TOSHIBA

Leading Innovation >>>





The Dura-Bull TX® 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 variable frequency drive applications, latest edition API capabilities, along with its other standard features, provide additional value that our customers have come to expect from Toshiba.



- Oversized Cast Iron or Fabricated Steel Main Terminal Box Exceed NEMA MGI Volume Requirement
- NEMA MG1 Type II Main Terminal Box for 6800
- Top-Mount T-Box Capability with 90°-Step Rotational for 5800 and smaller
- Oversize Main T-Box Field-Replaceable and F1 & F2 Positioning for 5811 and Smaller
- Four-Position Air Gap Inspection Holes for Anti-Friction Bearing Design
- Vibration Provision Mounting Pads (Un-machined)
- Auxiliary Boxes for Space Heater and RTDs in F2 (Option for F1 Field Conversion)
- Sufficient Clearance Between Box and Floor for Easy Connection
- Space Heater 120V/1 Phase/60 Hz

- Bearing RTD Provisions
- Oversized, Same Diameter Bearings on Both Ends for Extended Bearing Life for Easy and Low-Cost Maintenance (Direct Coupled)
- Cartridge-Type Field-Replaceable Grease Outlet
- Side-Ventilated Heavy Duty Cast Iron (Option for Short Fabricated Steel Fan Covers to Allow for Installation in Limited Spaces)
- Ground Terminals on All Four Corners of Frame with Vertical Jacking Screws & Four-Position Dowel Holes for Easy Alignment
- Tri-Mount Capability for Drop-in Replacement 5009, 5010, 5011, 5809, 5810, 5811, 6809, 6810, 6811 with Same BA
- Available Copper Bar Design with API Style End Ring to Eliminate Need for Trim Balancing (Standard on 6811 Design)

> RUGGED CONSTRUCTION FOR ULTIMATE DURABILITY

- ▶ **HORSEPOWER**: 200 to 1250 HP
- **SPEED (60 Hz):** 3600, 1800, 1200, or 900 RPM
- ▶ **VOLTAGE (60 Hz):** 2300, 4000, or 6600 V
- ► ENCLOSURE: Totally Enclosed Fan Cooled
- **FRAME SIZE:** 5011/5811/6811 Tri-Mount
- WINDING: Form Wound Coils

- ▶ **PROTECTION**: IP54 or IP55 (IP55 For All Sleeve Designs)
- **CONSTRUCTION:** Cast Iron Fin-Type
- ▶ **INSULATION:** Class F, Meets NEMA MG1 Part 31 (Inverter Duty)
- ► MOUNTING: Horizontal Foot Mounting
- ► ENVIRONMENT: Indoor & Outdoor Use
- ▶ CLASS B: Temperature Rise at 1.0 SF by Resistance







GENERAL				
Frame Size	5011/5811/6811 Multi-Mount; Direct Coupled & Belt Drive (4-Pole & Greater)			
Pole Speed	2-, 4-, 6-, & 8-Pole			
Target Output (4000 V)	2-Pole	4-Pole	6-Pole	8-Pole
5009/10/11	Up to 450 HP	Up to 500 HP	Up to 450 HP	Up to 300 HP
5809/10/11	Up to 600 HP	Up to 800 HP	Up to 700 HP	Up to 500 HP
6809/10/11	Up to 1000 HP	Up to 1250	Up to 1000	Up to 800
Voltage	2300, 4000, or 6600 V (Dual-Voltage Option Available)			
Frequency	60 Hz (Option for 50 Hz)			
Insulation	Class F, Meets NEMA MG1 Part 31 (Inverter Duty); Contact Toshiba for Class H Option			
Service Factor	1.15 on Sine Wave Power			
Time Rating	Continuous			
Available Standards	NEMA MG1; API 541, API 547, IEEE 112; CSA Construction (Option for Applicable IEEE841 Features); Contact Toshiba for Other Standards			
OPERATING CONDITIONS				
Ambient Temperature	-25° 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 (Or Optional Toshiba T300MVi Adjustable Speed Drive)			
Starting Duty	(1) Hot or (2) Cold, per NEMA MG1; or 2 (Hot) / 3 Cold, per API			
Allowable Load Wk ²	Per NEMA MG1; 1/2 Wk² for 2-Pole			
Area Classification	Non-hazardous , Option for Class I, Division 2, Group A, B, C & D (T3 Temperature Code); Class II, Division 2, Group F & G (T3 Temperature Code)			
BEARING DETAILS				
Туре	Anti-Friction Bearing as Standard; Sleeve Bearing Option Available (6811 2-Pole Available with Sleeve Only)			
Lubrication Type	Grease Lubrication - Chevron SRI or Equivalent; Oil Lubricant - ISO VG32 for Sleeve Bearings Option			
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	Insulated NDE Bearing for Anti-Friction Bearing and Insulated Sleeve Bearings at Both Ends			
CONSTRUCTION DETAILS		.		
Mounting	Horizontal Foot Mounting			
Direction of Rotation	Bi-Directional for 4-Pole and Slower (2-Pole Uni-Directional)			
Main T-Box Location	F1 (Cast Iron for 5811 Frame and Smaller; Fabricated Steel for 6811 Frame Type II per NEMA MG1)			
Number of Leads	Three or Six			
Shaft Material	Hot-Rolled 1045 (4142 Standard for 2-Pole and Belt Drive)			
	C5			
Core Plate Grade	C5			
Core Plate Grade Frame/Brackets Material	C5 Cast Iron			
		s and Optional CI for 5811 a	nd Smaller	

APPLICABLE APPLICATIONS:

- Compressors
- Pumps

- Fans
- Conveyors

APPLICABLE INDUSTRIES:

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













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