

TOSHIBA
Leading Innovation >>>



TOP 10 REASONS
TO BUY TOSHIBA EQP GLOBAL SERIES
LOW VOLTAGE MOTORS



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1 **OVERSIZED BEARINGS**

The majority of motor failures are bearing related. For this reason, Toshiba uses over-sized, 300 series bearings on both the drive end and non-drive end of all motors. When compared to other competitors with smaller bearing sizes, Toshiba bearing life can last up to ten times longer.

2 **LOW VIBRATION**

The NEMA maximum vibration limit for motors is 0.15 in./sec. at no load. Toshiba motors are manufactured to meet lower vibration levels not to exceed .10 in./sec. except for IEEE 841 motors. Low vibration preserves the mechanical integrity of the specified motor and bearings, leading to increased motor life.

3 **HEAVY DUTY CONSTRUCTION**

Toshiba motors incorporate a robust cast iron design to increase stability and eliminate many common mechanical failures. Increased ribbing in the end bells, maximum surface area at connection points, and deep bearing pockets produce a sturdy, reliable product.

4 **100% QUALITY TEST**

Toshiba performs a routine quality test on every single motor it manufactures. With every motor going through rigorous quality checks, Toshiba ensures that every motor sold will perform at the highest levels.

5 **INSULATION WITH WIDE THERMAL CAPABILITY**

Toshiba winding designs contain some Class H insulation materials, giving the motors increased thermal protection. At the same time, Toshiba motors operate with very low temperature rise at rated conditions, giving them a wide thermal margin and extended motor life (for every 10° run below the insulation rating, the life of the insulation doubles).

6 **OPTIMIZED FOR ASD USE**

When a motor is run on a ASD, its windings need to withstand sharp voltage spikes coming from the ASD inverter. These spikes can cause winding failures for under-protected motors. NEMA requires ASD-rated motors to withstand a maximum of 1860 V. Toshiba designs its motors to withstand 2000 V spikes, protecting them against ASD harm when other motors would fail.

7 **C5-RATED INTER-LAMINATION MATERIAL**

Toshiba uses C5-rated (which can withstand burnout temperatures over 1000°F) thermal materials on its stator and rotor laminations. Some competitors use lower grade C3 material. This gives Toshiba motors increased thermal efficiencies, and excellent rewind ability characteristics.

8 **PACKAGE DEALS**

In addition to manufacturing high quality motors, Toshiba manufactures high quality adjustable speed drives. If bought as a motor/drive package, the ASD warranty is raised to meet the standard motor warranty of three years.

9 **HIGH TORQUE OUTPUT**

Toshiba motors produce more torque than is required to meet NEMA Design B levels. Because of this, higher torques prevent motors from stalling under heavy loaded applications. They also are less affected by adverse electrical circumstances, such as voltage sags, which will reduce the motor's torque output.

10 **CAST IRON CONSTRUCTION**

Toshiba uses a robust cast iron construction for its motors. Cast iron has excellent thermal properties for efficiency, durability, and can be precision machined for exact tolerances. Compared to lighter, less protected, rolled steel or aluminum frames. Cast iron motors have superior durability and corrosion resistance.



**EQP Global® SD, 840, & 841
LOW VOLTAGE MOTORS**

TOSHIBA MOTORS & DRIVES DIVISION:

- Low & Medium Voltage Motors
- Adjustable Speed Drives
- Power Apparatus Components



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