# **TOSHIBA**

**Leading Innovation** >>>



# PRODUCT OFFERING MOTORS



## **LOW VOLTAGE MOTORS**

## **GENERAL PURPOSE**



Manufacture)











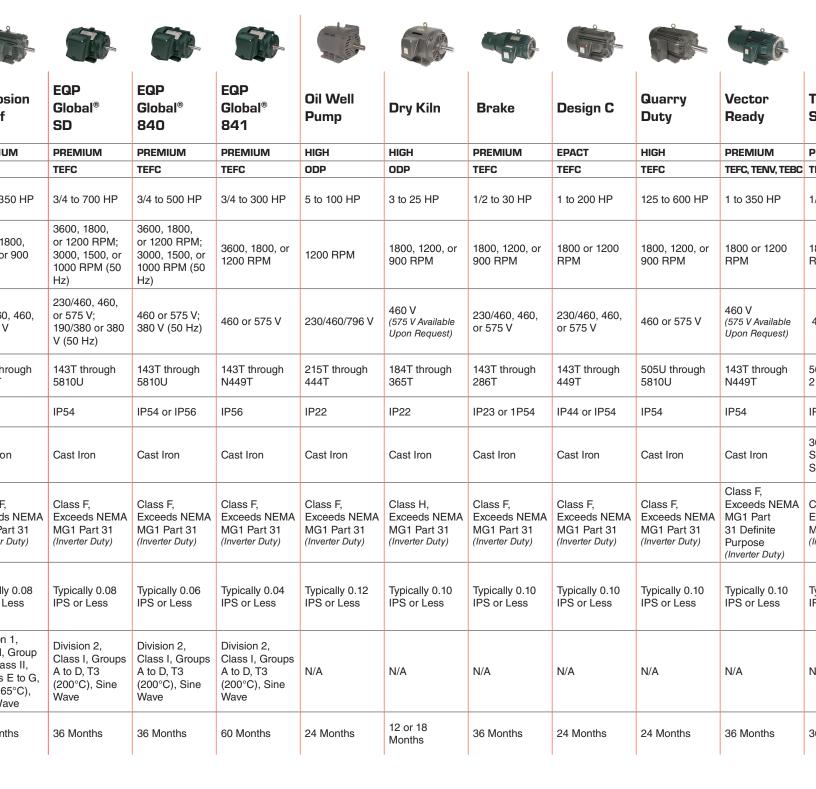






	Open Drip Proof	Open Drip Proof EPACT	Open Drip Proof EQPIII®	Totally Enclosed Fan Cooled	Totally Enclosed Fan Cooled EPACT	EQPIII®	EQPIII® 840	EQPIII® 841	Explo Proo
EFFICIENCY	HIGH	EPACT	PREMIUM	HIGH	EPACT	PREMIUM	PREMIUM	PREMIUM	PREM
ENCLOSURE	ODP	ODP	ODP	TEFC	TEFC	TEFC	TEFC	TEFC	TEXP
Horsepower	400 to 800 HP	250 to 500 HP	3/4 to 700 HP	1/2 to 800 HP	1 to 500 HP	1/2 to 400 HP	3/4 to 400 HP	3/4 to 200 HP	3/4 to
Speed (60 Hz)	3600, 1800, or 1200 RPM	3600, 1800, or 1200 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1200, RPM
Voltage (60 Hz)	460 or 575 V	230/460, 460, or 575 V	230/460, 460, or 575 V	230/460, 460, or 575 V	230/460, 460, or 575 V	230/460, 460, or 575 V	460 or 575 V	460 or 575 V	230/46 or 575
Frame Size	449TS through 5810U	445TS through 509U	143T through 509U	56 through 5811U	143T through 5810U	143T through 5810U	143T through 5810U	143T through N449T	143T t N449T
Protection	IP22	IP22	IP22	IP54	IP54	IP54	IP54 or IP56	IP56	IP55
Construction	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast II
Insulation	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class Excee MG1 F (Inverte
Vibration (Unfiltered)	Typically 0.10 IPS or Less	Typically 0.10 IPS or Less	Typically 0.08 IPS or Less; 0.12 IPS or Less Non- NAFTA	Typically 0.10 IPS or Less	Typically 0.10 IPS or Less	Typically 0.08 IPS or Less	Typically 0.06 IPS or Less	Typically 0.04 IPS or Less	Typica IPS or
Area Classification	N/A	N/A	N/A	N/A	N/A	Division 2, Class I, Groups A to D, T3 (200°C), Sine Wave	Division 2, Class I, Groups A to D, T3 (200°C), Sine Wave	Division 2, Class I, Groups A to D, T3 (200°C), Sine Wave	Division Class D & Cl Group T3B (1 Sine V
Warranty (From Date of	24 Months	24 Months	36 Months	24 Months	24 Months	36 Months	36 Months	60 Months	36 Mo

### **DEFINITE PURPOSE**





## **MEDIUM VOLTAGE MOTORS**



















oshwash S	Vertical P-Base	Vertical P-Base Premium	Open Drip Proof	Weather- Protected I	Weather- Protected II	Dura-Bull TX®	Totally Enclosed Fan Cooled	Air-to-Air Cooled	
REMIUM	HIGH	PREMIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	
EFC, TENV	TEFC	TEFC	ODP	WPI	WPII	TEFC	TEFC	TEAAC	
/2 to 10 HP	3 to 400 HP	3 to 400 HP	200 to 900 HP	400 to 5000 HP	400 to 5000 HP	200 to 800 HP	100 to 2500 HP	450 to 5000 HP	
300 or 1200 PM	3600, 1800, or 1200 RPM	3600, 1800, or 1200 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	3600, 1800, 1200, or 900 RPM	
-60 or 575 V	460 V (575 V Available Upon Request)	460 V (575 V Available Upon Request)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 V)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 & 13,200 V)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 & 13,200 V)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 V)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 V)	2300, 2300/4000, 4000, or 4160 V (Option for 6000 & 13,200 V)	
6C through 15TC	180 through N449LP	180 through N449 (HP & LP)	445T through 5810	5011 through 6813; 450 through 560 IEC	5011 through 6813; 450 through 560 IEC	5011 & 5811	449 through 5811 & N6310 through N8810	5812; 400 through 560 IEC	
P56	IP54	IP54	IP22	IP23	IP24	IP44, IP54, or IP55	IP44, IP54, or IP55	IP54 or IP55	
04 Stainless teel, O-Ring ealed	Cast Iron	Cast Iron	Cast Iron Frame & Brackets	Cast Iron for 500 IEC Frame & Below; Steel for 560 IEC Frame	Cast Iron for 500 IEC Frame & Below; Steel for 560 IEC Frame	Cast Iron Frame & Brackets	Cast Iron Frame & Brackets	Cast Iron for 500 IEC Frame & Below; Steel for 560 IEC Frame	
lass F, xceeds NEMA IG1 Part 31 nverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F Form Wound – VPI (Option for Class H Available)	Class F Form Wound – VPI (Option for Class H Non-IEC Frames Available)	Class F Form Wound – VPI (Option for Class H Non-IEC Frames Available)	Class F Form Wound – VPI (Option for Class H Available)	Class F Form Wound – VPI (Option for Class H Available)	Class F Form Wound – VPI (Option for Class H Non-IEC Frames Available)	
ypically 0.10 °S or Less	Typically 0.10 IPS or Less	Typically 0.10 IPS or Less	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	0.15 IPS for 2- through 6-Pole; 0.12 IPS for 8-Pole	
/A	N/A	Division 2, Class I, Groups A to D, T3 (200°C), Sine Wave	Division 2, Class I	Division 2, Class I	Division 2, Class I	Division 2, Class I & II	Division 2, Class I & II	Division 2, Class I	
6 Months	24 Months	36 Months	18 Months	18 Months	18 Months	18 Months	18 Months	18 Months	



## **ONE CALL. ONE SOLUTION.**

Toshiba International Corporation is proud to be a single-source solution for our customers, offering a complete product lineup of electric motors, adjustable speed drives, and motor starters for a variety of applications. Many of these products are manufactured at our one million square foot manufacturing facility located in Houston, Texas. Our Houston facility has extensive knowledge and experience, offering the following services in-house:

- Research & Development
- Design & Engineering
- Manufacturing
- Sales & Marketing

- Applications Support
- Field Service
- Customer Service & Project Management
- Logistics & Warehousing
- Product Application & Field Service Training

## > ONE STOP FOR ALL YOUR MOTOR NEEDS

Toshiba is a leading manufacturer of low voltage motors from ½ to 800 HP and 230 to 575 V and medium voltage motors from 100 to 50,000 HP and 2,300 to 13,800 V. Our extensive motor product offering and large installed base in the numerous industries demonstrates our customers' confidence in choosing Toshiba motors. Since many of our products are manufactured under one roof, we can offer customized solutions to meet your application needs. We also have the capability to test our products together, as a complete system, before it goes out into the field—ensuring the highest level of quality, performance, and reliability.

#### APPLICATIONS



Oil & Gas



Mining & Minerals



Aggregate



**Assembly** 



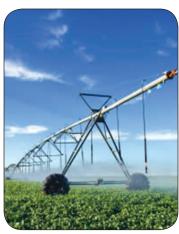
Food & Beverage



Utilities



**Textiles** 



**A**gribusiness

#### **TOSHIBA MOTORS & DRIVES DIVISION**

- Motors
- Adjustable Speed Drives
- Motor Controls



**TOSHIBA**Leading Innovation >>> www.toshiba.com/tic