary Terminal Box)  |
| 5.  | Sufficient Clearance Between Box & Floor for Easy Connection  |
| 6.  | Bearing RTD Provisions – Oversized, Same Diameter Bearings on Both Ends for Extended Life                                 |
| 7.  | Cartridge-Type Field-Replaceable Grease Outlet  |
| 8.  | Side-Ventilated Heavy Duty Cast Iron or Fabricated Steel Fan Covers to Allow for Installation in Limited Spaces           |
| 9.  | Ground Terminals on All Four Corners of Frame with Vertical Jacking Screws & Four-Position Dowel Holes for Easy Alignment |
| 10. | Multi-Mount Capability for Replacement – 5009, 5010, 5011, 5809, 5810, 5811 with Same BA                                  |
| 11. | Available Copper Bar Design with API Style End Ring to Eliminate Need for Trim Balancing                                  |



## > RUGGED CONSTRUCTION FOR ULTIMATE DURABILITY

- |  |  |
|--|--|
| ▶ <b>HORSEPOWER:</b> 100 to 800 HP                   | ▶ <b>PROTECTION:</b> IP44 or IP55                                    |
| ▶ <b>SPEED (60 Hz):</b> 3600, 1800, 1200, or 900 RPM | ▶ <b>CONSTRUCTION:</b> Cast Iron Fin-Type                            |
| ▶ <b>VOLTAGE (60 Hz):</b> 2300, 4000, or 6600 V      | ▶ <b>INSULATION:</b> Class F, Meets NEMA MG1 Part 31 (Inverter Duty) |
| ▶ <b>ENCLOSURE:</b> Totally Enclosed Fan Cooled      | ▶ <b>MOUNTING:</b> Horizontal Foot Mounting                          |
| ▶ <b>FRAME SIZE:</b> 5011/5811 Multi-Mount           | ▶ <b>ENVIRONMENT:</b> Indoor & Outdoor Use                           |

# DURA-BULL TX<sup>®</sup>

## MEDIUM VOLTAGE MOTOR





## OUR TOUGHEST MEDIUM VOLTAGE MOTOR

Frame Size	5011/5811 Multi-Mount; Direct Coupled & Belt Drive (4-Pole & Greater)			
Pole Speed	2-, 4-, 6-, & 8-Pole			
Target Output	2-Pole	4-Pole	6-Pole	8-Pole
5009/10/11 TEFC	Up to 450 HP	Up to 500 HP	Up to 450 HP	Up to 250 HP
5809/10/11 TEFC	Up to 600 HP	Up to 800 HP	Up to 700 HP	Up to 500 HP
Voltage	2300, 4000, or 6600 V (Dual-Voltage Option Available)			
Frequency	50 or 60 Hz			
Insulation	Class F, Meets NEMA MG1 Part 31 (Inverter Duty)			
Service Factor	1.15			
Time Rating	Continuous			
Applicable Standards	NEMA MG1; API 541, API 547, IEEE 840 (As Requested); CSA Construction			

### OPERATING CONDITIONS

Ambient Temperature	-20° to 40°C
Humidity	<100%
Altitude	<3300 Feet (1000 Meters); Consult Factory for Higher Altitude Applications
Enclosure	Totally Enclosed Fan Cooled, Cast Iron Fin-Type
Starting Method	Direct On-Line, per NEMA
Starting Duty	(1) Hot or (2) Cold, per NEMA MG1
Allowable Load Wk <sup>2</sup>	Per NEMA MG1; 1/2 Wk <sup>2</sup> for 2-Pole
Area Classification	Class I, Division 2, Group C & D (T3 Temperature Code); Class II, Division 2, Group C & D (T3 Temperature Code)

### BEARING DETAILS

Type	Anti-Friction Bearing as Standard; Sleeve Bearing Option Available
Lubrication Type	Grease Lubrication - Chevron SRI or Equivalent; Oil Lubricant - ISO VG32
Temperature	55°C Rise Maximum at 1.15 Service Factor by RTD; 53°C Rise Maximum at 1.15 Service Factor When Sleeve Bearing is Specified
Insulation	OS Insulation Bearing

### CONSTRUCTION DETAILS

Mounting	Horizontal Foot Mounting
Direction of Rotation	Bi-Directional (2-Pole Uni-Directional)
T-Box Location	DE Side as Standard; Cast Iron F1
Number of Leads	Three or Six
Shaft Material	Hot-Rolled 1045 or 4142
Core Plate	C5
Frame/Brackets	Cast Iron
Rotor Cage	Aluminum Die Cast as Standard; Copper Bar Option Available
Construction	Non-Sparking

### APPLICABLE APPLICATIONS:

- Compressors
- Fans
- Pumps
- Conveyors

### APPLICABLE INDUSTRIES:

- Oil & Gas
- Mining & Minerals
- Pulp & Paper

