



## Efficiency, Quality, & Performance (EQP) – The EQP Global® 841 motor series is Toshiba's next-generation NEMA Premium® efficiency motor series.

This cutting-edge motor product line is designed to meet or exceed the competitive demands of the global market, as well as the requirements of the Energy Independence & Security Act of 2007 (EISA), while maintaining the high reliability and quality expected from Toshiba.

The EQP Global 841 specifically addresses the needs of the petrochemical industry, where premium performance and reliability are imperative. Building on over 20 years of success with our EQPIII motor series, the EQP Global 841 features design enhancements on the rotor, frame, brackets, fan, and bearings.

Our EQP philosophy extends beyond great products. We provide solutions and Global Supply Chain Management Systems (GSCMS) to meet the evolving needs of our global customers.

- NEMA Premium® Efficiency
- Meets or Exceeds Energy Independence & Security Act of 2007 (EISA)
- Addresses Global Motor Specifications Including CE, NEMA, & IEC
- Inverter-Duty Rated
- Multi-Mount on 140 Through 445 & N449 Frames

Horsepower	3/4 to 300 HP
Speed (60 Hz)	3600, 1800, or 1200 RPM
Voltage (60 Hz)	460 or 575 V
Enclosure	Totally Enclosed Fan Cooled
Frame Size	143T through N449T
Protection	IP56
Construction	All Cast Iron
Insulation	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Vibration (Unfiltered)	Typically 0.04 Inches/Second or Less
Mounting	Suitable for Horizontal & Vertical Mounting; Also Available with C-Face Mounting
Environment	Severe Duty, Suitable for Use in Division 2 Hazardous Locations



# EQP GLOBAL 841

LOW VOLTAGE MOTOR  
PETRO-CHEMICAL DUTY





## BUILT FOR PETRO-CHEMICAL DUTY APPLICATIONS



### Nameplate

- Stainless Steel
- NEMA Premium® Design
- Raised Letters for Clarity
- Inverter-Duty Rating on Nameplate (1 to 200 HP, 4- & 6-Pole)
- Separate Lubrication Label on All Frames



### Construction

- Cast Iron Frame & Bearing Brackets
- Multi-Mount Construction
- Gasket Provided Between Motor Frame & Conduit Box
- Typical Unfiltered Vibration Levels of 0.04 Inches/Second or Less
- Protective Coating on All Internal Machined Surfaces
- IP56 Protection
- Multiple Drain Provisions for Horizontal & Vertical Mounting



### Conduit Box

- Gasketed Cast Iron Construction
- UL Ground Lug
- Lead-Separation Protection
- Terminal Lugs on All Frames
- Rotatable (90°)
- NPT Drill & Tap Conduit Opening



### Bearing System

- Oversized 300 Series Bearings on All Frames (DE & ODE)
- Low Temperature Rise for Extended Life
- L-10 Bearing Life of 150,000 Hours Direct-Coupled
- L-10 Bearing Life of 50,000 Hours Belted
- Labyrinth Seal on All Frames, Both Ends
- Open Regreasable on All Frames



### Insulation System

- Major Components Made from Class H Rated Materials
- Low-Loss Electrical Steel
- Exceeds NEMA MG1 Part 31
- 20:1 Constant Torque & 60:1 Variable Torque (1 to 200 HP, 4- & 6-Pole)
- Voltage Withstand Capability of 2000 V in 0.1  $\mu$ s
- Large Thermal Margins for Extended Life & Reliability
- Phase Paper & Coil Bracing on Both Ends on All Motor Ratings



### Testing

- 100% No-Load Commercial Test & Vibration Test on All Motors
- On 440 Frame & Larger 100% of Bearings are Ball-Pass Frequency Tested
- Commercial Test Report with Vibration Data Supplied with All Motors

TOSHIBA				PETRO-CHEMICAL DUTY EQP Global 841	
MODEL NO.		SERIAL NO.		FRAME	NEMA
HP	KW	RPM		ENCL.	TYPE
VOLT	AMP			FORM	INS.
Hz	S.F.	P.F.	CODE	IP:	DUTY
NEMA NOM EFF	MAX SAFE RPM			PH.	MAX. AMB. °C
GUAR. MIN EFF				WT.	Kg. Lbs.
O.S.:		L.S.:		USE POLYUREA BASED GREASE	
CSA CERTIFIED-CL 1, DIV 2, GRP A, B, C, D/ZONE		2 GRP IIA, IIB, IIC; SINEWAVE - T3 1.15SF OR		MFG. DATE	
T3C 1.0SF, OR VPWM VFD T3 1.0SF -		60:1V, 10:1CT, 1:1SCHP			
V622-ADN					
TOSHIBA INTERNATIONAL CORPORATION - HOUSTON, TEXAS MADE IN VIETNAM					

