

TOSHIBA

MEDIUM VOLTAGE MOTORS

TOP HAT TEAAC

(TOTALLY ENCLOSED AIR-to-AIR COOLED)



**SEVERE
DUTY**

BUILT FOR SEVERE DUTY APPLICATIONS

Efficiency & Reliability. Toshiba's Totally Enclosed Air-to-Air Cooled (TEAAC) medium voltage motor series is designed for durability in harsh conditions. This product line offers some of the highest efficiencies and torques in the industry while producing some of the lowest vibration levels in frames of this size, leading to a longer motor life and greater motor reliability.

Features include:

- Stator RTD - 2-Phase
- Bearing RTD Provisions
- Space Heater (120 V, 1, 60)
 - Wired to an Auxiliary Box
- Dowel Holes & Provisions for Vertical Jacking for Easy Alignment
- API-541 & API-547 Capabilities
- Type II Main Terminal Box (Fabricated Steel)

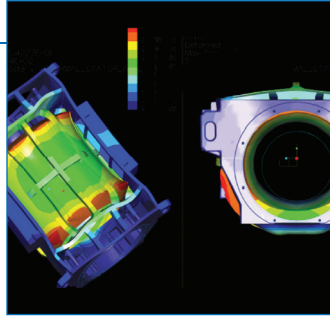


Horsepower	450 to 8000 HP (Pole Speed Dependent)
Pole Speed (RPM)	2 (3600), 4 (1800), 6 (1200) or 8 (900) RPM
Voltage (60 Hz)	4000 V
Frame Size	5010 through 1089
Enclosure	TEAAC
Service Factor	1.15
Construction	Cast Iron Frame & Carbon Steel Heat Exchanger Tubes
Insulation	Class F Inverter Duty, Meets NEMA MG1 Part 31
Environment	Suitable for Indoor & Outdoor Use
Sound Pressure	< 90 dBa
Degree of Protection	IP55

TOSHIBA

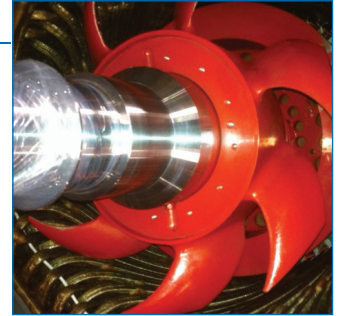
FRAME DESIGN

- Thermal Analysis Used to Determine Optimal Performance
- Designed to Reduce Vibration by Maintaining Stator-to-Frame Concentricity



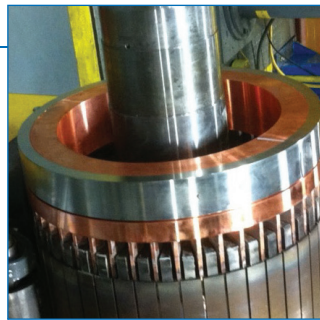
FAN DESIGN

- 3-D Computational Fluid Dynamics Analysis Used to Model Airflow & Optimize Fan Design
- Designed to Provide Maximum Airflow with Reduced Frictional Losses



COPPER BAR

- API® Style End Rings without Welded Joints
- End Rings/Brazing System Available per API-541
- Bar Swaging Complete Length of Rotor Core



MOTOR/DRIVE SOLUTION

- Insulation Meets NEMA® MG1 Part 31
- Can Be Paired with UL-Listed Medium Voltage Drive
- Medium Voltage Drive Contains Motor-Friendly Multiphase Neutral Point Clamped Output
- Motor/Drive Extended Warranty Package For Up to Three Years



INDUSTRIES SERVED

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

APPLICATIONS

- Pumps
- Fans
- Compressors
- Conveyors
- Mixers
- Crushers





Pole Speed	2	4	6	8
Maximum HP	4000	8000	6000	4500
Frame	5010 through 1089			
Service Factor	1.15			
Winding Temperature Rise by Resistance Method (°C)	B Rise at 1.0 SF			
Sound Pressure	≤90 dBA	≤85 dBA		
Vibration (in/sec) Pk	0.15	0.12		
Insulated Sleeve Bearings	Drive End & Opposite Drive End			
Insulated Anti-Friction Ball Bearing or Housing (NDE)	N/A	Yes		
Locked Rotor-Amps (By Design)	≤650%			
Direction of Rotation	Uni-Directional			Bi-Directional
Voltage*	4000 V			
CSA®	Available			
Area Classification	Class I, Division 2, Groups A/B/C/D; T3 Temperature Code			
Rotor Construction	Copper Bar Rotor Construction with Phosphorous Free Brazing			
Shaft Material	Hot-Rolled 1035 & 1045 with Option for 4142 (4142 is STD for 2-Pole 6810)			
Winding RTD	Two-Phase; 100 Ω Platinum			
Space Heater (V/Ph/Hz)	120/1/60			
Main T-Box (F1)	Type II with Stand-Off Insulated Terminals			
Auxiliary Boxes (F2)	Cast Iron			
Bearing RTD (F2)	Provisions			
Lamination Material	C5			
Fan Material	Aluminum Non-Sparking per API®			
Vertical Jacking & Dowel Pins	Provisions			
Ambient Temperature	-25° to 40°C			

*Per NEMA® MG1 STD with Option for Lower Levels - Consult Factory

