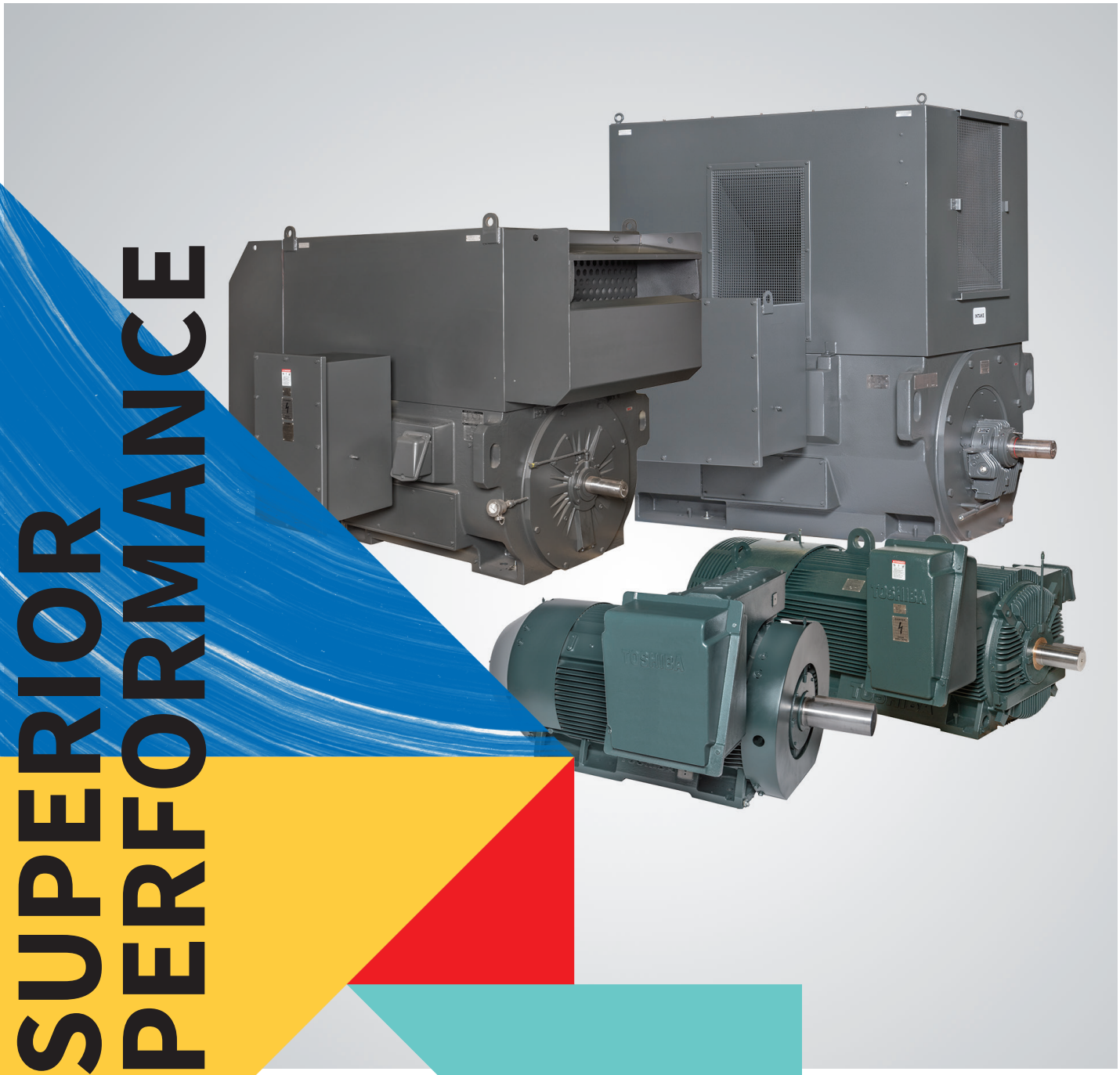
TOSHIBA

TOP REASONS TO BUY

MEDIUM VOLTAGE MOTORS



SUPERIOR PERFORMANCE

TOP REASONS TO BUY TOSHIBA MEDIUM VOLTAGE MOTORS

Toshiba International Corporation (TIC) offers a comprehensive portfolio of medium voltage motors that provide its customers a high level of quality, performance and durability. This includes a robust offering of Toshiba motors manufactured at TIC's facility in Houston, Texas (TIC Motors), that are adjustable speed drive (ASD) capable and meet or exceed NEMA MG1 part 31 requirements for ASD use. From design to advanced manufacturing processes, there are many reasons to choose TIC Motors for your medium voltage motor needs.

1 - BEARINGS

TIC Motors use 300 series bearings on both the drive end and non-drive end to prevent common bearing-related motor failures. These bearings result in a bearing life that may be up to ten times longer than those for motors built with smaller bearings.

2 - PHOSPHOROUS FREE INDUCTION BRAZING ON COPPER BAR ROTORS

A silver brazing technique is used on the rotors of TIC Motors that results in additional reliability. Specifically, this technique allows for higher joint strength, increased fatigue resistance, higher temperature resistance and deterioration prevention.

3 - HEAVY DUTY CONSTRUCTION

Heavy duty cast iron TIC Motors are designed to meet the many performance and environmental requirements of motor applications. Advanced manufacturing and engineering processes that are part of TIC's ISO 9001 certified quality management system help ensure that TIC Motors offer a high level of quality and durability.

4 - RENK® SLEEVE BEARINGS

Renk sleeve bearings contribute to the heavy duty construction of TIC Motors. Renk bearings offer a high level of quality with easy assembly, long service life, and quiet and reliable motor operation.

5 - INSULATION WITH WIDE THERMAL CAPABILITY

TIC Motors incorporate an advanced mica insulation system with a micro-processed controlled VPI system that utilizes an epoxy varnish to increase thermal protection and to maintain a very low temperature rise for extended motor life.

6 - SUPERIOR COIL MANUFACTURING

TIC Motors are manufactured using a fully automated coil making system. The process accurately shapes the coil to fit the stator slot during the stator coil insertion. This technique increases production without sacrificing performance or quality by preventing damage typically resulting from manual adjustments.

7 - EXTENDED RELIABILITY WITH VPI

TIC's Vacuum Pressure Impregnation (VPI) process reduces vibration in and related movement of the winding end turns. It encapsulates the coils and removes voids in the insulation to prevent partial discharge and to allow for maximum heat transfer.

8 - C5-RATED STEEL LAMINATION

TIC Motors feature C5-rated thermal materials on their stator and rotor laminations that can withstand burnout temperatures over 1000° F. These C5-rated thermal materials provide increased thermal efficiencies and allow for excellent repeated repairability of the windings.

9 - SPECIAL BRACING FOR HARSH APPLICATIONS

TIC Motors utilize special bracing methods to reduce movement of end turns during motor startup. As a result, such bracing on the winding end turns helps to extend the number of starts possible during the motor's life span.

10 - HIGH TORQUE OUTPUT

Motor designs with high torque output enable TIC motors to perform well in demanding high-torque applications such as conveyors or crushers. These double-cage die-cast aluminum rotor designs prevent motors from stalling either under heavy loaded applications or as a result of electrical problems such as voltage sags. These high-torque output designs also result in faster acceleration as well as higher than normal inertia values as established by NEMA.

TOSHIBA MOTORS & DRIVES
Adjustable Speed Drives • Motors • Motor Controls

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