

TOSHIBA

Leading Innovation >>>



2013 Motor Catalog

LOW & MEDIUM VOLTAGE



Our Motor Manufacturing

TIC began manufacturing motors in Houston, Texas in 1980 and has since developed a proud tradition of producing some of the most reliable, robust motors in the industry. Today we produce the widest range of three-phase, industrial grade, low and medium voltage electric motors available in the market. Many of our motors are completely designed, engineered, and manufactured at our 348,000 sq. ft. motor manufacturing plant, which gives us the flexibility to customize our motors to perform beyond a wide variety of industrial and application requirements.

Our motors are built using only the highest quality domestic and foreign parts, allowing us to in turn deliver the highest quality motors that exceed Toshiba's stringent testing standards, as well as domestic and international performance standards. Please contact our Houston factory for more information on our NAFTA-Qualified motors.

MEDIUM VOLTAGE MOTOR OFFERING

						
Series	ODP High Efficiency	WPI High Efficiency	WP11 High Efficiency	TEFC Dura-Bull TX® High Efficiency	TEFC High Efficiency	TEAAC High Efficiency
Horsepower	200 to 900 HP	400 to 5000 HP	400 to 5000 HP	200 to 800 HP	100 to 2500 HP	450 to 5000 HP
Voltage (60 Hz)	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)
Speed (60 Hz)	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
Frequency	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Insulation	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)
Temperature Rise (Sine Wave)	Class B at 1.0 SF	Class B at 1.0 SF	Class B at 1.0 SF; Class F for 1000 to 1200 HP 5812 Frame	Class B at 1.0 SF	Class B at 1.0 SF; Class F for 350 HP N449 Frame	Class B at 1.0 SF
Protection	IP22	IP23	IP24	IP44, IP54, or IP55	IP44, IP54, or IP55	IP54 or IP55
Frame & End Bracket	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
Frame Size	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
Bearing Type (Lubrication)	Anti-Friction (Polyurea Base Grease)	Anti-Friction (Polurea Base Grease) or Sleeve (Oil)	Anti-Friction (Polurea Base Grease) or Sleeve (Oil)	Anti-Friction (Polurea Base Grease) or Sleeve (Oil)	Anti-Friction (Polurea Base Grease) or Sleeve (Oil)	Anti-Friction (Grease) or Sleeve (Oil)
Bearing Thermal Protection	See Production Modifications Section for Available Options	See Production Modifications Section for Available Options	See Production Modifications Section for Available Options	RTD Provisions (One per Bearing)	Included – RTD (One per Bearing, 100 Ω) for N6310 through N8810 Frames	See Production Modifications Section for Available Options
Bearing Insulation Method	See Production Modifications Section for Available Options	NDE Insulated Bearing for NEMA Frames; Insulated Bearing Housing for IEC Frames	NDE Insulated Bearing for NEMA Frames; Insulated Bearing Housing for IEC Frames	NDE Insulated Bearing	NDE Insulated Bearing for 5000 Frames; Insulated Bearing Housing for 6000 Frames	NDE Insulated Bearing for 5812 NEMA Frames; Insulated Bearing Housing for IEC Frames
Main Terminal Box	Cast Iron	Cast Iron on 5000 Frames; Fabricated Steel on 6800 & IEC Frames	Cast Iron on 5000 Frames; Fabricated Steel on 6800 & IEC Frames	Cast Iron	Cast Iron on 449 through 5811 Frames; Fabricated Steel on N6310 through N8810 Frames	Cast Iron on 5812 Frame; Fabricated Steel on IEC Frames
Auxiliary Terminal Box	Cast Iron (Where Applicable)	Cast Iron Space Heater & RTD Boxes	Cast Iron Space Heater & RTD Boxes	Cast Iron Space Heater & RTD Boxes	Cast Iron Space Heater & RTDs Boxes (N6310 through N8810 Frames Have One Main Fabricated Steel Box with Mechanical Barrier)	Cast Iron Space Heater & RTD Boxes
Auxiliary Box Location	F1 (Where Applicable)	F1 for Up to 5812 Frames, F2 for Up to 6800 & IEC Frames	F1 for Up to 5812 Frames, F2 for Up to 6800 & IEC Frames	F2	F1 for Up to 440 Frame; F2 for All Remaining Frames	F1 for 5812 Frame; F2 for IEC Frames
Rotor	Die Cast Aluminum or Copper Bar (Except 440 Frames)	Die Cast Aluminum or Copper Bar	Die Cast Aluminum or Copper Bar	Die Cast Aluminum or Copper Bar	Die Cast Aluminum or Copper Bar (Except 440 Frames)	Die Cast Aluminum or Copper Bar
Space Heaters	See Production Modifications Section for Available Options	Included in Separate Auxiliary Terminal Box	Included in Separate Auxiliary Terminal Box	Included in Separate Auxiliary Terminal Box	Included in Separate Auxiliary Terminal Box (Option for N449 Available)	Included in Separate Auxiliary Terminal Box
Vibration (NEMA Unfiltered)	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
Suitable Environments	Indoor	Indoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor
Nameplate	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless
Paint	Epoxydized Polyester Tek Coat	Epoxy Resin Primer with Polyurethane Enamel on IEC Frames; Epoxydized Polyester Tek Coat on NEMA Frames	Epoxy Resin Primer with Polyurethane Enamel on IEC Frames; Epoxydized Polyester Tek Coat on NEMA Frames	Epoxydized Polyester Tek Coat	Epoxydized Polyester Tek Coat on NEMA Frames Up to 5811; Alkyd Resin Primer with PU Resin Finish on N6310 through N8810 Frames	Epoxy Resin Primer with Polyurethane Enamel on IEC Frames; Epoxydized Polyester Tek Coat on NEMA Frames
Area Classification Options	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
Warranty (From Date of Manufacture)	18 Months	18 Months	18 Months	18 Months	18 Months	18 Months



LOW VOLTAGE MOTOR OFFERING



Series	ODP High Efficiency	ODP EPACT Efficiency	ODP EQP Premium Efficiency	TEFC High Efficiency	TEFC EPACT Efficiency	TEFC EQPIII® Premium Efficiency	TEFC EQPIII® 840 Premium Efficiency	TEFC EQPIII® 841 Premium Efficiency	TEXP Explosion Proof Premium Efficiency	TEFC EQP Global® SD Premium Efficiency
NEMA Torque	B	B	B	B	B	B	B	B	B	B
Horsepower	400 to 800 HP	250 to 500 HP	¾ to 700 HP	½ to 800 HP	1 to 500 HP	½ to 400 HP	¾ to 400 HP	¾ to 200 HP	¾ to 350 HP	¾ to 700 HP
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	230/460, 460, or 575 V	230/460, 460, 575 V; 190/380 V (50 Hz)
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, 1800, 1200, or 900 RPM	3600, 1800, 1200 RPM; 3150, or 1000 RPM (50 Hz)
Frequency	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 or 50 Hz
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 F, Exceeds NEMA MG1 Part 31 (Inverter Duty)	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Inverter Duty	VT 10:1, CT 4:1 (1 to 200 HP, 2-, 4-, & 6-Pole)	VT 10:1, CT 4:1 (1 to 200 HP, 2-, 4-, & 6-Pole)	VT 10:1, CT 4:1 (1 to 200 HP, 2-, 4-, & 6-Pole)	VT 10:1, CT 4:1 (1 to 200 HP, 2-, 4-, & 6-Pole)	VT 10:1, CT 4:1 (1 to 200 HP, 2-, 4-, & 6-Pole)	VT 60:1, CT 20:1 (1 to 200 HP, 4- & 6-Pole); VT 10:1, CT 4:1 (1 to 200 HP, 2-Pole)	VT 60:1, CT 20:1 (1 to 200 HP, 4- & 6-Pole); VT 10:1, CT 4:1 (1 to 200 HP, 2-Pole)	VT 60:1, CT 20:1 (1 to 200 HP, 4- & 6-Pole); VT 10:1, CT 4:1 (1 to 200 HP, 2-Pole)	CT 4:1 (Two Frames Above); VT 10:1 (One Frame Above), Division 1, Class I, Group D, T2A (280°C), 2- & 4-Pole	VT 60:1, CT 20:1 (1 to 200 HP, 4- & 6-Pole); VT 10:1, CT 4:1 (1 to 200 HP, 2-Pole)
Temperature Rise (Sine Wave)	Class B at 1.0 SF	Class B at 1.0 SF	Class B at 1.15 SF	Class B at 1.0 SF	Class B at 1.0 SF	Class B at 1.15 SF 445T Frame & Below; 1.0 SF 447T Frame & Above	Class B at 1.15 SF 445T Frame & Below; 1.0 SF 447T Frame & Above	Class B at 1.15 SF 445T Frame & Below; 1.0 SF 447T Frame & Above	Class B at 1.15 SF 445T Frame & Below; 1.0 SF 447T Frame & Above	Class B at 1.15 SF 445T Frame & Below; 1.0 SF 447T Frame & Above
Protection	IP22	IP22	IP22	IP54	IP54	IP54	IP54 or IP56	IP56	IP55	IP54
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 through N449T	143T through 5810U
Frame	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Bearing Type	Open Regreaseable; Roller Bearing DE 509U Frame & Above (4- & 6-Pole)	Open Regreaseable; Roller Bearing DE 447T Frame & Above (4- & 6-Pole)	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Sealed 256T & Below; Open Regreaseable 284T & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Open Regreaseable; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)	Sealed 256T Frame & Below; Open Regreaseable 284T Frame & Above; Roller Bearing DE 444T Frame & Above (4- & 6-Pole)
Lubrication	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base	Polyurea Base
Lubrication Fittings	449TS Frame & Above	445T Frame & Above	284T Frame & Above	284T Frame & Above	284T Frame & Above	284T Frame & Above	284T Frame & Above	All Frames	284T Frame & Above	284T Frame & Above
Conduit Box	Stamped Steel	Stamped Steel, Rotatable (90°)	Stamped Steel, Rotatable (90°)	Stamped Steel, Rotatable (90°)	Stamped Steel, Rotatable (90°)	Stamped Steel, Rotatable (90°)	Gasketed Cast Iron, Rotatable (90°)	Gasketed Cast Iron, Rotatable (90°)	Cast Iron, Rotatable (90°)	Cast Iron, Rotatable (90°)
Rotor	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum
Shaft	AIISI #1045 All Frames	AIISI #1045 All Frames	AIISI #1045 All Frames	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE	AIISI #1045 All Ball Bearing Motors; AIISI #4142 444T Frame & Above with Roller Bearing DE
Shaft Seal	N/A	N/A	N/A	V-Ring Slinger DE	V-Ring Slinger DE	V-Ring Slinger DE	V-Ring Slinger DE; Labyrinth 324T Frame & Above, Both Ends	Labyrinth Both Ends	Brass Slinger Both Ends	V-Ring Slinger
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	Typically 0.08 IPS or Less	Typically 0.08 IPS or Less
Nameplate	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless	304 Stainless
Hardware	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)	Zinc-Dichromate (Grade 5)
Paint	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish	Alkyd Resin Primer with Acrylic Enamel Finish
Lifting Eyebolt	All Frames	All Frames	All Frames	182T Frame & Above	182T Frame & Above	182T Frame & Above	182T Frame & Above	182T Frame & Above	182T Frame & Above	182T Frame & Above
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 1, Class I, Groups A to D, T3 (200°C), Sine Wave	Division 2, Class I, Groups A to D, T3 (200°C), Sine Wave
Warranty	24 Months	24 Months	36 Months	24 Months	24 Months	36 Months	36 Months	60 Months	36 Months	36 Months

[illegible]

Catalog Notes:

1	Motors are Not NAFTA Qualified
2	Motors Provided with Drive-End Roller Bearing as Standard
3	Motors are 1.0 Service Factor
4	Motors are Unidirectional CCW Rotation when Facing Non-Drive End of Motor
5	Motors are Unidirectional CW Rotation when Facing Non-Drive End of Motor
6	Motors are NEMA Design A
7	Totally Enclosed Non-Ventilated (TENV)
8	Ball Bearing Long Shaft as Standard
9	Motors Nameplated Dual Frequency 50/60 Hz
10	Motors will be Obsoleted Once Inventory is Depleted
11	"Dura-Bull TX®" Design
12	Copper Bar Rotor
13	Tophat WPI Design
14	Class F Rise by Resistance at 1.0SF
15	Force-Cooled Sleeve Bearings
16	Motor has Non-NEMA "BA" Dimension

TOSHIBA
Leading Innovation >>>



Our Company

Toshiba International Corporation (TIC) is a Toshiba America Inc. (TAI) Group Company, a wholly owned subsidiary of Toshiba Corporation. TIC's Industrial Division is headquartered in Houston, Texas and employs approximately 1,400 people. With an extensive product offering ranging from electric motors and adjustable speed drives to uninterruptible power systems and super-charge ion batteries, TIC provides application solutions to a wide range of industries.



One Call, One Solution

Most products are manufactured at our one million square foot state-of-the-art manufacturing facility, in Houston, Texas. We are proud to be a single-source solution for our customers. Our comprehensive product offering and large installed base demonstrates our customer's confidence in choosing Toshiba. Since most 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.



Our Products

TIC produces a wide range of general and definite purpose low voltage motors for countless industries and applications. Our low voltage motors products range from ½ to 800 HP and 230 to 575 V and our medium voltage motor products range from 200 to 50,000 HP and 2300 to 13,800 V.

Our products are built to deliver superior performance in virtually any application, setting new standards in extreme duty. Even if your project requires a customized product or integrated system, we can deliver a solution to not only meet but exceed your expectations.

This catalog contains all our standard offerings. For information on custom projects, please contact the factory directly at (800) 231-1412.

Agency Approvals

ISO9001:2008

Emblem: ISO 9001:2008

Agency: International Standards Organization
Requirements: ISO 9001
Toshiba File: Certificate 30301

NVLAP

Emblem:



Agency: National Voluntary Laboratory Accreditation Program (NVLAP), administered by the National Institute of Standards and Technology (NIST)
Requirements: Efficiency testing per ISO/IEC 17025
Toshiba File: NVLAP Lab Code: 200088-0

UL Listed

Emblem:



Agency: Underwriters Laboratories (UL)
Requirements: a) Construction in accordance with UL 674 Safety for Electric Motors for use in hazardous locations
b) Compliance with UL procedure per Toshiba File E53559
c) Maintain traceability of product using UL serial numbers on listing labels
Toshiba File: E53559

UL Listed in Canada

Emblem:



Agency: Canadian Standards Association (CSA), reviewed by Underwriters Laboratories (UL)
Requirements: 449 TEFC 4-Pole and 300 HP low voltage motors of standard insulation system per UL file E134089. Motors with this emblem must have UL-approved model number described in file for identification of motors.
Toshiba File: E133052

UL Component Recognition

Emblem:



Agency: Underwriters Laboratories (UL)
Requirements: UL 1004 Safety Standard for Electric Motors
Toshiba File: E133052

NEMA

Emblem:



Agency: National Electrical Manufacturers Association (NEMA)
Requirements: Meets or exceeds efficiency values of NEMA MG-1 (most recent version), Tables 12-12 (LV 60 Hz), 12-13 (MV 60 Hz), and 12-14 (LV 50 Hz)

IEC

Emblem:



Agency: International Electrotechnical Commission (IEC)
Requirements: Complies with requirements referenced from AEI-31
(a) EMC Directive 2004/108/EC
(b) Low Voltage Directive 2006/95/EC
(c) Machinery Directive 2006/42/EC

U.S. DOE

Emblem:



Agency: U.S. Department of Energy (DOE)
Requirements: General Purpose motors whose efficiency levels meet or exceed the values show in Federal Register 10CFR Part 431
Toshiba File: CC027B

CSA

Emblem:



Agency: Canadian Standards Association (CSA)
Requirements: CSA Std. C22.2 No. 0, 77, 100, and 145
Toshiba File: Report No. LR39610

CSA Energy Efficiency

Emblem:



Agency: Canadian Standards Association Efficiency Verification Program
Requirements: Efficiency levels that meet or exceed CSA's Energy Efficiency Regulations (CSA Standard C390-10)
Toshiba File: EEV79018

UL & CSA Explosion Proof Classifications

CAUTION!

Motors that are misused in hazardous environments can cause a fire or explosion, resulting in destruction of property, serious injury, or death. **Only the end user or a qualified underwriter should identify and select the appropriate motor class, group, division, and temperature code to meet the requirements of each installation.** Toshiba can only advise what listings and approvals Toshiba motors carry. Toshiba cannot evaluate nor recommend what motors may be suitable for use in hazardous environments.

Hazardous Locations:

For details on area classification and equipment suitability, please consult NFPA70™ National Electric Code® Articles 500 to 516.

- Class I Group C — locations containing flammable gas, flammable liquid-produced vapor, or combustible liquid-produced vapor mixed with air that may burn or explode, having either a maximum experimental safe gap (MESG) value greater than 0.45 mm and less than or equal to 0.75 mm, or a minimum igniting current ratio (MIC ratio) greater than 0.40 and less than or equal to 0.80. Please consult NFPA 497 for substances and additional information related to this group.
- Class I Group D — locations containing flammable gas, flammable liquid-produced vapor, or combustible liquid-produced vapor mixed with air that may burn or explode, having either a maximum experimental safe gap (MESG) value greater than 0.75 mm or a minimum igniting current ratio (MIC ratio) greater than 0.80. Please consult NFPA 497 for substances and additional information related to this group..
- Class II Group E — locations with atmospheres containing combustible metal dusts, including aluminum, magnesium, and their commercial alloys, or other combustible dusts whose particle size, abrasiveness, and conductivity present similar hazards in the use of electrical equipment. Please consult NFPA 499 for substances and additional information related to this group..
- Class II Group F — locations with atmospheres containing combustible carbonaceous dusts that have more than 8% total entrapped volatiles or that have been sensitized by other materials so that they present an explosion hazard. Coal, carbon black, charcoal, and coke dusts are examples of carbonaceous dusts. Please consult NFPA 499 for other substances and additional information related to this group.
- Class II Group G — locations with atmospheres containing combustible dusts not included in Group E or F, including flour, grain, wood, plastic, and chemicals. Please consult NFPA 499 for substances and additional information related to this group.

Class II Temperature Codes:

The temperature marking shall be less than the ignition temperature of the specific dust to be encountered. For organic dusts that may dehydrate or carbonize, the temperature marking shall not exceed the lower of either the ignition temperature or 165°C (329°F). Due to the low surface temperature requirements (higher temperature codes) mandated in Class II F & G, over temperature protection must be used.

- All Toshiba Explosion Proof motors are equipped with an internally-mounted normally-closed winding thermostat.

Surface Temperatures:

Surface temperatures of Toshiba's Explosion Proof motors shall not exceed the following UL and CSA maximums under fault conditions. The below temperature class (T Code) identifies the maximum motor surface temperature that will be developed under all operating conditions.

- Division 1 considers external surface temperature and includes overloads and locked rotor conditions.
- Division 2 considers internal and external surface temperatures during normal operation.

T Code	Maximum Motor Surface Temperature	
	°C	°F
T1	450°	842°
T2	300°	572°
T2A	280°	536°
T2B	260°	500°
T2C	230°	446°
T2D	215°	419°
T3	200°	392°

T Code	Maximum Motor Surface Temperature	
	°C	°F
T3A	180°	356°
T3B	165°	329°
T3C	160°	320°
T4	135°	275°
T4A	120°	248°
T5	100°	212°
T6	85°	185°

Additional Notes:

- Stock motors are not suitable for applications in temperatures below -25°C (-13°F). Contact Toshiba for further information.
- All Toshiba Explosion Proof motors are supplied with Explosion Proof UL- and CSA-approved conduit boxes as standard.
- Inverter-duty Explosion Proof motors are available; contact Toshiba for further information.

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Disclaimer:

Toshiba has made every effort necessary to ensure the accuracy of the contents in this catalog. However, Toshiba cannot be held liable for errors made from changing models/catalog numbers, or typographical and pictorial errors that may have resulted during the compilation of this catalog. All motor data and dimensions provided shall be used for reference only. The weights listed in this catalog are estimated and cannot be guaranteed. Prices are subject to change at any given time without notice.

Toshiba cannot assume responsibility for the selection, installation, operation, and maintenance of our motors. Only the purchaser, end user, or a qualified underwriter should identify and select the appropriate motor that meets the requirements of the intended application.

General Purpose Motors

Open Drip Proof Motors

Toshiba's general purpose, open drip proof motors are designed to meet the industry's ever-increasing need for improved energy conservation and product reliability. These motors offer some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. Recommended for indoor use, our general purpose, open drip proof motors are available in High Efficiency, EPACT Efficiency, and our NEMA® Premium Efficiency motor option, the EQPIII.

Standard Features:

- Open Drip Proof
- High, EPACT, & NEMA® Premium Efficiency
- 230/460, 460, or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Design B Torques
- Class F Insulation; Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- Stamped Steel Conduit Box
- Cast Iron Frame
- Cast Iron Brackets
- Ball Bearing 143T through 405T Frames
- Roller Bearing on 444T Frame & Above, 4- & 6-Pole
- Polyurea Base Grease
- 304 Stainless Steel Nameplate

Applications:

- Pumps
- Fans
- Compressors
- Conveyors
- Material Handling
- General Applications



Open Drip Proof

> High Efficiency



2 TWO YEAR WARRANTY

Toshiba’s general purpose, open drip proof, High Efficiency motor series is designed to meet the industry’s ever-increasing need for improved energy conservation and product reliability. This product line offers a high torque and low vibration design, leading to a longer life and greater reliability.

Product Scope:

Horsepower:	400 to 800 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	460 or 575 V
Enclosure:	Open Drip Proof
Frame Size:	449TS through 5810US
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	1200	460	509UZ	3200	F4006VLF4BM	464	95.0	2	MXTDPS	\$50,793
400	1200	575	509UZ	3200	F4006VLF4OM	371	95.0	2	MXTDPS	\$50,793
400	1200	460	509US	3200	F4006VLG3BM	464	95.0		MXTDPS	\$47,250
400	1200	575	509US	3200	F4006VLG3OM	371	95.0		MXTDPS	\$47,250
400	900	460	5810UZ	4800	F4008VLF4BM	577	94.1	2	MXTDPS	\$56,043
400	900	575	5810UZ	4800	F4008VLF4OM	462	94.1	2	MXTDPS	\$56,043
400	900	460	5810US	4800	F4008VLG3BM	577	94.1		MXTDPS	\$52,500
400	900	575	5810US	4800	F4008VLG3OM	462	94.1		MXTDPS	\$52,500
450	1200	460	509UZ	3200	F4506VLF4BM	523	95.4	2	MXTDPS	\$56,700
450	1200	575	509US	3200	F4506VLG3OM	418	95.4		MXTDPS	\$53,155
450	1200	460	509US	3200	F4506VLG3BM	523	95.4		MXTDPS	\$53,155
450	1200	575	509UZ	3200	F4506VLF4OM	418	95.4	2	MXTDPS	\$56,700
500	1200	460	5810UZ	4800	F5006VLF4BM	683	95.8	2	MXTDPS	\$62,605
500	1200	575	5810US	4800	F5006VLG3OM	546	95.8		MXTDPS	\$59,062
500	1200	460	5810US	4800	F5006VLG3BM	683	95.8		MXTDPS	\$59,062
500	1200	575	5810UZ	4800	F5006VLF4OM	546	95.8	2	MXTDPS	\$62,605
600	3600	460	507USS	2722	F6002VLG3BM	665	94.1		MXTDPS	\$64,467
600	3600	575	449TS	2686	B6002VKG3OME	432	95.0	3	MXTDPS	\$58,722
600	3600	460	449TS	2686	B6002VKG3BME	675	95.0	3	MXTDPS	\$58,722
600	3600	575	507USS	2722	F6002VLG3OM	532	94.1		MXTDPS	\$64,467
600	1800	460	509UZ	3200	F6004VLF4BM	651	95.4	2	MXTDPS	\$58,669
600	1800	575	509US	3200	F6004VLG3OM	521	95.4		MXTDPS	\$55,124
600	1800	460	509US	3200	F6004VLG3BM	651	95.4		MXTDPS	\$55,124
600	1800	575	509UZ	3200	F6004VLF4OM	521	95.4	2	MXTDPS	\$58,669
600	1200	460	5810UZ	4800	F6006VLF4BM	866	95.4	2	MXTDPS	\$74,418
600	1200	575	5810US	4800	F6006VLG3OM	693	95.4		MXTDPS	\$70,875
600	1200	460	5810US	4800	F6006VLG3BM	866	95.4		MXTDPS	\$70,875
600	1200	575	5810UZ	4800	F6006VLF4OM	693	95.4	2	MXTDPS	\$74,418

Open Drip Proof

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
700	3600	460	509USS	3200	F7001VLG3BM	756	96.0	5	MXTDPS	\$68,906
700	3600	575	507USS	2580	F7002VKG3OM	616	94.1	3	MXTDPS	\$68,906
700	3600	460	507USS	2580	F7002VKG3BM	770	94.1	3	MXTDPS	\$68,906
700	3600	575	509USS	3200	F7003VLG3OM	611	96.0	4	MXTDPS	\$68,906
700	3600	460	509USS	3200	F7003VLG3BM	756	96.0	4	MXTDPS	\$68,906
700	3600	575	509USS	3200	F7001VLG3OM	611	96.0	5	MXTDPS	\$68,906
700	1800	460	5810UZ	4800	F7004VLF4BM	852	95.4	2	MXTDPS	\$67,855
700	1800	575	5810US	4800	F7004VLG3OM	682	95.4		MXTDPS	\$64,312
700	1800	460	5810US	4800	F7004VLG3BM	852	95.4		MXTDPS	\$64,312
700	1800	575	5810UZ	4800	F7004VLF4OM	682	95.4	2	MXTDPS	\$67,855
700	1200	460	5810UZ	4800	F7006VKF4BM	991	95.8	2, 3	MXTDPS	\$86,230
700	1200	575	5810US	4800	F7006VKG3OM	793	95.8	3	MXTDPS	\$82,687
700	1200	460	5810US	4800	F7006VKG3BM	991	95.8	3	MXTDPS	\$82,687
700	1200	575	5810UZ	4800	F7006VKF4OM	793	95.8	2, 3	MXTDPS	\$86,230
800	3600	460	509USS	3200	F8001VLG3BM	882	95.8	5	MXTDPS	\$78,749
800	3600	575	509USS	3200	F8003VLG3OM	706	95.8	4	MXTDPS	\$78,749
800	3600	460	509USS	3200	F8003VLG3BM	882	95.8	4	MXTDPS	\$78,749
800	3600	575	509USS	3200	F8001VLG3OM	706	95.8	5	MXTDPS	\$78,749
800	1800	460	5810UZ	4800	F8004VLF4BM	969	95.4	2	MXTDPS	\$77,043
800	1800	575	5810UZ	4800	F8004VLF4OM	775	95.4	2	MXTDPS	\$77,043
800	1800	460	5810US	4800	F8004VLG3BM	969	95.4		MXTDPS	\$73,499
800	1800	575	5810US	4800	F8004VLG3OM	775	95.4		MXTDPS	\$73,499

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Drip Proof

> EPACT Efficiency



2 TWO YEAR WARRANTY

Toshiba’s general purpose, open drip proof, EPACT Efficiency motor series is designed to meet the industry’s ever-increasing need for improved energy conservation and product reliability. It offers a high torque and low vibration design, leading to a longer life and greater reliability. This product line also meets the basic NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-11.

Product Scope:

Horsepower:	250 to 500 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Open Drip Proof
Frame Size:	445TS through 509UZ
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
250	3600	230/460	445TS	1440	2502DPAB21B	275	94.5		MXTDPE	\$26,821
250	3600	575	445TS	1440	2502DPAC21B		94.5		MXTDPE	\$26,821
250	1800	460	447T	1980	2504DPAB21A		95.4	8	MXTDPE	\$24,322
250	1800	575	447T	1980	2504DPAC21A		95.4	8	MXTDPE	\$24,322
250	1800	460	447T	1980	2504DPAB21A-R		95.4	2	MXTDPE	\$25,076
250	1800	575	447T	1980	2504DPAC21A-R		95.4	2	MXTDPE	\$25,076
250	1200	460	505US	2100	2506DPAB21E		95.4		MXTDPE	\$31,015
250	1200	575	505US	2100	2506DPAC21E		95.4		MXTDPE	\$31,015
250	1200	460	505UZ	2100	2506DPAB21G-R		95.4	2	MXTDPE	\$34,137
250	1200	575	505UZ	2285	2506DPAC21G-R		95.4	2	MXTDPE	\$34,137
300	3600	460	445TS	1440	3002DPAB21B	334	95.0		MXTDPE	\$34,913
300	3600	575	445TS	1440	3002DPAC21B		95.0		MXTDPE	\$34,913
300	1800	460	447T	1980	3004DPAB21A		95.4	8	MXTDPE	\$27,441
300	1800	575	447T	1980	3004DPAC21A		95.4	8	MXTDPE	\$27,441
300	1800	460	447T	1980	3004DPAB21A-R		95.4	2	MXTDPE	\$29,010
300	1800	575	447T	1980	3004DPAC21A-R		95.4	2	MXTDPE	\$29,010
300	1200	460	509US	3200	3006DPAB21E	365	95.4		MXTDPE	\$39,142
300	1200	575	509US	3200	3006DPAC21E	288	95.4		MXTDPE	\$39,142
300	1200	460	509UZ	3200	3006DPAB21G-R	365	95.4	2	MXTDPE	\$42,264
300	1200	575	509UZ	3200	3006DPAC21G-R	288	95.4	2	MXTDPE	\$42,264
350	3600	460	447TS	1700	3502DPAB21B	386	95.0		MXTDPE	\$37,905
350	3600	575	447TS	1700	3502DPAC21B	304	95.0		MXTDPE	\$37,905
350	1800	460	505US	2100	3504DPAB21E		95.4		MXTDPE	\$30,854
350	1800	575	505US	2100	3504DPAC21E		95.4		MXTDPE	\$30,854
350	1800	460	505UZ	2285	3504DPAB21G-R		95.4	2	MXTDPE	\$32,393
350	1800	575	505UZ	2285	3504DPAC21G-R		95.4	2	MXTDPE	\$32,393
350	1200	460	509US	3200	3506DPAB21E	406	95.4		MXTDPE	\$40,050
350	1200	575	509US	3200	3506DPAC21E	335	95.4		MXTDPE	\$40,050
350	1200	460	509UZ	3200	3506DPAB21G-R	406	95.4	2	MXTDPE	\$43,691
350	1200	575	509UZ	3200	3506DPAC21G-R	335	95.4	2	MXTDPE	\$43,691

Open Drip Proof

> EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	3600	460	447TS	1700	4002DPAB21B	447	95.4		MXTDPE	\$44,010
400	3600	575	447TS	1700	4002DPAC21B		95.4		MXTDPE	\$44,010
400	1800	460	505US	2100	4004DPAB21E	414	95.4		MXTDPE	\$42,605
400	1800	575	505US	2100	4004DPAC21E		96.5		MXTDPE	\$42,605
400	1800	460	505UZ	2285	4004DPAB21G-R	414	96.5	2	MXTDPE	\$42,026
400	1800	575	505UZ	2285	4004DPAC21G-R		95.4	2	MXTDPE	\$42,026
450	3600	460	505USS	2100	4502DPAB21F	95.8	95.8		MXTDPE	\$47,558
450	3600	575	505USS	2100	4502DPAC21F		95.8		MXTDPE	\$47,558
450	1800	460	507US	2900	4504DPAB21E		95.8		MXTDPE	\$46,084
450	1800	575	507US	2900	4504DPAC21E		95.8		MXTDPE	\$46,084
450	1800	460	507UZ	2900	4504DPAB21G-R		95.8	2	MXTDPE	\$47,623
450	1800	575	507UZ	2900	4504DPAC21G-R		95.8	2	MXTDPE	\$47,623
500	3600	460	505USS	2100	5002DPAB21F	551	95.8		MXTDPE	\$52,829
500	3600	575	505USS	2100	5002DPAC21F		95.8		MXTDPE	\$52,829
500	1800	460	509US	3200	5004DPAB21E		95.8		MXTDPE	\$51,204
500	1800	575	509US	3200	5004DPAC21E		95.8		MXTDPE	\$51,204
500	1800	460	509UZ	2900	5004DPAB21G-R		95.8	2	MXTDPE	\$52,743
500	1800	575	509UZ	3200	5004DPAC21G-R		95.8	2	MXTDPE	\$52,743

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Drip Proof

> Premium Efficiency



2 TWO YEAR WARRANTY

The general purpose, open drip proof, Premium Efficiency motor series is the general purpose motor product offering that takes energy efficiency in our basic product to the next level. The Premium motor line encompasses popular motor features and delivers the quality design, performance, and reliability the motor industry has come to expect from Toshiba, all at a competitive price. The Premium motor series also exceeds the NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-11.

Product Scope

Horsepower:	1 to 75 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	230/460 or 575 V
Enclosure:	Open Drip Proof
Frame Size:	143T through 365T
Construction:	Cast Iron
Vibration :	Typically 0.12 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 30 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1	1800	230/460	143T	41	0014DPSA31A-P	3/1.5	84.5	1	MCTDPP	\$450
1	1800	575	143T	41	0014DPSC31A-P	1.2	84.5	1	MCTDPP	\$450
1	1200	230/460	145T	50	0016DPSA31A-P	3.8/1.9	82.5	1	MCTDPP	\$559
1	1200	575	145T	50	0016DPSC31A-P	1.5	82.5	1	MCTDPP	\$559
1.5	3600	230/460	143T	41	Y152DPSA31A-P	4.2/2.1	84.0	1	MCTDPP	\$490
1.5	3600	575	143T	41	Y152DPSC31A-P	1.7	84.0	1	MCTDPP	\$490
1.5	1800	230/460	145T	50	Y154DPSA31A-P	4.4/2.2	86.5	1	MCTDPP	\$495
1.5	1800	575	145T	50	Y154DPSC31A-P	1.8	86.5	1	MCTDPP	\$495
1.5	1200	230/460	182T	72	Y156DPSA31A-P	5.2/2.6	86.5	1	MCTDPP	\$597
1.5	1200	575	182T	72	Y156DPSC31A-P	2.1	86.5	1	MCTDPP	\$597
2	3600	230/460	145T	50	0022DPSA31A-P	5.4/2.7	85.5	1	MCTDPP	\$594
2	3600	575	145T	50	0022DPSC31A-P	2.2	85.5	1	MCTDPP	\$594
2	1800	230/460	145T	50	0024DPSA31A-P	5.4/2.7	85.5	1	MCTDPP	\$537
2	1800	575	145T	50	0024DPSC31A-P	2.2	85.5	1	MCTDPP	\$537
2	1200	230/460	184T	91	0026DPSA31A-P	6.8/3.4	86.5	1	MCTDPP	\$692
2	1200	575	184T	91	0026DPSC31A-P	2.7	85.5	1	MCTDPP	\$692
3	3600	230/460	145T	50	0032DPSA31A-P	7.8/3.9	85.5	1	MCTDPP	\$628
3	3600	575	145T	50	0032DPSC31A-P	3.1	85.5	1	MCTDPP	\$628
3	1800	230/460	182T	72	0034DPSA31A-P	8.0/4.0	89.5	1	MCTDPP	\$617
3	1800	575	182T	72	0034DPSC31A-P	3.2	89.5	1	MCTDPP	\$617
3	1200	230/460	213T	128	0036DPSA31A-P	9.0/4.5	87.5	1	MCTDPP	\$879
3	1200	575	213T	128	0036DPSC31A-P	3.9	87.5	1	MCTDPP	\$879
5	3600	230/460	182T	72	0052DPSA31A-P	11.6/5.8	86.5	1	MCTDPP	\$778
5	3600	575	182T	72	0052DPSC31A-P	4.6	86.5	1	MCTDPP	\$778
5	1800	230/460	184T	91	0054DPSA31A-P	13.2/6.6	88.5	1	MCTDPP	\$704
5	1800	575	184T	91	0054DPSC31A-P	5.3	88.5	1	MCTDPP	\$704
5	1200	230/460	215T	157	0056DPSA31A-P	14.4/7.2	88.5	1	MCTDPP	\$1,292
5	1200	575	215T	157	0056DPSC31A-P	5.8	88.5	1	MCTDPP	\$1,292

Open Drip Proof

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	3600	230/460	184T	91	Y752DPSA31A-P	18.0/9.0	88.5	1	MCTDPP	\$1,008
7.5	3600	575	184T	91	Y752DPSC31A-P	7.2	88.5	1	MCTDPP	\$1,008
7.5	1800	230/460	213T	128	Y754DPSA31A-P	18.8/9.4	90.2	1	MCTDPP	\$1,008
7.5	1800	575	213T	128	Y754DPSC31A-P	7.5	90.2	1	MCTDPP	\$1,008
7.5	1200	230/460	254T	260	Y756DPSA31A-P	20.4/10.2	90.2	1	MCTDPP	\$1,680
7.5	1200	575	254T	260	Y756DPSC31A-P	8.2	90.2	1	MCTDPP	\$1,680
10	3600	230/460	213T	128	0102DPSA31A-P	24.8/12.4	89.5	1	MCTDPP	\$1,209
10	3600	575	213T	128	0102DPSC31A-P	9.9	89.5	1	MCTDPP	\$1,209
10	1800	230/460	215T	157	0104DPSA31A-P	24.4/12.2	90.2	1	MCTDPP	\$1,226
10	1800	575	215T	157	0104DPSC31A-P	9.8	90.2	1	MCTDPP	\$1,226
10	1200	230/460	256T	297	0106DPSA31A-P	26.6/13.3	91.7	1	MCTDPP	\$2,052
10	1200	575	256T	297	0106DPSC31A-P	10.6	91.7	1	MCTDPP	\$2,052
15	3600	230/460	215T	157	0152DPSA31A-P	36.8/18.4	90.2	1	MCTDPP	\$1,663
15	3600	575	215T	157	0152DPSC31A-P	14.7	90.2	1	MCTDPP	\$1,663
15	1800	230/460	254T	230	0154DPSA31A-P	38.2/19.1	93.0	1	MCTDPP	\$1,621
15	1800	575	254T	230	0154DPSC31A-P	15.2	93.0	1	MCTDPP	\$1,621
15	1200	230/460	284T	394	0156DPSA31A-P	40/20	91.7	1	MCTDPP	\$2,878
15	1200	575	284T	394	0156DPSC31A-P	16	91.7	1	MCTDPP	\$2,878
20	3600	230/460	254T	260	0202DPSA31A-P	47.2/23.6	91.0	1	MCTDPP	\$2,109
20	3600	575	254T	260	0202DPSC31A-P	18.9	91.0	1	MCTDPP	\$2,109
20	1800	230/460	256T	310	0204DPSA31A-P	50/25	93.0	1	MCTDPP	\$2,002
20	1800	575	256T	310	0204DPSC31A-P	20	93.0	1	MCTDPP	\$2,002
20	1200	230/460	286T	350	0206DPSA31A-P	51.6/25.8	92.4	1	MCTDPP	\$3,371
20	1200	575	286T	350	0206DPSC31A-P	20.6	92.4	1	MCTDPP	\$3,371
25	3600	230/460	256T	297	0252DPSA31A-P	58/29	91.0	1	MCTDPP	\$2,589
25	3600	575	256T	297	0252DPSC31A-P	23.2	91.0	1	MCTDPP	\$2,589
25	1800	230/460	284T	374	0254DPSA31A-P	64/32	93.0	1	MCTDPP	\$2,428
25	1800	575	284T	374	0254DPSC31A-P	25.6	93.0	1	MCTDPP	\$2,428
25	1200	230/460	324T	580	0256DPSA31A-P	67/33.5	93.0	1	MCTDPP	\$3,445
25	1200	575	324T	580	0256DPSC31A-P	26.8	93.0	1	MCTDPP	\$3,445
30	3600	230/460	284TS	420	0302DPSA31B-P	70.8/35.4	91.7	1	MCTDPP	\$2,974
30	3600	575	284TS	420	0302DPSC31B-P	28.3	91.7	1	MCTDPP	\$2,974
30	1800	230/460	286T	350	0304DPSA31A-P	72.4/36.2	94.1	1	MCTDPP	\$2,919
30	1800	575	286T	350	0304DPSC31A-P	29	94.1	1	MCTDPP	\$2,919
30	1200	230/460	326T	480	0306DPSA31A-P	80/40	93.6	1	MCTDPP	\$4,206
30	1200	575	326T	480	0306DPSC31A-P	32	93.6	1	MCTDPP	\$4,206
40	3600	230/460	286TS	350	0402DPSA31B-P	93/46.5	92.4	1	MCTDPP	\$3,746
40	3600	575	286TS	350	0402DPSC31B-P	37.2	92.4	1	MCTDPP	\$3,746
40	1800	230/460	324T	570	0404DPSA31A-P	97/48.5	93.6	1	MCTDPP	\$3,178
40	1800	575	324T	570	0404DPSC31A-P	43.7	93.6	1	MCTDPP	\$3,178
40	1200	230/460	364T	770	0406DPSA31A-P	98.4/49.2	94.1	1	MCTDPP	\$5,502
40	1200	575	364T	770	0406DPSC31A-P	39.4	94.1	1	MCTDPP	\$5,502
50	3600	230/460	324TS	606	0502DPSA31B-P	118/59	93.0	1	MCTDPP	\$4,374
50	3600	575	324TS	606	0502DPSC31B-P	47.2	93.0	1	MCTDPP	\$4,374
50	1800	230/460	326T	639	0504DPSA31A-P	118/59	94.5	1	MCTDPP	\$3,876
50	1800	575	326T	639	0504DPSC31A-P	47.2	94.5	1	MCTDPP	\$3,876
50	1200	230/460	365T	838	0506DPSA31A-P	123/61.5	93.6	1	MCTDPP	\$6,423

Open Drip Proof

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1200	575	365T	838	0506DPSC31A-P	49.2	93.6	1	MCTDPP	\$6,423
60	3600	230/460	326TS	692	0602DPSA31B-P	136/68	93.6	1	MCTDPP	\$5,390
60	3600	575	326TS	692	0602DPSC31B-P	54.4	93.6	1	MCTDPP	\$5,390
60	1800	230/460	364T	770	0604DPSA31A-P	144/72	95.0	1	MCTDPP	\$5,462
60	1800	575	364T	770	0604DPSC31A-P	57.6	95.0	1	MCTDPP	\$5,462
75	3600	230/460	364TS	686	0752DPSA31B-P			1	MCTDPP	\$6,787
75	3600	575	364TS	686	0752DPSC31B-P			1	MCTDPP	\$6,787
75	1800	230/460	365T	838	0754DPSA31A-P	176/88	95.0	1	MCTDPP	\$7,037
75	1800	575	365T	838	0754DPSC31A-P	70.4	95	1	MCTDPP	\$7,037

FL Amps and FL EFF are average expected design values and not guaranteed.

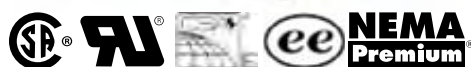
The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Drip Proof

EQPIII

> NEMA® Premium Efficiency



3 THREE YEAR WARRANTY



Toshiba's general purpose, open drip proof, NEMA® Premium efficiency, EQPIII® motor series is the cornerstone of the Toshiba product offering. This product is built to withstand the most extreme conditions and designed to meet the industry's ever-increasing need for improved energy conservation and product reliability in indoor applications. This motor meets the NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-12 and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability.

Product Scope:

Horsepower:	¾ to 700 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Open Drip Proof
Frame Size:	143T through 509US
Construction:	Cast Iron
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	230/460	143T	47	B3/46DLF2AMH02	3.0/1.5	80.0		MXTDPP	\$855
0.75	1200	575	143T	47	B3/46DLF2OMH02	1.2	80.0		MXTDPP	\$855
1	1800	230/460	143T	48	B0014DLF2AMH02	2.8/1.4	84.0		MXTDPP	\$712
1	1800	575	143T	48	B0014DLF2OMH02	1.1	84.0		MXTDPP	\$712
1	1200	230/460	145T	51	B0016DLF2AMH02	3.6/1.8	82.5		MXTDPP	\$917
1	1200	575	145T	51	B0016DLF2OMH02	1.5	82.5		MXTDPP	\$917
1.5	3600	230/460	143T	43	BY152DLF2AMH02	4.2/2.1	84.0		MXTDPP	\$806
1.5	3600	575	143T	43	BY152DLF2OMH02	1.7	84.0		MXTDPP	\$806
1.5	1800	230/460	145T	53	BY154DLF2AMH02	4.4/2.2	86.5		MXTDPP	\$779
1.5	1800	575	145T	53	BY154DLF2OMH02	1.8	86.5		MXTDPP	\$779
1.5	1200	230/460	182T	80	BY156DLF2AMH02	5.0/2.5	86.5		MXTDPP	\$967
1.5	1200	575	182T	80	BY156DLF2OMH02	2	86.5		MXTDPP	\$967
2	3600	230/460	145T	46	B0022DLF2AMH02	5.0/2.5	86.5		MXTDPP	\$955
2	3600	575	145T	46	B0022DLF2OMH02	2	86.5		MXTDPP	\$955
2	1800	230/460	145T	61	B0024DLF2AMH02	5.6/2.8	86.5		MXTDPP	\$855
2	1800	575	145T	61	B0024DLF2OMH02	2.2	86.5		MXTDPP	\$855
2	1200	230/460	184T	92	B0026DLF2AMH02	6.6/3.3	87.5		MXTDPP	\$1,292
2	1200	575	184T	92	B0026DLF2OMH02	2.6	87.5		MXTDPP	\$1,292
3	3600	230/460	145T	53	B0032DLF2AMH02	7.4/3.7	86.5		MXTDPP	\$1,031
3	3600	575	145T	53	B0032DLF2OMH02	3	86.5		MXTDPP	\$1,031
3	1800	230/460	182T	91	B0034DLF2AMH02	7.6/3.8	89.5		MXTDPP	\$930
3	1800	575	182T	91	B0034DLF2OMH02	3	89.5		MXTDPP	\$930
3	1200	230/460	213T	155	B0036DLF2AMH01	8.4/4.2	90.2		MXTDPP	\$1,458
3	1200	575	213T	155	B0036DLF2OMH01	3.4	90.2		MXTDPP	\$1,458
5	3600	230/460	182T	78	B0052DLF2AMH02	11.6/5.8	89.5		MXTDPP	\$1,240
5	3600	575	182T	78	B0052DLF2OMH02	4.6	89.5		MXTDPP	\$1,240
5	1800	230/460	184T	102	B0054DLF2AMH02	12.6/6.3	89.5		MXTDPP	\$1,178

Open Drip Proof

EQPIII

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1800	575	184T	102	B0054DLF2OMH02	5	89.5		MXTDPP	\$1,178
5	1200	230/460	215T	158	B0056DLF2AMH01	13.4/6.7	90.2		MXTDPP	\$1,880
5	1200	575	215T	158	B0056DLF2OMH01	5.4	90.2		MXTDPP	\$1,880
7.5	3600	230/460	184T	87	BY752DLF2AMH02	17/8.5	90.2		MXTDPP	\$1,648
7.5	3600	575	184T	87	BY752DLF2OMH02	6.8	90.2		MXTDPP	\$1,648
7.5	1800	230/460	213T	164	BY754DLF2USH01	18.8/9.4	91.7		MXTDPP	\$1,427
7.5	1800	575	213T	164	BY754DLF2OSH01	7.5	91.7		MXTDPP	\$1,427
7.5	1200	230/460	254T	255	BY756DLF2UMH01	20/10	91.7		MXTDPP	\$2,352
7.5	1200	575	254T	255	BY756DLF2OMH01	8	91.7		MXTDPP	\$2,352
10	3600	230/460	213T	156	B0102DLF2UMH01	26/13	90.2		MXTDPP	\$1,866
10	3600	575	213T	156	B0102DLF2OMH01	10.4	90.2		MXTDPP	\$1,866
10	1800	230/460	215T	184	B0104DLF2USH01	24/12	91.7		MXTDPP	\$1,712
10	1800	575	215T	184	B0104DLF2OSH01	9.6	91.7		MXTDPP	\$1,712
10	1200	230/460	256T	290	B0106DLF2UMH01	26/13	92.4		MXTDPP	\$2,754
10	1200	575	256T	290	B0106DLF2OMH01	10.4	92.4		MXTDPP	\$2,754
15	3600	230/460	215T	188	B0152DLF2UMH01	37/18.5	91.0		MXTDPP	\$2,364
15	3600	575	215T	188	B0152DLF2OMH01	15	91.0		MXTDPP	\$2,364
15	1800	230/460	254T	260	B0154DLF2UMH01	38/19	93.0		MXTDPP	\$2,358
15	1800	575	254T	260	B0154DLF2OMH01	15	93.0		MXTDPP	\$2,358
15	1200	230/460	284T	346	B0156VLF1UMH01	39/19.5	92.4		MXTDPP	\$3,723
15	1200	575	284T	346	B0156VLF1OMH01	15.6	92.4		MXTDPP	\$3,723
20	3600	230/460	254T	276	B0202DLF2UMH01	46/23	92.4		MXTDPP	\$2,787
20	3600	575	254T	276	B0202DLF2OMH01	18	92.4		MXTDPP	\$2,787
20	1800	230/460	256T	317	B0204DLF2UMH01	48/24	93.6		MXTDPP	\$2,823
20	1800	575	256T	317	B0204DLF2OMH01	19.2	93.6		MXTDPP	\$2,823
20	1200	230/460	286T	393	B0206VLF1UMH01	51/25.5	93.0		MXTDPP	\$4,349
20	1200	575	286T	393	B0206VLF1OMH01	20.4	93.0		MXTDPP	\$4,349
25	3600	230/460	256T	309	B0252DLF2UMH01	56/28	93.0		MXTDPP	\$3,404
25	3600	575	256T	309	B0252DLF2OMH01	22	93.0		MXTDPP	\$3,404
25	1800	230/460	284T	373	B0254VLF1USH01	62/31	93.6		MXTDPP	\$3,442
25	1800	575	284T	373	B0254VLF1OSH01	25	93.6		MXTDPP	\$3,442
25	1200	230/460	324T	468	B0256VLF1UMH01	62/31	93.6		MXTDPP	\$5,161
25	1200	575	324T	468	B0256VLF1OMH01	25	93.6		MXTDPP	\$5,161
30	3600	230/460	284TS	373	B0302VLG3UMH	70/35	93.6		MXTDPP	\$4,264
30	3600	575	284TS	373	B0302VLG3OMH	28	93.6		MXTDPP	\$4,264
30	1800	230/460	286T	402	B0304VLF1USH01	74/37	94.1		MXTDPP	\$4,001
30	1800	575	286T	402	B0304VLF1OSH01	30	94.1		MXTDPP	\$4,001
30	1200	230/460	326T	532	B0306VLF1UMH01	74/37	93.6		MXTDPP	\$5,905
30	1200	575	326T	532	B0306VLF1OMH01	30	93.6		MXTDPP	\$5,905
40	3600	230/460	286TS	412	B0402VLG3UMH	92/46	93.6		MXTDPP	\$5,195
40	3600	575	286TS	412	B0402VLG3OMH	37	93.6		MXTDPP	\$5,195
40	1800	230/460	324T	562	B0404VLF1UMH01	96/48	94.5		MXTDPP	\$4,974
40	1800	575	324T	562	B0404VLF1OMH01	39	94.5		MXTDPP	\$4,974
40	1200	230/460	364T	659	B0406VLF3USH	98/49	94.5		MXTDPP	\$9,113
40	1200	575	364T	659	B0406VLF3OSH	39	94.5		MXTDPP	\$9,113
50	3600	230/460	324TS	550	B0502VLG3UMH	118/59	93.6		MXTDPP	\$6,175
50	3600	575	324TS	550	B0502VLG3OMH	47	93.6		MXTDPP	\$6,175
50	1800	230/460	326T	620	B0504VLF1UMH01	120/60	95.0		MXTDPP	\$5,908

Open Drip Proof

EQPIII

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1800	575	326T	620	B0504VLF1OMH01	48	95.0		MXTDPP	\$5,908
50	1200	230/460	365T	716	B0506VLF3USH	124/62	94.5		MXTDPP	\$10,643
50	1200	575	365T	716	B0506VLF3OSH	50	94.5		MXTDPP	\$10,643
60	3600	230/460	326TS	594	B0602VLG3UMH	140/70	93.6		MXTDPP	\$7,019
60	3600	575	326TS	594	B0602VLG3OMH	56	93.6		MXTDPP	\$7,019
60	1800	230/460	364T	662	B0604VLF3USH	146/73	95.4		MXTDPP	\$7,109
60	1800	575	364T	662	B0604VLF3OSH	58	95.4		MXTDPP	\$7,109
60	1200	230/460	404T	1032	B0606VLF3USH	148/74	95.0		MXTDPP	\$12,418
60	1200	575	404T	1032	B0606VLF3OSH	59	95.0		MXTDPP	\$12,418
75	3600	230/460	364TS	747	B0752VLG3USH	174/87	94.5		MXTDPP	\$9,617
75	3600	575	364TS	747	B0752VLG3OSH	70	94.5		MXTDPP	\$9,617
75	1800	230/460	365T	748	B0754VLF3USH	178/89	95.4		MXTDPP	\$8,475
75	1800	575	365T	748	B0754VLF3OSH	71	95.4		MXTDPP	\$8,475
75	1200	230/460	405T	1139	B0756VLF3USH	184/92	95.8		MXTDPP	\$14,470
75	1200	575	405T	1139	B0756VLF3OSH	74	95.8		MXTDPP	\$14,470
100	3600	230/460	365TS	747	B1002VLG3USH	230/115	95.0		MXTDPP	\$12,030
100	3600	575	365TS	747	B1002VLG3OSH	92	95.0		MXTDPP	\$12,030
100	1800	230/460	404T	1100	B1004VLF3USH	230/115	95.4		MXTDPP	\$11,142
100	1800	575	404T	1100	B1004VLF3OSH	92	95.4		MXTDPP	\$11,142
100	1200	230/460	444T	1406	B1006VLF4USH	244/122	95.4	2	MXTDPP	\$18,327
100	1200	575	444T	1406	B1006VLF4OSH	98	95.4	2	MXTDPP	\$18,327
125	3600	230/460	404TS	1114	B1252VLG3USH	284/142	95.4		MXTDPP	\$14,535
125	3600	575	404TS	1114	B1252VLG3OSH	114	95.4		MXTDPP	\$14,535
125	1800	230/460	405T	1209	B1254VLF3USH	284/142	95.4		MXTDPP	\$12,567
125	1800	575	405T	1209	B1254VLF3OSH	113	95.4		MXTDPP	\$12,567
125	1200	230/460	445T	1507	B1256VLF4USH	310/155	95.4	2	MXTDPP	\$20,814
125	1200	575	445T	1507	B1256VLF4OSH	124	95.4	2	MXTDPP	\$20,814
150	3600	230/460	405TS	1213	B1502VLG3USH	332/166	95.8		MXTDPP	\$17,681
150	3600	575	405TS	1213	B1502VLG3OSH	133	95.8		MXTDPP	\$17,681
150	1800	230/460	444T	1355	B1504VLF4USH	334/167	95.8	2	MXTDPP	\$18,147
150	1800	575	444T	1355	B1504VLF4OSH	134	95.8	2	MXTDPP	\$18,147
150	1200	460	445TZ	1617	B1506VLF4BSH	180	95.8	2	MXTDPP	\$23,074
150	1200	575	445TZ	1617	B1506VLF4OSH	144	95.8	2	MXTDPP	\$23,074
150	1200	460	445TS	1617	B1506VLG3BSH	180	95.8		MXTDPP	\$23,074
150	1200	575	445TS	1617	B1506VLG3OSH	144	95.8		MXTDPP	\$23,074
200	3600	230/460	444TS	1520	B2002VLG3USH	450/225	95.8		MXTDPP	\$27,504
200	3600	575	444TS	1520	B2002VLG3OSH	180	95.8		MXTDPP	\$27,504
200	1800	230/460	445T	1597	B2004VLF4USH	444/222	96.2	2	MXTDPP	\$21,882
200	1800	575	445T	1597	B2004VLF4OSH	178	96.2	2	MXTDPP	\$21,882
200	1200	575	505UZ	2010	B2006VLF4OMH	188	95.8	2	MXTDPP	\$37,362
200	1200	460	505UZ	2010	B2006VLF4BMH	235	95.8	2	MXTDPP	\$37,362
200	1200	575	505US	2010	B2006VLG3OMH	188	95.8		MXTDPP	\$33,894
200	1200	460	505US	2010	B2006VLG3BMH	235	95.8		MXTDPP	\$33,894
250	3600	230/460	445TS	1720	B2502VLG3UMH	560/280	95.8		MXTDPP	\$29,802
250	3600	575	445TS	1720	B2502VLG3OMH	224	95.8		MXTDPP	\$29,802
250	1800	460	447T	1721	B2504VLF4BMH	272	96.5	2	MXTDPP	\$30,715
250	1800	575	447T	1721	B2504VLF4OMH	218	96.5	2	MXTDPP	\$30,715
250	1800	460	447TS	1721	B2504VLG3BMH	272	96.5		MXTDPP	\$30,715

TOSHIBA

ODP General Purpose

TEFC General Purpose

EQP Global

Definite Purpose

Explosion Proof

Brake

Washdown

Vertical

LV Motor Modifications

MV General Purpose

MV Motor Modifications

Spare Parts

Open Drip Proof

EQPIII

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
250	1800	575	447TS	1721	B2504VLG3OMH	218	96.5		MXTDPP	\$30,715
250	1200	460	505UZ	2072	B2506VLF4BMH	290	95.8	2	MXTDPP	\$39,068
250	1200	575	505UZ	2072	B2506VLF4OMH	232	95.8	2	MXTDPP	\$39,068
250	1200	460	505US	2072	B2506VLG3BMH	290	95.8		MXTDPP	\$35,600
250	1200	575	505US	2072	B2506VLG3OMH	232	95.8		MXTDPP	\$35,600
300	3600	575	447TS	1934	B3002VLG3OMH	264	96.2		MXTDPP	\$38,793
300	3600	460	447TS	1934	B3002VLG3BMH	330	96.2		MXTDPP	\$38,793
300	1800	460	447T	1721	B3004VLF4BMH	330	96.2	2	MXTDPP	\$32,234
300	1800	575	447T	1721	B3004VLF4OMH	264	96.2	2	MXTDPP	\$32,234
300	1800	460	447TS	1721	B3004VLG3BMH	330	96.2		MXTDPP	\$32,234
300	1800	575	447TS	1721	B3004VLG3OMH	264	96.2		MXTDPP	\$32,234
300	1200	460	507UZ	2474	B3006VLF4BMH	345	95.8	2	MXTDPP	\$46,961
300	1200	575	507UZ	2474	B3006VLF4OMH	276	95.8	2	MXTDPP	\$46,961
300	1200	460	507US	2474	B3006VLG3BMH	345	95.8		MXTDPP	\$43,493
300	1200	575	507US	2474	B3006VLG3OMH	276	95.8		MXTDPP	\$43,493
350	3600	460	447TS	2012	B3502VLG3BMH	382	96.2		MXTDPP	\$42,117
350	3600	575	447TS	2012	B3502VLG3OMH	305	96.2		MXTDPP	\$42,117
350	1800	460	505US	2054	B3504VLG3BMH	385	96.5		MXTDPP	\$37,544
350	1800	575	505UZ	2054	B3504VLF4OMH	308	96.5	2	MXTDPP	\$41,012
350	1800	460	505UZ	2054	B3504VLF4BMH	385	96.5	2	MXTDPP	\$41,012
350	1800	575	505US	2054	B3504VLG3OMH	308	96.5		MXTDPP	\$37,544
400	3600	460	505USS	2312	B4002VLG3BMH	430	95.8		MXTDPP	\$48,900
400	3600	575	505USS	2312	B4002VLG3OMH	344	95.8		MXTDPP	\$48,900
400	1800	460	507UZ	2620	B4004VLF4BMH	440	96.5	2	MXTDPP	\$50,808
400	1800	575	507UZ	2620	B4004VLF4OMH	352	96.5	2	MXTDPP	\$50,808
400	1800	460	507US	2620	B4004VLG3BMH	440	96.5		MXTDPP	\$47,340
400	1800	575	507US	2620	B4004VLG3OMH	352	96.5		MXTDPP	\$47,340
450	3600	460	507USS	2777	B4502VLG3BMH	480	96.2		MXTDPP	\$52,842
450	3600	575	507USS	2777	B4502VLG3OMH	384	96.2		MXTDPP	\$52,842
450	1800	460	507US	2777	B4504VLG3BMH	495	96.2		MXTDPP	\$53,256
450	1800	575	507UZ	2777	B4504VLF4OMH	396	96.2	2	MXTDPP	\$56,724
450	1800	460	507UZ	2777	B4504VLF4BMH	495	96.2	2	MXTDPP	\$56,724
450	1800	575	507US	2777	B4504VLG3OMH	396	96.2		MXTDPP	\$53,256
500	3600	460	507USS	2777	B5002VLG3BMH	528	96.5		MXTDPP	\$58,700
500	3600	575	507USS	2777	B5002VLG3OMH	422	96.5		MXTDPP	\$58,700
500	1800	460	509UZ	3200	B5004VLF4BMH	553	96.5	2	MXTDPP	\$64,057
500	1800	575	509UZ	3200	B5004VLF4OMH	442	96.5	2	MXTDPP	\$64,057
500	1800	460	509US	3200	B5004VLG3BMH	553	96.5		MXTDPP	\$60,686
500	1800	575	509US	3200	B5004VLG3OMH	442	96.5		MXTDPP	\$60,686
600	3600	460	507USS	2777	F6002VLG3BMH	640	96.2		MXTDPP	\$67,752
600	3600	575	507USS	2777	F6002VLG3OMH	512	96.2		MXTDPP	\$67,752
700	3600	460	507USS	2777	B7002VKG3BMH	741	96.2		MXTDPP	\$75,091
700	3600	575	507USS	2777	B7002VKG3OMH	592	96.2		MXTDPP	\$75,091

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

General Purpose Series

Totally Enclosed Fan Cooled Motors

Toshiba's general purpose, totally enclosed fan cooled motors are designed to meet the industry's ever-increasing need for improved energy conservation and product reliability. Using the cornerstone of our product offering, the EQPIII® motor line, as a base, our totally enclosed fan cooled motors are built to withstand the toughest conditions. This product line offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. Our totally enclosed fan cooled motors are designed for indoor and outdoor use, and are available in High Efficiency, High Efficiency C-Face Footless, EPACT Efficiency, and our NEMA® Premium Efficiency motor option, the EQPIII.

Standard Features:

- Totally Enclosed Fan Cooled
- High, EPACT, & NEMA® Premium Efficiency
- 230/460, 460, or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Design B Torques
- Class F Insulation; Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- Stamped Steel Conduit Box on 140 through 5010U Frames or Cast Iron Conduit Box on 5810U Frame
- Cast Iron Frame
- Steel or Cast Iron Fan Cover
- Cast Iron Brackets
- Ball Bearing 140T through 405T Frames
- Roller Bearing on 440T Frame & Above, 4- & 6-Pole
- V-Ring Shaft Slinger or Labyrinth Seal on Drive End
- Polyurea Base Grease
- 304 Stainless Steel Nameplate

Applications:

- Pumps
- Fans
- Compressors
- Conveyors
- Material Handling
- General Applications



Totally Enclosed Fan Cooled Fractional 56 Frame

> High Efficiency



2 TWO YEAR WARRANTY

Toshiba's general purpose, totally enclosed fan cooled, High Efficiency, three-phase Fractional 56 Frame motor series is designed to meet the industry's ever-increasing need for improved energy conservation and product performance. This product line offers exceptionally high torque and a low vibration design, leading to a longer life and greater reliability.

Product Scope:

Horsepower:	1/2 to 2 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	230/460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	56/56H & 56C
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

**Available as Foot Mount, C-Face Footless, or modified Foot Mount for C-Face*

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
C-FACE FOOTED										
0.5	1800	230/460	56/56H	49	B1/24EMF2AOZ	1.7/0.85	78.5	1, 7	MXTFCS	\$435
0.5	1800	575	56/56H	49	B1/24EMF2OOZ	0.68	78.5	1, 7	MXTFCS	\$435
0.5	1200	230/460	56/56H	53	B1/26FMF2AOZ	2.0/1.0	77.0	1	MXTFCS	\$632
0.5	1200	575	56/56H	53	B1/26FMF2OOZ	0.8	77.0	1	MXTFCS	\$632
0.75	3600	230/460	56/56H	47	B3/42FMF2AOZ	2.2/1.1	77.0	1	MXTFCS	\$430
0.75	3600	575	56/56H	47	B3/42FMF2OOZ	0.88	77.0	1	MXTFCS	\$430
0.75	1800	230/460	56/56H	57	B3/44FMF2AOZ	2.2/1.1	81.5	1	MXTFCS	\$468
0.75	1800	575	56/56H	57	B3/44FMF2OOZ	0.88	81.5	1	MXTFCS	\$468
0.75	1200	230/460	56/56H	53	B3/46FLF2AOZ	2.8/1.4	78.5	1	MXTFCS	\$647
0.75	1200	575	56/56H	53	B3/46FLF2OOZ	1.1	78.5	1	MXTFCS	\$647
1	3600	230/460	56/56H	50	B0012FMF2AOZ	2.7/1.35	80.0	1	MXTFCS	\$507
1	3600	575	56/56H	50	B0012FMF2OOZ	1.1	80.0	1	MXTFCS	\$507
1	1800	230/460	56/56H	56	B0014FLF2AOZ	2.9/1.45	82.5	1	MXTFCS	\$490
1	1800	575	56/56H	56	B0014FLF2OOZ	1.2	82.5	1	MXTFCS	\$490
1	1200	230/460	56/56H	54	B0016FLF2AOZ	3.7/1.85	78.5	1	MXTFCS	\$656
1	1200	575	56/56H	54	B0016FLF2OOZ	1.5	78.5	1	MXTFCS	\$656
1.5	3600	230/460	56/56H	53	BY152FLF2AOZ	3.8/1.9	82.5	1	MXTFCS	\$557
1.5	3600	575	56/56H	53	BY152FLF2OOZ	1.6	82.5	1	MXTFCS	\$557
1.5	1800	230/460	56/56H	54	BY154FLF2AOZ	4.5/2.25	81.5	1	MXTFCS	\$549
1.5	1800	575	56/56H	54	BY154FLF2OOZ	1.8	81.5	1	MXTFCS	\$549
1.5	1200	230/460	56/56H	58	BY156FLF2AOZ	5.4/2.7	78.5	1	MXTFCS	\$752
1.5	1200	575	56/56H	58	BY156FLF2OOZ	2.2	78.5	1	MXTFCS	\$752

Totally Enclosed Fan Cooled

Fractional 56 Frame

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
2	3600	230/460	56/56H	54	B0022FLF2AOZ	5.2/2.6	84.0	1	MXTFCS	\$623
2	3600	575	56/56H	54	B0022FLF2OOZ	2.1	84.0	1	MXTFCS	\$623
2	1800	230/460	56/56H	55	B0024FLF2AOZ	5.8/2.9	84.0	1	MXTFCS	\$592
2	1800	575	56/56H	55	B0024FLF2OOZ	2.3	84.0	1	MXTFCS	\$592
C-FACE FOOTLESS										
0.5	1800	230/460	56C	47	B1/24EMC2AOZ	1.7/0.85	78.5	1, 7	MXTFCS	\$468
0.5	1800	575	56C	47	B1/24EMC2OOZ	0.68	78.5	1, 7	MXTFCS	\$468
0.5	1200	230/460	56C	51	B1/26FMC2AOZ	2.0/1.0	77.0	1	MXTFCS	\$654
0.5	1200	575	56C	51	B1/26FMC2OOZ	0.8	77.0	1	MXTFCS	\$632
0.75	3600	230/460	56C	47	B3/42FMC2AOZ	2.2/1.1	77.0	1	MXTFCS	\$430
0.75	3600	575	56C	47	B3/42FMC2OOZ	0.88	77.0	1	MXTFCS	\$430
0.75	1800	230/460	56C	54	B3/44FMC2AOZ	2.2/1.1	81.5	1	MXTFCS	\$500
0.75	1800	575	56C	54	B3/44FMC2OOZ	0.88	81.5	1	MXTFCS	\$500
0.75	1200	230/460	56C	51	B3/46FLC2AOZ	2.8/1.4	78.5	1	MXTFCS	\$684
0.75	1200	575	56C	51	B3/46FLC2OOZ	1.1	78.5	1	MXTFCS	\$684
1	3600	230/460	56C	48	B0012FMC2AOZ	2.7/1.35	80.0	1	MXTFCS	\$509
1	3600	575	56C	48	B0012FMC2OOZ	1.1	80.0	1	MXTFCS	\$509
1	1800	230/460	56C	54	B0014FLC2AOZ	2.9/1.45	82.5	1	MXTFCS	\$533
1	1800	575	56C	54	B0014FLC2OOZ	1.2	82.5	1	MXTFCS	\$533
1	1200	230/460	56C	52	B0016FLC2AOZ	3.7/1.85	78.5	1	MXTFCS	\$671
1	1200	575	56C	52	B0016FLC2OOZ	1.5	78.5	1	MXTFCS	\$671
1.5	3600	230/460	56C	51	BY152FLC2AOZ	3.8/1.9	82.5	1	MXTFCS	\$560
1.5	3600	575	56C	51	BY152FLC2OOZ	1.6	82.5	1	MXTFCS	\$560
1.5	1800	230/460	56C	52	BY154FLC2AOZ	4.5/2.25	81.5	1	MXTFCS	\$566
1.5	1800	575	56C	52	BY154FLC2OOZ	1.8	81.5	1	MXTFCS	\$566
1.5	1200	230/460	56C	56	BY156FLC2AOZ	5.4/2.7	78.5	1	MXTFCS	\$765
1.5	1200	575	56C	56	BY156FLC2OOZ	2.2	78.5	1	MXTFCS	\$765
2	3600	230/460	56C	52	B0022FLC2AOZ	5.2/2.6	84.0	1	MXTFCS	\$638
2	3600	575	56C	52	B0022FLC2OOZ	2.1	84.0	1	MXTFCS	\$638
2	1800	230/460	56C	53	B0024FLC2AOZ	5.8/2.9	84.0	1	MXTFCS	\$605
2	1800	575	56C	53	B0024FLC2OOZ	2.3	84.0	1	MXTFCS	\$605

C-Face Footed available through stock modification.

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Totally Enclosed Fan Cooled

> High & EPACT Efficiency



High Efficiency:



EPACT Efficiency:



2 TWO YEAR WARRANTY

Toshiba's general purpose, totally enclosed fan cooled, High and EPACT Efficiency motor series are designed to meet the industry's ever-increasing need for improved energy conservation and product performance. These product lines offer exceptionally high torque and low vibration designs, leading to a longer life and greater reliability.

Product Scope:

Horsepower:	1 to 800 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	180T through 5811US
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
HIGH EFFICIENCY										
250	900	460	N587UZ	5150	B2508FLF4BM	321	95.0	2	MXTFCS	\$63,475
250	900	460	N449T	3930	B2508FLF4BML	306	94.0	2	MXTFCS	\$56,935
250	900	460	N587US	5150	B2508FLG3BM	321	95.0		MXTFCS	\$59,931
250	900	575	N587UZ	5150	B2508FLF4OM	257	95.0	2	MXTFCS	\$63,475
250	900	575	N449T	3930	B2508FLF4OML	245	94.0	2	MXTFCS	\$56,935
250	900	575	N587US	5150	B2508FLG3OM	257	95.0		MXTFCS	\$59,931
300	900	460	5810UZ	7800	F3008FLF4BM	430	95.0	2	MXTFCS	\$66,543
300	900	460	5810US	7800	F3008FLG3BM	430	95.0		MXTFCS	\$63,000
300	900	575	5810UZ	7800	F3008FLF4OM	265	95.0	2	MXTFCS	\$66,543
300	900	575	5810US	7800	F3008FLG3OM	265	95.0		MXTFCS	\$63,000
350	900	460	5810UZ	7800	F3508FLF4BM	500	95.0	2	MXTFCS	\$77,043
350	900	460	5810US	7800	F3508FLG3BM	500	95.0		MXTFCS	\$73,499
350	900	575	5810UZ	7800	F3508FLF4OM	310	95.0	2	MXTFCS	\$77,043
350	900	575	5810US	7800	F3508FLG3OM	310	95.0		MXTFCS	\$73,499
400	1200	460	5010UZ	4740	F4006FLF4BM	486	94.1	2	MXTFCS	\$63,196
400	1200	460	5010US	4755	F4006FLG3BM	486	94.1		MXTFCS	\$59,653
400	1200	575	5010UZ	4740	F4006FLF4OM	388	94.1	2	MXTFCS	\$63,196
400	1200	575	5010US	4755	F4006FLG3OM	388	94.1		MXTFCS	\$59,653
400	900	460	5810UZ	7800	F4008FLF4BM	504	95.4	2	MXTFCS	\$87,544
400	900	460	5810US	7800	F4008FLG3BM	504	95.4		MXTFCS	\$83,999
400	900	575	5810UZ	7800	F4008FLF4OM	380	95.4	2	MXTFCS	\$87,544
400	900	575	5810US	7800	F4008FLG3OM	380	95.4		MXTFCS	\$83,999
450	1200	460	5810UZ	7800	F4506FLF4BM	486	96.2	2	MXTFCS	\$74,418
450	1200	460	5810US	7800	F4506FLG3BM	486	96.2		MXTFCS	\$70,875
450	1200	575	5810UZ	7800	F4506FLF4OM	425	96.2	2	MXTFCS	\$74,418

Totally Enclosed Fan Cooled

> High & EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
450	1200	575	5810US	7800	F4506FLG3OM	425	96.2		MXTFCS	\$70,875
450	900	460	5810UZ	7800	F4508FLF4BM	631	95.4	2	MXTFCS	\$98,043
450	900	460	5810US	7800	F4508FLG3BM	631	95.4		MXTFCS	\$94,500
450	900	575	5810UZ	7800	F4508FLF4OM	504	95.4	2	MXTFCS	\$98,043
450	900	575	5810US	7800	F4508FLG3OM	504	95.4		MXTFCS	\$94,500
500	1200	460	5810UZ	7800	F5006FLF4BM	654	95.4	2	MXTFCS	\$82,294
500	1200	460	5810US	7800	F5006FLG3BM	654	95.4		MXTFCS	\$78,749
500	1200	575	5810UZ	7800	F5006FLF4OM	523	95.4	2	MXTFCS	\$82,294
500	1200	575	5810US	7800	F5006FLG3OM	523	95.4		MXTFCS	\$78,749
500	900	460	5811US	7000	5008FTAB11E-A	632	95.0		MXTFCS	\$98,500
500	900	460	5811UZ	7000	5008FTAB11G-AR	632	95.0	2	MXTFCS	\$102,000
500	900	575	5811US	7000	5008FTAC11E-A	506	95.0		MXTFCS	\$98,500
500	900	575	5811UZ	7000	5008FTAC11G-AR	506	95.0	2	MXTFCS	\$102,000
600	3600	460	5810USS	7800	F6003FLG8BM	656		4	MXTFCS	\$89,775
600	3600	575	5810USS	7800	F6003FLG8OM	525		4	MXTFCS	\$89,775
600	1800	460	5810UZ	7800	F6004FLF4BM	682		2	MXTFCS	\$82,294
600	1800	460	5810US	7800	F6004FLG3BM	682			MXTFCS	\$78,749
600	1800	575	5810UZ	7800	F6004FLF4OM	547		2	MXTFCS	\$82,294
600	1800	575	5810US	7800	F6004FLG3OM	547			MXTFCS	\$78,749
600	1200	460	5810UZ	7800	F6006FLF4BM	776		2	MXTFCS	\$93,318
600	1200	460	5810US	7800	F6006FLG3BM	776			MXTFCS	\$89,775
600	1200	575	5810UZ	7800	F6006FLF4OM	612		2	MXTFCS	\$93,318
600	1200	575	5810US	7800	F6006FLG3OM	612			MXTFCS	\$89,775
600	900	460	5811US	7000	6004FTAB11E-A	668	95.4		MXTFCS	\$90,458
600	900	575	5811US	7000	6004FTAC11E-A	534	95.4		MXTFCS	\$90,458
700	3600	460	5811USS	7000	F7003FTAB11F-A	796	95.8	4	MXTFCS	\$96,354
700	3600	575	5811USS	7000	F7003FTAC11F-A	638	95.8	4	MXTFCS	\$96,354
700	1800	460	5810UZ	7800	F7004FLF4BM	780		2	MXTFCS	\$95,418
700	1800	460	5810US	7800	F7004FLG3BM	780			MXTFCS	\$91,875
700	1800	460	5811US	7000	7004FTAB11E-A	779	95.4		MXTFCS	\$99,357
700	1800	575	5810UZ	7800	F7004FLF4OM	624		2	MXTFCS	\$95,418
700	1800	575	5810US	7800	F7004FLG3OM	624			MXTFCS	\$91,875
700	1800	575	5811US	7000	7004FTAC11E-A	622	95.4		MXTFCS	\$99,357
700	1200	460	5811US	7000	7006FTAB11E-A	864	95.6		MXTFCS	\$103,169
700	1200	575	5811US	7000	7006FTAC11E-A	691			MXTFCS	\$103,169
800	1800	460	5811US	7000	8004FTAB11E-A	890	95.0		MXTFCS	\$101,643
800	1800	575	5811US	7000	8004FTAC11E-A	712	95.0		MXTFCS	\$101,643

EPACT EFFICIENCY

1	900	230/460	182T	82	0018FCSA21A		74.0		MXTFCE	\$1,551
1	900	575	182T	82	0018FCSC21A		74.0		MXTFCE	\$1,551
1.5	900	230/460	184T	105	Y158FCSA21A		77.0		MXTFCE	\$1,830
1.5	900	575	184T	105	Y158FCSC21A		77.0		MXTFCE	\$1,830
2	900	230/460	213T	190	0028FCSA21A		82.5		MXTFCE	\$2,188
2	900	575	213T	190	0028FCSC21A		82.5		MXTFCE	\$2,188
3	900	230/460	215T	206	0038FCSA21A		84.0		MXTFCE	\$2,731
3	900	575	215T	206	0038FCSC21A		84.0		MXTFCE	\$2,731
5	900	230/460	254T	254	0058FCSA21A		85.5		MXTFCE	\$3,630
5	900	575	254T	254	0058FCSC21A		85.5		MXTFCE	\$3,630

Totally Enclosed Fan Cooled

> High & EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	900	230/460	256T	327	Y758FCSA21A		85.5		MXTFCE	\$4,581
7.5	900	575	256T	327	Y758FCSC21A		85.5		MXTFCE	\$4,581
10	900	230/460	284T	380	0108FCSA21A		88.5		MXTFCE	\$5,349
10	900	575	284T	380	0108FCSC21A		88.5		MXTFCE	\$5,349
15	900	230/460	286T	424	0158FCSA21A		88.5		MXTFCE	\$6,961
15	900	575	286T	424	0158FCSC21A		88.5		MXTFCE	\$6,961
20	900	230/460	324T	567	0208FCSA21A		89.5		MXTFCE	\$8,510
20	900	575	324T	567	0208FCSC21A		89.5		MXTFCE	\$8,510
25	900	230/460	326T	631	0258FCSA21A		89.5		MXTFCE	\$9,895
25	900	575	326T	631	0258FCSC21A		89.5		MXTFCE	\$9,895
30	900	230/460	364T	714	0308FCSA21A		91.0		MXTFCE	\$11,710
30	900	575	364T	714	0308FCSC21A		91.0		MXTFCE	\$11,710
40	900	230/460	365T	771	0408FCSA21A		91.0		MXTFCE	\$14,161
40	900	575	365T	771	0408FCSC21A		91.0		MXTFCE	\$14,161
50	900	230/460	404T	1241	0508FCSA21A		91.7		MXTFCE	\$16,920
50	900	575	404T	1241	0508FCSC21A		91.7		MXTFCE	\$16,920
60	900	230/460	405T	1319	0608FCSA21A		91.7		MXTFCE	\$19,327
60	900	575	405T	1319	0608FCSC21A		91.7		MXTFCE	\$19,327
75	900	230/460	444T	1786	0758FCSA21A-R		93.0	2	MXTFCE	\$25,471
75	900	575	444T	1786	0758FCSC21A-R		93.0	2	MXTFCE	\$25,471
100	900	230/460	445T	1941	1008FCSA21A-R		93.0	2	MXTFCE	\$31,491
100	900	575	445T	1941	1008FCSC21A-R		93.0	2	MXTFCE	\$31,491
125	900	460	447T	2800	1258FCSB21A-R		93.6	2	MXTFCE	\$33,554
125	900	575	447T	2800	1258FCSC21A-R		93.6	2	MXTFCE	\$33,554
150	900	460	N449T	3820	1508FCSB21A-R		93.6	2	MXTFCE	\$42,677
150	900	460	505US	2800	1508FCSB21E		93.6		MXTFCE	\$53,344
150	900	460	505UZ	2629	1508FCSB21G-R		93.6	2	MXTFCE	\$56,465
150	900	575	N449T	3820	1508FCSC21A-R		93.6	2	MXTFCE	\$42,677
150	900	575	505US	2800	1508FCSC21E		93.6		MXTFCE	\$53,344
150	900	575	505UZ	2629	1508FCSC21G-R		93.6	2	MXTFCE	\$56,465
200	900	460	N449T	3685	2008FCSB21A-R		94.1	2	MXTFCE	\$47,635
200	900	460	5010US	4650	2008FCSB21E		94.1		MXTFCE	\$59,543
200	900	460	5010UZ	4650	2008FCSB21G-R		94.1	2	MXTFCE	\$62,664
200	900	460	N587UZ	3800	B2008FLF4BMW			2	MXTFCE	\$55,150
200	900	460	N587US	3800	B2008FLG3BMW				MXTFCE	\$53,589
200	900	575	N449T	3685	2008FCSC21A-R		94.1	2	MXTFCE	\$47,635
200	900	575	5010US	4650	2008FCSC21E		94.1		MXTFCE	\$59,543
200	900	575	5010UZ	4650	2008FCSC21G-R		94.1	2	MXTFCE	\$62,664
200	900	575	N587UZ	3800	B2008FLF4OMW			2	MXTFCE	\$55,150
200	900	575	N587US	3800	B2008FLG3OMW				MXTFCE	\$53,589
250	3600	460	N449TS	3800	2503FCAB21B	270	95.8		MXTFCE	\$30,299
250	3600	575	N449TS	3800	2503FCAC21B	216	95.8		MXTFCE	\$30,299
250	1800	460	N449T	3800	2504FCAB21A		95.0	8	MXTFCE	\$25,602
250	1800	460	N449T	3800	2504FCAB21A-R		95.0	2	MXTFCE	\$26,396
250	1800	575	N449T	3800	2504FCAC21A		95.0	8	MXTFCE	\$25,602
250	1800	575	N449T	3800	2504FCAC21A-R		95.0	2	MXTFCE	\$26,396
250	1200	460	N449T	3800	2506FCAB21A-R		95.0	2	MXTFCE	\$32,647
250	1200	575	N449T	3800	2506FCAC21A-R		95.0	2	MXTFCE	\$32,647

Totally Enclosed Fan Cooled

> High & EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
300	3600	460	N449TS	3800	3003FCAB21B		95.4	4	MXTFCE	\$37,743
300	3600	575	N449TS	3800	3003FCAC21B		95.4	4	MXTFCE	\$37,743
300	1800	460	N449T	3800	3004FCAB21A	386	95.4	8	MXTFCE	\$28,885
300	1800	460	N449T	3800	3004FCAB21A-R	386	95.4	2	MXTFCE	\$30,505
300	1800	575	N449T	3800	3004FCAC21A	309	95.4	8	MXTFCE	\$28,885
300	1800	575	N449T	3800	3004FCAC21A-R	309	95.4	2	MXTFCE	\$30,505
300	1200	460	N449T	3800	3006FCAB21A-R		95.0	2	MXTFCE	\$42,208
300	1200	575	N449T	3800	3006FCAC21A-R	309	95.0	2	MXTFCE	\$42,208
350	3600	460	N449TS	3800	3503FCAB21B		95.4	4	MXTFCE	\$42,138
350	3600	575	N449TS	3800	3503FCAC21B		95.4	4	MXTFCE	\$42,138
350	1800	460	N449T	3800	3504FCAB21A		95.4	8	MXTFCE	\$32,478
350	1800	460	N449T	3800	3504FCAB21A-R		95.4	2	MXTFCE	\$34,098
350	1800	575	N449T	3800	3504FCAC21A		95.4	8	MXTFCE	\$32,478
350	1800	575	N449T	3800	3504FCAC21A-R		95.4	2	MXTFCE	\$34,098
350	1200	460	N449T	3800	3506FCAB21A-R	416	95.8	2	MXTFCE	\$44,500
350	1200	575	N449T	3800	3506FCAC21A-R	333	95.0	2	MXTFCE	\$44,500
400	3600	460	N449TS	3800	4003FCAB21B		95.4	4	MXTFCE	\$52,492
400	3600	575	N449TS	3800	4003FCAC21B		95.4	4	MXTFCE	\$52,492
400	1800	460	N449T	3800	4004FCAB21A	440	95.4	8	MXTFCE	\$45,076
400	1800	460	N449T	3800	4004FCAB21A-R	440	95.4	2	MXTFCE	\$46,696
400	1800	575	N449T	3800	4004FCAC21A	352	95.4	8	MXTFCE	\$45,076
400	1800	575	N449T	3800	4004FCAC21A-R	352	95.4	2	MXTFCE	\$46,696
450	3600	460	5010USS	4637	4503FCAB21F		95.4	4	MXTFCE	\$59,061
450	3600	575	5010USS	4637	4503FCAC21F		95.4	4	MXTFCE	\$59,061
450	1800	460	5010US	4755	4504FCAB21E		95.4		MXTFCE	\$48,510
450	1800	460	5010UZ	4905	4504FCAB21G-R		95.4	2	MXTFCE	\$50,130
450	1800	575	5010US	4755	4504FCAC21E		95.4		MXTFCE	\$48,510
450	1800	575	5010UZ	4905	4504FCAC21G-R		95.4	2	MXTFCE	\$50,130
500	3600	460	5810USS	6083	5003FCAB21F	537	95.4	4	MXTFCE	\$65,620
500	3600	575	5810USS	6083	5003FCAC21F	430	95.4	4	MXTFCE	\$65,620
500	1800	460	5810US	6083	5004FCAB21E		95.8		MXTFCE	\$53,899
500	1800	460	5810UZ	6240	5004FCAB21G-R		95.8	2	MXTFCE	\$55,519
500	1800	575	5810US	6083	5004FCAC21E		95.8		MXTFCE	\$53,899
500	1800	575	5810UZ	6240	5004FCAC21G-R		95.8	2	MXTFCE	\$55,519

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Totally Enclosed Fan Cooled

C-Face Footless

> EPACT Efficiency



The general purpose, totally enclosed fan cooled, EPACT efficiency, C-Face Footless motor series encompasses Toshiba’s standard motor features and delivers the quality design, performance, and reliability the motor industry has come to expect from Toshiba. This product line meets the basic NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-11.

Product Scope

Horsepower:	1 to 75 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	230/460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143TC through 365TC
Construction:	Cast Iron
Vibration:	Typically 0.12 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 30 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1	1800	230/460	143TC	49	0014FTSA24A-P	2.9/1.45	82.5	1	MCTFCE	\$471
1	1800	575	143TC	49	0014FTSC24A-P	1.15	82.5	1	MCTFCE	\$471
1	1200	230/460	145TC	53	0016FTSA24A-P	3.4/1.7	80.0	1	MCTFCE	\$568
1	1200	575	145TC	53	0016FTSC24A-P	1.4	80.0	1	MCTFCE	\$568
1.5	3600	230/460	143TC	53	Y152FTSA24A-P	4.4/2.2	82.5	1	MCTFCE	\$496
1.5	3600	575	143TC	53	Y152FTSC24A-P	1.8	82.5	1	MCTFCE	\$496
1.5	1800	230/460	145TC	62	Y154FTSA24A-P	4.2/2.1	84.0	1	MCTFCE	\$496
1.5	1800	575	145TC	62	Y154FTSC24A-P	1.7	84.0	1	MCTFCE	\$496
1.5	1200	230/460	182TC	99	Y156FTSA24A-P	4.6/2.3	85.5	1	MCTFCE	\$634
1.5	1200	575	182TC	99	Y156FTSC24A-P	1.84	85.5	1	MCTFCE	\$634
2	3600	230/460	145TC	61	0022FTSA24A-P	5.2/2.6	84.0	1	MCTFCE	\$580
2	3600	575	145TC	61	0022FTSC24A-P	2.1	84.0	1	MCTFCE	\$580
2	1800	230/460	145TC	62	0024FTSA24A-P	5.6/2.8	84.0	1	MCTFCE	\$548
2	1800	575	145TC	62	0024FTSC24A-P	2.2	84.0	1	MCTFCE	\$548
2	1200	230/460	184TC	91	0026FTSA24A-P	6.2/3.1	86.5	1	MCTFCE	\$718
2	1200	575	184TC	91	0026FTSC24A-P	2.48	86.5	1	MCTFCE	\$718
3	3600	230/460	182TC	88	0032FTSA24A-P	7.2/3.6	85.5	1	MCTFCE	\$666
3	3600	575	182TC	88	0032FTSC24A-P	2.88	85.5	1	MCTFCE	\$666
3	1800	230/460	182TC	100	0034FTSA24A-P	8/4	87.5	1	MCTFCE	\$634
3	1800	575	182TC	100	0034FTSC24A-P	3.2	87.5	1	MCTFCE	\$634
3	1200	230/460	213TC	180	0036FTSA24A-P	8.9/4.45	87.5	1	MCTFCE	\$916
3	1200	575	213TC	180	0036FTSC24A-P	3.6	87.5	1	MCTFCE	\$916
5	3600	230/460	184TC	101	0052FTSA24A-P	11.8/5.9	87.5	1	MCTFCE	\$823
5	3600	575	184TC	101	0052FTSC24A-P	4.72	87.5	1	MCTFCE	\$823
5	1800	230/460	184TC	112	0054FTSA24A-P	12.8/6.4	87.5	1	MCTFCE	\$737
5	1800	575	184TC	112	0054FTSC24A-P	5.12	85.5	1	MCTFCE	\$737
5	1200	230/460	215TC	206	0056FTSA24A-P	14.6/7.3	87.5	1	MCTFCE	\$1,307
5	1200	575	215TC	206	0056FTSC24A-P	5.84	87.5	1	MCTFCE	\$1,307

Totally Enclosed Fan Cooled

C-Face Footless

> EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	3600	230/460	213TC	175	Y752FTSA24A-P	18.8/9.4	88.5	1	MCTFCE	\$1,077
7.5	3600	575	213TC	175	Y752FTSC24A-P	7.52	88.5	1	MCTFCE	\$1,077
7.5	1800	230/460	213TC	179	Y754FTSA24A-P	18.9/9.45	89.5	1	MCTFCE	\$1,053
7.5	1800	575	213TC	179	Y754FTSC24A-P	7.6	89.5	1	MCTFCE	\$1,053
7.5	1200	230/460	254TC	310	Y756FTSA24A-P	20/10	89.5	1	MCTFCE	\$1,751
7.5	1200	575	254TC	310	Y756FTSC24A-P	8	89.5	1	MCTFCE	\$1,751
10	3600	230/460	215TC	195	0102FTSA24A-P	24/12	89.5	1	MCTFCE	\$1,254
10	3600	575	215TC	195	0102FTSC24A-P	9.6	89.5	1	MCTFCE	\$1,254
10	1800	230/460	215TC	201	0104FTSA24A-P	25.2/12.6	89.5	1	MCTFCE	\$1,275
10	1800	575	215TC	201	0104FTSC24A-P	10.1	89.5	1	MCTFCE	\$1,275
10	1200	230/460	256TC	315	0106FTSA24A-P	26.6/13.3	89.5	1	MCTFCE	\$2,226
10	1200	575	256TC	315	0106FTSC24A-P	10.6	89.5	1	MCTFCE	\$2,226
15	3600	230/460	254TC	290	0152FTSA24A-P	35.2/17.6	90.2	1	MCTFCE	\$1,738
15	3600	575	254TC	290	0152FTSC24A-P	14.1	90.2	1	MCTFCE	\$1,738
15	1800	230/460	254TC	280	0154FTSA24A-P	36.6/18.3	91.0	1	MCTFCE	\$1,738
15	1800	575	254TC	280	0154FTSC24A-P	14.6	91.0	1	MCTFCE	\$1,738
15	1200	230/460	284TC	425	0156FTSA24A-P	40/20	90.2	1	MCTFCE	\$3,005
15	1200	575	284TC	425	0156FTSC24A-P	16	90.2	1	MCTFCE	\$3,005
20	3600	230/460	256TC	340	0202FTSA24A-P	47/23.5	90.2	1	MCTFCE	\$2,280
20	3600	575	256TC	340	0202FTSC24A-P	18.8	90.2	1	MCTFCE	\$2,280
20	1800	230/460	256TC	327	0204FTSA24A-P	49.2/24.6	91.0	1	MCTFCE	\$2,119
20	1800	575	256TC	327	0204FTSC24A-P	19.7	91.0	1	MCTFCE	\$2,119
20	1200	230/460	286TC	427	0206FTSA24A-P	52/26	90.2	1	MCTFCE	\$3,575
20	1200	575	286TC	427	0206FTSC24A-P	20.5	90.2	1	MCTFCE	\$3,575
25	3600	230/460	284TSC	409	0252FTSA24B-P	59/29.5	91.0	1	MCTFCE	\$2,731
25	3600	575	284TSC	409	0252FTSC24B-P	23.6	91.0	1	MCTFCE	\$2,731
25	1800	230/460	284TC	427	0254FTSA24A-P	62/31	92.4	1	MCTFCE	\$2,562
25	1800	575	284TC	427	0254FTSC24A-P	24.8	92.4	1	MCTFCE	\$2,562
25	1200	230/460	324TC	593	0256FTSA24A-P	62/31	91.7	1	MCTFCE	\$4,345
25	1200	575	324TC	593	0256FTSC24A-P	24.8	91.7	1	MCTFCE	\$4,345
30	3600	230/460	286TSC	432	0302FTSA24B-P	70/35	91.0	1	MCTFCE	\$3,110
30	3600	575	286TSC	432	0302FTSC24B-P	28	91.0	1	MCTFCE	\$3,110
30	1800	230/460	286TC	495	0304FTSA24A-P	73/36.5	92.4	1	MCTFCE	\$3,110
30	1800	575	286TC	495	0304FTSC24A-P	29.2	92.4	1	MCTFCE	\$3,110
30	1200	230/460	326TC	593	0306FTSA24A-P	72/36	91.7	1	MCTFCE	\$5,168
30	1200	575	326TC	593	0306FTSC24A-P	28.8	91.7	1	MCTFCE	\$5,168
40	3600	230/460	324TSC	527	0402FTSA24B-P	96/48	91.7	1	MCTFCE	\$3,997
40	3600	575	324TSC	527	0402FTSC24B-P	38.4	91.7	1	MCTFCE	\$3,997
40	1800	230/460	324TC	593	0404FTSA24A-P	96/48	93.0	1	MCTFCE	\$3,955
40	1800	575	324TC	593	0404FTSC24A-P	38.4	93.0	1	MCTFCE	\$3,955
40	1200	230/460	364TC	714	0406FTSA24A-P	95.6/47.8	93.0	1	MCTFCE	\$6,770
40	1200	575	364TC	714	0406FTSC24A-P	38.2	93.0	1	MCTFCE	\$6,770
50	3600	230/460	326TSC	593	0502FTSA24B-P	120/60	92.4	1	MCTFCE	\$5,327
50	3600	575	326TSC	593	0502FTSC24B-P	48	92.4	1	MCTFCE	\$5,327
50	1800	230/460	326TC	634	0504FTSA24A-P	118/59	93.0	1	MCTFCE	\$5,053
50	1800	575	326TC	634	0504FTSC24A-P	47.2	93.0	1	MCTFCE	\$5,053
50	1200	230/460	365TC	662	0506FTSA24A-P	116/58	93.0	1	MCTFCE	\$7,921

Totally Enclosed Fan Cooled

C-Face Footless

> EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1200	575	365TC	662	0506FTSC24A-P	46.4	93.0	1	MCTFCE	\$7,921
60	3600	230/460	364TSC	774	0602FTSA24B-P	137/68.5	93.0	1	MCTFCE	\$7,593
60	3600	575	364TSC	774	0602FTSC24B-P	54.8	93.0	1	MCTFCE	\$7,593
60	1800	230/460	364TC	845	0604FTSA24A-P	144/72	93.6	1	MCTFCE	\$7,045
60	1800	575	364TC	845	0604FTSC24A-P	57.6	93.6	1	MCTFCE	\$7,045
75	3600	230/460	365TSC	793	0752FTSA24B-P	166/83	93.0	1	MCTFCE	\$9,144
75	3600	575	365TSC	793	0752FTSC24B-P	68	93.0	1	MCTFCE	\$9,144
75	1800	230/460	365TC	950	0754FTSA24A-P	178/89	94.1	1	MCTFCE	\$8,914
75	1800	575	365TC	950	0754FTSC24A-P	71.2	94.1	1	MCTFCE	\$8,914

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Totally Enclosed Fan Cooled EQPIII

> NEMA® Premium Efficiency



EQPIII
EXTREME MOTOR PRODUCTS

Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII motor series is the cornerstone of the Toshiba product offering. This product is built to withstand the most extreme conditions and designed to meet the industry's ever-increasing need for improved energy conservation and product reliability in both indoor and outdoor applications. This motor meets the NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-12 and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability.

Product Scope:

Horsepower:	½ to 400 HP
Speed:	3600, 1800, or 1200 RPM (½ to 75 HP) 900 RPM (¾ to 400 HP)
Voltage:	230/460, 460, or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through 5810US
Construction:	Cast Iron
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

Standard Features:

- IP54 Protection (With Addition of Cast Iron Conduit Box)
- Insulation System's Major Components Made from Class H Materials
- Voltage Withstand Capability of 2000 V in 0.1 µs
- Inverter Duty Capability of 20:1 Constant Torque (1 to 200 HP, 4- & 6-Pole)
- L-10 Bearing Life of 150,000 Hours Directly Coupled
- L-10 Bearing Life of 40,000 Hours Belted
- Terminal Lugs on 280 Frames & Larger
- No-Load Commercial Test on All Motors
- Ball-Pass Frequency Tested on 440 Frame & Larger

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.5	1800	230/460	143T	60	B1/24FLF2AMH	1.5/0.75	82.5		MXTFCP	\$811
0.5	1800	575	143T	60	B1/24FLF2OMH	0.60	82.5		MXTFCP	\$811
0.5	1200	230/460	143T	60	B1/26FLF2AMH	1.8/0.9	77.0		MXTFCP	\$957
0.5	1200	575	143T	60	B1/26FLF2OMH	0.8	78.5		MXTFCP	\$957
0.75	1800	230/460	143T	60	B3/44FLF2AMH	2.2/1.1	85.5		MXTFCP	\$853
0.75	1800	575	143T	60	B3/44FLF2OMH	0.85	85.5		MXTFCP	\$853
0.75	1200	230/460	143T	60	B3/46FLF2AMH03	3/1.5	80.0		MXTFCP	\$1,007
0.75	1200	575	143T	60	B3/46FLF2OMH03	1.2	80.0		MXTFCP	\$959
0.75	900	230/460	145T	62	B3/48FLF2AMH	4.2/2.1	72.0		MXTFCP	\$1,638
0.75	900	575	145T	62	B3/48FLF2OMH	1.5	74.0		MXTFCP	\$1,638
1	1800	230/460	143T	60	B0014FLF2AMH03	2.8/1.4	85.5		MXTFCP	\$853
1	1800	575	143T	60	B0014FLF2OMH03	1.1	85.5		MXTFCP	\$853
1	1200	230/460	145T	62	B0016FLF2AMH03	3.6/1.8	82.5		MXTFCP	\$1,062
1	1200	575	145T	62	B0016FLF2OMH03	1.4	82.5		MXTFCP	\$1,062
1	900	230/460	182T	82	B0018FLF2AMH	4.4 / 2.2	82.5		MXTFCP	\$1,724
1	900	575	182T	82	B0018FLF2OMH	1.7	82.5		MXTFCP	\$1,724

Totally Enclosed Fan Cooled

EQPIII

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	3600	230/460	143T	54	BY152FLF2AMH03	4.2/2.1	84.0		MXTFCP	\$967
1.5	3600	575	143T	54	BY152FLF2OMH03	1.7	84.0		MXTFCP	\$967
1.5	1800	230/460	145T	61	BY154FLF2AMH03	4.4/2.2	86.5		MXTFCP	\$937
1.5	1800	575	145T	61	BY154FLF2OMH03	1.8	86.5		MXTFCP	\$937
1.5	1200	230/460	182T	82	BY156FLF2AMH03	5/2.5	87.5		MXTFCP	\$1,133
1.5	1200	575	182T	82	BY156FLF2OMH03	2	86.5		MXTFCP	\$1,079
1.5	900	230/460	184T	105	BY158FLF2AMH	6.8 / 3.4	82.5		MXTFCP	\$2,034
1.5	900	575	184T	105	BY158FLF2OMH	2.8	82.5		MXTFCP	\$2,034
2	3600	230/460	145T	61	B0022FLF2AMH03	5.4/2.7	86.5		MXTFCP	\$1,125
2	3600	575	145T	61	B0022FLF2OMH03	2.2	86.5		MXTFCP	\$1,125
2	1800	230/460	145T	62	B0024FLF2AMH03	5.6/2.8	86.5		MXTFCP	\$1,020
2	1800	575	145T	62	B0024FLF2OMH03	2.2	86.5		MXTFCP	\$1,020
2	1200	230/460	184T	105	B0026FLF2AMH03	6.6/3.3	88.5		MXTFCP	\$1,312
2	1200	575	184T	105	B0026FLF2OMH03	2.6	88.5		MXTFCP	\$1,312
2	900	230/460	213T	190	B0028FLF2AMH	6.6 / 3.3	86.5		MXTFCP	\$2,431
2	900	575	213T	190	B0028FLF2OMH	2.6	86.5		MXTFCP	\$2,431
3	3600	230/460	182T	91	B0032FLF2AMH03	7.2/3.6	88.5		MXTFCP	\$1,245
3	3600	575	182T	91	B0032FLF2OMH03	2.9	88.5		MXTFCP	\$1,245
3	1800	230/460	182T	94	B0034FLF2AMH03	7.6/3.8	89.5		MXTFCP	\$1,171
3	1800	575	182T	94	B0034FLF2OMH03	3	89.5		MXTFCP	\$1,171
3	1200	230/460	213T	190	B0036FLF2AMH04	8.2/4.1	90.2		MXTFCP	\$1,515
3	1200	575	213T	190	B0036FLF2OMH04	3.3	90.2		MXTFCP	\$1,515
3	900	230/460	215T	206	B0038FLF2AMH	10.0 / 5.0	87.5		MXTFCP	\$3,035
3	900	575	215T	206	B0038FLF2OMH	4	87.5		MXTFCP	\$3,035
5	3600	230/460	184T	104	B0052FLF2AMH03	11.4/5.7	89.5		MXTFCP	\$1,475
5	3600	575	184T	104	B0052FLF2OMH03	4.6	89.5		MXTFCP	\$1,475
5	1800	230/460	184T	106	B0054FLF2AMH03	12.6/6.3	89.5		MXTFCP	\$1,337
5	1800	575	184T	106	B0054FLF2OMH03	5	89.5		MXTFCP	\$1,337
5	1200	230/460	215T	206	B0056FLF2AMH04	13.4/6.7	90.2		MXTFCP	\$2,121
5	1200	575	215T	206	B0056FLF2OMH04	5.4	90.2		MXTFCP	\$2,121
5	900	230/460	254T	254	B0058FLF2AMH	16.0 / 8.0	90.2		MXTFCP	\$4,034
5	900	575	254T	254	B0058FLF2OMH	6.4	90.2		MXTFCP	\$4,034
7.5	3600	230/460	213T	185	BY752FLF2UMH04	18/9	90.2		MXTFCP	\$1,649
7.5	3600	575	213T	185	BY752FLF2OMH04	7.2	90.2		MXTFCP	\$1,649
7.5	1800	230/460	213T	179	BY754FLF2USH04	18.2/9.1	91.7		MXTFCP	\$1,570
7.5	1800	575	213T	179	BY754FLF2OSH04	7.3	91.7		MXTFCP	\$1,570
7.5	1200	230/460	254T	254	BY756FLF2USH02	19.6/9.8	91.7		MXTFCP	\$2,674
7.5	1200	575	254T	254	BY756FLF2OSH02	7.8	91.7		MXTFCP	\$2,674
7.5	900	230/460	256T	327	BY758FLF2USH	23.0 / 11.5	90.2		MXTFCP	\$5,090
7.5	900	575	256T	327	BY758FLF2OSH	9	90.2		MXTFCP	\$5,090
10	3600	230/460	215T	202	B0102FLF2UMH04	23/11.5	90.2		MXTFCP	\$1,979
10	3600	575	215T	202	B0102FLF2OMH04	9.2	90.2		MXTFCP	\$1,979
10	1800	230/460	215T	210	B0104FLF2USH04	24/12	91.7		MXTFCP	\$1,911
10	1800	575	215T	210	B0104FLF2OSH04	9.6	91.7		MXTFCP	\$1,911
10	1200	230/460	256T	327	B0106FLF2USH02	26/13	92.4		MXTFCP	\$3,267
10	1200	575	256T	327	B0106FLF2OSH02	10.4	92.4		MXTFCP	\$3,267
10	900	230/460	284T	380	B0108FLF2USH	30.0 / 15.0	90.2		MXTFCP	\$5,943
10	900	575	284T	380	B0108FLF2OSH	11.8	90.2		MXTFCP	\$5,943

Totally Enclosed Fan Cooled

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> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
15	3600	230/460	254T	320	B0152FLF2USH02	34/17	91.7		MXTFCP	\$2,721
15	3600	575	254T	320	B0152FLF2OSH02	13.6	91.7		MXTFCP	\$2,721
15	1800	230/460	254T	310	B0154FLF2USH02	37/18.5	92.4		MXTFCP	\$2,579
15	1800	575	254T	310	B0154FLF2OSH02	14.8	92.4		MXTFCP	\$2,579
15	1200	230/460	284T	380	B0156FLF3UMH02	38/19	92.4		MXTFCP	\$4,580
15	1200	575	284T	380	B0156FLF3OMH02	15.2	92.4		MXTFCP	\$4,580
15	900	230/460	286T	424	B0158FLF3UMH	42.0 / 21.0	90.2		MXTFCP	\$7,735
15	900	575	286T	424	B0158FLF3OMH	17.8	90.2		MXTFCP	\$7,735
20	3600	230/460	256T	346	B0202FLF2USH02	44/22	92.4		MXTFCP	\$3,357
20	3600	575	256T	346	B0202FLF2OSH02	17.6	92.4		MXTFCP	\$3,357
20	1800	230/460	256T	345	B0204FLF2USH02	50/25	93.0		MXTFCP	\$3,186
20	1800	575	256T	345	B0204FLF2OSH02	20	93.0		MXTFCP	\$3,186
20	1200	230/460	286T	490	B0206FLF3UMH02	50/25	91.7		MXTFCP	\$5,364
20	1200	575	286T	490	B0206FLF3OMH02	20	91.7		MXTFCP	\$5,364
20	900	230/460	324T	567	B0208FLF3UMH	60.0 / 30.0	91.7		MXTFCP	\$9,455
20	900	575	324T	567	B0208FLF3OMH	24	91.7		MXTFCP	\$9,455
25	3600	230/460	284TS	425	B0252FLG3UMH02	56/28	92.4		MXTFCP	\$4,325
25	3600	575	284TS	425	B0252FLG3OMH02	22	92.4		MXTFCP	\$4,325
25	1800	230/460	284T	443	B0254FLF3UMH02	58/29	93.6		MXTFCP	\$3,864
25	1800	575	284T	443	B0254FLF3OMH02	24	93.6		MXTFCP	\$3,864
25	1200	230/460	324T	567	B0256FLF3UMH02	64/32	93.0		MXTFCP	\$6,836
25	1200	575	324T	567	B0256FLF3OMH02	26	93.0		MXTFCP	\$6,836
25	900	230/460	326T	631	B0258FLF3UMH	76.0 / 38.0	91.7		MXTFCP	\$10,994
25	900	575	326T	631	B0258FLF3OMH	30	91.7		MXTFCP	\$10,994
30	3600	230/460	286TS	463	B0302FLG3UMH02	66/33	92.4		MXTFCP	\$4,829
30	3600	575	286TS	463	B0302FLG3OMH02	26	92.4		MXTFCP	\$4,829
30	1800	230/460	286T	475	B0304FLF3UMH02	70/35	93.6		MXTFCP	\$4,646
30	1800	575	286T	475	B0304FLF3OMH02	29	93.6		MXTFCP	\$4,646
30	1200	230/460	326T	631	B0306FLF3UMH02	76/38	93.6		MXTFCP	\$7,949
30	1200	575	326T	631	B0306FLF3OMH02	30	93.6		MXTFCP	\$7,949
30	900	230/460	364T	714	B0308FLF3UMH	84.0 / 42.0	92.4		MXTFCP	\$13,011
30	900	575	364T	714	B0308FLF3OMH	34	92.4		MXTFCP	\$13,011
40	3600	230/460	324TS	535	B0402FLG3UMH02	92/46	93.0		MXTFCP	\$6,261
40	3600	575	324TS	535	B0402FLG3OMH02	37	93.0		MXTFCP	\$6,261
40	1800	230/460	324T	569	B0404FLF3USH02	94/47	94.1		MXTFCP	\$6,007
40	1800	575	324T	569	B0404FLF3OSH02	38	94.1		MXTFCP	\$6,007
40	1200	230/460	364T	714	B0406FLF3UMH02	96/48	94.1		MXTFCP	\$10,399
40	1200	575	364T	714	B0406FLF3OMH02	38	94.1		MXTFCP	\$10,399
40	900	230/460	365T	771	B0408FLF3UMH	114.0 / 57.0	93.0		MXTFCP	\$15,735
40	900	575	365T	771	B0408FLF3OMH	45	93.0		MXTFCP	\$15,735
50	3600	230/460	326TS	610	B0502FLG3UMH02	114/57	93.0		MXTFCP	\$8,266
50	3600	575	326TS	610	B0502FLG3OMH02	46	93.0		MXTFCP	\$8,266
50	1800	230/460	326T	634	B0504FLF3USH02	120/60	94.5		MXTFCP	\$7,326
50	1800	575	326T	634	B0504FLF3OSH02	48	94.1		MXTFCP	\$7,326
50	1200	230/460	365T	771	B0506FLF3UMH02	122/61	94.1		MXTFCP	\$12,140
50	1200	575	365T	771	B0506FLF3OMH02	48	94.1		MXTFCP	\$12,140
50	900	230/460	404T	1241	B0508FLF3UMH	152.0 / 76.0	93.6		MXTFCP	\$18,800
50	900	575	404T	1241	B0508FLF3OMH	62	93.6		MXTFCP	\$18,800

Totally Enclosed Fan Cooled

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
60	3600	230/460	364TS	730	B0602FLG3UMH02	140/70	93.6		MXTFCP	\$10,187
60	3600	575	364TS	730	B0602FLG3OMH02	56	93.6		MXTFCP	\$10,187
60	1800	230/460	364T	781	B0604FLF3UMH02	142/71	95.0		MXTFCP	\$10,324
60	1800	575	364T	781	B0604FLF3OMH02	57	95.0		MXTFCP	\$10,324
60	900	230/460	405T	1319	B0608FLF3USH	196/98	93.6		MXTFCP	\$21,475
60	900	575	405T	1319	B0608FLF3OSH	75	93.6		MXTFCP	\$21,475
75	3600	230/460	365TS	773	B0752FLG3UMH02	174/87	93.6		MXTFCP	\$12,828
75	3600	575	365TS	773	B0752FLG3OMH02	70	93.6		MXTFCP	\$12,828
75	1800	230/460	365T	839	B0754FLF3UMH02	178/89	95.4		MXTFCP	\$13,300
75	1800	575	365T	839	B0754FLF3OMH02	71	95.4		MXTFCP	\$13,300
75	900	230/460	444T	1786	B0758FLF4USH	222/111	94.5	2	MXTFCP	\$28,301
75	900	575	444T	1786	B0758FLF4OSH	99	94.5	2	MXTFCP	\$28,301
100	900	230/460	445T	1941	B1008FLF4USH	304/152	93.6	2	MXTFCP	\$34,990
100	900	575	445T	1941	B1008FLF4OSH	125	93.6	2	MXTFCP	\$34,990
125	900	460	447T	2800	B1258FLF4BMH	193	93.6	2	MXTFCP	\$37,283
125	900	460	N449T	3800	B1258FLF4BMHL	156	95.0	2	MXTFCP	\$41,106
125	900	575	447T	2800	B1258FLF4OMH	155	93.6	2	MXTFCP	\$37,283
125	900	575	N449T	3800	B1258FLF4OMHL	125	95.0	2	MXTFCP	\$41,106
150	900	460	505UZ	2629	B1508FLF4BMH	212	95.4	2	MXTFCP	\$62,739
150	900	460	N449T	3820	B1508FLF4BMHL	186	95.0	2	MXTFCP	\$47,418
150	900	460	505US	2800	B1508FLG3BMH	212	95.4		MXTFCP	\$59,271
150	900	575	505UZ	2629	B1508FLF4OMH	165	95.4	2	MXTFCP	\$62,739
150	900	575	N449T	3820	B1508FLF4OMHL	150	95.0	2	MXTFCP	\$47,418
150	900	575	505US	2800	B1508FLG3OMH	165	95.4		MXTFCP	\$59,271
200	900	460	5010UZ	4650	B2008FLF4BMH	361	95.4	2	MXTFCP	\$69,627
200	900	460	N449T	3685	B2008FLF4BMHL	249	95.0	2	MXTFCP	\$52,928
200	900	460	5010US	4650	B2008FLG3BMH	361	95.4		MXTFCP	\$66,159
200	900	575	5010UZ	4650	B2008FLF4OMH	278	95.4	2	MXTFCP	\$69,627
200	900	575	N449T	3685	B2008FLF4OMHL	199	95.0	2	MXTFCP	\$52,928
200	900	575	5010US	4650	B2008FLG3OMH	278	95.4		MXTFCP	\$66,159
250	900	460	N587UZ	380	B2508FLF4BMH	321	95.0	2	MXTFCP	\$69,454
250	900	460	N449T	3930	B2508FLF4BMHL	336	94.5	2	MXTFCP	\$66,147
250	900	575	N587UZ	3800	B2508FLF4OMH	257	95.0	2	MXTFCP	\$69,454
250	900	575	N449T	3930	B2508FLF4OMHL	269	94.5	2	MXTFCP	\$66,147
300	900	460	5810UZ	6093	F3008FLF4BMH	388	95.0	2	MXTFCP	\$74,886
300	900	460	5810US	6093	F3008FLG3BMH	388	95.0		MXTFCP	\$70,898
300	900	575	5810UZ	6093	F3008FLF4OMH	310	95.0	2	MXTFCP	\$74,886
300	900	575	5810US	6093	F3008FLG3OMH	310	95.0		MXTFCP	\$70,898
350	900	460	5810UZ	6240	F3508FLF4BMH	444	95.4	2	MXTFCP	\$86,701
350	900	460	5810US	6083	F3508FLG3BMH	444	95.4		MXTFCP	\$82,714
350	900	575	5810UZ	6240	F3508FLF4OMH	356	95.4	2	MXTFCP	\$86,701
350	900	575	5810US	6083	F3508FLG3OMH	356	95.4		MXTFCP	\$82,714
400	900	460	5810UZ	6240	F4008FLF4BMH	560	95.4	2	MXTFCP	\$98,518
400	900	460	5810US	6083	F4008FLG3BMH	560	95.4		MXTFCP	\$94,530
400	900	575	5810UZ	6240	F4008FLF4OMH	400	95.4	2	MXTFCP	\$98,518
400	900	575	5810US	6083	F4008FLG3OMH	400	95.4		MXTFCP	\$94,530

FL Amps and FL EFF are average expected design values and not guaranteed.
 The weights listed above are estimated.
 Please contact Toshiba for information on product availability.
 NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled EQPIII-840

> NEMA® Premium Efficiency



3 THREE YEAR
WARRANTY



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII-840 motor series addresses the special requirements of the mill and chemical industries where motor performance and reliability are imperative. The EQPIII-840 is built using the cornerstone of the Toshiba motor product offering as a base. This high-end product incorporates many of the key features of an IEEE-841 motor in a cost-effective package. Designed for indoor and outdoor use, it is the perfect solution for applications where IEEE-841 requirements are not mandated. Its performance offers 20 to 1 constant torque, oversized bearings, IP54 or IP56 protection, Class F insulation system and NEMA® Premium design, meeting the NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-12.

Product Scope:

Horsepower:	¾ to 400 HP
Speed:	3600, 1800, or 1200 (1 to 75 HP) 900 RPM (¾ to 400 HP)
Volt:	460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through 5810US
Construction:	Cast Iron
Vibration:	Typically 0.06 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

Standard Features:

- IP54 or IP56 Protection (With Addition of Cast Iron Conduit Box)
- Insulation System's Major Components Made from Class H Materials
- Voltage Withstand Capability of 2000 V in 0.1 µs
- Inverter Duty Capability of 20:1 Constant Torque (1 to 200 HP, 4- & 6-Pole)
- L-10 Bearing Life of 150,000 Hours Directly Coupled
- L-10 Bearing Life of 50,000 Hours Belted
- Terminal Lugs on 210 Frames & Larger
- 100% No-Load Commercial Test on All Motors
- On 440 Frame & Larger:
 - Vibration Test
 - Commercial Test Report Supplied with Motor
 - 100% of Bearings are Ball-Pass Frequency Tested
 - Separate Lubrication Label

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	460	143T	72	B3/46FLF1BMHD02	1.5	80.0		MXT840	\$1,025
0.75	1200	575	143T	72	B3/46FLF1OMHD02	1.2	80.0		MXT840	\$1,025
0.75	900	460	145T	76	B3/48FLF1BMHD	2.1	72.0		MXT840	\$1,686
0.75	900	575	145T	76	B3/48FLF1OMHD	1.5	74.0		MXT840	\$1,686
1	1800	460	143T	75	B0014FLF1BMHD02	1.4	85.5		MXT840	\$928
1	1800	575	143T	75	B0014FLF1OMHD02	1.1	85.5		MXT840	\$928
1	1200	460	145T	76	B0016FLF1BMHD02	1.8	82.5		MXT840	\$1,160
1	1200	575	145T	76	B0016FLF1OMHD02	1.4	82.5		MXT840	\$1,160
1	900	460	182T	117	B0018FLF1BMHD	2.2	82.5		MXT840	\$1,831
1	900	575	182T	117	B0018FLF1OMHD	1.7	82.5		MXT840	\$1,831
1.5	3600	460	143T	69	BY152FLF1BMHD02	2.1	84.0		MXT840	\$1,089
1.5	3600	575	143T	69	BY152FLF1OMHD02	1.7	84.0		MXT840	\$1,089
1.5	1800	460	145T	75	BY154FLF1BMHD02	2.2	86.5		MXT840	\$1,035

Totally Enclosed Fan Cooled

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	575	145T	75	BY154FLF1OMHD02	1.8	86.5		MXT840	\$1,035
1.5	1200	460	182T	117	BY156FLF1BMHD02	2.5	86.5		MXT840	\$1,236
1.5	1200	575	182T	117	BY156FLF1OMHD02	2	86.5		MXT840	\$1,236
1.5	900	460	184T	122	BY158FLF1BMHD	3.4	82.5		MXT840	\$2,161
1.5	900	575	184T	122	BY158FLF1OMHD	2.8	82.5		MXT840	\$2,161
2	3600	460	145T	74	B0022FLF1BMHD02	2.7	86.5		MXT840	\$1,169
2	3600	575	145T	74	B0022FLF1OMHD02	2.2	86.5		MXT840	\$1,169
2	1800	460	145T	76	B0024FLF1BMHD02	2.8	86.5		MXT840	\$1,136
2	1800	575	145T	76	B0024FLF1OMHD02	2.2	86.5		MXT840	\$1,136
2	1200	460	184T	122	B0026FLF1BMHD02	3.3	88.5		MXT840	\$1,379
2	1200	575	184T	122	B0026FLF1OMHD02	2.6	88.5		MXT840	\$1,379
2	900	460	213T	198	B0028FLF1BMHD	3.3	86.5		MXT840	\$2,711
2	900	575	213T	198	B0028FLF1OMHD	2.6	86.5		MXT840	\$2,711
3	3600	460	182T	117	B0032FLF1BMHD02	3.6	88.5		MXT840	\$1,337
3	3600	575	182T	117	B0032FLF1OMHD02	2.9	88.5		MXT840	\$1,337
3	1800	460	182T	118	B0034FLF1BMHD02	3.8	89.5		MXT840	\$1,194
3	1800	575	182T	118	B0034FLF1OMHD02	3	89.5		MXT840	\$1,194
3	1200	460	213T	198	B0036FLF1BMHD04	4.1	90.2		MXT840	\$1,768
3	1200	575	213T	198	B0036FLF1OMHD04	3.3	90.2		MXT840	\$1,768
3	900	460	215T	216	B0038FLF3BMHD	5	87.5		MXT840	\$3,227
3	900	575	215T	216	B0038FLF3OMHD	4	87.5		MXT840	\$3,227
5	3600	460	184T	123	B0052FLF1BMHD02	5.7	89.5		MXT840	\$1,576
5	3600	575	184T	123	B0052FLF1OMHD02	4.6	89.5		MXT840	\$1,576
5	1800	460	184T	124	B0054FLF1BMHD02	6.3	89.5		MXT840	\$1,395
5	1800	575	184T	124	B0054FLF1OMHD02	5	89.5		MXT840	\$1,395
5	1200	460	215T	216	B0056FLF1BMHD04	6.7	90.2		MXT840	\$2,372
5	1200	575	215T	216	B0056FLF1OMHD04	5.4	90.2		MXT840	\$2,372
5	900	460	254T	327	B0058FLF3BMHD	8	90.2		MXT840	\$4,283
5	900	575	254T	327	B0058FLF3OMHD	6.4	90.2		MXT840	\$4,283
7.5	3600	460	213T	196	BY752FLF1BMHD04	9	90.2		MXT840	\$1,925
7.5	3600	575	213T	196	BY752FLF1OMHD04	7.2	90.2		MXT840	\$1,925
7.5	1800	460	213T	190	BY754FLF1BSHD04	9.1	91.7		MXT840	\$1,823
7.5	1800	575	213T	190	BY754FLF1OSHD04	7.4	91.7		MXT840	\$1,823
7.5	1200	460	254T	327	BY756FLF1BMHD02	9.8	91.7		MXT840	\$3,052
7.5	1200	575	254T	327	BY756FLF1OMHD02	7.8	91.7		MXT840	\$3,052
7.5	900	460	256T	347	BY758FLF3BMHD	11.5	90.2		MXT840	\$5,414
7.5	900	575	256T	347	BY758FLF3OMHD	9	90.2		MXT840	\$5,414
10	3600	460	215T	210	B0102FLF1BMHD04	11.5	90.2		MXT840	\$2,151
10	3600	575	215T	210	B0102FLF1OMHD04	9.2	90.2		MXT840	\$2,151
10	1800	460	215T	226	B0104FLF1BSHD04	12	91.7		MXT840	\$2,145
10	1800	575	215T	226	B0104FLF1OSHD04	9.6	91.7		MXT840	\$2,145
10	1200	460	256T	347	B0106FLF1BMHD02	13	92.4		MXT840	\$3,747
10	1200	575	256T	347	B0106FLF1OMHD02	10.4	92.4		MXT840	\$3,747
10	900	460	284T	380	B0108FLF3BMHD	15	90.2		MXT840	\$6,320
10	900	575	284T	380	B0108FLF3OMHD	11.8	90.2		MXT840	\$6,320
15	3600	460	254T	330	B0152FLF1BMHD02	17	91.7		MXT840	\$2,948
15	3600	575	254T	330	B0152FLF1OMHD02	13.6	91.7		MXT840	\$2,948

Totally Enclosed Fan Cooled

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
15	1800	460	254T	333	B0154FLF1BMHD02	18.5	92.4		MXT840	\$2,827
15	1800	575	254T	333	B0154FLF1OMHD02	14.8	92.4		MXT840	\$2,827
15	1200	460	284T	473	B0156FLF3BMHD02	19	92.4		MXT840	\$4,980
15	1200	575	284T	473	B0156FLF3OMHD02	15.2	92.4		MXT840	\$4,980
15	900	460	286T	471	B0158FLF3BMHD	21	90.2		MXT840	\$8,234
15	900	575	286T	471	B0158FLF3OMHD	17.8	90.2		MXT840	\$8,234
20	3600	460	256T	389	B0202FLF1BMHD02	22	92.4		MXT840	\$3,564
20	3600	575	256T	389	B0202FLF1OMHD02	17.6	92.4		MXT840	\$3,564
20	1800	460	256T	364	B0204FLF1BMHD02	25	93.0		MXT840	\$3,522
20	1800	575	256T	364	B0204FLF1OMHD02	20	93.0		MXT840	\$3,522
20	1200	460	286T	512	B0206FLF3BMHD02	25	92.4		MXT840	\$5,861
20	1200	575	286T	512	B0206FLF3OMHD02	20	92.4		MXT840	\$5,861
20	900	460	324T	621	B0208FLF3BMHD	30	91.7		MXT840	\$10,066
20	900	575	324T	621	B0208FLF3OMHD	24	91.7		MXT840	\$10,066
25	3600	460	284TS	450	B0252FLG3BMHD02	28	92.4		MXT840	\$4,611
25	3600	575	284TS	450	B0252FLG3OMHD02	22	92.4		MXT840	\$4,611
25	1800	460	284T	509	B0254FLF3BMHD02	29	93.6		MXT840	\$4,262
25	1800	575	284T	509	B0254FLF3OMHD02	24	93.6		MXT840	\$4,262
25	1200	460	324T	621	B0256FLF3BMHD01	32	93.0		MXT840	\$7,462
25	1200	575	324T	621	B0256FLF3OMHD01	26	93.0		MXT840	\$7,462
25	900	460	326T	685	B0258FLF3BMHD	38	91.7		MXT840	\$11,742
25	900	575	326T	685	B0258FLF3OMHD	30	91.7		MXT840	\$11,742
30	3600	460	286TS	498	B0302FLG3BMHD02	33	92.4		MXT840	\$5,350
30	3600	575	286TS	498	B0302FLG3OMHD02	26	92.4		MXT840	\$5,350
30	1800	460	286T	500	B0304FLF3BMHD02	35	93.6		MXT840	\$4,978
30	1800	575	286T	500	B0304FLF3OMHD02	29	93.6		MXT840	\$4,978
30	1200	460	326T	685	B0306FLF3BMHD01	38	93.6		MXT840	\$8,183
30	1200	575	326T	685	B0306FLF3OMHD01	30	93.6		MXT840	\$8,183
30	900	460	364T	825	B0308FLF3BMHD	42	92.4		MXT840	\$13,860
30	900	575	364T	825	B0308FLF3OMHD	34	92.4		MXT840	\$13,860
40	3600	460	324TS	551	B0402FLG3BMHD02	46	93.0		MXT840	\$7,079
40	3600	575	324TS	551	B0402FLG3OMHD02	37	93.0		MXT840	\$7,079
40	1800	460	324T	636	B0404FLF3BSHD01	47	94.1		MXT840	\$6,478
40	1800	575	324T	636	B0404FLF3OSHD01	38	94.1		MXT840	\$6,478
40	1200	460	364T	825	B0406FLF3BMHD01	48	94.1		MXT840	\$11,092
40	1200	575	364T	825	B0406FLF3OMHD01	38	94.1		MXT840	\$11,092
40	900	460	365T	895	B0408FLF3BMHD	57	93.0		MXT840	\$16,777
40	900	575	365T	895	B0408FLF3OMHD	45	93.0		MXT840	\$16,777
50	3600	460	326TS	571	B0502FLG3BMHD02	57	93.0		MXT840	\$8,752
50	3600	575	326TS	571	B0502FLG3OMHD02	46	93.0		MXT840	\$8,752
50	1800	460	326T	694	B0504FLF3BSHD01	60	94.5		MXT840	\$7,527
50	1800	575	326T	694	B0504FLF3OSHD01	48	94.1		MXT840	\$7,527
50	1200	460	365T	895	B0506FLF3BMHD01	61	94.1		MXT840	\$12,733
50	1200	575	365T	895	B0506FLF3OMHD01	48	94.1		MXT840	\$12,733
50	900	460	404T	1200	B0508FLF3BMHD	76	93.6		MXT840	\$20,030
50	900	575	404T	1200	B0508FLF3OMHD	62	93.6		MXT840	\$20,030
60	3600	460	364TS	774	B0602FLG3BMHD02	70	93.6		MXT840	\$12,090

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> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
60	3600	575	364TS	774	B0602FLG3OMHD02	56	93.6		MXT840	\$12,090
60	1800	460	364T	845	B0604FLF3BMHD01	71	95.0		MXT840	\$11,416
60	1800	575	364T	845	B0604FLF3OMHD01	57	95.0		MXT840	\$11,416
60	900	460	405T	1456	B0608FLF3BSHD	98	93.6		MXT840	\$22,918
60	900	575	405T	1456	B0608FLF3OSHD	75	93.6		MXT840	\$22,918
75	3600	460	365TS	841	B0752FLG3BMHD02	87	93.6		MXT840	\$14,458
75	3600	575	365TS	841	B0752FLG3OMHD01	70	93.6		MXT840	\$14,458
75	1800	460	365T	901	B0754FLF3BMHD01	89	95.4		MXT840	\$13,700
75	1800	575	365T	901	B0754FLF3OMHD01	71	95.4		MXT840	\$13,700
75	900	460	444T	2005	B0758FLF4BSHD	111	94.5	2	MXT840	\$30,151
75	900	575	444T	2005	B0758FLF4OSHD	99	94.5	2	MXT840	\$30,151
100	900	460	445T	2155	B1008FLF4BSHD	152	93.6	2	MXT840	\$37,327
100	900	575	445T	2155	B1008FLF4OSHD	125	93.6	2	MXT840	\$37,327
125	900	460	447T	2444	B1258FLF4BSHD	193	93.6	2	MXT840	\$40,795
125	900	460	N449T	3900	B1258FLF4BSHDL	156	95.0	2	MXT840	\$42,836
125	900	575	447T	2444	B1258FLF4OSHD	155	93.6	2	MXT840	\$40,795
125	900	575	N449T	3900	B1258FLF4OSHDL	125	95.0	2	MXT840	\$42,836
150	900	460	505UZ	3000	B1508FLF4BSHD	212	95.4	2	MXT840	\$68,058
150	900	460	N449T	3920	B1508FLF4BSHDL	186	95.0	2	MXT840	\$51,673
150	900	460	505US	4000	B1508FLG3BSHD	212	95.4		MXT840	\$64,590
150	900	575	505UZ	3000	B1508FLF4OSHD	165	95.4	2	MXT840	\$68,058
150	900	575	N449T	3920	B1508FLF4OSHDL	150	95.0	2	MXT840	\$51,673
150	900	575	505US	4000	B1508FLG3OSHD	165	95.4		MXT840	\$64,590
200	900	460	5010UZ	4650	B2008FLF4BSHD	361	95.4	2	MXT840	\$71,291
200	900	460	N449T	4000	B2008FLF4BSHDL	249	95.0	2	MXT840	\$54,257
200	900	460	5010US	4650	B2008FLG3BSHD	361	95.4		MXT840	\$67,823
200	900	575	5010UZ	4650	B2008FLF4OSHD	278	95.4	2	MXT840	\$71,291
200	900	575	N449T	4000	B2008FLF4OSHDL	199	95.0	2	MXT840	\$54,257
200	900	575	5010US	4650	B2008FLG3OSHD	278	95.4		MXT840	\$67,823
250	900	460	N449T	4130	B2508FLF4BMHDL	336	94.5	2	MXT840	\$71,232
250	900	575	N449T	4130	B2508FLF4OMHDL	269	94.5	2	MXT840	\$71,232
300	900	460	5810UZ	7800	F3008FLF4BMHD	388	95.0	2	MXT840	\$75,983
300	900	460	5810US	7800	F3008FLG3BMHD	388	95.0		MXT840	\$75,983
300	900	575	5810UZ	7800	F3008FLF4OMHD	305	95.0	2	MXT840	\$79,972
300	900	575	5810US	7800	F3008FLG3OMHD	305	95.0		MXT840	\$79,972
350	900	460	5810UZ	7800	F3508FLF4BMHD	444	95.4	2	MXT840	\$87,800
350	900	460	5810US	7800	F3508FLG3BMHD	444	95.4		MXT840	\$87,800
350	900	575	5810UZ	7800	F3508FLF4OMHD	353	95.4	2	MXT840	\$91,788
350	900	575	5810US	7800	F3508FLG3OMHD	353	95.4		MXT840	\$91,788
400	900	460	5810UZ	7800	F4008FLF4BMHD	560	95.4	2	MXT840	\$99,616
400	900	460	5810US	7800	F4008FLG3BMHD	560	95.4		MXT840	\$99,616
400	900	575	5810UZ	7800	F4008FLF4OMHD	400	95.4	2	MXT840	\$103,603
400	900	575	5810US	7800	F4008FLG3OMHD	400	95.4		MXT840	\$103,603

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled EQPIII-841

> NEMA® Premium Efficiency



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII-841 motor series addresses the special requirements of the petrochemical industry where motor performance and reliability are imperative. This product line was built using the cornerstone of the Toshiba motor product offering as a base, and it is designed for indoor and outdoor use in the harshest environments where premium performance and reliability are a must. Its performance offers 20 to 1 constant torque, oversized bearings, IP56 protection, Class F insulation system and NEMA® Premium design, meeting the NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-12. These motors are built to meet or exceed IEEE standard 841 specifications and feature a labyrinth seal on both DE and ODE.

Product Scope:

Horsepower:	¾ to 200 HP
Speed:	3600, 1800, or 1200 RPM (¾ to 75 HP) 900 RPM (¾ to 200 HP)
Voltage:	460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through N449T
Construction:	Cast Iron
Vibration:	Typically 0.04 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

Standard Features:

- IP56 Protection (With Addition of Cast Iron Conduit Box)
- Insulation System's Major Components Made from Class H Materials
- Voltage Withstand Capability of 2000 V in 0.1 µs
- Inverter Duty Capability of 20:1 Constant Torque (1 to 200 HP, 4- & 6-Pole)
- L-10 Bearing Life of 150,000 Hours Directly Coupled
- L-10 Bearing Life of 40,000 Hours Belted
- Terminal Lugs on All Frames
- 100% No-Load Commercial Test & Vibration Test on All Frames
- Commercial Test Report with Vibration Data Supplied with All Frames
- 100% of Bearings are Ball-Pass Frequency Tested on 440 Frame & Larger

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	460	143T	72	B3/46FLF3BMHJ01	1.5	80.0		MXT841	\$1,254
0.75	1200	575	143T	72	B3/46FLF3OMHJ01	1.2	80.0		MXT841	\$1,254
0.75	900	460	145T	76	B3/48FLF3BMHJ	2.1	72.0		MXT841	\$2,785
0.75	900	575	145T	76	B3/48FLF3OMHJ	1.5	74.0		MXT841	\$2,785
1	1800	460	143T	74	B0014FLF3BMHJ01	1.4	85.5		MXT841	\$1,080
1	1800	575	143T	74	B0014FLF3OMHJ01	1.1	85.5		MXT841	\$1,080
1	1200	460	145T	76	B0016FLF3BMHJ01	1.8	82.5		MXT841	\$1,339
1	1200	575	145T	76	B0016FLF3OMHJ01	1.4	82.5		MXT841	\$1,339
1	900	460	182T	117	B0018FLF3BMHJ	2.2	82.5		MXT841	\$3,065
1	900	575	182T	117	B0018FLF3OMHJ	1.7	82.5		MXT841	\$3,065
1.5	3600	460	143T	69	BY152FLF3BMHJ01	2.1	84.0		MXT841	\$1,213
1.5	3600	575	143T	69	BY152FLF3OMHJ01	1.7	84.0		MXT841	\$1,213

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> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	460	145T	75	BY154FLF3BMHJ01	2.2	86.5		MXT841	\$1,200
1.5	1800	575	145T	75	BY154FLF3OMHJ01	1.8	86.5		MXT841	\$1,200
1.5	1200	460	182T	117	BY156FLF3BMHJ01	2.5	87.5		MXT841	\$1,651
1.5	1200	575	182T	117	BY156FLF3OMHJ01	2	87.5		MXT841	\$1,651
1.5	900	460	184T	122	BY158FLF3BMHJ	3.4	82.5		MXT841	\$3,373
1.5	900	575	184T	122	BY158FLF3OMHJ	2.8	82.5		MXT841	\$3,373
2	3600	460	145T	74	B0022FLF3BMHJ01	2.7	86.5		MXT841	\$1,383
2	3600	575	145T	74	B0022FLF3OMHJ01	2.2	86.5		MXT841	\$1,383
2	1800	460	145T	76	B0024FLF3BMHJ01	2.8	86.5		MXT841	\$1,318
2	1800	575	145T	76	B0024FLF3OMHJ01	2.2	86.5		MXT841	\$1,318
2	1200	460	184T	122	B0026FLF3BMHJ01	3.3	88.5		MXT841	\$1,689
2	1200	575	184T	122	B0026FLF3OMHJ01	2.6	88.5		MXT841	\$1,689
2	900	460	213T	198	B0028FLF3BMHJ	3.3	86.5		MXT841	\$3,821
2	900	575	213T	198	B0028FLF3OMHJ	2.6	86.5		MXT841	\$3,821
3	3600	460	182T	117	B0032FLF3BMHJ01	3.6	88.5		MXT841	\$1,698
3	3600	575	182T	117	B0032FLF3OMHJ01	2.9	88.5		MXT841	\$1,698
3	1800	460	182T	118	B0034FLF3BMHJ01	3.8	89.5		MXT841	\$1,594
3	1800	575	182T	118	B0034FLF3OMHJ01	3	89.5		MXT841	\$1,594
3	1200	460	213T	198	B0036FLF3BMHJ01	4.1	90.2		MXT841	\$2,165
3	1200	575	213T	198	B0036FLF3OMHJ01	3.3	90.2		MXT841	\$2,165
3	900	460	215T	216	B0038FLF3BMHJ	5	87.5		MXT841	\$4,447
3	900	575	215T	216	B0038FLF3OMHJ	4	87.5		MXT841	\$4,447
5	3600	460	184T	123	B0052FLF3BMHJ01	5.7	89.5		MXT841	\$1,925
5	3600	575	184T	123	B0052FLF3OMHJ01	4.6	89.5		MXT841	\$1,925
5	1800	460	184T	124	B0054FLF3BMHJ01	6.3	89.5		MXT841	\$1,707
5	1800	575	184T	124	B0054FLF3OMHJ01	5	89.5		MXT841	\$1,707
5	1200	460	215T	216	B0056FLF3BMHJ01	6.7	90.2		MXT841	\$2,969
5	1200	575	215T	216	B0056FLF3OMHJ01	5.4	90.2		MXT841	\$2,969
5	900	460	254T	327	B0058FLF3BMHJ	8	90.2		MXT841	\$5,647
5	900	575	254T	327	B0058FLF3OMHJ	6.4	90.2		MXT841	\$5,647
7.5	3600	460	213T	196	BY752FLF3BMHJ02	9	90.2		MXT841	\$2,334
7.5	3600	575	213T	196	BY752FLF3OMHJ02	7.2	90.2		MXT841	\$2,334
7.5	1800	460	213T	190	BY754FLF3BSHJ01	9.2	91.7		MXT841	\$2,317
7.5	1800	575	213T	190	BY754FLF3OSHJ01	7.3	91.7		MXT841	\$2,317
7.5	1200	460	254T	327	BY756FLF3BMHJ01	9.8	91.7		MXT841	\$3,860
7.5	1200	575	254T	327	BY756FLF3OMHJ01	7.8	91.7		MXT841	\$3,860
7.5	900	460	256T	347	BY758FLF3BMHJ	11.5	90.2		MXT841	\$6,748
7.5	900	575	256T	347	BY758FLF3OMHJ	9	90.2		MXT841	\$6,748
10	3600	460	215T	210	B0102FLF3BMHJ02	11.5	90.2		MXT841	\$2,724
10	3600	575	215T	210	B0102FLF3OMHJ02	9.2	90.2		MXT841	\$2,724
10	1800	460	215T	213	B0104FLF3BSHJ01	12	91.7		MXT841	\$2,790
10	1800	575	215T	213	B0104FLF3OSHJ01	9.6	91.7		MXT841	\$2,790
10	1200	460	256T	347	B0106FLF3BMHJ01	13	92.4		MXT841	\$4,715
10	1200	575	256T	347	B0106FLF3OMHJ01	10.4	92.4		MXT841	\$4,715
10	900	460	284T	473	B0108FLF3BMHJ	15	90.2		MXT841	\$7,672
10	900	575	284T	473	B0108FLF3OMHJ	11.8	90.2		MXT841	\$7,672
15	3600	460	254T	330	B0152FLF3BMHJ01	17	91.7		MXT841	\$3,747

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> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
15	3600	575	254T	330	B0152FLF3OMHJ01	13.6	91.7		MXT841	\$3,747
15	1800	460	254T	333	B0154FLF3BMHJ01	18.5	92.4		MXT841	\$3,681
15	1800	575	254T	333	B0154FLF3OMHJ01	14.8	92.4		MXT841	\$3,681
15	1200	460	284T	473	B0156FLF3BMHJ01	19	92.4		MXT841	\$6,258
15	1200	575	284T	473	B0156FLF3OMHJ01	15.2	92.4		MXT841	\$6,258
15	900	460	286T	512	B0158FLF3BMHJ	21	90.2		MXT841	\$9,541
15	900	575	286T	512	B0158FLF3OMHJ	17.8	90.2		MXT841	\$9,541
20	3600	460	256T	370	B0202FLF3BMHJ01	22	92.4		MXT841	\$4,634
20	3600	575	256T	370	B0202FLF3OMHJ01	17.6	92.4		MXT841	\$4,634
20	1800	460	256T	364	B0204FLF3BMHJ01	25	93.0		MXT841	\$4,580
20	1800	575	256T	364	B0204FLF3OMHJ01	20	93.0		MXT841	\$4,580
20	1200	460	286T	512	B0206FLF3BMHJ01	25	92.4		MXT841	\$7,626
20	1200	575	286T	512	B0206FLF3OMHJ01	20	92.4		MXT841	\$7,626
20	900	460	324T	621	B0208FLF3BMHJ	30	91.7		MXT841	\$11,402
20	900	575	324T	621	B0208FLF3OMHJ	24	91.7		MXT841	\$11,402
25	3600	460	284TS	450	B0252FLG3BMHJ01	28	92.4		MXT841	\$5,714
25	3600	575	284TS	450	B0252FLG3OMHJ01	22	92.4		MXT841	\$5,714
25	1800	460	284T	498	B0254FLF3BMHJ01	29	93.6		MXT841	\$5,454
25	1800	575	284T	498	B0254FLF3OMHJ01	24	93.6		MXT841	\$5,454
25	1200	460	324T	621	B0256FLF3BMHJ01	32	93.0		MXT841	\$9,242
25	1200	575	324T	621	B0256FLF3OMHJ01	26	93.0		MXT841	\$9,242
25	900	460	326T	685	B0258FLF3BMHJ	38	91.7		MXT841	\$13,006
25	900	575	326T	685	B0258FLF3OMHJ	30	91.7		MXT841	\$13,006
30	3600	460	286TS	498	B0302FLG3BMHJ01	33	92.4		MXT841	\$6,669
30	3600	575	286TS	498	B0302FLG3OMHJ01	26	92.4		MXT841	\$6,669
30	1800	460	286T	500	B0304FLF3BMHJ01	35	93.6		MXT841	\$6,343
30	1800	575	286T	500	B0304FLF3OMHJ01	29	93.6		MXT841	\$6,343
30	1200	460	326T	685	B0306FLF3BMHJ01	38	93.6		MXT841	\$10,642
30	1200	575	326T	685	B0306FLF3OMHJ01	30	93.6		MXT841	\$10,642
30	900	460	364T	825	B0308FLF3BMHJ	42	92.4		MXT841	\$15,230
30	900	575	364T	825	B0308FLF3OMHJ	34	92.4		MXT841	\$15,230
40	3600	460	324TS	593	B0402FLG3BMHJ01	46	93.0		MXT841	\$8,770
40	3600	575	324TS	593	B0402FLG3OMHJ01	37	93.0		MXT841	\$8,770
40	1800	460	324T	636	B0404FLF3BSHJ01	47	94.1		MXT841	\$8,429
40	1800	575	324T	636	B0404FLF3OSHJ01	38	94.1		MXT841	\$8,429
40	1200	460	364T	825	B0406FLF3BMHJ01	48	94.1		MXT841	\$14,428
40	1200	575	364T	825	B0406FLF3OMHJ01	38	94.1		MXT841	\$14,428
40	900	460	365T	895	B0408FLF3BMHJ	57	93.0		MXT841	\$18,060
40	900	575	365T	895	B0408FLF3OMHJ	45	93.0		MXT841	\$18,060
50	3600	460	326TS	652	B0502FLG3BMHJ01	57	93.0		MXT841	\$11,386
50	3600	575	326TS	652	B0502FLG3OMHJ01	46	93.0		MXT841	\$11,386
50	1800	460	326T	694	B0504FLF3BSHJ01	60	94.5		MXT841	\$10,350
50	1800	575	326T	694	B0504FLF3OSHJ01	48	94.5		MXT841	\$10,350
50	1200	460	365T	895	B0506FLF3BMHJ01	61	94.1		MXT841	\$16,565
50	1200	575	365T	895	B0506FLF3OMHJ01	48	94.1		MXT841	\$16,565
50	900	460	404T	1300	B0508FLF3BMHJ	76	93.6		MXT841	\$21,570
50	900	575	404T	1300	B0508FLF3OMHJ	62	93.6		MXT841	\$21,570

Totally Enclosed Fan Cooled

EQPIII-841

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
60	3600	460	364TS	835	B0602FLG3BMHJ	70	93.6		MXT841	\$13,475
60	3600	575	364TS	835	B0602FLG3OMHJ	56	93.6		MXT841	\$13,475
60	1800	460	364T	845	B0604FLF3BMHJ01	71	95.0		MXT841	\$13,362
60	1800	575	364T	845	B0604FLF3OMHJ01	57	95.0		MXT841	\$13,362
60	900	460	405T	1456	B0608FLF3BSHJ	98	93.6		MXT841	\$24,355
60	900	575	405T	1456	B0608FLF3OSHJ	75	93.6		MXT841	\$24,355
75	3600	460	365TS	905	B0752FLG3BMHJ01	87	93.6		MXT841	\$16,929
75	3600	575	365TS	905	B0752FLG3OMHJ	70	93.6		MXT841	\$16,929
75	1800	460	365T	901	B0754FLF3BMHJ01	89	95.4		MXT841	\$16,939
75	1800	575	365T	901	B0754FLF3OMHJ01	71	95.4		MXT841	\$16,939
75	900	460	444T	2005	B0758FLF4BSHJ	111	94.5	2	MXT841	\$31,510
75	900	575	444T	2005	B0758FLF4OSHJ	99	94.5	2	MXT841	\$31,510
100	900	460	445T	2155	B1008FLF4BSHJ	152	93.6	2	MXT841	\$38,470
100	900	575	445T	2155	B1008FLF4OSHJ	125	93.6	2	MXT841	\$38,470
125	900	460	447T	2444	B1258FLF4BSHJ	193	93.6	2	MXT841	\$41,727
125	900	460	N449T	2444	B1258FLF4BSHJL	156	95.0	2	MXT841	\$41,727
125	900	575	447T	2444	B1258FLF4OSHJ	155	93.6	2	MXT841	\$41,727
125	900	575	N449T	2444	B1258FLF4OSHJL	125	95.0	2	MXT841	\$41,727
150	900	460	N449T	3960	B1508FLF4BSHJL	186	95.0	2	MXT841	\$52,234
150	900	575	N449T	3960	B1508FLF4OSHJL	150	95.0	2	MXT841	\$52,234
200	900	460	N449T	3800	B2008FLF4BSHJL	254	94.5	2	MXT841	\$58,788
200	900	575	N449T	3800	B2008FLF4OSHJL	201	94.5	2	MXT841	\$58,788

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

General Purpose EQP Global

EQP Global Motor Series



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global® 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.

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

Standard Features:

- Totally Enclosed Fan Cooled
- Severe Duty, Mill & Chemical (840) or Petrochemical (841)
- NEMA® Premium Efficiency
- 230/460, 460, or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Design B Torques
- Available in Footed, C-Face Footed, & C-Face Footless Designs
- Dual-Frequency Nameplated (60/50 Hz) on Global SD & Global 840 (1 to 75 HP)
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- IP54 or IP56 Protection
- Cast Iron Conduit Box
- Cast Iron Frame & Brackets
- Breather Drains, Plugs, or T-Drains
- V-Ring or Labyrinth Shaft Seals
- Dual-Drilled for Multiple Mounting (140 through 445 & N449 Frames)
- 4142 High Strength Shaft Steel on All 440 Frames & Larger Roller Bearing Motors
- 20:1 Constant Torque, 60:1 Variable Torque Standard on all 1 to 200 HP, 4- & 6-Pole Motors
- No-Load Commercial Testing on All Motors

Applications:

- Pumps
- Fans
- Compressors
- Conveyors
- Mixers
- Material Handling



Totally Enclosed Fan Cooled EQP Global SD

> NEMA® Premium Efficiency



3 THREE YEAR WARRANTY



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global

SD motor series is Toshiba's next-generation motor product line. This cutting-edge 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.

Designed for severe duty applications and built on over 20 years of success with our EQPIII motor series, the EQP Global SD features multiple new design enhancements that make it one of the lowest cost-of-ownership products in the industry.

Product Scope:

Horsepower:	¾ to 700 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Volt (60 Hz):	230/460, 460, or 575 V
(50 Hz):	190/380 or 380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143T through 5810U
Construction:	Cast Iron (Frame, Brackets, & Conduit Box)
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty Voltage Withstand Capability of 2000 V in 0.1 µs)

** Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQPIII Series base price for these frame sizes).*

Standard Features:

- IP54 Protection
- Dual-Frequency 50/60 Hz on Nameplate (1 to 75 HP)
- 20:1 Constant Torque & 60:1 Variable Torque (1 to 200 HP, 4- & 6-Pole)
- High-Starting Torque for Most Demanding Applications
- Oversized 300 Series Bearings on All Frames (DE & ODE)
- Regreasable 280 Frame & Larger
- Multi-Mount on 140 through 445 & N449 Frames
- No-Load Commercial Test per IEEE 112 on All Motors
- On 440 Frame & Larger:
 - Commercial Test & Vibration Test
 - 100% of Bearings are Ball-Pass Frequency Tested

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	230/460	143T	52	3/46SDSR41A-P	2.8 / 1.4	80.0	1, 9	MTPFCP	\$547
0.75	1200	575	143T	52	3/46SDSC41A-P	1.1	81.9	1, 9	MTPFCP	\$548
1	1800	230/460	143T	51	0014SDSR41A-P	3.4 / 1.7	85.5	1, 9	MTPFCP	\$464
1	1800	575	143T	51	0014SDSC41A-P	1.3	85.5	1, 9	MTPFCP	\$464
1	1200	230/460	145T	56	0016SDSR41A-P	3.6 / 1.8	82.5	1, 9	MTPFCP	\$576
1	1200	575	145T	56	0016SDSC41A-P	1.5	82.5	1, 9	MTPFCP	\$576

Totally Enclosed Fan Cooled

EQP Global SD

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	3600	230/460	143T	50	Y152SDSR41A-P	4.0 / 2.0	84.0	1, 9	MTPFCP	\$505
1.5	3600	575	143T	50	Y152SDSC41A-P	1.6	84.0	1, 9	MTPFCP	\$505
1.5	1800	230/460	145T	53	Y154SDSR41A-P	4.8 / 2.4	86.5	1, 9	MTPFCP	\$510
1.5	1800	575	145T	53	Y154SDSC41A-P	1.9	86.5	1, 9	MTPFCP	\$510
1.5	1200	230/460	182T	79	Y156SDSR41A-P	5.0 / 2.5	87.5	1, 9	MTPFCP	\$615
1.5	1200	575	182T	79	Y156SDSC41A-P	2	87.5	1, 9	MTPFCP	\$615
2	3600	230/460	145T	53	0022SDSR41A-P	5.2 / 2.6	85.5	1, 9	MTPFCP	\$612
2	3600	575	145T	53	0022SDSC41A-P	2.1	85.5	1, 9	MTPFCP	\$612
2	1800	230/460	145T	56	0024SDSR41A-P	6.0 / 3.0	86.5	1, 9	MTPFCP	\$554
2	1800	575	145T	56	0024SDSC41A-P	2.4	86.5	1, 9	MTPFCP	\$554
2	1200	230/460	184T	93	0026SDSR41A-P	6.8 / 3.4	88.5	1, 9	MTPFCP	\$713
2	1200	575	184T	93	0026SDSC41A-P	2.7	88.5	1, 9	MTPFCP	\$713
3	3600	230/460	182T	77	0032SDSR41A-P	7.4 / 3.7	86.5	1, 9	MTPFCP	\$647
3	3600	575	182T	77	0032SDSC41A-P	3	86.5	1, 9	MTPFCP	\$647
3	1800	230/460	182T	86	0034SDSR41A-P	8.0 / 4.0	89.5	1, 9	MTPFCP	\$636
3	1800	575	182T	86	0034SDSC41A-P	3.2	89.5	1, 9	MTPFCP	\$636
3	1200	230/460	213T	147	0036SDSR41A-P	8.8 / 4.4	89.5	1, 9	MTPFCP	\$906
3	1200	575	213T	147	0036SDSC41A-P	3.5	89.5	1, 9	MTPFCP	\$906
5	3600	230/460	184T	91	0052SDSR41A-P	11.6 / 5.8	88.5	1, 9	MTPFCP	\$802
5	3600	575	184T	91	0052SDSC41A-P	4.6	88.5	1, 9	MTPFCP	\$802
5	1800	230/460	184T	97	0054SDSR41A-P	13.0 / 6.5	89.5	1, 9	MTPFCP	\$726
5	1800	575	184T	97	0054SDSC41A-P	5.2	89.5	1, 9	MTPFCP	\$726
5	1200	230/460	215T	165	0056SDSR41A-P	13.8 / 6.9	89.5	1, 9	MTPFCP	\$1,332
5	1200	575	215T	165	0056SDSC41A-P	5.5	89.5	1, 9	MTPFCP	\$1,332
7.5	3600	230/460	213T	155	Y752SDSR41A-P	18.0 / 9.0	89.5	1, 9	MTPFCP	\$1,039
7.5	3600	575	213T	155	Y752SDSC41A-P	7.2	89.5	1, 9	MTPFCP	\$1,039
7.5	1800	230/460	213T	171	Y754SDSR41A-P	19.6 / 9.8	91.7	1, 9	MTPFCP	\$1,039
7.5	1800	575	213T	171	Y754SDSC41A-P	7.8	91.7	1, 9	MTPFCP	\$1,039
7.5	1200	230/460	254T	252	Y756SDSR41A-P	20.4 / 10.2	91.0	1, 9	MTPFCP	\$1,768
7.5	1200	575	254T	252	Y756SDSC41A-P	8.2	91.0	1, 9	MTPFCP	\$1,768
10	3600	230/460	215T	172	0102SDSR41A-P	23.6 / 11.8	90.2	1, 9	MTPFCP	\$1,246
10	3600	575	215T	172	0102SDSC41A-P	9.4	90.2	1, 9	MTPFCP	\$1,246
10	1800	230/460	215T	186	0104SDSR41A-P	26.0 / 13.0	91.7	1, 9	MTPFCP	\$1,264
10	1800	575	215T	186	0104SDSC41A-P	10.4	91.7	1, 9	MTPFCP	\$1,264
10	1200	230/460	256T	274	0106SDSR41A-P	26.8 / 13.4	91.0	1, 9	MTPFCP	\$2,160
10	1200	575	256T	274	0106SDSC41A-P	10.8	91.0	1, 9	MTPFCP	\$2,160
15	3600	230/460	254T	274	0152SDSR41A-P	36.0 / 18.0	91.0	1, 9	MTPFCP	\$1,714
15	3600	575	254T	274	0152SDSC41A-P	14.4	91.0	1, 9	MTPFCP	\$1,714
15	1800	230/460	254T	289	0154SDSR41A-P	38.0 / 19.0	92.4	1, 9	MTPFCP	\$1,706
15	1800	575	254T	289	0154SDSC41A-P	15.2	92.4	1, 9	MTPFCP	\$1,706
15	1200	230/460	284T	364	0156SDSR41A-P	39.2 / 19.6	91.7	1, 9	MTPFCP	\$3,029
15	1200	575	284T	364	0156SDSC41A-P	15.8	91.7	1, 9	MTPFCP	\$3,029
20	3600	230/460	256T	292	0202SDSR41A-P	48.0 / 24.0	91.0	1, 9	MTPFCP	\$2,220
20	3600	575	256T	292	0202SDSC41A-P	19.2	91.0	1, 9	MTPFCP	\$2,220
20	1800	230/460	256T	340	0204SDSR41A-P	50.0 / 25.0	93.0	1, 9	MTPFCP	\$2,107
20	1800	575	256T	340	0204SDSC41A-P	20	93.0	1, 9	MTPFCP	\$2,107
20	1200	230/460	286T	411	0206SDSR41A-P	50.8 / 25.4	91.7	1, 9	MTPFCP	\$3,548

Totally Enclosed Fan Cooled

EQP Global SD

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
20	1200	575	286T	411	0206SDSC41A-P	20.4	91.7	1, 9	MTPFCP	\$3,548
25	3600	230/460	284TS	406	0252SDSR41B-P	58.0 / 29.0	91.7	1, 9	MTPFCP	\$2,725
25	3600	575	284TS	406	0252SDSC41B-P	23.2	91.7	1, 9	MTPFCP	\$2,725
25	1800	230/460	284T	424	0254SDSR41A-P	61.0 / 30.5	93.6	1, 9	MTPFCP	\$2,556
25	1800	230/460	284TS	424	0254SDSR41B-P	61.0 / 30.5	93.6	1, 9	MTPFCP	\$2,556
25	1800	575	284T	424	0254SDSC41A-P	24.4	93.6	1, 9	MTPFCP	\$2,556
25	1200	230/460	324T	545	0256SDSR41A-P	62.4 / 31.2	93.0	1, 9	MTPFCP	\$4,306
25	1200	575	324T	545	0256SDSC41A-P	24.6	93.0	1, 9	MTPFCP	\$4,306
30	3600	230/460	286TS	439	0302SDSR41B-P	70.0 / 35.0	91.7	1, 9	MTPFCP	\$3,131
30	3600	575	286TS	439	0302SDSC41B-P	28	91.7	1, 9	MTPFCP	\$3,131
30	1800	230/460	286T	448	0304SDSR41A-P	72.8 / 36.4	93.6	1, 9	MTPFCP	\$3,073
30	1800	230/460	286TS	448	0304SDSR41B-P	72.8 / 36.4	93.6	1, 9	MTPFCP	\$3,073
30	1800	575	286T	448	0304SDSC41A-P	29.2	93.6	1, 9	MTPFCP	\$3,073
30	1200	230/460	326T	571	0306SDSR41A-P	74.4 / 37.2	93.0	1, 9	MTPFCP	\$5,257
30	1200	575	326T	571	0306SDSC41A-P	30	93.0	1, 9	MTPFCP	\$5,257
40	3600	230/460	324TS	589	0402SDSR41B-P	94.0 / 47.0	92.4	1, 9	MTPFCP	\$3,943
40	3600	575	324TS	589	0402SDSC41B-P	37.6	92.4	1, 9	MTPFCP	\$3,943
40	1800	230/460	324T	593	0404SDSR41A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$3,973
40	1800	230/460	324TS	593	0404SDSR41B-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$3,973
40	1800	575	324T	593	0404SDSC41A-P	38.4	94.1	1, 9	MTPFCP	\$3,973
40	1200	230/460	364T	708	0406SDSR41A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$6,878
40	1200	575	364T	708	0406SDSC41A-P	38.4	94.1	1, 9	MTPFCP	\$6,878
50	3600	230/460	326TS	624	0502SDSR41B-P	116.0 / 58.0	93.0	1, 9	MTPFCP	\$5,467
50	3600	575	326TS	624	0502SDSC41B-P	46.4	93.0	1, 9	MTPFCP	\$5,467
50	1800	230/460	326T	651	0504SDSR41A-P	120.0 / 60.0	94.5	1, 9	MTPFCP	\$4,845
50	1800	230/460	326TS	651	0504SDSR41B-P	120.0 / 60.0	94.5	1, 9	MTPFCP	\$4,845
50	1800	575	326T	651	0504SDSC41A-P	48	94.5	1, 9	MTPFCP	\$4,845
50	1200	230/460	365T	757	0506SDSR41A-P	120.0 / 60.0	94.1	1, 9	MTPFCP	\$8,029
50	1200	575	365T	757	0506SDSC41A-P	48	94.1	1, 9	MTPFCP	\$8,029
60	3600	230/460	364TS	763	0602SDSR41B-P	138.0 / 69.0	93.6	1, 9	MTPFCP	\$6,737
60	3600	575	364TS	763	0602SDSC41B-P	55	93.6	1, 9	MTPFCP	\$6,737
60	1800	230/460	364T	796	0604SDSR41A-P	138.0 / 69.0	95.0	1, 9	MTPFCP	\$6,828
60	1800	230/460	364TS	796	0604SDSR41B-P	138.0 / 69.0	95.0	1, 9	MTPFCP	\$6,828
60	1800	575	364T	796	0604SDSC41A-P	55	95.0	1, 9	MTPFCP	\$6,828
60	1200	230/460	404T	1241	B0606FLF3USH02	148.0 / 74.0	95.0		MXTFCG	\$11,953
60	1200	575	404T	1241	B0606FLF3OSH02	59	95.0		MXTFCG	\$11,953
75	3600	230/460	365TS	814	0752SDSR41B-P	172.0 / 86.0	93.6	1, 9	MTPFCP	\$8,484
75	3600	575	365TS	814	0752SDSC41B-P	68.8	93.6	1, 9	MTPFCP	\$8,484
75	1800	230/460	365T	893	0754SDSR41A-P	172.0 / 86.0	95.4	1, 9	MTPFCP	\$8,796
75	1800	230/460	365TS	893	0754SDSR41B-P	172.0 / 86.0	95.4	1, 9	MTPFCP	\$8,796
75	1800	575	365T	893	0754SDSC41A-P	68.8	95.4	1, 9	MTPFCP	\$8,796
75	1200	230/460	405T	1319	B0756FLF3USH02	182.0 / 91.0	95.0		MXTFCG	\$13,770
75	1200	575	405T	1319	B0756FLF3OSH02	73	95.0		MXTFCG	\$13,770
100	3600	230/460	405TS	1305	B1002FLG3USH02	228/114	95.0		MXTFCG	\$13,470
100	3600	575	405TS	1305	B1002FLG3OSH02	91	95.0		MXTFCG	\$13,470
100	1800	230/460	405T	1353	B1004FLF3USH03	238/119	95.4		MXTFCG	\$12,828
100	1800	575	405T	1353	B1004FLF3OSH03	95	95.4		MXTFCG	\$12,828

Totally Enclosed Fan Cooled

EQP Global SD

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
100	1200	230/460	444T	1990	B1006FLF4USH01	246/123	95.4	2	MXTFCG	\$18,189
100	1200	575	444T	1990	B1006FLF4OSH01	98	95.4	2	MXTFCG	\$18,189
125	3600	230/460	444TS	1831	B1251FLG3USH	280/140	95.4	5	MXTFCG	\$17,745
125	3600	230/460	444TS	1831	B1253FLG3USH01	280/140	95.4	4	MXTFCG	\$17,745
125	3600	575	444TS	1831	B1251FLG3OSH	112	95.4	5	MXTFCG	\$17,745
125	3600	575	444TS	1831	B1253FLG3OSH01	112	95.4	4	MXTFCG	\$17,745
125	1800	230/460	444T	1873	B1254FLF3USH	290/145	95.8	8	MXTFCG	\$16,168
125	1800	230/460	444T	1873	B1254FLF4USH01	290/145	95.8	2	MXTFCG	\$16,168
125	1800	575	444T	1873	B1254FLF3OSH	116	95.8	8	MXTFCG	\$16,168
125	1800	575	444T	1873	B1254FLF4OSH01	116	95.8	2	MXTFCG	\$16,168
125	1200	230/460	445T	2100	B1256FLF4USH01	312/156	95.4	2	MXTFCG	\$18,753
125	1200	575	445T	2100	B1256FLF4OSH01	125	95.4	2	MXTFCG	\$18,753
150	3600	230/460	445TS	2016	A1501FLG3USH01	338/169	95.8	5, 6	MXTFCG	\$20,617
150	3600	230/460	445TS	2016	A1503FLG3USH01	338/169	95.8	4, 6	MXTFCG	\$20,617
150	3600	575	445TS	2016	A1503FLG3OSH01	135	95.8	4, 6	MXTFCG	\$20,617
150	3600	575	445TS	2016	A1501FLG3OSH01	135	95.8	5, 6	MXTFCG	\$20,617
150	1800	230/460	445T	2040	B1504FLF3USH	354/177	95.8	8	MXTFCG	\$18,867
150	1800	230/460	445T	2040	B1504FLF4USH01	354/177	95.8	2	MXTFCG	\$18,867
150	1800	575	445T	2040	B1504FLF3OSH	142	95.8	8	MXTFCG	\$18,867
150	1800	575	445T	2040	B1504FLF4OSH01	142	95.8	2	MXTFCG	\$18,867
150	1200	460	447T	2211	B1506FLF4BSH01	182	95.8	2	MXTFCG	\$21,896
150	1200	575	447T	2211	B1506FLF4OSH01	146	95.8	2	MXTFCG	\$21,896
200	3600	460	447TS	2325	B2001FLG3BSH	225	95.8	5	MXTFCG	\$26,798
200	3600	460	447TS	2325	B2003FLG3BSH01	225	95.8	4	MXTFCG	\$26,798
200	3600	575	447TS	2325	B2001FLG3OSH	180	96.2	5	MXTFCG	\$26,798
200	3600	575	447TS	2325	B2003FLG3OSH01	180	96.2	4	MXTFCG	\$26,798
200	1800	460	447T	2375	B2004FLF3BSH	233	96.2	8	MXTFCG	\$22,677
200	1800	460	447T	2375	B2004FLF4BSH01	233	96.2	2	MXTFCG	\$22,677
200	1800	575	447T	2375	B2004FLF3OSH	233	96.2	8	MXTFCG	\$22,677
200	1800	575	447T	2375	B2004FLF4OSH01	186	96.2	2	MXTFCG	\$22,677
200	1200	460	N449T	2629	B2006FLF4BMHL	246	96.2	2	MXTFCG	\$27,242
200	1200	460	505UZ	2629	B2006FLF4BSH	235	95.8	2	MXTFCG	\$32,565
200	1200	460	505US	2629	B2006FLG3BSH	235	95.8		MXTFCG	\$29,781
200	1200	575	N449T	2629	B2006FLF4OMHL	189	96.2	2	MXTFCG	\$27,242
200	1200	575	505UZ	2629	B2006FLF4OSH	188	95.8	2	MXTFCG	\$32,565
200	1200	575	505US	2629	B2006FLG3OSH	188	95.8		MXTFCG	\$29,781
250	3600	460	5010USS	3952	B2501FLG3BMH	275	95.8	5	MXTFCG	\$35,072
250	3600	460	N449TS	3800	B2501FLG3BMHL	273	95.4	5	MXTFCG	\$33,666
250	3600	460	5010USS	3952	B2503FLG3BMH	275	95.8	4	MXTFCG	\$35,072
250	3600	460	N449TS	3800	B2503FLG3BMHL	273	95.4	4	MXTFCG	\$33,666
250	3600	575	5010USS	3952	B2501FLG3OMH	220	95.8	5	MXTFCG	\$35,072
250	3600	575	N449TS	3800	B2501FLG3OMHL	218	95.4	5	MXTFCG	\$33,666
250	3600	575	5010USS	3952	B2503FLG3OMH	220	95.8	4	MXTFCG	\$35,072
250	3600	575	N449TS	3800	B2503FLG3OMHL	218	95.4	4	MXTFCG	\$33,666
250	1800	460	N449T	3810	B2504FLF3BMHL	276	96.2	8	MXTFCG	\$30,282
250	1800	460	505UZ	3005	B2504FLF4BMH	290	95.8	2	MXTFCG	\$32,094
250	1800	460	N449T	3810	B2504FLF4BMHL	276	96.2	2	MXTFCG	\$30,282

Totally Enclosed Fan Cooled

EQP Global SD

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
250	1800	460	505US	2907	B2504FLG3BMH	290	95.8		MXTFCG	\$29,310
250	1800	575	505UZ	3005	B2504FLF4OMH	232	95.8	2	MXTFCG	\$32,094
250	1800	575	N449T	3810	B2504FLF4OMHL	220	96.2	2	MXTFCG	\$30,282
250	1800	575	505US	2907	B2504FLG3OMH	232	95.8		MXTFCG	\$29,310
250	1200	460	5010UZ	4193	B2506FLF4BMH01	305	95.8	2	MXTFCG	\$38,959
250	1200	460	N449T	3930	B2506FLF4BMHL	295	96.2	2	MXTFCG	\$34,366
250	1200	460	5010US	4193	B2506FLG3BMH01	305	95.8		MXTFCG	\$36,175
250	1200	575	5010UZ	4193	B2506FLF4OMH01	244	95.8	2	MXTFCG	\$38,959
250	1200	575	N449T	3930	B2506FLF4OMHL	232	96.2	2	MXTFCG	\$34,366
250	1200	575	5010US	4193	B2506FLG3OMH01	232	95.8		MXTFCG	\$36,175
300	3600	460	N449TS	3815	B3001FLG3BMHL	328	95.8	5	MXTFCG	\$41,936
300	3600	460	5010USS	3954	B3001FLG8BMH	325	95.8	5	MXTFCG	\$43,497
300	3600	460	N449TS	3815	B3003FLG3BMHL	328	95.8	4	MXTFCG	\$41,936
300	3600	460	5010USS	3954	B3003FLG8BMH	325	95.8	4	MXTFCG	\$43,497
300	3600	575	N449TS	3815	B3001FLG3OMHL	261	95.8	5	MXTFCG	\$41,936
300	3600	575	5010USS	3954	B3001FLG8OMH	260	95.8	5	MXTFCG	\$43,497
300	3600	575	N449TS	3815	B3003FLG3OMHL	261	95.8	4	MXTFCG	\$41,936
300	3600	575	5010USS	3954	B3003FLG8OMH	260	95.8	4	MXTFCG	\$43,497
300	1800	460	N449T	3850	B3004FLF3BMHL	330	96.2	8	MXTFCG	\$32,094
300	1800	460	5010UZ	4219	B3004FLF4BMH01	330	96.5	2	MXTFCG	\$36,488
300	1800	460	N449T	3850	B3004FLF4BMHL	330	96.2	2	MXTFCG	\$32,094
300	1800	460	5010US	4378	B3004FLG3BMH01	330	96.5		MXTFCG	\$35,389
300	1800	575	5010UZ	4219	B3004FLF4OMH01	264	96.5	2	MXTFCG	\$36,488
300	1800	575	N449T	3850	B3004FLF4OMHL	264	96.2	2	MXTFCG	\$32,094
300	1800	575	5010US	4378	B3004FLG3OMH01	264	96.5		MXTFCG	\$35,389
300	1200	460	5010UZ	4400	B3006FLF4BMH01	363	96.2	2	MXTFCG	\$52,056
300	1200	460	N449T	3930	B3006FLF4BMHL	354	96.2	2	MXTFCG	\$46,898
300	1200	460	5010US	4232	B3006FLG3BMH01	363	96.2		MXTFCG	\$49,272
300	1200	575	5010UZ	4400	B3006FLF4OMH01	290	96.2	2	MXTFCG	\$52,056
300	1200	575	N449T	3930	B3006FLF4OMHL	283	96.2	2	MXTFCG	\$46,898
300	1200	575	5010US	4232	B3006FLG3OMH	290	96.2		MXTFCG	\$49,272
350	3600	460	N449TS	3815	B3501FLG3BMHL	382	95.8	5	MXTFCG	\$46,820
350	3600	460	N449TS	3815	B3503FLG3BMHL	382	95.8	4	MXTFCG	\$46,820
350	3600	460	5010USS	3975	B3503FLG8BMH	380	95.8	4	MXTFCG	\$49,150
350	3600	575	N449TS	3815	B3501FLG3OMHL	307	95.8	5	MXTFCG	\$46,820
350	3600	575	N449TS	3815	B3503FLG3OMHL	307	95.8	4	MXTFCG	\$46,820
350	3600	575	5010USS	3975	B3503FLG8OMH	304	95.8	4	MXTFCG	\$49,150
350	1800	460	N449T	3850	B3504FLF3BMHL	380	96.2	8	MXTFCG	\$36,087
350	1800	460	5010UZ	4121	B3504FLF4BMH01	388	96.2	2	MXTFCG	\$40,674
350	1800	460	N449T	3850	B3504FLF4BMHL	380	96.2	2	MXTFCG	\$36,087
350	1800	460	5010US	4121	B3504FLG3BMH01	388	96.2		MXTFCG	\$37,890
350	1800	575	5010UZ	4121	B3504FLF4OMH	310	96.2	2	MXTFCG	\$40,674
350	1800	575	N449T	3850	B3504FLF4OMHL	304	96.2	2	MXTFCG	\$36,087
350	1800	575	5010US	4121	B3504FLG3OMH01	310	96.2		MXTFCG	\$37,890
350	1200	460	5011US	4835	3506FTAB41E-A	415	95.8	11	MXTFCG	\$59,739
350	1200	460	5011UZ	4835	3506FTAB41E-AR	415	95.8	2, 11	MXTFCG	\$62,941
350	1200	460	5010UZ	4735	B3506FLF4BMH	416	95.0	2	MXTFCG	\$54,731

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
350	1200	460	N449T	3800	B3506FLF4BMHL	414	96.2	2	MXTFCG	\$49,445
350	1200	460	5010US	4735	B3506FLG3BMH	416	95.0	4	MXTFCG	\$51,947
350	1200	575	5011US	4835	3506FTAC41E-A	332	95.8	11	MXTFCG	\$59,739
350	1200	575	5011UZ	4835	3506FTAC41G-AR	332	95.8	2, 11	MXTFCG	\$62,941
350	1200	575	5010UZ	4735	B3506FLF4OMH	333	95.0	2	MXTFCG	\$54,731
350	1200	575	N449T	3800	B3506FLF4OMHL	328	96.2	2	MXTFCG	\$49,445
350	1200	575	5010US	4735	B3506FLG3OMH	333	95.0		MXTFCG	\$51,947
400	3600	460	5011USS	4512	4003FTAB41F-A	441	95.8	4, 11	MXTFCG	\$67,073
400	3600	460	5010USS	4412	B4001FLG8BMH	438	95.8	5	MXTFCG	\$58,324
400	3600	460	5010USS	4412	B4003FLG8BMH	438	95.8	4	MXTFCG	\$58,324
400	3600	575	5011USS	4512	4003FTAC41F-A	352	95.8	4, 11	MXTFCG	\$67,073
400	3600	575	5010USS	4412	B4001FLG8OMH	350	95.8	5	MXTFCG	\$58,324
400	3600	575	5010USS	4412	B4003FLG8OMH	350	95.8	4	MXTFCG	\$58,324
400	1800	460	5011US	4117	4004FTAB41E-A	446	96.2	11	MXTFCG	\$60,985
400	1800	460	5011UZ	4117	4004FTAB41E-AR	446	96.2	2, 11	MXTFCG	\$64,188
400	1800	460	5010UZ	4017	B4004FLF4BMH01	450	96.2	2	MXTFCG	\$55,815
400	1800	460	5010US	4017	B4004FLG3BMH01	450	96.2		MXTFCG	\$53,030
400	1800	575	5011US	4117	4004FTAC41E-A	358	96.2	11	MXTFCG	\$60,985
400	1800	575	5011UZ	4117	4004FTAC41G-AR	358	96.2	2, 11	MXTFCG	\$64,188
400	1800	575	5010UZ	4017	B4004FLF4OMH01	365	96.2	2	MXTFCG	\$55,815
400	1800	575	5010US	4017	B4004FLG3OMH01	365	96.2		MXTFCG	\$53,030
400	1200	460	5010UZ	4931	F4006FLF4BMH	481	95.0	2	MXTFCG	\$62,152
400	1200	460	5010US	4931	F4006FLG3BMH	481	95.0		MXTFCG	\$59,368
400	1200	575	5010UZ	4931	F4006FLF4OMH	385	95.0	4	MXTFCG	\$62,152
400	1200	575	5010US	4931	F4006FLG3OMH	385	95.0		MXTFCG	\$59,368
450	3600	460	5011USS	4737	4503FTAB41F-A	494	95.8	4, 11	MXTFCG	\$75,466
450	3600	460	5010USS	4637	B4501FLG8BMH	493	95.8	5	MXTFCG	\$65,623
450	3600	460	5010USS	4637	B4503FLG8BMH	493	95.8	4	MXTFCG	\$65,623
450	3600	575	5011USS	4737	4503FTAC41F-A	396	95.8	4, 11	MXTFCG	\$75,466
450	3600	575	5010USS	4637	B4501FLG8OMH	394	95.8	5	MXTFCG	\$65,623
450	3600	575	5010USS	4637	B4503FLG8OMH	394	95.8	4	MXTFCG	\$65,623
450	1800	460	5011US	4717	4504FTAB41E-A	504	96.2	11	MXTFCG	\$65,186
450	1800	460	5011UZ	4717	4504FTAB41E-AR	504	96.2	2, 11	MXTFCG	\$74,964
450	1800	460	5010UZ	4617	B4504FLF4BMH	514	95.4	2	MXTFCG	\$56,684
450	1800	460	5010US	4617	B4504FLG3BMH	514	95.4		MXTFCG	\$53,900
450	1800	575	5011US	4717	4504FTAC41E-A	405	96.2	11	MXTFCG	\$65,186
450	1800	575	5011UZ	4717	4504FTAC41G-AR	405	96.2	2, 11	MXTFCG	\$74,964
450	1800	575	5010UZ	4617	B4504FLF4OMH	411	95.4	2	MXTFCG	\$56,684
450	1800	575	5010US	4617	B4504FLG3OMH	411	95.4		MXTFCG	\$53,900
450	1200	460	5810UZ	6040	F4506FLG4BMH	533	95.4	2	MXTFCG	\$67,242
450	1200	460	5810US	6040	F4506FLG3BMH	533	95.4		MXTFCG	\$64,040
450	1200	575	5810UZ	6040	F4506FLF4OMH	427	95.4	2	MXTFCG	\$67,242
450	1200	575	5810US	6040	F4506FLG3OMH	427	95.4		MXTFCG	\$64,040
500	3600	460	5010USS	4637	B5001FKG8BMH	547	95.8	3, 5	MXTFCG	\$72,911
500	3600	460	5010USS	4637	B5003FKG8BMH	547	95.8	3, 4	MXTFCG	\$72,911
500	3600	575	5010USS	4637	B5001FKG8OMH	438	95.8	3, 5	MXTFCG	\$72,911
500	3600	575	5010USS	4637	B5003FKG8OMH	438	95.8	3, 4	MXTFCG	\$72,911

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EQP Global SD

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
500	3600	460	5011USS	4737	5003FTAB41F-A	549	95.8	4, 11	MXTFCG	\$83,847
500	1800	460	5011US	4837	5004FTAB41E-A	565	96.2	11	MXTFCG	\$72,073
500	1800	460	5011UZ	4837	5004FTAB41E-AR	565	96.2	2, 11	MXTFCG	\$82,884
500	3600	575	5011USS	4737	5003FTAC41F-A	439	95.8	4, 11	MXTFCG	\$83,847
500	1800	575	5011US	4837	5004FTAC41E-A	452	96.2	11	MXTFCG	\$72,073
500	1800	575	5011UZ	4837	5004FTAC41G-AR	452	96.2	2, 11	MXTFCG	\$82,884
500	1200	460	5810UZ	6140	F5006FLF4BMH	615	95.8	2	MXTFCG	\$74,357
500	1200	460	5810US	6140	F5006FLG3BMH	615	95.8		MXTFCG	\$71,155
500	1200	575	5810UZ	6140	F5006FLF4OMH	490	95.8	2	MXTFCG	\$74,357
500	1200	575	5810US	6140	F5006FLG3OMH	490	95.8		MXTFCG	\$71,155
600	1800	460	5810UZ	6040	F6004FLF4BMH	673	95.8	2	MXTFCG	\$74,357
600	1800	460	5810US	6040	F6004FLG3BMH	673	95.8		MXTFCG	\$71,155
600	1800	575	5810UZ	6040	F6004FLF4OMH	540	95.8	2	MXTFCG	\$74,357
600	1800	575	5810US	6040	F6004FLG3OMH	540	95.8		MXTFCG	\$71,155
600	1200	460	5810UZ	6340	F6006FLF4BMH	776	95.8	2	MXTFCG	\$88,589
600	1200	460	5810US	6340	F6006FLG3BMH	776	95.8		MXTFCG	\$85,387
600	1200	575	5810UZ	6340	F6006FLF4OMH	620	95.8	2	MXTFCG	\$88,589
600	1200	575	5810US	6340	F6006FLG3OMH	620	95.8		MXTFCG	\$85,387
700	1800	460	5810UZ	6140	F7004FLF4BMH	799	95.8	2	MXTFCG	\$86,216
700	1800	460	5810US	6140	F7004FLG3BMH	799	95.8		MXTFCG	\$83,014
700	1800	575	5810UZ	6140	F7004FLF4OMH	640	95.8	2	MXTFCG	\$86,216
700	1800	575	5810US	6140	F7004FLG3OMH	640	95.8		MXTFCG	\$83,014

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled
EQP Global SD C-Face
 > NEMA® Premium Efficiency



3 THREE YEAR WARRANTY



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP

Global SD C-Face motor series is Toshiba's next-generation motor product line. 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.

This series is designed for severe duty applications and built on over 20 years of success with our EQP III motor series. Available in C-Face Footed and C-Face Footless designs, the EQP Global SD C-Face features multiple new design enhancements that make it one of the lowest cost-of-ownership products in the industry.

Product Scope:

Horsepower:	¾ to 75 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Voltage (60 Hz):	230/460 or 575 V
(50 Hz):	190/380 or 380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143TC to 365TC
Construction:	Cast Iron
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

** Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQP III Series base price for these frame sizes).*

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
C-FACE FOOTED										
0.75	1200	230/460	143TC	52	3/46SDSR42A-P	2.8 / 1.4	80.0	1, 9, 16	MTPFCP	\$685
0.75	1200	230/460	143TC	52	3/46SDSR47A-P	2.8 / 1.4	80.0	1, 9	MTPFCP	\$685
0.75	1200	575	143TC	52	3/46SDSC42A-P	1.1	81.9	1, 9, 16	MTPFCP	\$686
0.75	1200	575	143TC	52	3/46SDSC47A-P	1.1	81.9	1, 9	MTPFCP	\$686
1	1800	230/460	143TC	51	0014SDSR42A-P	3.4 / 1.7	85.5	1, 9, 16	MTPFCP	\$598
1	1800	230/460	143TC	51	0014SDSR47A-P	3.4 / 1.7	85.5	1, 9	MTPFCP	\$598
1	1800	575	143TC	51	0014SDSC42A-P	1.3	85.5	1, 9, 16	MTPFCP	\$598
1	1800	575	143TC	51	0014SDSC47A-P	1.3	85.5	1, 9	MTPFCP	\$598
1	1200	230/460	145TC	56	0016SDSR42A-P	3.6 / 1.8	82.5	1, 9, 16	MTPFCP	\$716
1	1200	230/460	145TC	56	0016SDSR47A-P	3.6 / 1.8	82.5	1, 9	MTPFCP	\$716
1	1200	575	145TC	56	0016SDSC42A-P	1.5	82.5	1, 9, 16	MTPFCP	\$716
1	1200	575	145TC	56	0016SDSC47A-P	1.5	82.5	1, 9	MTPFCP	\$716
1.5	3600	230/460	143TC	50	Y152SDSR42A-P	4.0 / 2.0	84.0	1, 9, 16	MTPFCP	\$641
1.5	3600	230/460	143TC	50	Y152SDSR47A-P	4.0 / 2.0	84.0	1, 9	MTPFCP	\$641
1.5	3600	575	143TC	50	Y152SDSC42A-P	1.6	84.0	1, 9, 16	MTPFCP	\$641
1.5	3600	575	143TC	50	Y152SDSC47A-P	1.6	84.0	1, 9	MTPFCP	\$641
1.5	1800	230/460	145TC	53	Y154SDSR42A-P	4.8 / 2.4	86.5	1, 9, 16	MTPFCP	\$646
1.5	1800	230/460	145TC	53	Y154SDSR47A-P	4.8 / 2.4	86.5	1, 9	MTPFCP	\$646

Totally Enclosed Fan Cooled

EQP Global SD C-Face

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	575	145TC	53	Y154SDSC42A-P	1.9	86.5	1, 9, 16	MTPFCP	\$646
1.5	1800	575	145TC	53	Y154SDSC47A-P	1.9	86.5	1, 9	MTPFCP	\$646
1.5	1200	230/460	182TC	79	Y156SDSR42A-P	5.0 / 2.5	87.5	1, 9, 16	MTPFCP	\$779
1.5	1200	230/460	182TC	79	Y156SDSR47A-P	5.0 / 2.5	87.5	1, 9	MTPFCP	\$779
1.5	1200	575	182TC	79	Y156SDSC42A-P	2	87.5	1, 9, 16	MTPFCP	\$779
1.5	1200	575	182TC	79	Y156SDSC47A-P	2	87.5	1, 9	MTPFCP	\$779
2	3600	230/460	145TC	53	0022SDSR42A-P	5.2 / 2.6	85.5	1, 9, 16	MTPFCP	\$754
2	3600	230/460	145TC	53	0022SDSR47A-P	5.2 / 2.6	85.5	1, 9	MTPFCP	\$754
2	3600	575	145TC	53	0022SDSC42A-P	2.1	85.5	1, 9, 16	MTPFCP	\$754
2	3600	575	145TC	53	0022SDSC47A-P	2.1	85.5	1, 9	MTPFCP	\$754
2	1800	230/460	145TC	56	0024SDSR42A-P	6.0 / 3.0	86.5	1, 9, 16	MTPFCP	\$693
2	1800	230/460	145TC	56	0024SDSR47A-P	6.0 / 3.0	86.5	1, 9	MTPFCP	\$693
2	1800	575	145TC	56	0024SDSC42A-P	2.4	86.5	1, 9, 16	MTPFCP	\$693
2	1800	575	145TC	56	0024SDSC47A-P	2.4	86.5	1, 9	MTPFCP	\$693
2	1200	230/460	184TC	93	0026SDSR42A-P	6.8 / 3.4	88.5	1, 9, 16	MTPFCP	\$882
2	1200	230/460	184TC	93	0026SDSR47A-P	6.8 / 3.4	88.5	1, 9	MTPFCP	\$882
2	1200	575	184TC	93	0026SDSC42A-P	2.7	88.5	1, 9, 16	MTPFCP	\$882
2	1200	575	184TC	93	0026SDSC47A-P	2.7	88.5	1, 9	MTPFCP	\$882
3	3600	230/460	182TC	77	0032SDSR42A-P	7.4 / 3.7	86.5	1, 9, 16	MTPFCP	\$813
3	3600	230/460	182TC	77	0032SDSR47A-P	7.4 / 3.7	86.5	1, 9	MTPFCP	\$813
3	3600	575	182TC	77	0032SDSC42A-P	3	86.5	1, 9, 16	MTPFCP	\$813
3	3600	575	182TC	77	0032SDSC47A-P	3	86.5	1, 9	MTPFCP	\$813
3	1800	230/460	182TC	86	0034SDSR42A-P	8.0 / 4.0	89.5	1, 9, 16	MTPFCP	\$801
3	1800	230/460	182TC	86	0034SDSR47A-P	8.0 / 4.0	89.5	1, 9	MTPFCP	\$801
3	1800	575	182TC	86	0034SDSC42A-P	3.2	89.5	1, 9, 16	MTPFCP	\$801
3	1800	575	182TC	86	0034SDSC47A-P	3.2	89.5	1, 9	MTPFCP	\$801
3	1200	230/460	213TC	147	0036SDSR42A-P	8.8 / 4.4	89.5	1, 9, 16	MTPFCP	\$1,129
3	1200	230/460	213TC	147	0036SDSR47A-P	8.8 / 4.4	89.5	1, 9	MTPFCP	\$1,129
3	1200	575	213TC	147	0036SDSC42A-P	3.5	89.5	1, 9, 16	MTPFCP	\$1,129
3	1200	575	213TC	147	0036SDSC47A-P	3.5	89.5	1, 9	MTPFCP	\$1,129
5	3600	230/460	184TC	91	0052SDSR42A-P	11.6 / 5.8	88.5	1, 9, 16	MTPFCP	\$976
5	3600	230/460	184TC	91	0052SDSR47A-P	11.6 / 5.8	88.5	1, 9	MTPFCP	\$976
5	3600	575	184TC	91	0052SDSC42A-P	4.6	88.5	1, 9, 16	MTPFCP	\$976
5	3600	575	184TC	91	0052SDSC47A-P	4.6	88.5	1, 9	MTPFCP	\$976
5	1800	230/460	184TC	97	0054SDSR42A-P	13.0 / 6.5	89.5	1, 9, 16	MTPFCP	\$896
5	1800	230/460	184TC	97	0054SDSR47A-P	13.0 / 6.5	89.5	1, 9	MTPFCP	\$896
5	1800	575	184TC	97	0054SDSC42A-P	5.2	89.5	1, 9, 16	MTPFCP	\$896
5	1800	575	184TC	97	0054SDSC47A-P	5.2	89.5	1, 9	MTPFCP	\$896
5	1200	230/460	215TC	165	0056SDSR42A-P	13.8 / 6.9	89.5	1, 9, 16	MTPFCP	\$1,578
5	1200	230/460	215TC	165	0056SDSR47A-P	13.8 / 6.9	89.5	1, 9	MTPFCP	\$1,578
5	1200	575	215TC	165	0056SDSC42A-P	5.5	89.5	1, 9, 16	MTPFCP	\$1,578
5	1200	575	215TC	165	0056SDSC47A-P	5.5	89.5	1, 9	MTPFCP	\$1,578
7.5	3600	230/460	213TC	155	Y752SDSR42A-P	18.0 / 9.0	89.5	1, 9, 16	MTPFCP	\$1,214
7.5	3600	230/460	213TC	155	Y752SDSR47A-P	18.0 / 9.0	89.5	1, 9	MTPFCP	\$1,214
7.5	3600	575	213TC	155	Y752SDSC42A-P	7.2	89.5	1, 9, 16	MTPFCP	\$1,214
7.5	3600	575	213TC	155	Y752SDSC47A-P	7.2	89.5	1, 9	MTPFCP	\$1,214
7.5	1800	230/460	213TC	171	Y754SDSR42A-P	19.6 / 9.8	91.7	1, 9, 16	MTPFCP	\$1,214

Totally Enclosed Fan Cooled

EQP Global SD C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	1800	230/460	213TC	171	Y754SDSR47A-P	19.6 / 9.8	91.7	1, 9	MTPFCP	\$1,214
7.5	1800	575	213TC	171	Y754SDSC42A-P	7.8	91.7	1, 9, 16	MTPFCP	\$1,214
7.5	1800	575	213TC	171	Y754SDSC47A-P	7.8	91.7	1, 9	MTPFCP	\$1,214
7.5	1200	230/460	254TC	252	Y756SDSR42A-P	20.4 / 10.2	91.0	1, 9, 16	MTPFCP	\$2,031
7.5	1200	230/460	254TC	252	Y756SDSR47A-P	20.4 / 10.2	91.0	1, 9	MTPFCP	\$2,031
7.5	1200	575	254TC	252	Y756SDSC42A-P	8.2	91.0	1, 9, 16	MTPFCP	\$2,031
7.5	1200	575	254TC	252	Y756SDSC47A-P	8.2	91.0	1, 9	MTPFCP	\$2,031
10	3600	230/460	215TC	172	0102SDSR42A-P	23.6 / 11.8	90.2	1, 9, 16	MTPFCP	\$1,421
10	3600	230/460	215TC	172	0102SDSR47A-P	23.6 / 11.8	90.2	1, 9	MTPFCP	\$1,421
10	3600	575	215TC	172	0102SDSC42A-P	9.4	90.2	1, 9, 16	MTPFCP	\$1,421
10	3600	575	215TC	172	0102SDSC47A-P	9.4	90.2	1, 9	MTPFCP	\$1,421
10	1800	230/460	215TC	186	0104SDSR42A-P	26.0 / 13.0	91.7	1, 9, 16	MTPFCP	\$1,439
10	1800	230/460	215TC	186	0104SDSR47A-P	26.0 / 13.0	91.7	1, 9	MTPFCP	\$1,439
10	1800	575	215TC	186	0104SDSC42A-P	10.4	91.7	1, 9, 16	MTPFCP	\$1,439
10	1800	575	215TC	186	0104SDSC47A-P	10.4	91.7	1, 9	MTPFCP	\$1,439
10	1200	230/460	256TC	274	0106SDSR42A-P	26.8 / 13.4	91.0	1, 9, 16	MTPFCP	\$2,423
10	1200	230/460	256TC	274	0106SDSR47A-P	26.8 / 13.4	91.0	1, 9	MTPFCP	\$2,423
10	1200	575	256TC	274	0106SDSC42A-P	10.8	91.0	1, 9, 16	MTPFCP	\$2,423
10	1200	575	256TC	274	0106SDSC47A-P	10.8	91.0	1, 9	MTPFCP	\$2,423
15	3600	230/460	254TC	274	0152SDSR42A-P	36.0 / 18.0	91.0	1, 9, 16	MTPFCP	\$1,977
15	3600	230/460	254TC	274	0152SDSR47A-P	36.0 / 18.0	91.0	1, 9	MTPFCP	\$1,977
15	3600	575	254TC	274	0152SDSC42A-P	14.4	91.0	1, 9, 16	MTPFCP	\$1,977
15	3600	575	254TC	274	0152SDSC47A-P	14.4	91.0	1, 9	MTPFCP	\$1,977
15	1800	230/460	254TC	289	0154SDSR42A-P	38.0 / 19.0	92.4	1, 9, 16	MTPFCP	\$1,969
15	1800	230/460	254TC	289	0154SDSR47A-P	38.0 / 19.0	92.4	1, 9	MTPFCP	\$1,969
15	1800	575	254TC	289	0154SDSC42A-P	15.2	92.4	1, 9, 16	MTPFCP	\$1,969
15	1800	575	254TC	289	0154SDSC47A-P	15.2	92.4	1, 9	MTPFCP	\$1,969
15	1200	230/460	284TC	364	0156SDSR42A-P	39.2 / 19.6	91.7	1, 9, 16	MTPFCP	\$3,467
15	1200	575	284TC	364	0156SDSC42A-P	15.8	91.7	1, 9	MTPFCP	\$3,467
20	3600	230/460	256TC	292	0202SDSR42A-P	48.0 / 24.0	91.0	1, 9, 16	MTPFCP	\$2,483
20	3600	230/460	256TC	292	0202SDSR47A-P	48.0 / 24.0	91.0	1, 9	MTPFCP	\$2,483
20	3600	575	256TC	292	0202SDSC42A-P	19.2	91.0	1, 9, 16	MTPFCP	\$2,483
20	3600	575	256TC	292	0202SDSC47A-P	19.2	91.0	1, 9	MTPFCP	\$2,483
20	1800	230/460	256TC	340	0204SDSR42A-P	50.0 / 25.0	93.0	1, 9, 16	MTPFCP	\$2,370
20	1800	230/460	256TC	340	0204SDSR47A-P	50.0 / 25.0	93.0	1, 9	MTPFCP	\$2,370
20	1800	575	256TC	340	0204SDSC42A-P	20	93.0	1, 9, 16	MTPFCP	\$2,370
20	1800	575	256TC	340	0204SDSC47A-P	20	93.0	1, 9	MTPFCP	\$2,370
20	1200	230/460	286TC	411	0206SDSR42A-P	50.8 / 25.4	91.7	1, 9	MTPFCP	\$3,986
20	1200	575	286TC	411	0206SDSC42A-P	20.4	91.7	1, 9	MTPFCP	\$3,986
25	3600	230/460	284TSC	406	0252SDSR42B-P	58.0 / 29.0	91.7	1, 9	MTPFCP	\$3,163
25	3600	575	284TSC	406	0252SDSC42B-P	23.2	91.7	1, 9	MTPFCP	\$3,163
25	1800	230/460	284TC	424	0254SDSR42A-P	61.0 / 30.5	93.6	1, 9	MTPFCP	\$2,994
25	1800	575	284TC	424	0254SDSC42A-P	24.4	93.6	1, 9	MTPFCP	\$2,994
25	1200	230/460	324TC	545	0256SDSR42A-P	62.4 / 31.2	93.0	1, 9	MTPFCP	\$4,798
25	1200	575	324TC	545	0256SDSC42A-P	24.6	93.0	1, 9	MTPFCP	\$4,798
30	3600	230/460	286TSC	439	0302SDSR42B-P	70.0 / 35.0	91.7	1, 9	MTPFCP	\$3,569
30	3600	575	286TSC	439	0302SDSC42B-P	28	91.7	1, 9	MTPFCP	\$3,569

Totally Enclosed Fan Cooled

EQP Global SD C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
30	1800	230/460	286TC	448	0304SDSR42A-P	72.8 / 36.4	93.6	1, 9	MTPFCP	\$3,511
30	1800	575	286TC	448	0304SDSC42A-P	29.2	93.6	1, 9	MTPFCP	\$3,511
30	1200	230/460	326TC	571	0306SDSR42A-P	74.4 / 37.2	93.0	1, 9	MTPFCP	\$5,749
30	1200	575	326TC	571	0306SDSC42A-P	30	93.0	1, 9	MTPFCP	\$5,749
40	3600	230/460	324TSC	589	0402SDSR42B-P	94.0 / 47.0	92.4	1, 9	MTPFCP	\$4,435
40	3600	575	324TSC	589	0402SDSC42B-P	37.6	92.4	1, 9	MTPFCP	\$4,435
40	1800	230/460	324TC	593	0404SDSR42A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$4,465
40	1800	575	324TC	593	0404SDSC42A-P	38.4	94.1	1, 9	MTPFCP	\$4,465
40	1200	230/460	364TC	708	0406SDSR42A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$7,698
40	1200	575	364TC	708	0406SDSC42A-P	38.4	94.1	1, 9	MTPFCP	\$7,698
50	3600	230/460	326TSC	624	0502SDSR42B-P	116.0 / 58.0	93.0	1, 9	MTPFCP	\$5,959
50	3600	575	326TSC	624	0502SDSC42B-P	46.4	93.0	1, 9	MTPFCP	\$5,959
50	1800	230/460	326TC	651	0504SDSR42A-P	120.0 / 60.0	94.5	1, 9	MTPFCP	\$5,337
50	1800	575	326TC	651	0504SDSC42A-P	48	94.5	1, 9	MTPFCP	\$5,337
50	1200	230/460	365TC	757	0506SDSR42A-P	120.0 / 60.0	94.1	1, 9	MTPFCP	\$8,849
50	1200	575	365TC	757	0506SDSC42A-P	48	94.1	1, 9	MTPFCP	\$8,849
60	3600	230/460	364TSC	763	0602SDSR42B-P	138.0 / 69.0	93.6	1, 9	MTPFCP	\$7,557
60	3600	575	364TSC	763	0602SDSC42B-P	55	93.6	1, 9	MTPFCP	\$7,557
60	1800	230/460	364TC	796	0604SDSR42A-P	138.0 / 69.0	95.0	1, 9	MTPFCP	\$7,648
60	1800	575	364TC	796	0604SDSC42A-P	55	95.0	1, 9	MTPFCP	\$7,648
75	3600	230/460	365TSC	814	0752SDSR42B-P	172.0 / 86.0	93.6	1, 9	MTPFCP	\$9,304
75	3600	575	365TSC	814	0752SDSC42B-P	68.8	93.6	1, 9	MTPFCP	\$9,304
75	1800	230/460	365TC	893	0754SDSR42A-P	172.0 / 86.0	95.4	1, 9	MTPFCP	\$9,616
75	1800	575	365TC	893	0754SDSC42A-P	68.8	95.4	1, 9	MTPFCP	\$9,616
C-FACE FOOTLESS										
0.75	1200	230/460	143TC	52	3/46SDSR44A-P	2.8 / 1.4	80.0	1, 9	MTPFCP	\$754
0.75	1200	575	143TC	52	3/46SDSC44A-P	1.1	81.9	1, 9	MTPFCP	\$754
1	1800	230/460	143TC	51	0014SDSR44A-P	3.4 / 1.7	85.5	1, 9	MTPFCP	\$658
1	1800	575	143TC	51	0014SDSC44A-P	1.3	85.5	1, 9	MTPFCP	\$658
1	1200	230/460	145TC	56	0016SDSR44A-P	3.6 / 1.8	82.5	1, 9	MTPFCP	\$788
1	1200	575	145TC	56	0016SDSC44A-P	1.5	82.5	1, 9	MTPFCP	\$788
1.5	3600	230/460	143TC	50	Y152SDSR44A-P	4.0 / 2.0	84.0	1, 9	MTPFCP	\$705
1.5	3600	575	143TC	50	Y152SDSC44A-P	1.6	84.0	1, 9	MTPFCP	\$705
1.5	1800	230/460	145TC	53	Y154SDSR44A-P	4.8 / 2.4	86.5	1, 9	MTPFCP	\$711
1.5	1800	575	145TC	53	Y154SDSC44A-P	1.9	86.5	1, 9	MTPFCP	\$711
1.5	1200	230/460	182TC	79	Y156SDSR44A-P	5.0 / 2.5	87.5	1, 9	MTPFCP	\$857
1.5	1200	575	182TC	79	Y156SDSC44A-P	2	87.5	1, 9	MTPFCP	\$857
2	3600	230/460	145TC	53	0022SDSR44A-P	5.2 / 2.6	85.5	1, 9	MTPFCP	\$829
2	3600	575	145TC	53	0022SDSC44A-P	2.1	85.5	1, 9	MTPFCP	\$829
2	1800	230/460	145TC	56	0024SDSR44A-P	6.0 / 3.0	86.5	1, 9	MTPFCP	\$762
2	1800	575	145TC	56	0024SDSC44A-P	2.4	86.5	1, 9	MTPFCP	\$762
2	1200	230/460	184TC	93	0026SDSR44A-P	6.8 / 3.4	88.5	1, 9	MTPFCP	\$970
2	1200	575	184TC	93	0026SDSC44A-P	2.7	88.5	1, 9	MTPFCP	\$970
3	3600	230/460	182TC	77	0032SDSR44A-P	7.4 / 3.7	86.5	1, 9	MTPFCP	\$894
3	3600	575	182TC	77	0032SDSC44A-P	3	86.5	1, 9	MTPFCP	\$894
3	1800	230/460	182TC	86	0034SDSR44A-P	8.0 / 4.0	89.5	1, 9	MTPFCP	\$881

Totally Enclosed Fan Cooled

EQP Global SD C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	1800	575	182TC	86	0034SDSC44A-P	3.2	89.5	1, 9	MTPFCP	\$881
3	1200	230/460	213TC	147	0036SDSR44A-P	8.8 / 4.4	89.5	1, 9	MTPFCP	\$1,242
3	1200	575	213TC	147	0036SDSC44A-P	3.5	89.5	1, 9	MTPFCP	\$1,242
5	3600	230/460	184TC	91	0052SDSR44A-P	11.6 / 5.8	88.5	1, 9	MTPFCP	\$1,074
5	3600	575	184TC	91	0052SDSC44A-P	4.6	88.5	1, 9	MTPFCP	\$1,074
5	1800	230/460	184TC	97	0054SDSR44A-P	13.0 / 6.5	89.5	1, 9	MTPFCP	\$986
5	1800	575	184TC	97	0054SDSC44A-P	5.2	89.5	1, 9	MTPFCP	\$986
5	1200	230/460	215TC	165	0056SDSR44A-P	13.8 / 6.9	89.5	1, 9	MTPFCP	\$1,736
5	1200	575	215TC	165	0056SDSC44A-P	5.5	89.5	1, 9	MTPFCP	\$1,736
7.5	3600	230/460	213TC	155	Y752SDSR44A-P	18.0 / 9.0	89.5	1, 9	MTPFCP	\$1,335
7.5	3600	575	213TC	155	Y752SDSC44A-P	7.2	89.5	1, 9	MTPFCP	\$1,335
7.5	1800	230/460	213TC	171	Y754SDSR44A-P	19.6 / 9.8	91.7	1, 9	MTPFCP	\$1,335
7.5	1800	575	213TC	171	Y754SDSC44A-P	7.8	91.7	1, 9	MTPFCP	\$1,335
7.5	1200	230/460	254TC	252	Y756SDSR44A-P	20.4 / 10.2	91.0	1, 9	MTPFCP	\$2,234
7.5	1200	575	254TC	252	Y756SDSC44A-P	8.2	91.0	1, 9	MTPFCP	\$2,234
10	3600	230/460	215TC	172	0102SDSR44A-P	23.6 / 11.8	90.2	1, 9	MTPFCP	\$1,563
10	3600	575	215TC	172	0102SDSC44A-P	9.4	90.2	1, 9	MTPFCP	\$1,563
10	1800	230/460	215TC	186	0104SDSR44A-P	26.0 / 13.0	91.7	1, 9	MTPFCP	\$1,583
10	1800	575	215TC	186	0104SDSC44A-P	10.4	91.7	1, 9	MTPFCP	\$1,583
10	1200	230/460	256TC	274	0106SDSR44A-P	26.8 / 13.4	91.0	1, 9	MTPFCP	\$2,665
10	1200	575	256TC	274	0106SDSC44A-P	10.8	91.0	1, 9	MTPFCP	\$2,665
15	3600	230/460	254TC	274	0152SDSR44A-P	36.0 / 18.0	91.0	1, 9	MTPFCP	\$2,175
15	3600	575	254TC	274	0152SDSC44A-P	14.4	91.0	1, 9	MTPFCP	\$2,175
15	1800	230/460	254TC	289	0154SDSR44A-P	38.0 / 19.0	92.4	1, 9	MTPFCP	\$2,166
15	1800	575	254TC	289	0154SDSC44A-P	15.2	92.4	1, 9	MTPFCP	\$2,166
15	1200	230/460	284TC	364	0156SDSR44A-P	39.2 / 19.6	91.7	1, 9	MTPFCP	\$3,640
15	1200	575	284TC	364	0156SDSC44A-P	15.8	91.7	1, 9	MTPFCP	\$3,640
20	3600	230/460	256TC	292	0202SDSR44A-P	48.0 / 24.0	91.0	1, 9	MTPFCP	\$2,731
20	3600	575	256TC	292	0202SDSC44A-P	19.2	91.0	1, 9	MTPFCP	\$2,731
20	1800	230/460	256TC	340	0204SDSR44A-P	50.0 / 25.0	93.0	1, 9	MTPFCP	\$2,607
20	1800	575	256TC	340	0204SDSC44A-P	20	93.0	1, 9	MTPFCP	\$2,607
20	1200	230/460	286TC	411	0206SDSR44A-P	50.8 / 25.4	91.7	1, 9	MTPFCP	\$4,185
20	1200	575	286TC	411	0206SDSC44A-P	20.4	91.7	1, 9	MTPFCP	\$4,185
25	3600	230/460	284TSC	406	0252SDSR44B-P	58.0 / 29.0	91.7	1, 9	MTPFCP	\$3,321
25	3600	575	284TSC	406	0252SDSC44B-P	23.2	91.7	1, 9	MTPFCP	\$3,321
25	1800	230/460	284TC	424	0254SDSR44A-P	61.0 / 30.5	93.6	1, 9	MTPFCP	\$3,144
25	1800	575	284TC	424	0254SDSC44A-P	24.4	93.6	1, 9	MTPFCP	\$3,144
25	1200	230/460	324TC	545	0256SDSR44A-P	62.4 / 31.2	93.0	1, 9	MTPFCP	\$5,038
25	1200	575	324TC	545	0256SDSC44A-P	24.6	93.0	1, 9	MTPFCP	\$5,038
30	3600	230/460	286TSC	439	0302SDSR44B-P	70.0 / 35.0	91.7	1, 9	MTPFCP	\$3,747
30	3600	575	286TSC	439	0302SDSC44B-P	28	91.7	1, 9	MTPFCP	\$3,747
30	1800	230/460	286TC	448	0304SDSR44A-P	72.8 / 36.4	93.6	1, 9	MTPFCP	\$3,687
30	1800	575	286TC	448	0304SDSC44A-P	29.2	93.6	1, 9	MTPFCP	\$3,687
30	1200	230/460	326TC	571	0306SDSR44A-P	74.4 / 37.2	93.0	1, 9	MTPFCP	\$6,036
30	1200	575	326TC	571	0306SDSC44A-P	30	93.0	1, 9	MTPFCP	\$6,036
40	3600	230/460	324TSC	589	0402SDSR44B-P	94.0 / 47.0	92.4	1, 9	MTPFCP	\$4,657
40	3600	575	324TSC	589	0402SDSC44B-P	37.6	92.4	1, 9	MTPFCP	\$4,657

Totally Enclosed Fan Cooled

EQP Global SD C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
40	1800	230/460	324TC	593	0404SDSR44A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$4,688
40	1800	575	324TC	593	0404SDSC44A-P	38.4	94.1	1, 9	MTPFCP	\$4,688
40	1200	230/460	364TC	708	0406SDSR44A-P	96.0 / 48.0	94.1	1, 9	MTPFCP	\$8,083
40	1200	575	364TC	708	0406SDSC44A-P	38.4	94.1	1, 9	MTPFCP	\$8,083
50	3600	230/460	326TSC	624	0502SDSR44B-P	116.0 / 58.0	93.0	1, 9	MTPFCP	\$6,257
50	3600	575	326TSC	624	0502SDSC44B-P	46.4	93.0	1, 9	MTPFCP	\$6,257
50	1800	230/460	326TC	651	0504SDSR44A-P	120.0 / 60.0	94.5	1, 9	MTPFCP	\$5,604
50	1800	575	326TC	651	0504SDSC44A-P	48	94.5	1, 9	MTPFCP	\$5,604
50	1200	230/460	365TC	757	0506SDSR44A-P	120.0 / 60.0	94.1	1, 9	MTPFCP	\$9,291
50	1200	575	365TC	757	0506SDSC44A-P	48	94.1	1, 9	MTPFCP	\$9,291
60	3600	230/460	364TSC	763	0602SDSR44B-P	138.0 / 69.0	93.6	1, 9	MTPFCP	\$7,935
60	3600	575	364TSC	763	0602SDSC44B-P	55	93.6	1, 9	MTPFCP	\$7,935
60	1800	230/460	364TC	796	0604SDSR44A-P	138.0 / 69.0	95.0	1, 9	MTPFCP	\$8,030
60	1800	575	364TC	796	0604SDSC44A-P	55	95.0	1, 9	MTPFCP	\$8,030
75	3600	230/460	365TSC	814	0752SDSR44B-P	172.0 / 86.0	93.6	1, 9	MTPFCP	\$9,769
75	3600	575	365TSC	814	0752SDSC44B-P	68.8	93.6	1, 9	MTPFCP	\$9,769
75	1800	230/460	365TC	893	0754SDSR44A-P	172.0 / 86.0	95.4	1, 9	MTPFCP	\$10,097
75	1800	575	365TC	893	0754SDSC44A-P	68.8	95.4	1, 9	MTPFCP	\$10,097

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled EQP Global 840

> NEMA® Premium Efficiency



3 THREE YEAR
WARRANTY

EQP Global
840

Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global

840 motor series is Toshiba's next-generation motor product line. 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 840 specifically addresses the needs of the mill and chemical industries, incorporating many key features of an IEEE-841 motor. Building on over 20 years of success with our EQP III motor series, the EQP Global 840 features design enhancements on the rotor, frame, brackets, fan, and bearings.

Product Scope:

Horsepower:	¾ to 500 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Volt (60 Hz):	460 or 575 V
(50 Hz):	380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143T through 5810U
Construction:	All Cast Iron (Frame, End Bracket, Fan Cover, & Conduit Box)
Vibration:	Typically 0.06 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty Voltage Withstand Capability of 2000 V in 0.1 µs)

* Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQP III Series base price for these frame sizes).

Standard Features:

- IP54 Protection from 140 through 280 Frames, IP56 Protection 320 Frame & Larger
- Dual-Frequency 50/60 Hz on Nameplate (1 to 75 HP)
- 20:1 Constant Torque & 60:1 Variable Torque (1 to 200 HP, 4- & 6-Pole)
- High-Starting Torque for Most Demanding Applications
- Oversized 300 Series Bearings on All Frames (DE & ODE)
- Open Regreasable Bearings 280 Frame & Larger
- Shaft/Slinger Bearing Protection 140 to 280 Frames
- Labyrinth Seal 320 Frame & Larger, Both Ends
- Protective Coating on All Internal Machined Surfaces
- No-Load Commercial Test per IEEE 112 on All Motors
- On 440 Frame & Larger:
 - Commercial Test & Vibration Test
 - 100% of Bearings are Ball-Pass Frequency Tested

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	460	143T	52	3/46XSSB41A-P	1.4	80.0	1, 9	MTP840	\$610
0.75	1200	575	143T	52	3/46XSSC41A-P	1.1	81.9	1, 9	MTP840	\$610
1	1800	460	143T	51	0014XSSB41A-P	1.7	85.5	1, 9	MTP840	\$552
1	1800	575	143T	51	0014XSSC41A-P	1.3	85.5	1, 9	MTP840	\$552
1	1200	460	145T	56	0016XSSB41A-P	1.8	82.5	1, 9	MTP840	\$690
1	1200	575	145T	56	0016XSSC41A-P	1.5	82.5	1, 9	MTP840	\$690
1.5	3600	460	143T	50	Y152XSSB41A-P	2	84.0	1, 9	MTP840	\$616
1.5	3600	575	143T	50	Y152XSSC41A-P	1.6	84.0	1, 9	MTP840	\$616

Totally Enclosed Fan Cooled

EQP Global 840

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	460	145T	53	Y154XSSB41A-P	2.4	86.5	1, 9	MTP840	\$615
1.5	1800	575	145T	53	Y154XSXC41A-P	1.9	86.5	1, 9	MTP840	\$615
1.5	1200	460	182T	79	Y156XSSB41A-P	2.5	87.5	1, 9	MTP840	\$735
1.5	1200	575	182T	79	Y156XSXC41A-P	2	87.5	1, 9	MTP840	\$735
2	3600	460	145T	53	0022XSSB41A-P	2.6	85.5	1, 9	MTP840	\$695
2	3600	575	145T	53	0022XSXC41A-P	2.1	85.5	1, 9	MTP840	\$695
2	1800	460	145T	56	0024XSSB41A-P	3	86.5	1, 9	MTP840	\$675
2	1800	575	145T	56	0024XSXC41A-P	2.4	86.5	1, 9	MTP840	\$675
2	1200	460	184T	93	0026XSSB41A-P	3.4	88.5	1, 9	MTP840	\$820
2	1200	575	184T	93	0026XSXC41A-P	2.7	88.5	1, 9	MTP840	\$820
3	3600	460	182T	77	0032XSSB41A-P	3.7	86.5	1, 9	MTP840	\$757
3	3600	575	182T	77	0032XSXC41A-P	3	86.5	1, 9	MTP840	\$757
3	1800	460	182T	86	0034XSSB41A-P	4	89.5	1, 9	MTP840	\$711
3	1800	575	182T	86	0034XSXC41A-P	3.2	89.5	1, 9	MTP840	\$711
3	1200	460	213T	147	0036XSSB41A-P	4.4	89.5	1, 9	MTP840	\$1,002
3	1200	575	213T	147	0036XSXC41A-P	3.5	89.5	1, 9	MTP840	\$1,002
5	3600	460	184T	91	0052XSSB41A-P	5.8	88.5	1, 9	MTP840	\$937
5	3600	575	184T	91	0052XSXC41A-P	4.6	88.5	1, 9	MTP840	\$937
5	1800	460	184T	97	0054XSSB41A-P	6.5	89.5	1, 9	MTP840	\$830
5	1800	575	184T	97	0054XSXC41A-P	5.2	89.5	1, 9	MTP840	\$830
5	1200	460	215T	165	0056XSSB41A-P	6.9	89.5	1, 9	MTP840	\$1,411
5	1200	575	215T	165	0056XSXC41A-P	5.5	89.5	1, 9	MTP840	\$1,411
7.5	3600	460	213T	155	Y752XSSB41A-P	9	89.5	1, 9	MTP840	\$1,212
7.5	3600	575	213T	155	Y752XSXC41A-P	7.2	89.5	1, 9	MTP840	\$1,212
7.5	1800	460	213T	171	Y754XSSB41A-P	9.8	91.7	1, 9	MTP840	\$1,206
7.5	1800	575	213T	171	Y754XSXC41A-P	7.8	91.7	1, 9	MTP840	\$1,206
7.5	1200	460	254T	252	Y756XSSB41A-P	10.2	91.0	1, 9	MTP840	\$2,018
7.5	1200	575	254T	252	Y756XSXC41A-P	8.2	91.0	1, 9	MTP840	\$2,018
10	3600	460	215T	172	0102XSSB41A-P	11.8	90.2	1, 9	MTP840	\$1,423
10	3600	575	215T	172	0102XSXC41A-P	9.4	90.2	1, 9	MTP840	\$1,423
10	1800	460	215T	186	0104XSSB41A-P	13	91.7	1, 9	MTP840	\$1,418
10	1800	575	215T	186	0104XSXC41A-P	10.4	91.7	1, 9	MTP840	\$1,418
10	1200	460	256T	274	0106XSSB41A-P	13.4	91.0	1, 9	MTP840	\$2,478
10	1200	575	256T	274	0106XSXC41A-P	10.8	91.0	1, 9	MTP840	\$2,478
15	3600	460	254T	274	0152XSSB41A-P	18	91.0	1, 9	MTP840	\$1,950
15	3600	575	254T	274	0152XSXC41A-P	14.4	91.0	1, 9	MTP840	\$1,950
15	1800	460	254T	289	0154XSSB41A-P	19	92.4	1, 9	MTP840	\$1,870
15	1800	575	254T	289	0154XSXC41A-P	15.2	92.4	1, 9	MTP840	\$1,870
15	1200	460	284T	364	0156XSSB41A-P	19.6	91.7	1, 9	MTP840	\$3,293
15	1200	575	284T	364	0156XSXC41A-P	15.8	91.7	1, 9	MTP840	\$3,293
20	3600	460	256T	292	0202XSSB41A-P	24	91.0	1, 9	MTP840	\$2,357
20	3600	575	256T	292	0202XSXC41A-P	19.2	91.0	1, 9	MTP840	\$2,357
20	1800	460	256T	340	0204XSSB41A-P	25	93.0	1, 9	MTP840	\$2,329
20	1800	575	256T	340	0204XSXC41A-P	20	93.0	1, 9	MTP840	\$2,329
20	1200	460	286T	411	0206XSSB41A-P	25.4	91.7	1, 9	MTP840	\$3,876
20	1200	575	286T	411	0206XSXC41A-P	20.4	91.7	1, 9	MTP840	\$3,876
25	3600	460	284TS	406	0252XSSB41B-P	29	91.7	1, 9	MTP840	\$2,904

Totally Enclosed Fan Cooled

EQP Global 840

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
25	3600	575	284TS	406	0252XSSC41B-P	23.2	91.7	1, 9	MTP840	\$2,904
25	1800	460	284T	424	0254XSSB41A-P	30.5	93.6	1, 9	MTP840	\$2,818
25	1800	575	284T	424	0254XSSC41A-P	24.4	93.6	1, 9	MTP840	\$2,818
25	1200	460	324T	545	0256XSSB41A-P	31.2	93.0	1, 9	MTP840	\$4,700
25	1200	575	324T	545	0256XSSC41A-P	24.6	93.0	1, 9	MTP840	\$4,700
30	3600	460	286TS	439	0302XSSB41B-P	35	91.7	1, 9	MTP840	\$3,539
30	3600	575	286TS	439	0302XSSC41B-P	28	91.7	1, 9	MTP840	\$3,539
30	1800	460	286T	448	0304XSSB41A-P	36.4	93.6	1, 9	MTP840	\$3,292
30	1800	575	286T	448	0304XSSC41A-P	29.2	93.6	1, 9	MTP840	\$3,292
30	1200	460	326T	571	0306XSSB41A-P	37.2	93.0	1, 9	MTP840	\$5,412
30	1200	575	326T	571	0306XSSC41A-P	30	93.0	1, 9	MTP840	\$5,412
40	3600	460	324TS	589	0402XSSB41B-P	47	92.4	1, 9	MTP840	\$4,459
40	3600	575	324TS	589	0402XSSC41B-P	37.6	92.4	1, 9	MTP840	\$4,459
40	1800	460	324T	593	0404XSSB41A-P	48	94.1	1, 9	MTP840	\$4,284
40	1800	575	324T	593	0404XSSC41A-P	38.4	94.1	1, 9	MTP840	\$4,284
40	1200	460	364T	708	0406XSSB41A-P	48	94.1	1, 9	MTP840	\$7,335
40	1200	575	364T	708	0406XSSC41A-P	38.4	94.1	1, 9	MTP840	\$7,335
50	3600	460	326TS	624	0502XSSB41B-P	58	93.0	1, 9	MTP840	\$5,789
50	3600	575	326TS	624	0502XSSC41B-P	46.4	93.0	1, 9	MTP840	\$5,789
50	1800	460	326T	651	0504XSSB41A-P	60	94.5	1, 9	MTP840	\$4,978
50	1800	575	326T	651	0504XSSC41A-P	48	94.5	1, 9	MTP840	\$4,978
50	1200	460	365T	757	0506XSSB41A-P	60	94.1	1, 9	MTP840	\$8,421
50	1200	575	365T	757	0506XSSC41A-P	48	94.1	1, 9	MTP840	\$8,421
60	3600	460	364TS	763	0602XSSB41B-P	69	93.6	1, 9	MTP840	\$7,615
60	3600	575	364TS	763	0602XSSC41B-P	55	93.6	1, 9	MTP840	\$7,615
60	1800	460	364T	796	0604XSSB41A-P	69	95.0	1, 9	MTP840	\$7,550
60	1800	575	364T	796	0604XSSC41A-P	55	95.0	1, 9	MTP840	\$7,550
60	1200	460	404T	1300	B0606FLF3BSHD01	74	95.0		MXT40G	\$11,723
60	1200	575	404T	1300	B0606FLF3OSHD01	59	95.0		MXT40G	\$11,723
75	3600	460	365TS	814	0752XSSB41B-P	86	93.6	1, 9	MTP840	\$9,562
75	3600	575	365TS	814	0752XSSC41B-P	68.8	93.6	1, 9	MTP840	\$9,562
75	1800	460	365T	893	0754XSSB41A-P	86	95.4	1, 9	MTP840	\$9,060
75	1800	575	365T	893	0754XSSC41A-P	68.8	95.4	1, 9	MTP840	\$9,060
75	1200	460	405T	1495	B0756FLF3BSHD01	91	95.0		MXT40G	\$13,802
75	1200	575	405T	1456	B0756FLF3OSHD01	73	95.0		MXT40G	\$13,802
100	3600	460	405TS	1388	B1002FLG3BSHD01	114	95.0		MXT40G	\$15,223
100	3600	575	405TS	1388	B1002FLG3OSHD01	91	95.0		MXT40G	\$15,223
100	1800	460	405T	1426	B1004FLF3BSHD01	119	95.4		MXT40G	\$13,298
100	1800	575	405T	1426	B1004FLF3OSHD01	95	95.4		MXT40G	\$13,298
100	1200	460	444T	2005	B1006FLF4BSHD01	123	95.4		MXT40G	\$18,864
100	1200	575	444T	2005	B1006FLF4OSHD01	99	95.4		MXT40G	\$18,864
125	3600	460	444TS	1972	B1251FLG3BSHD01	140	95.4	5	MXT40G	\$18,903
125	3600	460	444TS	1972	B1253FLG3BSHD01	140	95.4	4	MXT40G	\$18,903
125	3600	575	444TS	1972	B1251FLG3OSHD01	112	95.4	5	MXT40G	\$18,903
125	3600	575	444TS	1972	B1253FLG3OSHD01	112	95.4	4	MXT40G	\$18,903
125	1800	460	444T	1900	B1254FLF3BSHD	145	95.8	8	MXT40G	\$17,567
125	1800	460	444T	1900	B1254FLF4BSHD01	145	95.8	2	MXT40G	\$17,567

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> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
125	1800	575	444T	1900	B1254FLF3OSHD	145	95.8	8	MXT40G	\$17,567
125	1800	575	444T	1900	B1254FLF4OSHD01	116	95.8	2	MXT40G	\$17,567
125	1200	460	445T	2155	B1256FLF4BSHD01	156	95.4	2	MXT40G	\$22,013
125	1200	575	445T	2155	B1256FLF4OSHD01	125	95.4	2	MXT40G	\$22,013
150	3600	460	445TS	2150	A1501FLG3BSHD01	169	95.8	5, 6	MXT40G	\$22,709
150	3600	460	445TS	2150	A1503FLG3BSHD01	169	95.8	4, 6	MXT40G	\$22,709
150	3600	575	445TS	2150	A1501FLG3OSHD01	135	95.8	5, 6	MXT40G	\$22,709
150	3600	575	445TS	2150	A1503FLG3OSHD01	135	95.8	4, 6	MXT40G	\$22,709
150	1800	460	445T	2164	B1504FLF3BSHD	177	95.8	8	MXT40G	\$20,422
150	1800	460	445T	2164	B1504FLF4BSHD01	177	95.8	2	MXT40G	\$20,422
150	1800	575	445T	2164	B1504FLF3OSHD	142	95.8	8	MXT40G	\$20,422
150	1800	575	445T	2164	B1504FLF4OSHD01	142	95.8	2	MXT40G	\$20,422
150	1200	460	447T	2444	B1506FLF4BSHD01	182	95.8	2	MXT40G	\$24,628
150	1200	575	447T	2444	B1506FLF4OSHD01	146	95.8	2	MXT40G	\$24,628
200	3600	460	447TS	2445	B2001FLG3BSHD	225	96.2	5	MXT40G	\$28,727
200	3600	460	447TS	2445	B2003FLG3BSHD	225	96.2	4	MXT40G	\$28,727
200	3600	575	447TS	2445	B2001FLG3OSHD	180	96.2	5	MXT40G	\$28,727
200	3600	575	447TS	2445	B2003FLG3OSHD	180	96.2	4	MXT40G	\$28,727
200	1800	460	447T	2466	B2004FLF3BSHD	233	96.2	8	MXT40G	\$24,840
200	1800	460	447T	2466	B2004FLF4BSHD01	233	96.2	2	MXT40G	\$24,840
200	1800	575	447T	2466	B2004FLF3OSHD	186	96.2	8	MXT40G	\$24,840
200	1800	575	447T	2466	B2004FLF4OSHD01	186	96.2	2	MXT40G	\$24,840
200	1200	460	505UZ	3000	B2006FLF4BSHD	235	95.8	2	MXT40G	\$35,230
200	1200	460	N449T	3920	B2006FLF4BSHDL	246	96.2	2	MXT40G	\$31,007
200	1200	460	505US	3000	B2006FLG3BSHD	235	95.8		MXT40G	\$32,445
200	1200	575	505UZ	3000	B2006FLF4OSHD	188	95.8	2	MXT40G	\$35,230
200	1200	575	N449T	3920	B2006FLF4OSHDL	189	96.2	2	MXT40G	\$31,007
200	1200	575	505US	3000	B2006FLG3OSHD	188	95.8		MXT40G	\$32,445
250	3600	460	5010USS	4152	B2501FLG3BMHD	275	95.8	5	MXT40G	\$38,404
250	3600	460	N449TS	4000	B2501FLG3BMHDL	273	95.4	5	MXT40G	\$36,865
250	3600	460	5010USS	4152	B2503FLG3BMHD	275	95.8	4	MXT40G	\$38,404
250	3600	460	N449TS	4000	B2503FLG3BMHDL	273	95.4	4	MXT40G	\$36,865
250	3600	575	5010USS	4152	B2501FLG3OMHD	220	95.8	5	MXT40G	\$38,404
250	3600	575	N449TS	4000	B2501FLG3OMHDL	218	95.4	5	MXT40G	\$36,865
250	3600	575	5010USS	4152	B2503FLG3OMHD	220	95.8	4	MXT40G	\$38,404
250	3600	575	N449TS	4000	B2503FLG3OMHDL	218	95.4	4	MXT40G	\$36,865
250	1800	460	N449T	4010	B2504FLF3BSHDL	276	96.2	8	MXT40G	\$31,652
250	1800	460	505UZ	3205	B2504FLF4BMHD	290	95.8	2	MXT40G	\$35,143
250	1800	460	N449T	4010	B2504FLF4BSHDL	276	96.2	2	MXT40G	\$31,652
250	1800	460	505US	3107	B2504FLG3BMHD	290	95.8		MXT40G	\$32,094
250	1800	575	505UZ	3205	B2504FLF4OMHD	232	95.8	2	MXT40G	\$35,143
250	1800	575	N449T	4010	B2504FLF4OMHDL	220	96.2	2	MXT40G	\$31,652
250	1800	575	505US	3107	B2504FLG3OMHD	232	95.8		MXT40G	\$32,094
250	1200	460	5010UZ	4393	B2506FLF4BMHD	305	95.8	2	MXT40G	\$42,660
250	1200	460	N449T	4130	B2506FLF4BSHDL	295	96.2	2	MXT40G	\$37,630
250	1200	460	5010US	4393	B2506FLG3BMHD	305	95.8		MXT40G	\$39,611
250	1200	575	N449T	4130	B2506FLF4OMHDL	232	96.2	2	MXT40G	\$37,630

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
250	1200	575	5010UZ	4393	B2506FLF4OSHD	244	95.8	2	MXT40G	\$42,660
250	1200	575	5010US	4393	B2506FLG3OMHD	232	95.8		MXT40G	\$39,611
300	3600	460	N449TS	4015	B3001FLG3BMHDL	328	95.8	5	MXT40G	\$46,020
300	3600	460	5010USS	4154	B3001FLG8BMHD	325	95.8	5	MXT40G	\$47,580
300	3600	460	N449TS	4015	B3003FLG3BMHDL	328	95.8	4	MXT40G	\$46,020
300	3600	460	5010USS	4154	B3003FLG8BMHD	325	95.8	4	MXT40G	\$47,580
300	3600	575	N449TS	4015	B3001FLG3OMHDL	261	95.8	5	MXT40G	\$46,020
300	3600	575	5010USS	4154	B3001FLG8OMHD	260	95.8	5	MXT40G	\$47,580
300	3600	575	N449TS	4015	B3003FLG3OMHDL	261	95.8	4	MXT40G	\$46,020
300	3600	575	5010USS	4154	B3003FLG8OMHD	260	95.8	4	MXT40G	\$47,580
300	1800	460	N449T	4050	B3004FLF3BMHDL	330	96.2	8	MXT40G	\$35,144
300	1800	460	5010UZ	4419	B3004FLF4BMHD	330	96.5	2	MXT40G	\$39,955
300	1800	460	N449T	4050	B3004FLF4BMHDL	330	96.2	2	MXT40G	\$35,143
300	1800	460	5010US	4578	B3004FLG3BMHD	330	96.5		MXT40G	\$36,906
300	1800	575	5010UZ	4419	B3004FLF4OMHD	264	96.5	2	MXT40G	\$39,955
300	1800	575	N449T	4050	B3004FLF4OMHDL	264	96.2	2	MXT40G	\$35,143
300	1800	575	5010US	4578	B3004FLG3OMHD	264	96.5		MXT40G	\$36,906
300	1200	460	5010UZ	4600	B3006FLF4BMHD	363	96.2	2	MXT40G	\$56,139
300	1200	460	N449T	4130	B3006FLF4BMHDL	354	96.2	2	MXT40G	\$50,981
300	1200	460	5010US	4432	B3006FLG3BMHD	363	96.2		MXT40G	\$53,355
300	1200	575	5010UZ	4600	B3006FLF4OMHD	290	96.2	2	MXT40G	\$56,139
300	1200	575	N449T	4130	B3006FLF4OMHDL	283	96.2	2	MXT40G	\$50,981
300	1200	575	5010US	4432	B3006FLG3OMHD	290	96.2		MXT40G	\$53,355
350	3600	460	N449TS	4015	B3501FLG3BMHDL	382	95.8	5	MXT40G	\$50,904
350	3600	460	N449TS	4015	B3503FLG3BMHDL	382	95.8	4	MXT40G	\$50,904
350	3600	460	5010USS	4175	B3503FLG8BMHD	380	95.8	4	MXT40G	\$53,233
350	3600	575	N449TS	4015	B3501FLG3OMHDL	307	95.8	5	MXT40G	\$50,904
350	3600	575	N449TS	4015	B3503FLG3OMHDL	307	95.8	4	MXT40G	\$50,904
350	3600	575	5010USS	4175	B3503FLG8OMHD	304	95.8	4	MXT40G	\$53,233
350	1800	460	N449T	4050	B3504FLF3BSHDL	380	96.2	8	MXT40G	\$39,515
350	1800	460	5010UZ	4321	B3504FLF4BMHD	388	96.2	2	MXT40G	\$44,538
350	1800	460	N449T	4050	B3504FLF4BSHDL	380	96.2	2	MXT40G	\$39,515
350	1800	460	5010US	4321	B3504FLG3BMHD	388	96.2		MXT40G	\$41,489
350	1800	575	N449T	4050	B3504FLF3OSHD	380	96.2	8	MXT40G	\$39,515
350	1800	575	5010UZ	4321	B3504FLF4OMHD	310	96.2	2	MXT40G	\$44,538
350	1800	575	N449T	4050	B3504FLF4OMHDL	304	96.2	2	MXT40G	\$39,515
350	1800	575	5010US	4321	B3504FLG3OMHD	310	96.2		MXT40G	\$41,489
350	1200	460	5010UZ	4935	B3506FLF4BMHD	416	95.0	2	MXT40G	\$58,815
350	1200	460	N449T	4000	B3506FLF4BMHDL	414	96.2	2	MXT40G	\$53,528
350	1200	460	5010US	4935	B3506FLG3BMHD	416	95.0		MXT40G	\$56,030
350	1200	575	5010UZ	4935	B3506FLF4OMHD	333	95.0	2	MXT40G	\$58,815
350	1200	575	N449T	4000	B3506FLF4OMHDL	328	96.2	2	MXT40G	\$53,528
350	1200	575	5010US	4935	B3506FLG3OMHD	333	95.0		MXT40G	\$56,030
400	3600	460	5010USS	4612	B4001FLG8BMHD	438	95.8	5	MXT40G	\$62,409
400	3600	460	5010USS	4612	B4003FLG8BMHD	438	95.8	4	MXT40G	\$62,409
400	3600	575	5010USS	4612	B4001FLG8OMHD	350	95.8	5	MXT40G	\$62,409
400	3600	575	5010USS	4612	B4003FLG8OMHD	350	95.8	4	MXT40G	\$62,409

Totally Enclosed Fan Cooled

EQP Global 840

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	1800	460	5010UZ	4217	B4004FLF4BMHD	450	96.2	2	MXT40G	\$59,899
400	1800	460	5010US	4217	B4004FLG3BMHD	450	96.2		MXT40G	\$57,115
400	1800	575	5010UZ	4217	B4004FLF4OMHD	365	96.2	2	MXT40G	\$59,899
400	1800	575	5010US	4217	B4004FLG3OMHD	365	96.2		MXT40G	\$57,115
400	1200	460	5010UZ	5131	F4006FLF4BMHD	481	95.0	2	MXT40G	\$66,236
400	1200	460	5010US	5131	F4006FLG3BMHD	481	95.0		MXT40G	\$63,452
400	1200	575	5010UZ	5131	F4006FLF4OMHD	385	95.0	2	MXT40G	\$66,236
400	1200	575	5010US	5131	F4006FLG3OMHD	385	95.0		MXT40G	\$63,452
450	3600	460	5010USS	4837	B4501FLG8BMHD	493	95.8	5	MXT40G	\$69,708
450	3600	460	5010USS	4837	B4503FLG8BMHD	493	95.8	4	MXT40G	\$69,708
450	3600	575	5010USS	4837	B4501FLG8OMHD	394	95.8	5	MXT40G	\$69,708
450	3600	575	5010USS	4837	B4503FLG8OMHD	394	95.8	4	MXT40G	\$69,708
450	1800	460	5010UZ	4817	B4504FLF4BMHD	514	95.4	2	MXT40G	\$60,767
450	1800	460	5010US	4817	B4504FLG3BMHD	514	95.4		MXT40G	\$57,983
450	1800	575	5010UZ	4817	B4504FLF4OMHD	411	95.4	2	MXT40G	\$60,767
450	1800	575	5010US	4817	B4504FLG3OMHD	411	95.4		MXT40G	\$57,983
450	1200	460	5810UZ	6240	F4506FLF4BMHD	533	95.4	2	MXT40G	\$71,325
450	1200	460	5810US	6240	F4506FLG3BMHD	533	95.4		MXT40G	\$68,124
450	1200	575	5810UZ	6240	F4506FLF4OMHD	426	95.4	2	MXT40G	\$71,325
450	1200	575	5810US	6240	F4506FLG3OMHD	426	95.4		MXT40G	\$68,124
500	3600	460	5010USS	4837	B5001FKG8BMHD	547	95.8	3, 5	MXT40G	\$76,995
500	3600	460	5010USS	4837	B5003FKG8BMHD	547	95.8	3, 4	MXT40G	\$76,995
500	3600	575	5010USS	4837	B5001FKG8OMHD	438	95.8	3, 5	MXT40G	\$76,995
500	3600	575	5010USS	4837	B5003FKG8OMHD	438	95.8	3, 4	MXT40G	\$76,995
500	1800	460	5011US	5037	5004XSSB41E	569	96.2	11	MXT40G	\$73,568
500	1800	460	5011UZ	5037	5004XSSB41G-AR	569	96.2	2, 11	MXT40G	\$76,770
500	1800	575	5011US	5037	5004XSSC41E	452	96.2	11	MXT40G	\$73,568
500	1800	575	5011UZ	5037	5004XSSC41G-AR	452	96.2	2, 11	MXT40G	\$76,770
500	1200	460	5810UZ	6340	F5006FLF4BMHD	591	95.4	2	MXT40G	\$78,440
500	1200	460	5810US	6340	F5006FLG3BMHD	591	95.4		MXT40G	\$75,239
500	1200	575	5810UZ	6340	F5006FLF4OMHD	473	95.4	2	MXT40G	\$78,440
500	1200	575	5810US	6340	F5006FLG3OMHD	473	95.4		MXT40G	\$75,239

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled
EQP Global 840 C-Face
 > NEMA® Premium Efficiency



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global

840 C-Face motor series is Toshiba's next-generation motor product line. The EQP Global SD C-Face 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.

Available in C-Face Footed and C-Face Footless designs, the EQP Global 840 C-Face motor specifically addresses the needs of the petrochemical industry, where premium performance and reliability are imperative. Building on over 20 years of success with our EQP III motor series, this new motor line features design enhancements on the rotor, frame, brackets, fan, and bearings.

Product Scope:

Horsepower:	¾ to 75 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Volt (60 Hz):	460 or 575 V
(50 Hz):	380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143TC through 365TC
Construction:	Cast Iron
Vibration:	Typically 0.06 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

* Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQP III Series base price for these frame sizes).



3 THREE YEAR WARRANTY

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
C-FACE FOOTED										
0.75	1200	460	143TC	52	3/46XSSB42A-P	1.4	80.0	1, 9, 16	MTP840	\$719
0.75	1200	460	143TC	52	3/46XSSB47A-P	1.4	80.0	1, 9	MTP840	\$719
0.75	1200	575	143TC	52	3/46XSSC42A-P	1.1	81.9	1, 9, 16	MTP840	\$719
0.75	1200	575	143TC	52	3/46XSSC47A-P	1.1	81.9	1, 9	MTP840	\$719
1	1800	460	143TC	51	0014XSSB42A-P	1.7	85.5	1, 9, 16	MTP840	\$661
1	1800	460	143TC	51	0014XSSB47A-P	1.7	85.5	1, 9	MTP840	\$661
1	1800	575	143TC	51	0014XSSC42A-P	1.3	85.5	1, 9, 16	MTP840	\$661
1	1800	575	143TC	51	0014XSSC47A-P	1.3	85.5	1, 9	MTP840	\$661
1	1200	460	145TC	56	0016XSSB42A-P	1.8	82.5	1, 9, 16	MTP840	\$799
1	1200	460	145TC	56	0016XSSB47A-P	1.8	82.5	1, 9	MTP840	\$799
1	1200	575	145TC	56	0016XSSC42A-P	1.5	82.5	1, 9, 16	MTP840	\$799
1	1200	575	145TC	56	0016XSSC47A-P	1.5	82.5	1, 9	MTP840	\$799
1.5	3600	460	143TC	50	Y152XSSB42A-P	2	84.0	1, 9, 16	MTP840	\$725
1.5	3600	460	143TC	50	Y152XSSB47A-P	2	84.0	1, 9	MTP840	\$725
1.5	3600	575	143TC	50	Y152XSSC42A-P	1.6	84.0	1, 9, 16	MTP840	\$725
1.5	3600	575	143TC	50	Y152XSSC47A-P	1.6	84.0	1, 9	MTP840	\$725
1.5	1800	460	145TC	53	Y154XSSB42A-P	2.4	86.5	1, 9, 16	MTP840	\$724

Totally Enclosed Fan Cooled

EQP Global 840 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	460	145TC	53	Y154XSSB47A-P	2.4	86.5	1, 9	MTP840	\$724
1.5	1800	575	145TC	53	Y154XSSC42A-P	1.9	86.5	1, 9, 16	MTP840	\$724
1.5	1800	575	145TC	53	Y154XSSC47A-P	1.9	86.5	1, 9	MTP840	\$724
1.5	1200	460	182TC	79	Y156XSSB42A-P	2.5	87.5	1, 9, 16	MTP840	\$866
1.5	1200	460	182TC	79	Y156XSSB47A-P	2.5	87.5	1, 9	MTP840	\$866
1.5	1200	575	182TC	79	Y156XSSC42A-P	2	87.5	1, 9, 16	MTP840	\$866
1.5	1200	575	182TC	79	Y156XSSC47A-P	2	87.5	1, 9	MTP840	\$866
2	3600	460	145TC	53	0022XSSB42A-P	2.6	85.5	1, 9, 16	MTP840	\$804
2	3600	460	145TC	53	0022XSSB47A-P	2.6	85.5	1, 9	MTP840	\$804
2	3600	575	145TC	53	0022XSSC42A-P	2.1	85.5	1, 9, 16	MTP840	\$804
2	3600	575	145TC	53	0022XSSC47A-P	2.1	85.5	1, 9	MTP840	\$804
2	1800	460	145TC	56	0024XSSB42A-P	3	86.5	1, 9, 16	MTP840	\$784
2	1800	460	145TC	56	0024XSSB47A-P	3	86.5	1, 9	MTP840	\$784
2	1800	575	145TC	56	0024XSSC42A-P	2.4	86.5	1, 9, 16	MTP840	\$784
2	1800	575	145TC	56	0024XSSC47A-P	2.4	86.5	1, 9	MTP840	\$784
2	1200	460	184TC	93	0026XSSB42A-P	3.4	88.5	1, 9, 16	MTP840	\$951
2	1200	460	184TC	93	0026XSSB47A-P	3.4	88.5	1, 9	MTP840	\$951
2	1200	575	184TC	93	0026XSSC42A-P	2.7	88.5	1, 9, 16	MTP840	\$951
2	1200	575	184TC	93	0026XSSC47A-P	2.7	88.5	1, 9	MTP840	\$951
3	3600	460	182TC	77	0032XSSB42A-P	3.7	86.5	1, 9, 16	MTP840	\$888
3	3600	460	182TC	77	0032XSSB47A-P	3.7	86.5	1, 9	MTP840	\$888
3	3600	575	182TC	77	0032XSSC42A-P	3	86.5	1, 9, 16	MTP840	\$888
3	3600	575	182TC	77	0032XSSC47A-P	3	86.5	1, 9	MTP840	\$888
3	1800	460	182TC	86	0034XSSB42A-P	4	89.5	1, 9, 16	MTP840	\$842
3	1800	460	182TC	86	0034XSSB47A-P	4	89.5	1, 9	MTP840	\$842
3	1800	575	182TC	86	0034XSSC42A-P	3.2	89.5	1, 9, 16	MTP840	\$842
3	1800	575	182TC	86	0034XSSC47A-P	3.2	89.5	1, 9	MTP840	\$842
3	1200	460	213TC	147	0036XSSB42A-P	4.4	89.5	1, 9, 16	MTP840	\$1,177
3	1200	460	213TC	147	0036XSSB47A-P	4.4	89.5	1, 9	MTP840	\$1,177
3	1200	575	213TC	147	0036XSSC42A-P	3.5	89.5	1, 9, 16	MTP840	\$1,177
3	1200	575	213TC	147	0036XSSC47A-P	3.5	89.5	1, 9	MTP840	\$1,177
5	3600	460	184TC	91	0052XSSB42A-P	5.8	88.5	1, 9, 16	MTP840	\$1,068
5	3600	460	184TC	91	0052XSSB47A-P	5.8	88.5	1, 9	MTP840	\$1,068
5	3600	575	184TC	91	0052XSSC42A-P	4.6	88.5	1, 9, 16	MTP840	\$1,068
5	3600	575	184TC	91	0052XSSC47A-P	4.6	88.5	1, 9	MTP840	\$1,068
5	1800	460	184TC	97	0054XSSB42A-P	6.5	89.5	1, 9, 16	MTP840	\$961
5	1800	460	184TC	97	0054XSSB47A-P	6.5	89.5	1, 9	MTP840	\$961
5	1800	575	184TC	97	0054XSSC42A-P	5.2	89.5	1, 9, 16	MTP840	\$961
5	1800	575	184TC	97	0054XSSC47A-P	5.2	89.5	1, 9	MTP840	\$961
5	1200	460	215TC	165	0056XSSB42A-P	6.9	89.5	1, 9, 16	MTP840	\$1,586
5	1200	460	215TC	165	0056XSSB47A-P	6.9	89.5	1, 9	MTP840	\$1,586
5	1200	575	215TC	165	0056XSSC42A-P	5.5	89.5	1, 9, 16	MTP840	\$1,586
5	1200	575	215TC	165	0056XSSC47A-P	5.5	89.5	1, 9	MTP840	\$1,586
7.5	3600	460	213TC	155	Y752XSSB42A-P	9	89.5	1, 9, 16	MTP840	\$1,387
7.5	3600	460	213TC	155	Y752XSSB47A-P	9	89.5	1, 9	MTP840	\$1,387
7.5	3600	575	213TC	155	Y752XSSC42A-P	7.2	89.5	1, 9, 16	MTP840	\$1,387
7.5	3600	575	213TC	155	Y752XSSC47A-P	7.2	89.5	1, 9	MTP840	\$1,387

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EQP Global 840 C-Face

> NEMA® Premium Efficiency



EQPGlobal
840

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	1800	460	213TC	171	Y754XSSB42A-P	9.8	91.7	1, 9, 16	MTP840	\$1,381
7.5	1800	460	213TC	171	Y754XSSB47A-P	9.8	91.7	1, 9	MTP840	\$1,381
7.5	1800	575	213TC	171	Y754XSSC42A-P	7.8	91.7	1, 9, 16	MTP840	\$1,381
7.5	1800	575	213TC	171	Y754XSSC47A-P	7.8	91.7	1, 9	MTP840	\$1,381
7.5	1200	460	254TC	252	Y756XSSB42A-P	10.2	91.0	1, 9, 16	MTP840	\$2,281
7.5	1200	460	254TC	252	Y756XSSB47A-P	10.2	91.0	1, 9	MTP840	\$2,281
7.5	1200	575	254TC	252	Y756XSSC42A-P	8.2	91.0	1, 9, 16	MTP840	\$2,281
7.5	1200	575	254TC	252	Y756XSSC47A-P	8.2	91.0	1, 9	MTP840	\$2,281
10	3600	460	215TC	172	0102XSSB42A-P	11.8	90.2	1, 9, 16	MTP840	\$1,598
10	3600	460	215TC	172	0102XSSB47A-P	11.8	90.2	1, 9	MTP840	\$1,598
10	3600	575	215TC	172	0102XSSC42A-P	9.4	90.2	1, 9, 16	MTP840	\$1,598
10	3600	575	215TC	172	0102XSSC47A-P	9.4	90.2	1, 9	MTP840	\$1,598
10	1800	460	215TC	186	0104XSSB42A-P	13	91.7	1, 9, 16	MTP840	\$1,593
10	1800	460	215TC	186	0104XSSB47A-P	13	91.7	1, 9	MTP840	\$1,593
10	1800	575	215TC	186	0104XSSC42A-P	10.4	91.7	1, 9, 16	MTP840	\$1,593
10	1800	575	215TC	186	0104XSSC47A-P	10.4	91.7	1, 9	MTP840	\$1,593
10	1200	460	256TC	274	0106XSSB42A-P	13.4	91.0	1, 9, 16	MTP840	\$2,741
10	1200	460	256TC	274	0106XSSB47A-P	13.4	91.0	1, 9	MTP840	\$2,741
10	1200	575	256TC	274	0106XSSC42A-P	10.8	91.0	1, 9, 16	MTP840	\$2,741
10	1200	575	256TC	274	0106XSSC47A-P	10.8	91.0	1, 9	MTP840	\$2,741
15	3600	460	254TC	274	0152XSSB42A-P	18	91.0	1, 9, 16	MTP840	\$2,213
15	3600	460	254TC	274	0152XSSB47A-P	18	91.0	1, 9	MTP840	\$2,213
15	3600	575	254TC	274	0152XSSC42A-P	14.4	91.0	1, 9, 16	MTP840	\$2,213
15	3600	575	254TC	274	0152XSSC47A-P	14.4	91.0	1, 9	MTP840	\$2,213
15	1800	460	254TC	289	0154XSSB42A-P	19	92.4	1, 9, 16	MTP840	\$2,133
15	1800	460	254TC	289	0154XSSB47A-P	19	92.4	1, 9	MTP840	\$2,133
15	1800	575	254TC	289	0154XSSC42A-P	15.2	92.4	1, 9, 16	MTP840	\$2,133
15	1800	575	254TC	289	0154XSSC47A-P	15.2	92.4	1, 9	MTP840	\$2,133
15	1200	460	284TC	364	0156XSSB42A-P	19.6	91.7	1, 9, 16	MTP840	\$3,731
15	1200	575	284TC	364	0156XSSC42A-P	15.8	91.7	1, 9	MTP840	\$3,731
20	3600	460	256TC	292	0202XSSB42A-P	24	91.0	1, 9, 16	MTP840	\$2,620
20	3600	460	256TC	292	0202XSSB47A-P	24	91.0	1, 9	MTP840	\$2,620
20	3600	575	256TC	292	0202XSSC42A-P	19.2	91.0	1, 9, 16	MTP840	\$2,620
20	3600	575	256TC	292	0202XSSC47A-P	19.2	91.0	1, 9	MTP840	\$2,620
20	1800	460	256TC	340	0204XSSB42A-P	25	93.0	1, 9, 16	MTP840	\$2,592
20	1800	460	256TC	340	0204XSSB47A-P	25	93.0	1, 9	MTP840	\$2,592
20	1800	575	256TC	340	0204XSSC42A-P	20	93.0	1, 9, 16	MTP840	\$2,592
20	1800	575	256TC	340	0204XSSC47A-P	20	93.0	1, 9	MTP840	\$2,592
20	1200	460	286TC	411	0206XSSB42A-P	25.4	91.7	1, 9	MTP840	\$4,314
20	1200	575	286TC	411	0206XSSC42A-P	20.4	91.7	1, 9	MTP840	\$4,314
25	3600	460	284TSC	406	0252XSSB42B-P	29	91.7	1, 9	MTP840	\$3,342
25	3600	575	284TSC	406	0252XSSC42B-P	23.2	91.7	1, 9	MTP840	\$3,342
25	1800	460	284TC	424	0254XSSB42A-P	30.5	93.6	1, 9	MTP840	\$3,256
25	1800	575	284TC	424	0254XSSC42A-P	24.4	93.6	1, 9	MTP840	\$3,256
25	1200	460	324TC	545	0256XSSB42A-P	31.2	93.0	1, 9	MTP840	\$5,192
25	1200	575	324TC	545	0256XSSC42A-P	24.6	93.0	1, 9	MTP840	\$5,192
30	3600	460	286TSC	439	0302XSSB42B-P	35	91.7	1, 9	MTP840	\$3,977

Totally Enclosed Fan Cooled

EQP Global 840 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
30	3600	575	286TSC	439	0302XSSC42B-P	28	91.7	1, 9	MTP840	\$3,977
30	1800	460	286TC	448	0304XSSB42A-P	36.4	93.6	1, 9	MTP840	\$3,730
30	1800	575	286TC	448	0304XSSC42A-P	29.2	93.6	1, 9	MTP840	\$3,730
30	1200	460	326TC	571	0306XSSB42A-P	37.2	93.0	1, 9	MTP840	\$5,904
30	1200	575	326TC	571	0306XSSC42A-P	30	93.0	1, 9	MTP840	\$5,904
40	3600	460	324TSC	589	0402XSSB42B-P	47	92.4	1, 9	MTP840	\$4,951
40	3600	575	324TSC	589	0402XSSC42B-P	37.6	92.4	1, 9	MTP840	\$4,951
40	1800	460	324TC	593	0404XSSB42A-P	48	94.1	1, 9	MTP840	\$4,776
40	1800	575	324TC	593	0404XSSC42A-P	38.4	94.1	1, 9	MTP840	\$4,776
40	1200	460	364TC	708	0406XSSB42A-P	48	94.1	1, 9	MTP840	\$8,155
40	1200	575	364TC	708	0406XSSC42A-P	38.4	94.1	1, 9	MTP840	\$8,155
50	3600	460	326TSC	624	0502XSSB42B-P	58	93.0	1, 9	MTP840	\$6,281
50	3600	575	326TSC	624	0502XSSC42B-P	46.4	93.0	1, 9	MTP840	\$6,281
50	1800	460	326TC	651	0504XSSB42A-P	60	94.5	1, 9	MTP840	\$5,420
50	1800	575	326TC	651	0504XSSC42A-P	48	94.5	1, 9	MTP840	\$5,420
50	1200	460	365TC	757	0506XSSB42A-P	60	94.1	1, 9	MTP840	\$9,241
50	1200	575	365TC	757	0506XSSC42A-P	48	94.1	1, 9	MTP840	\$9,241
60	3600	460	364TSC	763	0602XSSB42B-P	69	93.6	1, 9	MTP840	\$8,435
60	3600	575	364TSC	763	0602XSSC42B-P	55	93.6	1, 9	MTP840	\$8,435
60	1800	460	364TC	796	0604XSSB42A-P	69	95.0	1, 9	MTP840	\$8,370
60	1800	575	364TC	796	0604XSSC42A-P	55	95.0	1, 9	MTP840	\$8,370
75	3600	460	365TSC	814	0752XSSB42B-P	86	93.6	1, 9	MTP840	\$10,382
75	3600	575	365TSC	814	0752XSSC42B-P	68.8	93.6	1, 9	MTP840	\$10,382
75	1800	460	365TC	893	0754XSSB42A-P	86	95.4	1, 9	MTP840	\$9,880
75	1800	575	365TC	893	0754XSSC42A-P	68.8	95.4	1, 9	MTP840	\$9,880
C-FACE FOOTLESS										
0.75	1200	460	143TC	52	3/46XSSB44A-P	1.4	80.0	1, 9	MTP840	\$791
0.75	1200	575	143TC	52	3/46XSSC44A-P	1.1	81.9	1, 9	MTP840	\$791
1	1800	460	143TC	51	0014XSSB44A-P	1.7	85.5	1, 9	MTP840	\$727
1	1800	575	143TC	51	0014XSSC44A-P	1.3	85.5	1, 9	MTP840	\$727
1	1200	460	145TC	56	0016XSSB44A-P	1.8	82.5	1, 9	MTP840	\$879
1	1200	575	145TC	56	0016XSSC44A-P	1.5	82.5	1, 9	MTP840	\$879
1.5	3600	460	143TC	50	Y152XSSB44A-P	2	84.0	1, 9	MTP840	\$798
1.5	3600	575	143TC	50	Y152XSSC44A-P	1.6	84.0	1, 9	MTP840	\$798
1.5	1800	460	145TC	53	Y154XSSB44A-P	2.4	86.5	1, 9	MTP840	\$796
1.5	1800	575	145TC	53	Y154XSSC44A-P	1.9	86.5	1, 9	MTP840	\$796
1.5	1200	460	182TC	79	Y156XSSB44A-P	2.5	87.5	1, 9	MTP840	\$953
1.5	1200	575	182TC	79	Y156XSSC44A-P	2	87.5	1, 9	MTP840	\$953
2	3600	460	145TC	53	0022XSSB44A-P	2.6	85.5	1, 9	MTP840	\$884
2	3600	575	145TC	53	0022XSSC44A-P	2.1	85.5	1, 9	MTP840	\$884
2	1800	460	145TC	56	0024XSSB44A-P	3	86.5	1, 9	MTP840	\$862
2	1800	575	145TC	56	0024XSSC44A-P	2.4	86.5	1, 9	MTP840	\$862
2	1200	460	184TC	93	0026XSSB44A-P	3.4	88.5	1, 9	MTP840	\$1,046
2	1200	575	184TC	93	0026XSSC44A-P	2.7	88.5	1, 9	MTP840	\$1,046
3	3600	460	182TC	77	0032XSSB44A-P	3.7	86.5	1, 9	MTP840	\$977
3	3600	575	182TC	77	0032XSSC44A-P	3	86.5	1, 9	MTP840	\$977
3	1800	460	182TC	86	0034XSSB44A-P	4	89.5	1, 9	MTP840	\$926

Totally Enclosed Fan Cooled

EQP Global 840 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	1800	575	182TC	86	0034XSSC44A-P	3.2	89.5	1, 9	MTP840	\$926
3	1200	460	213TC	142	0036XSSB44A-P	4.4	89.5	1, 9	MTP840	\$1,295
3	1200	575	213TC	142	0036XSSC44A-P	3.5	89.5	1, 9	MTP840	\$1,295
5	3600	460	184TC	91	0052XSSB44A-P	5.8	88.5	1, 9	MTP840	\$1,175
5	3600	575	184TC	91	0052XSSC44A-P	4.6	88.5	1, 9	MTP840	\$1,175
5	1800	460	184TC	97	0054XSSB44A-P	6.5	89.5	1, 9	MTP840	\$1,057
5	1800	575	184TC	97	0054XSSC44A-P	5.2	89.5	1, 9	MTP840	\$1,057
5	1200	460	215TC	165	0056XSSB44A-P	6.9	89.5	1, 9	MTP840	\$1,745
5	1200	575	215TC	165	0056XSSC44A-P	5.5	89.5	1, 9	MTP840	\$1,745
7.5	3600	460	213TC	155	Y752XSSB44A-P	9	89.5	1, 9	MTP840	\$1,526
7.5	3600	575	213TC	155	Y752XSSC44A-P	7.2	89.5	1, 9	MTP840	\$1,526
7.5	1800	460	213TC	171	Y754XSSB44A-P	9.8	91.7	1, 9	MTP840	\$1,519
7.5	1800	575	213TC	171	Y754XSSC44A-P	7.8	91.7	1, 9	MTP840	\$1,519
7.5	1200	460	254TC	252	Y756XSSB44A-P	10.2	91.0	1, 9	MTP840	\$2,509
7.5	1200	575	254TC	252	Y756XSSC44A-P	8.2	91.0	1, 9	MTP840	\$2,509
10	3600	460	215TC	172	0102XSSB44A-P	11.8	90.2	1, 9	MTP840	\$1,758
10	3600	575	215TC	172	0102XSSC44A-P	9.4	90.2	1, 9	MTP840	\$1,758
10	1800	460	215TC	186	0104XSSB44A-P	13	91.7	1, 9	MTP840	\$1,752
10	1800	575	215TC	186	0104XSSC44A-P	10.4	91.7	1, 9	MTP840	\$1,752
10	1200	460	256TC	274	0106XSSB44A-P	13.4	91.0	1, 9	MTP840	\$3,015
10	1200	575	256TC	274	0106XSSC44A-P	10.8	91.0	1, 9	MTP840	\$3,015
15	3600	460	254TC	274	0152XSSB44A-P	18	91.0	1, 9	MTP840	\$2,434
15	3600	575	254TC	274	0152XSSC44A-P	14.4	91.0	1, 9	MTP840	\$2,434
15	1800	460	254TC	289	0154XSSB44A-P	19	92.4	1, 9	MTP840	\$2,346
15	1800	575	254TC	289	0154XSSC44A-P	15.2	92.4	1, 9	MTP840	\$2,346
15	1200	460	284TC	364	0156XSSB44A-P	19.6	91.7	1, 9	MTP840	\$4,104
15	1200	575	284TC	364	0156XSSC44A-P	15.8	91.7	1, 9	MTP840	\$4,104
20	3600	460	256TC	292	0202XSSB44A-P	24	91.0	1, 9	MTP840	\$2,882
20	3600	575	256TC	292	0202XSSC44A-P	19.2	91.0	1, 9	MTP840	\$2,882
20	1800	460	256TC	340	0204XSSB44A-P	25	93.0	1, 9	MTP840	\$2,851
20	1800	575	256TC	340	0204XSSC44A-P	20	93.0	1, 9	MTP840	\$2,851
20	1200	460	286TC	411	0206XSSB44A-P	25.4	91.7	1, 9	MTP840	\$4,745
20	1200	575	286TC	411	0206XSSC44A-P	20.4	91.7	1, 9	MTP840	\$4,745
25	3600	460	284TSC	406	0252XSSB44B-P	29	91.7	1, 9	MTP840	\$3,676
25	3600	575	284TSC	406	0252XSSC44B-P	23.2	91.7	1, 9	MTP840	\$3,676
25	1800	460	284TC	424	0254XSSB44A-P	30.5	93.6	1, 9	MTP840	\$3,419
25	1800	575	284TC	424	0254XSSC44A-P	24.4	93.6	1, 9	MTP840	\$3,419
25	1200	460	324TC	545	0256XSSB44A-P	31.2	93.0	1, 9	MTP840	\$5,711
25	1200	575	324TC	545	0256XSSC44A-P	24.6	93.0	1, 9	MTP840	\$5,711
30	3600	460	286TSC	439	0302XSSB44B-P	35	91.7	1, 9	MTP840	\$4,375
30	3600	575	286TSC	439	0302XSSC44B-P	28	91.7	1, 9	MTP840	\$4,375
30	1800	460	286TC	448	0304XSSB44A-P	36.4	93.6	1, 9	MTP840	\$3,917
30	1800	575	286TC	448	0304XSSC44A-P	29.2	93.6	1, 9	MTP840	\$3,917
30	1200	460	326TC	571	0306XSSB44A-P	37.2	93.0	1, 9	MTP840	\$6,494
30	1200	575	326TC	571	0306XSSC44A-P	30	93.0	1, 9	MTP840	\$6,494
40	3600	460	324TSC	589	0402XSSB44B-P	47	92.4	1, 9	MTP840	\$5,446
40	3600	575	324TSC	589	0402XSSC44B-P	37.6	92.4	1, 9	MTP840	\$5,446

Totally Enclosed Fan Cooled

EQP Global 840 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
40	1800	460	324TC	593	0404XSSB44A-P	48	94.1	1, 9	MTP840	\$5,015
40	1800	575	324TC	593	0404XSSC44A-P	38.4	94.1	1, 9	MTP840	\$5,015
40	1200	460	364TC	708	0406XSSB44A-P	48	94.1	1, 9	MTP840	\$8,971
40	1200	575	364TC	708	0406XSSC44A-P	38.4	94.1	1, 9	MTP840	\$8,971
50	3600	460	326TSC	624	0502XSSB44B-P	58	93.0	1, 9	MTP840	\$6,909
50	3600	575	326TSC	624	0502XSSC44B-P	46.4	93.0	1, 9	MTP840	\$6,909
50	1800	460	326TC	651	0504XSSB44A-P	60	94.5	1, 9	MTP840	\$5,744
50	1800	575	326TC	651	0504XSSC44A-P	48	94.5	1, 9	MTP840	\$5,744
50	1200	460	365TC	757	0506XSSB44A-P	60	94.1	1, 9	MTP840	\$10,165
50	1200	575	365TC	757	0506XSSC44A-P	48	94.1	1, 9	MTP840	\$10,165
60	3600	460	364TSC	763	0602XSSB44B-P	69	93.6	1, 9	MTP840	\$9,279
60	3600	575	364TSC	763	0602XSSC44B-P	55	93.6	1, 9	MTP840	\$9,279
60	1800	460	364TC	796	0604XSSB44A-P	69	95.0	1, 9	MTP840	\$8,789
60	1800	575	364TC	796	0604XSSC44A-P	55	95.0	1, 9	MTP840	\$8,789
75	3600	460	365TSC	814	0752XSSB44B-P	86	93.6	1, 9	MTP840	\$11,420
75	3600	575	365TSC	814	0752XSSC44B-P	68.8	93.6	1, 9	MTP840	\$11,420
75	1800	460	365TC	893	0754XSSB44A-P	86	95.4	1, 9	MTP840	\$10,374
75	1800	575	365TC	893	0754XSSC44A-P	68.8	95.4	1, 9	MTP840	\$10,374

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled

EQP Global 841

> NEMA® Premium Efficiency



5 FIVE YEAR WARRANTY



Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global 841 motor series is Toshiba's next-generation motor product line. The EQP Global 841 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.

Product Scope:

Horsepower:	¾ to 300 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Volt (60 Hz):	460 or 575 V
(50 Hz):	380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143T through N449T
Construction:	All Cast Iron (Frame, End Brackets, Fan Cover, & Conduit Box)
Vibration:	Typically 0.04 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty Voltage Withstand Capability of 2000 V in 0.1 µs)

* Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQPIII Series base price for these frame sizes).

Standard Features:

- IP56 Protection
- 20:1 Constant Torque & 60:1 Variable Torque (1 to 200 HP, 4- & 6-Pole)
- High-Starting Torque for Most Demanding Applications
- Oversized 300 Series Bearings on All Frames (DE & ODE)
- Open Regreasable on All Frames
- Labyrinth Seal on All Frames, Both Ends
- Protective Coating on All Internal Machined Surfaces
- 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

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	460	143T	52	3/46XDSB41A-P	1.4	80.0	1, 9	MTP841	\$829
0.75	1200	575	143T	52	3/46XDSC41A-P	1.1	81.9	1, 9	MTP841	\$829
1	1800	460	145T	56	0014XDSB41A-P	1.7	85.5	1, 9	MTP841	\$714
1	1800	575	145T	56	0014XDSC41A-P	1.3	85.5	1, 9	MTP841	\$714
1	1200	460	145T	56	0016XDSB41A-P	1.8	82.5	1, 9	MTP841	\$885
1	1200	575	145T	56	0016XDSC41A-P	1.5	82.5	1, 9	MTP841	\$885

Totally Enclosed Fan Cooled

EQP Global 841

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	3600	460	143T	50	Y152XDSB41A-P	2	84.0	1, 9	MTP841	\$764
1.5	3600	575	143T	50	Y152XDSC41A-P	1.6	84.0	1, 9	MTP841	\$764
1.5	1800	460	145T	53	Y154XDSB41A-P	2.4	86.5	1, 9	MTP841	\$793
1.5	1800	575	145T	53	Y154XDSC41A-P	1.9	86.5	1, 9	MTP841	\$793
1.5	1200	460	182T	79	Y156XDSB41A-P	2.5	87.5	1, 9	MTP841	\$1,092
1.5	1200	575	182T	79	Y156XDSC41A-P	2	87.5	1, 9	MTP841	\$1,092
2	3600	460	145T	53	0022XDSB41A-P	2.6	85.5	1, 9	MTP841	\$915
2	3600	575	145T	53	0022XDSC41A-P	2.1	85.5	1, 9	MTP841	\$915
2	1800	460	145T	56	0024XDSB41A-P	3	86.5	1, 9	MTP841	\$871
2	1800	575	145T	56	0024XDSC41A-P	2.4	86.5	1, 9	MTP841	\$871
2	1200	460	184T	93	0026XDSB41A-P	3.4	88.5	1, 9	MTP841	\$1,117
2	1200	575	184T	93	0026XDSC41A-P	2.7	88.5	1, 9	MTP841	\$1,117
3	3600	460	182T	77	0032XDSB41A-P	3.7	86.5	1, 9	MTP841	\$1,123
3	3600	575	182T	77	0032XDSC41A-P	3	86.5	1, 9	MTP841	\$1,123
3	1800	460	182T	86	0034XDSB41A-P	4	89.5	1, 9	MTP841	\$1,054
3	1800	575	182T	86	0034XDSC41A-P	3.2	89.5	1, 9	MTP841	\$1,054
3	1200	460	213T	147	0036XDSB41A-P	4.4	89.5	1, 9	MTP841	\$1,364
3	1200	575	213T	147	0036XDSC41A-P	3.5	89.5	1, 9	MTP841	\$1,364
5	3600	460	184T	91	0052XDSB41A-P	5.8	88.5	1, 9	MTP841	\$1,273
5	3600	575	184T	91	0052XDSC41A-P	4.6	88.5	1, 9	MTP841	\$1,273
5	1800	460	184T	97	0054XDSB41A-P	6.5	89.5	1, 9	MTP841	\$1,129
5	1800	575	184T	97	0054XDSC41A-P	5.2	89.5	1, 9	MTP841	\$1,129
5	1200	460	215T	165	0056XDSB41A-P	6.9	89.5	1, 9	MTP841	\$1,964
5	1200	575	215T	165	0056XDSC41A-P	5.5	89.5	1, 9	MTP841	\$1,964
7.5	3600	460	213T	155	Y752XDSB41A-P	9	89.5	1, 9	MTP841	\$1,543
7.5	3600	575	213T	155	Y752XDSC41A-P	7.2	89.5	1, 9	MTP841	\$1,543
7.5	1800	460	213T	171	Y754XDSB41A-P	9.8	91.7	1, 9	MTP841	\$1,532
7.5	1800	575	213T	171	Y754XDSC41A-P	7.8	91.7	1, 9	MTP841	\$1,532
7.5	1200	460	254T	252	Y756XDSB41A-P	10.2	91.0	1, 9	MTP841	\$2,553
7.5	1200	575	254T	252	Y756XDSC41A-P	8.2	91.0	1, 9	MTP841	\$2,553
10	3600	460	215T	172	0102XDSB41A-P	11.8	90.2	1, 9	MTP841	\$1,801
10	3600	575	215T	172	0102XDSC41A-P	9.4	90.2	1, 9	MTP841	\$1,801
10	1800	460	215T	186	0104XDSB41A-P	13	91.7	1, 9	MTP841	\$1,845
10	1800	575	215T	186	0104XDSC41A-P	10.4	91.7	1, 9	MTP841	\$1,845
10	1200	460	256T	274	0106XDSB41A-P	13.4	91.0	1, 9	MTP841	\$3,118
10	1200	575	256T	274	0106XDSC41A-P	10.8	91.0	1, 9	MTP841	\$3,118
15	3600	460	254T	274	0152XDSB41A-P	18	91.0	1, 9	MTP841	\$2,478
15	3600	575	254T	274	0152XDSC41A-P	14.4	91.0	1, 9	MTP841	\$2,478
15	1800	460	254T	289	0154XDSB41A-P	19	92.4	1, 9	MTP841	\$2,434
15	1800	575	254T	289	0154XDSC41A-P	15.2	92.4	1, 9	MTP841	\$2,434
15	1200	460	284T	364	0156XDSB41A-P	19.6	91.7	1, 9	MTP841	\$4,139
15	1200	575	284T	364	0156XDSC41A-P	15.8	91.7	1, 9	MTP841	\$4,139
20	3600	460	256T	292	0202XDSB41A-P	24	91.0	1, 9	MTP841	\$3,065
20	3600	575	256T	292	0202XDSC41A-P	19.2	91.0	1, 9	MTP841	\$3,065
20	1800	460	256T	340	0204XDSB41A-P	25	93.0	1, 9	MTP841	\$3,029
20	1800	575	256T	340	0204XDSC41A-P	20	93.0	1, 9	MTP841	\$3,029
20	1200	460	286T	411	0206XDSB41A-P	25.4	91.7	1, 9	MTP841	\$5,043
20	1200	575	286T	411	0206XDSC41A-P	20.4	91.7	1, 9	MTP841	\$5,043

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
25	3600	460	284TS	406	0252XDSB41B-P	29	91.7	1, 9	MTP841	\$3,779
25	3600	575	284TS	406	0252XDSC41B-P	23.2	91.7	1, 9	MTP841	\$3,779
25	1800	460	284T	424	0254XDSB41A-P	30.5	93.6	1, 9	MTP841	\$3,607
25	1800	575	284T	424	0254XDSC41A-P	24.4	93.6	1, 9	MTP841	\$3,607
25	1200	460	324T	545	0256XDSB41A-P	31.2	93.0	1, 9	MTP841	\$6,112
25	1200	575	324T	545	0256XDSC41A-P	24.6	93.0	1, 9	MTP841	\$6,112
30	3600	460	286TS	439	0302XDSB41B-P	35	91.7	1, 9	MTP841	\$4,410
30	3600	575	286TS	439	0302XDSC41B-P	28	91.7	1, 9	MTP841	\$4,410
30	1800	460	286T	448	0304XDSB41A-P	36.4	93.6	1, 9	MTP841	\$4,195
30	1800	575	286T	448	0304XDSC41A-P	29.2	93.6	1, 9	MTP841	\$4,195
30	1200	460	326T	571	0306XDSB41A-P	37.2	93.0	1, 9	MTP841	\$7,039
30	1200	575	326T	571	0306XDSC41A-P	30	93.0	1, 9	MTP841	\$7,039
40	3600	460	324TS	589	0402XDSB41B-P	47	92.4	1, 9	MTP841	\$5,800
40	3600	575	324TS	589	0402XDSC41B-P	37.6	92.4	1, 9	MTP841	\$5,800
40	1800	460	324T	593	0404XDSB41A-P	48	94.1	1, 9	MTP841	\$5,575
40	1800	575	324T	593	0404XDSC41A-P	38.4	94.1	1, 9	MTP841	\$5,575
40	1200	460	364T	708	0406XDSB41A-P	48	94.1	1, 9	MTP841	\$9,542
40	1200	575	364T	708	0406XDSC41A-P	38.4	94.1	1, 9	MTP841	\$9,542
50	3600	460	326TS	624	0502XDSB41B-P	58	93.0	1, 9	MTP841	\$7,531
50	3600	575	326TS	624	0502XDSC41B-P	46.4	93.0	1, 9	MTP841	\$7,531
50	1800	460	326T	651	0504XDSB41A-P	60	94.5	1, 9	MTP841	\$6,845
50	1800	575	326T	651	0504XDSC41A-P	48	94.5	1, 9	MTP841	\$6,845
50	1200	460	365T	757	0506XDSB41A-P	60	94.1	1, 9	MTP841	\$10,956
50	1200	575	365T	757	0506XDSC41A-P	48	94.1	1, 9	MTP841	\$10,956
60	3600	460	364TS	763	0602XDSB41B-P	69	93.6	1, 9	MTP841	\$8,912
60	3600	575	364TS	763	0602XDSC41B-P	55	93.6	1, 9	MTP841	\$8,912
60	1800	460	364T	796	0604XDSB41A-P	69	95.0	1, 9	MTP841	\$8,837
60	1800	575	364T	796	0604XDSC41A-P	55	95.0	1, 9	MTP841	\$8,837
60	1200	460	404T	1300	B0606FLF3BSHJ01	74	95.0		MXT41G	\$13,722
60	1200	575	404T	1300	B0606FLF3OSHJ01	59	95.0		MXT41G	\$13,722
75	3600	460	365TS	814	0752XDSB41B-P	86	93.6	1, 9	MTP841	\$11,196
75	3600	575	365TS	814	0752XDSC41B-P	68.8	93.6	1, 9	MTP841	\$11,196
75	1800	460	365T	893	0754XDSB41A-P	86	95.4		MTP841	\$11,203
75	1800	575	365T	893	0754XDSC41A-P	68.8	95.4		MTP841	\$11,203
75	1200	460	405T	1456	B0756FLF3BSHJ01	91	95.0		MXT41G	\$17,010
75	1200	575	405T	1456	B0756FLF3OSHJ01	73	95.0		MXT41G	\$17,010
100	3600	460	405TS	1388	B1002FLG3BSHJ	114	95.0		MXT41G	\$17,821
100	3600	575	405TS	1388	B1002FLG3OSHJ	91	95.0		MXT41G	\$17,821
100	1800	460	405T	1426	B1004FLF3BSHJ01	119	95.4		MXT41G	\$16,680
100	1800	575	405T	1426	B1004FLF3OSHJ01	95	95.4		MXT41G	\$16,680
100	1200	460	444T	2005	B1006FLF4BSHJ01	123	95.4	2	MXT41G	\$22,087
100	1200	575	444T	2005	B1006FLF4OSHJ01	99	95.4	2	MXT41G	\$22,087
125	3600	460	444TS	1972	B1251FLG3BSHJ	140	95.4	5	MXT41G	\$23,063
125	3600	460	444TS	1972	B1253FLG3BSHJ	140	95.4	4	MXT41G	\$23,063
125	3600	575	444TS	1972	B1251FLG3OSHJ	112	95.4	5	MXT41G	\$23,063
125	3600	575	444TS	1972	B1253FLG3OSHJ	112	95.4	4	MXT41G	\$23,063
125	1800	460	444T	1896	B1254FLF3BSHJ	145	95.8	8	MXT41G	\$21,434

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
125	1800	575	444T	1896	B1254FLF3OSHJ	116	95.8	8	MXT41G	\$21,434
125	1800	460	444T	1895	B1254FLF4BSHJ01	145	95.8	2	MXT41G	\$21,434
125	1800	575	444T	1895	B1254FLF4OSHJ01	116	95.8	2	MXT41G	\$21,434
125	1200	460	445T	2155	B1256FLF4BSHJ01	156	95.4	2	MXT41G	\$26,862
125	1200	575	445T	2155	B1256FLF4OSHJ01	125	95.4	2	MXT41G	\$26,862
150	3600	460	445TS	2150	A1501FLG3BSHJ	169	95.8	5, 6	MXT41G	\$27,710
150	3600	460	445TS	2150	A1503FLG3BSHJ	169	95.8	4, 6	MXT41G	\$27,710
150	3600	575	445TS	2150	A1501FLG3OSHJ	135	95.8	5, 6	MXT41G	\$27,710
150	3600	575	445TS	2150	A1503FLG3OSHJ	135	95.8	4, 6	MXT41G	\$27,710
150	1800	460	445T	2164	B1504FLF3BSHJ01	177	95.8	8	MXT41G	\$24,918
150	1800	460	445T	2164	B1504FLF4BSHJ01	177	95.8	2	MXT41G	\$24,918
150	1800	575	445T	2164	B1504FLF3OSHJ	142	95.8	8	MXT41G	\$24,918
150	1800	575	445T	2164	B1504FLF4OSHJ01	142	95.8	2	MXT41G	\$24,918
150	1200	460	447T	2444	B1506FLF4BSHJ01	182	95.8	2	MXT41G	\$30,054
150	1200	575	447T	2444	B1506FLF4OSHJ01	146	95.8	2	MXT41G	\$30,054
200	3600	460	447TS	2445	B2001FLG3BSHJ	225	95.8	5	MXT41G	\$35,052
200	3600	460	447TS	2445	B2003FLG3BSHJ	225	95.8	4	MXT41G	\$35,052
200	3600	575	447TS	2445	B2001FLG3OSHJ	180	95.8	5	MXT41G	\$35,052
200	3600	575	447TS	2445	B2003FLG3OSHJ	180	95.8	4	MXT41G	\$35,052
200	1800	460	447T	2466	B2004FLF3BSHJ	233	96.2	8	MXT41G	\$30,312
200	1800	460	447T	2466	B2004FLF4BSHJ01	233	96.2	2	MXT41G	\$30,312
200	1800	575	447T	2466	B2004FLF3OSHJ	186	96.2	8	MXT41G	\$30,312
200	1800	575	447T	2466	B2004FLF4OSHJ01	186	96.2	2	MXT41G	\$30,312
200	1200	460	N449T	3920	B2006FLF4BSHJL	246	95.8	2	MXT41G	\$36,822
200	1200	575	N449T	3920	B2006FLF4OSHJL	195	95.8	2	MXT41G	\$36,822
250	3600	460	N449TS	4000	B2503FLG3BSHJL	270	95.8	4	MXT41G	\$40,168
250	3600	575	N449TS	4000	B2503FLG3OSHJL	216	95.8	4	MXT41G	\$40,168
250	1800	460	N449T	4010	B2504FLF3BSHJL	272	96.2	8	MXT41G	\$33,112
250	1800	460	N449T	4010	B2504FLF4BSHJL	272	96.2	2	MXT41G	\$33,112
250	1800	575	N449T	4010	B2504FLF4OSHJL	217	96.2	2	MXT41G	\$33,112
250	1200	460	N449T	4130	B2506FLF4BSHJL	305	95.8	2	MXT41G	\$40,972
250	1200	575	N449T	4130	B2506FLF4OSHJL	240	95.8	2	MXT41G	\$40,972
300	3600	460	N449TS	4015	B3003FLG3BSHJL	324	96.2	4	MXT41G	\$49,783
300	3600	575	N449TS	4015	B3003FLG3OSHJL	259	96.2	4	MXT41G	\$49,783
300	1800	460	N449T	4050	B3004FLF3BSHJL	326	96.2	8	MXT41G	\$38,361
300	1800	460	N449T	4050	B3004FLF4BSHJL	326	96.2	2	MXT41G	\$38,361
300	1800	575	N449T	4050	B3004FLF4OSHJL	261	96.2	2	MXT41G	\$38,361
300	1200	460	N449T	4130	B3006FLF3BSHJL	368	95.8	8	MXT41G	\$54,990
300	1200	575	N449T	4130	B3006FLF3OSHJL	292	95.8	8	MXT41G	\$54,990
300	1200	460	N449T	4130	B3006FLF4BSHJL	368.0	95.8	2	MXT41G	\$54,990
300	1200	575	N449T	4130	B3006FLF4OSHJL	292.0	95.8	2	MXT41G	\$54,990

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

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5 FIVE YEAR WARRANTY

EQP Global
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Toshiba's general purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQP Global 841 C-Face motor series is Toshiba's next-generation motor product line. The EQP Global 841 C-Face motor 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.

Available in C-Face Footed and C-Face Footless designs, the EQP Global 841 C-Face Footed motor specifically addresses the needs of the petrochemical industry, where premium performance and reliability are imperative. Building on over 20 years of success with our EQP III motor series, this new motor line features design enhancements on the rotor, frame, brackets, fan, and bearings.

Product Scope:

Horsepower:	¾ to 75 HP
Speed (60 Hz):	3600, 1800, or 1200 RPM
(50 Hz):	3000, 1500, or 1000 RPM
Volt (60 Hz):	460 or 575 V
(50 Hz):	380 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size*:	143TC through 365TC
Construction:	Cast Iron
Vibration:	Typically 0.06 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

** Production modifications not applicable to EQP Global Motors 140 through 360 Frames (use EQP III Series base price for these frame sizes.)*

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
C-FACE FOOTED										
0.75	1200	460	143TC	52	3/46XDSB42A-P	1.4	80.0	1, 9, 16	MTP841	\$938
0.75	1200	460	143TC	52	3/46XDSB47A-P	1.4	80.0	1, 9	MTP841	\$938
0.75	1200	575	143TC	52	3/46XDSC42A-P	1.1	81.9	1, 9, 16	MTP841	\$938
0.75	1200	575	143TC	52	3/46XDSC47A-P	1.1	81.9	1, 9	MTP841	\$938
1	1800	460	143TC	51	0014XDSB42A-P	1.7	85.5	1, 9, 16	MTP841	\$823
1	1800	460	143TC	51	0014XDSB47A-P	1.7	85.5	1, 9	MTP841	\$823
1	1800	575	143TC	51	0014XDSC42A-P	1.3	85.5	1, 9, 16	MTP841	\$823
1	1800	575	143TC	51	0014XDSC47A-P	1.3	85.5	1, 9	MTP841	\$823
1	1200	460	145TC	56	0016XDSB42A-P	1.8	82.5	1, 9, 16	MTP841	\$994
1	1200	460	145TC	56	0016XDSB47A-P	1.8	82.5	1, 9	MTP841	\$994
1	1200	575	145TC	56	0016XDSC42A-P	1.5	82.5	1, 9, 16	MTP841	\$994
1	1200	575	145TC	56	0016XDSC47A-P	1.5	82.5	1, 9	MTP841	\$994
1.5	3600	460	143TC	50	Y152XDSB42A-P	2	84.0	1, 9, 16	MTP841	\$873
1.5	3600	460	143TC	50	Y152XDSB47A-P	2	84.0	1, 9	MTP841	\$873
1.5	3600	575	143TC	50	Y152XDSC42A-P	1.6	84.0	1, 9, 16	MTP841	\$873
1.5	3600	575	143TC	50	Y152XDSC47A-P	1.6	84.0	1, 9	MTP841	\$873

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	460	145TC	53	Y154XDSB42A-P	2.4	86.5	1, 9, 16	MTP841	\$902
1.5	1800	460	145TC	53	Y154XDSB47A-P	2.4	86.5	1, 9	MTP841	\$902
1.5	1800	575	145TC	53	Y154XDSC42A-P	1.9	86.5	1, 9, 16	MTP841	\$902
1.5	1800	575	145TC	53	Y154XDSC47A-P	1.9	86.5	1, 9	MTP841	\$902
1.5	1200	460	182TC	79	Y156XDSB42A-P	2.5	87.5	1, 9, 16	MTP841	\$1,223
1.5	1200	460	182TC	79	Y156XDSB47A-P	2.5	87.5	1, 9	MTP841	\$1,223
1.5	1200	575	182TC	79	Y156XDSC42A-P	2	87.5	1, 9, 16	MTP841	\$1,223
1.5	1200	575	182TC	79	Y156XDSC47A-P	2	87.5	1, 9	MTP841	\$1,223
2	3600	460	145TC	53	0022XDSB42A-P	2.6	85.5	1, 9, 16	MTP841	\$1,024
2	3600	460	145TC	53	0022XDSB47A-P	2.6	85.5	1, 9	MTP841	\$1,024
2	3600	575	145TC	53	0022XDSC42A-P	2.1	85.5	1, 9, 16	MTP841	\$1,024
2	3600	575	145TC	53	0022XDSC47A-P	2.1	85.5	1, 9	MTP841	\$1,024
2	1800	460	145TC	56	0024XDSB42A-P	3	86.5	1, 9, 16	MTP841	\$980
2	1800	460	145TC	56	0024XDSB47A-P	3	86.5	1, 9	MTP841	\$980
2	1800	575	145TC	56	0024XDSC42A-P	2.4	86.5	1, 9, 16	MTP841	\$980
2	1800	575	145TC	56	0024XDSC47A-P	2.4	86.5	1, 9	MTP841	\$980
2	1200	460	184TC	93	0026XDSB42A-P	3.4	88.5	1, 9, 16	MTP841	\$1,248
2	1200	460	184TC	93	0026XDSB47A-P	3.4	88.5	1, 9	MTP841	\$1,248
2	1200	575	184TC	93	0026XDSC42A-P	2.7	88.5	1, 9, 16	MTP841	\$1,248
2	1200	575	184TC	93	0026XDSC47A-P	2.7	88.5	1, 9	MTP841	\$1,248
3	3600	460	182TC	77	0032XDSB42A-P	3.7	86.5	1, 9, 16	MTP841	\$1,254
3	3600	460	182TC	77	0032XDSB47A-P	3.7	86.5	1, 9	MTP841	\$1,254
3	3600	575	182TC	77	0032XDSC42A-P	3	86.5	1, 9, 16	MTP841	\$1,254
3	3600	575	182TC	77	0032XDSC47A-P	3	86.5	1, 9	MTP841	\$1,254
3	1800	460	182TC	86	0034XDSB42A-P	4	89.5	1, 9, 16	MTP841	\$1,185
3	1800	460	182TC	86	0034XDSB47A-P	4	89.5	1, 9	MTP841	\$1,185
3	1800	575	182TC	86	0034XDSC42A-P	3.2	89.5	1, 9, 16	MTP841	\$1,185
3	1800	575	182TC	86	0034XDSC47A-P	3.2	89.5	1, 9	MTP841	\$1,185
3	1200	460	213TC	147	0036XDSB42A-P	4.4	89.5	1, 9, 16	MTP841	\$1,539
3	1200	460	213TC	147	0036XDSB47A-P	4.4	89.5	1, 9	MTP841	\$1,539
3	1200	575	213TC	147	0036XDSC42A-P	3.5	89.5	1, 9, 16	MTP841	\$1,539
3	1200	575	213TC	147	0036XDSC47A-P	3.5	89.5	1, 9	MTP841	\$1,539
5	3600	460	184TC	91	0052XDSB42A-P	5.8	88.5	1, 9, 16	MTP841	\$1,404
5	3600	460	184TC	91	0052XDSB47A-P	5.8	88.5	1, 9	MTP841	\$1,404
5	3600	575	184TC	91	0052XDSC42A-P	4.6	88.5	1, 9, 16	MTP841	\$1,404
5	3600	575	184TC	91	0052XDSC47A-P	4.6	88.5	1, 9	MTP841	\$1,404
5	1800	460	184TC	97	0054XDSB42A-P	6.5	89.5	1, 9, 16	MTP841	\$1,260
5	1800	460	184TC	97	0054XDSB47A-P	6.5	89.5	1, 9	MTP841	\$1,260
5	1800	575	184TC	97	0054XDSC42A-P	5.2	89.5	1, 9, 16	MTP841	\$1,260
5	1800	575	184TC	97	0054XDSC47A-P	5.2	89.5	1, 9	MTP841	\$1,260
5	1200	460	215TC	165	0056XDSB42A-P	6.9	89.5	1, 9, 16	MTP841	\$2,139
5	1200	460	215TC	165	0056XDSB47A-P	6.9	89.5	1, 9	MTP841	\$2,139
5	1200	575	215TC	165	0056XDSC42A-P	5.5	89.5	1, 9, 16	MTP841	\$2,139
5	1200	575	215TC	165	0056XDSC47A-P	5.5	89.5	1, 9	MTP841	\$2,139
7.5	3600	460	213TC	155	Y752XDSB42A-P	9	89.5	1, 9, 16	MTP841	\$1,718
7.5	3600	460	213TC	155	Y752XDSB47A-P	9	89.5	1, 9	MTP841	\$1,718
7.5	3600	575	213TC	155	Y752XDSC42A-P	7.2	89.5	1, 9, 16	MTP841	\$1,718

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HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
7.5	3600	575	213TC	155	Y752XDSC47A-P	7.2	89.5	1, 9	MTP841	\$1,718
7.5	1800	460	213TC	171	Y754XDSB42A-P	9.8	91.7	1, 9, 16	MTP841	\$1,707
7.5	1800	460	213TC	171	Y754XDSB47A-P	9.8	91.7	1, 9	MTP841	\$1,707
7.5	1800	575	213TC	171	Y754XDSC42A-P	7.8	91.7	1, 9, 16	MTP841	\$1,707
7.5	1800	575	213TC	171	Y754XDSC47A-P	7.8	91.7	1, 9	MTP841	\$1,707
7.5	1200	460	254TC	252	Y756XDSB42A-P	10.2	91.0	1, 9, 16	MTP841	\$2,816
7.5	1200	460	254TC	252	Y756XDSB47A-P	10.2	91.0	1, 9	MTP841	\$2,816
7.5	1200	575	254TC	252	Y756XDSC42A-P	8.2	91.0	1, 9, 16	MTP841	\$2,816
7.5	1200	575	254TC	252	Y756XDSC47A-P	8.2	91.0	1, 9	MTP841	\$2,816
10	3600	460	215TC	172	0102XDSB42A-P	11.8	90.2	1, 9, 16	MTP841	\$1,976
10	3600	460	215TC	172	0102XDSB47A-P	11.8	90.2	1, 9	MTP841	\$1,976
10	3600	575	215TC	172	0102XDSC42A-P	9.4	90.2	1, 9, 16	MTP841	\$1,976
10	3600	575	215TC	172	0102XDSC47A-P	9.4	90.2	1, 9	MTP841	\$1,976
10	1800	460	215TC	186	0104XDSB42A-P	13	91.7	1, 9, 16	MTP841	\$2,020
10	1800	460	215TC	186	0104XDSB47A-P	13	91.7	1, 9	MTP841	\$2,020
10	1800	575	215TC	186	0104XDSC42A-P	10.4	91.7	1, 9, 16	MTP841	\$2,020
10	1800	575	215TC	186	0104XDSC47A-P	10.4	91.7	1, 9	MTP841	\$2,020
10	1200	460	256TC	274	0106XDSB42A-P	13.4	91.0	1, 9, 16	MTP841	\$3,381
10	1200	460	256TC	274	0106XDSB47A-P	13.4	91.0	1, 9	MTP841	\$3,381
10	1200	575	256TC	274	0106XDSC42A-P	10.8	91.0	1, 9, 16	MTP841	\$3,381
10	1200	575	256TC	274	0106XDSC47A-P	10.8	91.0	1, 9	MTP841	\$3,381
15	3600	460	254TC	274	0152XDSB42A-P	18	91.0	1, 9, 16	MTP841	\$2,741
15	3600	460	254TC	274	0152XDSB47A-P	18	91.0	1, 9	MTP841	\$2,741
15	3600	575	254TC	274	0152XDSC42A-P	14.4	91.0	1, 9, 16	MTP841	\$2,741
15	3600	575	254TC	274	0152XDSC47A-P	14.4	91.0	1, 9	MTP841	\$2,741
15	1800	460	254TC	289	0154XDSB42A-P	19	92.4	1, 9, 16	MTP841	\$2,697
15	1800	460	254TC	289	0154XDSB47A-P	19	92.4	1, 9	MTP841	\$2,697
15	1800	575	254TC	289	0154XDSC42A-P	15.2	92.4	1, 9, 16	MTP841	\$2,697
15	1800	575	254TC	289	0154XDSC47A-P	15.2	92.4	1, 9	MTP841	\$2,697
15	1200	460	284TC	364	0156XDSB42A-P	19.6	91.7	1, 9	MTP841	\$4,577
15	1200	575	284TC	364	0156XDSC42A-P	15.8	91.7	1, 9	MTP841	\$4,577
20	3600	460	256TC	292	0202XDSB42A-P	24	91.0	1, 9	MTP841	\$3,328
20	3600	460	256TC	292	0202XDSB47A-P	24	91.0	1, 9	MTP841	\$3,328
20	3600	575	256TC	292	0202XDSC42A-P	19.2	91.0	1, 9	MTP841	\$3,328
20	3600	575	256TC	292	0202XDSC47A-P	19.2	91.0	1, 9	MTP841	\$3,328
20	1800	460	256TC	340	0204XDSB42A-P	25	93.0	1, 9	MTP841	\$3,292
20	1800	460	256TC	340	0204XDSB47A-P	25	93.0	1, 9	MTP841	\$3,292
20	1800	575	256TC	340	0204XDSC42A-P	20	93.0	1, 9	MTP841	\$3,292
20	1800	575	256TC	340	0204XDSC47A-P	20	93.0	1, 9	MTP841	\$3,292
20	1200	460	286TC	411	0206XDSB42A-P	25.4	91.7	1, 9	MTP841	\$5,481
20	1200	575	286TC	411	0206XDSC42A-P	20.4	91.7	1, 9	MTP841	\$5,481
25	3600	460	284TSC	406	0252XDSB42B-P	29	91.7	1, 9	MTP841	\$4,217
25	3600	575	284TSC	406	0252XDSC42B-P	23.2	91.7	1, 9	MTP841	\$4,217
25	1800	460	284TC	424	0254XDSB42A-P	30.5	93.6	1, 9	MTP841	\$4,045
25	1800	575	284TC	424	0254XDSC42A-P	24.4	93.6	1, 9	MTP841	\$4,045
25	1200	460	324TC	545	0256XDSB42A-P	31.2	93.0	1, 9	MTP841	\$6,604
25	1200	575	324TC	545	0256XDSC42A-P	24.6	93.0	1, 9	MTP841	\$6,604

Totally Enclosed Fan Cooled

EQP Global 841 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
30	3600	460	286TSC	439	0302XDSB42B-P	35	91.7	1, 9	MTP841	\$4,848
30	3600	575	286TSC	439	0302XDSC42B-P	28	91.7	1, 9	MTP841	\$4,848
30	1800	460	286TC	448	0304XDSB42A-P	36.4	93.6	1, 9	MTP841	\$4,633
30	1800	575	286TC	448	0304XDSC42A-P	29.2	93.6	1, 9	MTP841	\$4,633
30	1200	460	326TC	571	0306XDSB42A-P	37.2	93.0	1, 9	MTP841	\$7,531
30	1200	575	326TC	571	0306XDSC42A-P	30	93.0	1, 9	MTP841	\$7,531
40	3600	460	324TSC	589	0402XDSB42B-P	47	92.4	1, 9	MTP841	\$6,292
40	3600	575	324TSC	589	0402XDSC42B-P	37.6	92.4	1, 9	MTP841	\$6,292
40	1800	460	324TC	593	0404XDSB42A-P	48	94.1	1, 9	MTP841	\$6,067
40	1800	575	324TC	593	0404XDSC42A-P	38.4	94.1	1, 9	MTP841	\$6,067
40	1200	460	364TC	708	0406XDSB42A-P	48	94.1	1, 9	MTP841	\$10,362
40	1200	575	364TC	708	0406XDSC42A-P	38.4	94.1	1, 9	MTP841	\$10,362
50	3600	460	326TSC	624	0502XDSB42B-P	58	93.0	1, 9	MTP841	\$8,023
50	3600	575	326TSC	624	0502XDSC42B-P	46.4	93.0	1, 9	MTP841	\$8,023
50	1800	460	326TC	651	0504XDSB42A-P	60	94.5	1, 9	MTP841	\$7,337
50	1800	575	326TC	651	0504XDSC42A-P	48	94.5	1, 9	MTP841	\$7,337
50	1200	460	365TC	757	0506XDSB42A-P	60	94.1	1, 9	MTP841	\$11,776
50	1200	575	365TC	757	0506XDSC42A-P	48	94.1	1, 9	MTP841	\$11,776
60	3600	460	364TSC	763	0602XDSB42B-P	69	93.6	1, 9	MTP841	\$9,732
60	3600	575	364TSC	763	0602XDSC42B-P	55	93.6	1, 9	MTP841	\$9,732
60	1800	460	364TC	796	0604XDSB42A-P	69	95.0	1, 9	MTP841	\$9,657
60	1800	575	364TC	796	0604XDSC42A-P	55	95.0	1, 9	MTP841	\$9,657
75	3600	460	365TSC	814	0752XDSB42B-P	86	93.6	1, 9	MTP841	\$12,016
75	3600	575	365TSC	814	0752XDSC42B-P	68.8	93.6	1, 9	MTP841	\$12,016
75	1800	460	365TC	893	0754XDSB42A-P	86	95.4	1, 9	MTP841	\$12,023
75	1800	575	365TC	893	0754XDSC42A-P	68.8	95.4	1, 9	MTP841	\$12,023
C-FACE FOOTLESS										
0.75	1200	460	143TC	52	3/46XDSB44A-P	1.4	80.0	1, 9	MTP841	\$1,032
0.75	1200	575	143TC	52	3/46XDSC44A-P	1.1	81.9	1, 9	MTP841	\$1,032
1	1800	460	143TC	51	0014XDSB44A-P	1.7	85.5	1, 9	MTP841	\$905
1	1800	575	143TC	51	0014XDSC44A-P	1.3	85.5	1, 9	MTP841	\$905
1	1200	460	145TC	56	0016XDSB44A-P	1.8	82.5	1, 9	MTP841	\$1,093
1	1200	575	145TC	56	0016XDSC44A-P	1.5	82.5	1, 9	MTP841	\$1,093
1.5	3600	460	143TC	50	Y152XDSB44A-P	2	84.0	1, 9	MTP841	\$960
1.5	3600	575	143TC	50	Y152XDSC44A-P	1.6	84.0	1, 9	MTP841	\$960
1.5	1800	460	145TC	53	Y154XDSB44A-P	2.4	86.5	1, 9	MTP841	\$992
1.5	1800	575	145TC	53	Y154XDSC44A-P	1.9	86.5	1, 9	MTP841	\$992
1.5	1200	460	182TC	79	Y156XDSB44A-P	2.5	87.5	1, 9	MTP841	\$1,345
1.5	1200	575	182TC	79	Y156XDSC44A-P	2	87.5	1, 9	MTP841	\$1,345
2	3600	460	145TC	53	0022XDSB44A-P	2.6	85.5	1, 9	MTP841	\$1,126
2	3600	575	145TC	53	0022XDSC44A-P	2.1	85.5	1, 9	MTP841	\$1,126
2	1800	460	145TC	56	0024XDSB44A-P	3	86.5	1, 9	MTP841	\$1,078
2	1800	575	145TC	56	0024XDSC44A-P	2.4	86.5	1, 9	MTP841	\$1,078
2	1200	460	184TC	93	0026XDSB44A-P	3.4	88.5	1, 9	MTP841	\$1,373
2	1200	575	184TC	93	0026XDSC44A-P	2.7	88.5	1, 9	MTP841	\$1,373
3	3600	460	182TC	77	0032XDSB44A-P	3.7	86.5	1, 9	MTP841	\$1,379

Totally Enclosed Fan Cooled

EQP Global 841 C-Face

> NEMA® Premium Efficiency



EQPGlobal
841

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	3600	575	182TC	77	0032XDSC44A-P	3	86.5	1, 9	MTP841	\$1,379
3	1800	460	182TC	86	0034XDSB44A-P	4	89.5	1, 9	MTP841	\$1,304
3	1800	575	182TC	86	0034XDSC44A-P	3.2	89.5	1, 9	MTP841	\$1,304
3	1200	460	213TC	142	0036XDSB44A-P	4.4	89.5	1, 9	MTP841	\$1,693
3	1200	575	213TC	142	0036XDSC44A-P	3.5	89.5	1, 9	MTP841	\$1,693
5	3600	460	184TC	91	0052XDSB44A-P	5.8	88.5	1, 9	MTP841	\$1,544
5	3600	575	184TC	91	0052XDSC44A-P	4.6	88.5	1, 9	MTP841	\$1,544
5	1800	460	184TC	97	0054XDSB44A-P	6.5	89.5	1, 9	MTP841	\$1,386
5	1800	575	184TC	97	0054XDSC44A-P	5.2	89.5	1, 9	MTP841	\$1,386
5	1200	460	215TC	165	0056XDSB44A-P	6.9	89.5	1, 9	MTP841	\$2,353
5	1200	575	215TC	165	0056XDSC44A-P	5.5	89.5	1, 9	MTP841	\$2,353
7.5	3600	460	213TC	155	Y752XDSB44A-P	9	89.5	1, 9	MTP841	\$1,890
7.5	3600	575	213TC	155	Y752XDSC44A-P	7.2	89.5	1, 9	MTP841	\$1,890
7.5	1800	460	213TC	171	Y754XDSB44A-P	9.8	91.7	1, 9	MTP841	\$1,878
7.5	1800	575	213TC	171	Y754XDSC44A-P	7.8	91.7	1, 9	MTP841	\$1,878
7.5	1200	460	254TC	252	Y756XDSB44A-P	10.2	91.0	1, 9	MTP841	\$3,098
7.5	1200	575	254TC	252	Y756XDSC44A-P	8.2	91.0	1, 9	MTP841	\$3,098
10	3600	460	215TC	172	0102XDSB44A-P	11.8	90.2	1, 9	MTP841	\$2,174
10	3600	575	215TC	172	0102XDSC44A-P	9.4	90.2	1, 9	MTP841	\$2,174
10	1800	460	215TC	186	0104XDSB44A-P	13.4	91.7	1, 9	MTP841	\$2,222
10	1800	575	215TC	186	0104XDSC44A-P	10.8	91.7	1, 9	MTP841	\$2,222
10	1200	460	256TC	274	0106XDSB44A-P	13.4	91.0	1, 9	MTP841	\$3,719
10	1200	575	256TC	274	0106XDSC44A-P	10.8	91.0	1, 9	MTP841	\$3,719
15	3600	460	254TC	274	0152XDSB44A-P	18	91.0	1, 9	MTP841	\$3,015
15	3600	575	254TC	274	0152XDSC44A-P	14.4	91.0	1, 9	MTP841	\$3,015
15	1800	460	254TC	289	0154XDSB44A-P	19	92.4	1, 9	MTP841	\$2,967
15	1800	575	254TC	289	0154XDSC44A-P	15.2	92.4	1, 9	MTP841	\$2,967
15	1200	460	284TC	364	0156XDSB44A-P	19.6	91.7	1, 9	MTP841	\$5,035
15	1200	575	284TC	364	0156XDSC44A-P	15.8	91.7	1, 9	MTP841	\$5,035
20	3600	460	256TC	292	0202XDSB44A-P	24	91.0	1, 9	MTP841	\$3,661
20	3600	575	256TC	292	0202XDSC44A-P	19.2	91.0	1, 9	MTP841	\$3,661
20	1800	460	256TC	340	0204XDSB44A-P	25	93.0	1, 9	MTP841	\$3,621
20	1800	575	256TC	340	0204XDSC44A-P	20	93.0	1, 9	MTP841	\$3,621
20	1200	460	286TC	411	0206XDSB44A-P	25.4	91.7	1, 9	MTP841	\$6,029
20	1200	575	286TC	411	0206XDSC44A-P	20.4	91.7	1, 9	MTP841	\$6,029
25	3600	460	284TSC	406	0252XDSB44B-P	29	91.7	1, 9	MTP841	\$4,639
25	3600	575	284TSC	406	0252XDSC44B-P	23.2	91.7	1, 9	MTP841	\$4,639
25	1800	460	284TC	424	0254XDSB44A-P	30.5	93.6	1, 9	MTP841	\$4,247
25	1800	575	284TC	424	0254XDSC44A-P	24.4	93.6	1, 9	MTP841	\$4,247
25	1200	460	324TC	545	0256XDSB44A-P	31.2	93.0	1, 9	MTP841	\$7,264
25	1200	575	324TC	545	0256XDSC44A-P	24.6	93.0	1, 9	MTP841	\$7,264
30	3600	460	286TSC	439	0302XDSB44B-P	35	91.7	1, 9	MTP841	\$5,333
30	3600	575	286TSC	439	0302XDSC44B-P	28	91.7	1, 9	MTP841	\$5,333
30	1800	460	286TC	448	0304XDSB44A-P	36.4	93.6	1, 9	MTP841	\$4,865
30	1800	575	286TC	448	0304XDSC44A-P	29.2	93.6	1, 9	MTP841	\$4,865
30	1200	460	326TC	571	0306XDSB44A-P	37.2	93.0	1, 9	MTP841	\$8,284
30	1200	575	326TC	571	0306XDSC44A-P	30	93.0	1, 9	MTP841	\$8,284

Totally Enclosed Fan Cooled

EQP Global 841 C-Face

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
40	3600	460	324TSC	589	0402XDSB44B-P	47	92.4	1, 9	MTP841	\$6,921
40	3600	575	324TSC	589	0402XDSC44B-P	37.6	92.4	1, 9	MTP841	\$6,921
40	1800	460	324TC	593	0404XDSB44A-P	48	94.1	1, 9	MTP841	\$6,370
40	1800	575	324TC	593	0404XDSC44A-P	38.4	94.1	1, 9	MTP841	\$6,370
40	1200	460	364TC	708	0406XDSB44A-P	48	94.1	1, 9	MTP841	\$11,398
40	1200	575	364TC	708	0406XDSC44A-P	38.4	94.1	1, 9	MTP841	\$11,398
50	3600	460	326TSC	324	0502XDSB44B-P	58	93.0	1, 9	MTP841	\$8,825
50	3600	575	326TSC	324	0502XDSC44B-P	46.4	93.0	1, 9	MTP841	\$8,825
50	1800	460	326TC	651	0504XDSB44A-P	60	94.5	1, 9	MTP841	\$7,704
50	1800	575	326TC	651	0504XDSC44A-P	48	94.5	1, 9	MTP841	\$7,704
50	1200	460	365TC	757	0506XDSB44A-P	60	94.1	1, 9	MTP841	\$12,954
50	1200	575	365TC	757	0506XDSC44A-P	48	94.1	1, 9	MTP841	\$12,954
60	3600	460	364TSC	763	0602XDSB44B-P	69	93.6	1, 9	MTP841	\$10,705
60	3600	575	364TSC	763	0602XDSC44B-P	55	93.6	1, 9	MTP841	\$10,705
60	1800	460	364TC	796	0604XDSB44A-P	69	95.0	1, 9	MTP841	\$10,140
60	1800	575	364TC	796	0604XDSC44A-P	55	95.0	1, 9	MTP841	\$10,140
75	3600	460	365TSC	814	0752XDSB44B-P	86	93.6	1, 9	MTP841	\$13,218
75	3600	575	365TSC	814	0752XDSC44B-P	68.8	93.6	1, 9	MTP841	\$13,218
75	1800	460	365TC	893	0754XDSB44A-P	86	95.4	1, 9	MTP841	\$12,624
75	1800	575	365TC	893	0754XDSC44A-P	68.8	95.4	1, 9	MTP841	\$12,624

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Definite Purpose Series

Open Drip Proof Oil Well Pump Motors

Toshiba's definite purpose, open drip proof, high efficiency, Oil Well Pump motor series shares the same superb quality as other Toshiba open drip proof designs. This series is equipped to handle the harshest of environments, including installations in remote locations where the motor cannot be easily accessed. These motors are specifically built for use in the oil industry and offer a high-slip, high-torque design with protective screens to safeguard against outdoor elements. Exceptional corrosion-resistance and high structural rigidity are inherent in this type of motor, and reliability and durability are critical factors that differentiate this product from competitors' offerings.

Standard Features:

- Open Drip Proof
- High Efficiency
- 230/460/796 V (796 V Usable on Solidly-Grounded Neutral System)
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Class F Insulation
- IP22 Protection
- NEMA Design D
 - 5 to 8% Slip
 - 275% or Higher Locked Rotor Torque
- F2 Assembly
- Normally-Closed Thermostats
- Cast Iron Frame & Brackets
- Cast Iron Conduit Box
- Corrosion-Resistant Screens
- Lithium Base Grease
- Y-Delta Starting (230/460 V Only)

Applications:

- Oil Well Pumps
- Presses
- Lifts
- High Slip, Design D



Definite Purpose Series

Totally Enclosed Fan Cooled Design C Motors

The definite purpose, totally enclosed fan cooled, EPACT efficiency, Design C motor series is designed using the EPACT motor as a base and incorporating Design C torque. This product is typically used in conveyor or crusher applications, or other applications requiring high starting torque, and can handle indoor and outdoor use. The Design C motor line meets the basic NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-11. This motor product line encompasses Toshiba's impressive standard motor features and delivers the quality design, performance, and reliability the motor industry has come to expect from Toshiba.

Standard Features:

- Totally Enclosed Fan Cooled
- EPACT Efficiency
- 230/460, 460, or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Class F Insulation
- Exceeds Insulation Requirements of NEMA MG1 Part 30 or 31 (Inverter Duty)
- Cast Iron or Stamped Steel Gasketed Conduit Box
- Cast Iron Frame
- Stamped Steel Fan Cover
- Cast Iron Brackets
- Ball Bearing on 143T through 326T Frames
- Roller Bearing on 360T through 440T Frames
- Shaft Slinger or V-Ring Seal on Drive End
- Lithium Base or Polyurea Base Grease
- Stainless Steel Nameplate
- Available with Design C Torques

Applications:

- Conveyors
- Material Handling
- General Applications



Totally Enclosed Fan Cooled Design C

> EPACT Efficiency



The definite purpose, totally enclosed fan cooled, EPACT efficiency, Design C motor is designed using the EPACT motor as a base and incorporating Design C torque. This product is typically used in conveyor and crusher applications, or other applications requiring high starting torque, and can handle indoor or outdoor use. This product line encompasses Toshiba's impressive standard motor features and delivers the quality design, performance, and reliability the motor industry has come to expect from Toshiba. It also meets the basic NEMA energy efficiency requirements as listed in NEMA MG1 Table 12-11.

Product Scope:

Horsepower:	1 to 200 HP
Speed:	1800 or 1200 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through 449T
Construction:	Cast Iron or Rolled Steel T-Box
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 30 (Inverter Duty)

**Non-NAFTA products meet Class F Insulation, exceeding NEMA MG1 Part 30 (Inverter Duty), & include gasketed cast iron box*

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1	1800	230/460	143T	54	C0014FLF2UMWQ	2.8/1.4	83.5		MXTFCC	\$603
1	1800	230/460	143T	49	0014FTCA21A-P	2.9/1.5	82.5	1	MCTFCC	\$391
1	1800	575	143T	54	C0014FLF2OMWQ	1.1	82.5		MXTFCC	\$603
1	1800	575	143T	49	0014FTCC21A-P	1.2	82.5	1	MCTFCC	\$391
1	1200	230/460	145T	53	0016FTCA21A-P	3.4/1.7	80.0	1	MCTFCC	\$481
1	1200	575	145T	53	0016FTCC21A-P	1.4	80.0	1	MCTFCC	\$481
1.5	1800	230/460	145T	61	CY154FLF2UMWQ	4.4/2.2	84.0		MXTFCC	\$666
1.5	1800	230/460	145T	51	Y154FTCA21A-P	4.2/2.1	84.0	1	MCTFCC	\$401
1.5	1800	575	145T	61	CY154FLF2OMWQ	1.8	84.0		MXTFCC	\$666
1.5	1800	575	145T	51	Y154FTCC21A-P	1.7	84.0	1	MCTFCC	\$401
1.5	1200	230/460	182T	93	Y156FTCA21A-P	4.1/2.3	85.5	1	MCTFCC	\$598
1.5	1200	575	182T	93	Y156FTCC21A-P	1.8	85.5	1	MCTFCC	\$598
2	1800	230/460	145T	62	C0024FLF2UMWQ	5.6/2.8	84.0		MXTFCC	\$726
2	1800	230/460	145T	55	0024FTCA21A-P	5.6/2.8	84.0	1	MCTFCC	\$456
2	1800	575	145T	62	C0024FLF2OMWQ	2.2	84.0		MXTFCC	\$726
2	1800	575	145T	55	0024FTCC21A-P	2.3	84.0	1	MCTFCC	\$456
2	1200	230/460	184T	101	0026FTCA21A-P	6.2/3.1	86.5	1	MCTFCC	\$650
2	1200	575	184T	101	0026FTCC21A-P	2.5	86.5	1	MCTFCC	\$650
3	1800	230/460	182T	94	C0034FLF2UMWQ	7.6/3.8	87.5		MXTFCC	\$818
3	1800	230/460	182T	89	0034FTCA21A-P	8.0/4.0	87.5	1	MCTFCC	\$533
3	1800	575	182T	94	C0034FLF2OMWQ	3	87.5		MXTFCC	\$818
3	1800	575	182T	89	0034FTCC21A-P	3.2	87.5	1	MCTFCC	\$533
3	1200	230/460	213T	143	0036FTCA21A-P	8.9/4.5	87.5	1	MCTFCC	\$849
3	1200	575	213T	143	0036FTCC21A-P	3.6	87.5	1	MCTFCC	\$849
5	1800	230/460	184T	106	C0054FLF2UMWQ	12.6/6.3	87.5		MXTFCC	\$949
5	1800	230/460	184T	101	0054FTCA21A-P	12.8/6.4	87.5	1	MCTFCC	\$597
5	1800	575	184T	106	C0054FLF2OSWQ	5.1	87.5		MXTFCC	\$949

Totally Enclosed Fan Cooled

Design C

> EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1800	575	184T	101	0054FTCC21A-P	5.1	85.5	1	MCTFCC	\$597
5	1200	230/460	215T	177	0056FTCA21A-P	14.6/7.3	87.5	1	MCTFCC	\$1,090
5	1200	575	215T	177	0056FTCC21A-P	5.8	87.5	1	MCTFCC	\$1,090
7.5	1800	230/460	213T	185	CY754FLF2USWQ	18.6/9.3	89.5		MXTFCC	\$1,611
7.5	1800	230/460	213T	153	Y754FTCA21A-P	18.9/9.5	89.5	1	MCTFCC	\$827
7.5	1800	575	213T	185	CY754FLF2OSWQ	7.4	89.5		MXTFCC	\$1,611
7.5	1800	575	213T	153	Y754FTCC21A-P	7.6	89.5	1	MCTFCC	\$827
7.5	1200	230/460	254T	254	Y756FTCA21A-P	20/10	89.5	1	MCTFCC	\$1,571
7.5	1200	575	254T	254	Y756FTCC21A-P	8	89.5	1	MCTFCC	\$1,571
10	1800	230/460	215T	201	C0104FLF2USWQ	24/12	89.5		MXTFCC	\$1,701
10	1800	230/460	215T	176	0104FTCA21A-P	25/12.5	89.5	1	MCTFCC	\$988
10	1800	575	215T	201	C0104FLF2OSWQ	9.6	89.5		MXTFCC	\$1,701
10	1800	575	215T	176	0104FTCC21A-P	10.1	89.5	1	MCTFCC	\$988
10	1200	230/460	256T	327	C0106FLF2USWQ	27/13.5	89.5		MXTFCC	\$2,887
10	1200	230/460	256T	291	0106FTCA21A-P	13.2	89.5	1	MCTFCC	\$1,859
10	1200	575	256T	327	C0106FLF2OSWQ	10.4	89.5		MXTFCC	\$2,887
10	1200	575	256T	291	0106FTCC21A-P	10.6	89.5	1	MCTFCC	\$1,859
15	1800	230/460	254T	292	C0154FLF2USWQ	37/18.5	91.0		MXTFCC	\$2,359
15	1800	230/460	254T	271	0154FTCA21A-P	37/18.5	91.0	1	MCTFCC	\$1,424
15	1800	575	254T	292	C0154FLF2OSWQ	14.8	91.0		MXTFCC	\$2,359
15	1800	575	254T	271	0154FTCC21A-P	14.6	91.0	1	MCTFCC	\$1,424
15	1200	230/460	284T	370	C0156FLF3UMWQ	38/19	90.2		MXTFCC	\$4,301
15	1200	230/460	284T	384	0156FTCA21A-P	40/20	90.2	1	MCTFCC	\$2,546
15	1200	575	284T	370	C0156FLF3OMWQ	15.2	90.2		MXTFCC	\$4,301
15	1200	575	284T	384	0156FTCC21A-P	16	90.2	1	MCTFCC	\$2,546
20	1800	230/460	256T	340	C0204FLF2USWQ	50/25	91.0		MXTFCC	\$2,854
20	1800	230/460	256T	300	0204FTCA21A-P	50/25	91.0	1	MCTFCC	\$1,757
20	1800	575	256T	340	C0204FLF2OSWQ	20	91.0		MXTFCC	\$2,854
20	1800	575	256T	300	0204FTCC21A-P	19.7	91.0	1	MCTFCC	\$1,757
20	1200	230/460	286T	400	C0206FLF3UMWQ	52/26	90.2		MXTFCC	\$4,872
20	1200	230/460	286T	544	0206FTCA21A-P	26	90.2	1	MCTFCC	\$3,146
20	1200	575	286T	400	C0206FLF3OMWQ	21	90.2		MXTFCC	\$4,872
20	1200	575	286T	544	0206FTCC21A-P	21	90.2	1	MCTFCC	\$3,146
25	1800	230/460	284T	400	C0254FLF3UMWQ	60/30	92.4		MXTFCC	\$3,805
25	1800	230/460	284T	419	0254FTCA21A-P	62/31	92.4	1	MCTFCC	\$2,116
25	1800	575	284T	400	C0254FLF3OMWQ	24	92.4		MXTFCC	\$3,805
25	1800	575	284T	419	0254FTCC21A-P	25	92.4	1	MCTFCC	\$2,116
25	1200	230/460	324T	493	C0256FLF3UMWQ	64/32	91.7		MXTFCC	\$6,003
25	1200	230/460	324T	544	0256FTCA21A-P	62/31	91.7	1	MCTFCC	\$3,802
25	1200	575	324T	493	C0256FLF3OMWQ	26	91.7		MXTFCC	\$6,003
25	1200	575	324T	544	0256FTCC21A-P	25	91.7	1	MCTFCC	\$3,802
30	1800	230/460	286T	432	C0304FLF3UMWQ	74/37	92.4		MXTFCC	\$4,256
30	1800	230/460	286T	456	0304FTCA21A-P	74/37	92.4	1	MCTFCC	\$2,560
30	1800	575	286T	432	C0304FLF3OMWQ	29	92.4		MXTFCC	\$4,256
30	1800	575	286T	456	0304FTCC21A-P	29	92.4	1	MCTFCC	\$2,560
30	1200	230/460	326T	543	C0306FLF3UMWQ	78/39	91.7		MXTFCC	\$6,169
30	1200	230/460	326T	606	0306FTCA21A-P	22/36	91.7	1	MCTFCC	\$4,188
30	1200	575	326T	543	C0306FLF3OMWQ	31	91.7		MXTFCC	\$6,169

Totally Enclosed Fan Cooled

Design C

> EPACT Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
30	1200	575	326T	606	0306FTCC21A-P	29	91.7	1	MCTFCC	\$4,188
40	1800	230/460	324T	569	C0404FLF3USWQ	92/46	93.0		MXTFCC	\$5,683
40	1800	230/460	324T	586	0404FTCA21A-P	96/48	93.0	1	MCTFCC	\$3,493
40	1800	575	324T	569	C0404FLF3OSWQ	37	93.0		MXTFCC	\$5,683
40	1800	575	324T	586	0404FTCC21A-P	38	93.0	1	MCTFCC	\$3,493
40	1200	230/460	364T	712	C0406FLF3UMWQ	98/49	93.0		MXTFCC	\$9,161
40	1200	230/460	364T	809	0406FTCA21A-P	49	93.0	1, 2	MCTFCC	\$5,656
40	1200	575	364T	712	C0406FLF3OMWQ	39	93.0		MXTFCC	\$9,161
40	1200	575	364T	809	0406FTCC21A-P	39	93.0	1, 2	MCTFCC	\$5,656
50	1800	230/460	326T	636	C0504FLF3USWQ	122/61	93.0		MXTFCC	\$6,343
50	1800	230/460	326T	675	0504FTCA21A-P	118/59	93.0	1	MCTFCC	\$3,932
50	1800	575	326T	636	C0504FLF3OSWQ	49	93.0		MXTFCC	\$6,343
50	1800	575	326T	675	0504FTCC21A-P	47	93.0	1	MCTFCC	\$3,932
50	1200	230/460	365T	795	C0506FLF3UMWQ	124/62	93.0		MXTFCC	\$10,299
50	1200	230/460	365T	886	0506FTCA21A-P	122/61	93.0	1, 2	MCTFCC	\$6,834
50	1200	575	365T	795	C0506FLF3OMWQ	50	93.0		MXTFCC	\$10,299
50	1200	575	365T	886	0506FTCC21A-P	49	93.0	1, 2	MCTFCC	\$6,834
60	1800	230/460	364T	748	C0604FLF3UMWQ	142/71	93.6		MXTFCC	\$8,883
60	1800	230/460	364T	882	0604FTCA21A-P	146/73	93.6	1, 2	MCTFCC	\$5,987
60	1800	575	364T	748	C0604FLF3OMWQ	57	93.6		MXTFCC	\$8,883
60	1800	575	364T	882	0604FTCC21A-P	58	93.6	1, 2	MCTFCC	\$5,987
60	1200	230/460	404T	1240	C0606FLF3USWQ	148/74	93.6		MXTFCC	\$13,440
60	1200	230/460	404T	1240	0606FTCA21A-P	140/70	93.6	1, 2	MCTFCC	\$8,601
60	1200	575	404T	1240	C0606FLF3OSWQ	59	93.6		MXTFCC	\$13,440
60	1200	575	404T	1240	0606FTCC21A-P	56	93.6	1, 2	MCTFCC	\$8,601
75	1800	230/460	365T	950	0754FTCA21A-P	178/89	94.1	1, 2	MCTFCC	\$7,156
75	1800	575	365T	950	0754FTCC21A-P	71	94.1	1, 2	MCTFCC	\$7,156
75	1200	230/460	405T	1451	0756FTCA21A-P	174/87	93.6	1, 2	MCTFCC	\$9,577
75	1200	575	405T	1451	0756FTCC21A-P	70	93.6	1, 2	MCTFCC	\$9,577
100	1800	230/460	405T	1342	1004FTCA21A-P	250/125	94.5	1, 2	MCTFCC	\$9,099
100	1800	575	405T	1342	1004FTCC21A-P	100	94.5	1, 2	MCTFCC	\$9,099
100	1200	230/460	444T	1727	1006FTCA21A-P	252/126	94.1	1, 2	MCTFCC	\$12,416
100	1200	575	444T	1727	1006FTCC21A-P	101	94.1	1, 2	MCTFCC	\$12,416
125	1800	230/460	444T	1676	1254FTCA21A-P	294/147	94.5	1, 2	MCTFCC	\$12,083
125	1800	575	444T	1676	1254FTCC21A-P	118	94.5	1, 2	MCTFCC	\$12,083
125	1200	230/460	445T	1949	1256FTCA21A-P	310/155	94.1	1, 2	MCTFCC	\$14,705
125	1200	575	445T	1949	1256FTCC21A-P	124	94.1	1, 2	MCTFCC	\$14,705
150	1800	230/460	445T	1896	1504FTCA21A-P	350/175	95.0	1, 2	MCTFCC	\$14,251
150	1800	575	445T	1896	1504FTCC21A-P	140	95.0	1, 2	MCTFCC	\$14,251
150	1200	460	447T	2314	1506FTCB21A-P	182	95.0	1, 2	MCTFCC	\$17,256
150	1200	575	447T	2314	1506FTCC21A-P	146	95.0	1, 2	MCTFCC	\$17,256
200	1800	460	447T	2385	2004FTCB21A-P	226	95.0	1, 2	MCTFCC	\$17,638
200	1800	575	447T	2385	2004FTCC21A-P	180	95.0	1, 2	MCTFCC	\$17,638
200	1200	460	449T	1764	2006FTCB21A-P	241	95.0	1, 2	MCTFCC	\$21,359
200	1200	575	449T	1764	2006FTCC21A-P	193	95.0	1, 2	MCTFCC	\$21,359

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Definite Purpose Series

Open Drip Proof Dry Kiln Motors

Toshiba's definite purpose, open drip proof, high efficiency, Dry Kiln motor series incorporates a new and improved insulation system into the premium open drip proof design. This allows the motor to run in higher ambient temperatures (90°, 115°, and 135°C) and meets the ever-increasing demands of the lumber industry. The Dry Kiln motor series is designed for indoor and outdoor use in even the harshest dry kiln environments. High ambient temperatures, high humidity, and chemicals present no problem to this motor series due to its corrosion-resistance and high structural rigidity. As with other Toshiba designs, reliability and durability are critical factors that differentiate this product from competitors' offerings.

Standard Features:

- Open Drip Proof
- High Efficiency
- 460 or 575 V
- Three-Phase
- 60 Hz
- Design B Torques
- Class H Insulation
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- Special Windings for High Humidity & Corrosive Atmospheres
- 90°, 115°, & 135°C Designs
- 8-Foot Class H Leads (Three Leads)
- 304 Stainless Steel Nameplate
- Stamped Steel Conduit Box
- Cast Iron Frame
- Cast Iron Bearing Brackets
- High Temperature Bearing Grease

Applications:

- Soft Wood Dry Kilns
- Hard Wood Dry Kilns
- High Temperature Fans
- Oven Conveyors

Warranty:

- From Date of Shipment: 18 Months
- From Date of Installation: 12 Months



Open Drip Proof

Dry Kiln – 90 ° C Ambient

> High Efficiency



Toshiba’s definite purpose, open drip proof, high efficiency, Dry Kiln motor series incorporates a new and improved insulation system into the premium open drip proof design. This allows the motor to run in higher ambient temperatures (90°, 115°, and 135°C) and meets the ever-increasing demands of the lumber industry. The Dry Kiln motor series is designed for indoor and outdoor use in even the harshest dry kiln environments. High ambient temperatures, high humidity, and chemicals present no problem to this motor series due to its corrosion-resistance and high structural rigidity. As with other Toshiba designs, reliability and durability are critical factors that differentiate this product from competitors’ offerings.

Product Scope:

Horsepower:	3 to 25 HP
Speed:	1800, 1200, or 900 RPM
Voltage:	460 V (575 V Available Upon Request)
Enclosure:	Open Drip Proof
Frame Size:	184T through 326T
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class H, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	1200	460	213T	142	0036DPKB11A	4.6	84.0		MXTDPK	\$3,191
5	1800	460	184T	100	0054DPKB11A	6.3	89.5		MXTDPK	\$3,005
5	1200	460	215T	180	0056DPKB11A	6.8	88.5		MXTDPK	\$3,329
5	900	460	254T	232	0058DPKB11A	7.8	87.5		MXTDPK	\$3,597
7.5	1800	460	213T	141	Y754DPKB11A	10.3	87.5		MXTDPK	\$3,191
7.5	1200	460	254T	230	Y756DPKB11A	10.5	87.5		MXTDPK	\$3,597
7.5	900	460	256T	303	Y758DPKB11A	11.5	88.5		MXTDPK	\$4,244
10	1800	460	215T	158	0104DPKB11A	12	91.7		MXTDPK	\$3,329
10	1200	460	256T	261	0106DPKB11A	13.5	88.5		MXTDPK	\$4,244
10	900	460	284T	343	0108DPKB11A	15.5	90.2		MXTDPK	\$5,346
15	1800	460	254T	256	0154DPKB11A	19	90.2		MXTDPK	\$3,597
15	1200	460	284T	326	0156DPKB11A	21	89.5		MXTDPK	\$5,346
15	900	460	286T	395	0158DPKB11A	23	90.2		MXTDPK	\$6,763
20	1800	460	256T	294	0204DPKB11A	24	93.6		MXTDPK	\$4,244
20	1200	460	286T	355	0206DPKB11A	27	89.5		MXTDPK	\$6,763
20	900	460	324T	492	0208DPKB11A	30	89.5		MXTDPK	\$8,004
25	1800	460	284T	373	0254DPKB11A	32	91.0		MXTDPK	\$5,346
25	1200	460	324T	433	0256DPKB11A	33	90.2		MXTDPK	\$8,004
25	900	460	326T	495	0258DPKB11A	36	91.0		MXTDPK	\$8,991

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Drip Proof

Dry Kiln – 115° C Ambient

> High Efficiency



Toshiba's definite purpose, open drip proof, high efficiency, Dry Kiln motor series incorporates a new and improved insulation system into the premium open drip proof design. This allows the motor to run in higher ambient temperatures (90°, 115°, and 135°C) and meets the ever-increasing demands of the lumber industry. The Dry Kiln motor series is designed for indoor and outdoor use in even the harshest dry kiln environments. High ambient temperatures, high humidity, and chemicals present no problem to this motor series due to its corrosion-resistance and high structural rigidity. As with other Toshiba designs, reliability and durability are critical factors that differentiate this product from competitors' offerings.

Product Scope:

Horsepower:	5 to 25 HP
Speed:	1200 or 900 RPM
Voltage:	460 V (575 V Available Upon Request)
Enclosure:	Open Drip Proof
Frame Size:	215T through 326T
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class H, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1200	460	215T	180	0056DPKB41A-Y	6.8	89.5		MXTPDK	\$4,160
5	900	460	254T	232	0058DPKB21A-Y	7.8	87.5		MXTPDK	\$4,498
7.5	1200	460	254T	230	Y756DPKB41A-Y	10.5	90.2		MXTPDK	\$4,498
7.5	900	460	256T	303	Y758DPKB21A-Y	12	87.5		MXTPDK	\$5,306
10	1200	460	256T	261	0106DPKB41A-Y	13.5	91.7		MXTPDK	\$5,306
10	900	460	284T	343	0108DPKB21A-Y	15.00	88.5		MXTPDK	\$6,832
15	1200	460	284T	326	0156DPKB41A-Y	21	91.7		MXTPDK	\$6,832
15	900	460	286T	395	0158DPKB21A-Y	23	89.5		MXTPDK	\$8,455
20	900	460	324T	492	0208DPKB41A-Y	32.00	89.5		MXTPDK	\$10,005
25	900	460	326T	495	0258DPKB21A-Y	39.00	90.2		MXTPDK	\$11,241

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Drip Proof

Dry Kiln – 135 °C Ambient

> High Efficiency



Toshiba’s definite purpose, open drip proof, high efficiency, Dry Kiln motor series incorporates a new and improved insulation system into the premium open drip proof design. This allows the motor to run in higher ambient temperatures (90°, 115°, and 135°C) and meets the ever-increasing demands of the lumber industry. The Dry Kiln motor series is designed for indoor and outdoor use in even the harshest dry kiln environments. High ambient temperatures, high humidity, and chemicals present no problem to this motor series due to its corrosion-resistance and high structural rigidity. As with other Toshiba designs, reliability and durability are critical factors that differentiate this product from competitors’ offerings.

Product Scope:

Horsepower:	5 to 25 HP
Speed:	1200 or 900 RPM
Voltage:	460 V (575 V Available Upon Request)
Enclosure:	Open Drip Proof
Frame Size:	254T through 365T
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class H, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1200	460	254T	180	0056DPKB41A-Z	6.8	89.5		MXTDPK	\$4,783
5	900	460	256T	232	0058DPKB21A-Z	7.8	87.5		MXTDPK	\$5,171
7.5	1200	460	256T	230	Y756DPKB41A-Z	10.5	90.2		MXTDPK	\$5,171
7.5	900	460	284T	303	Y758DPKB21A-Z	11.5	88.5		MXTDPK	\$6,102
10	1200	460	284T	261	0106DPKB41A-Z	13.5	91.7		MXTDPK	\$6,102
10	900	460	286T	343	0108DPKB21A-Z	15.5	88.5		MXTDPK	\$7,684
15	1200	460	286T	326	0156DPKB41A-Z	21	91.7		MXTDPK	\$7,857
15	900	460	324T	395	0158DPKB21A-Z	23	89.5		MXTDPK	\$9,723
20	900	460	364T	492	0208DPKB41A-Z	30	88.5		MXTDPK	\$11,505
25	900	460	365T	495	0258DPKB21A-Z	36	90.2		MXTDPK	\$12,924

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Definite Purpose Series

Totally Enclosed Fan Cooled

Quarry Duty Motors

Toshiba's definite purpose, totally enclosed fan cooled, high efficiency, Quarry Duty motor series has a proven track record of exceeding the extreme demands of the cement and aggregate industries. Our Quarry Duty motors utilize a totally enclosed fan cooled design and provide exceptional high torque, oversized superior-grade roller bearings, and shafts built with high strength 4142 steel. The roller bearings on the motor's drive-end allow for heavy radial loads normally associated with belt-driven applications. The Quarry Duty motor series exceeds NEMA MG1 Part 31 requirements and is designed for horizontal or vertical, indoor and outdoor applications.

Standard Features:

- Totally Enclosed Fan Cooled
- High Efficiency
- High Torque Design
- 460 or 575 V
- Three-Phase
- 60 Hz
- Class F Insulation
- 1.15 Service Factor
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- Cast Iron Frames
- Stamped Steel Fan Cover
- Cast Iron Brackets
- Open Regreasable Roller Bearings
- Polyurea Base Grease
- Cast Iron Conduit Box
- V-Ring Shaft Seal
- 4142 High Strength Shaft Steel
- Grade-8 Hardware
- Bearing Lock Nuts for Vertical Mounting

Applications:

- Ball & Rolling Mills
- Centrifuges
- Chippers
- Cone Crushers
- Conveyors
- Debarkers
- Grinding Mills
- Hammer Mills
- Jaw Crushers



Totally Enclosed Fan Cooled

Quarry Duty

> High Efficiency



Toshiba’s definite purpose, totally enclosed fan cooled, high efficiency, Quarry Duty motor series has a proven track record of exceeding the extreme demands of the cement and aggregate industries. Our Quarry Duty motors utilize a totally enclosed fan cooled design and provide exceptional high torque, oversized superior-grade roller bearings, and shafts built with high strength 4142 steel. The roller bearings on the motor’s drive-end allow for heavy radial loads normally associated with belt-driven applications. The Quarry Duty motor series is designed for horizontal or vertical, indoor and outdoor applications.

Product Scope:

Horsepower:	125 to 600 HP
Speed:	1800, 1200, or 900 RPM
Volt:	460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	505UZ through 5810UZ
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
125	900	460	505UZ	2629	C1258FLF4BMQ	168.0	93.0	2	MFCQ	\$20,402
125	900	575	505UZ	2629	C1258FLF4OMQ	135.0	93.0	2	MFCQ	\$20,402
150	900	460	505UZ	2937	A1508FLF4BMQ	201.0	93.6	2, 6	MFCQ	\$31,341
150	900	575	505UZ	2937	A1508FLF4OMQ	161.0	93.6	2, 6	MFCQ	\$31,341
200	1200	460	505UZ	3030	C2006FLF4BMQ	236.0	93.6	2	MFCQ	\$22,330
200	1200	575	505UZ	3030	C2006FLF4OMQ	189.0	93.6	2	MFCQ	\$22,330
200	900	460	N587UZQ	3840	C2008FLF4BMQ	262.0	94.5	2	MFCQ	\$38,901
200	900	575	N587UZQ	3840	C2008FLF4OMQ	210.0	94.5	2	MFCQ	\$38,901
250	1800	460	505UZ	2765	A2504FLF4BMQ	288.0	94.1	2, 6	MFCQ	\$26,879
250	1800	575	505UZ	2765	A2504FLF4OMQ	231.0	94.1	2, 6	MFCQ	\$26,879
250	1200	460	N587UZQ	3744	A2506FLF4BMQ	296.0	94.5	2, 6	MFCQ	\$34,461
250	1200	575	N587UZQ	3744	A2506FLF4OMQ	237.0	94.5	2, 6	MFCQ	\$34,461
250	900	460	N587UZQ	4160	A2508FLF4BMQ01	321.0	95.0	2, 6	MFCQ	\$43,125
250	900	575	N587UZQ	4160	A2508FLF4OMQ	260.0	95.0	2, 6	MFCQ	\$43,125
300	1800	460	N587UZQ	3781	A3004FLF4BMQ	350.0	94.1	2, 6	MFCQ	\$32,142
300	1800	575	N587UZQ	3781	A3004FLF4OMQ	280.0	94.1	2, 6	MFCQ	\$32,142
300	1200	460	N587UZQ	3967	A3006FLF4BMQ	354.0	94.5	2, 6	MFCQ	\$39,564
300	1200	575	N587UZQ	3967	A3006FLF4OMQ	284.0	94.3	2, 6	MFCQ	\$39,564
300	900	460	5810UZ	6000	F3008FLF4BMQ	443.0	95.0	2	MFCQ	\$53,174
300	900	575	5810UZ	6000	F3008FLF4OMQ	354.0	95.0	2	MFCQ	\$53,174
350	1800	460	N587UZQ	3909	A3504FLF4BMQ	408.0	94.1	2, 6	MFCQ	\$34,697
350	1800	575	N587UZQ	3909	A3504FLF4OMQ	327.0	94.1	2, 6	MFCQ	\$34,697
350	1200	460	5010UZ	4740	A3506FLF4BMQ	451.0	94.5	2, 6	MFCQ	\$42,565
350	1200	575	5010UZ	4740	A3506FLF4OMQ	361.0	94.5	2, 6	MFCQ	\$42,565
350	900	460	5810UZ	6083	F3508FLF4BMQ	488.0	93.6	2	MFCQ	\$58,145
350	900	575	5810UZ	6083	F3508FLF4OMQ	390.0	93.6	2	MFCQ	\$58,145

Totally Enclosed Fan Cooled

Quarry Duty

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	1800	460	N587UZQ	3909	A4004FLF4BMQ	470.0	94.5	2, 6	MFCQ	\$40,595
400	1800	575	N587UZQ	3909	A4004FLF4OMQ	376.0	94.5	2, 6	MFCQ	\$40,595
400	1200	460	5010UZ	4905	F4006FLF4BMQ	485.0	95.4	2	MFCQ	\$49,240
400	1200	575	5010UZ	4905	F4006FLF4OMQ	388.0	95.4	2	MFCQ	\$49,240
400	900	460	5810UZ	6000	F4008FLF4BMQ	560.0	95.4	2	MFCQ	\$68,259
400	900	575	5810UZ	6000	F4008FLF4OMQ	450.0	95.4	2	MFCQ	\$68,259
450	1800	460	5010UZ	4870	A4504FLF4BMQ	509.0	95.4	2, 6	MFCQ	\$47,732
450	1800	575	5010UZ	4870	A4504FLF4OMQ	408.0	95.4	2, 6	MFCQ	\$47,732
450	1200	460	5810UZ	5700	F4506FLF4BMQ	589.0	95.4	2	MFCQ	\$56,247
450	1200	575	5810UZ	5700	F4506FLF4OMQ	475.0	95.4	2	MFCQ	\$56,247
450	900	460	5810UZ	6083	F4508FLF4BMQ	617.0	95.4	2	MFCQ	\$73,289
450	900	575	5810UZ	6083	F4508FLF4OMQ	500.0	95.4	2	MFCQ	\$73,289
500	1800	460	5010UZ	4675	A5004FLF4BMQ	586.0	94.1	2, 6	MFCQ	\$50,907
500	1800	575	5010UZ	4675	A5004FLF4OMQ	469.0	94.1	2, 6	MFCQ	\$50,907
500	1200	460	5810UZ	6083	F5006FLF4BMQ	645.0	95.4	2	MFCQ	\$71,163
500	1200	575	5810UZ	6083	F5006FLF4OMQ	516.0	95.4	2	MFCQ	\$71,163
600	1800	460	5810UZ	7700	F6004FLF4BMQ	682.0	95.8	2	MFCQ	\$56,930
600	1800	575	5810UZ	7700	F6004FLF4OMQ	547.0	96.2	2	MFCQ	\$56,930
600	1200	460	5810UZ	6083	F6006FLF4BMQ	776.0	95.4	2	MFCQ	\$85,397
600	1200	575	5810UZ	6083	F6006FLF4OMQ	612.0	95.4	2	MFCQ	\$85,397

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Definite Purpose Series

Totally Enclosed

Vector Ready Motors

Toshiba's definite purpose, premium efficiency, Vector Ready motor series is designed for the extreme operational requirements of today's variable speed applications. This product line was built using the cornerstone of the Toshiba motor product offering, the EQPIII, as a base. It is built to survive in the most demanding environments requiring tight vector control such as material handling, conveyor, and machine tool as well as many other process-oriented applications. The Vector Ready motor series is specifically designed for indoor and outdoor inverter operation and is not intended for conventional across-the-line operation. Available in TEFC, TEBC, and TENV designs, this product exceeds the requirements of NEMA MG1 Part 31 Definite Purpose (inverter duty).

Standard Features:

- Totally Enclosed Non-Ventilated, Totally Enclosed Fan Cooled, or Totally Enclosed Blower Cooled
- Cast Iron Frame
- Premium Efficiency
- Class F Insulation
- Three-Phase
- 60 Hz
- 1.0 Service Factor
- NEMA Design A
- Exceeds Insulation Requirements of NEMA MG1 Part 31 Definite Purpose (Inverter Duty)
- 143T through 256T Frames TEFC or TENV
- 284T through N449T Frames TEFC or TEBC
- Double Shaft Extensions for Encoder Mounting
 - 5/8" for 143T through 256T Frames
 - 1" for 284T through N449T Frames
- Double C-Face TENV 143T through 256T Frames
- Normally-Closed Thermostats (155°C)
- C-Face Footed Available

- Constant HP
 - 60 to 120 Hz (143T through 256T Frames)
 - 60 to 90 Hz (284T through N449T Frames)
- Constant Torque 2000:1 for TEBC, TEFC, & TENV (Vector Control Mode)
- Constant Torque 20:1 for TEFC & TENV (V/f Mode Only)
- Equivalent Circuit Data on Nameplate
- Rotor Inertia (Wk^2) on Nameplate
- Large Variety of Encoder Options

Applications:

- Material Handling
- Metal Processing
- Plastic Extrusion
- Textile Processing
- Test Stands
- Winders & Slitters
- Presses
- Pumps



Totally Enclosed

Vector Ready

> Premium Efficiency



3

THREE YEAR WARRANTY

Toshiba’s definite purpose, totally enclosed fan cooled, premium efficiency, Vector Ready motor series is designed for the extreme operational requirements of today’s variable speed applications. This product line was built using the cornerstone of the Toshiba motor product offering, the EQPIII, as a base. It is built to survive in the most demanding environments requiring tight vector control such as material handling, conveyor, and machine tool as well as many other process-oriented applications. The Vector Ready motor series is specifically designed for indoor and outdoor inverter operation and is not intended for conventional across-the-line operation. This product exceeds the requirements of NEMA MG1 Part 31 Definite Purpose (inverter duty).

Product Scope:

Horsepower:	1 to 350 HP
Speed:	1800 or 1200 RPM
Voltage:	460 V (575 V Available Upon Request)
Enclosure:	Totally Enclosed Non-Ventilated, Totally Enclosed Fan Cooled, & Totally Enclosed Blower Cooled
Frame Size:	143TC through N449T
Construction:	Cast Iron
Vibration	Typically 0.10 Inches/Second or Less
Insulation:	Class F, Exceeds NEMA MG1 Part 31 Definite Purpose (Inverter Duty); Class H with Class F Leads

HP	Speed (RPM)	Volts	Enclosure	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1	1800	460	TENV	143TC	58	0014FNFB32A	1.5	84.0	3, 6	MXTVRR	\$1,548
1.5	1800	460	TENV	143TC	61	Y154FNFB32A	2	85.5	3, 6	MXTVRR	1,555
2	1800	460	TENV	145TC	62	0024FNFB32A	2.7	88.5	3, 6	MXTVRR	\$1,676
3	1800	460	TENV	182TC	94	0034FNFB32A	4.1	86.5	3, 6	MXTVRR	\$2,106
5	1800	460	TENV	184TC	106	0054FNFB32A	6.5	87.5	3, 6	MXTVRR	\$2,239
7.5	1800	460	TEFC	213TC	179	Y754FCFB32A	9.5	90.2	3, 6	MXTVRR	2,622
7.5	1800	460	TENV	213TC	179	Y754FNFB32A	9.5	89.5	3, 6	MXTVRR	3,019
10	1800	460	TEFC	215TC	201	0104FCFB32A	12.5	90.2	3, 6	MXTVRR	\$3,132
10	1800	460	TENV	215TC	201	0104FNFB32A	12.5	90.2	3, 6	MXTVRR	\$3,581
15	1800	460	TEFC	254TC	310	0154FCFB32A	18	92.4	3, 6	MXTVRR	\$3,772
15	1800	460	TENV	254TC	310	0154FNFB32A	18	91.0	3, 6	MXTVRR	\$4,288
15	1200	460	TEBC	284TC	380	0156BCFB32A	19.5	91.7	3, 6	MXTVRR	\$7,807
20	1800	460	TEFC	256TC	340	0204FCFB32A	24	92.4	3, 6	MXTVRR	\$4,174
20	1200	460	TEBC	286TC	490	0206BCFB32A	25	91.0	3, 6	MXTVRR	\$10,871
25	1800	460	TEBC	284TC	443	0254BCFB32A	30	93.6	3, 6	MXTVRR	\$7,286
25	1800	460	TEFC	284T	443	0254FCFB31A	30	93.6	3, 6	MXTVRR	\$5,213
25	1200	460	TEBC	324TC	576	0256BCFB32A	31.5	93.0	3, 6	MXTVRR	\$12,707
30	1800	460	TEBC	286TC	475	0304BCFB32A	33.5	92.4	3, 6	MXTVRR	\$8,032
30	1800	460	TEFC	286T	475	0304FCFB31A	35.5	92.4	3, 6	MXTVRR	\$5,961
30	1200	460	TEBC	326TC	700	0306BCFB32A	37.5	93.0	3, 6	MXTVRR	\$13,978
40	1800	460	TEBC	324TC	569	0404BCFB32A	47	94.1	3, 6	MXTVRR	\$9,563
40	1800	460	TEFC	324T	569	0404FCFB31A	47	94.1	3, 6	MXTVRR	\$7,668
40	1200	460	TEBC	364TC	714	0406BCFB32A	48	93.6	3, 6	MXTVRR	\$16,863

Totally Enclosed Vector Ready > Premium Efficiency



HP	Speed (RPM)	Volts	Enclosure	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1800	460	TEBC	326TC	634	0504BCFB32A	59.5	93.6	3, 6	MXTVRR	\$10,962
50	1800	460	TEFC	326T	634	0504FCFB31A	60	93.6	3, 6	MXTVRR	\$9,488
50	1200	460	TEBC	365TC	771	0506BCFB32A	61	93.0	3, 6	MXTVRR	\$20,215
60	1800	460	TEBC	364TC	781	0604BCFB32A	71	94.5	3, 6	MXTVRR	\$13,419
60	1800	460	TEFC	364T	781	0604FCFB31A	71	94.5	3, 6	MXTVRR	\$12,228
60	1200	460	TEBC	404T	1241	0606BCFB31A	73	95.4	3, 6	MXTVRR	\$22,424
75	1800	460	TEBC	365TC	839	0754BCFB32A	89	95.0	3, 6	MXTVRR	\$16,043
75	1800	460	TEFC	365T	839	0754FCFB31A	89	95.0	3, 6	MXTVRR	\$13,853
75	1200	460	TEBC	405T	1319	0756BCFB31A	91	95.4	3, 6	MXTVRR	\$27,322
100	1800	460	TEBC	405T	1353	1004BCFB31A	117	95.8	3, 6	MXTVRR	\$22,394
100	1800	460	TEFC	405T	1353	1004FCFB31A	118	95.4	3, 6	MXTVRR	\$18,743
100	1200	460	TEBC	444T	1786	1006BCFB31A	123	95.8	2, 3, 6	MXTVRR	\$31,066
125	1800	460	TEBC	444T	1837	1254BCFB31A	146	95.8	2, 3, 6	MXTVRR	\$28,243
125	1800	460	TEFC	444T	1837	1254FCFB31A	146	95.8	2, 3, 6	MXTVRR	\$24,376
150	1800	460	TEBC	445T	2040	1504BCFB31A	175	96.2	2, 3, 6	MXTVRR	\$32,054
150	1800	460	TEFC	445T	2040	1504FCFB31A	176	95.8	2, 3, 6	MXTVRR	\$28,187
200	1800	460	TEBC	447T	2182	2004BCFB31A	232	96.2	2, 3, 6	MXTVRR	\$37,953
200	1800	460	TEFC	447T	2182	2004FCFB31A	233	96.2	2, 3, 6	MXTVRR	\$34,086
250	1800	460	TEBC	N449T	3130	2504BCFB31A	271	96.5	2, 3, 6	MXTVRR	\$47,613
250	1800	460	TEFC	N449T	3130	2504FCFB31A	274	96.2	2, 3, 6	MXTVRR	\$42,529
300	1800	460	TEBC	N449T	4000	3004BCFB31A	325	96.5	2, 3, 6	MXTVRR	\$53,551
300	1800	460	TEFC	N449T	4000	3004FCFB31A	328	96.2	2, 3, 6	MXTVRR	\$48,466
350	1800	460	TEBC	N449T	4000	3504BCFB31A	380	96.5	2, 3, 6	MXTVRR	\$58,634

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

The VR product line is specifically designed for drive-fed applications and is not meant to be used for across-the-line applications. These motors are NEMA Design A.

The motors above offer constant torque from 0 RPM to base speed on vector drives.

On volts per hertz drives, TEFC and TENV motors are limited to 20:1 constant torque.

Constant HP operation is available up to two times the base speed on 140 through 250 frame motors, and up to one and a half times the base speed on 280 through 440 frame motors.

Spare Parts	
MV Motor Modifications	
MV General Purpose	
LV Motor Modifications	
Vertical	
Washdown	
Brake	
Explosion Proof	
Definite Purpose	
EQP Global	
TEFC General Purpose	
ODP General Purpose	

Explosion Proof Motors

Totally Enclosed

Toshiba's general purpose, totally enclosed explosion proof, premium efficiency motors are built to meet the UL and CSA Listed Hazardous Locations requirements. This product line is designed for use in Class I, Division 1, Group D, and Class II, Division 1, Groups E, F, and G, and carries a temperature code rating of T3B (165°C). It is ideal for indoor and outdoor use and offers the performance and reliability the motor industry has come to expect from Toshiba, which makes the Explosion Proof motor the clear choice for your toughest environments and applications.

Standard Features:

- Totally Enclosed Fan Cooled Explosion Proof
- Premium Efficiency
- 230/460, 460 or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- NEMA Design B
- Class I, Division 1, Group D, & Class II, Division 1, Groups E, F, & G
- T3B Temperature Code 165°C
- Class F Insulation
- Cast Iron Conduit Box
- Cast Iron Fan Cover
- Non-Sparking Brass Shaft Slingers
- IP55 Protection
- Normally-Closed Thermostats
- Ball Bearing 143T through 405T Frames
- Roller Bearing on All 444T Frames & Larger, 4- & 6-Pole
- UL Listed File No. E312568
- CSA Certified File No. 046728

Applications:

- Petrochemical & Gas
- Grain & Feed Mills
- Pharmaceuticals
- Pumps
- Fans
- Compressors
- Conveyors
- Material Handling
- UL & CSA Listed Hazardous Locations



Totally Enclosed

Explosion Proof

> Premium Efficiency



The general purpose, totally enclosed explosion proof, premium efficiency motor series is built to meet the UL and CSA Listed Hazardous Locations requirements. This product line is designed for use in Class I, Division 1, Group D, and Class II, Division 1, Groups E, F, and G, and carries a temperature code rating of T3B (165°C). It is ideal for indoor and outdoor use and offers the performance and reliability the motor industry has come to expect from Toshiba, which makes the Explosion Proof motor the clear choice for your toughest environments and applications.

Product Scope:

Horsepower:	¾ to 350 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Totally Enclosed Explosion Proof
Frame Size:	143T through N449T
Construction:	Cast Iron
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.75	1200	230/460	143T	75	3/46XPEA41A	2.8/1.4	80.0		MXTXPP	\$1,747
0.75	1200	575	143T	75	3/46XPEC41A	1.1	80.0		MXTXPP	\$1,747
0.75	900	230/460	145T	75	B3/48YLF2ASH	4.2/2.1	72.0		MXTXPP	\$2,105
0.75	900	575	145T	75	B3/48YLF2OSH	1.5	74.0		MXTXPP	\$2,105
1	1800	230/460	143T	74	0014XPEA41A	3.4/1.7	85.5		MXTXPP	\$1,608
1	1800	575	143T	74	0014XPEC41A	1.3	85.5		MXTXPP	\$1,608
1	1200	230/460	145T	76	0016XPEA41A	3.6/1.8	82.5		MXTXPP	\$1,835
1	1200	575	145T	76	0016XPEC41A	1.5	82.5		MXTXPP	\$1,835
1	900	230/460	182T	114	B0018YLF2ASH	4.4/2.2	81.5		MXTXPP	\$2,211
1	900	575	182T	114	B0018YLF2OSH	1.7	81.5		MXTXPP	\$2,211
1.5	3600	230/460	143T	77	Y152XPEA41A	4/2	84.0		MXTXPP	\$1,730
1.5	3600	575	143T	77	Y152XPEC41A	1.6	84.0		MXTXPP	\$1,730
1.5	1800	230/460	145T	77	Y154XPEA41A	4.8/2.4	86.5		MXTXPP	\$1,710
1.5	1800	575	145T	77	Y154XPEC41A	1.9	86.5		MXTXPP	\$1,710
1.5	1200	230/460	182T	114	Y156XPEA41A	5/2.5	86.5		MXTXPP	\$1,918
1.5	1200	575	182T	114	Y156XPEC41A	2	86.5		MXTXPP	\$1,918
1.5	900	230/460	184T	122	BY158YLF2ASH	6.2/3.1	84.0		MXTXPP	\$2,416
1.5	900	575	184T	122	BY158YLF2OSH	2.5	84.0		MXTXPP	\$2,416
2	3600	230/460	145T	77	0022XPEA41A	5.2/2.6	86.5		MXTXPP	\$1,821
2	3600	575	145T	77	0022XPEC41A	2.1	86.5		MXTXPP	\$1,821
2	1800	230/460	145T	76	0024XPEA41A	6/3	86.5		MXTXPP	\$1,811
2	1800	575	145T	76	0024XPEC41A	2.4	86.5		MXTXPP	\$1,811
2	1200	230/460	184T	114	0026XPEA41A	6.8/3.4	88.5		MXTXPP	\$2,169
2	1200	575	184T	114	0026XPEC41A	2.7	88.5		MXTXPP	\$2,169
2	900	230/460	213T	198	B0028YLF2ASH	6.4/3.2	85.5		MXTXPP	\$3,302
2	900	575	213T	198	B0028YLF2OSH	2.5	85.5		MXTXPP	\$3,302
3	3600	230/460	182T	117	0032XPEA41A	7.4/3.7	88.5		MXTXPP	\$2,078

Totally Enclosed
Explosion Proof
 > Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	3600	575	182T	117	0032XPEC41A	3	88.5		MXTXPP	\$2,078
3	1800	230/460	182T	118	0034XPEA41A	8/4	89.5		MXTXPP	\$2,064
3	1800	575	182T	118	0034XPEC41A	3.2	89.5		MXTXPP	\$2,064
3	1200	230/460	213T	198	0036XPEA41A	8.8/4.4	89.5		MXTXPP	\$2,887
3	1200	575	213T	198	0036XPEC41A	3.5	89.5		MXTXPP	\$2,887
3	900	230/460	215T	216	B0038YLF2AMH	9.2/4.6	86.5		MXTXPP	\$3,852
3	900	575	215T	216	B0038YLF2OMH	3.7	86.5		MXTXPP	\$3,852
5	3600	230/460	184T	124	0052XPEA41A	11.6/5.8	88.5		MXTXPP	\$2,409
5	3600	575	184T	124	0052XPEC41A	4.6	88.5		MXTXPP	\$2,409
5	1800	230/460	184T	126	0054XPEA41A	13/6.5	89.5		MXTXPP	\$2,268
5	1800	575	184T	126	0054XPEC41A	5.2	89.5		MXTXPP	\$2,268
5	1200	230/460	215T	216	0056XPEA41A	13.8/6.9	89.5		MXTXPP	\$3,560
5	1200	575	215T	216	0056XPEC41A	5.5	89.5		MXTXPP	\$3,560
5	900	230/460	254T	330	B0058YLF2USH	16.0/8.0	90.2		MXTXPP	\$4,717
5	900	575	254T	330	B0058YLF2OSH	6.4	90.2		MXTXPP	\$4,717
7.5	3600	230/460	213T	237	Y752XPEA41A	18/9	90.2		MXTXPP	\$2,986
7.5	3600	575	213T	237	Y752XPEC41A	7.2	90.2		MXTXPP	\$2,986
7.5	1800	230/460	213T	221	Y754XPEA41A	19.6/9.8	91.7		MXTXPP	\$2,844
7.5	1800	575	213T	221	Y754XPEC41A	7.8	91.7		MXTXPP	\$2,844
7.5	1200	230/460	254T	373	Y756XPEA41A	20.4/10.2	91.7		MXTXPP	\$4,299
7.5	1200	575	254T	373	Y756XPEC41A	8.2	91.7		MXTXPP	\$4,299
7.5	900	230/460	256T	350	BY758YLF2USH	23.0/11.5	90.2		MXTXPP	\$5,199
7.5	900	575	256T	350	BY758YLF2OMH	9	90.2		MXTXPP	\$5,199
10	3600	230/460	215T	237	0102XPEA41A	23.6/11.8	90.2		MXTXPP	\$3,224
10	3600	575	215T	237	0102XPEC41A	9.4	90.2		MXTXPP	\$3,224
10	1800	230/460	215T	221	0104XPEA41A	26/13	91.7		MXTXPP	\$3,311
10	1800	575	215T	221	0104XPEC41A	10.4	91.7		MXTXPP	\$3,311
10	1200	230/460	256T	314	0106XPEA41A	26/13	92.4		MXTXPP	\$5,181
10	1200	575	256T	314	0106XPEC41A	10.8	92.4		MXTXPP	\$5,181
10	900	230/460	284T	475	B0108YLF3AMH	30.0/15.0	91.0		MXTXPP	\$6,561
10	900	575	284T	475	B0108YLF3OMH	11.8	91.0		MXTXPP	\$6,561
15	3600	230/460	254T	373	0152XPEA41A	36/18	91.0		MXTXPP	\$4,413
15	3600	575	254T	373	0152XPEC41A	14.4	91.0		MXTXPP	\$4,413
15	1800	230/460	254T	373	0154XPEA41A	38/19	92.4		MXTXPP	\$4,242
15	1800	575	254T	373	0154XPEC41A	15.2	92.4		MXTXPP	\$4,242
15	1200	230/460	284T	579	0156XPEA41A	39/19.5	91.7		MXTXPP	\$7,558
15	1200	575	284T	579	0156XPEC41A	15.8	91.7		MXTXPP	\$7,558
15	900	230/460	286T	579	B0158YLF2USH	50/25	90.2		MXTXPP	\$8,632
15	900	575	286T	579	B0158YLF2OSH	19	90.2		MXTXPP	\$8,632
20	3600	230/460	256T	386	0202XPEA41A	48/24	92.4		MXTXPP	\$5,289
20	3600	575	256T	386	0202XPEC41A	19.2	92.4		MXTXPP	\$5,289
20	1800	230/460	256T	373	0204XPEA41A	50/25	93.0		MXTXPP	\$5,081
20	1800	575	256T	373	0204XPEC41A	20	93.0		MXTXPP	\$5,081
20	1200	230/460	286T	540	0206XPEA41A	50/25	91.7		MXTXPP	\$8,396
20	1200	575	286T	540	0206XPEC41A	20	91.7		MXTXPP	\$8,396
20	900	230/460	324T	567	B0208YLF3AMH	62/31	91.0		MXTXPP	\$9,757
20	900	575	324T	567	B0208YLF3OMH	24	91.0		MXTXPP	\$9,757

Totally Enclosed

Explosion Proof

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
25	3600	230/460	284TS	560	0252XPEA41B	58/29	92.4		MXTXPP	\$6,886
25	3600	575	284TS	560	0252XPEC41B	23	92.4		MXTXPP	\$6,886
25	1800	230/460	284T	584	0254XPEA41A	62/31	93.6		MXTXPP	\$6,201
25	1800	575	284T	584	0254XPEC41A	24	93.6		MXTXPP	\$6,201
25	1200	230/460	324T	689	0256XPEA41A	62/31	93.0		MXTXPP	\$10,179
25	1200	575	324T	689	0256XPEC41A	25	93.0		MXTXPP	\$10,179
25	900	230/460	326T	688	B0258YLF1AMH	70/35	91.7		MXTXPP	\$12,367
25	900	575	326T	688	B0258YLF1OMH	28	91.7		MXTXPP	\$12,367
30	3600	230/460	286TS	560	0302XPEA41B	70/35	91.7		MXTXPP	\$7,424
30	3600	575	286TS	560	0302XPEC41B	28	91.7		MXTXPP	\$7,424
30	1800	230/460	286T	550	0304XPEA41A	72/36	93.6		MXTXPP	\$7,193
30	1800	575	286T	550	0304XPEC41A	29	93.6		MXTXPP	\$7,193
30	1200	230/460	326T	688	0306XPEA41A	74/37	93.0		MXTXPP	\$11,916
30	1200	575	326T	688	0306XPEC41A	30	93.0		MXTXPP	\$11,916
30	900	230/460	364T	714	B0308YLF3AMH	84/42	92.4		MXTXPP	\$14,718
30	900	575	364T	714	B0308YLF3OMH	33	92.4		MXTXPP	\$14,718
40	3600	230/460	324TS	754	0402XPEA41B	94/47	93.0		MXTXPP	\$9,991
40	3600	575	324TS	754	0402XPEC41B	38	93.0		MXTXPP	\$9,991
40	1800	230/460	324T	735	0404XPEA41A	96/48	94.1		MXTXPP	\$9,572
40	1800	575	324T	735	0404XPEC41A	38	94.1		MXTXPP	\$9,572
40	1200	230/460	364T	856	0406XPEA41A	96/48	94.1		MXTXPP	\$15,474
40	1200	575	364T	856	0406XPEC41A	38	94.1		MXTXPP	\$15,474
40	900	230/460	365T	932	B0408YLF3AMH	114/57	91.7		MXTXPP	\$17,679
40	900	575	365T	932	B0408YLF3OMH	46	91.7		MXTXPP	\$17,679
50	3600	230/460	326TS	754	0502XPEA41B	116/58	93.0		MXTXPP	\$12,299
50	3600	575	326TS	754	0502XPEC41B	46	93.0		MXTXPP	\$12,299
50	1800	230/460	326T	735	0504XPEA41A	120/60	94.5		MXTXPP	\$11,656
50	1800	575	326T	735	0504XPEC41A	48	94.5		MXTXPP	\$11,656
50	1200	230/460	365T	932	0506XPEA41A	120/60	94.1		MXTXPP	\$17,577
50	1200	575	365T	932	0506XPEC41A	48	94.1		MXTXPP	\$17,577
50	900	230/460	404T	1200	B0508YLF3ASH	156/78	93.6		MXTXPP	\$21,459
50	900	575	404T	1200	B0508YLF3QSH	62	93.6		MXTXPP	\$21,459
60	3600	230/460	364TS	984	0602XPEA41B	138/69	93.6		MXTXPP	\$17,529
60	3600	575	364TS	984	0602XPEC41B	55	93.6		MXTXPP	\$17,529
60	1800	230/460	364T	961	0604XPEA41A	138/69	95.0		MXTXPP	\$16,939
60	1800	575	364T	961	0604XPEC41A	55	95.0		MXTXPP	\$16,939
60	1200	230/460	404T	1600	B0606YLF3USH	140/70	95.0		MXTXPP	\$22,001
60	1200	575	404T	1600	B0606YLF3QSH	56	95.0		MXTXPP	\$22,001
60	900	230/460	405T	1456	B0608YLF3ASH	186/93	93.0		MXTXPP	\$24,407
60	900	575	405T	1456	B0608YLF3QSH	74	93.0		MXTXPP	\$24,407
75	3600	230/460	365TS	984	0752XPEA41B	172/86	93.6		MXTXPP	\$20,315
75	3600	575	365TS	984	0752XPEC41B	69	93.6		MXTXPP	\$20,315
75	1800	230/460	365T	1001	0754XPEA41A	172/86	95.4		MXTXPP	\$20,839
75	1800	575	365T	1001	0754XPEC41A	69	95.4		MXTXPP	\$20,839
75	1200	230/460	405T	1600	B0756YLF3USH	184/92	95.0		MXTXPP	\$24,369
75	1200	575	405T	1600	B0756YLF3QSH	73	95.0		MXTXPP	\$24,369
75	900	230/460	444T	2100	B0758YLF4ASH	222/111	94.1	2	MXTXPP	\$29,453

Totally Enclosed Explosion Proof > Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
75	900	575	444T	2100	B0758YLF4OSH	99	94.5	2	MXTXPP	\$29,453
100	3600	230/460	405TS	1525	B1002YLG3USH	228/114	95.0		MXTXPP	\$27,483
100	3600	575	405TS	1525	B1002YLG3OSH	91	95.0		MXTXPP	\$27,483
100	1800	230/460	405T	1539	B1004YLF3USH	238/119	95.4		MXTXPP	\$25,623
100	1800	575	405T	1539	B1004YLF3OSH	95	95.4		MXTXPP	\$25,623
100	1200	230/460	444T	2100	B1006YLF4USH	244/122	95.4	2	MXTXPP	\$33,871
100	1200	575	444T	2100	B1006YLF4OSH	98	95.4	2	MXTXPP	\$33,871
125	3600	230/460	444TS	1838	B1251YLG3USH	286/143	95.0	5	MXTXPP	\$34,442
125	3600	575	444TS	1838	B1253YLG3OSH	116	95.0	4	MXTXPP	\$34,442
125	3600	230/460	444TS	1838	B1253YLG3USH	286/143	95.0	4	MXTXPP	\$34,442
125	3600	575	444TS	1838	B1251YLG3OSH	116	95.0	5	MXTXPP	\$34,442
125	1800	230/460	444T	2100	B1254YLF4USH	290/145	95.8	2	MXTXPP	\$30,048
125	1800	575	444T	2100	B1254YLF4OSH	116	95.8	2	MXTXPP	\$30,048
125	1200	230/460	445T	2155	B1256YLF4USH	122	94.5	2	MXTXPP	\$36,392
125	1200	575	445T	2155	B1256YLF4OSH	314/157	94.5	2	MXTXPP	\$36,392
150	3600	230/460	445TS	2115	B1501YLG3USH	350/175	95.4	5	MXTXPP	\$40,313
150	3600	575	445TS	2115	B1501YLG3OSH	140	95.4	5	MXTXPP	\$40,313
150	3600	230/460	445TS	2115	B1503YLG3USH	350/175	95.4	4	MXTXPP	\$40,313
150	3600	575	445TS	2115	B1503YLG3OSH	140	95.4	4	MXTXPP	\$40,313
150	1800	230/460	445T	2164	B1504YLF4USH	354/177	95.8	2	MXTXPP	\$35,522
150	1800	575	445T	2164	B1504YLF4OMH	142	95.8	2	MXTXPP	\$35,522
200	3600	460	447TS	2445	B2001YLG3BSH	218	95.8	5	MXTXPP	\$49,194
200	3600	575	447TS	2445	B2001YLG3OSH	168	95.8	5	MXTXPP	\$49,194
200	3600	460	447TS	2445	B2003YLG3BSH	218	95.8	4	MXTXPP	\$49,194
200	3600	575	447TS	2445	B2003YLG3OSH	168	95.8	4	MXTXPP	\$49,194
200	1800	460	447T	2466	B2004YLF4BSH	233	96.2	2	MXTXPP	\$41,984
200	1800	575	447T	2466	B2004YLF4OSH	186	96.2	2	MXTXPP	\$41,984
200	1200	460	N449T	4200	2006XPEB41A	245	95.8	8	MXTXPP	\$45,372
200	1200	575	N449T	4200	2006XPEC41A	198	95.8	8	MXTXPP	\$45,372
200	1200	460	N449T	4200	2006XPEB41A-R	245	95.8	2	MXTXPP	\$46,572
200	1200	575	N449T	4200	2006XPEC41A-R	198	95.8	2	MXTXPP	\$46,572
250	3600	230/460	N449TS	4200	2503XPEB41B	275	95.8		MXTXPP	\$55,986
250	3600	575	N449TS	4200	2503XPEC41B	219	95.8		MXTXPP	\$55,986
250	1800	460	N449T	4200	2504XPEB41A	275	96.2	8	MXTXPP	\$48,625
250	1800	575	N449T	4200	2504XPEC41A	220	96.2	8	MXTXPP	\$48,625
250	1800	460	N449T	4200	2504XPEB41A-R	275	96.2	2	MXTXPP	\$49,875
250	1800	575	N449T	4200	2504XPEC41A-R	220	96.2	2	MXTXPP	\$49,875
250	1200	460	N449TS	4200	2506XPEB41B	309	95.8		MXTXPP	\$51,679
250	1200	575	N449TS	4200	2506XPEC41B	243	95.8		MXTXPP	\$51,679
250	1200	460	N449T	4200	2506XPEB41A	309	95.8	8	MXTXPP	\$51,679
250	1200	575	N449T	4200	2506XPEC41A	243	95.8	8	MXTXPP	\$51,679
250	1200	460	N449T	4200	2506XPEB41A-R	309	95.8	2	MXTXPP	\$52,929
250	1200	575	N449T	4200	2506XPEC41A-R	243	95.8	2	MXTXPP	\$52,929
300	3600	460	N449TS	4200	3003XPEB41B	327	95.8	4	MXTXPP	\$62,015
300	3600	575	N449TS	4200	3003XPEC41B	261	95.8	4	MXTXPP	\$62,015
300	1200	460	N449T	4200	3006XPEB41A	375	95.8	8	MXTXPP	\$55,518
300	1200	575	N449T	4200	3006XPEC41A	297	95.8	8	MXTXPP	\$55,518

Totally Enclosed

Explosion Proof

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
300	1200	460	N449T	4200	3006XPEB41A-R	375	95.8	2	MXTXPP	\$56,768
300	1200	575	N449T	4200	3006XPEC41A-R	297	95.8	2	MXTXPP	\$56,768
300	1800	460	N449T	4200	3004XPEB41A	331	96.1	8	MXTXPP	\$51,807
300	1800	575	N449T	4200	3004XPEC41A	265	96.1	8	MXTXPP	\$51,807
300	1800	460	N449T	4200	3004XPEB41A-R	331	96.1	2	MXTXPP	\$53,057
300	1800	575	N449T	4200	3004XPEC41A-R	265	96.1	2	MXTXPP	\$53,057
350	3600	460	N449T	4200	3503XPEB41B	387	95.8	4	MXTXPP	\$64,378
350	3600	575	N449T	4200	3503XPEC41B	312	95.9	4	MXTXPP	\$64,378
350	1800	460	N449T	4200	3504XPEB41A	388	96.2	8	MXTXPP	\$54,928
350	1800	575	N449T	4200	3504XPEC41A	310	96.2	8	MXTXPP	\$54,928
350	1800	460	N449T	4200	3504XPEB41A-R	388	96.2	2	MXTXPP	\$56,178
350	1800	575	N449T	4200	3504XPEC41A-R	310	96.2	2	MXTXPP	\$56,178

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Explosion Proof C-Face Footed

> Premium Efficiency



3 THREE YEAR
WARRANTY

The general purpose, totally enclosed explosion proof, premium efficiency, C-Face Footed motor series is built to meet the UL and CSA Listed Hazardous Locations requirements. This product line is designed for use in Class I, Division 1, Group D, and Class II, Division 1, Groups E, F, and G, and carries a temperature code rating of T3B (165°C). It is ideal for indoor and outdoor use and offers the performance and reliability the motor industry has come to expect from Toshiba, which makes the Explosion Proof C-Face Footed motor the clear choice for your toughest environments and applications.

Product Scope:*

Horsepower:	1 to 75 HP
Speed:	3600 or 1800 RPM
Voltage:	230/460 or 575 V
Enclosure:	Totally Enclosed Explosion Proof
Frame Size:	143TC through 365TC
Construction:	Cast Iron
Vibration:	Typically 0.08 Inches/Second or Less (Unfiltered)
Insulation:	Class F

*Contact Toshiba for additional C-Face capabilities.

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1	1800	230/460	143TC	74	B0014YLT2ASH	2.8/1.4	85.5		MXTXPP	\$1,849
1	1800	575	143TC	74	B0014YLT2OSH	1.1	85.5		MXTXPP	\$1,849
1.5	3600	230/460	143TC	77	BY152YLT2AMH	4.2/2.1	84.0		MXTXPP	\$1,971
1.5	3600	575	143TC	77	BY152YLT2OMH	1.7	84.0		MXTXPP	\$1,971
1.5	1800	230/460	145TC	77	BY154YLT2AMH	4.4/2.2	86.5		MXTXPP	\$1,951
1.5	1800	575	145TC	77	BY154YLT2OSH	1.8	86.5		MXTXPP	\$1,951
2	3600	230/460	145TC	77	B0022YLT2AMH	5.4/2.7	86.5		MXTXPP	\$2,062
2	3600	575	145TC	77	B0022YLT2OMH	2.2	86.5		MXTXPP	\$2,062
2	1800	230/460	145TC	76	B0024YLT2ASH	5.6/2.8	86.5		MXTXPP	\$2,052
2	1800	575	145TC	76	B0024YLT2OSH	2.2	86.5		MXTXPP	\$2,052
3	3600	230/460	182TC	117	B0032YLT2AMH	7.2/3.6	88.5		MXTXPP	\$2,351
3	3600	575	182TC	117	B0032YLT2OMH	2.9	88.5		MXTXPP	\$2,351
3	1800	230/460	182TC	118	B0034YLT2ASH	7.6/3.8	89.5		MXTXPP	\$2,337
3	1800	575	182TC	118	B0034YLT2OSH	3	89.5		MXTXPP	\$2,337
5	3600	230/460	184TC	124	B0052YLT2AMH	11.4/5.7	88.5		MXTXPP	\$2,682
5	3600	575	184TC	124	B0052YLT2OMH	4.6	88.5		MXTXPP	\$2,682
5	1800	230/460	184TC	126	B0054YLT2ASH	12.6/6.3	89.5		MXTXPP	\$2,541
5	1800	575	184TC	126	B0054YLT2OSH	5	89.5		MXTXPP	\$2,541
7.5	3600	230/460	213TC	237	BY752YLT2UMH	18/9	90.2		MXTXPP	\$3,314
7.5	3600	575	213TC	237	BY752YLT2OMH	7.2	90.2		MXTXPP	\$3,314
7.5	1800	230/460	213TC	221	BY754YLT2USH	5.2	91.7		MXTXPP	\$3,172
7.5	1800	575	213TC	221	BY754YLT2OMH	19.6/8.3	91.7		MXTXPP	\$3,172
10	3600	230/460	215TC	237	B0102YLT2UMH	23/11.5	90.2		MXTXPP	\$3,552
10	3600	575	215TC	237	B0102YLT2OMH	9.2	90.2		MXTXPP	\$3,552
10	1800	230/460	215TC	221	B0104YLT2USH	10.4	91.7		MXTXPP	\$3,639
10	1800	575	215TC	221	B0104YLT2OSH	26/13	91.7		MXTXPP	\$3,639
15	3600	230/460	254TC	373	B0152YLT2AMH	34/17	91.0		MXTXPP	\$4,851

Totally Enclosed

Explosion Proof C-Face Footed

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
15	3600	575	254TC	373	B0152YLT2OMH	13.6	91.0		MXTXPP	\$4,851
15	1800	230/460	254TC	373	B0154YLT2USH	37/18.5	92.4		MXTXPP	\$4,680
15	1800	575	254TC	373	B0154YLT2OSH	14.8	92.4		MXTXPP	\$4,680
20	3600	230/460	256TC	386	B0202YLT2USH	44/22	92.4		MXTXPP	\$5,727
20	3600	575	256TC	386	B0202YLT2OSH	17.6	92.4		MXTXPP	\$5,727
20	1800	230/460	256TC	373	B0204YLT2USH	50/25	93.0		MXTXPP	\$5,519
20	1800	575	256TC	373	B0204YLT2OSH	20	93.0		MXTXPP	\$5,519
25	3600	230/460	284TSC	560	B0252YLG3UMH	56/28	92.4		MXTXPP	\$7,652
25	3600	575	284TSC	560	B0252YLG3OMH	22	92.4		MXTXPP	\$7,652
25	1800	230/460	284TC	584	B0254YLT3UMH	24	93.6		MXTXPP	\$6,967
25	1800	575	284TC	584	B0254YLT3OMH	62/31	93.6		MXTXPP	\$6,967
30	1800	230/460	286TC	560	B0304YLT3UMH	29	93.6		MXTXPP	\$7,959
30	1800	575	286TC	560	B0304YLT3OMH	72/36	93.6		MXTXPP	\$7,959
40	1800	230/460	324TC	735	B0404YLT1AMH	96/48	94.1		MXTXPP	\$10,447
40	1800	575	324TC	735	B0404YLT1OMH	38	94.1		MXTXPP	\$10,447
50	1800	230/460	326TC	735	B0504YLT1AMH	120/60	94.5		MXTXPP	\$12,531
50	1800	575	326TC	735	B0504YLT1OMH	48	94.5		MXTXPP	\$12,531
60	1800	230/460	364TC	961	B0604YLT3UMH	140/70	95.0		MXTXPP	\$17,923
60	1800	575	364TC	961	B0604YLT3OMH	56	95.0		MXTXPP	\$17,923
75	1800	230/460	365TC	1001	B0754YLT3UMH	69	95.4		MXTXPP	\$21,823
75	1800	575	365TC	1001	B0754YLT3OMH	172/86	95.4		MXTXPP	\$21,823

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Brake Motors

Totally Enclosed Fan Cooled

Toshiba's definite purpose, totally enclosed fan cooled, NEMA® Premium efficiency, Brake Motor series is designed to meet the needs of general holding applications. This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. The Brake Motor series is suitable for indoor and outdoor use.

Standard Features:

- Totally Enclosed Fan Cooled
- NEMA® Premium Efficiency
- C-Face Footed & Footless
- 230/460, 460, or 575 V
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Class F Insulation
- IP23 (SD), IP54 (840), or IP55 (4X) Protection
- 304 Stainless Steel Nameplate
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- Stamped Steel Conduit Box on EQPIII
- Cast Iron Conduit Box on EQPIII-840
- Cast Iron Fan Cover
- Cast Iron Frame & Brackets
- V-Ring Seal on Drive End

Brake Options:

- Solenoid Actuated Spring-Set Brakes
- Multiple Options for Brake Voltages
- Manual Release Lever on Rear of Brake Housing
- Wear Adjustment
- Static Torque Ratings from 3 to 125 lb. ft.

Applications:

- Conveyors
- Gear Reducers
- Door Lift Operators
- Material Handling
- Baggage Handling
- Carousels & Palletizing
- Holding Applications



Totally Enclosed Fan Cooled EQPIII Brake Motor

> NEMA® Premium Efficiency



3 THREE YEAR
WARRANTY

Toshiba’s definite purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII Brake Motor series is designed to meet the needs of general holding applications. This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. The EQPIII-840 Brake Motor series is suitable for indoor and outdoor use.

Product Scope:

Horsepower:	½ to 30 HP
Speed:	1800, 1200 or 900 RPM
Voltage:	230/460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through 286T
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Brake Coil Voltage:	Matches Motor Voltage (Other Voltages & Frequencies Available)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.5	1200	230/460	143T	66	6	B1/262LF2AMH	2.8/1.4	78.5		MXTFCB	\$2,206
0.5	1200	575	143T	66	6	B1/262LF2OMH	1.1	78.5		MXTFCB	\$2,206
0.75	1200	230/460	143T	66	6	B3/462LF2AMH	3.0/1.5	80.0*		MXTFCB	\$2,260
0.75	1200	575	143T	66	6	B3/462LF2OMH	1.2	80.0*		MXTFCB	\$2,260
1	1800	230/460	143T	66	6	B00142LF2AMH	2.8/1.4	85.5		MXTFCB	\$2,294
1	1800	575	143T	66	6	B00142LF2OMH	1.1	85.5		MXTFCB	\$2,294
1	1200	230/460	145T	75	10	B00163LF2AMH	3.6/1.8	82.5		MXTFCB	\$2,358
1	1200	575	145T	75	10	B00163LF2OMH	1.4	82.5		MXTFCB	\$2,358
1	900	230/460	182T	100	10	B00183LF2AMH	4.4/2.2	82.5		MXTFCB	\$3,335
1	900	575	182T	100	10	B00183LF2OMH	1.7	82.5		MXTFCB	\$3,335
1.5	1800	230/460	145T	70	10	BY1543LF2AMH	4.4/2.2	86.5		MXTFCB	\$2,338
1.5	1800	575	145T	70	10	BY1543LF2OMH	1.8	86.5		MXTFCB	\$2,338
1.5	1200	230/460	182T	94	10	BY1563LF2AMH	5/2.5	87.5		MXTFCB	\$2,652
1.5	1200	575	182T	94	10	BY1563LF2OMH	2	86.5		MXTFCB	\$2,652
1.5	900	230/460	184T	124	15	BY1584LF2AMH	6.8/3.4	82.5		MXTFCB	\$3,694
1.5	900	575	184T	124	15	BY1584LF2OMH	2.8	82.5		MXTFCB	\$3,694
2	1800	230/460	145T	74	10	B00243LF2AMH	5.6/2.8	86.5		MXTFCB	\$2,348
2	1800	575	145T	74	10	B00243LF2OMH	2.2	86.5		MXTFCB	\$2,348
2	1200	230/460	184T	113	15	B00264LF2AMH	6.6/3.3	88.5		MXTFCB	\$2,865
2	1200	575	184T	113	15	B00264LF2OMH	2.6	88.5		MXTFCB	\$2,865
2	900	230/460	213T	209	25	B00284LF2AMH	6.6/3.3	86.5		MXTFCB	\$6,124
2	900	575	213T	209	25	B00284LF2OMH	2.6	82.5		MXTFCB	\$6,124
3	1800	230/460	182T	110	15	B00344LF2AMH	7.6/3.8	89.5		MXTFCB	\$2,773
3	1800	575	182T	110	15	B00344LF2OMH	3	89.5		MXTFCB	\$2,773
3	1200	230/460	213T	189	35	B00365LF2AMH	8.2/4.1	90.2		MXTFCB	\$5,084
3	1200	575	213T	189	35	B00365LF2OMH	3.3	90.2		MXTFCB	\$5,084

Totally Enclosed Fan Cooled

EQPIII Brake Motor

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	900	230/460	215T	228	35	B00385LF2AMH	10.0/5.0	87.5		MXTFCB	\$6,223
3	900	575	215T	228	35	B00385LF2OMH	4	87.5		MXTFCB	\$6,223
5	1800	230/460	184T	115	15	B00544LF2AMH	12.6/6.3	89.5		MXTFCB	\$2,851
5	1800	575	184T	115	15	B00544LF2OMH	5	89.5		MXTFCB	\$2,851
5	1200	230/460	215T	206	35	B00565LF2AMH	13.4/6.7	90.2		MXTFCB	\$5,244
5	1200	575	215T	206	35	B00565LF2OMH	5.4	90.2		MXTFCB	\$5,244
5	900	230/460	254T	272	50	B00586LF2AMH	16.0/8.0	90.2		MXTFCB	\$3,661
5	900	575	254T	272	50	B00586LF2OMH	6.4	90.2		MXTFCB	\$3,661
7.5	1800	230/460	213T	217	35	BY7545LF2USH	18.2/9.1	91.7		MXTFCB	\$4,949
7.5	1800	575	213T	217	35	BY7545LF2OSH	7.3	91.7		MXTFCB	\$4,949
7.5	1200	230/460	254T	272	50	BY7566LF2USH	19.6/9.8	91.7		MXTFCB	\$6,559
7.5	1200	575	254T	272	50	BY7566LF2OSH	7.8	91.7		MXTFCB	\$6,559
7.5	900	230/460	256T	352	75	BY7586LF2USH	23.0/11.5	90.2		MXTFCB	\$9,936
7.5	900	575	256T	352	75	BY7586LF2OSH	9	90.2		MXTFCB	\$9,936
10	1800	230/460	215T	232	50	B01046LF2USH	24/12	91.7		MXTFCB	\$5,579
10	1800	575	215T	232	50	B01046LF2OSH	9.6	91.7		MXTFCB	\$5,579
10	1200	230/460	256T	352	75	B01067LF2USH	26.0/13.0	92.4		MXTFCB	\$8,002
10	1200	575	256T	352	75	B01067LF2OSH	10.4	92.4		MXTFCB	\$8,002
10	900	230/460	284T	408	105	B01088LF2USH	30.0/15.0	90.2		MXTFCB	\$12,107
10	900	575	284T	408	105	B01088LF2OSH	11.8	90.2		MXTFCB	\$12,107
15	1800	230/460	254T	335	75	B01547LF2USH	37.0/18.5	92.4		MXTFCB	\$7,315
15	1800	575	254T	335	75	B01547LF2OSH	14.8	92.4		MXTFCB	\$7,315
15	1200	230/460	284T	408	105	B01568LF2USH	38.0/19.0	92.4		MXTFCB	\$10,614
15	1200	575	284T	408	105	B01568LF2OSH	15.2	92.4		MXTFCB	\$10,614
15	900	230/460	286T	584	125	B01589LF2USH	42.0/21.0	90.2		MXTFCB	\$22,960
15	900	575	286T	584	125	B01589LF2OSH	17.8	90.2		MXTFCB	\$22,960
20	1800	230/460	256T	373	105	B02048LF2USH	50.0/25.0	93.0		MXTFCB	\$9,221
20	1800	575	256T	373	105	B02048LF2OSH	20	93.0		MXTFCB	\$9,221
20	1200	230/460	286T	650	125	B02069LF2USH	50.0/25.0	92.4		MXTFCB	\$20,421
20	1200	575	286T	650	125	B02069LF2OSH	21	92.4		MXTFCB	\$20,421
25	1800	230/460	284T	471	105	B02548LF2USH	58.0/29.0	93.6		MXTFCB	\$10,182
25	1800	575	284T	471	105	B02548LF2OSH	24	93.6		MXTFCB	\$10,182
30	1800	230/460	286T	635	125	B03049LF2USH	70.0/35.0	93.6		MXTFCB	\$19,702
30	1800	575	286T	635	125	B03049LF2OSH	29	93.6		MXTFCB	\$19,702

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled EQPIII-840 Brake Motor

> NEMA® Premium Efficiency



3 THREE YEAR WARRANTY

Toshiba’s definite purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII-840 Brake Motor series is designed to meet the needs of general holding applications. This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. The EQPIII-840 Brake Motor series is suitable for indoor and outdoor use.

Product Scope:

Horsepower:	½ to 30 HP
Speed:	1800, 1200 or 900 RPM
Voltage:	460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143T through 286T
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.5	1200	460	143T	66	6	B1/262LF1BMHD	1.4	78.5		MXTFCB	\$4,018
0.5	1200	575	143T	66	6	B1/262LF1OMHD	1.1	78.5		MXTFCB	\$4,018
0.75	1200	460	143T	66	6	B3/462LF1BMHD	1.5	80.0		MXTFCB	\$4,082
0.75	1200	575	143T	66	6	B3/462LF1OMHD	1.2	80.0		MXTFCB	\$4,082
1	1800	460	143T	76	6	B00142LF1BMHD	1.4	85.5		MXTFCB	\$4,091
1	1800	575	143T	76	6	B00142LF1OMHD	1.1	85.5		MXTFCB	\$4,091
1	1200	460	145T	70	10	B00163LF1BMHD	1.8	82.5		MXTFCB	\$4,190
1	1200	575	145T	70	10	B00163LF1OMHD	1.4	82.5		MXTFCB	\$4,190
1	900	460	182T	159	10	B00183LF1BMHD	2.2	82.5		MXTFCB	\$5,174
1	900	575	182T	159	10	B00183LF1OMHD	1.7	82.5		MXTFCB	\$5,174
1.5	1800	460	145T	85	10	BY1543LF1BMHD	2.2	86.5		MXTFCB	\$4,184
1.5	1800	575	145T	85	10	BY1543LF1OMHD	1.8	86.5		MXTFCB	\$4,184
1.5	1200	460	182T	94	10	BY1563LF1BMHD	2.5	86.5		MXTFCB	\$4,540
1.5	1200	575	182T	94	10	BY1563LF1OMHD	2	86.5		MXTFCB	\$4,540
1.5	900	460	184T	165	15	BY1584LF1BMHD	3.4	82.5		MXTFCB	\$5,586
1.5	900	575	184T	165	15	BY1584LF1OMHD	2.8	82.5		MXTFCB	\$5,586
2	1800	460	145T	95	10	B00243LF1BMHD	2.8	86.5		MXTFCB	\$4,483
2	1800	575	145T	95	10	B00243LF1OMHD	2.2	86.5		MXTFCB	\$4,483
2	1200	460	184T	125	15	B00264LF1BMHD	3.3	88.5		MXTFCB	\$4,757
2	1200	575	184T	125	15	B00264LF1OMHD	2.6	88.5		MXTFCB	\$4,757
2	900	460	213T	244	35	B00284LF3BMHD	3.3	86.5		MXTFCB	\$7,920
2	900	575	213T	244	35	B00284LF3OMHD	2.6	86.5		MXTFCB	\$7,920
3	1800	460	182T	100	15	B00344LF1BMHD	3.8	89.5		MXTFCB	\$4,696
3	1800	575	182T	100	15	B00344LF1OMHD	3	89.5		MXTFCB	\$4,696
3	1200	460	213T	189	35	B00365LF3BMHD	4.1	90.2		MXTFCB	\$6,966
3	1200	575	213T	189	35	B00365LF3OMHD	3.3	90.2		MXTFCB	\$6,966
3	900	460	215T	262	35	B00385LF3BMHD	5	87.5		MXTFCB	\$8,578
3	900	575	215T	262	35	B00385LF3OMHD	4	87.5		MXTFCB	\$8,578

Totally Enclosed Fan Cooled

EQPIII-840 Brake Motor

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1800	460	184T	125	15	B00544LF1BMHD	6.3	89.5		MXTFCB	\$4,781
5	1800	575	184T	125	15	B00544LF1OMHD	5	89.5		MXTFCB	\$4,781
5	1200	460	215T	201	35	B00565LF3BMHD	6.7	90.2		MXTFCB	\$7,170
5	1200	575	215T	201	35	B00565LF3OMHD	5.4	90.2		MXTFCB	\$7,170
5	900	460	254T	369	50	B00586LF3BMHD	8	90.2		MXTFCB	\$10,435
5	900	575	254T	369	50	B00586LF3OMHD	6.4	90.2		MXTFCB	\$10,435
7.5	1800	460	213T	236	35	BY7545LF3BSHD	9.1	91.7		MXTFCB	\$6,810
7.5	1800	575	213T	236	35	BY7545LF3OSHD	7.3	91.7		MXTFCB	\$6,810
7.5	1200	460	254T	369	50	BY7566LF3BSHD	9.8	91.7		MXTFCB	\$9,110
7.5	1200	575	254T	369	50	BY7566LF3OSHD	7.8	91.7		MXTFCB	\$9,110
7.5	900	460	256T	397	75	BY7586LF3BSHD	11.5	90.2		MXTFCB	\$12,558
7.5	900	575	256T	397	75	BY7586LF3OSHD	9	90.2		MXTFCB	\$12,558
10	1800	460	215T	268	50	B01046LF3BSHD	12	91.7		MXTFCB	\$7,495
10	1800	575	215T	268	50	B01046LF3OSHD	9.6	91.7		MXTFCB	\$7,495
10	1200	460	256T	397	75	B01067LF3BSHD	13	92.4		MXTFCB	\$10,772
10	1200	575	256T	397	75	B01067LF3OSHD	10.4	92.4		MXTFCB	\$10,772
10	900	460	284T	434	105	B01088LF3BSHD	15	90.2		MXTFCB	\$15,185
10	900	575	284T	434	105	B01088LF3OSHD	11.8	90.2		MXTFCB	\$15,185
15	1800	460	254T	383	75	B01547LF3BSHD	18.5	92.4		MXTFCB	\$9,854
15	1800	575	254T	383	75	B01547LF3OSHD	14.8	92.4		MXTFCB	\$9,854
15	1200	460	284T	434	105	B01568LF3BSHD	19	92.4		MXTFCB	\$13,706
15	1200	575	284T	434	105	B01568LF3OSHD	15.2	92.4		MXTFCB	\$13,706
15	900	460	286T	676	125	B01589LF3BSHD	21	90.2		MXTFCB	\$23,471
15	900	575	286T	676	125	B01589LF3OSHD	17.8	90.2		MXTFCB	\$23,471
20	1800	460	256T	418	105	B02048LF3BSHD	25	93.0		MXTFCB	\$11,776
20	1800	575	256T	418	105	B02048LF3OSHD	20	93.0		MXTFCB	\$11,776
20	1200	460	286T	676	125	B02069LF3BSHD	25	92.4		MXTFCB	\$20,917
20	1200	575	286T	676	125	B02069LF3OSHD	21	92.4		MXTFCB	\$20,917
25	1800	460	284T	563	105	B02548LF3BSHD	29	93.6		MXTFCB	\$12,988
25	1800	575	284T	563	105	B02548LF3OSHD	24	93.6		MXTFCB	\$12,988
30	1800	460	286T	664	125	B03049LF3BSHD	35	93.6		MXTFCB	\$20,034
30	1800	575	286T	664	125	B03049LF3OSHD	29	93.6		MXTFCB	\$20,034

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled

EQPIII Brake Motor
C-Face Footless

> NEMA® Premium Efficiency



Toshiba’s definite purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII Brake Motor C-Face Footless designed to meet the needs of general holding applications. This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. The Brake Motor series is suitable for indoor and outdoor use.

Product Scope:	
Horsepower:	½ to 30 HP
Speed:	1800, 1200 or 900 RPM
Voltage:	230/460 or 575 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	143TC through 286TC
Construction:	Cast Iron
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.5	1200	230/460	143TC	64	6	B1/262LC2AMH	2.8/1.4	78.5		MXTFCB	\$2,395
0.5	1200	575	143TC	64	6	B1/262LC2OMH	1.1	78.5		MXTFCB	\$2,395
0.75	1200	230/460	143TC	64	6	B3/462LC2AMH	3.0/1.5	80.0		MXTFCB	\$2,449
0.75	1200	575	143TC	64	6	B3/462LC2OMH	1.2	80.0		MXTFCB	\$2,449
1	1800	230/460	143TC	66	6	B00142LC2AMH	2.8/1.4	85.5		MXTFCB	\$2,483
1	1800	575	143TC	66	6	B00142LC2OMH	1.1	85.5		MXTFCB	\$2,483
1	1200	230/460	145TC	69	10	B00163LC2AMH	3.6/1.8	82.5		MXTFCB	\$2,547
1	1200	575	145TC	69	10	B00163LC2OMH	1.4	82.5		MXTFCB	\$2,547
1	900	230/460	182TC	100	10	B00183LC2AMH	4.4/2.2	82.5		MXTFCB	\$3,570
1	900	575	182TC	100	10	B00183LC2OMH	1.7	82.5		MXTFCB	\$3,570
1.5	1800	230/460	145TC	69	10	BY1543LC2AMH	4.4/2.2	86.5		MXTFCB	\$2,527
1.5	1800	575	145TC	69	10	BY1543LC2OMH	1.8	86.5		MXTFCB	\$2,527
1.5	1200	230/460	182TC	92	10	BY1563LC2AMH	5/2.5	87.5		MXTFCB	\$2,841
1.5	1200	575	182TC	92	10	BY1563LC2OMH	2	86.5		MXTFCB	\$2,841
1.5	900	230/460	184TC	124	15	BY1584LC2AMH	6.8/3.4	82.5		MXTFCB	\$3,930
1.5	900	575	184TC	124	15	BY1584LC2OMH	2.8	82.5		MXTFCB	\$3,930
2	1800	230/460	145TC	74	10	B00243LC2AMH	5.6/2.8	86.5		MXTFCB	\$2,537
2	1800	575	145TC	74	10	B00243LC2OMH	2.2	86.5		MXTFCB	\$2,537
2	1200	230/460	184TC	107	15	B00264LC2AMH	6.6/3.3	88.5		MXTFCB	\$3,054
2	1200	575	184TC	107	15	B00264LC2OMH	2.6	88.5		MXTFCB	\$3,054
2	900	230/460	213TC	209	25	B00285LC2AMH	6.6/3.3	86.5		MXTFCB	\$6,360
2	900	575	213TC	209	25	B00285LC2OMH	2.6	82.5		MXTFCB	\$6,360
3	1800	230/460	182TC	110	15	B00344LC2AMH	7.6/3.8	89.5		MXTFCB	\$2,962
3	1800	575	182TC	110	15	B00344LC2OMH	3	89.5		MXTFCB	\$2,962
3	1200	230/460	213TC	184	35	B00365LC2AMH	8.2/4.1	90.2		MXTFCB	\$5,320
3	1200	575	213TC	184	35	B00365LC2OMH	3.3	90.2		MXTFCB	\$5,320
3	900	230/460	215TC	228	35	B00385LC2AMH	10.0/5.0	87.5		MXTFCB	\$6,459
3	900	575	215TC	228	35	B00385LC2OMH	4	87.5		MXTFCB	\$6,459
5	1800	230/460	184TC	115	15	B00544LC2AMH	12.6/6.3	89.5		MXTFCB	\$3,040

Totally Enclosed Fan Cooled

EQPIII Brake Motor C-Face Footless

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1800	575	184TC	115	15	B00544LC2OMH	5	89.5		MXTFCB	\$3,040
5	1200	230/460	215TC	206	35	B00565LC2AMH	13.4/6.7	90.2		MXTFCB	\$5,481
5	1200	575	215TC	206	35	B00565LC2OMH	5.4	90.2		MXTFCB	\$5,481
5	900	230/460	254TC	272	50	B00586LC2AMH	16.0/8.0	90.2		MXTFCB	\$8,384
5	900	575	254TC	272	50	B00586LC2OMH	6.4	90.2		MXTFCB	\$8,384
7.5	1800	230/460	213TC	217	35	BY7545LC2USH	18.2/9.1	91.7		MXTFCB	\$5,185
7.5	1800	575	213TC	217	35	BY7545LC2OSH	7.3	91.7		MXTFCB	\$5,185
7.5	1200	230/460	254TC	272	50	BY7566LC2USH	19.6/9.8	91.7		MXTFCB	\$6,937
7.5	1200	575	254TC	272	50	BY7566LC2OSH	7.8	91.7		MXTFCB	\$6,937
7.5	900	230/460	256TC	352	75	BY7587LC2USH	23.0/11.5	90.2		MXTFCB	\$10,314
7.5	900	575	256TC	352	75	BY7587LC2OSH	9	90.2		MXTFCB	\$10,314
10	1800	230/460	215TC	227	50	B01046LC2USH	24/12	91.7		MXTFCB	\$5,816
10	1800	575	215TC	227	50	B01046LC2OSH	9.6	91.7		MXTFCB	\$5,816
10	1200	230/460	256TC	352	75	B01067LC2USH	26.0/13.0	92.4		MXTFCB	\$8,380
10	1200	575	256TC	352	75	B01067LC2OSH	10.4	92.4		MXTFCB	\$8,380
10	900	230/460	284TC	408	105	B01088LC2USH	30.0/15.0	90.2		MXTFCB	\$12,662
10	900	575	284TC	408	105	B01088LC2OSH	11.8	90.2		MXTFCB	\$12,662
15	1800	230/460	254TC	335	75	B01547LC2USH	37.0/18.5	92.4		MXTFCB	\$7,693
15	1800	575	254TC	335	75	B01547LC2OSH	14.8	92.4		MXTFCB	\$7,693
15	1200	230/460	284TC	408	105	B01568LC2USH	98.0/19.0	92.4		MXTFCB	\$11,169
15	1200	575	284TC	408	105	B01568LC2OSH	15.2	92.4		MXTFCB	\$11,169
15	900	230/460	286TC	584	125	B01589LC2USH	42.0/21.0	90.2		MXTFCB	\$23,515
15	900	575	286TC	584	125	B01589LC2OSH	17.8	90.2		MXTFCB	\$23,515
20	1800	230/460	256TC	373	105	B02048LC2USH	50.0/25.0	93.0		MXTFCB	\$9,598
20	1800	575	256TC	373	105	B02048LC2OSH	20	93.0		MXTFCB	\$9,598
20	1200	230/460	286TC	650	125	B02069LC2USH	50.0/25.0	92.4		MXTFCB	\$20,976
20	1200	575	286TC	650	125	B02069LC2OSH	21	92.4		MXTFCB	\$20,976
25	1800	230/460	284TC	471	105	B02548LC2USH	58.0/29.0	93.6		MXTFCB	\$10,737
25	1800	575	284TC	471	105	B02548LC2OSH	24	93.6		MXTFCB	\$10,737
30	1800	230/460	286TC	635	125	B03049LC2USH	70.0/35.0	93.6		MXTFCB	\$20,258
30	1800	575	286TC	635	125	B03049LC2OSH	29	93.6		MXTFCB	\$20,258

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

Totally Enclosed Fan Cooled
EQPIII-840 Brake Motor
C-Face Footless

> NEMA® Premium Efficiency



3 THREE YEAR WARRANTY

Toshiba's definite purpose, totally enclosed fan cooled, NEMA® Premium efficiency, EQPIII-840 Brake Motor C-Face Footless is designed to meet the needs of general holding applications. This product line is built to withstand the toughest conditions and offers some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. The Brake Motor series is suitable for indoor and outdoor use.

Product Scope:

Horsepower: ½ to 30 HP

Speed: 1800, 1200 or 900 RPM

Voltage: 460 or 575 V

Enclosure: Totally Enclosed Fan Cooled

Frame Size: 143TC through 286TC

Construction: Cast Iron

Vibration: Typically 0.10 Inches/Second or Less (Unfiltered)

Insulation: Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
0.5	1200	460	143TC	64	6	B1/262LC1BMHD	1.4	78.5		MXTFCB	\$4,207
0.5	1200	575	143TC	64	6	B1/262LC1OMHD	1.1	78.5		MXTFCB	\$4,207
0.75	1200	460	143TC	64	6	B3/462LC1BMHD	1.5	80.0		MXTFCB	\$4,271
0.75	1200	575	143TC	64	6	B3/462LC1OMHD	1.2	80.0		MXTFCB	\$4,271
1	1800	460	143TC	76	6	B00142LC1BMHD	1.4	85.5		MXTFCB	\$4,280
1	1800	575	143TC	76	6	B00142LC1OMHD	1.1	85.5		MXTFCB	\$4,280
1	1200	460	145TC	69	10	B00163LC1BMHD	1.8	82.5		MXTFCB	\$4,379
1	1200	575	145TC	69	10	B00163LC1OMHD	1.4	82.5		MXTFCB	\$4,379
1	900	460	182TC	92	10	B00183LC1BMHD	2.2	82.5		MXTFCB	\$5,411
1	900	575	182TC	92	10	B00183LC1OMHD	1.7	82.5		MXTFCB	\$5,411
1.5	1800	460	145TC	75	10	BY1543LC1BMHD	2.2	86.5		MXTFCB	\$4,373
1.5	1800	575	145TC	75	10	BY1543LC1OMHD	1.8	86.5		MXTFCB	\$4,373
1.5	1200	460	182TC	92	10	BY1563LC1BMHD	2.5	86.5		MXTFCB	\$4,729
1.5	1200	575	182TC	92	10	BY1563LC1OMHD	2	86.5		MXTFCB	\$4,729
1.5	900	460	184TC	145	15	BY1584LC1BMHD	3.4	82.5		MXTFCB	\$5,821
1.5	900	575	184TC	145	15	BY1584LC1OMHD	2.8	82.5		MXTFCB	\$5,821
2	1800	460	145TC	74	10	B00243LC1BMHD	2.8	86.5		MXTFCB	\$4,672
2	1800	575	145TC	74	10	B00243LC1OMHD	2.2	86.5		MXTFCB	\$4,672
2	1200	460	184TC	145	15	B00264LC1BMHD	3.3	88.5		MXTFCB	\$4,946
2	1200	575	184TC	145	15	B00264LC1OMHD	2.6	88.5		MXTFCB	\$4,946
2	900	460	213TC	184	20	B00285LC3BMHD	3.3	86.5		MXTFCB	\$8,155
2	900	575	213TC	184	20	B00285LC3OMHD	2.6	86.5		MXTFCB	\$8,155
3	1800	460	182TC	98	15	B00344LC1BMHD	3.8	89.5		MXTFCB	\$4,885
3	1800	575	182TC	98	15	B00344LC1OMHD	3	89.5		MXTFCB	\$4,885
3	1200	460	213TC	184	35	B00365LC3BMHD	4.1	90.2		MXTFCB	\$7,203
3	1200	575	213TC	184	35	B00365LC3OMHD	3.3	90.2		MXTFCB	\$7,203
3	900	460	215TC	262	25	B00385LC3BMHD	5	87.5		MXTFCB	\$8,814
3	900	575	215TC	262	25	B00385LC3OMHD	4	87.5		MXTFCB	\$8,814

Totally Enclosed Fan Cooled

EQPIII-840 Brake Motor C-Face Footless

> NEMA® Premium Efficiency



HP	Speed (RPM)	Volts	Frame	Weight (lbs.)	Brake (ft.-lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
5	1800	460	184TC	125	15	B00544LC1BMHD	6.3	89.5		MXTFCB	\$4,970
5	1800	575	184TC	125	15	B00544LC1OMHD	5	89.5		MXTFCB	\$4,970
5	1200	460	215TC	201	35	B00565LC3BMHD	6.7	90.2		MXTFCB	\$7,406
5	1200	575	215TC	201	35	B00565LC3OMHD	5.4	90.2		MXTFCB	\$7,406
5	900	460	254TC	369	50	B00586LC3BMHD	8	90.2		MXTFCB	\$10,813
5	900	575	254TC	369	50	B00586LC3OMHD	6.4	90.2		MXTFCB	\$10,813
7.5	1800	460	213TC	236	35	BY7545LC3BSHD	9.1	91.7		MXTFCB	\$7,047
7.5	1800	575	213TC	236	35	BY7545LC3OSHD	7.3	91.7		MXTFCB	\$7,047
7.5	1200	575	254TC	369	50	BY7566LC3OSHD	7.8	91.7		MXTFCB	\$9,488
7.5	1200	460	254TC	369	50	BY7566LC3BSHD	9.8	91.7		MXTFCB	\$9,488
7.5	900	575	256TC	397	75	BY7587LC3OSHD	9	90.2		MXTFCB	\$12,936
7.5	900	460	256TC	397	75	BY7587LC3BSHD	11.5	90.2		MXTFCB	\$12,936
10	1800	460	215TC	268	50	B01046LC3BSHD	12	91.7		MXTFCB	\$7,732
10	1800	575	215TC	268	50	B01046LC3OSHD	9.6	91.7		MXTFCB	\$7,732
10	1200	460	256TC	397	75	B01067LC3BSHD	13	92.4		MXTFCB	\$11,150
10	1200	575	256TC	397	75	B01067LC3OSHD	10.4	92.4		MXTFCB	\$11,150
10	900	460	284TC	434	105	B01088LC3BSHD	15	90.2		MXTFCB	\$15,740
10	900	575	284TC	434	105	B01088LC3OSHD	11.8	90.2		MXTFCB	\$15,740
15	1800	460	254TC	383	75	B01547LC3BSHD	18.5	92.4		MXTFCB	\$10,232
15	1800	575	254TC	383	75	B01547LC3OSHD	14.8	92.4		MXTFCB	\$10,232
15	1200	460	284TC	434	105	B01568LC3BSHD	19	92.4		MXTFCB	\$14,261
15	1200	575	284TC	434	105	B01568LC3OSHD	15.2	92.4		MXTFCB	\$14,261
15	900	460	286TC	676	125	B01589LC3BSHD	21	90.2		MXTFCB	\$24,026
15	900	575	286TC	676	125	B01589LC3OSHD	17.8	90.2		MXTFCB	\$24,026
20	1800	460	256TC	418	105	B02048LC3BSHD	25	93.0		MXTFCB	\$12,154
20	1800	575	256TC	418	105	B02048LC3OSHD	20	93.0		MXTFCB	\$12,154
20	1200	460	286TC	676	125	B02069LC3BSHD	25	92.4		MXTFCB	\$21,473
20	1200	575	286TC	676	125	B02069LC3OSHD	21	92.4		MXTFCB	\$21,473
25	1800	460	284TC	563	105	B02548LC3BSHD	29	93.6		MXTFCB	\$13,543
25	1800	575	284TC	563	105	B02548LC3OSHD	24	93.6		MXTFCB	\$13,543
30	1800	460	286TC	664	125	B03049LC3BSHD	35	93.6		MXTFCB	\$20,589
30	1800	575	286TC	664	125	B03049LC3OSHD	29	93.6		MXTFCB	\$20,589

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

NEMA® Premium is not defined for motors less than 1 HP, motors greater than 500 HP, or motors with speeds less than 1200 RPM.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Washdown Motors

Totally Enclosed

Toshwash SS Motors

Toshiba's definite purpose, premium efficiency, Toshwash SS motor series is built to meet the extreme demands of the food and pharmaceutical industries. The daily pressure washes and hot cleaning solutions in these industries require motors specifically designed to withstand these conditions. Working with several major users in these industries, Toshiba developed one of the toughest motors available—the Toshwash SS, a washdown duty motor. This specially designed motor approaches five times the normal life cycle of other commercial washdown duty motors and offers the widest variety of TENV frame sizes available for food, pharmaceutical, and other applications requiring frequent washdowns. Available in TEFC and TENV designs, this motor series exceeds NEMA MG1 Part 31 requirements and is suitable for indoor and outdoor applications.

Standard Features:

- Totally Enclosed Fan Cooled & Totally Enclosed Non-Ventilated
- EISA Efficiency Compliant
- Three-Phase
- 60 Hz
- 1.15 Service Factor
- Class F Insulation
- Multiple Dips & Bakes for Moisture Protection
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- All Stainless Steel Frame
- Stainless Steel Bearing Brackets
- Stainless Steel Fan Covers
- Stainless Steel Shaft
- Ground & Polished Shaft Seal Fits
- High Strength Double-Lip Teflon Shaft Seals
- O-Ring Seals Between Frame & Bearing Brackets
- Double O-Ring Sealed Conduit Box
- Neoprene Lead Separator Between Frame & Conduit Box
- Laser Engraved Nameplate to Prevent Contamination
- Removable Drain Plugs Every 90° for Universal Mounting
- C-Face Footed & Footless

Applications:

- Food Industry
- Meat Processing & Packing
- Dairy Industry
- Pharmaceutical
- Beverage & Bottling
- Canneries
- Pumps
- Blowers
- Conveyors
- Gear Reducers



Totally Enclosed
Toshwash SS C-Face

➤ Premium Efficiency



3 THREE YEAR WARRANTY

Toshiba's definite purpose, premium efficiency, Toshwash SS C-Face motor series is built to meet the extreme demands of the food and pharmaceutical industries. The daily pressure washes and hot cleaning solutions in these industries require motors specifically designed to withstand these conditions. Working with several major users in these industries, Toshiba developed one of the toughest motors available—the Toshwash SS, a washdown duty motor. This specially designed motor approaches five times the normal life cycle of other commercial washdown duty motors and offers the widest variety of TENV frame sizes available for food, pharmaceutical, and other applications requiring frequent washdowns. Available in C-Face Footed and C-Face Footless designs, this motor series exceeds NEMA MG1 Part 31 requirements and is suitable for indoor and outdoor applications.

Product Scope:

Horsepower:	½ to 10 HP
Speed:	1800 or 1200 RPM
Voltage:	230/460, 460, or 575 V
Enclosure:	Totally Enclosed Non-Ventilated or Totally Enclosed Fan Cooled
Frame Size:	56C through 215TC
Construction:	All Stainless Steel
Vibration:	Typically 0.10 Inches/Second or Less (Unfiltered)
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)
Mounting:	C-Face Footed or Footless

HP	Speed (RPM)	Volts	Enclosure	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
C-FACE FOOTED											
0.5	1800	230/460	TENV	56C	54	1/24FNWA32H	1.7/1.85	81.5	7	MXTFCT	\$2,466
0.5	1800	575	TENV	56C	54	1/24FNWC32H	0.7	81.5	7	MXTFCT	\$2,466
0.5	1200	230/460	TENV	56C	60	1/26FNWA32H	1.8/0.9	80.0	7	MXTFCT	\$2,814
0.5	1200	575	TENV	56C	60	1/26FNWC32H	0.7	80.0	7	MXTFCT	\$2,814
0.75	1800	230/460	TENV	56C	60	3/44FNWA32H	2.2/1.1	82.5	7	MXTFCT	\$2,582
0.75	1800	575	TENV	56C	60	3/44FNWC32H	0.9	82.5	7	MXTFCT	\$2,582
0.75	1200	230/460	TENV	56C	62	3/46FNWA32H	3/1.5	82.5	7	MXTFCT	\$2,946
0.75	1200	575	TENV	56C	62	3/46FNWC32H	1.2	82.5	7	MXTFCT	\$2,946
1	1800	230/460	TENV	143TC	63	0014FNWA32A	3.0/1.5	84.0	7	MXTFCT	\$3,253
1	1800	575	TENV	143TC	63	0014FNWC32A	1.2	84.0	7	MXTFCT	\$3,253
1	1800	230/460	TENV	56C	63	0014FNWA32H	3.0/1.5	84.0	7	MXTFCT	\$3,253
1	1800	575	TENV	56C	63	0014FNWC32H	1.2	84.0	7	MXTFCT	\$3,253
1	1200	230/460	TENV	145TC	70	0016FNWA32A	3.6/1.8	82.5	7	MXTFCT	\$3,839
1	1200	575	TENV	145TC	70	0016FNWC32A	1.45	82.5	7	MXTFCT	\$3,839
1	1200	230/460	TENV	56C	70	0016FNWA32H	3.6/1.8	82.5	7	MXTFCT	\$3,839
1	1200	575	TENV	56C	70	0016FNWC32H	1.45	82.5	7	MXTFCT	\$3,839

Totally Enclosed

Toshwash SS C-Face

> Premium Efficiency



HP	Speed (RPM)	Volts	Enclosure	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1.5	1800	230/460	TEFC	145TC	64	Y154FCWA42A	4.0/2.0	87.5		MXTFCT	\$4,442
1.5	1800	575	TEFC	145TC	64	Y154FCWC42A	1.7	87.5		MXTFCT	\$4,442
1.5	1800	230/460	TEFC	56C	64	Y154FCWA42H	4.0/2.0	87.5		MXTFCT	\$4,442
1.5	1800	575	TEFC	56C	64	Y154FCWC42H	1.7	87.5		MXTFCT	\$4,442
2	1800	230/460	TEFC	56C	65	0024FCWA42H	5.2/2.6	87.5		MXTFCT	\$5,046
2	1800	575	TEFC	145TC	65	0024FCWC42A	2.1	87.5		MXTFCT	\$5,046
2	1800	230/460	TEFC	145TC	65	0024FCWA42A	5.2/2.6	87.5		MXTFCT	\$5,046
2	1800	575	TEFC	56C	65	0024FCWC42H	2.1	87.5		MXTFCT	\$5,046
3	1800	230/460	TEFC	182TC	108	0034FCWA42A	7.6/3.8	89.5		MXTFCT	\$6,393
3	1800	575	TEFC	182TC	108	0034FCWC42A	3	89.5		MXTFCT	\$6,393
5	1800	230/460	TEFC	184TC	108	0054FCWA42A	12.8/6.4	87.5		MXTFCT	\$6,864
5	1800	575	TEFC	184TC	108	0054FCWC42A	5.1	87.5		MXTFCT	\$6,864
7.5	1800	230/460	TEFC	213TC	238	Y754FCWA42A	19/9.5	91.7		MXTFCT	\$8,042
7.5	1800	575	TEFC	213TC	238	Y754FCWC42A	7.6	91.7		MXTFCT	\$8,042
10	1800	230/460	TEFC	215TC	230	0104FCWA42A	24/12	91.7		MXTFCT	\$10,723
10	1800	575	TEFC	215TC	230	0104FCWC42A	9.6	91.7		MXTFCT	\$10,723
C-FACE FOOTLESS											
0.5	1800	230/460	TENV	56C	54	1/24FNWA34H	1.7/0.85	81.5	7	MXTFCT	\$2,454
0.5	1800	575	TENV	56C	54	1/24FNWC34H	0.7	81.5	7	MXTFCT	\$2,454
0.5	1200	230/460	TENV	56C	58	1/26FNWA34H	1.8/0.9	80.0	7	MXTFCT	\$2,799
0.5	1200	575	TENV	56C	58	1/26FNWC34H	0.7	80.0	7	MXTFCT	\$2,799
0.75	1800	230/460	TENV	56C	60	3/44FNWA34H	2.2/1.1	82.5	7	MXTFCT	\$2,570
0.75	1800	575	TENV	56C	60	3/44FNWC34H	0.9	82.5	7	MXTFCT	\$2,570
0.75	1200	230/460	TENV	56C	62	3/46FNWA34H	3/1.5	82.5	7	MXTFCT	\$2,929
0.75	1200	575	TENV	56C	62	3/46FNWC34H	1.2	82.5	7	MXTFCT	\$2,929
1	1800	230/460	TENV	56C	60	0014FNWA34H	3/1.5	84.0	7	MXTFCT	\$3,241
1	1800	575	TENV	143TC	63	0014FNWC34A	1.2	84.0	7	MXTFCT	\$3,241
1	1800	230/460	TENV	143TC	63	0014FNWA34A	3/1.5	84.0	7	MXTFCT	\$3,241
1	1800	575	TENV	56C	60	0014FNWC34H	1.2	84.0	7	MXTFCT	\$3,241
1	1200	230/460	TENV	145TC	80	0016FNWA34A	3.6/1.8	82.5	7	MXTFCT	\$3,824
1	1200	575	TENV	145TC	80	0016FNWC34A	1.4	82.5	7	MXTFCT	\$3,824
1	1200	230/460	TENV	56C	80	0016FNWA34H	3.6/1.8	82.5	7	MXTFCT	\$3,824
1	1200	575	TENV	56C	80	0016FNWC34H	1.4	82.5	7	MXTFCT	\$3,824
1.5	1800	230/460	TEFC	145TC	64	Y154FCWA34A	4.4/2.2	84.0		MXTFCT	\$3,689
1.5	1800	230/460	TENV	145TC	65	Y154FNWA34K	4.4/2.2	84.0	7	MXTFCT	\$3,689
1.5	1800	230/460	TEFC	56C	64	Y154FCWA34H	4.4/2.2	84.0		MXTFCT	\$3,689
1.5	1800	575	TEFC	145TC	64	Y154FCWC34A	1.8	84.0		MXTFCT	\$3,689
1.5	1800	575	TEFC	56C	64	Y154FCWC34H	1.8	84.0		MXTFCT	\$3,689
1.5	1800	575	TENV	145TC	65	Y154FNWC34K	1.8	84.0	7	MXTFCT	\$3,689
1.5	1200	230/460	TEFC	145TC	100	Y156FCWA34A	5.6/2.8	80.0		MXTFCT	\$4,353
1.5	1200	575	TEFC	145TC	100	Y156FCWC34A	2.2	80.0		MXTFCT	\$4,353
1.5	1200	230/460	TEFC	56C	100	Y156FCWA34H	5.6/2.8	80.0		MXTFCT	\$4,353
1.5	1200	575	TEFC	56C	100	Y156FCWC34H	2.2	80.0		MXTFCT	\$4,353
2	1800	230/460	TEFC	145TC	65	0024FCWA34A	5.6/2.8	84.0		MXTFCT	\$4,193
2	1800	230/460	TENV	145TC	108	0024FNWA34K	5.6/2.8	84.0	7	MXTFCT	\$4,193
2	1800	230/460	TEFC	56C	65	0024FCWA34H	5.6/2.8	84.0		MXTFCT	\$4,193

Totally Enclosed

Toshwash SS C-Face

> Premium Efficiency



HP	Speed (RPM)	Volts	Enclosure	Frame	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
2	1800	575	TEFC	145TC	65	0024FCWC34A	2.3	84.0		MXTFCT	\$4,193
2	1800	575	TEFC	56C	65	0024FCWC34H	2.3	84.0		MXTFCT	\$4,193
2	1800	575	TENV	145TC	108	0024FNWC34K	2.3	84.0	7	MXTFCT	\$4,193
3	1800	230/460	TEFC	182TC	108	0034FCWA34A	8.0/4.0	87.5		MXTFCT	\$5,315
3	1800	575	TEFC	182TC	108	0034FCWC34A	3.5	87.5		MXTFCT	\$5,315
3	1800	230/460	TENV	182TC	108	0034FNWA34A	8.0/4.0	87.5	7	MXTFCT	\$5,315
3	1800	575	TENV	182TC	108	0034FNWC34A	3.5	87.5	7	MXTFCT	\$5,315
5	1800	230/460	TEFC	184TC	108	0054FCWA34A	12.8/6.4	87.5		MXTFCT	\$5,708
5	1800	575	TEFC	184TC	108	0054FCWC34A	5.1	87.5		MXTFCT	\$5,708

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Vertical P-Base Motors

Totally Enclosed Fan Cooled

Toshiba's definite purpose, totally enclosed fan cooled, Vertical P-Base Footless motors are designed with the petrochemical and material processing industries in mind. These motors are built to withstand the toughest conditions and offer some of the highest efficiency and torque ratings—leading to a longer life and greater reliability. In addition, our LP design meets API 610 specifications for chemical processing applications and all motors include a patent-pending lubrication system that provides improved flow and circulation of grease and oil for longer bearing life. The Vertical P-Base motor can be used in indoor and outdoor applications, exceeds NEMA MG1 Part 31 requirements, and is available in normal and medium thrust as well as high and premium efficiencies.

Standard Features:

- Totally Enclosed Fan Cooled
- IP54 Mill & Chemical Duty
- High & NEMA® Premium Efficiency
- 460 V
- 1.15 Service Factor
- Three-Phase
- 60 Hz
- Class F Insulation
- Exceeds Insulation Requirements of NEMA MG1 Part 31 (Inverter Duty)
- NEMA Design B
- All Cast Iron
- HP (Normal Thrust)
- LP (Medium Thrust)
- Positive Displacement Grease Lubrication System
- Labyrinth Seal on Top Bracket
- Base Brackets in Various Diameters
- Labyrinth-Seal Option for Drive End
- 260 to 3780 lbs. Down Thrust (Minimum L-10 at 17,500 Hours)
- Standard Grease Lubrication (Field-Modifiable for Oil-Mist Lubrication)

Applications:

- Booster Pumps
- Centrifugal Pumps
- Non-Clog pumps
- In-Line Pumps
- Vertical Turbine Pumps



Totally Enclosed Fan Cooled Vertical P-Base Footless Medium Thrust

> High Efficiency



**2 TWO YEAR
WARRANTY**

Toshiba's definite purpose, totally enclosed fan cooled, high efficiency, Vertical P-Base Footless medium thrust motors are designed with the petrochemical and material processing industries in mind. These motors are built to withstand the toughest conditions and offer some of the highest efficiency and torque ratings—leading to a longer life and greater reliability. In addition, our medium thrust design meets API 610 specifications for chemical processing applications and all motors include a patent-pending lubrication system that provides improved flow and circulation of grease and oil for longer bearing life.

Product Scope:

Horsepower:	3 to 400 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	460 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	180LP through N449LP20
Construction:	All Cast Iron
Thrust Ratings:	390 to 3780 Pounds
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	BD Dimension	Maxium Down Thrust Capacity (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3	3600	460	180LP	10"	390	0032FTVB1PX-A				MXTFCV	\$2,426
3	1800	460	180LP	10"	635	0034FTVB1PX-A				MXTFCV	\$2,377
5	3600	460	180LP	10"	500	0052FTVB1PX-A				MXTFCV	\$3,132
5	1800	460	180LP	10"	750	0054FTVB1PX-A				MXTFCV	\$3,069
7.5	3600	460	210LP	10"	580	Y752FTVB1PX-A				MXTFCV	\$3,387
7.5	1800	460	210LP	10"	850	Y754FTVB1PX-A				MXTFCV	\$3,320
10	3600	460	210LP	10"	640	0102FTVB1PX-A				MXTFCV	\$3,687
10	1800	460	210LP	10"	900	0104FTVB1PX-A				MXTFCV	\$3,614
15	3600	460	250LP10	10"	1250	0152FTVB1PX-A				MXTFCV	\$4,604
15	1800	460	250LP10	10"	1580	0154FTVB1PX-A				MXTFCV	\$4,773
15	1200	460	280LP10	10"	2000	0156FTVB1PX-A				MXTFCV	\$6,385
20	3600	460	250LP10	10"	1240	0202FTVB1PX-A				MXTFCV	\$5,038
20	1800	460	250LP10	10"	1560	0204FTVB1PX-A				MXTFCV	\$5,440
20	1200	460	280LP10	10"	2200	0206FTVB1PX-A				MXTFCV	\$7,760
25	3600	460	280LP10	10"	1230	0252FTVB1PX-A				MXTFCV	\$5,324
25	1800	460	280LP10	10"	1570	0254FTVB1PX-A				MXTFCV	\$6,064
25	1200	460	320LP16	16.5"	2290	0256FTVB1RX-A				MXTFCV	\$9,062
30	3600	460	280LP10	10"	1220	0302FTVB1PX-A				MXTFCV	\$5,874
30	1800	460	280LP10	10"	1580	0304FTVB1PX-A				MXTFCV	\$6,823
30	1200	460	320LP16	16.5"	2380	0306FTVB1RX-A				MXTFCV	\$10,366
40	3600	460	320LP16	16.5"	1840	0402FTVB1RX-A				MXTFCV	\$7,754
40	1800	460	320LP16	16.5"	2320	0404FTVB1RX-A				MXTFCV	\$8,128
40	1200	460	360LP16	16.5"	2540	0406FTVB1RX-A				MXTFCV	\$13,575
50	3600	460	320LP16	16.5"	1830	0502FTVB1RX-A				MXTFCV	\$8,939
50	1800	460	320LP16	16.5"	2300	0504FTVB1RX-A				MXTFCV	\$9,638

Totally Enclosed Fan Cooled Vertical P-Base Footless Medium Thrust

> High Efficiency



HP	Speed (RPM)	Volts	Frame	BD Dimension	Maxium Down Thrust Capacity (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1200	460	360LP16	16.5"	2670	0506FTVB1RX-A				MXTFCV	\$16,005
60	3600	460	360LP16	16.5"	2080	0602FTVB1RX-A				MXTFCV	\$11,429
60	1800	460	360LP16	16.5"	2610	0604FTVB1RX-A				MXTFCV	\$11,926
60	1200	460	400LP16	16.5"	3330	0606FTVB1RX-A				MXTFCV	\$18,570
75	3600	460	360LP16	16.5"	2070	0752FTVB1RX-A				MXTFCV	\$13,594
75	1800	460	360LP16	16.5"	2600	0754FTVB1RX-A				MXTFCV	\$13,837
75	1200	460	400LP16	16.5"	3280	0756FTVB1RX-A				MXTFCV	\$21,838
100	3600	460	400LP16	16.5"	2290	1002FTVB1RX-A				MXTFCV	\$19,579
100	1800	460	400LP16	16.5"	2880	1004FTVB1RX-A				MXTFCV	\$18,643
100	1200	460	440LP16	16.5"	3620	1006FTVB1RX-A				MXTFCV	\$28,550
125	3600	460	440LP16	16.5"	2480	1251FTVB1RX-A			5	MXTFCV	\$29,076
125	1800	460	440LP16	16.5"	3180	1254FTVB1RX-A				MXTFCV	\$23,733
125	1200	460	440LP16	16.5"	3580	1256FTVB1RX-A				MXTFCV	\$34,515
150	3600	460	440LP16	16.5"	2450	1501FTVB1RX-A			5	MXTFCV	\$35,365
150	1800	460	440LP16	16.5"	3130	1504FTVB1RX-A				MXTFCV	\$28,986
150	1200	460	440LP16	16.5"	3510	1506FTVB1RX-A				MXTFCV	\$42,886
200	3600	460	440LP16	16.5"	2390	2001FTVB1RX-A			5	MXTFCV	\$43,165
200	1800	460	440LP16	16.5"	3050	2004FTVB1RX-A				MXTFCV	\$40,510
200	1200	460	N449LP20	20"	3780	2006FTVB1SX-A				MXTFCV	\$57,453
250	3600	460	N449LP20	20"	2490	2501FTVB1SX-A			5	MXTFCV	\$54,920
250	1800	460	N449LP20	20"	3270	2504FTVB1SX-A				MXTFCV	\$47,877
250	1200	460	N449LP20	20"	3680	2506FTVB1SX-A				MXTFCV	\$71,817
300	3600	460	N449LP20	20"	2440	3001FTVB1SX-A			5	MXTFCV	\$65,840
300	1800	460	N449LP20	20"	3250	3004FTVB1SX-A				MXTFCV	\$57,453
300	1200	460	N449LP20	20"	3630	3006FTVB1SX-A				MXTFCV	\$86,181
350	3600	460	N449LP20	20"	2440	3501FTVB1SX-A			5	MXTFCV	\$76,887
350	1800	460	N449LP20	20"	3250	3504FTVB1SX-A				MXTFCV	\$67,031
350	1200	460	N449LP20	20"	3560	3506FTVB1SX-A				MXTFCV	\$100,546
400	3600	460	N449LP20	20"	2440	4001FTVB1SX-A			5	MXTFCV	\$87,871
400	1800	460	N449LP20	20"	3250	4004FTVB1SX-A				MXTFCV	\$76,607

In addition to the dimensions listed, alternate P-flange BD dimensions are available. Please contact Toshiba for additional information.

FL Amps and FL EFF are average expected design values and not guaranteed.

Please contact Toshiba for information on product availability.

Totally Enclosed Fan Cooled

Vertical P-Base Footless

Normal & Medium Thrust

> Premium Efficiency



3

THREE YEAR WARRANTY

Toshiba’s definite purpose, totally enclosed fan cooled, premium efficiency, Vertical P-Base Footless normal and medium thrust motors are designed with the petrochemical and material processing industries in mind. These motors are built to withstand the toughest conditions and offer some of the highest efficiency and torque ratings—leading to a longer life and greater reliability. In addition, our medium thrust design meets API 610 specifications for chemical processing applications and all motors include a patent-pending lubrication system that provides improved flow and circulation of grease and oil for longer bearing life.

Product Scope:

Horsepower:	3 to 350 HP
Speed:	3600, 1800, or 1200 RPM
Voltage:	460 V
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	180HP through N449LP20
Construction:	All Cast Iron
Thrust Ratings:	260 to 3780 Pounds
Insulation:	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

HP	Speed (RPM)	Volts	Frame	BD Dimension	Maxium Down Thrust Capacity (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
NORMAL THRUST											
3	3600	460	180HP	10"	260	0032FTVB3PW-A	3.6	88.5		MXTFCV	\$3,051
3	1800	460	180HP	10"	390	0034FTVB3PW-A	3.8	89.5		MXTFCV	\$2,989
5	3600	460	180HP	10"	310	0052FTVB3PW-A	5.7	89.5		MXTFCV	\$3,941
5	1800	460	180HP	10"	490	0054FTVB3PW-A	6.3	89.5		MXTFCV	\$3,862
7.5	3600	460	210HP	10"	310	Y752FTVB3PW-A	9	90.2		MXTFCV	\$4,254
7.5	1800	460	210HP	10"	560	Y754FTVB3PW-A	9.1	91.7		MXTFCV	\$4,170
10	3600	460	210HP	10"	380	0102FTVB3PW-A	11.5	90.2		MXTFCV	\$4,641
10	1800	460	210HP	10"	640	0104FTVB3PW-A	12	91.7		MXTFCV	\$4,551
15	3600	460	250HP10	10"	760	0152FTVB3PW-A	17	91.7		MXTFCV	\$5,755
15	1800	460	250HP10	10"	1050	0154FTVB3PW-A	18.5	92.4		MXTFCV	\$5,965
15	1200	460	280HP10	10"	1200	0156FTVB3PW-A	19	92.4		MXTFCV	\$7,673
20	3600	460	250HP10	10"	750	0202FTVB3PW-A	22	92.4		MXTFCV	\$6,297
20	1800	460	250HP10	10"	1040	0204FTVB3PW-A	25	93.0		MXTFCV	\$6,801
20	1200	460	280HP10	10"	1200	0206FTVB3PW-A	25	91.7		MXTFCV	\$9,327
25	3600	460	280HP10	10"	740	0252FTVB3PW-A	28	92.4		MXTFCV	\$6,399
25	1800	460	280HP10	10"	1050	0254FTVB3PW-A	29	93.6		MXTFCV	\$7,289
25	1200	460	320HP16	16.5"	1335	0256FTVB3RW-A	32	93.0		MXTFCV	\$10,893
30	3600	460	280HP10	10"	730	0302FTVB3PW-A	33	92.4		MXTFCV	\$7,060
30	1800	460	280HP10	10"	1050	0304FTVB3PW-A	35	93.6		MXTFCV	\$8,202
30	1200	460	320HP16	16.5"	1335	0306FTVB3RW-A	38	93.6		MXTFCV	\$12,459
40	3600	460	320HP16	16.5"	850	0402FTVB3RW-A	46	93.0		MXTFCV	\$9,320
40	1800	460	320HP16	16.5"	1170	0404FTVB3RW-A	47	94.1		MXTFCV	\$9,770
40	1200	460	360HP16	16.5"	1335	0406FTVB3RW-A	48	94.4		MXTFCV	\$15,663
50	3600	460	320HP16	16.5"	830	0502FTVB3RW-A	57	93.0		MXTFCV	\$10,744

Totally Enclosed Fan Cooled Vertical P-Base Footless Normal & Medium Thrust

➤ Premium Efficiency



HP	Speed (RPM)	Volts	Frame	BD Dimension	Maxium Down Thrust Capacity (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
50	1800	460	320HP16	16.5"	1150	0504FTVB3RW-A	60	94.5		MXTFCV	\$11,584
50	1200	460	360HP16	16.5"	1335	0506FTVB3RW-A	61	94.1		MXTFCV	\$18,467
60	3600	460	360HP16	16.5"	940	0602FTVB3RW-A	70	93.6		MXTFCV	\$13,187
60	1800	460	360HP16	16.5"	1290	0604FTVB3RW-A	71	95.0		MXTFCV	\$13,761
60	1200	460	400HP16	16.5"	1690	0606FTVB3RW-A	74	95.0		MXTFCV	\$21,426
75	3600	460	360HP16	16.5"	930	0752FTVB3RW-A	87	93.6		MXTFCV	\$15,686
75	1800	460	360HP16	16.5"	1270	0754FTVB3RW-A	89	95.4		MXTFCV	\$15,967
75	1200	460	400HP16	16.5"	1640	0756FTVB3RW-A	91	95.0		MXTFCV	\$25,197
100	3600	460	400HP16	16.5"	990	1002FTVB3RW-A	114	95.0		MXTFCV	\$22,591
100	1800	460	400HP16	16.5"	1370	1004FTVB3RW-A	119	95.4		MXTFCV	\$21,511
100	1200	460	440HP16	16.5"	1780	1006FTVB3RW-A	123	95.4		MXTFCV	\$32,189
125	3600	460	440HP16	16.5"	1030	1251FTVB3RW-A	140	95.4	5	MXTFCV	\$32,781
125	1800	460	440HP16	16.5"	1480	1254FTVB3RW-A	145	95.8		MXTFCV	\$26,758
125	1200	460	440HP16	16.5"	1740	1256FTVB3RW-A	156	95.4		MXTFCV	\$38,913
150	3600	460	440HP16	16.5"	1000	1501FTVB3RW-A	169	95.8	5	MXTFCV	\$39,873
150	1800	460	440HP16	16.5"	1430	1504FTVB3RW-A	177	95.8		MXTFCV	\$32,681
150	1200	460	440HP16	16.5"	1670	1506FTVB3RW-A	182	95.8		MXTFCV	\$48,352
200	3600	460	440HP16	16.5"	940	2001FTVB3RW-A	225	95.8	5	MXTFCV	\$48,667
200	1800	460	440HP16	16.5"	1350	2004FTVB3RW-A	233	96.2		MXTFCV	\$45,673
200	1200	460	N449HP20	20"	1710	2006FTVB3SW-A	246	96.2		MXTFCV	\$65,625
250	3600	460	N449HP20	20"	860	2501FTVB3SW-A	270	95.8	5	MXTFCV	\$62,889
250	1800	460	N449HP20	20"	1360	2504FTVB3SW-A	276	96.2		MXTFCV	\$54,687
250	1200	460	N449HP20	20"	1610	2506FTVB3SW-A	295	96.2		MXTFCV	\$82,030
300	3600	460	N449HP20	20"	820	3001FTVB3SW-A	328	95.8	5	MXTFCV	\$75,467
300	1800	460	N449HP20	20"	1340	3004FTVB3SW-A	330	96.2		MXTFCV	\$65,625
300	1200	460	N449HP20	20"	1570	3006FTVB3SW-A	354	96.2		MXTFCV	\$98,438
350	3600	460	N449HP20	20"	820	3501FTVB3SW-A	382	95.8	5	MXTFCV	\$88,048
350	1800	460	N449HP20	20"	1340	3504FTVB3SW-A	380	96.2		MXTFCV	\$76,561
MEDIUM THRUST											
3	3600	460	180LP	10"	390	0032FTVB3PX-A	3.6	88.5		MXTFCV	\$3,235
3	1800	460	180LP	10"	635	0034FTVB3PX-A	3.8	89.5		MXTFCV	\$3,170
5	3600	460	180LP	10"	500	0052FTVB3PX-A	5.7	89.5		MXTFCV	\$4,176
5	1800	460	180LP	10"	750	0054FTVB3PX-A	6.3	89.5		MXTFCV	\$4,093
7.5	3600	460	210LP	10"	580	Y752FTVB3PX-A	9	90.2		MXTFCV	\$4,517
7.5	1800	460	210LP	10"	850	Y754FTVB3PX-A	9.1	91.7		MXTFCV	\$4,426
10	3600	460	210LP	10"	640	0102FTVB3PX-A	11.5	90.2		MXTFCV	\$4,916
10	1800	460	210LP	10"	900	0104FTVB3PX-A	12	91.7		MXTFCV	\$4,818
15	3600	460	250LP10	10"	1250	0152FTVB3PX-A	17	91.7		MXTFCV	\$5,986
15	1800	460	250LP10	10"	1580	0154FTVB3PX-A	18.5	92.4		MXTFCV	\$6,204
15	1200	460	280LP10	10"	2000	0156FTVB3PX-A	19	92.4		MXTFCV	\$7,981
20	3600	460	250LP10	10"	1240	0202FTVB3PX-A	22	92.4		MXTFCV	\$6,549
20	1800	460	250LP10	10"	1560	0204FTVB3PX-A	25	93.0		MXTFCV	\$7,073
20	1200	460	280LP10	10"	2200	0206FTVB3PX-A	25	91.7		MXTFCV	\$9,699
25	3600	460	280LP10	10"	1230	0252FTVB3PX-A	28	92.4		MXTFCV	\$6,655
25	1800	460	280LP10	10"	1570	0254FTVB3PX-A	29	93.6		MXTFCV	\$7,581
25	1200	460	320LP16	16.5"	2290	0256FTVB3RX-A	32	93.0		MXTFCV	\$11,328

Totally Enclosed Fan Cooled

Vertical P-Base Footless

Normal & Medium Thrust

> Premium Efficiency



HP	Speed (RPM)	Volts	Frame	BD Dimension	Maxium Down Thrust Capacity (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
30	3600	460	280LP10	10"	1220	0302FTVB3PX-A	33	92.4		MXTFCV	\$7,342
30	1800	460	280LP10	10"	1580	0304FTVB3PX-A	35	93.6		MXTFCV	\$8,529
30	1200	460	320LP16	16.5"	2380	0306FTVB3RX-A	38	93.6		MXTFCV	\$12,957
40	3600	460	320LP16	16.5"	1840	0402FTVB3RX-A	46	93.0		MXTFCV	\$9,693
40	1800	460	320LP16	16.5"	2320	0404FTVB3RX-A	47	94.1		MXTFCV	\$10,161
40	1200	460	360LP16	16.5"	2540	0406FTVB3RX-A	48	94.1		MXTFCV	\$16,290
50	3600	460	320LP16	16.5"	1830	0502FTVB3RX-A	57	93.0		MXTFCV	\$11,174
50	1800	460	320LP16	16.5"	2300	0504FTVB3RX-A	60	94.5		MXTFCV	\$12,047
50	1200	460	360LP16	16.5"	2670	0506FTVB3RX-A	61	94.1		MXTFCV	\$19,206
60	3600	460	360LP16	16.5"	2080	0602FTVB3RX-A	70	93.6		MXTFCV	\$13,714
60	1800	460	360LP16	16.5"	2610	0604FTVB3RX-A	71	95.0		MXTFCV	\$14,311
60	1200	460	400LP16	16.5"	3330	0606FTVB3RX-A	74	95.0		MXTFCV	\$22,284
75	3600	460	360LP16	16.5"	2070	0752FTVB3RX-A	87	93.6		MXTFCV	\$16,313
75	1800	460	360LP16	16.5"	2600	0754FTVB3RX-A	89	95.4		MXTFCV	\$16,605
75	1200	460	400LP16	16.5"	3280	0756FTVB3RX-A	91	95.0		MXTFCV	\$26,205
100	3600	460	400LP16	16.5"	2290	1002FTVB3RX-A	114	95.0		MXTFCV	\$23,495
100	1800	460	400LP16	16.5"	2880	1004FTVB3RX-A	119	95.4		MXTFCV	\$22,372
100	1200	460	440LP16	16.5"	3620	1006FTVB3RX-A	123	95.4		MXTFCV	\$32,833
125	3600	460	440LP16	16.5"	2480	1251FTVB3RX-A	140	95.4	5	MXTFCV	\$33,437
125	1800	460	440LP16	16.5"	3180	1254FTVB3RX-A	145	95.8		MXTFCV	\$27,293
125	1200	460	440LP16	16.5"	3580	1256FTVB3RX-A	156	95.4		MXTFCV	\$39,692
150	3600	460	440LP16	16.5"	2450	1501FTVB3RX-A	169	95.8	5	MXTFCV	\$40,670
150	1800	460	440LP16	16.5"	3130	1504FTVB3RX-A	177	95.8		MXTFCV	\$33,334
150	1200	460	440LP16	16.5"	3510	1506FTVB3RX-A	182	95.8		MXTFCV	\$49,319
200	3600	460	440LP16	16.5"	2390	2001FTVB3RX-A	225	95.8	5	MXTFCV	\$49,640
200	1800	460	440LP16	16.5"	3050	2004FTVB3RX-A	233	96.2		MXTFCV	\$46,587
200	1200	460	N449LP20	20"	3780	2006FTVB3SX-A	246	96.2		MXTFCV	\$67,593
250	3600	460	N449LP20	20"	2490	2501FTVB3SX-A	270	95.8	5	MXTFCV	\$64,777
250	1800	460	N449LP20	20"	3270	2504FTVB3SX-A	276	96.2		MXTFCV	\$56,328
250	1200	460	N449LP20	20"	3680	2506FTVB3SX-A	295	96.2		MXTFCV	\$84,492
300	3600	460	N449LP20	20"	2440	3001FTVB3SX-A	328	95.8	5	MXTFCV	\$77,733
300	1800	460	N449LP20	20"	3250	3004FTVB3SX-A	330	96.2		MXTFCV	\$67,593
300	1200	460	N449LP20	20"	3630	3006FTVB3SX-A	354	96.2		MXTFCV	\$101,391
350	3600	460	N449LP20	20"	2440	3501FTVB3SX-A	382	95.8	5	MXTFCV	\$90,689
350	1800	460	N449LP20	20"	3250	3504FTVB3SX-A	380	96.2		MXTFCV	\$78,859
350	1200	460	N449LP20	20"	3560	3506FTVB3SX-A	414	96.2		MXTFCV	\$118,288

In addition to the dimensions listed, alternate P-flange BD dimensions are available. Please contact Toshiba for additional information.

FL Amps and FL EFF are average expected design values and not guaranteed.

Please contact Toshiba for information on product availability.

Low Voltage Modifications

Stock Modifications

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Discount Symbol: **MMP001 – For Low Voltage Motors**

This section requires that the handling charge listed below be added to each motor that is to be modified in addition to the requested modifications.

Option		Handling Charge
Frame	143/145	\$241
	182/184	\$241
	213/215	\$284
	254/256	\$284
	284/286	\$383
	324/326	\$383
	364/365	\$438
	404/405	\$438
	444/445	\$602
	447	\$602
	449/500	\$602
	5000/5800	\$766

Modifications from this section should be added to the appropriate motor list price and the above handling charge to generate a total list price for the motor. Apply the applicable discount/multiplier from discount symbol MMP001 to arrive at a net each price. This will be the production/modified multiplier associated with the account pricing.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Blowers

Toshiba motors are suitable for use with inverter-fed controllers. Turndown capability is a function of the product selected. See individual product page for specific information. When turndown requirements exceed product capability, the use of an auxiliary blower is required. Contact Toshiba for help with determining whether a blower is required for an application.

The National Electrical Code 430.126 (b) requires that motors with external forced ventilation must have a form of thermal protection. See "Thermal Protection" section for the addition of thermal protection. This addition is not included in the blower adder.

Option		Blower
Frame	143/145	\$1,148
	182/184	\$1,203
	213/215	\$1,488
	254/256	\$1,641
	284/286	\$2,023
	324/326	\$2,515
	364/365	\$3,052
	404/405	\$4,040
	444/445	\$4,380
	447	\$4,380
	449/500	\$4,990
	5010/5011	\$6,016
	5810	\$10,666
	5811	\$13,333

Special Notes:

- Adders above are not available on explosion proof product.
- Blower standard voltages are as follows:
 - » 140 through 280T frames—single-phase 230 to 330 V and three-phase 230 to 330/400 to 575 V
 - » 320 through N449T frames—three-phase 230 to 330/400 to 575 V
 - » 500 frame and larger – three-phase 460 or 575 V (specify at time of order)
- Blowers cannot operate on line voltages over 575 V.
- Contact Toshiba for applications requiring line voltages over 575 V.
- Contact Toshiba for availability in Division 2 applications.

Conduit Box Modifications

Toshiba's standard main conduit box on all motors is located in the F1 position, with the exception of oil well pump motors that have the main box located in the F2 position.

Cast Iron Main Box

Cast iron conduit boxes come standard on all explosion proof, EQPIII-840, and EQPIII-841 products. Cast iron conduit boxes come standard on 360T frame and larger quarry duty products.

Option		Cast Iron Main Box
Frame	143/145	\$123
	182/184	\$123
	213/215	\$149
	254/256	\$149
	284/286	\$219
	324/326	\$219
	364/365	\$328
	404/405	\$328
	444/445	\$602
	447	\$602
	449/500	\$656
	5000/5800	\$1,094

Auxiliary Terminal Box

Termination of protective or monitoring devices can be provided in a separate auxiliary box (280 frame and larger) or a conduit mounted off the main terminal box (250T frame and below). All auxiliary boxes will be mounted on the same side as the main terminal box unless specified otherwise.

Option		Conduit
Frame	143/145	\$383
	182/184	\$383
	213/215	\$383
	254/256	\$383
	284/286	—
	324/326	—
	364/365	—
	404/405	—
	444/445	—
	447	—
	449/500	—
	5000/5800	—

Location

All motors are provided with the main terminal box in the F1 position, with the exception of oil well pump motors that have the main box located in the F2 position. For conduit box location in the F2 position, see adder below.

Option		F2 (Stock Modifications)	
		ODP	TEFC
Frame	143/145	\$65	\$65
	182/184	\$65	\$65
	213/215	\$95	\$95
	254/256	\$95	\$95
	284/286	\$110	\$110
	324/326	\$110	\$110
	364/365	\$165	\$165
	404/405	\$220	—
	444/445	\$330	—
	447	\$330	—
	449/500	\$400	\$400
	5000/5800	\$400	\$400

Special Notes:

- Not all TEFC motors are field-modifiable to F2 assembly.
- See applications section for F2 field modifiability.
- Contact Toshiba for availability.

Remote-Mount Conduit Box

For applications requiring that the conduit box be located away from the motor, Toshiba is able to supply a remote-mount conduit box. The conduit box will be supplied with the main motor, but it will arrive unfastened. It includes a main terminal box and a threaded mounting plate.

Option		Steel Conduit Box	Cast Iron Conduit Box
Frame	143/145	\$123	\$219
	182/184	\$123	\$219
	213/215	\$149	\$273
	254/256	\$149	\$273
	284/286	\$219	\$438
	324/326	\$219	\$438
	364/365	\$328	\$656
	404/405	\$328	\$656
	444/445	\$602	\$1,094
	447	\$602	\$1,094
	449/500	\$656	\$1,313
	5000/5800	\$875	\$1,750

Special Notes:

- Adders above are not available on explosion proof product.

Couplings & Sheaves Mounted

Couplings and V-belt sheaves must be supplied (finished bored, balanced, and key-seated) to Toshiba's shaft dimensions before they can be mounted to the motor. An incoming identification number must be obtained from Toshiba, and coupling must be shipped at least three weeks in advance before scheduled motor shipment and must include the manufacturer's mounting instructions.

Option		Customer-Supplied Sheave/Coupling
Frame	143/145	\$656
	182/184	\$656
	213/215	\$766
	254/256	\$875
	284/286	\$875
	324/326	\$875
	364/365	\$984
	404/405	\$984
	444/445	\$1,094
	447	\$1,203
	449/500	\$1,313
	5000/5800	\$1,313

Special Notes:

- Incoming parts without a proper Toshiba identification number will not be accepted and will be instead returned to sender.

Drains & Breathers

Standard horizontally-mounted totally enclosed fan cooled and open motors are provided with drain holes. Drain holes are located at the lowest point on the motor.

Breathers

Option		Standard Breather (1)	UL Stainless Breather (2)	Standard Breather Conduit Box (3)
Frame	143/145	\$219	\$273	\$273
	182/184	\$219	\$273	\$273
	213/215	\$219	\$273	\$273
	254/256	\$328	\$383	\$383
	284/286	\$328	\$383	\$383
	324/326	\$328	\$383	\$383
	364/365	\$328	\$438	\$438
	404/405	\$328	\$438	\$438
	444/445	\$328	\$438	\$438
	447	\$328	\$438	\$438
	449/500	\$328	\$438	\$438
	5000/5800	\$328	\$438	\$438

(1) EQPIII-840 and EQPIII-841 motors have dual tapped holes fitted with automatic bronze drain and breathers as standard.

(2) Explosion proof motors have UL-listed stainless steel drain and breathers as standard (for horizontal-mounting only).

(3) Standard and stainless breathers are available for cast conduit boxes only (not available on explosion proof motors).

Special Notes:

- EQP Global® 840 and 841 motors have tapped holes fitted with stainless steel T-drains located at the lowest point in the face of each bearing bracket (140 through 210 frames) or on the lowest point of the frame (250 through 360 frames).
- Additional breathers are not available on explosion proof product.

Additional Drain Holes

Option		Drain Hole	Drain Hole Conduit Box (1)
Frame	143/145	\$131	\$131
	182/184	\$131	\$131
	213/215	\$131	\$131
	254/256	\$131	\$131
	284/286	\$131	\$131
	324/326	\$131	\$131
	364/365	\$131	\$131
	404/405	\$131	\$131
	444/445	\$131	\$131
	447	\$131	\$131
	449/500	\$131	\$131
	5000/5800	\$131	\$131

(1) Conduit box drain holes are available on cast conduit boxes only.

Special Notes:

- Above adders not available on explosion proof product.
- EQP Global SD motors have two additional drain holes fitted with plastic plugs in each of the bearing brackets for vertical mounting.

Drip Covers

Drip covers can be furnished on standard motors for extra protection from dripping liquids and falling objects when the motor is mounted in the vertical shaft-down position. Standard drip covers are of fabricated steel 1/8" with no lip. Severe duty drip covers are of fabricated steel 3/8" with lip.

Option		Steel Drip Cover (Standard Duty)	Steel Drip Cover (Severe Duty)
Frame	143/145	\$328	\$394
	182/184	\$438	\$525
	213/215	\$438	\$525
	254/256	\$438	\$525
	284/286	\$613	\$735
	324/326	\$766	\$919
	364/365	\$831	\$998
	404/405	\$875	\$1,050
	444/445	\$941	\$1,129
	447	\$941	\$1,129
	449/500	\$941	\$1,129
	5000/5800	—	—

Special Notes:

- The drip cover adder does not include vertical lifting provisions.
- If lifting provisions are required, the motor becomes a production motor. See "Production" modifications section.

Textile Cover

Textile covers are available for totally enclosed fan cooled enclosure applications prone to lint and fibers entering the fan cover's air inlets.

Option		Textile Cover
Frame	143/145	\$328
	182/184	\$438
	213/215	\$438
	254/256	\$438
	284/286	\$613
	324/326	\$766
	364/365	\$831
	404/405	\$875
	444/445	\$941
	447	\$941
	449/500	\$941
	5000/5800	—

Special Notes:

- Adders above are not available on explosion proof product.

Enclosures

This section refers to additional specifications used to define the motor's enclosure. These adders may be required in order to provide a necessary additional degree of protection for normal operation in certain environments.

Marine Duty

Marine Duty IEEE 45 must be incorporated into an EQP Series 840 or 841 base motor. Please see adders below.

Option		IEEE 45 (1)	IEEE 45 (2)
Frame	143/145	\$383	\$131
	182/184	\$383	\$131
	213/215	\$405	\$131
	254/256	\$438	\$131
	284/286	\$645	\$131
	324/326	\$700	\$131
	364/365	\$853	\$131
	404/405	\$1,083	\$131
	444/445	\$1,291	\$131
	447	\$1,542	\$131
	449/500	\$1,542	\$131
	5000/5800	\$1,914	\$131

(1) In above-deck applications, the adder includes space heaters with leads terminating in main terminal box and tropicalization in accordance with IEEE 45 requirements.

» EQPIII-840 280 frame and below will require the addition of the labyrinth seals on both ends.

(2) In below-deck applications only, the nameplate changes.

Special Notes:

- EQPIII/Global 840 and 841 products through N449T frame are nameplated IEEE 45 Marine Duty as standard.

All Cast Iron Construction

All cast iron construction adders on totally enclosed motors will include the following cast iron features: frame, brackets, fan cover, and conduit box.

Option		All Cast Iron Construction
Frame	143/145	\$197
	182/184	\$241
	213/215	\$306
	254/256	\$394
	284/286	\$569
	324/326	\$656
	364/365	\$1,061
	404/405	\$1,400
	444/445	\$2,188
	447	\$3,281
	449/500	\$3,828 (1)
	5000/5800	\$3,828 (1)

(1) Heavy-gauge fabricated steel is used for fan cover in frame sizes above N449T.

Special Notes:

- This is standard construction on all 840 and all 841 motors, and totally enclosed explosion proof product.

Export Crating

Toshiba provides packaging options for different shipping requirements. Options include standard commercial packaging (for common, below-deck transport on ships) and containerized shipping. Both options are available at a net price of 8% of the motor's total sell price or a minimum of \$350, whichever is greater.

Flange-Mounting

Flanges can be ordered through production are also available as kits. See the "Parts" section of the catalog for information.

Open Drip Proof Motors

Option		C-Face Footed
Frame	143/145	—
	182/184	—
	213/215	\$295 (1)
	254/256	\$295 (1)
	284/286	\$438
	324/326	\$481
	364/365	\$875
	404/405	\$1,094
	444/445	\$1,586
	447	\$1,695
	449/500	—
	5000/5800	—

(1) Motors do not meet NEMA BA dimensions (NEMA BA dimension are available on 210 and 250 frames as production motors when specified).

Totally Enclosed Fan Cooled Motors

Option		C-Face Footed
Frame	143/145	\$109 (1, 2)
	182/184	\$131 (1, 2)
	213/215	\$175 (1)
	254/256	\$263 (1)
	284/286	\$438
	324/326	\$492
	364/365	\$820
	404/405	\$1,148
	444/445	\$1,477
	447	\$1,477
	449/500	\$1,641
	5000/5800	-

(1) Motors do not meet NEMA BA dimensions

(2) NEMA BA dimensions are available on 140 and 180 frames as production motors when specified for EQPIII series motors.

Totally Enclosed Explosion Proof

Option		C-Face Footed
Frame	143/145	\$241 (1)
	182/184	\$273 (1)
	213/215	\$328 (1)
	254/256	\$438 (1)
	284/286	\$766
	324/326	\$875
	364/365	\$984
	404/405	—
	444/445	—
	447	—
	449/500	—
	5000/5800	—

(1) Motors do not meet NEMA BA dimensions.

Grounding Provisions

All motor frames 140T through 5800 have a CSA clamp-type grounding lug in the conduit box. All EQPIII/Global 840 and 841 motors are provided with a UL-approved clamp-type grounding lug in the conduit box.

External Grounding Provisions on Motor Frame (Foot)

All EQPIII-841 motors have an additional grounding provision on the motor base as standard. The grounding provisions on the motor base are ¼" to 20" UNC tap for frames 140T through 250T, ⅜" to 16" UNC tap on frames 280T through 447T, and ½" to 13" UNC for frames larger than 447T.

Option		Foot Grounding
Frame	143/145	\$219
	182/184	\$219
	213/215	\$219
	254/256	\$219
	284/286	\$219
	324/326	\$219
	364/365	\$219
	404/405	\$219
	444/445	\$219
	447	\$219
	449/500	\$219
	5000/5800	\$219

External Grounding Pad to Motor Frame

Apply the adder below for a special ground pad with two holes mounted on the motor frame. When placing the order, the hole and tap size must be provided.

Option		Frame Grounding
Frame	143/145	—
	182/184	—
	213/215	—
	254/256	—
	284/286	—
	324/326	\$1,641
	364/365	\$1,641
	404/405	\$1,641
	444/445	\$1,641
	447	\$1,641
	449/500	\$1,641
	5000/5800	\$1,641

Special Notes:

- Adders above are not available on explosion proof product.

Insulation Modifications

Insulation systems are divided into classes according to the thermal endurance by temperature rating. Standard motor insulation comes non-hygroscopic Class F (utilizing Class H components) and is dipped and baked in a Class H varnish. Unusual or severe applications may require special insulation systems or winding protection.

Internal Coating for Extreme Service Operation

This adder provides additional insulation coating as well as corrosion protection for all internal machined surfaces.

Option		SD Coating
Frame	143/145	\$164
	182/184	\$164
	213/215	\$219
	254/256	\$328
	284/286	\$547
	324/326	\$766
	364/365	\$875
	404/405	\$1,203
	444/445	\$1,641
	447	\$2,406
	449/500	\$2,406
	5000/5800	\$2,734

Special Notes:

- This comes standard on all 840 and all 841 motors.

Tropicalize/Fungus-Proof Windings

Unwanted fungi may break down a motor's insulation system over time. The addition of the tropicalize/fungus-proof adder will protect motor windings from this type of problem.

Option		Tropicalize/Fungus-Proof Windings
Frame	143/145	\$109
	182/184	\$109
	213/215	\$164
	254/256	\$219
	284/286	\$328
	324/326	\$438
	364/365	\$547
	404/405	\$711
	444/445	\$930
	447	\$1,203
	449/500	\$1,203
	5000/5800	\$1,531

Epoxy Coating on Motor Windings

This adder provides additional protection against corrosive and/or humid environments.

Option		Epoxy Coating on Motor Windings
Frame	143/145	\$164
	182/184	\$164
	213/215	\$219
	254/256	\$328
	284/286	\$547
	324/326	\$766
	364/365	\$875
	404/405	\$1,203
	444/445	\$1,641
	447	\$2,406
	449/500	\$2,406
	5000/5800	\$2,734

Leads Length/Lead Terminals

Crimp-type lead lugs/ring terminals come standard on motors as follows:

- All 280 frame motors and larger
- 210 frame and larger on 840 products
- All 841 motors

Crimp Terminals

Option	Crimp Terminals	
Frame	143/145	\$109
	182/184	\$109
	213/215	\$153
	254/256	\$153
	284/286	—
	324/326	—
	364/365	—
	404/405	—
	444/445	—
	447	—
	449/500	—
	5000/5800	—

Burndy Lugs/Two-Hole Terminals

Option	Burndy Terminals	
Frame	143/145	\$580
	182/184	\$580
	213/215	\$744
	254/256	\$744
	284/286	\$744
	324/326	\$744
	364/365	\$744
	404/405	\$744
	444/445	\$744
	447	\$744
	449/500	\$744
	5000/5800	\$744

Nameplate(s)

Standard nameplates are 304-grade stainless steel with engraved lettering. Additional nameplates for remote-mounting and special markings are available. For requests other than what is listed below, contact Toshiba.

Duplicate or Special Nameplate

Option	Re-Nameplate	Duplicate Nameplate	Special ID Tag
Frame	143/145	\$131	\$131
	182/184	\$131	\$131
	213/215	\$131	\$131
	254/256	\$131	\$131
	284/286	\$131	\$131
	324/326	\$131	\$131
	364/365	\$131	\$131
	404/405	\$131	\$131
	444/445	\$131	\$131
	447	\$131	\$131
	449/500	\$131	\$131
	5000/5800	\$131	\$131

Screens

Corrosion resistant screens covering air inlets and outlets of open drip proof motors are available. Motors equipped with screens will meet the NEMA guarded definition.

Screens to an Open Drip Proof Motor

Option	Corrosion-Resistant	Stainless Steel
Frame	143/145	\$219
	182/184	\$273
	213/215	\$306
	254/256	\$361
	284/286	\$383
	324/326	\$438
	364/365	\$547
	404/405	\$766
	444/445	\$820
	447	\$875
	449/500	\$875
	5000/5800	\$1,094

Special Notes:

- Corrosion-resistant screens come standard on oil well pump motors.

Shaft Grounding Provisions

Shaft grounding provisions help to eliminate shaft currents that can be introduced into the motor through upstream controllers (ie: adjustable speed drives). These currents can potentially lead to premature failure of the bearings, commonly referred to as "fluting."

Option	Aegis Grounding Ring	
Frame	143/145	\$182
	182/184	\$208
	213/215	\$236
	254/256	\$290
	284/286	\$344
	324/326	\$398
	364/365	\$404
	404/405	\$597
	444/445	\$861
	447	\$861
	449/500	\$861
	5000/5800	—

Special Notes:

- Adders above do not include insulated bearings.
- Adders above are not available on explosion proof product.
- Insulating the bearings is recommended when the shaft voltage exceeds 300 mV.
- It is up to the user to determine when insulated bearings are required, especially with the use of an inverter-fed control. NEMA MG1 Part 31 suggests insulating the bearing(s) on all motors in 500 series frames and larger that are inverter-fed.
- Shaft grounding brushes may be used to divert the current around the bearing with the use of Inverter-fed control.
- Aegis recommends the non-drive end bearing be insulated on all frame sizes 440 and larger, when used with adjustable speed drives.
- Insulated bearings are not available on angular contact bearing construction.
- Where insulated bearings are used on direct coupled applications the use of insulated coupling and/or shaft grounding brush is required to reduce the risk of driven equipment bearing damage.
 - » Ground brushes are not suitable for Division 2 environments.
- If bearing thermal devices are required with the insulated bearing, a special version of the thermal device will be required.
- Contact Toshiba for availability and price.

Space Heaters

Space heaters are strip-type heaters mounted inside the frame near the coils to prevent moisture condensation in the motor during times the motor is not energized. Heater leads are brought out to the motor’s main conduit box and marked H1 and H2. Standard heater voltage is 120 V single-phase unless otherwise specified.

Option		Standard Space Heaters	Division 2 Space Heaters
Frame	143/145	\$328	\$656
	182/184	\$328	\$656
	213/215	\$328	\$656
	254/256	\$328	\$656
	284/286	\$481	\$962
	324/326	\$481	\$962
	364/365	\$580	\$1160
	404/405	\$700	\$1400
	444/445	\$831	\$1652
	447	\$941	\$1882
	449/500	\$941	\$1882
	5000/5800	\$1,148	\$2296

Special Notes:

- Adders above are not available on explosion proof product.

Terminal Blocks

Insulated stud-type terminal blocks/strips can be provided for single-voltage, single-speed applications in the standard conduit box.

Option		Terminal Block (1)	Terminal Strip (2)
Frame	143/145	\$339	\$219
	182/184	\$339	\$219
	213/215	\$339	\$219
	254/256	\$339	\$219
	284/286	\$405	\$219
	324/326	\$733	\$219
	364/365	\$733	\$219
	404/405	\$733	\$219
	444/445	\$1,444	\$219
	447	\$1,444	\$219
	449/500	(3)	\$219
	5000/5800	(3)	\$219

(1) This adder refers to power leads only.

(2) This adder refers to accessory leads only.

(3) Please contact Toshiba for pricing information on this adder.

Special Notes:

- Adders above are not available on explosion proof product.

Testing

Toshiba motors are tested in compliance with IEEE Std. 112 to meet NEMA MG1 requirements. Test reports and optional testing are available for each individual motor. Duplicates/ copies of standard routine test reports are available. Please contact Toshiba for scheduling/coordination for witness esting requirements. **All prices are net per motor.**

Option		Routine, Unwitnessed (Report Only)	Routine, Witnessed	Complete, Unwitnessed
Frame	143/145	\$30	\$300	\$1,350
	182/184	\$30	\$300	\$1,350
	213/215	\$30	\$300	\$1,350
	254/256	\$30	\$300	\$1,350
	284/286	\$30	\$500	\$1,450
	324/326	\$30	\$500	\$1,700
	364/365	\$30	\$750	\$1,950
	404/405	\$30	\$750	\$2,200
	444/445	\$30	\$750	\$2,450
	447	\$30	\$750	\$2,450
	449/500	\$30	\$1,000	\$3,200
	5000/5800	\$30	\$1,000	\$3,200
Option		Complete, Witnessed	Noise, Unwitnessed (1)	Noise, Witnessed (1)
Frame	143/145	\$1,500	\$600	\$1,000
	182/184	\$1,500	\$600	\$1,000
	213/215	\$1,500	\$600	\$1,000
	254/256	\$1,500	\$600	\$1,000
	284/286	\$1,750	\$800	\$1,200
	324/326	\$2,000	\$800	\$1,200
	364/365	\$2,250	\$800	\$1,200
	404/405	\$2,500	\$800	\$1,200
	444/445	\$2,750	\$1,000	\$1,500
	447	\$2,750	\$1,000	\$1,500
	449/500	\$3,500	\$1,200	\$1,500
	5000/5800	\$3,500	\$1,200	\$1,500
Option		Vibration	Insulation Resistance	Polarization Index
Frame	143/145	\$600	\$350	\$500
	182/184	\$600	\$350	\$500
	213/215	\$600	\$350	\$500
	254/256	\$600	\$400	\$550
	284/286	\$800	\$400	\$550
	324/326	\$800	\$450	\$600
	364/365	\$800	\$450	\$600
	404/405	\$800	\$500	\$650
	444/445	\$1,000	\$500	\$650
	447	\$1,000	\$550	\$700
	449/500	\$1,000	\$550	\$700
	5000/5800	\$1,000	\$550	\$700

(1) Noise test consists of overall sound pressure values/readings only. For octave band measurements, contact Toshiba for pricing.

Thermal Protection

Toshiba provides a wide variety of protective devices which are available as follows.

Thermostats (Klixons)

Toshiba's standard offering includes a normally-closed (NC), bi-metallic, temperature actuated element mounted on the stator winding. Leads are marked P1 and P2. Termination of the leads is in the main conduit box. Special thermostats are available upon request. Contact Toshiba for pricing and availability.

Option		Klixons-NC (1)
Frame	143/145	\$164
	182/184	\$164
	213/215	\$164
	254/256	\$164
	284/286	\$164
	324/326	\$230
	364/365	\$230
	404/405	\$328
	444/445	\$328
	447	\$405
	449/500	\$405
	5000/5800	\$438

(1) Division 2 environments require the use of hermetically-sealed thermostats. This is available as production only.

Winding PTC Thermistors

Non-linear resistance temperature detectors are mounted on the motor winding. This thermal protection consists of three thermistors only or three thermistors with a solid state control relay. The provided control relay is intended for mounting in a remote location.

Option		Mark A (PTC) Thermistor	Mark A (PTC) Thermistor & Module
Frame	143/145	\$328	\$1,367
	182/184	\$328	\$1,367
	213/215	\$328	\$1,367
	254/256	\$328	\$1,367
	284/286	\$328	\$1,367
	324/326	\$328	\$1,367
	364/365	\$328	\$1,367
	404/405	\$328	\$1,367
	444/445	\$328	\$1,367
	447	\$328	\$1,367
	449/500	\$328	\$1,367
	5000/5800	\$328	\$1,367

Special Notes:

- Adders above are not available for stock modification on explosion proof product.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Low Voltage Modifications

Production Modifications

Production modifications not applicable to EQP Global motors 140 through 360 frame (use EQPIII Series base price for these frame sizes.)

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Continued...

Discount Symbol: MMP001 – For Low Voltage Motors

Modifications from this section should be added to the appropriate motor list price to generate a total list price for the motor. Apply the applicable discount/multiplier from discount symbol MMP001 to arrive at a net each price.

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Altitude

Standard designs are built for operation up to 3300 ft. (1000 m) above sea level at a maximum ambient of 40°C.

Option		3301' to 9900'	Over 9900'
Frame	143/145	\$142	Contact Toshiba
	182/184	\$142	
	213/215	\$186	
	254/256	\$230	
	284/286	\$306	
	324/326	\$405	
	364/365	\$525	
	404/405	\$755	
	444/445	\$1,061	
	447	\$2,406	
	449/500	\$2,953	
	5000/5800	\$2,953	

Special Notes:

- Altitudes over 3300 ft. may affect frame size. Please contact Toshiba to confirm.

Ambient Temperature

Toshiba motors are designed to operate in an ambient temperature range between -25° and 40°C. For operation in temperatures above or below the standard, refer to chart below.

Option		-40° to -60°C (2)	-25° to -39°C	41° to 60°C	61° to 90°C (1 & 2)	91° to 115°C (1 & 2)
Frame	143/145	Contact Toshiba	\$142	\$142	\$284	Contact Toshiba
	182/184		\$142	\$142	\$284	
	213/215		\$186	\$186	\$284	
	254/256		\$230	\$230	\$372	
	284/286		\$306	\$306	\$656	
	324/326		\$405	\$405	\$809	
	364/365		\$525	\$525	\$1,039	
	404/405		\$755	\$755	\$1,498	
	444/445		\$1,061	\$1,061	\$2,122	
	447		\$2,406	\$2,406	\$2,625	
	449/500		\$2,953	\$2,953	\$3,281	
	5000/5800		\$2,953	\$2,953	\$4,375	

(1) This applies to open drip proof motors only. Contact Toshiba for totally enclosed fan cooled motors.

(2) Not available on explosion proof motors.

Special Notes:

- Non-standard ambient temperatures may affect frame size and insulation class. Please contact Toshiba to confirm.
- Maximum ambient for explosion proof motors when operated on adjustable speed drives is 50°C.

Balance/Vibration

All Toshiba motors are dynamically balanced and measured in accordance with NEMA MG1 standards unless otherwise specified by the design. Toshiba motors all have a standard vibration level of 0.12 inches/second. See adder below for vibration levels lower than the Toshiba standard.

Option		Precision 0.08 in/sec. (1, 2)	Precision 0.04 in/sec. (3, 4)	Special Balance Requirements
Frame	143/145	\$284	\$438	Contact Toshiba
	182/184	\$284	\$438	
	213/215	\$284	\$438	
	254/256	\$328	\$492	
	284/286	\$328	\$492	
	324/326	\$383	\$602	
	364/365	\$383	\$820	
	404/405	\$492	\$1,203	
	444/445	\$492	\$1,641	
	447	\$930	\$2,188	
	449/500	\$930 (5)	\$2,734 (5)	
	5000/5800	\$984 (5)	\$3,281 (5)	
	5011/5811	—	—	

(1) This vibration level is standard on all 840 products through 447 frame.

(2) This vibration level is standard on all 841 products.

(3) This vibration level is not available on Toshiba P-Base products. This precision level of vibration is not available for motors with roller bearings.

(4) This vibration level is not available on 5011/5811 frames.

(5) Contact Toshiba for 3600 RPM (2-pole motors).

Bases (Adjustable)

See "Spare Parts" section for pricing.

Bearings

Special bearings and designs are available on a production basis. Standard bearings can be changed for specific application requirements. The following list additions apply.

Sealed/Shielded Bearings

Open and totally enclosed general purpose motors on 250T frame and smaller contain shielded or sealed-type, non-regreasable bearings as standard. Contact Toshiba to determine actual stock design bearing information.

Option		Sealed Bearings
Frame	143/145	\$219
	182/184	\$219
	213/215	\$273
	254/256	\$273
	284/286	\$328
	324/326	\$328
	364/365	\$514
	404/405	\$820
	444/445	\$875
	447	—
	449/500	—
	5000/5800	—

Special Notes:

- Bearings are lubed for life and cannot be regreased.
- Sealed bearings come standard on all 140 through 250 frame motors, except for all 841 products.

Sleeve Bearings

Contact Low Voltage Motor Application Support for price and availability.

Insulated Bearings

Insulated bearings are typically applied in applications where shaft current concerns exist (i.e. applications involving the use of adjustable speed drives). Insulating the bearings helps to prevent electrical arcing (bearing fluting) and potential premature bearing failure.

Pricing below is for insulating the bearings on both end bells.

Option		Insulating Ball Bearings	Insulating Roller
Frame	143/145	\$1,641	—
	182/184	\$1,750	—
	213/215	\$2,188	—
	254/256	\$2,734	—
	284/286	\$2,953	—
	324/326	\$3,172	—
	364/365	\$3,281	—
	404/405	\$3,609	—
	444/445	\$3,938	\$6925
	447	\$3,938	\$6925 (2)
	449/500	\$4,375	\$7562 (2)
	5000	\$6,016	\$9600 (2)
	5800	\$6525 (2)	(1)

(1) Contact Toshiba for price and availability.
(2) Contact Toshiba for delivery. Availability of bearings may vary.

Special Notes:

- Insulating the bearings is recommended when shaft voltage exceeds 300 mV.
- It is up to the user to determine when insulated bearings are required, especially with the use of inverter-fed control. NEMA MG1 Part 31 suggests insulating the bearing(s) on all motors in 500 series frames and larger when inverter-fed.
- Toshiba suggests insulating both bearings on all frame sizes 440 and larger when used with adjustable speed drives.
- When insulated bearings are used on direct-coupled applications, the use of an insulated coupling and/or a shaft grounding brush is required in order to reduce the risk of driven equipment bearing damage. Grounding brushes are not suitable for Division 2 environments.
- Insulated bearings are not available on angular contact bearing construction.
- If bearing thermal devices are required with insulated bearings, a special version of the thermal device will be required. Contact Toshiba for availability and price of this thermal device.

Regreasable or Locked Bearings

Regreasable and locked bearings come standard in all 280T frame and larger motors.

Option		Regreasable (1)	Locked (2)
Frame	143/145	\$164	\$164
	182/184	\$164	\$164
	213/215	\$219	\$219
	254/256	\$219	\$219
	284/286	Toshiba Standard	Toshiba Standard
	324/326		
	364/365		
	404/405		
	444/445		
	447		
	449/500		
	5000/5800		

(1) This comes standard on all 841 motors.
(2) This comes standard on 210 frame and larger on all 840 motors, and is standard on all 841 motors.

Special Notes:

- Adders above are not available on explosion proof product.
- If special end-play tolerances with bearing lock nuts are required, contact Toshiba for pricing.

Changing from Ball Bearings to Roller Bearings

Cylindrical roller bearings are used in horizontal motors where high radial loads are present for an improved L-10 life, i.e. belted applications.

Option		LV Roller Bearings
Frame	143/145	—
	182/184	—
	213/215	—
	254/256	\$708
	284/286	\$926
	324/326	\$1,025
	364/365	\$1,090
	404/405	\$1,199
	444/445	(1)
	447	(1)
	449/500	(1)
	5000/5800	(1)

- (1) See motor price guide section for roller bearing motors.
- Special Notes:**
- Motors can go from a roller bearing to a ball bearing at no charge, but this must be specified when the order is placed.
 - This is applicable only for 1800 RPM motors and slower.
 - Roller bearing requests require that full belting/application details be provided prior to order acceptance.

Blowers

Toshiba motors are suitable for use with inverter-fed controllers. Turndown capability is a function of the product selected. See individual product page for specific information. When turndown requirements exceed product capability, the use of an auxiliary blower is required. Contact Toshiba for help with determining whether a blower is required for an application. The National Electrical Code 430.126 (b) mandates that motors with external-force ventilation have a form of thermal protection. See “Thermal Protection” section for the addition of thermal protection. This addition is not included in the blower adder.

Option		Blower
Frame	143/145	\$1,148
	182/184	\$1,203
	213/215	\$1,488
	254/256	\$1,641
	284/286	\$2,023
	324/326	\$2,515
	364/365	\$3,052
	404/405	\$4,040
	444/445	\$4,380
	447	\$4,380
	449/500	\$4,990
	5010	\$6,016
	5810	\$10,666
	5011/5811	\$13,333

Special Notes:

- Adders above are not available on explosion proof product.
- Blower standard Voltages as follows:
 - 140 through 280T frames — single-phase 218 to 290 V and three-phase 209 to 340/361 to 603 V
 - 320 through 5800 frames — three-phase 230 to 330/400 to 575 V
- On 320 frame motors and larger, blowers cannot operate on line voltages over 575 V.
- Contact Toshiba for applications requiring line voltages over 575 V.
- Contact Toshiba for availability in Division 2 applications.

Brakes

Toshiba offers a brake motor series up to 280 frame to cover applications with brake needs. Please see the Definite Purpose, Brake Motor section of the catalog. For brake motors above this, please contact Toshiba for availability.

Special Notes:

- Brakes are available for Division 1 and Division 2 applications for 140 through 250 frames. Contact Toshiba for price and availability.

CE Approval

CE approved motors are available on select ratings. Contact Toshiba for information.

Conduit Box Modifications

Toshiba's standard main conduit box on all motors are located in the F1 position, with the exception of oil well pump motors that have the main box located in the F2 position.

Cast Iron Main Box

Cast iron conduit boxes come standard on Explosion Proof, EQPIII-840, EQPIII-841, and all EQP Global motor products. Cast iron conduit boxes also come standard on all larger quarry duty products and all TEFC 5000 frames and above.

Option	Cast Iron Main Box
143/145	\$123
182/184	\$123
213/215	\$149
254/256	\$149
284/286	\$219
324/326	\$219
364/365	\$328
404/405	\$328
444/445	\$602
447	\$602
449/500	\$656
5000/5800	\$1,094

Auxiliary Terminal Box

Termination of protective or monitoring devices can be provided in a separate auxiliary box (280 frame and larger) or a conduit mounted off the main terminal box (250T frame and below). All auxiliary boxes are mounted on the same side as the main terminal box unless otherwise specified.

Option	Conduit	Auxiliary Steel Box	Auxiliary Cast Iron Box
143/145	\$383	—	—
182/184	\$383	—	—
213/215	\$383	—	—
254/256	\$383	—	—
284/286	\$450	\$645	\$766
324/326	\$450	\$645	\$766
364/365	\$450	\$645	\$766
404/405	—	\$645	\$766
444/445	—	\$645	\$766
447	—	\$645	\$766
449/500	—	\$645	\$766
5000/5800	—	\$645	\$766

Special Notes:

- Adders above are not available on explosion proof product.
- Auxiliary conduit box is provided as standard with stator RTD adder on all motors.

Location

All motors are provided with the main terminal box in the F1 position, with the exception of oil well pump motors that have the main box located in the F2 position. For conduit box location in the F2 position, see adder below.

Option	F2 (Production)	F3 (Top-Mount)
143/145	No Charge	Contact Toshiba
182/184	No Charge	
213/215	No Charge	
254/256	No Charge	
284/286	No Charge	
324/326	No Charge	
364/365	No Charge	
404/405	No Charge	
444/445	No Charge	
447	No Charge	
449/500	No Charge	
5000/5800	No Charge	

Special Notes:

- Not all motors are field-modifiable to F2 assembly.
- See "Applications" section for F2 field-modifiability.

Remote-Mount Conduit Box

For applications requiring that the conduit box be located away from the motor, Toshiba is able to supply a remote-mount conduit box. The conduit box will be supplied with the main motor, but will arrive unfastened. The remote-mount conduit box includes a main terminal box and a threaded mounting plate.

Option	Steel Conduit Box	Cast Iron Conduit Box
143/145	\$123	\$219
182/184	\$123	\$219
213/215	\$149	\$273
254/256	\$149	\$273
284/286	\$219	\$438
324/326	\$219	\$438
364/365	\$328	\$656
404/405	\$328	\$656
444/445	\$602	\$1,094
447	\$602	\$1,094
449/500	\$656	\$1,313
5000/5800	\$875	\$1,750

Special Notes:

- Adders above are not available on explosion proof product.

Connections

For various motor connections (Y-delta, part-winding, etc.), see "Starting/Connection" modifications section.

Couplings & Sheaves Mounted

Couplings and V-belt sheaves must be supplied (finished bored, balanced, and key-seated) to Toshiba's shaft dimensions before they can be mounted to a motor. An incoming identification number must be obtained from Toshiba, and coupling must be shipped at least three weeks in advance before scheduled motor shipment, and must include manufacturer's mounting instructions.

Option		Customer Supplied Sheave/Coupling
Frame	143/145	\$656
	182/184	\$656
	213/215	\$766
	254/256	\$875
	284/286	\$875
	324/326	\$875
	364/365	\$984
	404/405	\$984
	444/445	\$1,500
	447	\$2,100
	449/500	\$2,600
	5000/5800	\$2,750

Special Notes:

- Incoming parts without a proper Toshiba identification number will not be accepted and will be returned to sender.

Current Transformers

See "Surge Protection" modifications section.

Design C Torque

See "Torque" modifications section.

Documentation

See "Software" modifications section.

Dowel Pin Provisions

Dowel pin holes will be provided on two diagonal feet. These are provided to ensure motor alignment is maintained after the motor is installed. This feature comes standard on totally enclosed fan cooled 5011 and 5811 frames.

Option		Two Per Motor
Frame	143/145	\$547
	182/184	\$547
	213/215	\$547
	254/256	\$656
	284/286	\$656
	324/326	\$766
	364/365	\$766
	404/405	\$930
	444/445	\$930
	447	\$984
	449/500	\$1,094
	5000/5800	\$1,313

Special Notes:

- If four holes are required, one on each motor foot, double the above adder.

Drains & Breathers

Standard horizontally-mounted totally enclosed fan cooled and open motors are provided with drain holes. Drain holes are located at the lowest point on the motor.

Drain Holes

For additional drain hole(s), see adder below.

Option		Drain Hole	Drain Hole Conduit Box (1)	Stainless T-Drain	Stainless T-Drain Conduit Box (1)
Frame	143/145	\$131	\$131	\$219	\$219
	182/184	\$131	\$131	\$219	\$219
	213/215	\$131	\$131	\$219	\$219
	254/256	\$131	\$131	\$328	\$328
	284/286	\$131	\$131	\$328	\$328
	324/326	\$131	\$131	\$328	\$328
	364/365	\$131	\$131	\$328	\$328
	404/405	\$131	\$131	\$328	\$328
	444/445	\$131	\$131	\$328	\$328
	447	\$131	\$131	\$328	\$328
	449/500	\$131	\$131	\$328	\$328
	5000/5800	\$131	\$131	\$328	\$328

(1) Conduit box drain holes are available on cast conduit boxes only.

Special Notes:

- Adders above are not available on explosion proof product.
- All EQP Global products are provided with additional plugged drain provisions in each bearing bracket for vertical mounting configurations. Plugs must be removed for proper drainage of moisture.

Breathers

To request breather(s) be added to a motor, see adder below.

Option		Standard Breather (1)	UL Stainless Breather (2)	Standard Breather Conduit Box (3)
Frame	143/145	\$219	\$273	\$273
	182/184	\$219	\$273	\$273
	213/215	\$219	\$273	\$273
	254/256	\$328	\$383	\$383
	284/286	\$328	\$383	\$383
	324/326	\$328	\$383	\$383
	364/365	\$328	\$438	\$438
	404/405	\$328	\$438	\$438
	444/445	\$328	\$438	\$438
	447	\$328	\$438	\$438
	449/500	\$328	\$438	\$438
	5000/5800	\$328	\$438	\$438

(1) All 840 and all 841 motors are equipped with either an automatic bronze drain and breather or stainless steel T-drains as standard.

(2) Explosion proof motors have UL-listed stainless steel drain and breathers as standard (for horizontal mounting only). For vertical mounting, apply list adder "UL Stainless Breather" located in the lowest point in the bearing bracket.

(3) Standard and stainless breathers are available for cast iron conduit boxes only (not available on explosion proof motors).

Special Notes:

- EQP Global 840 and 841 motors have tapped holes fitted with stainless steel T-drains located at the lowest point in the face of each bearing bracket (140 through 210 frames) or on the lowest point of the frame (250 through 360 frames).
- Additional breathers are not available on explosion proof product for vertical mounting.

Drip Covers

Drip covers can be furnished on standard motors for extra protection from dripping liquids and falling objects when the motor is mounted in the vertical shaft-down position. Standard drip covers are of fabricated steel 1/8" with no lip. Severe duty drip covers are of fabricated steel 3/8" with lip.

Option		Steel - Standard	Steel - Severe Duty	Explosion Proof Motors
Frame	143/145	\$328	\$394	\$394
	182/184	\$438	\$525	\$525
	213/215	\$438	\$525	\$525
	254/256	\$438	\$525	\$525
	284/286	\$613	\$735	\$735
	324/326	\$766	\$919	\$919
	364/365	\$831	\$998	\$998
	404/405	\$875	\$1,050	\$1,050
	444/445	\$941	\$1,129	\$1,129
	447	\$941	\$1,129	\$1,129
	449/500	\$941	\$1,129	\$1,129
	5000/5800	—	—	—

Special Notes:

- Adders above are not available on explosion proof products.
- The drip cover adder does not include vertical lifting provisions.
- If lifting provisions are required, see "Vertical Lifting" modifications section.

Textile Cover

Textile covers are available for totally enclosed fan cooled enclosure applications prone to lint and fibers entering the fan cover's air inlets.

Option		Textile Cover
Frame	143/145	\$328
	182/184	\$438
	213/215	\$438
	254/256	\$438
	284/286	\$613
	324/326	\$766
	364/365	\$831
	404/405	\$875
	444/445	\$941
	447	\$941
	449/500	\$941
	5000/5800	—

Special Notes:

- Adders above are not available on explosion proof product.

Enclosures

This section refers to additional specifications used to define the motor's enclosure. These adders may be required in order to provide a necessary additional degree of protection for normal operation in certain environments.

Marine Duty

Marine Duty IEEE 45 must be incorporated into an EQPIII-840 or EQPIII-841 base motor. Please see adders below.

Option		IEEE 45 (1)	IEEE 45 (2)	ABS Type (3, 5)	ABS Unit (4, 5)
Frame	143/145	\$383	Standard on 840 & 841 Products	\$438	Contact Toshiba
	182/184	\$383		\$438	
	213/215	\$405		\$438	
	254/256	\$438		\$438	
	284/286	\$645		\$438	
	324/326	\$700		\$438	
	364/365	\$853		\$438	
	404/405	\$1,083		\$438	
	444/445	\$1,291		\$438	
	447	\$1,542		\$438	
	449/500	\$1,542		\$438	
	5000/5800	\$1,914		—	

(1) In above-deck applications the adder includes space heaters with leads terminating in main terminal box and tropicalization in accordance with IEEE 45 requirements.

» EQPIII-840 280 frame and below will require the addition of the labyrinth seals on both ends.

(2) In below-deck applications, the EQP 840 or EQP 841 product meets requirement as standard.

(3) ABS Type Approval – Includes a new nameplate with the ABS marking. Included on this nameplate is the IEEE 45/Marine Duty stamping and the IP rating.

(4) ABS Unit Approval – Contact Toshiba for clarification, pricing, and product availability.

(5) ABS is not available on EQP Global series product.

IP Enclosure Protection

Apply below adder to meet specified IP rating. This adder applies to totally enclosed product only.

Option		IP55 (1)
Frame	143/145	\$1,238
	182/184	\$1,238
	213/215	\$1,374
	254/256	\$1,593
	284/286	\$1,881
	324/326	\$1,881
	364/365	\$2,406
	404/405	\$2,406
	444/445	\$3,139
	447	\$4,014
	449/500	\$4,616
	5000/5800	\$6,038

(1) This degree of protection comes standard on all EQPIII-840 320 frame and larger and all IEEE 841 motors.

Mill & Chemical Construction

See the general purpose "EQPIII-840" and "EQP Global 840" sections of the price guide for base motor product meeting this requirement.

Petro-Chemical Construction

See the general purpose "EQPIII-841" and "EQP Global 841" sections of the price guide for base motor products meeting this requirement.

Classified-Division 2/Zone 2 Locations

Environmental/application conditions may require a special motor design and special labeling of the product to ensure proper protection and/or safety during use. If an environment and/or application has been identified as a Division 2 or Zone 2 location, Toshiba requires that a Class, Group, and Temperature code (T-code) be provided to ensure safe operation in the specified atmosphere. The adder below must be applied to the EQPIII or EQP Global base motor list price of the proper frame size to meet the temperature code requirement (contact Toshiba for the correct motor sizing).

Option		Class I, Division 2 (1, 3)	Class II, Division 2 (2, 3)
Frame	143/145	No Charge	No Charge
	182/184	No Charge	No Charge
	213/215	No Charge	No Charge
	254/256	No Charge	No Charge
	284/286	No Charge	No Charge
	324/326	No Charge	No Charge
	364/365	No Charge	No Charge
	404/405	No Charge	No Charge
	444/445	No Charge	No Charge
	447	No Charge	No Charge
	449/500	No Charge	No Charge
	5000/5800	No Charge	No Charge

- (1) All EQP-based product is suitable for a T3 (200°C) T-code under a sine wave condition based on a 1.0 service factor. For T-code ratings below 200°C, contact Toshiba for product pricing and availability. Contact Toshiba for applications utilizing ASD control. Please note that the NEC does not require the motor to be specifically nameplated with the area classification.
- (2) This must be incorporated into an EQPIII-840, EQPIII-841, EQP Global 840, EQP Global 841, or IP55 base motor.
- (3) CSA certification not available for Class II, Division 2. Class II certification can be made available through special acceptance. Contact Toshiba for pricing and delivery.
- Special Notes:**
- For Division 1 applications, see "Totally Enclosed Explosion Proof" section of the price guide or contact Toshiba.
 - Suitability of Zone 2 application is based on the National Electric Code (NEC).

Encoders

Encoders regulate speed on motors linked to variable speed applications, and they are available either face-mounted or shaft-mounted. Toshiba's standard offering is a BEI HS35 (shaft-mount) or Avtron M56 (face-mount). All prices below are based on Pulse Per Revolution (PPR) of 1024 single-output and dual-channel (A & B) quadrature. Encoder type must be specified upon order.

Option		NorthStar SL56 (2)	NorthStar HSD38 (1)	NorthStar ISD37 (1, 4)	Avtron AV56 (2)	Avtron M3 (1)
Frame	143/145	\$3,391	\$2,406	\$3,281	\$3,391	\$4,047
	182/184	\$3,391	\$2,406	\$3,281	\$3,391	\$4,047
	213/215	\$3,391	\$2,406	\$3,281	\$3,391	\$4,047
	254/256	\$3,391	\$2,406	\$3,281	\$3,391	\$4,047
	284/286	(3)	\$2,406	\$3,281	(3)	\$4,047
	324/326	(3)	\$2,406	\$3,281	(3)	\$4,047
	364/365	(3)	\$2,406	\$3,281	(3)	\$4,047
	404/405	(3)	\$2,406	\$3,281	(3)	\$4,047
	444/445	(3)	\$2,406	\$3,281	(3)	\$4,047
	447	(3)	\$2,406	\$3,281	(3)	\$4,047
	449/500	(3)	\$2,406	\$3,281	(3)	\$4,047
	5000/5800	(3)	\$2,406	\$3,281	(3)	\$4,047
Option		Avtron M4 (1)	Avtron HS35M (1)	Dynapar HS35 (1)	Dynapar HS20 (1)	BEI HS35 (1)
Frame	143/145	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	182/184	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	213/215	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	254/256	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	284/286	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	324/326	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	364/365	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	404/405	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	444/445	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	447	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	449/500	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734
	5000/5800	\$4,813	\$2,734	\$2,734	\$2,188	\$2,734

- (1) The encoder is shaft-mounted.
- (2) The encoder is face-mounted.
- (3) Contact Toshiba for availability and pricing.
- (4) This encoder is suitable for Division 2 environments (Groups A, B, C, D, F, and G).
- Special Notes:**
- Adders above are not available on explosion proof product.
 - For availability on explosion proof product, contact Toshiba.

Export Crating

Toshiba provides packaging options for different shipping requirements. Options include standard commercial packaging (for common, below-deck transport on ships) and containerized shipping. Both options are available at a net price of 8% of the motor's total sell price or a minimum of \$350, whichever is greater.

Fan Covers

Cast Iron fan covers are available for totally enclosed fan cooled enclosures.

Option		Cast Iron Fan Cover (1)
Frame	143/145	\$90
	182/184	\$110
	213/215	\$140
	254/256	\$180
	284/286	\$260
	324/326	\$300
	364/365	\$485
	404/405	\$640
	444/445	\$1000
	447	\$1,500
	449	\$2,200
	500	Contact Toshiba
	5000/5800	Contact Toshiba

(1) This feature is standard on EQPIII-840, EQPIII-841, EQP Global 840, EQP Global 841, and explosion proof motors.

Fans-Special

Toshiba motors come standard with high-strength, glass-reinforced fans on most ratings. Toshiba also offers other options for fan materials. Please contact Toshiba for availability and pricing.

Flange-Mounting

Flanges can be ordered through production are also available as kits. See the "Spare Parts" section of the catalog for information.

Open Drip Proof Motors

Option		C-Face Footed	D-Flange Footed (1)
Frame	143/145	—	—
	182/184	—	—
	213/215	\$295	—
	254/256	\$295	—
	284/286	\$438	—
	324/326	\$481	—
	364/365	\$875	\$1,695
	404/405	\$1,094	\$2,078
	444/445	\$1,586	\$2,297
	447	\$1,695	\$2,734
	449/500	—	\$2,734 (2)
	5000/5800	—	—

(1) D-flanges are available on 2-pole (3600 RPM) or 4-pole (1800 RPM) short shaft motors only.

(2) 500 frame D-flanges are available with diameters larger than those of short shaft motors. Contact Toshiba for specific availability.

Special Notes:

- 210 through 440 frames meet NEMA BA dimension for C-flanges.

Totally Enclosed Fan Cooled Motors

Option		C-Face Footed	C-Face Footless (1)	D-Flange Footed	D-Flange Footless (1)
Frame	143/145	\$109 (2)	\$175	\$438	\$492
	182/184	\$131 (2)	\$219	\$492	\$656
	213/215	\$175 (2)	\$219	\$547	\$656
	254/256	\$263 (2)	\$350	\$875	\$984
	284/286	\$438	\$514	\$930	\$1,148
	324/326	\$492	\$678	\$1,422	\$1,641
	364/365	\$820	\$1,061	\$1,695	\$2,188
	404/405	\$1,148	\$1,586	\$2,078	\$2,570
	444/445	\$1,477	\$2,242	\$2,297	\$3,063
	447	\$1,477	\$2,242	\$2,297	\$3,063
	449	\$1,641 (3)	\$2,516 (3)	\$2,734 (3)	\$3,391 (3)
	5000/5800	\$2,200	—	\$2,953	—

(1) These adders do not include drip covers or vertical lifting provisions.

(2) Motors do not meet NEMA BA dimensions (NEMA BA dimensions are available on 140 and 180 frame as production motors when specified).

(3) This option is not available on 500 frame motors, only on N449 frames.

Totally Enclosed Explosion Proof

Option		C-Face Footed
Frame	143/145	\$241 (1)
	182/184	\$273 (1)
	213/215	\$328 (1)
	254/256	\$438 (1)
	284/286	\$766
	324/326	\$875
	364/365	\$984
	404/405	—
	444/445	—
	447	—
	449/500	—
	5000/5800	—

(1) Motors do not meet NEMA BA dimensions.

Frequency

Standard product offering is 60 Hz with re-rate capabilities to 50 Hz operation. Contact Toshiba with frequency and voltage requirements for performance and sizing. For specially-wound 50 Hz motors, see price adder below.

Option		50 Hz (1)	Other
Frame	143/145	For LV Motors: Add 15% to Base 60 Hz List Price of Same HP & Pole Speed	Contact Toshiba
	182/184		
	213/215		
	254/256		
	284/286		
	324/326		
	364/365		
	404/405		
	444/445		
	447		
	449/500		
	5000/5800		

(1) For voltage other than 190/380, 208/415, 380, 400, 415, and 440, see voltage adder for additional charge.

Special Notes:

- Frame size may be affected in 50 Hz motors. Contact Toshiba to verify frame.

Grease Fittings

Standard hydraulic, Alemite/Zerk type fittings are provided with motors with regreasable bearings. For special grease fittings and drains, contact Toshiba for pricing and availability. For grease fittings, see “Regreasable Bearings” modification.

Grounding Provisions

All motor frames 140 through 5810 have CSA clamp-type grounding lugs in the conduit box. All EQPIII-840, EQPIII-841, EQP Global 840, and EQP Global 841 motors are provided with a UL-approved clamp-type grounding lug in the conduit box.

External Grounding Provisions on Motor Frame (Base)

All EQPIII-841 and EQP Global 841 motors have an additional grounding provision on the motor base as standard. The grounding provisions on the motor base are ¼” to 20” unified inch coarse thread (UNC) for motors up to 50 HP, ⅜” to 16” UNC for motors above 50 HP and up to 200 HP, and ½” to 13” UNC for motors above 200 HP.

Option		Frame Grounding
Frame	143/145	\$219
	182/184	\$219
	213/215	\$219
	254/256	\$219
	284/286	\$219
	324/326	\$219
	364/365	\$219
	404/405	\$219
	444/445	\$219
	447	\$219
	449/500	\$219
	5010/5810	\$219
5011/5811		(1)

(1) Grounding provision is provided as standard.

Special Notes:

- External grounding provisions are available for explosion proof product but must be used as supplementary ground connection in conjunction to the main equipment ground provision provided in the main terminal box.

External Grounding Pad to Motor Frame

Apply the adder below for a copper ground pad with two holes mounted on the motor frame. When placing the order, the hole and tap size must be provided.

Option		Frame Grounding
Frame	143/145	—
	182/184	—
	213/215	—
	254/256	—
	284/286	—
	324/326	\$1,641
	364/365	\$1,641
	404/405	\$1,641
	444/445	\$1,641
	447	\$1,641
	449/500	\$1,641
	5000/5800	\$1,641

Grounding Provisions to Motor Shaft

See “Shaft Grounding” modifications section.

Hardware

Standard hardware is non-corrosive. stainless hardware fasteners (holding brackets, conduit box, fan cover, and inner caps) are available. Toshiba standard stainless hardware is 304 unless specified otherwise.

Option		304 SS Hardware	316 SS Hardware
Frame	143/145	\$328	\$438
	182/184	\$328	\$438
	213/215	\$383	\$492
	254/256	\$438	\$547
	284/286	\$438	\$547
	324/326	\$711	\$875
	364/365	\$766	\$875
	404/405	\$875	\$1,094
	444/445	\$930	\$1,148
	447	\$984	\$1,203
	449/500	\$984	\$1,313
	5000/5800	\$1,094	\$1,531

Special Notes:

- Adders above are not available on explosion proof product.

Insulation Modifications

Insulation systems are divided into classes according to the thermal endurance by temperature rating. Standard motor insulation comes non-hygroscopic Class F (utilizing Class H components), and is dipped and baked in a Class H varnish. Unusual or severe applications may require special insulation systems or winding protection.

Upgrade to Class H Insulation System

Option		Class H
Frame	143/145	\$284
	182/184	\$284
	213/215	\$284
	254/256	\$372
	284/286	\$656
	324/326	\$809
	364/365	\$1,039
	404/405	\$1,498
	444/445	\$2,122
	447	\$2,625
	449/500	\$3,281
	5000/5800	\$4,375

Special Notes:

- Adders above not available on explosion proof product.
- Class-H insulation is standard on dry kiln product.

Internal Coating for Extreme Service Operation

This adder provides additional insulation coating as well as corrosion protection for all internal machined surfaces.

Option		Internal Coating
Frame	143/145	\$164
	182/184	\$164
	213/215	\$219
	254/256	\$328
	284/286	\$547
	324/326	\$766
	364/365	\$875
	404/405	\$1,203
	444/445	\$1,641
	447	\$2,406
	449/500	\$2,406
	5000/5800	\$2,734

Special Notes:

- This adder comes standard on all 840 and all 841 product.

Additional Dip & Bake

Improve motor's insulation system by applying an additional dip and bake process.

Option	Add Dip & Bake
143/145	\$230
182/184	\$230
213/215	\$230
254/256	\$306
284/286	\$492
324/326	\$656
364/365	\$820
404/405	\$1,094
444/445	\$1,477
447	\$1,477
449/500	\$1,969
5000/5800	\$2,734

Tropicalize/Fungus-Proof Windings

Unwanted fungi may break down a motor's insulation system over time. The addition of the tropicalize/fungus-proof adder will protect motor windings from this type of problem.

Option	Tropicalize/Fungus-Proof Winding
143/145	\$109
182/184	\$109
213/215	\$164
254/256	\$219
284/286	\$328
324/326	\$438
364/365	\$547
404/405	\$711
444/445	\$930
447	\$1,203
449/500	\$1,203
5000/5800	\$1,531

Encapsulate Windings

The encapsulate windings adder consists of an additional epoxy resin coating on the motor winding. Protects motor internally in situations where internal components will be directly exposed to corrosive and/or humid environments.

Option	Encapsulate (1)
143/145	\$656
182/184	\$656
213/215	\$656
254/256	\$1,050
284/286	\$1,214
324/326	\$1,313
364/365	\$1,553
404/405	\$2,166
444/445	\$2,964
447	\$3,281
449/500	
5000/5800	Contact Toshiba

(1) List prices apply to open drip proof motors only.

Special Notes:

- Adders above are not available on explosion proof or totally enclosed fan cooled product.

Epoxy Coating on Motor Windings

This adder provides additional protection against corrosive and/or humid environments.

Option	Epoxy Coating
143/145	\$164
182/184	\$164
213/215	\$219
254/256	\$328
284/286	\$547
324/326	\$766
364/365	\$875
404/405	\$1,203
444/445	\$1,641
447	\$2,406
449/500	\$2,406
5000/5800	\$2,734

Labels

See "Nameplates" section for information.

Leads Length/Lead Terminals

Crimp-type lead lugs/ring terminals come standard on motors as follows:

- 210 frame and larger on EQPIII-840 products
- All EQPIII-841 and EQP Global products
- All other 280 frame and larger motors

Crimp Terminals

Option	Crimp
143/145	\$109
182/184	\$109
213/215	\$153
254/256	\$153
284/286	—
324/326	—
364/365	—
404/405	—
444/445	—
447	—
449/500	—
5000/5800	—

Burndy Lugs/Two-Hole Terminals

Option	Burndy
143/145	\$580
182/184	\$580
213/215	\$744
254/256	\$744
284/286	\$744
324/326	\$744
364/365	\$744
404/405	\$744
444/445	\$744
447	\$744
449/500	\$744
5000/5800	\$744

Longer Lead Length than Standard

Standard lead length is 6" for frames 360 and smaller, 9" for frames 400 and larger, and 12" on all EQPIII-841 motors. Prices are based on a per foot, per lead basis. Multiply the number of motor leads by the number of desired feet and then by the applicable charge below.

Option		Per Foot, Per Lead (1)
Frame	143/145	\$11
	182/184	\$11
	213/215	\$11
	254/256	\$11
	284/286	\$18
	324/326	\$18
	364/365	\$22
	404/405	\$22
	444/445	\$33
	447	\$33
	449/500	\$55
	5000/5800	\$55

(1) For standard number of leads, refer to the Toshiba Installation and Maintenance Manual.

Neutral Lead (Three-Lead Plus a Neutral)

Option		Neutral Lead
Frame	143/145	\$175
	182/184	\$175
	213/215	\$219
	254/256	\$273
	284/286	\$328
	324/326	\$558
	364/365	\$820
	404/405	\$1,291
	444/445	(1)
	447	(1)
	449/500	(1)
	5000/5800	(1)

(1) Contact Toshiba for availability and pricing.

Lubrication

All bearings in motors with Class F insulation will be furnished with a lubricant that is capable of operating in ambient temperatures between -25° and 65°C. Please note that it is not recommended to mix greases of different bases. The mixing of different types of thickeners may destroy the composition and physical properties of the grease.

High Temperature Grease

This adder is for applications in which the ambient temperature is greater than 65°C.

Option		High Temp. Grease
Frame	143/145	\$109
	182/184	\$109
	213/215	\$109
	254/256	\$109
	284/286	\$109
	324/326	\$273
	364/365	\$273
	404/405	\$273
	444/445	\$273
	447	\$273
	449/500	\$273
	5000/5800	\$273

Low Temperature Grease

This adder is for applications in which the ambient temperature ranges from -25° to -40°C.

Option		Low Temp. Grease
Frame	143/145	\$109
	182/184	\$109
	213/215	\$109
	254/256	\$109
	284/286	\$109
	324/326	\$273
	364/365	\$273
	404/405	\$273
	444/445	\$273
	447	\$273
	449/500	\$273
	5000/5800	\$273

Special-Based Grease

This adder is for applications in which the customer specifies a grease other than the Toshiba standard.

Option		Special Grease
Frame	143/145	Contact Toshiba
	182/184	
	213/215	
	254/256	
	284/286	
	324/326	
	364/365	
	404/405	
	444/445	
	447	
	449/500	
	5000/5800	

Oil-Mist

Oil-mist lubrication is available on EQPIII-840 and EQPIII-841 motors only. Toshiba's EQPIII-840 and EQPIII-841 motors can be modified to accept an externally-generated oil-mist/dry sump lubrication arrangement. The type of preparation must be noted within the purchase order:

1. Oil-Mist Ready (provision for future oil mist): The bearing cavity is arranged for oil-mist, but the bearings will be packed with grease for normal operation. Should the oil-mist system be connected, Toshiba recommends that the grease be cleaned from the bearings and bearing cavities.
2. Oil-Mist Lubricated: The bearings will receive a light coat of oil for testing and shipment; however, the oil-mist system must be connected upon receipt of product.

Option		Oil-Mist Ready	Oil-Mist
Frame	143/145	\$766	\$766
	182/184	\$766	\$766
	213/215	\$766	\$766
	254/256	\$875	\$875
	284/286	\$875	\$875
	324/326	\$1,094	\$1,094
	364/365	\$1,313	\$1,313
	404/405	\$1,750	\$1,750
	444/445	\$2,625	\$2,625
	447	\$3,172	\$3,172
	449/500	\$3,172	\$3,172
	5000/5800	\$3,828	\$3,828

Special Notes:

- Adders above are not available on explosion proof product.
- This adder is not available on general purpose vertical shaft-down or shaft-up applications. Contact Toshiba for vertical oil mist applications.
- Oil-mist options are available on our vertical solid shaft P-base products.
- For storage, refer to Toshiba's oil-mist manual.

Nameplates

Standard nameplates are 304-grade stainless steel with engraved lettering. Additional nameplates for remote-mounting and special markings are available.

Duplicate or Special Nameplates

For requests other than what is listed below, contact Toshiba.

Option		Re-Nameplate	Duplicate Nameplate	Special ID Tag
Frame	All Frames	\$131	\$131	\$131

Paint

The standard paint finish is a self-priming, air-dried, acrylic alkyd resin finish. Beyond the standard colors offered by Toshiba, special colors and types of paints are available upon request. For special paint requirements, full specifications and color chip/manufacture color code will be required. Special paints requiring special application/curing equipment may not be available. Contact Toshiba for full details.

Option		Color Change Only	Special
Frame	143/145	\$438	Contact Toshiba
	182/184	\$438	
	213/215	\$438	
	254/256	\$547	
	284/286	\$547	
	324/326	\$656	
	364/365	\$656	
	404/405	\$766	
	444/445	\$875	
	447	\$875	
	449/500	\$984	
	5000/5800	\$1,094	

Screens

Corrosion-resistant screens covering air inlets and outlets of open drip proof motors are available. Motors equipped with screens will meet the NEMA guarded definition.

Screens to an Open Drip Proof Motor

Option		Corrosion-Resistant	Stainless Steel
Frame	143/145	\$219	\$273
	182/184	\$273	\$328
	213/215	\$306	\$361
	254/256	\$361	\$416
	284/286	\$383	\$438
	324/326	\$438	\$547
	364/365	\$547	\$766
	404/405	\$766	\$1,094
	444/445	\$820	\$1,203
	447	\$875	\$1,258
	449/500	\$875	\$1,258
	5000/5800	\$1,094	\$1,641

Special Notes:

- Screens come standard on oil well pump motors.

Seals

Shaft seals are installed on the shaft at the bracket face to prevent the ingress of dirt and liquid.

Option		V-Ring Drive End (1)	V-Ring Both Ends (1)	Labyrinth Drive End (2)
Frame	143/145	\$142	\$284	\$492
	182/184	\$186	\$372	\$492
	213/215	\$186	\$372	\$547
	254/256	\$186	\$372	\$656
	284/286	\$197	\$394	\$766
	324/326	\$252	\$503	\$766
	364/365	\$252	\$503	\$984
	404/405	\$317	\$634	\$984
	444/445	\$328	\$656	\$1,203
	447	\$328	\$656	\$1,422
	449/500	\$350	\$700	\$1,531
	5000/5800	\$350	\$700	\$1,641
Option		Labyrinth Both Ends (2)	Taconite Drive End (3)	Taconite Both Ends (3)
Frame	143/145	\$984	\$492	\$984
	182/184	\$984	\$492	\$984
	213/215	\$1,094	\$547	\$1,094
	254/256	\$1,313	\$656	\$1,313
	284/286	\$1,531	\$766	\$1,531
	324/326	\$1,531	\$766	\$1,531
	364/365	\$1,969	\$984	\$1,969
	404/405	\$1,969	\$984	\$1,969
	444/445	\$2,406	\$1,203	\$2,406
	447	\$2,844	\$1,422	\$2,844
	449/500	\$3,063	\$1,531	\$3,063
	5000/5800	\$3,281	\$1,641	\$3,281

(1) V-Ring shaft seals come standard on the drive end of totally enclosed motors.

(2) Non-contact labyrinth seals come standard on both ends of all EQP 841 series products and 320 frame and larger for EQP 840 series products.

(3) The taconite construction consists of two special bronze labyrinth seals (one on each end).

Special Notes:

- Adders above are not available on explosion proof product.
- Explosion proof products are provided with V-ring shaft slinger on both ends as standard. Contact Toshiba for pricing and availability for labyrinth seals.

Service Factor

Standard stock motors are designed for 1.15 service factor unless otherwise noted. Higher service factors are available if requested. Inquiries for service factors above 1.15 should be submitted to Toshiba for review. In certain cases, a higher service factor will require an increase in frame size or a special design.

Shafts

For shafts other than the Toshiba standard, see adders below.

NEMA Double-Shaft

Option		NEMA Double-Shaft
Frame	143/145	\$153
	182/184	\$153
	213/215	\$208
	254/256	\$273
	284/286	\$405
	324/326	\$591
	364/365	\$667
	404/405	\$733
	444/445	\$973
	447	\$973
	449/500	\$973 (1)
	5000/5800	—

(1) The NEMA double-shaft adder is defined up to N449 frame only. For 500 frame and larger, see “Special Shaft” adder section.

NEMA TS-Shaft to NEMA T-Shaft

Option		NEMA TS to NEMA T (2-Pole Motors)
Frame	284/286	\$405
	324/326	\$591
	364/365	\$667
	404/405	\$755

Special Notes:

- T-shaft, 2-pole motors are not recommended for belted applications.

NEMA TS Short Shaft

Toshiba does not charge for this modification on a production basis for direct-coupled applications. Requests for this option will be subject to standard factory lead times.

Special Shaft (Non-NEMA)

Any special shafts beyond what is listed above require adders from both Table A and Table B below.

- Table A – Base Charge for Shaft
- Table B – Shaft Feature Adder

Table A – Base Adder for Special Shaft Requirement

Option		Quantity 1	Quantity 2 to 4	Quantity 5+
Frame	143/145	\$656	\$295	\$109
	182/184	\$656	\$295	\$109
	213/215	\$766	\$295	\$109
	254/256	\$831	\$328	\$131
	284/286	\$930	\$372	\$186
	324/326	\$1,006	\$427	\$230
	364/365	\$1,192	\$481	\$273
	404/405	\$1,389	\$492	\$339
	444/445	\$1,641	\$678	\$416
	447	\$1,750	\$711	\$416
	449/500	\$1,750	\$711	\$416
	5000/5800	\$2,406	\$1,148	\$656

Table B – Shaft Features/Material

Option		304 Stainless Steel (1)	316 Stainless Steel (1)	416 Stainless Steel (2)	4142 High Carbon Steel	For each additional 5" length (3)
Frame	143/145	\$175	\$328	\$131	\$66	\$66
	182/184	\$175	\$328	\$131	\$66	\$66
	213/215	\$372	\$711	\$273	\$98	\$98
	254/256	\$514	\$1,006	\$383	\$98	\$98
	284/286	\$766	\$1,498	\$569	\$120	\$120
	324/326	\$1,389	\$2,734	\$984	\$153	\$153
	364/365	\$1,794	\$3,588	\$1,313	\$164	\$164
	404/405	\$2,581	\$5,163	\$1,936	\$186	\$186
	444/445	\$2,767	\$5,534	\$2,078	\$219	\$219
	447	\$2,898	\$5,797	\$2,078	\$230	\$230
	449/500	\$3,063	\$6,125	\$2,188	\$230	\$230
	5000/5800	\$3,281	\$6,563	\$2,461	\$273	\$273
Option		Drill & Tap in Shaft End	Steps – For Each Step or Reduced Dia.	Special Keyway	Threads	Tapers
Frame	143/145	\$66	\$66	\$66	\$66	\$88
	182/184	\$66	\$66	\$66	\$66	\$88
	213/215	\$98	\$98	\$98	\$98	\$109
	254/256	\$98	\$98	\$98	\$98	\$142
	284/286	\$120	\$120	\$120	\$120	\$175
	324/326	\$153	\$153	\$153	\$153	\$208
	364/365	\$164	\$164	\$164	\$164	\$230
	404/405	\$186	\$186	\$186	\$186	\$263
	444/445	\$219	\$219	\$219	\$219	\$295
	447	\$230	\$230	\$230	\$230	\$306
	449/500	\$230	\$230	\$230	\$230	\$306
	5000/5800	\$273	\$273	\$273	\$273	\$438

- (1) Not available on 2-pole (3600/3000 RPM) motors.
 (2) The use of 416 stainless steel is required for 2-pole motors.
 (3) For lengths greater than four times the shaft diameter, contact Toshiba for availability and pricing.

Shaft Seals

See “Seals” modification section.

Shaft Grounding Provisions

Shaft grounding provisions help to eliminate shaft currents that can be introduced into the motor through upstream controllers (ie: adjustable speed drives). These currents can potentially lead to premature failure of the bearings, commonly referred to as “fluting.”

Option	Shaft Grounding Brush	Aegis Grounding Ring
Frame	143/145	\$1,367
	182/184	\$1,367
	213/215	\$1,367
	254/256	\$1,367
	284/286	\$1,367
	324/326	\$1,477
	364/365	\$1,641
	404/405	\$1,805
	444/445	\$2,187
	447	\$2,187
	449/500	\$2,187
	5000/5800	\$2,734

Special Notes:

- Adders above do not include insulated bearings.
- Adders above are not available on explosion proof product.
- Insulating the bearings is recommended when the shaft voltage exceeds 300 mV.
- It is up to the user to determine when insulated bearings are required, especially with the use of an inverter-fed control. NEMA MG1 Part 31 suggests insulating the bearing(s) on all motors in 500 series frames and larger that are inverter-fed.
- Shaft grounding brushes may be used to divert the current around the bearing with the use of Inverter-fed control.
- Aegis recommends the non-drive end bearing be insulated on all frame sizes 440 and larger, when used with adjustable speed drives.
- Insulated bearings are not available on angular contact bearing construction.
- Where insulated bearings are used on direct coupled applications the use of insulated coupling and/or shaft grounding brush is required to reduce the risk of driven equipment bearing damage.
- *Ground brushes are not suitable for Division 2 environments.
- If bearing thermal devices are required with the insulated bearing, a special version of the thermal device will be required.
- Contact Toshiba for availability and price.

Software: Engineering Data

Toshiba provides a variety of software for stock and production motors. The following standard Toshiba data package is available, only if specified at the time of order, at no additional charge: certified prints, nameplate data, performance data, connection diagram, instructional and maintenance manual, and spare bearings parts list.

Above data will be sent out in electronic format (pdf only). If hard copy of information is required, see the adder below. For software other than what is listed above or that is specified after time of order, see table below.

Prices below are NET adders per option.

Software	Price
Toshiba Standard Software Package (1)	\$75
Speed Torque & Speed-Current Curve	\$75
Thermal Damage (Safe Stall Time) Curve	\$75
Performance Curve	\$75
Torsional Data (3)	\$100
Non-Standard Outline Drawing	Contact Toshiba
Certificate of Compliance	\$75
First Page of Customer Supplied Data Sheet (2)	\$55
Additional Pages of Customer Supplied Data Sheet (2)	\$40
Additional Copies of Data	\$30
Express Shipping	\$50
Other Special Requests	Contact Toshiba

(1) This adder applies only if it is specified after the order has been entered and acknowledged.

(2) This adder pertains to typical Toshiba performance data only.

(3) This adder will include shaft drawing, rotor assembly inertia, shaft torsional stiffness values.

Space Heaters

Space heaters are strip-type heaters mounted inside the frame near the coils to prevent moisture condensation in the motor during times the motor is not energized. Heater leads are brought out to the motor's main conduit box and marked H1 and H2. Standard heater voltage is 120 V single-phase unless otherwise specified.

Option	Standard	Division 2	Explosion Proof
Frame	143/145	\$328	\$634
	182/184	\$328	\$634
	213/215	\$328	\$634
	254/256	\$328	\$634
	284/286	\$481	\$952
	324/326	\$481	\$952
	364/365	\$580	\$1,148
	404/405	\$700	\$1,400
	444/445	\$831	\$1,652
	447	\$941	\$1,859
	449/500	\$941	\$1,859
	5000/5800	\$1,148	\$2,297

Starting/Connection

Toshiba standard stock motors have various starting connections/configurations available. For special or non-standard starting requirements, use the modifications below.

Option		Part Winding	Wye-Delta
Frame	143/145	—	—
	182/184	—	—
	213/215	\$153	\$153
	254/256	\$208	\$208
	284/286	\$241	\$241
	324/326	\$295	\$295
	364/365	\$427	\$427
	404/405	\$667	\$667
	444/445	\$1,083	\$1,083
	447	\$1,203	\$1,203
	449/500	\$1,203	\$1,203
	5000/5800	(1)	(1)

(1) Contact Toshiba on 5000 frames and larger for price and availability.

Surge Protection

Surge protection for motors is available on 440 frames and larger.

Option		Surge Capacitors (1)	Lightning Arrestor (1)	Surge Protection Package (1)	Current Transformer (2) (One Per Phase)
Frame	449/500	\$4,750	\$16,700	\$20,925	\$5,900
	5000/5800	\$4,750	\$16,700	\$20,925	\$5,900

(1) Not available for use with ASD control.

(2) Current transformers supplied with 10:1 current ratio as standard. Specify if other current ratio is desired.

Special Notes:

- This adder comes with an oversized main terminal box.
- These adders are not suitable for Division 2 environments.

Terminal Blocks

Insulated stud-type terminal blocks/strips can be provided for single-voltage, single-speed applications in the standard conduit box.

Option		Terminal Block (1)	Terminal Strip (2)
Frame	143/145	\$339	\$219
	182/184	\$339	\$219
	213/215	\$339	\$219
	254/256	\$339	\$219
	284/286	\$405	\$219
	324/326	\$733	\$219
	364/365	\$733	\$219
	404/405	\$733	\$219
	444/445	\$1,589	\$219
	447	\$1,589	\$219
	449/500	\$1,805	\$219
	5000/5800	\$2,527	\$219

(1) This adder refers to power leads only.

(2) This adder refers to accessory leads only.

Special Notes:

- Adders above are not available on explosion proof product.

Testing

Toshiba motors are tested in compliance with IEEE Std. 112 to meet NEMA MG1 requirements. Test reports and optional testing are available for each individual motor. Duplicates/copies of standard routine test reports are available.

Please contact Toshiba for scheduling/coordination for witness testing requirements.

Prices below are NET adders per option.

Option		Routine, Unwitnessed (Report Only)	Routine, Witnessed	Complete, Unwitnessed (2)	Complete, Witnessed (2)	Noise, Unwitnessed (1)
Frame	143/145	\$30	\$300	\$1,350	\$1,500	\$600
	182/184	\$30	\$300	\$1,350	\$1,500	\$600
	213/215	\$30	\$300	\$1,350	\$1,500	\$600
	254/256	\$30	\$300	\$1,350	\$1,500	\$600
	284/286	\$30	\$500	\$1,450	\$1,750	\$800
	324/326	\$30	\$500	\$1,700	\$2,000	\$800
	364/365	\$30	\$750	\$1,950	\$2,250	\$800
	404/405	\$30	\$750	\$2,200	\$2,500	\$800
	444/445	\$30	\$750	\$2,450	\$2,750	\$1,000
	447	\$30	\$750	\$2,450	\$2,750	\$1,000
	449/500	\$30	\$1,000	\$3,200	\$3,500	\$1,200
	5000/5800	\$30	\$1,000	\$3,200	\$3,500	\$1,200
Option		Noise, Witnessed (1)	Vibration	Insulation Resistance	Polarization Index	
Frame	143/145	\$1,000	\$600	\$350	\$500	
	182/184	\$1,000	\$600	\$350	\$500	
	213/215	\$1,000	\$600	\$350	\$500	
	254/256	\$1,000	\$600	\$400	\$550	
	284/286	\$1,200	\$800	\$400	\$550	
	324/326	\$1,200	\$800	\$450	\$600	
	364/365	\$1,200	\$800	\$450	\$600	
	404/405	\$1,200	\$800	\$500	\$650	
	444/445	\$1,500	\$1,000	\$500	\$650	
	447	\$1,500	\$1,000	\$550	\$700	
	449/500	\$1,500	\$1,000	\$550	\$700	
	5000/5800	\$1,500	\$1,000	\$550	\$700	

(1) Noise test consists of overall sound pressure values/readings only. For octave band measurements, contact Toshiba.

(2) Complete performance test per IEEE 112 method B.

Special Notes:

- For testing of more than one voltage or speed, multiply the adder above by the following.
 - » One Additional Voltage or Speed — 1.50
 - » Two Additional Voltages or Speeds — 2.00
 - » Three Additional Voltages or Speeds — 2.50
- Contact Toshiba for additional voltages not listed below.

Thermal Protection

Toshiba provides a wide variety of protective devices which are available as follows.

Thermostats (Klixons)

Toshiba's standard offering includes a normally-closed (NC), bi-metallic, temperature actuated element mounted on the stator winding. Leads are marked P1 and P2. Termination of the leads is in the main conduit box. Special thermostats are available upon request. Contact Toshiba for pricing and availability.

Option		Klixons (NC) (2)	Klixons NO	Hermetically Sealed (1)
Frame	143/145	\$164	\$219	\$328
	182/184	\$164	\$219	\$328
	213/215	\$164	\$219	\$328
	254/256	\$164	\$219	\$328
	284/286	\$164	\$219	\$328
	324/326	\$230	\$328	\$459
	364/365	\$230	\$328	\$459
	404/405	\$328	\$438	\$656
	444/445	\$328	\$438	\$656
	447	\$405	\$547	\$809
	449/500	\$405	\$547	\$809
	5000/5800	\$438	\$656	\$875

(1) Division 2 environments require the use of hermetically-sealed thermostats.

(2) This comes standard on explosion proof and vector ready motors.

Winding PTC Thermistors

Non-linear resistance temperature detectors are mounted on the motor winding. This thermal protection consists of three thermistors only or three thermistors with a solid state control relay. The provided control relay is intended for mounting in a remote location.

Option		Mark A (PTC) Thermistor	Mark A (PTC) Thermistor & Module
Frame	143/145	\$328	\$1,367
	182/184	\$328	\$1,367
	213/215	\$328	\$1,367
	254/256	\$328	\$1,367
	284/286	\$328	\$1,367
	324/326	\$328	\$1,367
	364/365	\$328	\$1,367
	404/405	\$328	\$1,367
	444/445	\$328	\$1,367
	447	\$328	\$1,367
	449/500	\$328	\$1,367
	5000/5800	\$328	\$1,367

(1) This adder includes auxiliary conduit.

Special Notes:

- Thermistors are available on explosion proof product but they are considered as a secondary device to the primary winding thermal device (Thermostat/Klixons).
- Thermistors can only be terminated in the main terminal box for explosion proof product.

Thermocouples

Winding (Stator) Thermocouples – A set of six (two per phase) winding thermocouples are provided and leads are terminated in a separate auxiliary conduit box. Pricing below does not include readout device(s).

Option		Stator Thermocouples "Type J"	Stator Thermocouples "Type T"
Frame	143/145	—	—
	182/184	—	—
	213/215	—	—
	254/256	\$2,625	\$2,625
	284/286	\$2,625	\$2,625
	324/326	\$2,625	\$2,625
	364/365	\$2,625	\$2,625
	404/405	\$2,625	\$2,625
	444/445	\$2,625	\$2,625
	447	\$2,625	\$2,625
	449/500	\$2,625	\$2,625
	5000/5800	\$2,625	\$2,625
Option		Stator Thermocouples "Type E"	Stator Thermocouples "Type K"
Frame	143/145	—	—
	182/184	—	—
	213/215	—	—
	254/256	\$2,625	\$2,625
	284/286	\$2,625	\$2,625
	324/326	\$2,625	\$2,625
	364/365	\$2,625	\$2,625
	404/405	\$2,625	\$2,625
	444/445	\$2,625	\$2,625
	447	\$2,625	\$2,625
	449/500	\$2,625	\$2,625
	5000/5800	\$2,625	\$2,625

Bearing Thermocouple – Pricing includes one per bearing (total of two thermocouples) with leads terminated in separate terminal housings. Pricing below does not include readout device(s).

Option		Bearing Thermocouples "Type J"	Bearing Thermocouples "Type T"
Frame	143/145	—	—
	182/184	—	—
	213/215	—	—
	254/256	\$3,938	\$3,938
	284/286	\$3,938	\$3,938
	324/326	\$3,938	\$3,938
	364/365	\$3,938	\$3,938
	404/405	\$3,938	\$3,938
	444/445	\$3,938	\$3,938
	447	\$3,938	\$3,938
	449/500	\$3,938	\$3,938
	5000/5800	\$3,938	\$3,938
Option		Bearing Thermocouples "Type E"	Bearing Thermocouples "Type K"
Frame	143/145	—	—
	182/184	—	—
	213/215	—	—
	254/256	\$3,938	\$3,938
	284/286	\$3,938	\$3,938
	324/326	\$3,938	\$3,938
	364/365	\$3,938	\$3,938
	404/405	\$3,938	\$3,938
	444/445	\$3,938	\$3,938
	447	\$3,938	\$3,938
	449/500	\$3,938	\$3,938
	5000/5800	\$3,938	\$3,938

Resistance Temperature Detectors (RTDs)

Winding (Stator) RTDs – A set of six (two per phase, three leads) winding RTDs are provided with leads terminated in an auxiliary conduit box. Pricing below does not include readout device(s).

Option		Stator RTDs (Copper; 10 ohm)	Stator RTDs (Platinum; 100 ohm)	Stator RTDs (Nickel; 120 ohm)
Frame	143/145	—	—	—
	182/184	—	—	—
	213/215	—	—	—
	254/256	\$4,266	\$4,266	\$4,266
	284/286	\$4,266	\$4,266	\$4,266
	324/326	\$4,266	\$4,266	\$4,266
	364/365	\$4,266	\$4,266	\$4,266
	404/405	\$4,266	\$4,266	\$4,266
	444/445	\$4,266	\$4,266	\$4,266
	447	\$4,266	\$4,266	\$4,266
	449/500	\$4,266	\$4,266	\$4,266
	5000/5800	\$4,266	\$4,266	\$4,266

- Special Notes:
- Contact Toshiba for pricing on other RTD types.
 - This adder is not available on explosion proof motors.

Bearing RTDs – Pricing includes one RTD per bearing (a total of two RTDs) and a three-lead single element design with leads terminated in separate terminal housings. Pricing below does not include readout device(s).

Option		Bearing RTDs (Copper; 10 ohm)	Bearing RTDs (Platinum; 100 ohm)	Bearing RTDs (Nickel; 120 ohm)
Frame	143/145	—	—	—
	182/184	—	—	—
	213/215	—	—	—
	254/256	\$4,813	\$4,813	\$4,813
	284/286	\$4,813	\$4,813	\$4,813
	324/326	\$4,813	\$4,813	\$4,813
	364/365	\$4,813	\$4,813	\$4,813
	404/405	\$4,813	\$4,813	\$4,813
	444/445	\$4,813	\$4,813	\$4,813
	447	\$4,813	\$4,813	\$4,813
	449/500	\$4,813	\$4,813	\$4,813
	5000/5800	\$4,813	\$4,813	\$4,813

- Special Notes:
- Contact Toshiba for pricing on other RTD types, including dual element.
 - This adder is not available on explosion proof motors.

Torque

Toshiba offers standard stock NEMA Design B and NEMA Design C motors in our catalog. For other special torque requirements (ie: starting/locked rotor, pull-up and/or breakdown torque), contact Toshiba. When available, please provide speed torque curve on the driven equipment and driven equipment inertia.

Vertical Jacking Provisions

Vertical jacking is used to assist in the proper alignment of the motor shaft with the driven equipment for shimming purposes. Provisions for four jacking bolts (one per foot) are provided. Jacking bolts are to be supplied by the customer.

Option		Vertical Jacking
Frame	143/145	\$545
	182/184	\$545
	213/215	\$650
	254/256	\$650
	284/286	\$760
	324/326	\$875
	364/365	\$875
	404/405	\$984
	444/445	\$984
	447	\$984
	449/500	\$1,203
	5000/5800	\$1,203

- Special Notes:
- This adder comes standard on totally enclosed fan cooled frames 5011/5811.

Vertical Lifting Provisions

This modification provides vertical lifting provisions for standard horizontal footless motors that are mounted vertical shaft down only.

Option		Vertical Lifting (2)
Frame	143/145	\$328
	182/184	\$394
	213/215	\$394
	254/256	\$547
	284/286	\$547
	324/326	\$755
	364/365	\$755
	404/405	\$952
	444/445	\$1,050
	447	\$1,050
	449/500	\$1,203 (1)
	5000/5800	—

- (1) Vertical lifting not available on 500 frame motors.
 (2) Contact Toshiba for footed motors.
- Special Notes:
- Above adders not available on all open drip proof or explosion proof motors, and are not available on any foot-mounted motors.
 - It is recommended that if a motor is mounted vertically, a drip-cover also be provided (see “Drip-Cover” section).

Vibration Detectors

These detectors are for single direction monitoring (horizontal, vertical, or axial). For total coverage of all three directions, three detectors must be provided. Monitoring direction must be specified at time of order.

Vibration Switch

Robertshaw – This adder consists of a self-contained detector and switch. A Robertshaw is an acceleration-sensitive instrument that measures peak vibratory shock at the point of measurement.

Option		Provisions Only for Robertshaw (1, 3)	Robertshaw Sensor (2, 3)	Provisions for Accelerometer or Velocity Sensor (4)	Others
Frame	143/145	—	—	\$547	Contact Toshiba
	182/184	—	—	\$547	
	213/215	—	—	\$547	
	254/256	\$1,039	\$4,266	\$547	
	284/286	\$1,039	\$4,266	\$547	
	324/326	\$1,039	\$4,266	\$547	
	364/365	\$1,039	\$4,266	\$547	
	404/405	\$1,039	\$4,266	\$547	
	444/445	\$1,039	\$4,266	\$1,039	
	447	\$1,039	\$4,266	\$1,039	
	449/500	\$1,039	\$4,266	\$1,039	
	5000/5800	\$1,039	\$4,266	\$1,039	

(1) Provisions for mounting are based on a Robertshaw model number 366.

(2) Standard model number offering is 366 (not suitable for Division 2 applications – Contact Toshiba for Division 2).

(3) This adder is not available on explosion proof motors.

(4) Pricing is based on Toshiba providing a single 1"-spot face surface with a ¼"-28 drill and tapped hole, unless specified otherwise.

Voltage

Motors are designed to operate successfully at plus or minus ten percent (10%) rated voltage; or plus or minus five percent (5%) of rated frequency; or combined variation not to exceed ten percent (10%). For 60 Hz voltages other than 230/460, 460, 575; or 50 Hz voltages other than 190/380, 208/415, 380, 400, 415, or 440, please refer to the list adder for an applicable charge.

This adder applies to 600 V motors or below only. Contact Toshiba for voltages above 600 that are not listed in this catalog.

Option		60 Hz	50 Hz (1)
Frame	143/145	\$175	\$175
	182/184	\$175	\$175
	213/215	\$219	\$219
	254/256	\$273	\$273
	284/286	\$328	\$328
	324/326	\$558	\$558
	364/365	\$820	\$820
	404/405	\$1,291	\$1,291
	444/445	\$1,750	\$1,750
	447	\$2,144	\$2,144
	449/500	\$2,144	\$2,144
	5000/5800	\$2,636	\$2,636

(1) All 50 Hz motors require the addition of a 15% frequency charge (see "Frequency" section).

Windings (Special)

See "Voltage" modifications section.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Medium Voltage General Purpose Motors Open Enclosure Motors

Toshiba's general purpose, medium voltage open enclosure motor series is designed to meet the industry's ever-increasing need for improved energy conservation and product reliability. These motors offer some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. This motor series is recommended for indoor use.

The general purpose, medium voltage open enclosure motor is available in a high efficiency design with a die cast aluminum rotor and anti-friction ball bearing as standard or with an optional copper bar rotor and/or sleeve bearings. These motor offerings are completely customizable due to our in-house design, engineering, and manufacturing capabilities. This allows us to not only meet but exceed your specific application requirements.

Standard Features:

- Open Drip Proof, Weather-Protected Type I, or Weather-Protected Type II
- High Efficiency
- 2300, 2300/4160, or 4000 V; Three-Phase, 60 Hz
- 1.15 Service Factor*
- Horizontal Foot-Mounted Direct-Coupled Applications
- Class F Form-Wound Insulation
- Class B Temperature Rise at 1.0 Service Factor*
- IP22, IP23, or IP24
- Vacuum-Pressure Impregnated System
- Cast Iron Frame, End Brackets, & Main Terminal Box (Fabricated Steel Main Terminal Box for 6800 & IEC Frames)
- Anti-Friction or Sleeve Bearings
- Aluminum Die Cast or Copper Bar Rotor
- Polyurea Base Grease or ISO VG Oil
- 304 Stainless Steel Nameplate

**Except Where Noted*

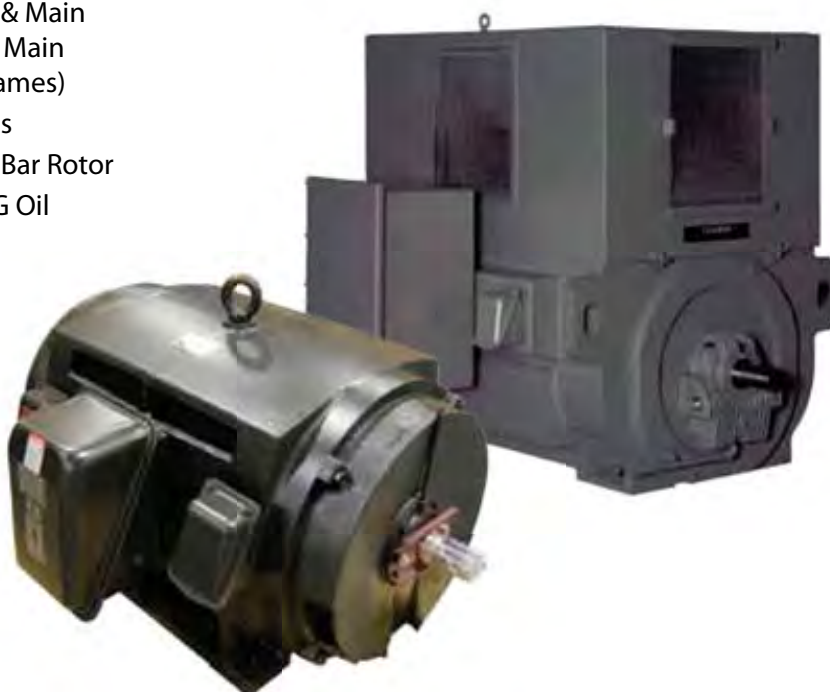
Applications:

- Pumps
- Fans
- Compressors
- Conveyors
- Mixers
- Material Handling
- General Applications

Warranty:

- From Date of Manufacture: 18 Months*
- From Date of Installation: 12 Months*

**(Whichever Comes First)*



Open Enclosure

ODP/WPI

> High Efficiency



Toshiba’s general purpose, Open Drip Proof and WPI, High Efficiency motor series are designed to meet the industry’s ever-increasing need for improved energy conservation and product reliability. These product lines offer a high torque and low vibration design leading to longer life and greater reliability. These motor offerings are completely customizable due to our in-house design, engineering, and manufacturing capabilities. This allows us to not only meet but exceed your specific application requirements.

Product Scope:

Horsepower:	200 to 5000 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	2300/4000, 2300/4160, or 4000 V*
Enclosure:	Open Drip Proof: IP22 Weather-Protected Type I: IP23
Frame Size:	445T through 560-2000
Construction:	Cast Iron Frame, End Brackets, & Main Terminal Box (Fabricated Steel Main Terminal Box for IEC Frames)
Insulation:	Class F with Class B Rise at 1.0 Service Factor
Environment:	Recommended for Indoor Use

*Contact Toshiba for availability on 6000 and 13,200 V, 60 Hz motors

WPI Tophat Special Features:

- Winding RTDs (Two-Phase)
 - Space Heater
 - NDE Insulated Bearing for 5012, 5812, & 6800 Frames (for Anti-Friction Ball Bearing)
 - NDE Insulated Bearing Housing for 450, 500, & 560 Frames (for Anti-Friction Ball Bearing)
- Available in Copper Bar Rotor Construction
 - Available with Insulated Sleeve Bearings
 - Additional Options Available; See Catalog Production Modifications Section

HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
200	3600	2300/4160	445TS	ODP	Anti-Friction		F2002VLG3JF	47 / 27	92.4		MXTDPM	\$27,398
200	1800	2300/4160	445T	ODP	Anti-Friction		F2004VLF3JF	50 / 29	93.6	6, 8	MXTDPM	\$30,311
200	1200	2300/4160	505US	ODP	Anti-Friction		F2006VLF3JF	52 / 31	92.6		MXTDPM	\$36,201
200	900	2300/4160	587US	ODP	Anti-Friction		F2008VLF3JM	50 / 29	93.3	12	MXTDPM	\$63,353
250	3600	2300/4160	505USS	ODP	Anti-Friction		F2502VLG3JF	59 / 33	93.0		MXTDPM	\$33,386
250	1800	2300/4160	447TS	ODP	Anti-Friction		F2504VLF3JF	58 / 33	94.3	6	MXTDPM	\$32,427
250	1200	2300/4160	505US	ODP	Anti-Friction		F2506VLF3JF	63 / 37	93.2		MXTDPM	\$37,505
250	900	2300/4160	5810US	ODP	Anti-Friction		F2508VLF3JM	62 / 36	93.5	12	MXTDPM	\$65,955
300	3600	2300/4160	505USS	ODP	Anti-Friction		F3002VLG3JF	70 / 39	94.1		MXTDPM	\$34,762
300	1800	2300/4160	505US	ODP	Anti-Friction		F3004VLF3JF	70 / 40	94.0		MXTDPM	\$34,884
300	1200	2300/4160	505US	ODP	Anti-Friction		F3006VLF3JF	71 / 41	94.7	6	MXTDPM	\$38,905
300	900	2300/4160	5810US	ODP	Anti-Friction		F3008VLF3JM	74 / 43	93.8	12	MXTDPM	\$67,333
350	3600	2300/4160	507USS	ODP	Anti-Friction		F3502VLG3JF	80 / 45	93.9		MXTDPM	\$36,779
350	1800	2300/4160	505US	ODP	Anti-Friction		F3504VLF3JF	80 / 44	95.1		MXTDPM	\$37,059
350	1200	2300/4160	507US	ODP	Anti-Friction		F3506VLF3JF	84 / 49	94.5	6	MXTDPM	\$41,751
350	900	2300/4160	5810US	ODP	Anti-Friction		F3508VLF3JM	86 / 49	94.1	12	MXTDPM	\$71,782

Open Enclosure

ODP/WPI

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	3600	2300/4160	507USS	ODP	Anti-Friction		F4002VLG3JF	91 / 51	94.6	6	MXTDPM	\$37,982
400	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		4003WPAK11F-A	94 / 54	93.7	4, 13	MXTWP1	\$65,086
400	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		4003WPAK11F-C	94 / 54	93.2	4, 12, 13	MXTWP1	\$86,458
400	3600	2300/4000	5011/12 USS	WPI	SLEEVE		4003WPQK11F-A	94 / 54	93.4	4, 13	MXTWP1	\$82,641
400	3600	2300/4000	5011/12 USS	WPI	SLEEVE		4003WPQK11F-C	94 / 54	93.1	4, 12, 13	MXTWP1	\$104,013
400	1800	2300/4160	507US	ODP	Anti-Friction		F4004VLF3JF	90 / 52	94.5	6	MXTDPM	\$38,170
400	1800	2300/4000	5011/12 US	WPI	Anti-Friction		4004WPAK11E-A	95 / 55	92.9	13	MXTWP1	\$67,547
400	1800	2300/4000	5011/12 US	WPI	Anti-Friction		4004WPAK11E-C	93 / 54	92.5	12, 13	MXTWP1	\$88,919
400	1200	2300/4160	509US	ODP	Anti-Friction		F4006VLF3JF	99 / 58	95.2		MXTDPM	\$51,088
400	1200	2300/4000	5011/12 US	WPI	Anti-Friction		4006WPAK11E-A	99 / 57	92.7	13	MXTWP1	\$74,079
400	1200	2300/4000	5011/12 US	WPI	Anti-Friction		4006WPAK11E-C	103 / 60	93.8	12, 13	MXTWP1	\$95,450
400	900	2300/4160	5810US	ODP	Anti-Friction		F4008VLF3JM	98 / 56	94.1	12	MXTDPM	\$73,031
450	3600	2300/4160	509USS	ODP	Anti-Friction		F4502VLG3JF	99 / 55	95.4	6	MXTDPM	\$41,639
450	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		4503WPAK11F-A	104 / 60	94.1	4, 13	MXTWP1	\$65,550
450	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		4503WPAK11F-C	104 / 60	93.6	4, 12, 13	MXTWP1	\$86,921
450	3600	2300/4000	5011/12 USS	WPI	SLEEVE		4503WPQK11F-A	104 / 60	93.8	4, 13	MXTWP1	\$83,105
450	3600	2300/4000	5011/12 USS	WPI	SLEEVE		4503WPQK11F-C	104 / 60	93.6	4, 12, 13	MXTWP1	\$104,477
450	1800	2300/4160	509US	ODP	Anti-Friction		F4504VLF3JF	101 / 56	95.5	6	MXTDPM	\$43,320
450	1800	2300/4000	5011/12 US	WPI	Anti-Friction		4504WPAK11E-A	106 / 61	93.2	13	MXTWP1	\$68,513
450	1800	2300/4000	5011/12 US	WPI	Anti-Friction		4504WPAK11E-C	101 / 58	92.7	12, 13	MXTWP1	\$89,884
450	1200	2300/4160	509US	ODP	Anti-Friction		F4506VLF3JF			3	MXTDPM	\$57,537
450	1200	2300/4000	5011/12 US	WPI	Anti-Friction		4506WPAK11E-A	113 / 65	93.5	13	MXTWP1	\$75,044
450	1200	2300/4000	5011/12 US	WPI	Anti-Friction		4506WPAK11E-C	116 / 67	94.0	12, 13	MXTWP1	\$96,416
450	900	2300/4160	5810US	ODP	Anti-Friction		F4508VLF3JM	109 / 63	94.4	12	MXTDPM	\$76,202
500	3600	2300/4160	509USS	ODP	Anti-Friction		F5002VLG3JF	110 / 61	94.8	6	MXTDPM	\$42,761
500	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		5003WPAK11F-A	114 / 66	93.9	4, 13	MXTWP1	\$66,411
500	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		5003WPAK11F-C	114 / 66	93.5	4, 12, 13	MXTWP1	\$87,783
500	3600	2300/4000	5011/12 USS	WPI	SLEEVE		5003WPQK11F-A	114 / 66	93.6	4, 13	MXTWP1	\$83,966
500	3600	2300/4000	5011/12 USS	WPI	SLEEVE		5003WPQK11F-C	114 / 66	93.5	4, 12, 13	MXTWP1	\$105,337
500	1800	2300/4160	509US	ODP	Anti-Friction		F5004VLF3JF	114 / 64	95.4	6	MXTDPM	\$44,940
500	1800	2300/4000	5011/12 US	WPI	Anti-Friction		5004WPAK11E-A	114 / 66	93.3	13	MXTWP1	\$68,981
500	1800	2300/4000	5011/12 US	WPI	Anti-Friction		5004WPAK11E-C	113 / 65	92.9	12, 13	MXTWP1	\$90,353
500	1200	2300/4160	5810US	ODP	Anti-Friction		F5006VLF3JM	114 / 66	95.3	12	MXTDPM	\$76,916
500	1200	2300/4000	5011/12 US	WPI	Anti-Friction		5006WPAK11E-A	128 / 74	93.6	13	MXTWP1	\$75,513
500	1200	2300/4000	5011/12 US	WPI	Anti-Friction		5006WPAK11E-C	130 / 75	94.2	12, 13	MXTWP1	\$96,884
500	900	2300/4160	5810US	ODP	Anti-Friction		F5008VLF3JM	122 / 70	95.2	12	MXTDPM	\$79,793
600	3600	2300/4160	5011/12 USS	WPI	Anti-Friction		6003WPAK11F-A	137 / 79	94.4	4, 13	MXTWP1	\$68,218
600	3600	2300/4160	5011/12 USS	WPI	Anti-Friction		6003WPAK11F-C	137 / 79	94.1	4, 12, 13	MXTWP1	\$89,589
600	3600	2300/4160	5011/12 USS	WPI	SLEEVE		6003WPQK11F-A	137 / 79	94.1	4, 13	MXTWP1	\$85,773
600	3600	2300/4160	5011/12 USS	WPI	SLEEVE		6003WPQK11F-C	137 / 79	94.1	4, 12, 13	MXTWP1	\$107,144
600	1800	2300/4160	5810US	ODP	Anti-Friction		F6004VLF3JM	135 / 78	93.7	12	MXTDPM	\$85,533
600	1800	2300/4160	5011/12 US	WPI	Anti-Friction		6004WPAK11E-A	139 / 80	93.5	13	MXTWP1	\$69,968
600	1800	2300/4160	5011/12 US	WPI	Anti-Friction		6004WPAK11E-C	133 / 77	93.4	12, 13	MXTWP1	\$91,339
600	1200	2300/4160	5810US	ODP	Anti-Friction		F6006VLF3JM	137 / 79	95.4	12	MXTDPM	\$86,099
600	1200	2300/4160	5011/12 US	WPI	Anti-Friction		6006WPAK11E-C	157 / 90	94.2	12, 13	MXTWP1	\$99,141
600	900	4000	5811/12 US	WPI	Anti-Friction		6008WPAK11E-A	93	94.3	13	MXTWP1	\$91,427
600	900	4000	5811/12 US	WPI	Anti-Friction		6008WPAK11E-C	84	94.7	12, 13	MXTWP1	\$114,835
700	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		7003WPAK11F-A	158 / 91	94.5	4, 13	MXTWP1	\$73,397
700	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		7003WPAK11F-C	158 / 91	94.3	4, 12, 13	MXTWP1	\$94,768

Open Enclosure

ODP/WPI

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
700	3600	2300/4000	5011/12 USS	WPI	SLEEVE		7003WPQK11F-A	158 / 91	94.2	4, 13	MXTWP1	\$90,952
700	3600	2300/4000	5011/12 USS	WPI	SLEEVE		7003WPQK11F-C	158 / 91	94.3	4, 12, 13	MXTWP1	\$112,323
700	1800	2300/4160	5810US	ODP	Anti-Friction		F7004VLF3JM	157 / 90	93.7	12	MXTDPM	\$87,873
700	1800	2300/4000	5011/12 US	WPI	Anti-Friction		7004WPAK11E-A	165 / 95	94.0	13	MXTWP1	\$78,143
700	1800	2300/4000	5011/12 US	WPI	Anti-Friction		7004WPAK11E-C	151 / 87	93.7	12, 13	MXTWP1	\$99,514
700	1200	2300/4160	5810US	ODP	Anti-Friction		F7006VLF3JM	160 / 92	96.1	12	MXTDPM	\$88,377
700	1200	4000	5811/12US	WPI	Anti-Friction		7006WPAK11E-A			13	MXTWP1	\$86,361
700	1200	4000	5811/12US	WPI	Anti-Friction		7006WPAK11E-C			12, 13	MXTWP1	\$109,767
700	900	4000	5811/12 US	WPI	Anti-Friction		7008WPAL11E-A	108	94.3	13	MXTWP1	\$93,627
700	900	4000	5811/12 US	WPI	Anti-Friction		7008WPAL11E-C	99	94.9	12, 13	MXTWP1	\$117,033
800	3600	4000	5811/12 USS	WPI	Anti-Friction		8003WPAL11F-A	102	95.2	4, 13	MXTWP1	\$89,680
800	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		8003WPAK11F-A	180 / 104	94.1	4, 13	MXTWP1	\$78,079
800	3600	2300/4000	5011/12 USS	WPI	Anti-Friction		8003WPAK11F-C	180 / 104	94.1	4, 12, 13	MXTWP1	\$99,450
800	3600	2300/4000	5011/12 USS	WPI	SLEEVE		8003WPQK11F-A	180 / 104	93.8	4, 13	MXTWP1	\$95,633
800	3600	2300/4000	5011/12 USS	WPI	SLEEVE		8003WPQK11F-C	180 / 104	94.1	4, 12, 13	MXTWP1	\$117,006
800	1800	2300/4160	5810US	ODP	Anti-Friction		F8004VLF3JM	178 / 103	94.2	12	MXTDPM	\$89,742
800	1800	2300/4000	5011/12 US	WPI	Anti-Friction		8004WPAK11E-A	187 / 108	93.6	13	MXTWP1	\$82,696
800	1800	2300/4000	5011/12 US	WPI	Anti-Friction		8004WPAK11E-C	174 / 100	94.1	12, 13	MXTWP1	\$104,068
800	1200	4000	5811/12 US	WPI	Anti-Friction		8006WPAL11E-A	115	94.5	13	MXTWP1	\$94,989
800	1200	4000	5811/12 US	WPI	Anti-Friction		8006WPAL11E-C	108	94.8	12, 13	MXTWP1	\$118,397
800	900	4000	6810/11/12 US	WPI	Anti-Friction		8008WPAL11E-C	108	94.9	12, 13	MXTWP1	\$188,192
800	900	4000	6810/11/12 US	WPI	SLEEVE		8008WPQL11E-C	108	94.9	12, 13	MXTWP1	\$202,999
900	3600	4000	5811/12 USS	WPI	Anti-Friction		9003WPAL11F-A	114	95.4	4, 13	MXTWP1	\$90,155
900	3600	4000	5811/12 USS	WPI	Anti-Friction		9003WPAL11F-C	110	95.8	4, 12, 13	MXTWP1	\$113,562
900	3600	4000	5811/12 USS	WPI	SLEEVE		9003WPQL11F-A	114	95.3	4, 13	MXTWP1	\$108,431
900	3600	4000	5811/12 USS	WPI	SLEEVE		9003WPQL11F-C	110	95.7	4, 12, 13	MXTWP1	\$131,881
900	1800	2300/4160	5810US	ODP	Anti-Friction		F9004VLF3JM	200 / 115	94.7	12	MXTDPM	\$91,900
900	1800	4000	5811/12 US	WPI	Anti-Friction		9005WPAL11E-A			4, 13	MXTWP1	\$91,870
900	1800	4000	5811/12 US	WPI	Anti-Friction		9005WPAL11E-C	117	95.6	4, 13	MXTWP1	\$115,276
900	1800	4000	5811/12 US	WPI	SLEEVE		9005WPQL11E-A			4, 13	MXTWP1	\$110,189
900	1800	4000	5811/12 US	WPI	SLEEVE		9005WPQL11E-C			4, 13	MXTWP1	\$133,596
900	1200	4000	5811/12 US	WPI	Anti-Friction		9006WPAL11E-A	124	94.5	13	MXTWP1	\$97,331
900	1200	4000	5811/12 US	WPI	Anti-Friction		9006WPAL11E-C	125	94.9	12, 13	MXTWP1	\$120,739
900	900	4000	6810/11/12 US	WPI	Anti-Friction		9008WPAL11E-C	121	95.0	12, 13	MXTWP1	\$196,820
900	900	4000	6810/11/12 US	WPI	SLEEVE		9008WPQL11E-C	121	95.0	12, 13	MXTWP1	\$211,627
1000	3600	4000	5811/12 USS	WPI	Anti-Friction		M203WPAL11F-A	126	95.5	4, 13	MXTWP1	\$91,390
1000	3600	4000	5811/12 USS	WPI	Anti-Friction		M203WPAL11F-C	122	96.0	4, 12, 13	MXTWP1	\$114,797
1000	3600	4000	5811/12 USS	WPI	SLEEVE		M203WPQL11F-A	126	95.4	4, 13	MXTWP1	\$109,708
1000	3600	4000	5811/12 USS	WPI	SLEEVE		M203WPQL11F-C	122	95.9	4, 12, 13	MXTWP1	\$133,115
1000	1800	4000	5811/12 US	WPI	Anti-Friction		M205WPAL11E-A	128	95.4	4, 13	MXTWP1	\$94,096
1000	1800	4000	5811/12 US	WPI	Anti-Friction		M205WPAL11E-C	131	95.7	4, 12, 13	MXTWP1	\$117,502
1000	1800	4000	5811/12 US	WPI	SLEEVE		M205WPQL11E-A	128	95.4	4, 13	MXTWP1	\$112,414
1000	1800	4000	5811/12 US	WPI	SLEEVE		M205WPQL11E-C	131	95.6	4, 12, 13	MXTWP1	\$135,820
1000	1200	4000	5811/12 US	WPI	Anti-Friction		M206WPAL11E-A	140	94.5	3, 13	MXTWP1	\$99,975
1000	1200	4000	5811/12 US	WPI	Anti-Friction		M206WPAL11E-C	137	94.6	3, 12, 13	MXTWP1	\$123,383
1000	900	4000	6812/13 US	WPI	Anti-Friction		M208WPAL11E-C	134	95.2	12 , 13	MXTWP1	\$206,520
1000	900	4000	6812/13 US	WPI	SLEEVE		M208WPQL11E-C	134	95.2	12 , 13	MXTWP1	\$221,327
1250	3600	4000	5811/12 USS	WPI	Anti-Friction		M253WPAL11F-A	158	95.7	4, 13	MXTWP1	\$96,433
1250	3600	4000	5811/12 USS	WPI	Anti-Friction		M253WPAL11F-C	153	96.2	4, 12, 13	MXTWP1	\$119,840

Open Enclosure

ODP/WPI

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1250	3600	4000	5811/12 USS	WPI	SLEEVE		M253WPQL11F-A	158	95.6	4, 13	MXTWP1	\$114,751
1250	3600	4000	5811/12 USS	WPI	SLEEVE		M253WPQL11F-C	153	96.1	4, 12, 13	MXTWP1	\$138,158
1250	1800	4000	5811/12 US	WPI	Anti-Friction		M255WPAL11E-A	159	95.5	4, 13	MXTWP1	\$100,627
1250	1800	4000	5811/12 US	WPI	Anti-Friction		M255WPAL11E-C	162	95.9	4, 12, 13	MXTWP1	\$124,034
1250	1800	4000	5811/12 US	WPI	SLEEVE		M255WPQL11E-A	159	95.5	4, 13	MXTWP1	\$118,945
1250	1800	4000	5811/12 US	WPI	SLEEVE		M255WPQL11E-C	162	95.8	4, 12, 13	MXTWP1	\$142,353
1250	1200	4000	6812/13 US	WPI	Anti-Friction		M257WPAL11E-C	157	94.9	12, 13	MXTWP1	\$213,190
1250	1200	4000	6812/13 US	WPI	SLEEVE		M257WPQL11E-C	157	94.9	12, 13	MXTWP1	\$227,997
1250	900	4000	6812/13 US	WPI	Anti-Friction		M258WPAL11E-C	169	95.3	12, 13	MXTWP1	\$218,600
1250	900	4000	6812/13 US	WPI	SLEEVE		M258WPQL11E-C	169	95.3	12, 13	MXTWP1	\$233,407
1500	3600	4000	5811/12 USS	WPI	Anti-Friction		M303WPAL11F-A	189	95.8	4, 13	MXTWP1	\$101,155
1500	3600	4000	5811/12 USS	WPI	Anti-Friction		M303WPAL11F-C	183	96.2	4, 12, 13	MXTWP1	\$124,562
1500	3600	4000	5811/12 USS	WPI	SLEEVE		M303WPQL11F-A	189	95.7	4, 13	MXTWP1	\$119,473
1500	3600	4000	5811/12 USS	WPI	SLEEVE		M303WPQL11F-C	183	96.1	4, 12, 13	MXTWP1	\$142,880
1500	1800	4000	5811/12 US	WPI	Anti-Friction		M305WPAL11E-A	189	95.6	4, 13	MXTWP1	\$104,211
1500	1800	4000	5811/12 US	WPI	Anti-Friction		M305WPAL11E-C	193	96.0	4, 12, 13	MXTWP1	\$127,617
1500	1800	4000	5811/12 US	WPI	SLEEVE		M305WPQL11E-A	189	95.6	4, 13	MXTWP1	\$122,529
1500	1800	4000	5811/12 US	WPI	SLEEVE		M305WPQL11E-C	193	95.9	4, 12, 13	MXTWP1	\$145,935
1500	1200	4000	6812/13 US	WPI	Anti-Friction		M307WPAL11E-C	187	95.0	12, 13	MXTWP1	\$219,320
1500	1200	4000	6812/13 US	WPI	SLEEVE		M307WPQL11E-C	187	95.0	12, 13	MXTWP1	\$234,127
1500	900	4000	6812/13 US	WPI	Anti-Friction		M308WPAL11E-C	205	95.4	12, 13	MXTWP1	\$228,730
1500	900	4000	6812/13 US	WPI	SLEEVE		M308WPQL11E-C	205	95.4	12, 13	MXTWP1	\$243,537
1750	3600	4000	5811/12 USS	WPI	Anti-Friction		M353WPAL11F-A	224	95.8	4, 13	MXTWP1	\$104,493
1750	3600	4000	5811/12 USS	WPI	Anti-Friction		M353WPAL11F-C	216	96.1	4, 12, 13	MXTWP1	\$127,900
1750	3600	4000	5811/12 USS	WPI	SLEEVE		M353WPQL11F-A	224	95.6	4, 13	MXTWP1	\$122,811
1750	3600	4000	5811/12 USS	WPI	SLEEVE		M353WPQL11F-C	216	95.9	4, 12, 13	MXTWP1	\$146,219
1750	1800	4000	5811/12 US	WPI	Anti-Friction		M355WPAL11E-A	221	95.5	4, 13	MXTWP1	\$106,082
1750	1800	4000	5811/12 US	WPI	Anti-Friction		M355WPAL11E-C	227	95.8	4, 12, 13	MXTWP1	\$129,488
1750	1800	4000	5811/12 US	WPI	SLEEVE		M355WPQL11E-A	221	95.5	4, 13	MXTWP1	\$124,400
1750	1800	4000	5811/12 US	WPI	SLEEVE		M355WPQL11E-C	227	95.7	4, 12, 13	MXTWP1	\$147,807
1750	1800	4000	6810/11/12 US	WPI	Anti-Friction		M355WPAL11E-C	219	95.8	12, 13	MXTWP1	\$227,712
1750	1800	4000	6810/11/12 US	WPI	SLEEVE		M355WPQL11E-C	219	95.8	12, 13	MXTWP1	\$242,519
1750	1200	4000	6812/13 US	WPI	Anti-Friction		M358WPAL11E-C	218	95.3	12, 13	MXTWP1	\$227,712
1750	1200	4000	6812/13 US	WPI	SLEEVE		M358WPQL11E-C	218	95.3	12, 13	MXTWP1	\$242,519
1750	900	4000	450-1250	WPI	Anti-Friction	11,900	J1758GLF3I-C	245	95.4	1	MXTWP1	\$253,404
1750	900	4000	450-1250	WPI	SLEEVE	11,900	J1758GLFLI-C	245	95.4	1	MXTWP1	\$268,211
1750	900	4000	450-1250	WPI	SLEEVE-FC	11,900	J1758GLFUI-C	245	95.4	1, 15	MXTWP1	\$270,115
2000	3600	4000	5811/12 USS	WPI	Anti-Friction		M403WPAL11F-A	253	95.8	4, 13	MXTWP1	\$108,298
2000	3600	4000	5811/12 USS	WPI	Anti-Friction		M403WPAL11F-C	245	96.1	4, 12, 13	MXTWP1	\$131,704
2000	3600	4000	5811/12 USS	WPI	SLEEVE		M403WPQL11F-A	253	95.7	4, 13	MXTWP1	\$126,616
2000	3600	4000	5811/12 USS	WPI	SLEEVE		M403WPQL11F-C	245	96.0	4, 12, 13	MXTWP1	\$150,023
2000	3600	4000	6810/11/12 USS	WPI	SLEEVE		M403WPQL11F-C	249	95.2	12, 13	MXTWP1	\$248,541
2000	1800	4000	6810/11/12 US	WPI	Anti-Friction		M405WPAL11E-C	250	95.9	12, 13	MXTWP1	\$225,832
2000	1800	4000	6810/11 US	WPI	SLEEVE		M405WPQL11E-C	250	95.9	12, 13	MXTWP1	\$240,639
2000	1200	4000	6812/13 US	WPI	Anti-Friction		M408WPAL11E-C	250	95.3	12, 13	MXTWP1	\$238,610
2000	1200	4000	6812/13 US	WPI	SLEEVE		M408WPQL11E-C	250	95.3	12, 13	MXTWP1	\$253,417
2000	900	4000	450-1400	WPI	Anti-Friction	13,500	J2008GLF3I-C	275	95.6	1	MXTWP1	\$268,612
2000	900	4000	450-1400	WPI	SLEEVE	13,500	J2008GLFLI-C	275	95.6	1	MXTWP1	\$283,419
2000	900	4000	450-1400	WPI	SLEEVE-FC	13,500	J2008GLFUI-C	275	95.6	1, 15	MXTWP1	\$285,323

Open Enclosure

ODP/WPI

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
2250	3600	4000	6810/11/12 USS	WPI	SLEEVE		M453WPQL11F-C	279	95.4	12, 13	MXTWP1	\$265,389
2250	1800	4000	6810/11/12 US	WPI	Anti-Friction		M455WPAL11E-C	278	96.0	12, 13	MXTWP1	\$238,103
2250	1800	4000	6810/11/12 US	WPI	SLEEVE		M455WPQL11E-C	278	96.0	12, 13	MXTWP1	\$252,910
2250	1200	4000	6812/13 US	WPI	Anti-Friction		M458WPAL11E-C	281	95.6	12, 13	MXTWP1	\$249,680
2250	1200	4000	6812/13 US	WPI	SLEEVE		M458WPQL11E-C	281	95.6	12, 13	MXTWP1	\$264,487
2250	900	4000	450-1400	WPI	Anti-Friction	13,500	J2258GLF3I-C	310	95.7	1	MXTWP1	\$281,390
2250	900	4000	450-1400	WPI	SLEEVE	13,500	J2258GLFLI-C	310	95.7	1	MXTWP1	\$296,197
2250	900	4000	450-1400	WPI	SLEEVE-FC	13,500	J2258GLFUI-C	310	95.7	1, 15	MXTWP1	\$298,101
2500	3600	4000	6810/11/12 USS	WPI	SLEEVE		M503WPQL11F-C	309	95.7	12, 13	MXTWP1	\$278,639
2500	1800	4000	6810/11/12 US	WPI	Anti-Friction		M505WPAL11E-C	309	96.3	12, 13	MXTWP1	\$247,402
2500	1800	4000	6810/11 US	WPI	SLEEVE		M505WPQL11E-C	309	96.3	12, 13	MXTWP1	\$262,209
2500	1200	4000	6812/13 US	WPI	Anti-Friction		M508WPAL11E-C	318	95.9	12, 13	MXTWP1	\$261,320
2500	1200	4000	6812/13 US	WPI	SLEEVE		M508WPQL11E-C	318	95.9	12, 13	MXTWP1	\$276,127
2500	900	4000	500-1600	WPI	Anti-Friction	14,100	J2508GLF3I-C	345	95.7	1	MXTWP1	\$314,068
2500	900	4000	500-1600	WPI	SLEEVE	14,100	J2508GLFLI-C	345	95.7	1	MXTWP1	\$328,875
2500	900	4000	500-1600	WPI	SLEEVE-FC	14,100	J2508GLFUI-C	345	95.7	1, 15	MXTWP1	\$330,779
2750	3600	4000	6810/11/12 USS	WPI	SLEEVE		M553WPQL11F-C			4, 12	MXTWP1	\$293,765
2750	1800	4000	6812/13 US	WPI	Anti-Friction		M555WPAL11F-C			4, 12	MXTWP1	\$259,730
2750	1800	4000	6812/13 US	WPI	SLEEVE		M555WPQL11F-C			4, 12	MXTWP1	\$274,537
2750	1200	4000	6812/13 US	WPI	Anti-Friction		M557WPAL11F-C	368	95.9	4, 12, 14	MXTWP1	\$272,190
2750	1200	4000	6812/13 US	WPI	SLEEVE		M557WPQL11F-C	368	95.9	4, 12, 14	MXTWP1	\$286,997
2750	900	4000	500-1600	WPI	Anti-Friction	14,100	J2758GLF3I-C	370	96.3	1	MXTWP1	\$326,790
2750	900	4000	500-1600	WPI	SLEEVE	14,100	J2758GLFLI-C	370	96.3	1	MXTWP1	\$341,597
2750	900	4000	500-1600	WPI	SLEEVE-FC	14,100	J2758GLFUI-C	370	96.3	1, 15	MXTWP1	\$343,501
3000	3600	4000	6810/11/12 USS	WPI	SLEEVE		M603WPQL11F-C	370	96.1	12, 13	MXTWP1	\$306,465
3000	1800	4000	6812/13 US	WPI	Anti-Friction		M605WPAL11E-C	369	96.5	12, 13	MXTWP1	\$272,389
3000	1800	4000	6812/13 US	WPI	SLEEVE		M605WPQL11E-C	369	96.5	12, 13	MXTWP1	\$287,196
3000	1200	4000	450-1400	WPI	Anti-Friction	13,000	J3007GLF3I-C	385	95.9	1	MXTWP1	\$297,245
3000	1200	4000	450-1400	WPI	SLEEVE	13,000	J3007GLFLI-C	385	95.9	1	MXTWP1	\$312,052
3000	1200	4000	450-1400	WPI	SLEEVE-FC	13,000	J3007GLFUI-C	385	95.9	1, 15	MXTWP1	\$313,956
3000	900	4000	500-1600	WPI	Anti-Friction	14,100	J3008GLF3I-C	405	96.3	1	MXTWP1	\$336,560
3000	900	4000	500-1600	WPI	SLEEVE	14,100	J3008GLFLI-C	405	96.3	1	MXTWP1	\$351,367
3000	900	4000	500-1600	WPI	SLEEVE-FC	14,100	J3008GLFUI-C	405	96.3	1, 15	MXTWP1	\$353,271
3500	3600	4000	6810/11/12 USS	WPI	SLEEVE		M703WPQL11F-C	431	96.2	12, 13	MXTWP1	\$319,281
3500	1800	4000	6812/13 US	WPI	Anti-Friction		M705WPAL11E-C	431	96.6	12, 13	MXTWP1	\$283,780
3500	1800	4000	6812/13 US	WPI	SLEEVE		M705WPQL11E-C	431	96.6	12, 13	MXTWP1	\$298,587
3500	1200	4000	450-1400	WPI	Anti-Friction	13,000	J3507GLF3I-C	450	96.0	1	MXTWP1	\$312,128
3500	1200	4000	450-1400	WPI	SLEEVE	13,000	J3507GLFLI-C	450	96.0	1	MXTWP1	\$326,935
3500	1200	4000	450-1400	WPI	SLEEVE-FC	13,000	J3507GLFUI-C	450	96.0	1, 15	MXTWP1	\$328,839
3500	900	4000	500-1800	WPI	Anti-Friction	16,700	J3508GLF3I-C	470	96.4	1	MXTWP1	\$347,120
3500	900	4000	500-1800	WPI	SLEEVE	16,700	J3508GLFLI-C	470	96.4	1	MXTWP1	\$361,927
3500	900	4000	500-1800	WPI	SLEEVE-FC	16,700	J3508GLFUI-C	470	96.4	1, 15	MXTWP1	\$363,831
4000	3600	4000	450-1400	WPI	SLEEVE	12,800	J4003GLFLI-C	495	95.8	1	MXTWP1	\$334,920
4000	3600	4000	450-1400	WPI	SLEEVE-FC	12,800	J4003GLFUI-C	495	95.8	1, 15	MXTWP1	\$336,824
4000	1800	4000	6812/13 US	WPI	Anti-Friction		M805WPAL11E-C	495	96.6	3, 12, 13	MXTWP1	\$297,360
4000	1800	4000	6812/13 US	WPI	SLEEVE		M805WPQL11E-C	495	96.6	3, 12, 13	MXTWP1	\$312,167
4000	1200	4000	500-1600	WPI	Anti-Friction	15,000	J4007GLF3I-C	510	96.7	1	MXTWP1	\$342,064
4000	1200	4000	500-1600	WPI	SLEEVE	15,000	J4007GLFLI-C	510	96.7	1	MXTWP1	\$356,871
4000	1200	4000	500-1600	WPI	SLEEVE-FC	15,000	J4007GLFUI-C	510	96.7	1, 15	MXTWP1	\$358,775

Open Enclosure

ODP/WPI

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Enclosure	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
4000	900	4000	500-1800	WPI	Anti-Friction	16,700	J4008GLF3I-C	535	96.5	1	MXTWP1	\$359,320
4000	900	4000	500-1800	WPI	SLEEVE	16,700	J4008GLFLI-C	535	96.5	1	MXTWP1	\$374,127
4000	900	4000	500-1800	WPI	SLEEVE-FC	16,700	J4008GLFUI-C	535	96.5	1, 15	MXTWP1	\$376,031
4500	3600	4000	500-1600	WPI	SLEEVE-FC	16,500	J4503GLFUI-C	555	96.5	1, 15	MXTWP1	\$353,574
4500	1800	4000	450-1400	WPI	Anti-Friction	12,900	J4505GLF3I-C	560	96.7	1	MXTWP1	\$328,580
4500	1800	4000	450-1400	WPI	SLEEVE	12,900	J4505GLFLI-C	560	96.7	1	MXTWP1	\$343,387
4500	1800	4000	450-1400	WPI	SLEEVE-FC	12,900	J4505GLFUI-C	560	96.7	1, 15	MXTWP1	\$345,291
4500	1200	4000	500-1600	WPI	Anti-Friction	15,000	J4507GLF3I-C	570	96.8	1	MXTWP1	\$363,957
4500	1200	4000	500-1600	WPI	SLEEVE	15,000	J4507GLFLI-C	570	96.8	1	MXTWP1	\$378,764
4500	1200	4000	500-1600	WPI	SLEEVE-FC	15,000	J4507GLFUI-C	570	96.8	1, 15	MXTWP1	\$380,668
4500	900	4000	560-1800	WPI	Anti-Friction	18,700	J4508GLF3I-C	600	96.6	1	MXTWP1	\$389,470
4500	900	4000	560-1800	WPI	SLEEVE	18,700	J4508GLFLI-C	600	96.6	1	MXTWP1	\$404,277
4500	900	4000	560-1800	WPI	SLEEVE-FC	18,700	J4508GLFUI-C	600	96.6	1, 15	MXTWP1	\$406,181
5000	3600	4000	500-1600	WPI	SLEEVE-FC	16,500	J5003GLFUI-C	615	96.5	1, 15	MXTWP1	\$362,820
5000	1800	4000	500-1600	WPI	SLEEVE	15,800	J5005GLFLI-C	620	96.8	1	MXTWP1	\$358,689
5000	1800	4000	500-1600	WPI	SLEEVE-FC	15,800	J5005GLFUI-C	620	96.8	1, 15	MXTWP1	\$360,593
5000	1200	4000	500-1800	WPI	Anti-Friction	17,200	J5007GLF3I-C	635	96.8	1	MXTWP1	\$378,511
5000	1200	4000	500-1800	WPI	SLEEVE	17,200	J5007GLFLI-C	635	96.8	1	MXTWP1	\$393,318
5000	1200	4000	500-1800	WPI	SLEEVE-FC	17,200	J5007GLFUI-C	635	96.8	1, 15	MXTWP1	\$395,222
5000	900	4000	560-2000	WPI	Anti-Friction	22,000	J5008GLF3I-C	660	96.6	1	MXTWP1	\$402,766
5000	900	4000	560-2000	WPI	SLEEVE	22,000	J5008GLFLI-C	660	96.6	1	MXTWP1	\$417,573
5000	900	4000	560-2000	WPI	SLEEVE-FC	22,000	J5008GLFUI-C	660	96.6	1, 15	MXTWP1	\$419,477

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Open Enclosure

WP11

> High Efficiency



Toshiba’s general purpose, Medium Voltage WP11, High Efficiency motor series is designed to meet the industry’s ever-increasing need for improved energy conservation and product reliability. This product line offers a high torque and low vibration design leading to longer life and greater reliability. These motor offerings are completely customizable due to our in-house design, engineering, and manufacturing capabilities. This allows us to not only meet but exceed your specific application requirements.

Product Scope:

Horsepower:	400 to 5000 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	2300/4000 or 4000 V*
Enclosure:	Weather-Protected Type 11: IP24
Frame Size:	5011/12US through 560-2000
Construction:	Cast Iron Frame, End Brackets, & Main Terminal Box (Fabricated Steel Main Terminal Box for IEC Frames)
Insulation:	Class F with Class B Rise at 1.0 Service Factor
Environment:	Suitable for Indoor or Outdoor Use

*Contact Toshiba for availability on 6600 and 13,200 V, 60 Hz motors

Special Features:

- Winding RTDs (Two per Phase)
 - Space Heater
 - NDE Insulated Bearing for 5000, 5800, & 6800 Frames (for Anti-Friction Ball Bearing)
 - NDE Insulated Bearing Housing for 450, 500, &
- 560 Frames (for Anti-Friction Ball Bearing)
 - Available in Copper Bar Rotor Construction
 - Available with Insulated Sleeve Bearings
 - Additional Options Available; See Catalog Production Modifications Section

HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	3600	2300/4000	5011/12 USS	Anti-Friction		4003WTAK11F-A	94 / 54	93.6	4	MXTWP2	\$65,873
400	3600	2300/4000	5011/12 USS	Anti-Friction		4003WTAK11F-C	94 / 54	92.9	4, 12	MXTWP2	\$87,245
400	3600	2300/4000	5011/12 USS	SLEEVE		4003WTQK11F-A	94 / 54	93.5	4	MXTWP2	\$83,429
400	3600	2300/4000	5011/12 USS	SLEEVE		4003WTQK11F-C	94 / 54	93.3	4, 12	MXTWP2	\$104,800
400	1800	2300/4000	5011/12 US	Anti-Friction		4004WTAK11E-A	94 / 54	92.8		MXTWP2	\$68,387
400	1800	2300/4000	5011/12 US	Anti-Friction		4004WTAK11E-C	89 / 51	92.5	12	MXTWP2	\$85,942
400	1200	2300/4000	5011/12 US	Anti-Friction		4006WTAK11E-A	97 / 56	92.6		MXTWP2	\$77,905
400	1200	2300/4000	5011/12 US	Anti-Friction		4006WTAK11E-C	103 / 60	93.8	12	MXTWP2	\$99,277
400	900	4000	5811/12 US	Anti-Friction		4008WTAL11E-A				MXTWP2	\$84,223
400	900	4000	5811/12 US	Anti-Friction		4008WTAL11E-C			12	MXTWP2	\$107,630
450	3600	2300/4000	5011/12 USS	Anti-Friction		4503WTAK11F-A	104 / 60	94.0	4	MXTWP2	\$66,953
450	3600	2300/4000	5011/12 USS	Anti-Friction		4503WTAK11F-C	104 / 60	93.4	4, 12	MXTWP2	\$88,324
450	3600	2300/4000	5011/12 USS	SLEEVE		4503WTQK11F-A	104 / 60	93.9	4	MXTWP2	\$84,509
450	3600	2300/4000	5011/12 USS	SLEEVE		4503WTQK11F-C	104 / 60	93.7	4, 12	MXTWP2	\$105,880
450	1800	2300/4000	5011/12 US	Anti-Friction		4504WTAK11E-A	106 / 61	93.1		MXTWP2	\$69,975
450	1800	2300/4000	5011/12 US	Anti-Friction		4504WTAK11E-C	103 / 59	92.7	12	MXTWP2	\$91,347
450	1200	2300/4000	5011/12 US	Anti-Friction		4506WTAK11E-A	113 / 65	93.4		MXTWP2	\$79,676
450	1200	2300/4000	5011/12 US	Anti-Friction		4506WTAK11E-C	116 / 67	94.0	12	MXTWP2	\$101,048
450	900	4000	5811/12 US	Anti-Friction		4508WTAL11E-A	66	93.8		MXTWP2	\$86,972
450	900	4000	5811/12 US	Anti-Friction		4508WTAL11E-C	61	94.4	12	MXTWP2	\$110,378
500	3600	2300/4000	5011/12 USS	Anti-Friction		5003WTAK11F-A	114 / 66	93.8	4	MXTWP2	\$69,208

Open Enclosure

WPII

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
500	3600	2300/4000	5011/12 USS	Anti-Friction		5003WTAK11F-C	114 / 66	93.3	4, 12	MXTWP2	\$90,579
500	3600	2300/4000	5011/12 USS	SLEEVE		5003WTQK11F-A	114 / 66	93.7	4	MXTWP2	\$86,762
500	3600	2300/4000	5011/12 USS	SLEEVE		5003WTQK11F-C	114 / 66	93.6	4, 12	MXTWP2	\$108,134
500	1800	2300/4000	5011/12 US	Anti-Friction		5004WTAK11E-A	114 / 66	93.2		MXTWP2	\$72,210
500	1800	2300/4000	5011/12 US	Anti-Friction		5004WTAK11E-C	112 / 65	92.9	12	MXTWP2	\$93,582
500	1200	2300/4000	5011/12 US	Anti-Friction		5006WTAK11E-A	126 / 73	93.5		MXTWP2	\$83,182
500	1200	2300/4000	5011/12 US	Anti-Friction		5006WTAK11E-C	130 / 75	94.2	12	MXTWP2	\$104,553
500	900	4000	5811/12 US	Anti-Friction		5008WTAL11E-A	75	93.9		MXTWP2	\$89,523
500	900	4000	5811/12 US	Anti-Friction		5008WTAL11E-C	69	94.8	12	MXTWP2	\$112,930
600	3600	2300/4000	5011/12 USS	Anti-Friction		6003WTAK11F-A	137 / 79	94.3	4	MXTWP2	\$72,103
600	3600	2300/4000	5011/12 USS	Anti-Friction		6003WTAK11F-C	137 / 69	93.9	4, 12	MXTWP2	\$93,475
600	3600	2300/4000	5011/12 USS	SLEEVE		6003WTQK11F-A	137 / 79	94.2	4	MXTWP2	\$89,659
600	3600	2300/4000	5011/12 USS	SLEEVE		6003WTQK11F-C	137 / 69	94.2	4, 12	MXTWP2	\$111,030
600	1800	2300/4000	5011/12 US	Anti-Friction		6004WTAK11E-A	137 / 79	93.4		MXTWP2	\$73,589
600	1800	2300/4000	5011/12 US	Anti-Friction		6004WTAK11E-C	130 / 75	93.4	12	MXTWP2	\$94,960
600	1200	4000	5811/12 US	Anti-Friction		6006WTAL11E-A				MXTWP2	\$89,069
600	1200	4000	5811/12 US	Anti-Friction		6006WTAL11E-C			12	MXTWP2	\$112,475
600	900	4000	5811/12 US	Anti-Friction		6008WTAL11E-A	93	94.2		MXTWP2	\$94,911
600	900	4000	5811/12 US	Anti-Friction		6008WTAL11E-C	84	94.7	12	MXTWP2	\$118,317
700	3600	2300/4000	5011/12 USS	Anti-Friction		7003WTAK11F-A	159 / 92	94.4	4	MXTWP2	\$77,280
700	3600	2300/4000	5011/12 USS	Anti-Friction		7003WTAK11F-C	158 / 91	94.2	4, 12	MXTWP2	\$98,651
700	3600	2300/4000	5011/12 USS	SLEEVE		7003WTQK11F-A	159 / 92	94.3	4	MXTWP2	\$94,835
700	3600	2300/4000	5011/12 USS	SLEEVE		7003WTQK11F-C	158 / 91	94.4	4, 12	MXTWP2	\$116,206
700	1800	2300/4000	5011/12 US	Anti-Friction		7004WTAK11E-A	165 / 95	93.9		MXTWP2	\$78,801
700	1800	2300/4000	5011/12 US	Anti-Friction		7004WTAK11E-C	151 / 87	93.7	12	MXTWP2	\$100,173
700	1200	4000	5811/12 US	Anti-Friction		7006WTAL11E-A	100	94.5		MXTWP2	\$89,982
700	1200	4000	5811/12 US	Anti-Friction		7006WTAL11E-C	94	94.3	12	MXTWP2	\$113,389
700	900	4000	5811/12 US	Anti-Friction		7008WTAL11E-A	108	94.2		MXTWP2	\$97,574
700	900	4000	5811/12 US	Anti-Friction		7008WTAL11E-C	99	94.9	12	MXTWP2	\$120,981
800	3600	4000	5811/12 USS	Anti-Friction		8003WTAL11F-A	102	95.2	4	MXTWP2	\$84,641
800	3600	4000	5811/12 USS	Anti-Friction		8003WTAL11F-C	99	95.6	4, 12	MXTWP2	\$108,049
800	3600	4000	5811/12 USS	SLEEVE		8003WTQL11F-A	102	95.1	4	MXTWP2	\$102,960
800	3600	4000	5811/12 USS	SLEEVE		8003WTQL11F-C	99	95.5	4, 12	MXTWP2	\$126,367
800	3600	2300/4000	5011/12 USS	Anti-Friction		8003WTAK11F-A	182 / 105	94.0	4	MXTWP2	\$80,606
800	3600	2300/4000	5011/12 USS	Anti-Friction		8003WTAK11F-C	178 / 103	94.0	4, 12	MXTWP2	\$101,977
800	1800	2300/4000	5011/12 US	Anti-Friction		8004WTAK11E-A	185 / 107	93.5	3	MXTWP2	\$82,511
800	1800	4000	5811/12 US	Anti-Friction		8005WTAL11E-A			4	MXTWP2	\$88,517
800	1800	4000	5811/12 US	Anti-Friction		8005WTAL11E-C			4, 12	MXTWP2	\$111,924
800	1800	4000	5811/12 US	SLEEVE		8005WTQL11E-A			4	MXTWP2	\$106,835
800	1800	4000	5811/12 US	SLEEVE		8005WTQL11E-C			4, 12	MXTWP2	\$130,243
800	1200	4000	5811/12 US	Anti-Friction		8006WTAL11E-A	115	94.5		MXTWP2	\$98,816
800	1200	4000	5811/12 US	Anti-Friction		8006WTAL11E-C	108	94.8	4, 12	MXTWP2	\$122,222
800	900	4000	6810/11/12 US	Anti-Friction		8008WTAL11E-C	108	94.9	12	MXTWP2	\$193,838
800	900	4000	6810/11/12 US	SLEEVE		8008WTQL11E-C	108	94.9	12	MXTWP2	\$209,089
900	3600	4000	5811/12 USS	Anti-Friction		9003WTAL11F-A	114	95.4	4	MXTWP2	\$91,036
900	3600	4000	5811/12 USS	Anti-Friction		9003WTAL11F-C	110	95.8	4, 12	MXTWP2	\$114,442
900	3600	4000	5811/12 USS	SLEEVE		9003WTQL11F-A	114	95.3	4	MXTWP2	\$110,424

Open Enclosure

WPII

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
900	3600	4000	5811/12 USS	SLEEVE		9003WTQL11F-C	110	95.7	4, 12	MXTWP2	\$132,760
900	1800	4000	5811/12 US	Anti-Friction		9005WTAL11E-A	114	95.5	4	MXTWP2	\$93,698
900	1800	4000	5811/12 US	Anti-Friction		9005WTAL11E-C	117	95.6	4, 12	MXTWP2	\$117,105
900	1800	4000	5811/12 US	SLEEVE		9005WTQL11E-A	114	95.5	4	MXTWP2	\$112,016
900	1800	4000	5811/12 US	SLEEVE		9005WTQL11E-C	117	95.5	4, 12	MXTWP2	\$135,423
900	1200	4000	5811/12 US	Anti-Friction		9006WTAL11E-A	124	94.5		MXTWP2	\$101,219
900	1200	4000	5811/12 US	Anti-Friction		9006WTAL11E-C	125	94.9	12	MXTWP2	\$124,626
900	900	4000	6810/11/12 US	Anti-Friction		9008WTAL11E-C	121	95.0	12	MXTWP2	\$202,725
900	900	4000	6810/11/12 US	SLEEVE		9008WTQL11E-C	121	95.0	12	MXTWP2	\$217,976
1000	3600	4000	5811/12 USS	Anti-Friction		M203WTAL11F-A	126	95.5	4	MXTWP2	\$96,083
1000	3600	4000	5811/12 USS	Anti-Friction		M203WTAL11F-C	122	96.0	4, 12	MXTWP2	\$119,490
1000	3600	4000	5811/12 USS	SLEEVE		M203WTQL11F-A	126	95.4	4	MXTWP2	\$114,401
1000	3600	4000	5811/12 USS	SLEEVE		M203WTQL11F-C	122	95.9	4, 12	MXTWP2	\$137,809
1000	1800	4000	5811/12 US	Anti-Friction		M205WTAL11E-A	126	95.6	4	MXTWP2	\$97,635
1000	1800	4000	5811/12 US	Anti-Friction		M205WTAL11E-C	131	95.7	4, 12	MXTWP2	\$121,043
1000	1800	4000	5811/12 US	SLEEVE		M205WTQL11E-A	126	95.6	4	MXTWP2	\$115,954
1000	1800	4000	5811/12 US	SLEEVE		M205WTQL11E-C	131	95.6	4, 12	MXTWP2	\$139,361
1000	1200	4000	5811/12 US	Anti-Friction		M206WTAL11E-A	135	94.5		MXTWP2	\$104,047
1000	1200	4000	5811/12 US	Anti-Friction		M206WTAL11E-C	137	94.6	12	MXTWP2	\$127,453
1000	900	4000	6812/13 US	Anti-Friction		M208WTAL11E-C	134	95.2	12	MXTWP2	\$212,716
1000	900	4000	6812/13 US	SLEEVE		M208WTQL11E-C	134	95.2	12	MXTWP2	\$227,967
1250	3600	4000	5811/12 USS	Anti-Friction		M253WTAL11F-A	158	95.7	4	MXTWP2	\$100,308
1250	3600	4000	5811/12 USS	Anti-Friction		M253WTAL11F-C	153	96.2	4, 12	MXTWP2	\$123,716
1250	3600	4000	5811/12 USS	SLEEVE		M253WTQL11F-A	158	95.6	4	MXTWP2	\$118,627
1250	3600	4000	5811/12 USS	SLEEVE		M253WTQL11F-C	153	95.9	4, 12	MXTWP2	\$142,034
1250	1800	4000	5811/12 US	Anti-Friction		M255WTAL11E-A	157	95.7	4	MXTWP2	\$104,434
1250	1800	4000	5811/12 US	Anti-Friction		M255WTAL11E-C	162	95.9	4, 12	MXTWP2	\$127,840
1250	1800	4000	5811/12 US	SLEEVE		M255WTQL11E-A	157	95.7	4	MXTWP2	\$122,753
1250	1800	4000	5811/12 US	SLEEVE		M255WTQL11E-C	162	95.8	4, 12	MXTWP2	\$146,159
1250	1200	4000	6812/13 US	Anti-Friction		M257WTAL11E-C	157	94.9	4, 12	MXTWP2	\$219,586
1250	1200	4000	6812/13 US	SLEEVE		M257WTQL11E-C	157	94.9	4, 12	MXTWP2	\$234,837
1250	900	4000	6812/13 US	Anti-Friction		M258WTAL11E-C	169	95.3	12	MXTWP2	\$225,158
1250	900	4000	6812/13 US	SLEEVE		M258WTQL11E-C	169	95.3	12	MXTWP2	\$240,409
1500	3600	4000	5811/12 USS	Anti-Friction		M303WTAL11F-A	189	95.8	4	MXTWP2	\$105,349
1500	3600	4000	5811/12 USS	Anti-Friction		M303WTAL11F-C	183	96.2	4, 12	MXTWP2	\$128,756
1500	3600	4000	5811/12 USS	SLEEVE		M303WTQL11F-A	189	95.7	4	MXTWP2	\$123,667
1500	3600	4000	5811/12 USS	SLEEVE		M303WTQL11F-C	183	96.1	4, 12	MXTWP2	\$147,075
1500	1800	4000	5811/12 US	Anti-Friction		M305WTAL11E-A	189	95.7	4	MXTWP2	\$108,057
1500	1800	4000	5811/12 US	Anti-Friction		M305WTAL11E-C	193	96.0	4, 12	MXTWP2	\$131,464
1500	1800	4000	5811/12 US	SLEEVE		M305WTQL11E-A	189	95.7	4	MXTWP2	\$126,376
1500	1800	4000	5811/12 US	SLEEVE		M305WTQL11E-C	193	95.9	4, 12	MXTWP2	\$149,783
1500	1200	4000	6812/13 US	Anti-Friction		M307WTAL11E-C	187	95.0	4, 12	MXTWP2	\$225,900
1500	1200	4000	6812/13 US	SLEEVE		M307WTQL11E-C	187	95.0	4, 12	MXTWP2	\$241,151
1500	900	4000	6812/13 US	Anti-Friction		M308WTAL11E-C	205	95.4	12	MXTWP2	\$235,592
1500	900	4000	6812/13 US	SLEEVE		M308WTQL11E-C	205	95.4	12	MXTWP2	\$250,843
1750	3600	4000	5811/12 USS	Anti-Friction		M353WTAL11F-A	224	95.8	4	MXTWP2	\$109,216
1750	3600	4000	5811/12 USS	Anti-Friction		M353WTAL11F-C	216	96.0	4, 12	MXTWP2	\$132,622

Open Enclosure

WPII

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1750	3600	4000	5811/12 USS	SLEEVE		M353WTQL11F-A	224	95.6	4	MXTWP2	\$127,534
1750	3600	4000	5811/12 USS	SLEEVE		M353WTQL11F-C	216	95.9	4, 12	MXTWP2	\$150,941
1750	1800	4000	6810/11/12 US	Anti-Friction		M355WTAL11E-C	219	95.8	4, 12	MXTWP2	\$225,807
1750	1800	4000	6810/11 US	SLEEVE		M355WTQL11E-C	219	95.8	4, 12	MXTWP2	\$241,058
1750	1200	4000	6812/13 US	Anti-Friction		M357WTAL11E-C	218	95.3	4, 12	MXTWP2	\$234,543
1750	1200	4000	6812/13 US	SLEEVE		M357WTQL11E-C	218	95.3	4, 12	MXTWP2	\$249,795
1750	900	4000	450-1250	Anti-Friction	12,300	J1758NLF3I-C	245	95.4	1	MXTWP2	\$261,006
1750	900	4000	450-1250	SLEEVE	12,300	J1758NLF1I-C	245	95.4	1	MXTWP2	\$276,257
1750	900	4000	450-1250	SLEEVE-FC	12,300	J1758NLFUI-C	245	95.4	1, 15	MXTWP2	\$278,218
2000	3600	4000	5811/12 USS	SLEEVE		M403WTQL11F-C	245	95.8	4, 12	MXTWP2	\$157,329
2000	3600	4000	6810/11/12 USS	SLEEVE		M403WTQL11F-CF	249	95.2	4, 12	MXTWP2	\$255,997
2000	1800	4000	6810/11 US	Anti-Friction		M405WTAL11E-C	250	95.9	4, 12	MXTWP2	\$232,607
2000	1800	4000	6810/11 US	SLEEVE		M405WTQL11E-C	250	95.9	4, 12	MXTWP2	\$247,858
2000	1200	4000	6812/13 US	Anti-Friction		M407WTAL11E-C	250	95.3	4, 12	MXTWP2	\$245,768
2000	1200	4000	6812/13 US	SLEEVE		M407WTQL11E-C	250	95.3	4, 12	MXTWP2	\$261,020
2000	900	4000	450-1400	Anti-Friction	13,900	J2008NLF3I-C	275	95.6	1	MXTWP2	\$276,670
2000	900	4000	450-1400	SLEEVE	13,900	J2008NLF1I-C	275	95.6	1	MXTWP2	\$291,922
2000	900	4000	450-1400	SLEEVE-FC	13,900	J2008NLFUI-C	275	95.6	1, 15	MXTWP2	\$293,883
2250	3600	4000	6810/11 USS	SLEEVE		M453WTQL11F-C	279	95.4	4, 12	MXTWP2	\$273,351
2250	1800	4000	6810/11 US	Anti-Friction		M455WTAL11E-C	278	96.0	4, 12	MXTWP2	\$245,246
2250	1800	4000	6810/11 US	SLEEVE		M455WTQL11E-C	278	96.0	4, 12	MXTWP2	\$260,497
2250	1200	4000	6812/13 US	Anti-Friction		M458WTAL11E-C	281	95.6	4, 12	MXTWP2	\$257,170
2250	1200	4000	6812/13 US	SLEEVE		M458WTQL11E-C	281	95.6	4, 12	MXTWP2	\$272,422
2250	900	4000	450-1400	Anti-Friction	13,900	J2258NLF3I-C	310	95.7	1	MXTWP2	\$289,832
2250	900	4000	450-1400	SLEEVE	13,900	J2258NLF1I-C	310	95.7	1	MXTWP2	\$305,083
2250	900	4000	450-1400	SLEEVE-FC	13,900	J2258NLFUI-C	310	95.7	1, 15	MXTWP2	\$307,044
2500	3600	4000	6810/11/12 USS	SLEEVE		M503WTQL11F-C	309	95.7	4, 12	MXTWP2	\$286,998
2500	1800	4000	6810/11 US	Anti-Friction		M505WTAL11E-C	309	96.3	4, 12	MXTWP2	\$254,824
2500	1800	4000	6810/11 US	SLEEVE		M505WTQL11E-C	309	96.3	4, 12	MXTWP2	\$270,075
2500	1200	4000	6812/13 US	Anti-Friction		M507WTAL11E-C	318	95.9	4, 12	MXTWP2	\$269,160
2500	1200	4000	6812/13 US	SLEEVE		M507WTQL11E-C	318	95.9	4, 12	MXTWP2	\$284,411
2500	900	4000	500-1600	Anti-Friction	14,500	J2508NLF3I-C	345	95.7	1	MXTWP2	\$323,490
2500	900	4000	500-1600	SLEEVE	14,500	J2508NLF1I-C	345	95.7	1	MXTWP2	\$338,741
2500	900	4000	500-1600	SLEEVE-FC	14,500	J2508NLFUI-C	345	95.7	1, 15	MXTWP2	\$340,702
2750	3600	4000	6810/11/12 USS	SLEEVE		M553WTQL11F-C			4, 12	MXTWP2	\$302,578
2750	1800	4000	6812/13 US	Anti-Friction		M555WTAL11F-C			4, 12	MXTWP2	\$267,522
2750	1800	4000	6812/13 US	SLEEVE		M555WTQL11F-C			4, 12	MXTWP2	\$282,773
2750	1200	4000	6812/13 US	Anti-Friction		M557WTAL11F-C	368	95.9	4, 12, 14	MXTWP2	\$280,356
2750	1200	4000	6812/13 US	SLEEVE		M557WTQL11F-C	368	95.9	4, 12, 14	MXTWP2	\$295,607
2750	900	4000	500-1600	Anti-Friction	14,500	J2758NLF3I-C	370	96.3	1	MXTWP2	\$336,594
2750	900	4000	500-1600	SLEEVE	14,500	J2758NLF1I-C	370	96.3	1	MXTWP2	\$351,845
2750	900	4000	500-1600	SLEEVE-FC	14,500	J2758NLFUI-C	370	96.3	1, 15	MXTWP2	\$353,806
3000	3600	4000	6810/11 USS	SLEEVE		M603WTQL11F-C	370	96.1	4, 12	MXTWP2	\$315,659
3000	1800	4000	6812/13 US	Anti-Friction		M605WTAL11E-C	369	96.5	4, 12	MXTWP2	\$280,561
3000	1800	4000	6812/13 US	SLEEVE		M605WTQL11E-C	369	96.5	4, 12	MXTWP2	\$295,812
3000	1200	4000	450-1400	Anti-Friction	13,400	J3007NLF3I-C	385	95.9	1	MXTWP2	\$306,162
3000	1200	4000	450-1400	SLEEVE	13,400	J3007NLF1I-C	385	95.9	1	MXTWP2	\$321,414

Open Enclosure

WPII

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3000	1200	4000	450-1400	SLEEVE-FC	13,400	J3007NLFUI-C	385	95.9	1, 15	MXTWP2	\$323,375
3000	900	4000	500-1600	Anti-Friction	14,500	J3008NLF3I-C	405	96.3	1	MXTWP2	\$346,657
3000	900	4000	500-1600	SLEEVE	14,500	J3008NLF3I-C	405	96.3	1	MXTWP2	\$361,908
3000	900	4000	500-1600	SLEEVE-FC	14,500	J3008NLFUI-C	405	96.3	1, 15	MXTWP2	\$363,869
3500	3600	4000	6810/11/12 USS	SLEEVE		M703WTQL11F-C	431	96.2	4, 12	MXTWP2	\$328,859
3500	1800	4000	6812/13 US	Anti-Friction		M705WTAL11E-C	431	96.6	4, 12	MXTWP2	\$292,293
3500	1800	4000	6812/13 US	SLEEVE		M705WTQL11E-C	431	96.6	4, 12	MXTWP2	\$307,545
3500	1200	4000	450-1400	Anti-Friction	13,400	J3507NLF3I-C	450	96.0	1	MXTWP2	\$321,492
3500	1200	4000	450-1400	SLEEVE	13,400	J3507NLF3I-C	450	96.0	1	MXTWP2	\$336,743
3500	1200	4000	450-1400	SLEEVE-FC	13,400	J3507NLFUI-C	450	96.0	1, 15	MXTWP2	\$338,704
3500	900	4000	500-1800	Anti-Friction	17,200	J3508NLF3I-C	470	96.4	1	MXTWP2	\$357,534
3500	900	4000	500-1800	SLEEVE	17,200	J3508NLF3I-C	470	96.4	1	MXTWP2	\$372,785
3500	900	4000	500-1800	SLEEVE-FC	17,200	J3508NLFUI-C	470	96.4	1, 15	MXTWP2	\$374,746
4000	3600	4000	450-1400	SLEEVE		J4003NLF3I-C	495	96.0	1	MXTWP2	\$344,968
4000	3600	4000	450-1400	SLEEVE-FC	13,000	J4003NLFUI-C	495	96.0	1, 15	MXTWP2	\$346,929
4000	1800	4000	6812/13 US	Anti-Friction		M805WTAL11E-C	495	96.6	3, 4, 12	MXTWP2	\$306,281
4000	1800	4000	6812/13 US	SLEEVE		M805WTQL11E-C	495	96.6	3, 4, 12	MXTWP2	\$321,532
4000	1200	4000	500-1600	Anti-Friction	15,400	J4007NLF3I-C	510	96.7	1	MXTWP2	\$352,326
4000	1200	4000	500-1600	SLEEVE	15,400	J4007NLF3I-C	510	96.7	1	MXTWP2	\$367,577
4000	1200	4000	500-1600	SLEEVE-FC	15,400	J4007NLFUI-C	510	96.7	1, 15	MXTWP2	\$369,538
4000	900	4000	500-1800	Anti-Friction	17,200	J4008NLF3I-C	535	96.5	1	MXTWP2	\$370,100
4000	900	4000	500-1800	SLEEVE	17,200	J4008NLF3I-C	535	96.5	1	MXTWP2	\$385,351
4000	900	4000	500-1800	SLEEVE-FC	17,200	J4008NLFUI-C	535	96.5	1, 15	MXTWP2	\$387,312
4500	3600	4000	500-1600	SLEEVE-FC	17,200	J4503NLFUI-C	555	96.5	1, 15	MXTWP2	\$364,181
4500	1800	4000	450-1400	Anti-Friction	13,300	J4505NLF3I-C	560	96.7	1	MXTWP2	\$338,437
4500	1800	4000	450-1400	SLEEVE	13,300	J4505NLF3I-C	560	96.7	1	MXTWP2	\$353,689
4500	1800	4000	450-1400	SLEEVE-FC	13,300	J4505NLFUI-C	560	96.7	1, 15	MXTWP2	\$355,650
4500	1200	4000	500-1600	Anti-Friction	15,400	J4507NLF3I-C	570	96.8	1	MXTWP2	\$374,876
4500	1200	4000	500-1600	SLEEVE	15,400	J4507NLF3I-C	570	96.8	1	MXTWP2	\$390,127
4500	1200	4000	500-1600	SLEEVE-FC	15,400	J4507NLFUI-C	570	96.8	1, 15	MXTWP2	\$392,088
4500	900	4000	560-1800	Anti-Friction	19,100	J4508NLF3I-C	600	96.6	1	MXTWP2	\$401,154
4500	900	4000	560-1800	SLEEVE	19,100	J4508NLF3I-C	600	96.6	1	MXTWP2	\$416,405
4500	900	4000	560-1800	SLEEVE-FC	19,100	J4508NLFUI-C	600	96.6	1, 15	MXTWP2	\$418,366
5000	3600	4000	500-1600	SLEEVE-FC	17,200	J5003NLFUI-C	615	96.5	1, 15	MXTWP2	\$373,705
5000	1800	4000	500-1600	SLEEVE	16,500	J5005NLF3I-C	620	96.8	1	MXTWP2	\$369,449
5000	1800	4000	500-1600	SLEEVE-FC	16,500	J5005NLFUI-C	620	96.8	1, 15	MXTWP2	\$371,410
5000	1200	4000	500-1800	Anti-Friction	17,800	J5007NLF3I-C	635	96.8	1	MXTWP2	\$389,866
5000	1200	4000	500-1800	SLEEVE	17,800	J5007NLF3I-C	635	96.8	1	MXTWP2	\$405,118
5000	1200	4000	500-1800	SLEEVE-FC	17,800	J5007NLFUI-C	635	96.8	1, 15	MXTWP2	\$407,079
5000	900	4000	560-2000	Anti-Friction	22,700	J5008NLF3I-C	660	96.6	1	MXTWP2	\$414,849
5000	900	4000	560-2000	SLEEVE	22,700	J5008NLF3I-C	660	96.6	1	MXTWP2	\$430,100
5000	900	4000	560-2000	SLEEVE-FC	22,700	J5008NLFUI-C	660	96.6	1, 15	MXTWP2	\$432,061

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Medium Voltage General Purpose Series Totally Enclosed Motors

Toshiba's general purpose, medium voltage totally enclosed motor series includes our totally enclosed fan cooled motor and our air-to-air cooled motor with top hat design. Designed to meet the industry's ever-increasing need for improved energy conservation and product reliability, these motors offer some of the highest efficiency and torque ratings while producing some of the lowest vibration ratings in the industry—leading to a longer life and greater reliability. This motor series can be used on indoor and outdoor applications.

The general purpose, medium voltage totally enclosed motor is available in a high efficiency design with a die cast aluminum rotor and anti-friction ball bearing as standard or with an optional copper bar rotor and/or sleeve bearings. These motor offerings are completely customizable due to our in-house design, engineering, and manufacturing capabilities. This allows us to not only meet but exceed your specific application requirements.

Standard Features:

- Totally Enclosed Fan Cooled or Air-to-Air Cooled
- High Efficiency
- 2300, 2300/4160, or 4000 V, Three-Phase, 60 Hz*
- Horizontal Foot-Mounted Direct-Coupled Applications
- Class F Form-Wound Insulation
- Class B Temperature Rise at 1.0 Service Factor
- IP44, IP54, or IP55
- Vacuum-Pressure Impregnated System
- Cast Iron Frame, End Brackets
- Cast Iron Terminal Box & Fabricated Steel Box
- Anti-Friction Ball or Sleeve Bearing
- Aluminum Die Cast or Option for Copper Rotor
- Polyurea Base Grease or ISO VG Oil
- 304 Stainless Steel Nameplate

Applications:

- Pumps
- Fans
- Compressors
- Conveyors
- Mixers
- Material Handling
- General Applications

Warranty:

- From Date of Manufacture: 18 Months**
- From Date of Installation: 12 Months**

**Contact Toshiba for 6000, 6600, or 13,200 V options.
**(Whichever Comes First)*



Totally Enclosed

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> High Efficiency



Dura-Bull TX® Special Features:

- 5000 Frames
- Multi-Mount Capability for Replacement—5009, 5010, 5011, 5809, 5810, 5811 with Same BA
- Available Copper Bar Design with API Style End Ring (up to 800 HP in 5811 Frame)
- Available with Sleeve Bearings
- Main T-Box Capable of F1 or F2 Field-Mounting; Top-Mount (F3) Available as Option
- Cartridge-Type Field-Replaceable Grease Outlet
- Winding Stator RTDs
- Space Heaters in Separate Auxiliary Terminal Box
- Bearing RTD Provisions
- Provisions for Vertical Jacking Screws
- Insulated NDE Ball Bearing For Up to 5811 Frames
- Additional Options Available; See Catalog Production Modifications Section

General Purpose Special Features:

- N447/449 & N6310 through N8810 Frames
- Fabricated Main Terminal Box
- Horizontal Foot-Mounted
- Fabricated Steel Fan Cover for N6310 Frame & Larger
- Winding & Bearing RTDs for N6310 Frame & Larger
- Space Heater for N6310 Frame & Larger
- Insulated NDE Ball Bearing Housing for N6310 through N8810 Frames
- Additional Options Available; See Catalog Production Modifications Section

Toshiba’s general purpose, medium voltage totally enclosed fan cooled motor offering is designed to meet the industry’s ever-increasing need for improved energy conservation and product performance. This product line offers exceptionally high torque and a low vibration design, leading to a longer life and greater reliability. These motors are completely customizable due to our in-house design, engineering, and manufacturing capabilities, allowing us to not only meet but exceed your specific application requirements.

Product Scope:

Horsepower:	100 to 2500 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	2300/4000 or 4000 V*
Enclosure:	Totally Enclosed Fan Cooled
Frame Size:	N449T through N8810**
Construction:	Cast Iron (Frame & End Brackets)
Insulation:	Class F with Class B Rise at 1.0 Service Factor
Environment:	Suitable for Indoor or Outdoor

*Contact Toshiba for availability on 6000 and 6600 V motors

**Non-NAFTA N6310 through N8810 frames

HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
100	3600	2300/4000	N449TS	Anti-Friction		1003FCAK11B-A	24 / 14	91.8	4, 6	MXTFCM	\$42,771
100	1800	2300/4000	N449T	Anti-Friction		1004FCAK11A-A	24 / 14	93.0	2	MXTFCM	\$42,112
100	1800	2300/4000	N449TS	Anti-Friction		1004FCAK11B-A	24 / 14	93.0		MXTFCM	\$42,112
100	1200	2300/4000	N449T	Anti-Friction		1006FCAK11A-A	25 / 15	94.1	2	MXTFCM	\$51,650
100	1200	2300/4000	N449TS	Anti-Friction		1006FCAK11B-A	25 / 15	94.1		MXTFCM	\$51,650
125	3600	2300/4000	N449TS	Anti-Friction		1253FCAK11B-A	29 / 17	92.4	4	MXTFCM	\$43,429
125	1800	2300/4000	N449T	Anti-Friction		1254FCAK11A-A	31 / 18	93.8	2	MXTFCM	\$42,771

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HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
125	1800	2300/4000	N449TS	Anti-Friction		1254FCAK11B-A	31 / 18	93.8		MXTFCM	\$42,771
125	1200	2300/4000	N449T	Anti-Friction		1256FCAK11A-A	31 / 18	95.0	2	MXTFCM	\$52,318
125	1200	2300/4000	N449TS	Anti-Friction		1256FCAK11B-A	31 / 18	95.0		MXTFCM	\$52,318
150	3600	2300/4000	N449TS	Anti-Friction		1503FCAK11B-A	35 / 20	93.0	4	MXTFCM	\$44,390
150	1800	2300/4000	N449T	Anti-Friction		1504FCAK11A-A	36 / 21	94.4		MXTFCM	\$43,948
150	1800	2300/4000	N449TS	Anti-Friction		1504FCAK11B-A	36 / 21	94.4		MXTFCM	\$43,948
150	1200	2300/4000	N449T	Anti-Friction		1506FCAK11A-A	36 / 21	95.1		MXTFCM	\$53,310
150	1200	2300/4000	N449TS	Anti-Friction		1506FCAK11B-A	36 / 21	95.1		MXTFCM	\$53,310
200	3600	2300/4000	N449TS	Anti-Friction		2003FCAK11B-A	45 / 27	93.7	4	MXTFCM	\$47,129
200	1800	2300/4000	N449T	Anti-Friction		2004FCAK11A-A	47 / 27	95.0	2	MXTFCM	\$45,294
200	1800	2300/4000	N449TS	Anti-Friction		2004FCAK11B-A	47 / 27	95.0		MXTFCM	\$45,294
200	1200	2300/4000	N449T	Anti-Friction		2006FCAK11A-A	48 / 28	95.4	2	MXTFCM	\$54,800
200	1200	2300/4000	N449TS	Anti-Friction		2006FCAK11B-A	48 / 28	95.4		MXTFCM	\$54,800
200	900	4000	5009/10/11 US	Anti-Friction		2008FTAL11E-A			11	MXTFCM	\$59,308
250	3600	2300/4000	N449TS	Anti-Friction		2503FCAK11B-A	57 / 33	94.5	4	MXTFCM	\$48,392
250	1800	2300/4000	N449T	Anti-Friction		2504FCAK11A-A	59 / 34	95.5	2	MXTFCM	\$46,837
250	1800	2300/4000	N449TS	Anti-Friction		2504FCAK11B-A	59 / 34	95.5		MXTFCM	\$46,837
250	1200	2300/4000	N449T	Anti-Friction		2506FCAK11A-A	61 / 35	95.8	2	MXTFCM	\$56,263
250	1200	2300/4000	N449TS	Anti-Friction		2506FCAK11B-A	61 / 35	95.8		MXTFCM	\$56,263
250	1200	4000	5009/10/11 US	Anti-Friction		2506FTAL11E-A			11	MXTFCM	\$58,512
250	900	4000	5009/10/11 US	Anti-Friction		2508FTAL11E-A	30	93.7	11	MXTFCM	\$59,859
300	3600	2300/4000	N449TS	Anti-Friction		3003FCAK11B-A	69 / 40	95.1	4, 6	MXTFCM	\$49,633
300	1800	2300/4000	N449T	Anti-Friction		3004FCAK11A-A	71 / 41	95.8	2, 6	MXTFCM	\$48,822
300	1800	2300/4000	N449TS	Anti-Friction		3004FCAK11B-A	71 / 41	95.8	6	MXTFCM	\$48,822
300	1800	4000	5009/10/11 US	Anti-Friction		3004FTAL11E-A			11	MXTFCM	\$51,150
300	1800	4000	5009/10/11 US	Anti-Friction		3004FTAL11E-C			11, 12	MXTFCM	\$72,521
300	1800	4000	5009/10/11 US	SLEEVE		3004FTQL11E-A			11	MXTFCM	\$68,706
300	1800	4000	5009/10/11 US	SLEEVE		3004FTQL11E-C			11, 12	MXTFCM	\$90,077
300	1200	4000	5009/10/11 US	Anti-Friction		3006FTAL11E-A	45	94.5	11	MXTFCM	\$59,342
300	1200	4000	5009/10/11 US	Anti-Friction		3006FTAL11E-C	45	94.5	11, 12	MXTFCM	\$80,713
300	900	4000	5009/10/11 US	Anti-Friction		3008FTAL11E-A	46	94.1	11	MXTFCM	\$62,932
350	3600	2300/4000	N449TS	Anti-Friction		3503FCAK11B-A	83 / 48	93.7	4, 6, 14	MXTFCM	\$50,960
350	3600	4000	5009/10/11 USS	Anti-Friction		3503FTAL11F-A	46	94.0	4, 11	MXTFCM	\$52,755
350	3600	4000	5009/10/11 USS	Anti-Friction		3503FTAL11F-C	44	95.0	4, 11, 12	MXTFCM	\$74,126
350	3600	4000	5009/10/11 USS	SLEEVE		3503FTQL11F-A			4, 11	MXTFCM	\$70,311
350	3600	4000	5009/10/11 USS	SLEEVE		3503FTQL11F-C	44	95.0	4, 11, 12	MXTFCM	\$91,682
350	1800	2300/4000	N449T	Anti-Friction		3504FCAK11A-A	83 / 48	96.0	2, 14	MXTFCM	\$49,393
350	1800	2300/4000	N449TS	Anti-Friction		3504FCAK11B-A	83 / 48	96.0	14	MXTFCM	\$49,393
350	1800	4000	5009/10/11 US	Anti-Friction		3504FTAL11E-A	50	94.7	11	MXTFCM	\$52,002
350	1800	4000	5009/10/11 US	Anti-Friction		3504FTAL11E-C	50	94.7	11, 12	MXTFCM	\$73,373
350	1800	4000	5009/10/11 US	SLEEVE		3504FTQL11E-A			11	MXTFCM	\$69,556
350	1800	4000	5009/10/11 US	SLEEVE		3504FTQL11E-C	44	93.7	4, 11, 12	MXTFCM	\$90,929
350	1200	4000	5009/10/11 US	Anti-Friction		3506FTAL11E-A	51	94.1	11	MXTFCM	\$60,164
350	1200	4000	5009/10/11 US	Anti-Friction		3506FTAL11E-C	51	94.6	11, 12	MXTFCM	\$81,536
350	900	4000	5809/10/11 US	Anti-Friction		3508FTAL11E-A	52	94.2	11	MXTFCM	\$73,984
400	3600	4000	5009/10/11 USS	Anti-Friction		4003FTAL11F-A	52	94.3	4, 11	MXTFCM	\$57,741
400	3600	4000	5809/10/11 USS	Anti-Friction		4003FTAL11F-C	50	94.4	4, 11, 12	MXTFCM	\$79,113

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HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
400	3600	4000	5809/10/11 USS	SLEEVE		4003FTQL11F-A			4, 11	MXTFCM	\$75,297
400	3600	4000	5809/10/11 USS	SLEEVE		4003FTQL11F-C	50	94.4	4, 11, 12	MXTFCM	\$98,668
400	1800	4000	5009/10/11 US	Anti-Friction		4004FTAL11E-A	56	95.0	11	MXTFCM	\$59,025
400	1800	4000	5009/10/11 US	Anti-Friction		4004FTAL11E-C	50	94.1	11, 12	MXTFCM	\$80,397
400	1800	4000	5009/10/11 US	SLEEVE		4004FTQL11E-A			11	MXTFCM	\$76,581
400	1800	4000	5009/10/11 US	SLEEVE		4004FTQL11E-C	50	94.1	11, 12	MXTFCM	\$97,952
400	1200	4000	5009/10/11 US	Anti-Friction		4006FTAL11E-A	61	94.8	11	MXTFCM	\$62,362
400	1200	4000	5009/10/11 US	Anti-Friction		4006FTAL11E-C			11, 12	MXTFCM	\$83,733
400	900	4000	5809/10/11 US	Anti-Friction		4008FTAL11E-A	61	94.4	11	MXTFCM	\$77,853
450	3600	4000	5009/10/11 USS	Anti-Friction		4503FTAL11F-A	59	94.7	4, 11	MXTFCM	\$59,677
450	3600	4000	5809/10/11 USS	Anti-Friction		4503FTAL11F-C	56	95.7	4, 11, 12	MXTFCM	\$81,048
450	3600	4000	5809/10/11 USS	SLEEVE		4503FTQL11F-A			4, 11	MXTFCM	\$77,233
450	3600	4000	5809/10/11 USS	SLEEVE		4503FTQL11F-C	56	94.6	4, 11, 12	MXTFCM	\$98,604
450	1800	4000	5009/10/11 US	Anti-Friction		4504FTAL11E-A	63	95.1	11	MXTFCM	\$62,525
450	1800	4000	5009/10/11 US	Anti-Friction		4504FTAL11E-C	56	94.1	11, 12	MXTFCM	\$83,897
450	1800	4000	5009/10/11 US	SLEEVE		4504FTQL11E-A			11	MXTFCM	\$80,081
450	1800	4000	5009/10/11 US	SLEEVE		4504FTQL11E-C	56	94.1	11, 12	MXTFCM	\$101,452
450	1200	4000	5009/10/11 US	Anti-Friction		4506FTAL11E-A	70	94.9	11	MXTFCM	\$67,381
450	1200	4000	5009/10/11 US	Anti-Friction		4506FTAL11E-C			11, 12	MXTFCM	\$90,248
450	900	4000	5809/10/11 US	Anti-Friction		4508FTAL11E-A	68	94.5	11	MXTFCM	\$80,680
500	3600	4000	5809/10/11 USS	Anti-Friction		5003FTAL11F-A	66	94.6	4, 11	MXTFCM	\$73,920
500	3600	4000	5809/10/11 USS	Anti-Friction		5003FTAL11F-C	62	94.9	4, 11, 12	MXTFCM	\$97,327
500	3600	4000	5809/10/11 USS	SLEEVE		5003FTQL11F-A			4, 11	MXTFCM	\$92,238
500	3600	4000	5809/10/11 USS	SLEEVE		5003FTQL11F-C	62	94.9	4, 11, 12	MXTFCM	\$115,646
500	1800	4000	5009/10/11 US	Anti-Friction		5004FTAL11E-A			11	MXTFCM	\$65,111
500	1800	4000	5009/10/11 US	Anti-Friction		5004FTAL11E-C			11, 12	MXTFCM	\$86,482
500	1800	4000	5009/10/11 US	SLEEVE		5004FTQL11E-A			11	MXTFCM	\$82,665
500	1800	4000	5009/10/11 US	SLEEVE		5004FTQL11E-C	62	94.4	4, 11, 12	MXTFCM	\$104,037
500	1200	4000	5809/10/11 US	Anti-Friction		5006FTAL11E-A	69	95.6	11	MXTFCM	\$76,346
500	1200	4000	5809/10/11 US	Anti-Friction		5006FTAL11E-C			11, 12	MXTFCM	\$101,390
500	900	4000	5809/10/11 US	Anti-Friction		5008FTAL11E-A	61	94.4	11	MXTFCM	\$87,297
600	3600	4000	5809/10/11 USS	Anti-Friction		6003FTAL11F-A	78	95.3	4, 11	MXTFCM	\$77,363
600	3600	4000	5809/10/11 USS	Anti-Friction		6003FTAL11F-C	74	95.0	4, 11, 12	MXTFCM	\$100,769
600	3600	4000	5809/10/11 USS	SLEEVE		6003FTQL11F-A			4, 11	MXTFCM	\$95,682
600	3600	4000	5809/10/11 USS	SLEEVE		6003FTQL11F-C	74	95.0	4, 11, 12	MXTFCM	\$119,088
600	1800	4000	5809/10/11 US	Anti-Friction		6004FTAL11E-A	78	94.8	11	MXTFCM	\$79,663
600	1800	4000	5809/10/11 US	Anti-Friction		6004FTAL11E-C	76	94.9	11, 12	MXTFCM	\$103,069
600	1800	4000	5809/10/11 US	SLEEVE		6004FTQL11E-A	75	95.0	11	MXTFCM	\$97,981
600	1800	4000	5809/10/11 US	SLEEVE		6004FTQL11E-C	76	94.9	11, 12	MXTFCM	\$121,387
600	1200	4000	5809/10/11 US	Anti-Friction		6006FTAL11E-A	83	96.0	11	MXTFCM	\$85,933
600	900	4000	N6310	Anti-Friction	9,250	J608FLF3I-C	84	95.5	1, 12	MXTAAM	\$134,380
700	1800	4000	5809/10/11 US	Anti-Friction		7004FTAL11E-A	92	95.2	11	MXTFCM	\$87,499
700	1800	4000	5809/10/11 US	Anti-Friction		7004FTAL11E-C	88	94.7	11, 12	MXTFCM	\$110,907
700	1800	4000	5809/10/11 US	SLEEVE		7004FTQL11E-A	86	95.0	11	MXTFCM	\$105,818
700	1800	4000	5809/10/11 US	SLEEVE		7004FTQL11E-C	88	94.7	11, 12	MXTFCM	\$129,225
700	1200	4000	5809/10/11 US	Anti-Friction		7006FTAL11E-A	96	96.0	11	MXTFCM	\$90,857
700	900	4000	N6810	Anti-Friction	11,455	J708FLF3I-C	96	95.5	1, 12		\$140,491

Totally Enclosed

TEFC

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
800	1800	4000	5809/10/11 US	Anti-Friction		8004FTAL11E-A	105	95.1	11	MXTFCM	\$89,513
800	1800	4000	5809/10/11 US	Anti-Friction		8004FTAL11E-C	100	95.0	11, 12	MXTFCM	\$112,920
800	1800	4000	5809/10/11 US	SLEEVE		8004FTQL11E-A	102	95.2	11	MXTFCM	\$107,831
800	1800	4000	5809/10/11 US	SLEEVE		8004FTQL11E-C	100	95.0	11, 12	MXTFCM	\$131,239
800	1200	4000	N6310	Anti-Friction	9,480	J806FLF3I-C	102	95.8	1, 12	MXTFCM	\$120,170
800	900	4000	N6810	Anti-Friction	11,600	J808FLF3I-C	110	95.5	1, 12	MXTFCM	\$140,426
900	1800	4000	N6310	Anti-Friction	9,250	J904FLF3I-C	115	96.0	1, 12	MXTFCM	\$118,638
900	1200	4000	N6810	Anti-Friction	11,455	J906FLF3I-C	118	96.0	1, 12	MXTFCM	\$133,957
900	900	4000	N7808	Anti-Friction	14,100	J908FLF3I-C	120	95.8	1, 12	MXTFCM	\$162,596
1000	1800	4000	N6310	Anti-Friction	9,250	J1004FLF3I-C	128	96.0	1, 12	MXTFCM	\$126,170
1000	1200	4000	N6810	Anti-Friction	12,455	J1006FLF3I-C	131	96.0	1, 12	MXTFCM	\$143,532
1000	900	4000	N7808	Anti-Friction	15,600	J1008FLF3I-C	133	96.0	1, 12	MXTFCM	\$172,723
1250	1800	4000	N6810	Anti-Friction	11,455	J1254FLF3I-C	158	96.0	1, 12	MXTFCM	\$145,447
1250	1200	4000	N7808	Anti-Friction	14,100	J1256FLF3I-C	162	96.0	1, 12	MXTFCM	\$172,511
1250	900	4000	N8810	Anti-Friction	18,700	J1258FLF3I-C	164	96.0	1, 12	MXTFCM	\$210,511
1500	1800	4000	N7808	Anti-Friction	14,100	J1504FLF3I-C	186	96.5	1, 12	MXTFCM	\$171,319
1500	1200	4000	N7808	Anti-Friction	15,100	J1506FLF3I-C	195	96.0	1, 12	MXTFCM	\$189,064
1500	900	4000	N8810	Anti-Friction	19,210	J1508FLF3I-C	197	96.0	1, 12	MXTFCM	\$231,362
1750	1800	4000	N7808	Anti-Friction	14,100	J1754FLF3I-C	216	96.5	1, 12	MXTFCM	\$183,362
1750	1200	4000	N8810	Anti-Friction	18,700	J1756FLF3I-C	222	96.5	1, 12	MXTFCM	\$227,191
2000	1800	4000	N8810	Anti-Friction	18,700	J2004FLF3I-C	247	96.5	1, 12	MXTFCM	\$214,255
2000	1200	4000	N8810	Anti-Friction	18,700	J2006FLF3I-C	253	96.5	1, 12	MXTFCM	\$239,702
2250	1800	4000	N8810	Anti-Friction	18,700	J2254FLF3I-C	278	96.5	1, 12	MXTFCM	\$218,511
2250	1200	4000	N8810	Anti-Friction	19,210	J2256FLF3I-C	284	96.5	1, 12	MXTFCM	\$251,872
2500	1800	4000	N8810	Anti-Friction	19,500	J2504FLF3I-C	305	96.5	1, 12	MXTFCM	\$235,532

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Totally Enclosed TEAAC

> High Efficiency



Toshiba’s general purpose, medium voltage totally enclosed air-to-air cooled motor offering includes a top hat design. Designed to meet the industry’s ever-increasing need for improved energy conservation and product performance, this product line offer exceptionally high torque and a low vibration design, leading to longer life and greater reliability.

Toshiba’s medium voltage motor offerings are completely customizable due to our in-house design, engineering, and manufacturing capabilities. This allows us to not only meet, but exceed your specific application requirements.

Product Scope:

Horsepower:	450 to 5000 HP
Speed:	3600, 1800, 1200, or 900 RPM
Voltage:	4000 V, Option for 2300 V*
Enclosure:	Totally Enclosed Air-to-Air Cooled
Frame Size:	5811/12US through 560-2000
Construction:	Cast Iron (Frame, End Brackets, & Main Terminal Box) & Fabricated Steel (Frame & Main Terminal Box)
Insulation:	Class F with Class B Rise at 1.0 Service Factor
Environment:	Suitable for Indoor or Outdoor

**Contact Toshiba for availability on 6000, 6600, and 13,800 V motors*

Special Features:

- Multi-Mount Capability on 5811/12US Frame (Optional for 5810/12)
- Available in Copper Bar Rotor Construction
- Available with Insulated Sleeve Bearings for 5812US Frame
- Includes:
 - Winding Stator RTDs (100 Ω; Two per Phase) in Auxiliary Terminal Box
 - Space Heaters (120 V Single Phase) in Auxiliary Terminal Box
- Additional Options Available; See Catalog Production Modifications Section

HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
450	900	4000	5811/12 US	Anti-Friction		4508TCAL11E-A	68	93.6		MXTAAM	\$108,806
450	900	4000	5811/12 US	Anti-Friction		4508TCAL11E-C	63	93.9	12	MXTAAM	\$132,213
500	900	4000	5811/12 US	Anti-Friction		5008TCAL11E-A	75	93.6		MXTAAM	\$109,211
500	900	4000	5811/12 US	Anti-Friction		5008TCAL11E-C	70	94.3	12	MXTAAM	\$132,618
600	1200	4000	5811/12 US	Anti-Friction		6006TCAL11E-A	85	93.6		MXTAAM	\$110,757
600	1200	4000	5811/12 US	Anti-Friction		6006TCAL11E-C	80	94.1	12	MXTAAM	\$134,163
600	900	4000	5811/12 US	Anti-Friction		6008TCAL11E-A	89	93.9		MXTAAM	\$111,191
600	900	4000	5811/12 US	Anti-Friction		6008TCAL11E-C	83	94.3	12	MXTAAM	\$134,599
700	3600	4000	5811/12 USS	Anti-Friction		7003TCAL11F-A	89	94.9	4	MXTAAM	\$93,727
700	3600	4000	5811/12 USS	Anti-Friction		7003TCAL11F-C	87	95.3	4, 12	MXTAAM	\$117,134
700	3600	4000	5811/12 USS	SLEEVE		7003TCQL11F-A	89	94.0	4	MXTAAM	\$112,045
700	3600	4000	5811/12 USS	SLEEVE		7003TCQL11F-C	87	94.3	4, 12	MXTAAM	\$135,452
700	1800	4000	5811/12 US	Anti-Friction		7005TCAL11E-A	90	94.6	4	MXTAAM	\$106,495

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TEAAC

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
700	1800	4000	5811/12 US	Anti-Friction		7005TCAL11E-C	89	94.6	4, 12	MXTAAM	\$129,902
700	1800	4000	5811/12 US	SLEEVE		7005TCQL11E-A	90	94.6	4	MXTAAM	\$124,813
700	1800	4000	5811/12 US	SLEEVE		7005TCQL11E-C	89	94.5	4, 12	MXTAAM	\$148,221
700	1200	4000	5811/12 US	Anti-Friction		7006TCAL11E-A	100	93.9		MXTAAM	\$115,868
700	1200	4000	5811/12 US	Anti-Friction		7006TCAL11E-C	93	94.2	12	MXTAAM	\$139,275
700	900	4000	400-1120	Anti-Friction	9,700	J708WLF3I-A	105	94.0	1	MXTAAM	\$204,660
700	900	4000	400-1120	Anti-Friction	9,700	J708WLF3I-C	105	94.0	1, 12	MXTAAM	\$224,260
700	900	4000	400-1120	SLEEVE	9,700	J708WLF3I-A	105	94.0	1	MXTAAM	\$219,467
700	900	4000	400-1120	SLEEVE	9,700	J708WLF3I-C	105	94.0	1, 12	MXTAAM	\$239,067
800	3600	4000	5811/12 USS	Anti-Friction		8003TCAL11F-A	101	95.1	4	MXTAAM	\$96,376
800	3600	4000	5811/12 USS	Anti-Friction		8003TCAL11F-C	99	95.4	4, 12	MXTAAM	\$119,782
800	3600	4000	5811/12 USS	SLEEVE		8003TCQL11F-A	101	94.3	4	MXTAAM	\$114,694
800	3600	4000	5811/12 USS	SLEEVE		8003TCQL11F-C	99	94.7	4, 12	MXTAAM	\$138,101
800	1800	4000	5811/12 US	Anti-Friction		8005TCAL11E-A	105	94.8	4	MXTAAM	\$108,207
800	1800	4000	5811/12 US	Anti-Friction		8005TCAL11E-C	101	95.1	4, 12	MXTAAM	\$131,614
800	1800	4000	5811/12 US	SLEEVE		8005TCQL11E-A	105	94.8	4	MXTAAM	\$126,525
800	1800	4000	5811/12 US	SLEEVE		8005TCQL11E-C	101	95.0	4, 12	MXTAAM	\$149,933
800	1200	4000	400-1120	Anti-Friction	9,000	J807WLF3I-A	110	95.4	1	MXTAAM	\$137,872
800	1200	4000	400-1120	Anti-Friction	9,000	J807WLF3I-C	110	95.4	1, 12	MXTAAM	\$157,472
800	1200	4000	400-1120	SLEEVE	9,000	J807WLF3I-A	110	95.4	1	MXTAAM	\$152,679
800	1200	4000	400-1120	SLEEVE	9,000	J807WLF3I-C	110	95.4	1, 12	MXTAAM	\$172,279
800	900	4000	400-1120	Anti-Friction	9,700	J808WLF3I-A	119	94.5	1	MXTAAM	\$213,681
800	900	4000	400-1120	Anti-Friction	9,700	J808WLF3I-C	119	94.5	1, 12	MXTAAM	\$233,281
800	900	4000	400-1120	SLEEVE	9,700	J808WLF3I-A	119	94.5	1	MXTAAM	\$228,488
800	900	4000	400-1120	SLEEVE	9,700	J808WLF3I-C	119	94.5	1, 12	MXTAAM	\$248,088
900	3600	4000	5811/12 USS	Anti-Friction		9003TCAL11F-A	113	95.3	4	MXTAAM	\$103,535
900	3600	4000	5811/12 USS	Anti-Friction		9003TCAL11F-C	111	95.6	4, 12	MXTAAM	\$126,942
900	3600	4000	5811/12 USS	SLEEVE		9003TCQL11F-A	113	94.6	4	MXTAAM	\$121,854
900	3600	4000	5811/12 USS	SLEEVE		9003TCQL11F-C	111	94.9	4, 12	MXTAAM	\$145,260
900	1800	4000	5811/12 US	Anti-Friction		9005TCAL11E-A	115	95.0	4	MXTAAM	\$109,767
900	1800	4000	5811/12 US	Anti-Friction		9005TCAL11E-C	114	95.2	4, 12	MXTAAM	\$133,174
900	1800	4000	5811/12 US	SLEEVE		9005TCQL11E-A	115	95.0	4	MXTAAM	\$128,085
900	1800	4000	5811/12 US	SLEEVE		9005TCQL11E-C	114	95.1	4, 12	MXTAAM	\$151,493
900	1200	4000	400-1120	Anti-Friction	9,000	J907WLF3I-A	125	95.4	1	MXTAAM	\$147,766
900	1200	4000	400-1120	Anti-Friction	9,000	J907WLF3I-C	125	95.4	1, 12	MXTAAM	\$167,366
900	1200	4000	400-1120	SLEEVE	9,000	J907WLF3I-A	125	95.4	1	MXTAAM	\$162,573
900	1200	4000	400-1120	SLEEVE	9,000	J907WLF3I-C	125	95.4	1, 12	MXTAAM	\$182,173
900	900	4000	400-1250	Anti-Friction	10,400	J908WLF3I-A	134	94.5		MXTAAM	\$225,638
900	900	4000	400-1250	Anti-Friction	10,400	J908WLF3I-C	134	94.5	1, 12	MXTAAM	\$245,238
900	900	4000	400-1250	SLEEVE	10,400	J908WLF3I-A	134	94.5	1	MXTAAM	\$240,445
900	900	4000	400-1250	SLEEVE	10,400	J908WLF3I-C	134	94.5	1, 12	MXTAAM	\$260,045
1000	3600	4000	5811/12 USS	Anti-Friction		M203TCAL11F-A	125	95.5	4	MXTAAM	\$117,844
1000	3600	4000	5811/12 USS	Anti-Friction		M203TCAL11F-C	122	95.8	4, 12	MXTAAM	\$141,252
1000	3600	4000	5811/12 USS	SLEEVE		M203TCQL11F-A	125	94.9	4	MXTAAM	\$136,163
1000	3600	4000	5811/12 USS	SLEEVE		M203TCQL11F-C	122	95.2	4, 12	MXTAAM	\$159,570
1000	1800	4000	5811/12 US	Anti-Friction		M205TCAL11E-A	130	95.0	4	MXTAAM	\$122,315
1000	1800	4000	5811/12 US	Anti-Friction		M205TCAL11E-C	127	95.5	4, 12	MXTAAM	\$145,721

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TEAAC

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
1000	1800	4000	5811/12 US	SLEEVE		M205TCQL11E-A	130	95.0	4	MXTAAM	\$140,633
1000	1800	4000	5811/12 US	SLEEVE		M205TCQL11E-C	127	95.4	4, 12	MXTAAM	\$164,040
1000	1200	4000	400-1250	Anti-Friction	10,300	J1007WLF3I-A	135	95.7	1	MXTAAM	\$230,513
1000	1200	4000	400-1250	Anti-Friction	10,300	J1007WLF3I-C	135	95.7	1, 12	MXTAAM	\$250,113
1000	1200	4000	400-1250	SLEEVE	10,300	J1007WLF3I-A	135	95.7	1	MXTAAM	\$245,320
1000	1200	4000	400-1250	SLEEVE	10,300	J1007WLF3I-C	135	95.7	1, 12	MXTAAM	\$264,920
1000	900	4000	450-1250	Anti-Friction	14,500	J1008WLF3I-C	139	94.5	1, 12	MXTAAM	\$255,213
1000	900	4000	450-1250	SLEEVE	14,500	J1008WLF3I-C	139	94.5	1, 12	MXTAAM	\$270,020
1000	900	4000	450-1250	SLEEVE-FC	14,500	J1008WLF3I-C	139	94.5	1, 12, 15	MXTAAM	\$271,924
1250	3600	4000	5811/12 USS	Anti-Friction		M253TCAL11F-A	155	95.8	4	MXTAAM	\$124,562
1250	3600	4000	5811/12 USS	Anti-Friction		M253TCAL11F-C	152	96.0	4, 12	MXTAAM	\$147,968
1250	3600	4000	5811/12 USS	SLEEVE		M253TCQL11F-A	155	95.3	4	MXTAAM	\$142,880
1250	3600	4000	5811/12 USS	SLEEVE		M253TCQL11F-C	152	95.5	4, 12	MXTAAM	\$166,287
1250	1800	4000	400-1120	Anti-Friction	9,300	J1255WLF3I-A	160	95.8	1	MXTAAM	\$191,322
1250	1800	4000	400-1120	Anti-Friction	9,300	J1255WLF3I-C	160	95.8	1, 12	MXTAAM	\$210,922
1250	1800	4000	400-1120	SLEEVE	9,300	J1255WLF3I-A	160	95.8	1	MXTAAM	\$206,129
1250	1800	4000	400-1120	SLEEVE	9,300	J1255WLF3I-C	160	95.8	1, 12	MXTAAM	\$225,729
1250	1200	4000	450-1250	Anti-Friction	13,400	J1257WLF3I-C	165	95.9	1, 12	MXTAAM	\$259,765
1250	1200	4000	450-1250	SLEEVE	13,400	J1257WLF3I-C	165	95.9	1, 12	MXTAAM	\$274,572
1250	1200	4000	450-1250	SLEEVE-FC	13,400	J1257WLF3I-C	165	95.9	1, 12, 15	MXTAAM	\$276,476
1250	900	4000	450-1250	Anti-Friction	14,500	J1258WLF3I-C	173	95.0	1, 12	MXTAAM	\$262,915
1250	900	4000	450-1250	SLEEVE	14,500	J1258WLF3I-C	173	95.0	1, 12	MXTAAM	\$277,722
1250	900	4000	450-1250	SLEEVE-FC	14,500	J1258WLF3I-C	173	95.0	1, 12, 15	MXTAAM	\$279,626
1500	3600	4000	400-1120	SLEEVE	9,700	J1503WLF3I-C	190	94.6	1, 12	MXTAAM	\$229,574
1500	3600	4000	400-1120	SLEEVE-FC	9,700	J1503WLF3I-C	190	94.6	1, 12, 15	MXTAAM	\$231,478
1500	1800	4000	400-1250	Anti-Friction	11,000	J1505WLF3I-A	192	95.0	1	MXTAAM	\$206,269
1500	1800	4000	400-1250	Anti-Friction	11,000	J1505WLF3I-C	192	95.0	1, 12	MXTAAM	\$225,869
1500	1800	4000	400-1250	SLEEVE	11,000	J1505WLF3I-A	192	95.0	1,	MXTAAM	\$221,076
1500	1800	4000	400-1250	SLEEVE	11,000	J1505WLF3I-C	192	95.0	1, 12	MXTAAM	\$240,676
1500	1200	4000	450-1250	Anti-Friction	13,400	J1507WLF3I-C	195	95.9	1, 12	MXTAAM	\$265,752
1500	1200	4000	450-1250	SLEEVE	13,400	J1507WLF3I-C	195	95.9	1, 12	MXTAAM	\$280,559
1500	1200	4000	450-1250	SLEEVE-FC	13,400	J1507WLF3I-C	195	95.9	1, 12, 15	MXTAAM	\$282,463
1500	900	4000	450-1400	Anti-Friction	16,500	J1508WLF3I-C	208	95.0	1, 12	MXTAAM	\$269,213
1500	900	4000	450-1400	SLEEVE	16,500	J1508WLF3I-C	208	95.0	1, 12	MXTAAM	\$284,020
1500	900	4000	450-1400	SLEEVE-FC	16,500	J1508WLF3I-C	208	95.0	1, 12, 15	MXTAAM	\$285,924
1750	3600	4000	450-1400	SLEEVE	13,600	J1753WLF3I-C	220	95.0	1, 12	MXTAAM	\$277,128
1750	3600	4000	450-1400	SLEEVE-FC	13,600	J1753WLF3I-C	220	95.0	1, 12, 15	MXTAAM	\$279,032
1750	1800	4000	450-1250	Anti-Friction	13,100	J1755WLF3I-C	220	96.1	1, 12	MXTAAM	\$265,869
1750	1800	4000	450-1250	SLEEVE	13,100	J1755WLF3I-C	220	96.1	1, 12	MXTAAM	\$280,676
1750	1800	4000	450-1250	SLEEVE-FC	13,100	J1755WLF3I-C	220	96.1	1, 12, 15	MXTAAM	\$282,580
1750	1200	4000	450-1250	Anti-Friction	13,400	J1757WLF3I-C	230	95.6	1, 12	MXTAAM	\$275,429
1750	1200	4000	450-1250	SLEEVE	13,400	J1757WLF3I-C	230	95.6	1, 12	MXTAAM	\$290,236
1750	1200	4000	450-1250	SLEEVE-FC	13,400	J1757WLF3I-C	230	95.6	1, 12, 15	MXTAAM	\$292,140
1750	900	4000	450-1400	Anti-Friction	16,500	J1758WLF3I-C	241	95.6	1, 12	MXTAAM	\$276,277
1750	900	4000	450-1400	SLEEVE	16,500	J1758WLF3I-C	241	95.6	1, 12	MXTAAM	\$291,084
1750	900	4000	450-1400	SLEEVE-FC	16,500	J1758WLF3I-C	241	95.6	1, 12, 15	MXTAAM	\$292,988
2000	3600	4000	450-1400	SLEEVE	13,600	J2003WLF3I-C	250	95.0	1, 12	MXTAAM	\$296,915

Totally Enclosed

TEAAC

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
2000	3600	4000	450-1400	SLEEVE-FC	13,600	J2003WLFUI-C	250	95.0	1, 12, 15	MXTAAM	\$298,819
2000	1800	4000	450-1250	Anti-Friction	13,100	J2005WLF3I-C	250	96.1	1, 12	MXTAAM	\$275,398
2000	1800	4000	450-1250	SLEEVE	13,100	J2005WLFUI-C	250	96.1	1, 12	MXTAAM	\$290,205
2000	1800	4000	450-1250	SLEEVE-FC	13,100	J2005WLFUI-C	250	96.1	1, 12, 15	MXTAAM	\$292,109
2000	1200	4000	450-1400	Anti-Friction	15,300	J2007WLF3I-C	260	95.8	1, 12	MXTAAM	\$285,638
2000	1200	4000	450-1400	SLEEVE	15,300	J2007WLFUI-C	260	95.8	1, 12	MXTAAM	\$300,445
2000	1200	4000	450-1400	SLEEVE-FC	15,300	J2007WLFUI-C	260	95.8	1, 12, 15	MXTAAM	\$302,349
2000	900	4000	500-1600	Anti-Friction	16,700	J2008WLF3I-C	274	95.9	1, 12	MXTAAM	\$292,979
2000	900	4000	500-1600	SLEEVE	16,700	J2008WLFUI-C	274	95.9	1, 12	MXTAAM	\$307,786
2000	900	4000	500-1600	SLEEVE-FC	16,700	J2008WLFUI-C	274	95.9	1, 12, 15	MXTAAM	\$309,690
2250	3600	4000	450-1400	SLEEVE	13,600	J2253WLFUI-C	285	95.0	1, 12	MXTAAM	\$315,106
2250	3600	4000	450-1400	SLEEVE-FC	13,600	J2253WLFUI-C	285	95.0	1, 12, 15	MXTAAM	\$317,010
2250	1800	4000	450-1250	Anti-Friction	13,100	J2255WLF3I-C	285	96.1	1, 12	MXTAAM	\$290,362
2250	1800	4000	450-1250	SLEEVE	13,100	J2255WLFUI-C	285	96.1	1, 12	MXTAAM	\$305,169
2250	1800	4000	450-1250	SLEEVE-FC	13,100	J2255WLFUI-C	285	96.1	1, 12, 15	MXTAAM	\$307,073
2250	1200	4000	450-1400	Anti-Friction	15,300	J2257WLF3I-C	295	95.9	1, 12	MXTAAM	\$297,766
2250	1200	4000	450-1400	SLEEVE	15,300	J2257WLFUI-C	295	95.9	1, 12	MXTAAM	\$312,573
2250	1200	4000	450-1400	SLEEVE-FC	15,300	J2257WLFUI-C	295	95.9	1, 12, 15	MXTAAM	\$314,477
2250	900	4000	500-1600	Anti-Friction	16,700	J2258WLF3I-C	301	96.0	1, 12	MXTAAM	\$334,468
2250	900	4000	500-1600	SLEEVE	16,700	J2258WLFUI-C	301	96.0	1, 12	MXTAAM	\$349,275
2250	900	4000	500-1600	SLEEVE-FC	16,700	J2258WLFUI-C	301	96.0	1, 12, 15	MXTAAM	\$351,179
2500	3600	4000	450-1400	SLEEVE	13,600	J2503WLFUI-C	315	95.2	1, 12	MXTAAM	\$325,000
2500	3600	4000	450-1400	SLEEVE-FC	13,600	J2503WLFUI-C	315	95.2	1, 12, 15	MXTAAM	\$326,904
2500	1800	4000	450-1250	Anti-Friction	13,100	J2505WLF3I-C	315	96.2	1, 12	MXTAAM	\$305,196
2500	1800	4000	450-1250	SLEEVE	13,100	J2505WLFUI-C	315	96.2	1, 12	MXTAAM	\$320,003
2500	1800	4000	450-1250	SLEEVE-FC	13,100	J2505WLFUI-C	315	96.2	1, 12, 15	MXTAAM	\$321,907
2500	1200	4000	500-1600	Anti-Friction	16,700	J2507WLF3I-C	325	96.0	1, 12	MXTAAM	\$308,617
2500	1200	4000	500-1600	SLEEVE	16,700	J2507WLFUI-C	325	96.0	1, 12	MXTAAM	\$323,424
2500	1200	4000	500-1600	SLEEVE-FC	16,700	J2507WLFUI-C	325	96.0	1, 12, 15	MXTAAM	\$325,328
2500	900	4000	500-1800	Anti-Friction	19,000	J2508WLF3I-C	330	96.2	1, 12	MXTAAM	\$356,489
2500	900	4000	500-1800	SLEEVE	19,000	J2508WLFUI-C	330	96.2	1, 12	MXTAAM	\$371,296
2500	900	4000	500-1800	SLEEVE-FC	19,000	J2508WLFUI-C	330	96.2	1, 12, 15	MXTAAM	\$373,200
3000	3600	4000	450-1400	SLEEVE	13,600	J3003WLFUI-C	375	95.6	1, 12	MXTAAM	\$340,000
3000	3600	4000	450-1400	SLEEVE-FC	13,600	J3003WLFUI-C	375	95.6	1, 12, 15	MXTAAM	\$341,904
3000	1800	4000	450-1400	Anti-Friction	14,900	J3005WLF3I-C	375	96.3	1, 12	MXTAAM	\$320,000
3000	1800	4000	450-1400	SLEEVE	14,900	J3005WLFUI-C	375	96.3	1, 12	MXTAAM	\$334,807
3000	1800	4000	450-1400	SLEEVE-FC	14,900	J3005WLFUI-C	375	96.3	1, 12, 15	MXTAAM	\$336,711
3000	1200	4000	500-1800	Anti-Friction	18,700	J3007WLF3I-C	390	96.4	1, 12	MXTAAM	\$340,532
3000	1200	4000	500-1800	SLEEVE	18,700	J3007WLFUI-C	390	96.4	1, 12	MXTAAM	\$355,339
3000	1200	4000	500-1800	SLEEVE-FC	18,700	J3007WLFUI-C	390	96.4	1, 12, 15	MXTAAM	\$357,243
3000	900	4000	500-1800	Anti-Friction	19,000	J3008WLF3I-C	395	96.4	1, 12	MXTAAM	\$378,511
3000	900	4000	500-1800	SLEEVE	19,000	J3008WLFUI-C	395	96.4	1, 12	MXTAAM	\$393,318
3000	900	4000	500-1800	SLEEVE-FC	19,000	J3008WLFUI-C	395	96.4	1, 12, 15	MXTAAM	\$395,222
3500	3600	4000	500-1600	SLEEVE-FC	18,300	J3503WLFUI-C	435	96.0	1, 12, 15	MXTAAM	\$371,263
3500	1800	4000	450-1400	Anti-Friction	14,900	J3505WLF3I-C	435	96.5	1, 12	MXTAAM	\$335,243
3500	1800	4000	450-1400	SLEEVE	14,900	J3505WLFUI-C	435	96.5	1, 12	MXTAAM	\$350,050
3500	1800	4000	450-1400	SLEEVE-FC	14,900	J3505WLFUI-C	435	96.5	1, 12, 15	MXTAAM	\$351,954

Totally Enclosed

TEAAC

> High Efficiency



HP	Speed (RPM)	Volts	Frame	Bearing	Weight (lbs.)	Model Number	FL Amps	Nominal FL EFF	Notes	Discount Symbol	List Price
3500	1200	4000	500-1800	Anti-Friction	18,700	J3507WLF3I-C	450	96.5	1, 12	MXTAAM	\$364,468
3500	1200	4000	500-1800	SLEEVE	18,700	J3507WLF3I-C	450	96.5	1, 12	MXTAAM	\$379,275
3500	1200	4000	500-1800	SLEEVE-FC	18,700	J3507WLFUI-C	450	96.5	1, 12, 15	MXTAAM	\$381,179
3500	900	4000	560-1800	Anti-Friction	22,000	J3508WLF3I-C	475	94.5	1, 12	MXTAAM	\$402,128
3500	900	4000	560-1800	SLEEVE	22,000	J3508WLF3I-C	475	94.5	1, 12	MXTAAM	\$416,935
3500	900	4000	560-1800	SLEEVE-FC	22,000	J3508WLFUI-C	475	94.5	1, 12, 15	MXTAAM	\$418,839
4000	3600	4000	500-1600	SLEEVE-FC	18,300	J4003WLFUI-C	495	96.1	1, 12, 15	MXTAAM	\$386,274
4000	1800	4000	500-1600	SLEEVE	17,200	J4005WLF3I-C	500	96.5	1, 12	MXTAAM	\$370,184
4000	1800	4000	500-1600	SLEEVE-FC	17,200	J4005WLFUI-C	500	96.5	1, 12, 15	MXTAAM	\$372,088
4000	1200	4000	560-1800	Anti-Friction	21,800	J4007WLF3I-C	525	96.6	1, 12	MXTAAM	\$399,894
4000	1200	4000	560-1800	SLEEVE	21,800	J4007WLF3I-C	525	96.6	1, 12	MXTAAM	\$414,701
4000	1200	4000	560-1800	SLEEVE-FC	21,800	J4007WLFUI-C	525	96.6	1, 12, 15	MXTAAM	\$416,605
4000	900	4000	560-2000	Anti-Friction	22,700	J4008WLF3I-C	543	94.5	1, 12	MXTAAM	\$435,957
4000	900	4000	560-2000	SLEEVE	22,700	J4008WLF3I-C	543	94.5	1, 12	MXTAAM	\$450,764
4000	900	4000	560-2000	SLEEVE-FC	22,700	J4008WLFUI-C	543	94.5	1, 12, 15	MXTAAM	\$452,668
4500	3600	4000	560-1800	SLEEVE-FC	23,100	J4503WLFUI-C	560	96.4	1, 12, 15	MXTAAM	\$427,979
4500	1800	4000	500-1800	SLEEVE	19,400	J4505WLF3I-C	560	96.7	1, 12	MXTAAM	\$385,618
4500	1800	4000	500-1800	SLEEVE-FC	19,400	J4505WLFUI-C	560	96.7	1, 12, 15	MXTAAM	\$387,522
4500	1200	4000	560-1800	Anti-Friction	21,800	J4507WLF3I-C	590	96.6	1, 12	MXTAAM	\$414,255
4500	1200	4000	560-1800	SLEEVE	21,800	J4507WLF3I-C	590	96.6	1, 12	MXTAAM	\$429,062
4500	1200	4000	560-1800	SLEEVE-FC	21,800	J4507WLFUI-C	590	96.6	1, 12, 15	MXTAAM	\$430,966
5000	3600	4000	560-1800	SLEEVE-FC	23,100	J5003WLFUI-C	620	96.4	1, 12, 15	MXTAAM	\$463,723
5000	1800	4000	500-1800	SLEEVE	20,400	J5005WLF3I-C	617	97.0	1, 12	MXTAAM	\$401,348
5000	1800	4000	500-1800	SLEEVE-FC	20,400	J5005WLFUI-C	617	97.0	1, 12, 15	MXTAAM	\$403,252
5000	1200	4000	560-1800	Anti-Friction	22,900	J5007WLF3I-C	667	95.0	1, 12	MXTAAM	\$435,957
5000	1200	4000	560-1800	SLEEVE	22,900	J5007WLF3I-C	667	95.0	1, 12	MXTAAM	\$450,764
5000	1200	4000	560-1800	SLEEVE-FC	22,900	J5007WLFUI-C	667	95.0	1, 12, 15	MXTAAM	\$452,668

FL Amps and FL EFF are average expected design values and not guaranteed.

The weights listed above are estimated.

Please contact Toshiba for information on product availability.

Medium Voltage Modifications

Production Modifications

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Discount Symbol: **MMP002 – For Medium Voltage Motors**

Modifications from this section should be added to the appropriate motor list price to generate a total list price for the motor. Apply the applicable discount/multiplier from discount symbol MMP002 to arrive at a net each price. This will be the production/modified multiplier associated with the account pricing.

ODP General Purpose
TEFC General Purpose
 EQP Global
Definite Purpose
Explosion Proof
Brake
Washdown
Vertical
LV Motor Modifications
MV General Purpose
MV Motor Modifications
Spare Parts

Altitude

Standard motors are built for operation up to 3,300 ft. (1,000 m) above sea level at a maximum ambient of 40°C within Class B rise limits when operated at rated horsepower.

Option		3,301 – 5,000 ft.	Over 5,000 ft.
NEMA Frames	440/500	3%	Contact Toshiba
	500/5000/5800	4%	
	6810/6813	4%	
	N6300–N8800*	4%	
IEC Frames	400/450*	5%	
	500/560*	6%	

* Non-NAFTA frames

Special Notes:

- Altitudes over 3,300 ft. may affect frame size. Final frame size is subject to final design completion.
- Above percentage adders will apply to the base motor list price.

Ambient Temperature

Toshiba motors are designed to operate in an ambient temperature range between -20° and 40°C. For operation in temperatures above the standard, refer to the chart below.

Option		41° to 45°C	46° to 50°C	Below – 40°C & Above 50°C
NEMA Frames	440/500	3%	5%	Contact Toshiba
	500/5000/5800	3%	5%	
	6810/6813	4%	6%	
	N6300–N8800*	4%	6%	
IEC Frames	400/450*	5%	7%	
	500/560*	5%	7%	

* Non-NAFTA frames

Special Notes:

- Ambient conditions may affect frame size. Final frame size is subject to final design completion.
- Sleeve bearings may require flood lubrication system for above 40°C ambient.
- At ambient temperatures of -40°C through -20°C, oil sump heaters are recommended for motors with sleeve bearings. See "Oil Sump Heaters" adders.
- At ambient temperatures of -40°C through -25°C, special low temperature grease is usually required for motors with anti-friction bearings. See "Lubrication" section for adders.
- Above percentage adders will apply to the base motor list price.

Balance/Vibration

All Toshiba motors are dynamically balanced and measured in accordance with NEMA MG1 standards unless otherwise specified by the design. Toshiba motors comply with NEMA unfiltered vibration levels of 0.15 inches/second for 2-pole through 6-pole, and 0.12 inches/second for 8-pole. For vibration levels lower than the Toshiba standard, refer to the chart below.

Option		Precision Balance	Special Balance
NEMA Frames	440/500	\$984	Contact Toshiba
	500/5000/5800	\$1,465	
	6810/6813	\$1,939	
	N6300–N8800*	\$2,341	
IEC Frames	400/450*	\$2,584	
	500/560*	\$2,675	

* Non-NAFTA frames

Special Notes:

Precision Balance:

- 0.10 inches/second for 2-pole
- 0.08 inches/second for 4-pole through 8-pole

Bearings

Special bearings and designs are available on a production basis for specific application requirements.

Insulated Bearings

Insulated bearings are typically used in applications where shaft current concerns exist (i.e. applications involving the use of adjustable speed drives). Insulating the bearings helps to prevent electrical arcing (bearing fluting) and potential premature bearing failure.

Option		Ball Bearings		Bearing Housing	
		NDE	DE	NDE	DE
NEMA Frames	440/500	\$1,969	\$1,969	N/A	N/A
	5000/5800	Included	\$3,008	N/A	N/A
	6800	Included	\$3,008	N/A	N/A
	N6300–N8800*	N/A	N/A	Included	\$3,222
IEC Frames	400/450*	N/A	N/A	\$3,478	\$3,478
	500/560*	N/A	N/A	\$3,598	\$3,598

* Non-NAFTA frames

Special Notes:

- An insulated NDE bearing is included with Dura-Bull TX®, 5012, 5812, and 6800 frame motors.
- DE insulated roller bearing is available upon request.
- Sleeve bearings are insulated on DE and NDE bearings on motors up to and including the 6800 frame.
- NEMA MG1 Part 31 suggests insulating the bearing(s) on all motors in 500 series frames and larger when inverter-fed. Toshiba recommends insulating the bearings when shaft voltage exceeds 300 mV, but it is up to the user to determine when insulated bearings are required, especially with the use of a non-Toshiba inverter-fed control.
- When insulated bearings are used on direct-coupled applications, the use of an insulated coupling and/or a shaft grounding brush is required in order to reduce the risk of driven equipment bearing damage. Please note that grounding brushes are not suitable for Division 2 environments.
- Insulated bearings are not available on angular contact bearing construction.
- If bearing thermal devices are required with insulated bearings, a special version of the thermal device will be required. Contact Toshiba for the availability and price of this thermal device.

Oil Sump Heaters

In ambient temperatures below -20°C, oil sump heaters are required for motors with sleeve bearings.

Option		Non-Hazardous Area	Hazardous Area
NEMA Frames	440/500	N/A	N/A
	5000/5800	\$2,412	\$5,420
	6800	\$2,588	\$5,855
	N6300–N8800*	\$2,755	\$6,433
IEC Frames	400/450*	\$2,989	\$6,898
	500/560*	\$3,150	\$7,340

* Non-NAFTA frames

Special Notes:

- This adder applies only to motors with self-cooled sleeve bearings.

Oil sump heaters operate at 120 V or 240 V (customer to specify voltage).

Roller Bearing for Belted Applications

Cylindrical roller bearings are used in motors where high radial loads are present (i.e. belted applications) for an improved L-10 bearing life.

Option		Roller Bearing	
		DE	
NEMA Frames	440/500	\$2,180	
	5000/5800	\$3,566 (1)	
	6800	N/A	
	N6300–N8800*	\$3,765	
IEC Frames	400/450*	N/A	
	500/560*	N/A	

* Non-NAFTA frames

(1) TEFC motors only

Special Notes:

- Roller bearing is available only on 1800 RPM and slower motors.
- Belted application requires full belting details and provided prior to order acceptance.

Blowers

The turndown capability of an inverter-fed Toshiba motor is a function of the product selected, and when turndown requirements exceed product capability, the use of an auxiliary blower is required. Contact Toshiba for help with determining whether a blower is required and for pricing.

The *National Electrical Code 430.126 (b)* mandates that motors with external force-ventilation have a form of thermal protection. See “Thermal Protection” section for the addition of thermal protection.

Conduit Box Modifications

The standard main conduit box on all Toshiba motors is located in the F1 position.

Auxiliary Terminal Box

Termination of protective or monitoring devices can be provided in a separate auxiliary box. Auxiliary box location is to be specified by the customer at time of order.

Option		NEMA 4X 304 SS	Aux. Cast Iron Box	Aux. Steel Box
NEMA Frames	440/500	\$2,470	Standard	\$766
	5000/5800	\$2,470		\$766
	6800	\$2,470		\$766
	N6300–N8800*	\$2,644		Standard
IEC Frames	400/450*	\$2,839	Standard	Standard
	500/560*	\$2,985		

* Non-NAFTA frames

Special Notes:

- Auxiliary terminal box is provided as standard with stator RTD adder on all motors.
- Auxiliary terminal box is provided as standard with space heaters.
- Bearing RTDs are terminated at their own conduit as standard. Termination at auxiliary terminal box requires an adder. See “Thermal Protection” section.

Main Box Construction

IEC frame motors come with a fabricated steel main box as standard. NEMA frame motors come standard with cast iron main boxes except for the following, which come with a fabricated steel main box:

- 1) 6800 and N6300 through N8800 frames
- 2) Motors with surge protection accessories
- 3) API motor offerings

Option		NEMA 4X 304 SS	NEMA Type II	Special Features
NEMA Frames	440/500	\$9,850	\$3,325	Contact Toshiba
	5000/5800	\$10,345	\$3,325	
	6800	\$12,780	Included	
	N6300–N8800*	\$13,330	\$3,440	
IEC Frames	400/450*	\$13,330	\$3,680	
	500/560*	\$13,330	\$3,680	

* Non-NAFTA frames

Special Notes:

- A top mount main box (F3) is available on Dura-Bull TX® 5011 and 5811 frames only.
- NEMA Type II main box comes with stand-off insulators.

Remote-Mount Conduit Box

For applications requiring that the conduit box be located away from the motor, Toshiba is able to supply a remote-mount conduit box. The conduit box will be supplied with the main motor, but will arrive unfastened. The remote-mount conduit box includes a main terminal box and a threaded mounting plate. Contact Toshiba for prices.

Couplings

Couplings must be supplied finished, bored, balanced, and freight-allowed to Toshiba manufacturing plant. An incoming identification number must be obtained from Toshiba. The coupling must be shipped at least six weeks prior to the order’s acknowledged ship date and must include the manufacturer’s mounting instructions.

Option		Customer-Supplied Sheave/Coupling
NEMA Frames	440/500	\$1,500
	5000/5800	\$2,750
	6800	\$3,750
	N6300–N8800*	\$3,940
IEC Frames	400/450*	\$5,450
	500/560*	\$5,650

* Non-NAFTA frames

Current Transformers

Window-type current transformers (one per phase). Both leads of each winding are inserted in opposite directions to measure any difference that would signify ground fault leakage.

Option		Differential CTs (One Per Phase)	Ammeter CT
NEMA Frames	440/500	\$4,594	\$1,731
	5000/5800	\$4,594	\$1,731
	6800	\$4,594	\$1,731
	N6300–N8800*	\$5,220	\$1,940
IEC Frames	400/450*	\$5,379	\$1,993
	500/560*	\$5,379	\$1,993

* Non-NAFTA frames

Special Notes:

- Price includes Type II main terminal box.
- Toshiba standard 50:5 current transformers will be provided unless otherwise specified by customer. Price is subject to change.
- Current transformer leads will be terminated in a separate auxiliary box.

Direction of Rotation

At time of order, the customer must specify the direction of rotation for the motor. Toshiba standard is counter clockwise (CCW) as viewed from non-drive end (NDE) of the motor.

Dowel Pin Provisions

Dowel pin holes will be provided on two diagonal feet. These are provided to ensure motor alignment is maintained after the motor is installed. This feature comes standard on Dura-Bull TX® motors.

Option		2 Per Motor	Special
NEMA Frames	440/500	\$1,094	Contact Toshiba
	5000/5800	\$1,313	
	6800	\$1,313	
	N6300–N8800*	\$1,524	
IEC Frames	400/450*	\$1,690	
	500/560*	\$1,690	

* Non-NAFTA frames

Drains & Breathers

All motors are provided with drain holes that are located at the lowest point on the motor.

Breathers

To request breather(s).

Option		Standard Breather Motor	Stainless Breather (1)	Standard Breather Conduit Box (2)
NEMA Frames	440/500	\$328	\$438	\$438
	5000/5800	\$328	\$438	\$438
	6800	\$328	\$438	\$438
	N6300-N8800*	\$360	\$472	\$472
IEC Frames	400/450*	\$360	\$472	\$472
	500/560*	\$360	\$472	\$472

* Non-NAFTA frames

(1) Stainless breathers and drains will be 304 SS (316 SS available; contact Toshiba).
(2) Standard and stainless breathers are available for cast iron conduit boxes only.

Drains

For additional drain hole(s).

Option		Drain Hole Conduit Box	Stainless Drain Plug Conduit Box
NEMA Frames	440/500	\$131	\$328
	5000/5800	\$131	\$328
	6800	\$131	\$328
	N6300-N8800*	\$182	\$360
IEC Frames	400/450*	\$182	\$360
	500/560*	\$182	\$360

* Non-NAFTA frames

Special Notes:

- Conduit box drain holes are available on cast iron conduit boxes only.
- Stainless drain plugs will be 304 SS (316 SS available; contact Toshiba).

Differential Pressure Switch/Gauge

On a motor with air filters, a pressure switch is used to measure the pressure drop across the filter caused by clogging. Toshiba's standard differential pressure switch is the Dwyer Instruments Model No. 1950-series.

Option		Switch	Gauge
NEMA Frames	440/500	N/A	N/A
	5000/5800	\$2,890	\$2,640
	6800	\$2,890	\$2,640
	N6300-N8800*	N/A	N/A
IEC Frames	400/450*	\$3,120	\$2,960
	500/560*	\$3,120	\$2,960

* Non-NAFTA frames

Special Notes:

- Differential pressure switches and gauges are available on WPII motors.

Enclosures

Classified-Division 2 / Zone 2 Locations

Environmental/application conditions may require a special motor design and special labeling of the product to ensure proper protection and/or safety during use. If an environment and/or application has been identified as a Division 2 or Zone 2 location, Toshiba requires that a Class, Group, and Temperature code (T-code) be provided to ensure safe operation in the specified atmosphere.

Option		Class I, Div 2 (1)	Class II, Div 2 (2)
NEMA Frames	440/500	\$2,970	\$4,240
	5000/5800	\$2,970	\$4,373
	6800	\$3,620	N/A
	N6300-N8800*	\$3,620	\$5,430

IEC Frames	400/450*	\$4,280	N/A
	500/560*	\$4,280	N/A

* Non-NAFTA frames

- (1) All medium voltage products are suitable for a T3 (200°C) T-code under a sine wave condition based on a 1.0 service factor. For T-code ratings below 200°C, contact Toshiba for product pricing and availability. Please contact Toshiba for applications utilizing ASD control. Please note that the NEC does not require the motor to be specifically nameplated with the area classification.
- (2) This adder is available on totally enclosed fan cooled (TEFC) enclosure only.

Special Notes:

- Low temperature space heaters are included in the above adders.
- Consult Toshiba for CSA certification and any other.
- Suitability of Zone 2 application is based on the National Electric Code (NEC).

IP Enclosure Protection

This motor modification is necessary to meet IEC enclosure definition of IP55. Available on TEFC and TEAAC motors only.

Option		IP55
NEMA Frames	440/500	\$3,958
	5000/5800	\$4,038
	6800	\$4,038
	N6300-N8800*	\$5,120
IEC Frames	400/450*	\$5,120
	500/560*	\$5,120

* Non-NAFTA frames

Special Notes:

- This adder is available on totally enclosed fan cooled (TEFC) enclosure only.

Encoders

Encoders regulate speed on motors linked to variable speed applications, and they are available either face-mounted or shaft-mounted. Toshiba's standard offering is a Dynapar HS35 (shaft-mount) or Avtron M3 (face-mount). All prices below are based on Pulse Per Revolution (PPR) of 1024 single-output and dual-channel (A & B) quadrature. Encoder type must be specified upon order.

Option		Dynapar HS35	Avtron M3	Special
NEMA Frames	440/500	\$2,734	\$3,820	Contact Toshiba
	5000/5800	\$2,734	\$3,820	
	6800	\$2,734	\$3,820	
	N6300-N8800*	\$3,272	\$4,410	
IEC Frames	400/450*	\$3,272	\$4,410	
	500/560*	\$3,272	\$4,410	

* Non-NAFTA frames

Export Crating

Toshiba provides packaging options for different shipping requirements. Options include commercial packaging (for common, below-deck transport on ships) and containerized shipping.

Option		Export Crating
NEMA Frames	440/500	\$3,240
	5000/5800	\$4,120
	6800	\$4,970
	N6300-N8800*	Included
IEC Frames	400/450*	Included
	500/560*	Included

* Non-NAFTA frames

Fan Covers

Cast iron fan covers are available on totally enclosed motors up to 5811US. On TEFC and TEAAC motors larger than 5811US, only fabricated steel covers are available.

Fans/Special

The standard material for fans on Toshiba motors is aluminum. Toshiba also offers other options for fan materials. Please contact Toshiba for availability and pricing.

Filters

Toshiba filters are 304 stainless steel with 70 micron filtration.

Option		Stainless Steel
NEMA Frames	440/500	N/A
	5000/5800	\$1,804
	6800	\$1,940
	N6300/N8800*	N/A
IEC Frames	400/450*	\$3,410
	500/560*	\$3,410

* Non-NAFTA frames

- Special Notes:
- See separate adder for differential pressure switch.
 - This adder applies to WPII motors only.

Flange-Mounting

Flange mounting is available only on motors with ball bearings and direct-coupled applications.

Option		Open Drip Proof		Totally Enclosed Fan Cooled		Weather Protected II
		C-Face Footed	D-Flange Footed	C-Face Footed	D-Flange Footed	D-Flange Footed
NEMA Frames	440/500	\$1,586	\$2,297	\$1,477 (1)	\$2,297 (1)	N/A
	5000/5800	N/A	\$2,734	\$2,895	\$3,411	\$3,575 (2)
	6800	N/A	\$2,950	N/A	\$3,956	\$4,134 (2)
	N6300/N8800*	N/A	N/A	N/A	N/A	N/A
IEC Frames	400/450*	N/A	N/A	N/A	N/A	N/A
	500/560*	N/A	N/A	N/A	N/A	N/A

* Non-NAFTA frames

- (1) Only applicable to 447 and 449 frames only. (TEFC 500 frame is not available).
(2) Only applicable to 2-pole motors.

- Special Notes:
- C-face option is not available for 500 frame ODP enclosure.
 - For frames above NEMA and IEC, contact Toshiba.

Freight

Toshiba freight terms are in accordance with Incoterms 2010 rules. Delivery terms for NAFTA Qualified motors are FCA Houston TIC Factory. Delivery terms for Non-NAFTA Qualified motors are DDP First Port of Entry for USA or Canada. Please contact Toshiba for delivery terms to other countries.

Frequency

Contact Toshiba for special frequency offerings.

Grease Fittings

Standard hydraulic, Alemite/Zerk-type fittings are provided with motors with regreasable bearings. For special grease fittings and drains, contact Toshiba for pricing and availability.

Grounding Provisions

All motor frames have clamp-type grounding lug inside the main conduit box.

External Grounding Pads on Motor Frame

Apply the adder below for a copper ground pad with two holes mounted on the motor frame. When placing the order, the hole and tap size must be provided.

Option		Frame Grounding	
		One	Two
NEMA Frames	440/500	\$1,641	\$2,752
	5000/5800	\$1,641	\$2,752
	6800	\$1,641	\$2,752
	N6300–N8800*	\$1,822	\$2,944
IEC Frames	400/450*	\$1,822	\$2,944
	500/560*	\$1,822	\$2,944

* Non-NAFTA frames

Grounding Provisions to Motor Shaft

See “Shaft Grounding” modifications section.

Hardware

Standard hardware is non-corrosive. Stainless hardware fasteners for holding brackets, conduit box, fan cover, and inner caps are available.

Option		304 SS Hardware	316 SS Hardware
NEMA Frames	440/500	\$780	\$936
	5000/5800	\$780	\$936
	6800	\$1,094	\$1,312
	N6300–N8800*	\$1,244	\$1,574
IEC Frames	400/450*	\$1,244	\$1,574
	500/560*	\$1,244	\$1,574

* Non-NAFTA frames

- Special Notes:
- This adder applies only to M10 size and smaller hardware.

Insulation Modifications

Standard motor insulation is Class F with Epoxy Resin based VPI insulation system, except for N6300 through N8800 motors which use Polyester Resin based insulation system.

Internal Coating for Extreme Service Operation

This adder provides additional insulation coating as well as corrosion protection for all internal machined surfaces.

Option		Internal Coating
NEMA Frames	440/500	\$2,406
	5000/5800	\$2,734
	6800	\$2,970
	N6300–N8800*	\$2,970
IEC Frames	400/450*	\$3,149
	500/560*	\$3,149

* Not NAFTA Qualified

Upgrade to Class H Insulation System

Option		Class H
NEMA Frames	440/500	\$7,340
	5000/5800	\$8,180
	6800	\$9,420
	N6300–N8800*	\$9,420
IEC Frames	400/450*	N/A
	500/560*	N/A

* Non-NAFTA frames

Additional VPI

Improve a motor's insulation system by applying one additional VPI process.

Option	Additional VPI	
NEMA Frames	440/500	\$2,820
	5000/5800	\$3,270
	6800	\$3,520
	N6300-N8800*	\$3,693
IEC Frames	400/450*	\$4,120
	500/560*	\$4,340

* Non-NAFTA frames

Tropicalize / Fungus-Proof Windings

Unwanted fungi may break down a motor's insulation system over time. The addition of the tropicalize/fungus-proof adder will protect motor windings from this type of problem.

Option	Tropicalize / Fungus-Proof Winding	
NEMA Frames	440/500	\$1,230
	5000/5800	\$1,531
	6800	\$1,820
	N6300-N8800*	\$2,050
IEC Frames	400/450*	\$2,230
	500/560*	\$2,403

* Non-NAFTA frames

Load Inertia

Refer to table below for load inertia values in accordance with NEMA section MG1 Part 20.11, Table 20-1.

Standard motor is capable of accelerating the following load inertias under the following conditions:

- Rated voltage and frequency applied at the motor terminals.
- During accelerating period, connected load torque shall be equal to or less than a torque which varies as square of the speed and is equal to 100% of full-load torque at rated speed.
- Starting duty per NEMA MG1 Part 20.12: twice from a cold condition, or once when at operating temperature.
- Load inertia higher than standard may require larger frame size and/or special rotor design. Contact Toshiba.

Values of Normal WK2 (lb-ft ²) (NEMA MG-1 Table 20-1)				
HP	3600 RPM	1800 RPM	1200 RPM	900 RPM
300	123	1197	3239	6540
350	141	1373	3723	7530
400	158	1546	4199	8500
450	175	1714	4666	9460
500	191	1880	5,130	10,400
600	222	2,202	6,030	12,250
700	252	2,514	6,900	14,060
800	280	2,815	7,760	15,830
900	308	3,108	8,590	17,560
1,000	334	3,393	9,410	19,260
1,250	395	4,073	11,380	23,390
1,500	451	4,712	13,260	27,350
1,750	502	5,310	15,060	31,170
2,000	548	5,880	16,780	34,860
2,250	590	6,420	18,440	38,430
2,500	628	6,930	20,030	41,900
3,000	694	7,860	23,040	48,520
3,500	746	8,700	25,850	54,800
4,000	785	9,460	28,460	60,700
4,500	813	10,120	30,890	66,300
5,000	831	10,720	33,160	71,700

* Non-NAFTA frames

Leads Terminals

All Toshiba medium voltage motors come standard with single-hole terminal lugs.

Burndy Lugs/Two-Hole Terminals

Option	Burndy	
NEMA Frames	440/500	\$744
	5000/5800	\$760
	6800	\$910
	N6300-N8800*	\$1,090
IEC Frames	400/450*	\$1,090
	500/560*	\$1,090

* Non-NAFTA frames

Lubrication

All bearings in motors with Class F insulation will be furnished with a lubricant that is capable of operating in ambient temperatures between -25° and 40°C. Please note that it is not recommended to mix greases of different bases. The mixing of different types of thickeners may destroy the composition and physical properties of the grease.

NAFTA-qualified motors use Chevron SRI-type grease. Non-NAFTA qualified motors use Shell Alvania RL2 grease.

Grease – High Temperature

This adder is for applications in which the ambient temperature is from 45° to 50°C.

Option	High Temp. Grease (45° to 50°C)	
NEMA Frames	440/500	\$273
	5000/5800	\$315
	6800	\$368
	N6300-N8800*	\$409
IEC Frames	400/450*	\$443
	500/560*	\$443

* Non-NAFTA frames

Grease – Low Temperature

This adder is for applications in which the ambient temperature ranges from -40°C to -25°C.

Option	Low Temp. Grease (-40° to -25°C)	
NEMA Frames	440/500	\$273
	5000/5800	\$315
	6800	\$368
	N6300-N8800*	\$409
IEC Frames	400/450*	\$443
	500/560*	\$443

* Non-NAFTA frames

Oil – Low Temperature

See Bearing Oil Sump Heater option.

Oil – Mist

Medium voltage motors can be provided to accept an externally-generated oil-mist/dry sump lubrication arrangement. The type of preparation must be noted within the purchase order:

1. Oil-Mist Ready (provision for future oil mist): The bearing cavity is arranged for oil-mist, but the bearings will be packed with grease for normal operation. Should the oil-mist system be connected, Toshiba recommends that the grease be cleaned from the bearings and bearing cavities.
2. Oil-Mist Lubricated: The bearings will receive a light coat of oil for testing and shipment; however, the oil-mist system must be connected upon receipt of product.

Option		Oil-Mist Ready	Oil-Mist
NEMA Frames	440/500	\$2,625	\$2,625
	5000/5800	\$3,828	\$3,828
	6800	\$4,150	\$4,150
	N6300–N8800*	\$4,150	\$4,150
IEC Frames	400/450*	\$4,150	\$4,150
	500/560*	\$4,328	\$4,328

* Non-NAFTA frames

- Special Notes:
- This adder is not available on general purpose vertical shaft-down or shaft-up applications.

Oil-mist options are not available on sleeve bearing designs.

Constant Level Oilers (Trico)

Option		Oiler (1/brg)
NEMA Frames	440/500	N/A
	5000/5800	\$1,479
	6800	\$1,627
	N6300–N8800*	\$1,790
IEC Frames	400/450*	\$1,790
	500/560*	\$1,969

* Non-NAFTA frames

- Special Notes:
- Constant Level Oiler adder is available on motors with sleeve bearings only.

Forced Lube Provisions (Sleeve Bearings Only)

Option		Carbon Steel Force Lube Provisions Only	Stainless Steel Force Lube Provisions Only
NEMA Frames	440/500	N/A	N/A
	5000/5800	\$1,280	\$2,022
	6800	\$1,408	\$2,224
	N6300–N8800*	\$1,548	\$2,445
IEC Frames	400/450*	\$1,703	\$2,690
	500/560*	\$1,874	\$2,960

* Non-NAFTA frames

- Special Notes:
- Flanges and piping (in carbon and stainless steel) are available. Please contact Toshiba for pricing.

Nameplates

Standard nameplates are 304-grade stainless steel with engraved lettering. Additional nameplates for remote-mounting and special markings are available.

Duplicate or Special Nameplates

For requests other than below, contact Toshiba.

Option		Duplicate Nameplate	Special ID Tag
Frame	All Frames	\$131	\$131

* Non-NAFTA frames

Paint

The standard paint finish on Toshiba motors is a self-priming, air-dried, acrylic alkyd resin finish. Beyond the standard paint finish, special colors and types of paints are available upon request. For special paint requirements, full specifications and color chip/manufacture color code will be required. Special paints requiring special application/curing equipment may not be available. Contact Toshiba for full details.

Option		Special Paint Color	Epoxy
NEMA Frames	440/500	\$875	\$3,250
	5000/5800	\$984	\$3,480
	6800	\$1,312	\$3,860
	N6300–N8800*	\$1,312	\$4,150
IEC Frames	400/450*	\$1,312	\$4,430
	500/560*	\$1,480	\$4,710

* Non-NAFTA frames

Seals

Shaft seals are installed on the shaft at the bracket face to prevent the ingress of dirt and liquid. Toshiba motors with sleeve bearings come standard with labyrinth seals. For motors with anti-friction bearings the following options are available.

Option		Labyrinth Drive End	Labyrinth Both Ends	Taconite Drive End (1)	Taconite Both Ends (1)
NEMA Frames	440/500	N/A	N/A	N/A	N/A
	5000/5800	\$2,612	\$3,438	\$2,612	\$3,438
	6800	\$2,926	\$3,850	\$2,926	\$3,850
	N6300–N8800*	\$2,926	\$3,850	\$2,926	\$3,850
IEC Frames	400/450*	\$2,926	\$3,850	\$2,926	\$3,850
	500/560*	\$3,277	\$4,312	\$3,277	\$4,312

(1) Taconite seal construction consists of two special bronze labyrinth seals (one on each end).

Service Factor

Standard model numbers are designed for 1.15 service factor unless otherwise noted. Higher service factors are available if requested. Inquiries for service factors above 1.15 should be submitted to Toshiba for review. In certain cases, a higher service factor will require an increase in frame size and/or a special design.

Shafts

For shafts with non-NEMA dimensions and/or non-Toshiba standard designs, see adders below.

List Adders for Special Shafts

- For NAFTA Qualified Motors: add \$2,500 + price of option(s) below
- For Non-NAFTA Qualified Motors: add \$3,000 + price of option(s) below

Option		4142 High Carbon Steel	Drill & Tap in Shaft End	Omit Keyway	
NEMA Frames	440/500	\$440	\$225	\$219	
	5000/5800	\$460	\$270	\$230	
	6800	\$546	\$302	\$273	
	N6300–N8800*	\$546	\$302	\$273	
IEC Frames	400/450*	\$546	\$302	\$273	
	500/560*	\$620	\$338	\$305	
Option		Threads	Tapers (1)	Up to 5" Additional Length	Forged Shaft
NEMA Frames	440/500	\$219	\$295	\$315	Contact Toshiba
	5000/5800	\$230	\$306	\$352	
	6800	\$273	\$438	\$395	
	N6300–N8800*	\$273	\$438	\$395	
IEC Frames	400/450*	\$273	\$438	\$395	
	500/560*	\$305	\$490	\$442	

* Non-NAFTA frames

(1) Customer must furnish taper gauge freight allowed to Toshiba factory.

Shaft Seals

See "Seals" modification section.

Shaft Grounding Provisions

Shaft grounding provisions help to eliminate shaft currents that can be introduced into the motor through upstream controllers (i.e. adjustable speed drives). These currents can potentially lead to premature failure of the bearings, commonly referred to as "fluting."

Option		Shaft Grounding (1)
NEMA Frames	440/500	\$3,080
	5000/5800	\$3,080
	6800	\$3,450
	N6300–N8800*	\$3,450
IEC Frames	400/450*	\$3,450
	500/560*	\$3,863

* Non-NAFTA frames

(1) For additional or alternative protection against shaft currents, see insulated bearings under "Bearings" section.

Special Notes:

- Insulating the bearings is recommended when the shaft voltage exceeds 300 mV.
- It is up to the user to determine when insulated bearings are required, especially with the use of an inverter-fed control. NEMA MG1 Part 31 suggests insulating the bearing(s) on all motors in 500 series frames and larger that are inverter-fed.
- Toshiba suggests insulating both bearings on all frame sizes 440 and larger when used with adjustable speed drives.
- When insulated bearings are used on direct coupled applications, the use of insulated coupling and/or shaft grounding brush is required to reduce the risk of driven equipment bearing damage.
- Ground brushes are not suitable for Division 2 environments.
- If bearing thermal devices are required with insulated bearings, a special version of the thermal device will be required. Please contact Toshiba for availability and pricing.

Software: Engineering Data

Toshiba provides a variety of software for stock and production motors. The following standard Toshiba data package is available at no additional charge: certified prints, nameplate data, performance data, connection diagram, instructional and maintenance manual, and spare bearings parts list.

Above data will be sent out in electronic format (pdf only). If hard copy of information is required, see the adder below. For software other than what is listed above or that is specified after time of order, see table below.

Software	Price
Toshiba Standard Software Package	Included
Speed Torque and Speed-Current Curve	Included
Thermal Damage (Safe Stall Time) Curve	Included
Performance Curve	\$160
Torsional Data (1)	\$320
Non-Standard Outline Drawing	Contact Toshiba
Certificate of Compliance	\$213
First Page of Customer Supplied Data Sheet (2)	\$213
Additional Pages of Customer Supplied Data Sheet (2)	\$32
Additional Copies of Data	\$43
Express Shipping	\$64
Other Special Requests	Contact Toshiba

* Non-NAFTA frames

(1) This adder will include shaft drawing, rotor assembly inertia, shaft torsional stiffness values.

(2) This adder pertains to typical Toshiba performance data only.

Soleplates/Slide Rails/Shims

Option		Soleplate (2 pcs)	Slide Rails	304 SS Shims
NEMA Frames	440/500	\$7,410	\$4,846	\$2,359
	5000/5800	\$8,059	\$5,380	\$2,429
	6800	\$8,786	\$6,025	\$2,671
	N6300–N8800*	\$8,786	\$6,025	\$2,671
IEC Frames	400/450*	\$8,786	\$6,025	\$2,671
	500/560*	\$9,610	\$6,748	\$2,939

* Non-NAFTA frames

Special Notes:

- Soleplates are for direct-coupled applications only.
- Slide Rails are for belted applications only.
- Toshiba's standard shim pack is 3 mm thick and is 304 stainless steel materials.

Space Heaters

Space heaters are strip-type heaters mounted inside the frame near the coils to prevent moisture condensation inside the motor during times the motor is not energized. Heater leads are brought out to the motor's auxiliary box and marked H1 and H2. Standard heater voltage is 120 V single-phase unless otherwise specified.

Option		Standard Space Heater	Low Temp Space Heater	Terminal Box Space Heater
NEMA Frames	440/500	\$1,425	\$2,850	\$1,425
	5000/5800	\$1,425	\$2,850	\$1,425
	6800	\$1,425	\$2,850	\$1,425
	N6300–N8800*	\$1,425	\$2,850	\$1,425
IEC Frames	400/450*	\$1,596	\$3,192	\$1,596
	500/560*	\$1,787	\$3,574	\$1,787

* Non-NAFTA frames

Surge Protection

The following options add protection from power surges coming from the power source. Surge capacitors reduce the steepness of a power surge front, and lightning arrestors limit the peak voltage of such a surge. Surge capacitors are not available if the motor is used with an adjustable speed drive.

Option		Surge Capacitor (1)	Lightning Arrestors (1)	Surge Protection Package (1)
NEMA Frames	440/500	\$4,750	\$16,700	\$20,925
	5000/5800	\$4,750	\$16,700	\$20,925
	6800	\$4,750	\$16,700	\$20,925
	N6300–N8800*	\$5,320	\$18,704	\$23,436
IEC Frames	400/450*	\$5,958	\$20,948	\$26,248
	500/560*	\$5,958	\$20,948	\$26,248

* Non-NAFTA frames

(1) Surge protection devices are not recommended for use with ASD control.

Special Notes:

- These adders include NEMA Type II main terminal box.

Testing

All Toshiba motors are tested in compliance with IEEE Std. 112 to meet NEMA MG1 requirements. Test reports and optional testing are available for each individual motor. Duplicates/ copies of standard routine test reports are available.

Please contact Toshiba for scheduling/coordination for witness testing requirements.

Option		Routine, Un-witnessed (Report Only)	Routine, Witnessed	Complete, Un-witnessed
NEMA Frames	440/500	Included	\$10,000	\$10,927
	5000/5800	Included	\$10,000	\$10,927
	6800	Included	\$10,000	\$10,927
	N6300–N8800*	Included	\$11,064	\$11,991
IEC Frames	400/450*	Included	\$12,765	\$13,829
	500/560*	Included	\$12,765	\$13,829
Option		Complete, Witnessed	Noise, Un-witnessed (1)	Noise Witnessed (1)
NEMA Frames	440/500	\$19,404	\$3,723	\$5,957
	5000/5800	\$19,404	\$3,723	\$5,957
	6800	\$19,404	\$3,723	\$5,957
	N6300–N8800*	\$20,468	\$4,255	\$6,393
IEC Frames	400/450*	\$22,340	\$4,680	\$6,819
	500/560*	\$22,340	\$4,680	\$6,819
Option		Vibration	Insulation Resistance	Polarization Index
NEMA Frames	440/500	\$2,659	\$1,595	\$1,914
	5000/5800	\$2,659	\$1,595	\$1,914
	6800	\$2,659	\$1,595	\$1,914
	N6300–N8800*	\$3,191	\$2,127	\$2,446
IEC Frames	400/450*	\$3,617	\$2,553	\$2,872
	500/560*	\$3,617	\$2,553	\$2,872

* Non-NAFTA frames

(1) Noise test consists of overall sound pressure values/readings only. For octave band measurements, please contact Toshiba.

Special Notes:

- Contact Toshiba for immersion testing on medium voltage motors.
- Every motor manufactured by Toshiba is given a routine test per NEMA MG1 and IEEE 112. Test results are compared to design standards and limits to ensure freedom from electrical or mechanical defects. A standard routine test consists of:
 - » No-Load Current
 - » No-Load Watts Inputs
 - » No-Load Speed
 - » Winding Resistance
 - » High Potential Test (dielectric test)
 - » Locked Rotor Current
 - » Locked Rotor Watts Input
 - » Visual Inspection
 - » Vibration Check – Overall vibration displacement measurements tested

per NEMA MG1-12

- Performance tests are performed In accordance with NEMA MG1-12 and IEEE 112 Method B (dynamometer) or Method “F1”. A complete performance test consists of:
 - » Temperature rise of stator windings, drive end bearing, and frame at rated load
 - » Winding resistance
 - » Input current at 125, 100, 75, 50, and 25 percent of rated no load HP
 - » Efficiency at 125, 100, 75, 50, and 25 percent of rated full load HP
 - » Power factor at 125, 100, 75, 50, and 25 percent of rated full load HP
 - » Speed (RPM) at 125, 100, 75, 50, and 25 percent of rated full load HP
 - » Torque at 125, 100, 75, 50, and 25 percent of rated full load HP
 - » Locked rotor torque and amps
 - » Breakdown torque
 - » No load amps and watt input

Thermal Protection

Toshiba provides a wide variety of protective devices which are available as follows.

Thermocouples

Winding (Stator) Thermocouples – A set of six winding thermocouples (two per phase) are provided and leads are terminated in a separate auxiliary conduit box. Pricing below does not include readout devices.

Option		Stator Thermocouples “Type J”	Stator Thermocouples “Type T”
NEMA Frames	440/500	\$2,625	\$2,625
	5000/5800	\$2,625	\$2,625
	6800	\$2,625	\$2,625
	N6300–N8800*	\$2,887	\$2,887
IEC Frames	400/450*	\$3,150	\$3,150
	500/560*	\$3,150	\$3,150
Option		Stator Thermocouples “Type E”	Stator Thermocouples “Type K”
NEMA Frames	440/500	\$2,625	\$2,625
	5000/5800	\$2,625	\$2,625
	6800	\$2,625	\$2,625
	N6300–N8800*	\$2,887	\$2,887
IEC Frames	400/450*	\$3,150	\$3,150
	500/560*	\$3,150	\$3,150

* Non-NAFTA frames

Bearing Thermocouple – Pricing includes one thermocouple per bearing (total of two) with leads terminated to its own cable head. Termination to an auxiliary terminal box is available at an additional cost. Pricing below does not include readout devices.

Option		Bearing Thermocouples “Type J”	Bearing Thermocouples “Type T”	Bearing Thermocouples “Type E”
NEMA Frames	440/500	\$3,938	\$3,938	\$3,938
	5000/5800	\$3,938	\$3,938	\$3,938
	6800	\$3,938	\$3,938	\$3,938
	N6300–N8800*	\$4,331	\$4,331	\$4,331
IEC Frames	400/450*	\$4,725	\$4,725	\$4,725
	500/560*	\$4,725	\$4,725	\$4,725
Option		Bearing Thermocouples “Type K”	Termination to Aux. Terminal Box	
NEMA Frames	440/500	\$3,938	\$940	
	5000/5800	\$3,938	\$940	
	6800	\$3,938	\$940	
	N6300–N8800*	\$4,331	\$1,069	
IEC Frames	400/450*	\$4,725	\$1,130	
	500/560*	\$4,725	\$1,130	

* Non-NAFTA frames

Special Notes:

- Steel core hex conduit is used when terminating to the auxiliary terminal box.

Resistance Temperature Detectors (RTDs)

Air Inlet RTD

Option		Air Inlet RTD
NEMA Frames	440/500	\$650
	5000/5800	\$650
	6800	\$650
	N6300-N8800*	\$715
IEC Frames	400/450*	\$780
	500/560*	\$780

* Non-NAFTA frames

Bearing RTDs – Pricing includes one RTD per bearing (total of two) and a three-lead, single element design with leads terminated to its own cable head. Termination to an auxiliary terminal box is available at an additional cost. Pricing below does not include readout devices.

Option		Bearing RTDs (Copper, 10 Ohm)	Bearing RTDs (Platinum, 100 Ohm)
NEMA Frames	440/500	\$3,590	\$3,590
	5000/5800	\$3,590 (1)	\$3,590 (1)
	6800	\$3,590	\$3,590
	N6300-N8800*	\$5,534	\$3,590
IEC Frames	400/450*	\$6,256	\$3,590
	500/560*	\$3,590	\$3,590

Option		Bearing RTDs (Nickel, 120 Ohm)	Termination to Aux. Terminal Box
NEMA Frames	440/500	\$3,590	\$940
	5000/5800	\$3,590 (1)	\$940
	6800	\$3,590	\$940
	N6300-N8800*	\$3,590	\$1,069
IEC Frames	400/450*	\$3,590	\$1,130
	500/560*	\$3,590	\$1,130

* Non-NAFTA frames

(1) Provisions for bearing RTDs are standard on Dura-Bull TX® design motors so adder is only \$1,450 (list price).

Special Notes:

- Contact Toshiba for pricing on other RTD types including dual element.

Winding (Stator) RTDs – A set of six winding RTDs (two per phase, three leads) are provided with leads terminated in an auxiliary conduit box. Pricing below does not include readout devices.

Option		Stator RTDs (Copper, 10 Ohm)	Stator RTDs (Platinum, 100 Ohm)	Stator RTDs (Nickel, 120 Ohm)
NEMA Frames	440/500	\$3,086	\$3,086	\$3,086
	5000/5800	\$3,086	\$3,086	\$3,086
	6800	\$3,086	\$3,086	\$3,086
	N6300-N8800*	\$3,086	\$3,086	\$3,086
IEC Frames	400/450*	\$3,086	\$3,086	\$3,086
	500/560*	\$3,086	\$3,086	\$3,086

* Non-NAFTA frames

Special Notes:

- Contact Toshiba for pricing on other RTD types.
- Platinum, 100 Ohm RTDs are included as standard on medium voltage totally enclosed fan cooled Dura-Bull TX® motors, 5012, 5812, 6800, N6000 through N8800, and IEC frames.

Torque

Toshiba offers standard torque and shall not be less than the values specified by NEMA MG1 Part 20.10.1. For other special torque requirements (i.e. starting/locked rotor, pull-up and/or breakdown torque), contact Toshiba. When available, please provide speed torque curve on the driven equipment and driven equipment inertia.

Vertical Jacking Provisions

Vertical jacking is used to assist in the proper alignment of the motor shaft with the driven equipment. Provisions for four jacking bolts (one per foot) are provided. Jacking bolts are to be supplied by the customer.

Option		Vertical Jacking Provisions
NEMA Frames	440/500	\$984
	5000/5800	\$1,203 (1)
	6800	\$1,203
	N6300-N8800*	\$1,323
IEC Frames	400/450*	\$1,443
	500/560*	\$1,443

* Non-NAFTA frames

(1) This adder comes standard on medium voltage totally enclosed fan cooled Dura-Bull TX® motors.

Vibration Detectors

These detectors are for single-direction monitoring (horizontal, vertical, or axial). For total coverage of all three directions, three detectors must be used. Monitoring direction must be specified at time of order.

Vibration Monitoring Devices

Robertshaw – consists of a self-contained detector and switch. A Robertshaw is an acceleration-sensitive instrument that measures peak vibratory shock at the point of measurement.

Accelerometer – used to sense bearing housing vibration on motors with anti-friction bearings.

Option		Provision for Robertshaw Sensor (1)		Robertshaw Sensor (2)	
		One End	Both Ends	One End	Both Ends
NEMA Frames	440/500	\$519	\$1,039	\$2,133	\$4,266
	5000/5800	\$519	\$1,039	\$2,133	\$4,266
	6800	\$519	\$1,039	\$2,133	\$4,266
	N6300-N8800*	\$570	\$1,142	\$2,346	\$4,692
IEC Frames	400/450*	\$622	\$1,246	\$2,559	\$5,119
	500/560*	\$622	\$1,246	\$2,559	\$5,119

Option		Provision for Metrix Accelerometer Sensor (3)		Metrix Accelerometer Sensor	
		One End	Both Ends	One End	Both Ends
NEMA Frames	440/500	\$519	\$1,039	\$2,266	\$4,520
	5000/5800	\$519	\$1,039	\$2,266	\$4,520
	6800	\$519	\$1,039	\$2,266	\$4,520
	N6300-N8800*	\$570	\$1,142	\$2,492	\$4,972
IEC Frames	400/450*	\$622	\$1,246	\$2,719	\$5,424
	500/560*	\$622	\$1,246	\$2,719	\$5,424

Option		Termination to Aux. T-Box
NEMA Frames	440/500	\$940
	5000/5800	\$940
	6800	\$940
	N6300-N8800*	\$1,069
IEC Frames	400/450*	\$1,130
	500/560*	\$1,130

* Non-NAFTA frames

(1) Provisions for mounting are based on a Robertshaw model number 366. For other sensor provisions, contact Toshiba for price and availability.

(2) Robertshaw sensors are not suitable for Division 2 applications. Please contact Toshiba for Division 2 sensors.

(3) Pricing is based on Toshiba providing a single 1" spot face surface with a ¼"-28 drilled and tapped hole, unless specified otherwise.

Vibration Probe – used to sense shaft vibration on motors with sleeve bearings. Contact Toshiba for other vibration probe options.

Option		Provisions for Bently-Nevada Vibration Probes		Bently-Nevada Vibration Probes (X,Y) Non-Contacting	
		One End	Both Ends	One End	Both Ends
NEMA Frames	440/500	N/A	N/A	N/A	N/A
	5000/5800	\$2,207	\$4,415	\$12,425	\$24,851
	6800	\$2,207	\$4,415	\$12,425	\$24,851
	N6300–N8800*	\$2,427	\$4,856	\$13,046	\$26,093
IEC Frames	400/450*	\$2,648	\$5,298	\$13,667	\$27,336
	500/560*	\$2,648	\$5,298	\$13,667	\$27,336

* Non-NAFTA frames

Voltage

Motors are designed to operate successfully at

- +/- 10% of rated voltage with rated frequency, or
- +/- 5% of rated frequency with rated voltage, or
- A combined variation in voltage and frequency of 10% of the rated values, provided the frequency variation does not exceed +/- 5% of rated frequency.

Please contact Toshiba for voltages that are not listed in this catalog.

Spare Parts

Low Voltage Motors

This spare parts listings is applicable to low voltage motors only. Please contact Toshiba for medium voltage motor spare parts.

C-Face Bracket

		Pole Speed	Discount Symbol	ODP EPACT & EQPIII	TEFC EPACT, EQPIII, & EQP Global SD	TEFC EQPIII-840, & EQP Global 840	TEFC EQPIII-841, & EQP Global 841	TEXP
Frame	140	All	MZPart	—	\$50 (2)	\$90 (2)	\$110 (2)	\$110 (2)
	180	All	MZPart	—	\$65 (2)	\$100 (2)	\$125 (2)	\$125 (2)
	210	All	MZPart	\$80 (1)	\$80 (2)	\$125 (2)	\$150 (2)	\$150 (2)
	250	All	MZPart	\$120 (1)	\$120 (2)	\$150 (2)	\$200 (2)	\$200 (2)
	280	2-Pole	MZPart	\$225	\$200	\$215	\$225	\$350
	280	4- to 8-Pole	MZPart	\$225	\$200	\$215	\$225	\$350
	320	2-Pole	MZPart	\$325	\$225	\$275	\$275	\$400
	320	4- to 8-Pole	MZPart	\$325	\$225	\$275	\$275	\$400
	360	2-Pole	MZPart	\$500	\$375	\$375	\$375	\$450
	360	4- to 8-Pole	MZPart	\$500	\$375	\$375	\$375	\$450
	400	2-Pole	MZPart	\$600	\$525	\$525	\$525	—
	400	4- to 8-Pole Short Shaft	MZPart	\$600	\$525	\$525	\$525	—
	400	4- to 8-Pole	MZPart	\$600	\$525	\$525	\$525	—
	440	2-Pole	MZPart	\$900	\$675	\$675	\$675	—
	440	4- to 8-Pole Short Shaft	MZPart	\$900	\$675	\$675	\$675	—
	440	4- to 8-Pole	MZPart	\$900	\$675	\$675	\$675	—
	447	2-Pole	MZPart	\$900	\$675	\$675	\$675	—
	447	4- to 8-Pole Short Shaft	MZPart	\$900	\$675	\$675	\$675	—
	447	4- to 8-Pole	MZPart	\$900	\$675	\$675	\$675	—
	449	4- to 8-Pole	MZPart	—	\$750	\$750	\$750	—
	N449	2-Pole	MZPart	—	\$750	\$750	\$750	—
	N449	4- to 8-Pole	MZPart	—	\$750 (3)	\$750 (3)	\$750 (3)	—
	500	All	MZPart	—	—	—	—	—
	5000	4- to 8-Pole Short Shaft	MZPart	—	\$750 (1)	\$750 (1)	\$750 (1)	—
	580	All	MZPart	—	—	—	—	—
	5800	4- to 8-Pole Short Shaft	MZPart	—	\$850 (1)	\$850 (1)	\$850 (1)	—

(1) The flange is not interchangeable on stock product. This refers to production motor replacement part only.

(2) Does not meet NEMA BA dimensions.

(3) Not available on roller bearing design.

Special Notes:

- To ensure that the proper C-face is selected for the need, the motor's model and serial number must be provided at time of order.
- All C-faces are not interchangeable with an existing product. Contact Toshiba with model and serial number of motor(s) to confirm flange interchangeability.
- Totally enclosed explosion proof C-faces must be assembled by a UL certified service shop. Contact Toshiba for flange availability for items not listed.

D-Flange Bracket

		Pole Speed	Discount Symbol	ODP EPACT & EQPIII	TEFC EPACT & EQPIII	TEFC EQPIII-840	TEFC EQPIII-841	TEXP
Frame	140	All	MZPart	—	\$80 (1)	\$80 (1)	\$80 (1)	—
	180	All	MZPart	—	\$125 (1)	\$125 (1)	\$125 (1)	—
	210	All	MZPart	—	\$150 (1)	\$150 (1)	\$150 (1)	—
	250	All	MZPart	—	\$225 (1)	\$225 (1)	\$225 (1)	—
	280	All	MZPart	—	\$250	\$250	\$250	—
	320	All	MZPart	—	\$400	\$400	\$400	—
	360	2-Pole	MZPart	\$600	\$600	\$600	\$600	—
	360	4- to 8-Pole	MZPart	—	\$600	\$600	\$600	—
	400	2-Pole	MZPart	\$725	\$725	\$725	\$725	—
	400	4- to 8-Pole	MZPart	—	\$725	\$725	\$725	—
	440	2-Pole	MZPart	\$800	\$800	\$800	\$800	—
	440	4- to 8-Pole	MZPart	\$800	\$800	\$800	\$800	—
	449	2-Pole	MZPart	\$1,000	—	—	—	—
	449	4- to 8-Pole	MZPart	—	—	—	—	—
	N449	2-Pole	MZPart	—	\$1,000	\$1,000	\$1,000	—
	N449	4- to 8-Pole	MZPart	—	\$1,000 (2)	\$1,000 (2)	\$1,000 (2)	—
	500	2-Pole	MZPart	\$1,250 (1)	—	—	—	—
	500	4- to 8-Pole	MZPart	—	—	—	—	—
	5000	4- to 8-Pole Short Shaft	MZPart	—	\$1,250 (1)	\$1,250 (1)	\$1,250 (1)	—
	5800	4- to 8-Pole Short Shaft	MZPart	—	\$1,400 (1)	\$1,400 (1)	—	—

1) The flange is not interchangeable on stock product. This refers to production motor replacement part only.

(2) Not available on roller bearing design.

Special Notes:

- To ensure that the proper D-flange is selected for the need, the motor's model and serial number must be provided at time of order.
- All D-flanges are not interchangeable with an existing product. Contact Toshiba with model and serial number of motor(s) to confirm flange interchangeability.
- Contact Toshiba for flange availability for items not listed.

Main Terminal Box

		Enclosure	Discount Symbol	Steel	Cast Iron
Frame	140	ODP & TEFC	MZPart	\$20	\$25
	180	ODP & TEFC	MZPart	\$20	\$40
	210	ODP & TEFC	MZPart	\$30	\$50
	250	ODP & TEFC	MZPart	\$35	\$60
	280	ODP & TEFC	MZPart	\$45	\$100
	320	ODP & TEFC	MZPart	\$60	\$100
	360	ODP & TEFC	MZPart	\$75	\$150
	400	ODP	MZPart	\$100	\$275
	400	TEFC	MZPart	\$75	\$150
	440	ODP & TEFC	MZPart	\$100	\$275
	500	ODP & TEFC	MZPart	\$150	\$300
	5000	TEFC	MZPart	\$200	\$400
	5800	TEFC	MZPart	—	\$500
	N580	ODP & TEFC	MZPart	\$200	\$500

Special Notes:

- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
- All parts are not interchangeable with an existing product. Contact Toshiba with model and serial number of motor(s) to confirm part interchangeability.
- Contact Toshiba for availability of parts not listed.

Slide Base

		Enclosure	Discount Symbol	Single Adjusting	Double Adjusting
Frame	140	ODP & TEFC	MZPart	\$45	—
	180	ODP & TEFC	MZPart	\$55	—
	210	ODP & TEFC	MZPart	\$85	—
	250	ODP & TEFC	MZPart	\$120	\$170
	280	ODP & TEFC	MZPart	\$135	\$190
	320	ODP & TEFC	MZPart	\$150	\$250
	360	ODP & TEFC	MZPart	\$200	\$275
	400	ODP & TEFC	MZPart	—	\$325
	440	ODP & TEFC	MZPart	—	\$375
	447/449	ODP & TEFC	MZPart	—	\$925
	500/5000	ODP & TEFC	MZPart	—	\$925
	5800	TEFC	MZPart	—	\$1,350

Special Notes:

- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
- All parts are not interchangeable with an existing product. Contact Toshiba with model and serial number of motor(s) to confirm part interchangeability.
- Contact Toshiba for availability of parts not listed.

Fan Cover Guard, Drip Cover, Blower

		Enclosure	Discount Symbol	Steel Fan Cover	Cast Iron Fan Cover	Steel Drip Cover	Blower
Frame	140	TEFC	MZPart	\$20	\$40	\$150	\$525
	180	TEFC	MZPart	\$25	\$50	\$200	\$550
	210	TEFC	MZPart	\$30	\$75	\$250	\$680
	250	TEFC	MZPart	\$50	\$100	\$300	\$750
	280	TEFC	MZPart	\$75	\$135	\$350	\$925
	320	TEFC	MZPart	\$100	\$200	\$400	\$1,075
	360	TEFC	MZPart	\$150	\$325	\$450	\$1,395
	400	TEFC	MZPart	\$275	\$450	—	\$1,650
	440	TEFC (2-Pole)	MZPart	\$450	\$1,100	—	\$1,725
	440	TEFC (4- to 8-Pole)	MZPart	\$350	\$800	—	\$1,725
	449	TEFC	MZPart	—	—	—	—
	N449	TEFC	MZPart	\$1,425	\$1,425	—	\$1,800
	500	TEFC (2-Pole)	MZPart	\$1,500	—	—	\$1,800
	500	TEFC (4- to 8-Pole)	MZPart	\$600	\$2,250	—	\$1,800
	5000	TEFC ((4- to 8-Pole)	MZPart	—	—	—	\$2,500
	5800	TEFC (4- to 8-Pole)	MZPart	—	—	—	\$3,000
	N587	TEFC (2-Pole)	MZPart	\$1,750	—	—	—
	N587	TEFC (4- to 8-Pole)	MZPart	\$1,250	\$3,100	—	—

Special Notes:

- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
- All parts are not interchangeable with an existing product. Contact Toshiba with model and serial number of motor(s) to confirm part interchangeability.
- Contact Toshiba for availability of parts not listed.

Cast Iron Main Terminal Box

Series: CT		Pole Speed	Discount Symbol	ODP & TEFC
Frame	140	ALL	MZPart	\$20
	180	ALL	MZPart	\$30
	210	ALL	MZPart	\$40
	250	ALL	MZPart	\$50
	280	ALL	MZPart	\$70
	320	2-Pole	MZPart	\$85
	320	4- to 6-Pole	MZPart	\$85
	360	2-Pole	MZPart	\$110
	360	4- to 6-Pole	MZPart	\$110

Special Notes:

- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
- Contact Toshiba for availability of parts not listed.

Cast Iron Cover Guard

		Pole Speed	Discount Symbol	ODP & TEFC
Frame	140	TEFC	MZPart	\$35
	180	TEFC	MZPart	\$45
	210	TEFC	MZPart	\$70
	250	TEFC	MZPart	\$90
	280	TEFC	MZPart	\$125
	320	2-Pole	MZPart	\$175
	320	4- to 6-Pole	MZPart	\$175
	360	2-Pole	MZPart	\$250
	360	4- to 6-Pole	MZPart	\$250

- Special Notes:**
- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
 - Contact Toshiba for availability of parts not listed.

C-Face Bracket

		Pole Speed	Discount Symbol	ODP & TEFC	TEFC
Frame	140	ALL	MZPart	—	\$45
	180	ALL	MZPart	—	\$60
	210	ALL	MZPart	\$60	\$75
	250	ALL	MZPart	\$90	\$110
	280	2-Pole	MZPart	\$150	\$180
	280	4- to 6-Pole	MZPart	\$150	\$180
	320	2-Pole	MZPart	\$175	\$210
	320	4- to 6-Pole	MZPart	\$175	\$210
	360	2-Pole	MZPart	\$225	\$350
	360	4- to 6-Pole	MZPart	\$225	\$350
	400	2-Pole	MZPart	—	\$640
	400 through 447	4- to 6-Pole	MZPart	—	\$720

- Special Notes:**
- To ensure the proper product is selected for the customer's need, the motor's model and serial number must be provided at time of order.
 - Contact Toshiba for availability of parts not listed.

Model Number Index

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0014DPSA31A-P	\$450	6	0016FNWC32H	\$3,839	108	0022XDSB42A-P	\$1,024	66	0024XDSC44A-P	\$1,078	68
0014DPSC31A-P	\$450	6	0016FNWC34A	\$3,824	109	0022XDSB44A-P	\$1,126	68	0024XDSC47A-P	\$980	66
0014FNFB32A	\$1,548	86	0016FNWC34H	\$3,824	109	0022XDSB47A-P	\$1,024	66	0024XPEA41A	\$1,811	90
0014FNWA32A	\$3,253	108	0016FTCA21A-P	\$481	74	0022XDSC41A-P	\$915	62	0024XPEC41A	\$1,811	90
0014FNWA32H	\$3,253	108	0016FTCC21A-P	\$481	74	0022XDSC42A-P	\$1,024	66	0024XSSB41A-P	\$675	50
0014FNWA34A	\$3,241	109	0016FTSA24A-P	\$568	20	0022XDSC44A-P	\$1,126	68	0024XSSB42A-P	\$784	56
0014FNWA34H	\$3,241	109	0016FTSC24A-P	\$568	20	0022XDSC47A-P	\$1,024	66	0024XSSB44A-P	\$862	58
0014FNWC32A	\$3,253	108	0016SDSC41A-P	\$576	36	0022XPEA41A	\$1,821	90	0024XSSB47A-P	\$784	56
0014FNWC32H	\$3,253	108	0016SDSC42A-P	\$716	43	0022XPEC41A	\$1,821	90	0024XSSC41A-P	\$675	50
0014FNWC34A	\$3,241	109	0016SDSC44A-P	\$788	46	0022XSSB41A-P	\$695	50	0024XSSC42A-P	\$784	56
0014FNWC34H	\$3,241	109	0016SDSC47A-P	\$716	43	0022XSSB42A-P	\$804	56	0024XSSC44A-P	\$862	58
0014FTCA21A-P	\$391	74	0016SDSR41A-P	\$576	36	0022XSSB44A-P	\$884	58	0024XSSC47A-P	\$784	56
0014FTCC21A-P	\$391	74	0016SDSR42A-P	\$716	43	0022XSSB47A-P	\$804	56	0026DPSA31A-P	\$692	6
0014FTSA24A-P	\$471	20	0016SDSR44A-P	\$788	46	0022XSSC41A-P	\$695	50	0026DPSC31A-P	\$692	6
0014FTSC24A-P	\$471	20	0016SDSR47A-P	\$716	43	0022XSSC42A-P	\$804	56	0026FTCA21A-P	\$650	74
0014SDSC41A-P	\$464	36	0016XDSB41A-P	\$885	61	0022XSSC44A-P	\$884	58	0026FTCC21A-P	\$650	74
0014SDSC42A-P	\$598	43	0016XDSB42A-P	\$994	65	0022XSSC47A-P	\$804	56	0026FTSA24A-P	\$718	20
0014SDSC44A-P	\$658	46	0016XDSB44A-P	\$1,093	68	0024DPSA31A-P	\$537	6	0026FTSC24A-P	\$718	20
0014SDSC47A-P	\$598	43	0016XDSB47A-P	\$994	65	0024DPSC31A-P	\$537	6	0026SDSC41A-P	\$713	37
0014SDSR41A-P	\$464	36	0016XDSC41A-P	\$885	61	0024FCWA34A	\$4,193	109	0026SDSC42A-P	\$882	44
0014SDSR42A-P	\$598	43	0016XDSC42A-P	\$994	65	0024FCWA34H	\$4,193	109	0026SDSC44A-P	\$970	46
0014SDSR44A-P	\$658	46	0016XDSC44A-P	\$1,093	68	0024FCWA42A	\$5,046	109	0026SDSC47A-P	\$882	44
0014SDSR47A-P	\$598	43	0016XDSC47A-P	\$994	65	0024FCWA42H	\$5,046	109	0026SDSR41A-P	\$713	37
0014XDSB41A-P	\$714	61	0016XPEA41A	\$1,835	90	0024FCWC34A	\$4,193	110	0026SDSR42A-P	\$882	44
0014XDSB42A-P	\$823	65	0016XPEC41A	\$1,835	90	0024FCWC34H	\$4,193	110	0026SDSR44A-P	\$970	46
0014XDSB44A-P	\$905	68	0016XSSB41A-P	\$690	49	0024FCWC42A	\$5,046	109	0026SDSR47A-P	\$882	44
0014XDSB47A-P	\$823	65	0016XSSB42A-P	\$799	55	0024FCWC42H	\$5,046	109	0026XDSB41A-P	\$1,117	62
0014XDSC41A-P	\$714	61	0016XSSB44A-P	\$879	58	0024FNFB32A	\$1,676	86	0026XDSB42A-P	\$1,248	66
0014XDSC42A-P	\$823	65	0016XSSB47A-P	\$799	55	0024FNWA34K	\$4,193	109	0026XDSB44A-P	\$1,373	68
0014XDSC44A-P	\$905	68	0016XSSC41A-P	\$690	49	0024FNWC34K	\$4,193	110	0026XDSB47A-P	\$1,248	66
0014XDSC47A-P	\$823	65	0016XSSC42A-P	\$799	55	0024FTCA21A-P	\$456	74	0026XDSC41A-P	\$1,117	62
0014XPEA41A	\$1,608	90	0016XSSC44A-P	\$879	58	0024FTCC21A-P	\$456	74	0026XDSC42A-P	\$1,248	66
0014XPEC41A	\$1,608	90	0016XSSC47A-P	\$799	55	0024FTSA24A-P	\$548	20	0026XDSC44A-P	\$1,373	68
0014XSSB41A-P	\$552	49	0018FCSA21A	\$1,551	17	0024FTSC24A-P	\$548	20	0026XDSC47A-P	\$1,248	66
0014XSSB42A-P	\$661	55	0018FCSC21A	\$1,551	17	0024SDSC41A-P	\$554	37	0026XPEA41A	\$2,169	90
0014XSSB44A-P	\$727	58	0022DPSA31A-P	\$594	6	0024SDSC42A-P	\$693	44	0026XPEC41A	\$2,169	90
0014XSSB47A-P	\$661	55	0022DPSC31A-P	\$594	6	0024SDSC44A-P	\$762	46	0026XSSB41A-P	\$820	50
0014XSSC41A-P	\$552	49	0022FTSA24A-P	\$580	20	0024SDSC47A-P	\$693	44	0026XSSB42A-P	\$951	56
0014XSSC42A-P	\$661	55	0022FTSC24A-P	\$580	20	0024SDSR41A-P	\$554	37	0026XSSB44A-P	\$1,046	58
0014XSSC44A-P	\$727	58	0022SDSC41A-P	\$612	37	0024SDSR42A-P	\$693	44	0026XSSB47A-P	\$951	56
0014XSSC47A-P	\$661	55	0022SDSC42A-P	\$754	44	0024SDSR44A-P	\$762	46	0026XSSC41A-P	\$820	50
0016DPSA31A-P	\$559	6	0022SDSC44A-P	\$829	46	0024SDSR47A-P	\$693	44	0026XSSC42A-P	\$951	56
0016DPSC31A-P	\$559	6	0022SDSC47A-P	\$754	44	0024XDSB41A-P	\$871	62	0026XSSC44A-P	\$1,046	58
0016FNWA32A	\$3,839	108	0022SDSR41A-P	\$612	37	0024XDSB42A-P	\$980	66	0026XSSC47A-P	\$951	56
0016FNWA32H	\$3,839	108	0022SDSR42A-P	\$754	44	0024XDSB44A-P	\$1,078	68	0028FCSA21A	\$2,188	17
0016FNWA34A	\$3,824	109	0022SDSR44A-P	\$829	46	0024XDSB47A-P	\$980	66	0028FCSC21A	\$2,188	17
0016FNWA34H	\$3,824	109	0022SDSR47A-P	\$754	44	0024XDSC41A-P	\$871	62	0032DPSA31A-P	\$628	6
0016FNWC32A	\$3,839	108	0022XDSB41A-P	\$915	62	0024XDSC42A-P	\$980	66	0032DPSC31A-P	\$628	6

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0032FTSA24A-P	\$666	20	0034SDSR41A-P	\$636	37	0036XSSC41A-P	\$1,002	50	0054FTVB1PX-A	\$3,069	112
0032FTSC24A-P	\$666	20	0034SDSR42A-P	\$801	44	0036XSSC42A-P	\$1,177	56	0054FTVB3PW-A	\$3,862	114
0032FTVB1PX-A	\$2,426	112	0034SDSR44A-P	\$881	46	0036XSSC44A-P	\$1,295	59	0054FTVB3PX-A	\$4,093	115
0032FTVB3PW-A	\$3,051	114	0034SDSR47A-P	\$801	44	0036XSSC47A-P	\$1,177	56	0054SDSC41A-P	\$726	37
0032FTVB3PX-A	\$3,235	115	0034XDSB41A-P	\$1,054	62	0038FCSA21A	\$2,731	17	0054SDSC42A-P	\$896	44
0032SDSC41A-P	\$647	37	0034XDSB42A-P	\$1,185	66	0038FCSC21A	\$2,731	17	0054SDSC44A-P	\$986	47
0032SDSC42A-P	\$813	44	0034XDSB44A-P	\$1,304	69	0052DPSA31A-P	\$778	6	0054SDSC47A-P	\$896	44
0032SDSC44A-P	\$894	46	0034XDSB47A-P	\$1,185	66	0052DPSC31A-P	\$778	6	0054SDSR41A-P	\$726	37
0032SDSC47A-P	\$813	44	0034XDSC41A-P	\$1,054	62	0052FTSA24A-P	\$823	20	0054SDSR42A-P	\$896	44
0032SDSR41A-P	\$647	37	0034XDSC42A-P	\$1,185	66	0052FTSC24A-P	\$823	20	0054SDSR44A-P	\$986	47
0032SDSR42A-P	\$813	44	0034XDSC44A-P	\$1,304	69	0052FTVB1PX-A	\$3,132	112	0054SDSR47A-P	\$896	44
0032SDSR44A-P	\$894	46	0034XDSC47A-P	\$1,185	66	0052FTVB3PW-A	\$3,941	114	0054XDSB41A-P	\$1,129	62
0032SDSR47A-P	\$813	44	0034XPEA41A	\$2,064	91	0052FTVB3PX-A	\$4,176	115	0054XDSB42A-P	\$1,260	66
0032XDSB41A-P	\$1,123	62	0034XPEC41A	\$2,064	91	0052SDSC41A-P	\$802	37	0054XDSB44A-P	\$1,386	69
0032XDSB42A-P	\$1,254	66	0034XSSB41A-P	\$711	50	0052SDSC42A-P	\$976	44	0054XDSB47A-P	\$1,260	66
0032XDSB44A-P	\$1,379	68	0034XSSB42A-P	\$842	56	0052SDSC44A-P	\$1,074	47	0054XDSC41A-P	\$1,129	62
0032XDSB47A-P	\$1,254	66	0034XSSB44A-P	\$926	58	0052SDSC47A-P	\$976	44	0054XDSC42A-P	\$1,260	66
0032XDSC41A-P	\$1,123	62	0034XSSB47A-P	\$842	56	0052SDSR41A-P	\$802	37	0054XDSC44A-P	\$1,386	69
0032XDSC42A-P	\$1,254	66	0034XSSC41A-P	\$711	50	0052SDSR42A-P	\$976	44	0054XDSC47A-P	\$1,260	66
0032XDSC44A-P	\$1,379	69	0034XSSC42A-P	\$842	56	0052SDSR44A-P	\$1,074	47	0054XPEA41A	\$2,268	91
0032XDSC47A-P	\$1,254	66	0034XSSC44A-P	\$926	59	0052SDSR47A-P	\$976	44	0054XPEC41A	\$2,268	91
0032XPEA41A	\$2,078	90	0034XSSC47A-P	\$842	56	0052XDSB41A-P	\$1,273	62	0054XSSB41A-P	\$830	50
0032XPEC41A	\$2,078	91	0036DPKB11A	\$3,191	78	0052XDSB42A-P	\$1,404	66	0054XSSB42A-P	\$961	56
0032XSSB41A-P	\$757	50	0036DPSA31A-P	\$879	6	0052XDSB44A-P	\$1,544	69	0054XSSB44A-P	\$1,057	59
0032XSSB42A-P	\$888	56	0036DPSC31A-P	\$879	6	0052XDSB47A-P	\$1,404	66	0054XSSB47A-P	\$961	56
0032XSSB44A-P	\$977	58	0036FTCA21A-P	\$849	74	0052XDSC41A-P	\$1,273	62	0054XSSC41A-P	\$830	50
0032XSSB47A-P	\$888	56	0036FTCC21A-P	\$849	74	0052XDSC42A-P	\$1,404	66	0054XSSC42A-P	\$961	56
0032XSSC41A-P	\$757	50	0036FTSA24A-P	\$916	20	0052XDSC44A-P	\$1,544	69	0054XSSC44A-P	\$1,057	59
0032XSSC42A-P	\$888	56	0036FTSC24A-P	\$916	20	0052XDSC47A-P	\$1,404	66	0054XSSC47A-P	\$961	56
0032XSSC44A-P	\$977	58	0036SDSC41A-P	\$906	37	0052XPEA41A	\$2,409	91	0056DPKB11A	\$3,329	78
0032XSSC47A-P	\$888	56	0036SDSC42A-P	\$1,129	44	0052XPEC41A	\$2,409	91	0056DPKB41A-Y	\$4,160	79
0034DPSA31A-P	\$617	6	0036SDSC44A-P	\$1,242	47	0052XSSB41A-P	\$937	50	0056DPKB41A-Z	\$4,783	80
0034DPSC31A-P	\$617	6	0036SDSC47A-P	\$1,129	44	0052XSSB42A-P	\$1,068	56	0056DPPD11A-P	\$1,068	72
0034FCWA34A	\$5,315	110	0036SDSR41A-P	\$906	37	0052XSSB44A-P	\$1,175	59	0056DPSA31A-P	\$1,292	6
0034FCWA42A	\$6,393	109	0036SDSR42A-P	\$1,129	44	0052XSSB47A-P	\$1,068	56	0056DPSC31A-P	\$1,292	6
0034FCWC34A	\$5,315	110	0036SDSR44A-P	\$1,242	47	0052XSSC41A-P	\$937	50	0056FTCA21A-P	\$1,090	75
0034FCWC42A	\$6,393	109	0036SDSR47A-P	\$1,129	44	0052XSSC42A-P	\$1,068	56	0056FTCC21A-P	\$1,090	75
0034FNFB32A	\$2,106	86	0036XDSB41A-P	\$1,364	62	0052XSSC44A-P	\$1,175	59	0056FTSA24A-P	\$1,307	20
0034FNWA34A	\$5,315	110	0036XDSB42A-P	\$1,539	66	0052XSSC47A-P	\$1,068	56	0056FTSC24A-P	\$1,307	20
0034FNWC34A	\$5,315	110	0036XDSB44A-P	\$1,693	69	0054DPKB11A	\$3,005	78	0056SDSC41A-P	\$1,332	37
0034FTCA21A-P	\$533	74	0036XDSB47A-P	\$1,539	66	0054DPSA31A-P	\$704	6	0056SDSC42A-P	\$1,578	44
0034FTCC21A-P	\$533	74	0036XDSC41A-P	\$1,364	62	0054DPSC31A-P	\$704	6	0056SDSC44A-P	\$1,736	47
0034FTSA24A-P	\$634	20	0036XDSC42A-P	\$1,539	66	0054FCWA34A	\$5,708	110	0056SDSC47A-P	\$1,578	44
0034FTSC24A-P	\$634	20	0036XDSC44A-P	\$1,693	69	0054FCWA42A	\$6,864	109	0056SDSR41A-P	\$1,332	37
0034FTVB1PX-A	\$2,377	112	0036XDSC47A-P	\$1,539	66	0054FCWC34A	\$5,708	110	0056SDSR42A-P	\$1,578	44
0034FTVB3PW-A	\$2,989	114	0036XPEA41A	\$2,887	91	0054FCWC42A	\$6,864	109	0056SDSR44A-P	\$1,736	47
0034FTVB3PX-A	\$3,170	115	0036XPEC41A	\$2,887	91	0054FNFB32A	\$2,239	86	0056SDSR47A-P	\$1,578	44
0034SDSC41A-P	\$636	37	0036XSSB41A-P	\$1,002	50	0054FTCA21A-P	\$597	74	0056XDSB41A-P	\$1,964	62
0034SDSC42A-P	\$801	44	0036XSSB42A-P	\$1,177	56	0054FTCC21A-P	\$597	75	0056XDSB42A-P	\$2,139	66
0034SDSC44A-P	\$881	47	0036XSSB44A-P	\$1,295	59	0054FTSA24A-P	\$737	20	0056XDSB44A-P	\$2,353	69
0034SDSC47A-P	\$801	44	0036XSSB47A-P	\$1,177	56	0054FTSC24A-P	\$737	20	0056XDSB47A-P	\$2,139	66

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0056XDSC41A-P	\$1,964	62	0102XSSC47A-P	\$1,598	57	0106SDSC41A-P	\$2,160	37	0152XDSC42A-P	\$2,741	67
0056XDSC42A-P	\$2,139	66	0104DPKB11A	\$3,329	78	0106SDSC42A-P	\$2,423	45	0152XDSC44A-P	\$3,015	69
0056XDSC44A-P	\$2,353	69	0104DPSA31A-P	\$1,226	7	0106SDSC44A-P	\$2,665	47	0152XDSC47A-P	\$2,741	67
0056XDSC47A-P	\$2,139	66	0104DPSC31A-P	\$1,226	7	0106SDSC47A-P	\$2,423	45	0152XPEA41A	\$4,413	91
0056XPEA41A	\$3,560	91	0104FCFB32A	\$3,132	86	0106SDSR41A-P	\$2,160	37	0152XPEC41A	\$4,413	91
0056XPEC41A	\$3,560	91	0104FCWA42A	\$10,723	109	0106SDSR42A-P	\$2,423	45	0152XSSB41A-P	\$1,950	50
0056XSSB41A-P	\$1,411	50	0104FCWC42A	\$10,723	109	0106SDSR44A-P	\$2,665	47	0152XSSB42A-P	\$2,213	57
0056XSSB42A-P	\$1,586	56	0104FNFB32A	\$3,581	86	0106SDSR47A-P	\$2,423	45	0152XSSB44A-P	\$2,434	59
0056XSSB44A-P	\$1,745	59	0104FTCA21A-P	\$988	75	0106XDSB41A-P	\$3,118	62	0152XSSB47A-P	\$2,213	57
0056XSSB47A-P	\$1,586	56	0104FTCC21A-P	\$988	75	0106XDSB42A-P	\$3,381	67	0152XSSC41A-P	\$1,950	50
0056XSSC41A-P	\$1,411	50	0104FTSA24A-P	\$1,275	21	0106XDSB44A-P	\$3,719	69	0152XSSC42A-P	\$2,213	57
0056XSSC42A-P	\$1,586	56	0104FTSC24A-P	\$1,275	21	0106XDSB47A-P	\$3,381	67	0152XSSC44A-P	\$2,434	59
0056XSSC44A-P	\$1,745	59	0104FTVB1PX-A	\$3,614	112	0106XDSC41A-P	\$3,118	62	0152XSSC47A-P	\$2,213	57
0056XSSC47A-P	\$1,586	56	0104FTVB3PW-A	\$4,551	114	0106XDSC42A-P	\$3,381	67	0154DPKB11A	\$3,597	78
0058DPKB11A	\$3,597	78	0104FTVB3PX-A	\$4,818	115	0106XDSC44A-P	\$3,719	69	0154DPSA31A-P	\$1,621	7
0058DPKB21A-Y	\$4,498	79	0104SDSC41A-P	\$1,264	37	0106XDSC47A-P	\$3,381	67	0154DPSC31A-P	\$1,621	7
0058DPKB21A-Z	\$5,171	80	0104SDSC42A-P	\$1,439	45	0106XPEA41A	\$5,181	91	0154FCFB32A	\$3,772	86
0058FCSA21A	\$3,630	17	0104SDSC44A-P	\$1,583	47	0106XPEC41A	\$5,181	91	0154FNFB32A	\$4,288	86
0058FCSC21A	\$3,630	17	0104SDSC47A-P	\$1,439	45	0106XSSB41A-P	\$2,478	50	0154FTCA21A-P	\$1,424	75
0102DPSA31A-P	\$1,209	7	0104SDSR41A-P	\$1,264	37	0106XSSB42A-P	\$2,741	57	0154FTCC21A-P	\$1,424	75
0102DPSC31A-P	\$1,209	7	0104SDSR42A-P	\$1,439	45	0106XSSB44A-P	\$3,015	59	0154FTSA24A-P	\$1,738	21
0102FTSA24A-P	\$1,254	21	0104SDSR44A-P	\$1,583	47	0106XSSB47A-P	\$2,741	57	0154FTSC24A-P	\$1,738	21
0102FTSC24A-P	\$1,254	21	0104SDSR47A-P	\$1,439	45	0106XSSC41A-P	\$2,478	50	0154FTVB1PX-A	\$4,773	112
0102FTVB1PX-A	\$3,687	112	0104XDSB41A-P	\$1,845	62	0106XSSC42A-P	\$2,741	57	0154FTVB3PW-A	\$5,965	114
0102FTVB3PW-A	\$4,641	114	0104XDSB42A-P	\$2,020	67	0106XSSC44A-P	\$3,015	59	0154FTVB3PX-A	\$6,204	115
0102FTVB3PX-A	\$4,916	115	0104XDSB44A-P	\$2,222	69	0106XSSC47A-P	\$2,741	57	0154SDSC41A-P	\$1,706	37
0102SDSC41A-P	\$1,246	37	0104XDSB47A-P	\$2,020	67	0108DPKB11A	\$5,346	78	0154SDSC42A-P	\$1,969	45
0102SDSC42A-P	\$1,421	45	0104XDSC41A-P	\$1,845	62	0108DPKB21A-Y	\$6,832	79	0154SDSC44A-P	\$2,166	47
0102SDSC44A-P	\$1,563	47	0104XDSC42A-P	\$2,020	67	0108DPKB21A-Z	\$7,684	80	0154SDSC47A-P	\$1,969	45
0102SDSC47A-P	\$1,421	45	0104XDSC44A-P	\$2,222	69	0108FCSA21A	\$5,349	18	0154SDSR41A-P	\$1,706	37
0102SDSR41A-P	\$1,246	37	0104XDSC47A-P	\$2,020	67	0108FCSC21A	\$5,349	18	0154SDSR42A-P	\$1,969	45
0102SDSR42A-P	\$1,421	45	0104XPEA41A	\$3,311	91	0152DPSA31A-P	\$1,663	7	0154SDSR44A-P	\$2,166	47
0102SDSR44A-P	\$1,563	47	0104XPEC41A	\$3,311	91	0152DPSC31A-P	\$1,663	7	0154SDSR47A-P	\$1,969	45
0102SDSR47A-P	\$1,421	45	0104XSSB41A-P	\$1,418	50	0152FTSA24A-P	\$1,738	21	0154XDSB41A-P	\$2,434	62
0102XDSB41A-P	\$1,801	62	0104XSSB42A-P	\$1,593	57	0152FTSC24A-P	\$1,738	21	0154XDSB42A-P	\$2,697	67
0102XDSB42A-P	\$1,976	67	0104XSSB44A-P	\$1,752	59	0152FTVB1PX-A	\$4,604	112	0154XDSB44A-P	\$2,967	69
0102XDSB44A-P	\$2,174	69	0104XSSB47A-P	\$1,593	57	0152FTVB3PW-A	\$5,755	114	0154XDSB47A-P	\$2,697	67
0102XDSB47A-P	\$1,976	67	0104XSSC41A-P	\$1,418	50	0152FTVB3PX-A	\$5,986	115	0154XDSC41A-P	\$2,434	62
0102XDSC41A-P	\$1,801	62	0104XSSC42A-P	\$1,593	57	0152SDSC41A-P	\$1,714	37	0154XDSC42A-P	\$2,697	67
0102XDSC42A-P	\$1,976	67	0104XSSC44A-P	\$1,752	59	0152SDSC42A-P	\$1,977	45	0154XDSC44A-P	\$2,967	69
0102XDSC44A-P	\$2,174	69	0104XSSC47A-P	\$1,593	57	0152SDSC44A-P	\$2,175	47	0154XDSC47A-P	\$2,697	67
0102XDSC47A-P	\$1,976	67	0106DPKB11A	\$4,244	78	0152SDSC47A-P	\$1,977	45	0154XPEA41A	\$4,242	91
0102XPEA41A	\$3,224	91	0106DPKB41A-Y	\$5,306	79	0152SDSR41A-P	\$1,714	37	0154XPEC41A	\$4,242	91
0102XPEC41A	\$3,224	91	0106DPKB41A-Z	\$6,102	80	0152SDSR42A-P	\$1,977	45	0154XSSB41A-P	\$1,870	50
0102XSSB41A-P	\$1,423	50	0106DPPD11A-P	\$1,665	72	0152SDSR44A-P	\$2,175	47	0154XSSB42A-P	\$2,133	57
0102XSSB42A-P	\$1,598	57	0106DPSA31A-P	\$2,052	7	0152SDSR47A-P	\$1,977	45	0154XSSB44A-P	\$2,346	59
0102XSSB44A-P	\$1,758	59	0106DPSC31A-P	\$2,052	7	0152XDSB41A-P	\$2,478	62	0154XSSB47A-P	\$2,133	57
0102XSSB47A-P	\$1,598	57	0106FTCA21A-P	\$1,859	75	0152XDSB42A-P	\$2,741	67	0154XSSC41A-P	\$1,870	50
0102XSSC41A-P	\$1,423	50	0106FTCC21A-P	\$1,859	75	0152XDSB44A-P	\$3,015	69	0154XSSC42A-P	\$2,133	57
0102XSSC42A-P	\$1,598	57	0106FTSA24A-P	\$2,226	21	0152XDSB47A-P	\$2,741	67	0154XSSC44A-P	\$2,346	59
0102XSSC44A-P	\$1,758	59	0106FTSC24A-P	\$2,226	21	0152XDSC41A-P	\$2,478	62	0154XSSC47A-P	\$2,133	57

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0156BCFB32A	\$7,807	86	0202SDSR42A-P	\$2,483	45	0204XSSB42A-P	\$2,592	57	0252SDSC41B-P	\$2,725	38
0156DPKB11A	\$5,346	78	0202SDSR44A-P	\$2,731	47	0204XSSB44A-P	\$2,851	59	0252SDSC42B-P	\$3,163	45
0156DPKB41A-Y	\$6,832	79	0202SDSR47A-P	\$2,483	45	0204XSSB47A-P	\$2,592	57	0252SDSC44B-P	\$3,321	47
0156DPKB41A-Z	\$7,857	80	0202XDSB41A-P	\$3,065	62	0204XSSC41A-P	\$2,329	50	0252SDSR41B-P	\$2,725	38
0156DPPD11A-P	\$2,321	72	0202XDSB42A-P	\$3,328	67	0204XSSC42A-P	\$2,592	57	0252SDSR42B-P	\$3,163	45
0156DPSA31A-P	\$2,878	7	0202XDSB44A-P	\$3,661	69	0204XSSC44A-P	\$2,851	59	0252SDSR44B-P	\$3,321	47
0156DPSC31A-P	\$2,878	7	0202XDSB47A-P	\$3,328	67	0204XSSC47A-P	\$2,592	57	0252XDSB41B-P	\$3,779	63
0156FTCA21A-P	\$2,546	75	0202XDSC41A-P	\$3,065	62	0206BCFB32A	\$10,871	86	0252XDSB42B-P	\$4,217	67
0156FTCC21A-P	\$2,546	75	0202XDSC42A-P	\$3,328	67	0206DPKB11A	\$6,763	78	0252XDSB44B-P	\$4,639	69
0156FTSA24A-P	\$3,005	21	0202XDSC44A-P	\$3,661	69	0206DPPD11A-P	\$2,771	72	0252XDSC41B-P	\$3,779	63
0156FTSC24A-P	\$3,005	21	0202XDSC47A-P	\$3,328	67	0206DPSA31A-P	\$3,371	7	0252XDSC42B-P	\$4,217	67
0156FTVB1PX-A	\$6,385	112	0202XPEA41A	\$5,289	91	0206DPSC31A-P	\$3,371	7	0252XDSC44B-P	\$4,639	69
0156FTVB3PW-A	\$7,673	114	0202XPEC41A	\$5,289	91	0206FTCA21A-P	\$3,146	75	0252XPEA41B	\$6,886	92
0156FTVB3PX-A	\$7,981	115	0202XSSB41A-P	\$2,357	50	0206FTCC21A-P	\$3,146	75	0252XPEC41B	\$6,886	92
0156SDSC41A-P	\$3,029	37	0202XSSB42A-P	\$2,620	57	0206FTSA24A-P	\$3,575	21	0252XSSB41B-P	\$2,904	50
0156SDSC42A-P	\$3,467	45	0202XSSB44A-P	\$2,882	59	0206FTSC24A-P	\$3,575	21	0252XSSB42B-P	\$3,342	57
0156SDSC44A-P	\$3,640	47	0202XSSB47A-P	\$2,620	57	0206FTVB1PX-A	\$7,760	112	0252XSSB44B-P	\$3,676	59
0156SDSR41A-P	\$3,029	37	0202XSSC41A-P	\$2,357	50	0206FTVB3PW-A	\$9,327	114	0252XSSC41B-P	\$2,904	51
0156SDSR42A-P	\$3,467	45	0202XSSC42A-P	\$2,620	57	0206FTVB3PX-A	\$9,699	115	0252XSSC42B-P	\$3,342	57
0156SDSR44A-P	\$3,640	47	0202XSSC44A-P	\$2,882	59	0206SDSC41A-P	\$3,548	38	0252XSSC44B-P	\$3,676	59
0156XDSB41A-P	\$4,139	62	0202XSSC47A-P	\$2,620	57	0206SDSC42A-P	\$3,986	45	0254BCFB32A	\$7,286	86
0156XDSB42A-P	\$4,577	67	0204DPKB11A	\$4,244	78	0206SDSC44A-P	\$4,185	47	0254DPKB11A	\$5,346	78
0156XDSB44A-P	\$5,035	69	0204DPSA31A-P	\$2,002	7	0206SDSR41A-P	\$3,548	37	0254DPSA31A-P	\$2,428	7
0156XDSC41A-P	\$4,139	62	0204DPSC31A-P	\$2,002	7	0206SDSR42A-P	\$3,986	45	0254DPSC31A-P	\$2,428	7
0156XDSC42A-P	\$4,577	67	0204FCFB32A	\$4,174	86	0206SDSR44A-P	\$4,185	47	0254FCFB31A	\$5,213	86
0156XDSC44A-P	\$5,035	69	0204FTCA21A-P	\$1,757	75	0206XDSB41A-P	\$5,043	62	0254FTCA21A-P	\$2,116	75
0156XPEA41A	\$7,558	91	0204FTCC21A-P	\$1,757	75	0206XDSB42A-P	\$5,481	67	0254FTCC21A-P	\$2,116	75
0156XPEC41A	\$7,558	91	0204FTSA24A-P	\$2,119	21	0206XDSB44A-P	\$6,029	69	0254FTSA24A-P	\$2,562	21
0156XSSB41A-P	\$3,293	50	0204FTSC24A-P	\$2,119	21	0206XDSC41A-P	\$5,043	62	0254FTSC24A-P	\$2,562	21
0156XSSB42A-P	\$3,731	57	0204FTVB1PX-A	\$5,440	112	0206XDSC42A-P	\$5,481	67	0254FTVB1PX-A	\$6,064	112
0156XSSB44A-P	\$4,104	59	0204FTVB3PW-A	\$6,801	114	0206XDSC44A-P	\$6,029	69	0254FTVB3PW-A	\$7,289	114
0156XSSC41A-P	\$3,293	50	0204FTVB3PX-A	\$7,073	115	0206XPEA41A	\$8,396	91	0254FTVB3PX-A	\$7,581	115
0156XSSC42A-P	\$3,731	57	0204SDSC41A-P	\$2,107	37	0206XPEC41A	\$8,396	91	0254SDSC41A-P	\$2,556	38
0156XSSC44A-P	\$4,104	59	0204SDSC42A-P	\$2,370	45	0206XSSB41A-P	\$3,876	50	0254SDSC42A-P	\$2,994	45
0158DPKB11A	\$6,763	78	0204SDSC44A-P	\$2,607	47	0206XSSB42A-P	\$4,314	57	0254SDSC44A-P	\$3,144	47
0158DPKB21A-Y	\$8,455	79	0204SDSC47A-P	\$2,370	45	0206XSSB44A-P	\$4,745	59	0254SDSR41A-P	\$2,556	38
0158DPKB21A-Z	\$9,723	80	0204SDSR41A-P	\$2,107	37	0206XSSC41A-P	\$3,876	50	0254SDSR41B-P	\$2,556	38
0158FCSA21A	\$6,961	18	0204SDSR42A-P	\$2,370	45	0206XSSC42A-P	\$4,314	57	0254SDSR42A-P	\$2,994	45
0158FCSC21A	\$6,961	18	0204SDSR44A-P	\$2,607	47	0206XSSC44A-P	\$4,745	59	0254SDSR44A-P	\$3,144	47
0202DPSA31A-P	\$2,109	7	0204SDSR47A-P	\$2,370	45	0208DPKB11A	\$8,004	78	0254XDSB41A-P	\$3,607	63
0202DPSC31A-P	\$2,109	7	0204XDSB41A-P	\$3,029	62	0208DPKB41A-Y	\$10,005	79	0254XDSB42A-P	\$4,045	67
0202FTSA24A-P	\$2,280	21	0204XDSB42A-P	\$3,292	67	0208DPKB41A-Z	\$11,505	80	0254XDSB44A-P	\$4,247	69
0202FTSC24A-P	\$2,280	21	0204XDSB44A-P	\$3,621	69	0208FCSA21A	\$8,510	18	0254XDSC41A-P	\$3,607	63
0202FTVB1PX-A	\$5,038	112	0204XDSB47A-P	\$3,292	67	0208FCSC21A	\$8,510	18	0254XDSC42A-P	\$4,045	67
0202FTVB3PW-A	\$6,297	114	0204XDSC41A-P	\$3,029	62	0252DPSA31A-P	\$2,589	7	0254XDSC44A-P	\$4,247	69
0202FTVB3PX-A	\$6,549	115	0204XDSC42A-P	\$3,292	67	0252DPSC31A-P	\$2,589	7	0254XPEA41A	\$6,201	92
0202SDSC41A-P	\$2,220	37	0204XDSC44A-P	\$3,621	69	0252FTSA24B-P	\$2,731	21	0254XPEC41A	\$6,201	92
0202SDSC42A-P	\$2,483	45	0204XDSC47A-P	\$3,292	67	0252FTSC24B-P	\$2,731	21	0254XSSB41A-P	\$2,818	51
0202SDSC44A-P	\$2,731	47	0204XPEA41A	\$5,081	91	0252FTVB1PX-A	\$5,324	112	0254XSSB42A-P	\$3,256	57
0202SDSC47A-P	\$2,483	45	0204XPEC41A	\$5,081	91	0252FTVB3PW-A	\$6,399	114	0254XSSB44A-P	\$3,419	59
0202SDSR41A-P	\$2,220	37	0204XSSB41A-P	\$2,329	50	0252FTVB3PX-A	\$6,655	115	0254XSSC41A-P	\$2,818	51

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0254XSSC42A-P	\$3,256	57	0302SDSR44B-P	\$3,747	47	0306FTCA21A-P	\$4,188	75	0402XSSB42B-P	\$4,951	58
0254XSSC44A-P	\$3,419	59	0302XDSB41B-P	\$4,410	63	0306FTCC21A-P	\$4,188	76	0402XSSB44B-P	\$5,446	59
0256BCFB32A	\$12,707	86	0302XDSB42B-P	\$4,848	68	0306FTSA24A-P	\$5,168	21	0402XSSC41B-P	\$4,459	51
0256DPKB11A	\$8,004	78	0302XDSB44B-P	\$5,333	69	0306FTSC24A-P	\$5,168	21	0402XSSC42B-P	\$4,951	58
0256DPPD11A-P	\$3,319	72	0302XDSC41B-P	\$4,410	63	0306FTVB1RX-A	\$10,366	112	0402XSSC44B-P	\$5,446	59
0256DPSA31A-P	\$3,445	7	0302XDSC42B-P	\$4,848	68	0306FTVB3RW-A	\$12,459	114	0404BCFB32A	\$9,563	86
0256DPSC31A-P	\$3,445	7	0302XDSC44B-P	\$5,333	69	0306FTVB3RX-A	\$12,957	116	0404DPSA31A-P	\$3,178	7
0256FTCA21A-P	\$3,802	75	0302XPEA41B	\$7,424	92	0306SDSC41A-P	\$5,257	38	0404DPSC31A-P	\$3,178	7
0256FTCC21A-P	\$3,802	75	0302XPEC41B	\$7,424	92	0306SDSC42A-P	\$5,749	46	0404FCFB31A	\$7,668	86
0256FTSA24A-P	\$4,345	21	0302XSSB41B-P	\$3,539	51	0306SDSC44A-P	\$6,036	47	0404FTCA21A-P	\$3,493	76
0256FTSC24A-P	\$4,345	21	0302XSSB42B-P	\$3,977	57	0306SDSR41A-P	\$5,257	38	0404FTCC21A-P	\$3,493	76
0256FTVB1RX-A	\$9,062	112	0302XSSB44B-P	\$4,375	59	0306SDSR42A-P	\$5,749	46	0404FTSA24A-P	\$3,955	21
0256FTVB3RW-A	\$10,893	114	0302XSSC41B-P	\$3,539	51	0306SDSR44A-P	\$6,036	47	0404FTSC24A-P	\$3,955	21
0256FTVB3RX-A	\$11,328	115	0302XSSC42B-P	\$3,977	58	0306XDSB41A-P	\$7,039	63	0404FTVB1RX-A	\$8,128	112
0256SDSC41A-P	\$4,306	38	0302XSSC44B-P	\$4,375	59	0306XDSB42A-P	\$7,531	68	0404FTVB3RW-A	\$9,770	114
0256SDSC42A-P	\$4,798	45	0304BCFB32A	\$8,032	86	0306XDSB44A-P	\$8,284	69	0404FTVB3RX-A	\$10,161	116
0256SDSC44A-P	\$5,038	47	0304DPSA31A-P	\$2,919	7	0306XDSC41A-P	\$7,039	63	0404SDSC41A-P	\$3,973	38
0256SDSR41A-P	\$4,306	38	0304DPSC31A-P	\$2,919	7	0306XDSC42A-P	\$7,531	68	0404SDSC42A-P	\$4,465	46
0256SDSR42A-P	\$4,798	45	0304FCFB31A	\$5,961	86	0306XDSC44A-P	\$8,284	69	0404SDSC44A-P	\$4,688	48
0256SDSR44A-P	\$5,038	47	0304FTCA21A-P	\$2,560	75	0306XPEA41A	\$11,916	92	0404SDSR41A-P	\$3,973	38
0256XDSB41A-P	\$6,112	63	0304FTCC21A-P	\$2,560	75	0306XPEC41A	\$11,916	92	0404SDSR41B-P	\$3,973	38
0256XDSB42A-P	\$6,604	67	0304FTSA24A-P	\$3,110	21	0306XSSB41A-P	\$5,412	51	0404SDSR42A-P	\$4,465	46
0256XDSB44A-P	\$7,264	69	0304FTSC24A-P	\$3,110	21	0306XSSB42A-P	\$5,904	58	0404SDSR44A-P	\$4,688	48
0256XDSC41A-P	\$6,112	63	0304FTVB1PX-A	\$6,823	112	0306XSSB44A-P	\$6,494	59	0404XDSB41A-P	\$5,575	63
0256XDSC42A-P	\$6,604	67	0304FTVB3PW-A	\$8,202	114	0306XSSC41A-P	\$5,412	51	0404XDSB42A-P	\$6,067	68
0256XDSC44A-P	\$7,264	69	0304FTVB3PX-A	\$8,529	116	0306XSSC42A-P	\$5,904	58	0404XDSB44A-P	\$6,370	70
0256XPEA41A	\$10,179	92	0304SDSC41A-P	\$3,073	38	0306XSSC44A-P	\$6,494	59	0404XDSC41A-P	\$5,575	63
0256XPEC41A	\$10,179	92	0304SDSC42A-P	\$3,511	46	0308FCSA21A	\$11,710	18	0404XDSC42A-P	\$6,067	68
0256XSSB41A-P	\$4,700	51	0304SDSC44A-P	\$3,687	47	0308FCSC21A	\$11,710	18	0404XDSC44A-P	\$6,370	70
0256XSSB42A-P	\$5,192	57	0304SDSR41A-P	\$3,073	38	0402DPSA31B-P	\$3,746	7	0404XPEA41A	\$9,572	92
0256XSSB44A-P	\$5,711	59	0304SDSR41B-P	\$3,073	38	0402DPSC31B-P	\$3,746	7	0404XPEC41A	\$9,572	92
0256XSSC41A-P	\$4,700	51	0304SDSR42A-P	\$3,511	46	0402FTSA24B-P	\$3,997	21	0404XSSB41A-P	\$4,284	51
0256XSSC42A-P	\$5,192	57	0304SDSR44A-P	\$3,687	47	0402FTSC24B-P	\$3,997	21	0404XSSB42A-P	\$4,776	58
0256XSSC44A-P	\$5,711	59	0304XDSB41A-P	\$4,195	63	0402FTVB1RX-A	\$7,754	112	0404XSSB44A-P	\$5,015	60
0258DPKB11A	\$8,991	78	0304XDSB42A-P	\$4,633	68	0402FTVB3RW-A	\$9,320	114	0404XSSC41A-P	\$4,284	51
0258DPKB21A-Y	\$11,241	79	0304XDSB44A-P	\$4,865	69	0402FTVB3RX-A	\$9,693	116	0404XSSC42A-P	\$4,776	58
0258DPKB21A-Z	\$12,924	80	0304XDSC41A-P	\$4,195	63	0402SDSC41B-P	\$3,943	38	0404XSSC44A-P	\$5,015	60
0258FCSA21A	\$9,895	18	0304XDSC42A-P	\$4,633	68	0402SDSC42B-P	\$4,435	46	0406BCFB32A	\$16,863	86
0258FCSC21A	\$9,895	18	0304XDSC44A-P	\$4,865	69	0402SDSC44B-P	\$4,657	47	0406DPPD11A-P	\$5,168	72
0302DPSA31B-P	\$2,974	7	0304XPEA41A	\$7,193	92	0402SDSR41B-P	\$3,943	38	0406DPSA31A-P	\$5,502	7
0302DPSC31B-P	\$2,974	7	0304XPEC41A	\$7,193	92	0402SDSR42B-P	\$4,435	46	0406DPSC31A-P	\$5,502	7
0302FTSA24B-P	\$3,110	21	0304XSSB41A-P	\$3,292	51	0402SDSR44B-P	\$4,657	47	0406FTCA21A-P	\$5,656	76
0302FTSC24B-P	\$3,110	21	0304XSSB42A-P	\$3,730	58	0402XDSB41B-P	\$5,800	63	0406FTCC21A-P	\$5,656	76
0302FTVB1PX-A	\$5,874	112	0304XSSB44A-P	\$3,917	59	0402XDSB42B-P	\$6,292	68	0406FTSA24A-P	\$6,770	21
0302FTVB3PW-A	\$7,060	114	0304XSSC41A-P	\$3,292	51	0402XDSB44B-P	\$6,921	70	0406FTSC24A-P	\$6,770	21
0302FTVB3PX-A	\$7,342	116	0304XSSC42A-P	\$3,730	58	0402XDSC41B-P	\$5,800	63	0406FTVB1RX-A	\$13,575	112
0302SDSC41B-P	\$3,131	38	0304XSSC44A-P	\$3,917	59	0402XDSC42B-P	\$6,292	68	0406FTVB3RW-A	\$15,663	114
0302SDSC42B-P	\$3,569	45	0306BCFB32A	\$13,978	86	0402XDSC44B-P	\$6,921	70	0406FTVB3RX-A	\$16,290	116
0302SDSC44B-P	\$3,747	47	0306DPPD11A-P	\$4,039	72	0402XPEA41B	\$9,991	92	0406SDSC41A-P	\$6,878	38
0302SDSR41B-P	\$3,131	38	0306DPSA31A-P	\$4,206	7	0402XPEC41B	\$9,991	92	0406SDSC42A-P	\$7,698	46
0302SDSR42B-P	\$3,569	45	0306DPSC31A-P	\$4,206	7	0402XSSB41B-P	\$4,459	51	0406SDSC44A-P	\$8,083	48

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
0406SDSR41A-P	\$6,878	38	0504FTCG21A-P	\$3,932	76	0506XPEC41A	\$17,577	92	0604SDSR41B-P	\$6,828	38
0406SDSR42A-P	\$7,698	46	0504FTSA24A-P	\$5,053	21	0506XSSB41A-P	\$8,421	51	0604SDSR42A-P	\$7,648	46
0406SDSR44A-P	\$8,083	48	0504FTSC24A-P	\$5,053	21	0506XSSB42A-P	\$9,241	58	0604SDSR44A-P	\$8,030	48
0406XDSB41A-P	\$9,542	63	0504FTVB1RX-A	\$9,638	112	0506XSSB44A-P	\$10,165	60	0604XDSB41A-P	\$8,837	63
0406XDSB42A-P	\$10,362	68	0504FTVB3RW-A	\$11,584	115	0506XSSC41A-P	\$8,421	51	0604XDSB42A-P	\$9,657	68
0406XDSB44A-P	\$11,398	70	0504FTVB3RX-A	\$12,047	116	0506XSSC42A-P	\$9,241	58	0604XDSB44A-P	\$10,140	70
0406XDSC41A-P	\$9,542	63	0504SDSC41A-P	\$4,845	38	0506XSSC44A-P	\$10,165	60	0604XDSC41A-P	\$8,837	63
0406XDSC42A-P	\$10,362	68	0504SDSC42A-P	\$5,337	46	0508FCSA21A	\$16,920	18	0604XDSC42A-P	\$9,657	68
0406XDSC44A-P	\$11,398	70	0504SDSC44A-P	\$5,604	48	0508FCSC21A	\$16,920	18	0604XDSC44A-P	\$10,140	70
0406XPEA41A	\$15,474	92	0504SDSR41A-P	\$4,845	38	0602DPSA31B-P	\$5,390	8	0604XPEA41A	\$16,939	92
0406XPEC41A	\$15,474	92	0504SDSR41B-P	\$4,845	38	0602DPSC31B-P	\$5,390	8	0604XPEC41A	\$16,939	92
0406XSSB41A-P	\$7,335	51	0504SDSR42A-P	\$5,337	46	0602FTSA24B-P	\$7,593	22	0604XSSB41A-P	\$7,550	51
0406XSSB42A-P	\$8,155	58	0504SDSR44A-P	\$5,604	48	0602FTSC24B-P	\$7,593	22	0604XSSB42A-P	\$8,370	58
0406XSSB44A-P	\$8,971	60	0504XDSB41A-P	\$6,845	63	0602FTVB1RX-A	\$11,429	113	0604XSSB44A-P	\$8,789	60
0406XSSC41A-P	\$7,335	51	0504XDSB42A-P	\$7,337	68	0602FTVB3RW-A	\$13,187	115	0604XSSC41A-P	\$7,550	51
0406XSSC42A-P	\$8,155	58	0504XDSB44A-P	\$7,704	70	0602FTVB3RX-A	\$13,714	116	0604XSSC42A-P	\$8,370	58
0406XSSC44A-P	\$8,971	60	0504XDSC41A-P	\$6,845	63	0602SDSC41B-P	\$6,737	38	0604XSSC44A-P	\$8,789	60
0408FCSA21A	\$14,161	18	0504XDSC42A-P	\$7,337	68	0602SDSC42B-P	\$7,557	46	0606BCFB31A	\$22,424	87
0408FCSC21A	\$14,161	18	0504XDSC44A-P	\$7,704	70	0602SDSC44B-P	\$7,935	48	0606DPPD11A-P	\$7,362	72
0502DPSA31B-P	\$4,374	7	0504XPEA41A	\$11,656	92	0602SDSR41B-P	\$6,737	38	0606FTCA21A-P	\$8,601	76
0502DPSC31B-P	\$4,374	7	0504XPEC41A	\$11,656	92	0602SDSR42B-P	\$7,557	46	0606FTCC21A-P	\$8,601	76
0502FTSA24B-P	\$5,327	21	0504XSSB41A-P	\$4,978	51	0602SDSR44B-P	\$7,935	48	0606FTVB1RX-A	\$18,570	113
0502FTSC24B-P	\$5,327	21	0504XSSB42A-P	\$5,420	58	0602XDSB41B-P	\$8,912	63	0606FTVB3RW-A	\$21,426	115
0502FTVB1RX-A	\$8,939	112	0504XSSB44A-P	\$5,744	60	0602XDSB42B-P	\$9,732	68	0606FTVB3RX-A	\$22,284	116
0502FTVB3RW-A	\$10,744	114	0504XSSC41A-P	\$4,978	51	0602XDSB44B-P	\$10,705	70	0608FCSA21A	\$19,327	18
0502FTVB3RX-A	\$11,174	116	0504XSSC42A-P	\$5,420	58	0602XDSC41B-P	\$8,912	63	0608FCSC21A	\$19,327	18
0502SDSC41B-P	\$5,467	38	0504XSSC44A-P	\$5,744	60	0602XDSC42B-P	\$9,732	68	0752DPSA31B-P	\$6,787	8
0502SDSC42B-P	\$5,959	46	0506BCFB32A	\$20,215	87	0602XDSC44B-P	\$10,705	70	0752DPSC31B-P	\$6,787	8
0502SDSC44B-P	\$6,257	48	0506DPPD11A-P	\$6,485	72	0602XPEA41B	\$17,529	92	0752FTSA24B-P	\$9,144	22
0502SDSR41B-P	\$5,467	38	0506DPSA31A-P	\$6,423	7	0602XPEC41B	\$17,529	92	0752FTSC24B-P	\$9,144	22
0502SDSR42B-P	\$5,959	46	0506DPSC31A-P	\$6,423	8	0602XSSB41B-P	\$7,615	51	0752FTVB1RX-A	\$13,594	113
0502SDSR44B-P	\$6,257	48	0506FTCA21A-P	\$6,834	76	0602XSSB42B-P	\$8,435	58	0752FTVB3RW-A	\$15,686	115
0502XDSB41B-P	\$7,531	63	0506FTCC21A-P	\$6,834	76	0602XSSB44B-P	\$9,279	60	0752FTVB3RX-A	\$16,313	116
0502XDSB42B-P	\$8,023	68	0506FTSA24A-P	\$7,921	21	0602XSSC41B-P	\$7,615	51	0752SDSC41B-P	\$8,484	38
0502XDSB44B-P	\$8,825	70	0506FTSC24A-P	\$7,921	22	0602XSSC42B-P	\$8,435	58	0752SDSC42B-P	\$9,304	46
0502XDSC41B-P	\$7,531	63	0506FTVB1RX-A	\$16,005	113	0602XSSC44B-P	\$9,279	60	0752SDSC44B-P	\$9,769	48
0502XDSC42B-P	\$8,023	68	0506FTVB3RW-A	\$18,467	115	0604BCFB32A	\$13,419	87	0752SDSR41B-P	\$8,484	38
0502XDSC44B-P	\$8,825	70	0506FTVB3RX-A	\$19,206	116	0604DPSA31A-P	\$5,462	8	0752SDSR42B-P	\$9,304	46
0502XPEA41B	\$12,299	92	0506SDSC41A-P	\$8,029	38	0604DPSC31A-P	\$5,462	8	0752SDSR44B-P	\$9,769	48
0502XPEC41B	\$12,299	92	0506SDSC42A-P	\$8,849	46	0604FCFB31A	\$12,228	87	0752XDSB41B-P	\$11,196	63
0502XSSB41B-P	\$5,789	51	0506SDSC44A-P	\$9,291	48	0604FTCA21A-P	\$5,987	76	0752XDSB42B-P	\$12,016	68
0502XSSB42B-P	\$6,281	58	0506SDSR41A-P	\$8,029	38	0604FTCC21A-P	\$5,987	76	0752XDSB44B-P	\$13,218	70
0502XSSB44B-P	\$6,909	60	0506SDSR42A-P	\$8,849	46	0604FTSA24A-P	\$7,045	22	0752XDSC41B-P	\$11,196	63
0502XSSC41B-P	\$5,789	51	0506SDSR44A-P	\$9,291	48	0604FTSC24A-P	\$7,045	22	0752XDSC42B-P	\$12,016	68
0502XSSC42B-P	\$6,281	58	0506XDSB41A-P	\$10,956	63	0604FTVB1RX-A	\$11,926	113	0752XDSC44B-P	\$13,218	70
0502XSSC44B-P	\$6,909	60	0506XDSB42A-P	\$11,776	68	0604FTVB3RW-A	\$13,761	115	0752XPEA41B	\$20,315	92
0504BCFB32A	\$10,962	87	0506XDSB44A-P	\$12,954	70	0604FTVB3RX-A	\$14,311	116	0752XPEC41B	\$20,315	92
0504DPSA31A-P	\$3,876	7	0506XDSC41A-P	\$10,956	63	0604SDSC41A-P	\$6,828	38	0752XSSB41B-P	\$9,562	51
0504DPSC31A-P	\$3,876	7	0506XDSC42A-P	\$11,776	68	0604SDSC42A-P	\$7,648	46	0752XSSB42B-P	\$10,382	58
0504FCFB31A	\$9,488	87	0506XDSC44A-P	\$12,954	70	0604SDSC44A-P	\$8,030	48	0752XSSB44B-P	\$11,420	60
0504FTCA21A-P	\$3,932	76	0506XPEA41A	\$17,577	92	0604SDSR41A-P	\$6,828	38	0752XSSC41B-P	\$9,562	51

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0752XSSC42B-P	\$10,382	58	1002FTVB1RX-A	\$19,579	113	1504FCAK11A-A	\$43,948	161	2008FTAL11E-A	\$59,308	161
0752XSSC44B-P	\$11,420	60	1002FTVB3RW-A	\$22,591	115	1504FCAK11B-A	\$43,948	161	2501FTVB1SX-A	\$54,920	113
0754BCFB32A	\$16,043	87	1002FTVB3RX-A	\$23,495	116	1504FCFB31A	\$28,187	87	2501FTVB3SW-A	\$62,889	115
0754DPSA31A-P	\$7,037	8	1003FCAK11B-A	\$42,771	160	1504FTCA21A-P	\$14,251	76	2501FTVB3SX-A	\$64,777	116
0754DPSC31A-P	\$7,037	8	1004BCFB31A	\$22,394	87	1504FTCC21A-P	\$14,251	76	2502DPAB21B	\$26,821	4
0754FCFB31A	\$13,853	87	1004FCAK11A-A	\$42,112	160	1504FTVB1RX-A	\$28,986	113	2502DPAC21B	\$26,821	4
0754FTCA21A-P	\$7,156	76	1004FCAK11B-A	\$42,112	160	1504FTVB3RW-A	\$32,681	115	2503FCAB21B	\$30,299	18
0754FTCC21A-P	\$7,156	76	1004FCFB31A	\$18,743	87	1504FTVB3RX-A	\$33,334	116	2503FCAC21B	\$30,299	18
0754FTSA24A-P	\$8,914	22	1004FTCA21A-P	\$9,099	76	1506FCAK11A-A	\$53,310	161	2503FCAK11B-A	\$48,392	161
0754FTSC24A-P	\$8,914	22	1004FTCC21A-P	\$9,099	76	1506FCAK11B-A	\$53,310	161	2503XPEB41B	\$55,986	93
0754FTVB1RX-A	\$13,837	113	1004FTVB1RX-A	\$18,643	113	1506FTCB21A-P	\$17,256	76	2503XPEC41B	\$55,986	93
0754FTVB3RW-A	\$15,967	115	1004FTVB3RW-A	\$21,511	115	1506FTCC21A-P	\$17,256	76	2504BCFB31A	\$47,613	87
0754FTVB3RX-A	\$16,605	116	1004FTVB3RX-A	\$22,372	116	1506FTVB1RX-A	\$42,886	113	2504DPAB21A	\$24,322	4
0754SDSC41A-P	\$8,796	38	1006BCFB31A	\$31,066	87	1506FTVB3RW-A	\$48,352	115	2504DPAB21A-R	\$25,076	4
0754SDSC42A-P	\$9,616	46	1006DPPD11A-P	\$11,105	72	1506FTVB3RX-A	\$49,319	116	2504DPAC21A	\$24,322	4
0754SDSC44A-P	\$10,097	48	1006FCAK11A-A	\$51,650	160	1508FCSB21A-R	\$42,677	18	2504DPAC21A-R	\$25,076	4
0754SDSR41A-P	\$8,796	38	1006FCAK11B-A	\$51,650	160	1508FCSB21E	\$53,344	18	2504FCAB21A	\$25,602	18
0754SDSR41B-P	\$8,796	38	1006FTCA21A-P	\$12,416	76	1508FCSB21G-R	\$56,465	18	2504FCAB21A-R	\$26,396	18
0754SDSR42A-P	\$9,616	46	1006FTCC21A-P	\$12,416	76	1508FCSC21A-R	\$42,677	18	2504FCAC21A	\$25,602	18
0754SDSR44A-P	\$10,097	48	1006FTVB1RX-A	\$28,550	113	1508FCSC21E	\$53,344	18	2504FCAC21A-R	\$26,396	18
0754XDSB41A-P	\$11,203	63	1006FTVB3RW-A	\$32,189	115	1508FCSC21G-R	\$56,465	18	2504FCAK11A-A	\$46,837	161
0754XDSB42A-P	\$12,023	68	1006FTVB3RX-A	\$32,833	116	2001FTVB1RX-A	\$43,165	113	2504FCAK11B-A	\$46,837	161
0754XDSB44A-P	\$12,624	70	1008FCSA21A-R	\$31,491	18	2001FTVB3RW-A	\$48,667	115	2504FCFB31A	\$42,529	87
0754XDSC41A-P	\$11,203	63	1008FCSC21A-R	\$31,491	18	2001FTVB3RX-A	\$49,640	116	2504FTVB1SX-A	\$47,877	113
0754XDSC42A-P	\$12,023	68	1251FTVB1RX-A	\$29,076	113	2003FCAK11B-A	\$47,129	161	2504FTVB3SW-A	\$54,687	115
0754XDSC44A-P	\$12,624	70	1251FTVB3RW-A	\$32,781	115	2004BCFB31A	\$37,953	87	2504FTVB3SX-A	\$56,328	116
0754XPEA41A	\$20,839	92	1251FTVB3RX-A	\$33,437	116	2004FCAK11A-A	\$45,294	161	2504XPEB41A	\$48,625	93
0754XPEC41A	\$20,839	92	1253FCAK11B-A	\$43,429	160	2004FCAK11B-A	\$45,294	161	2504XPEB41A-R	\$49,875	93
0754XSSB41A-P	\$9,060	51	1254BCFB31A	\$28,243	87	2004FCFB31A	\$34,086	87	2504XPEC41A	\$48,625	93
0754XSSB42A-P	\$9,880	58	1254FCAK11A-A	\$42,771	160	2004FTCB21A-P	\$17,638	76	2504XPEC41A-R	\$49,875	93
0754XSSB44A-P	\$10,374	60	1254FCAK11B-A	\$42,771	161	2004FTCC21A-P	\$17,638	76	2506DPAB21E	\$31,015	4
0754XSSC41A-P	\$9,060	51	1254FCFB31A	\$24,376	87	2004FTVB1RX-A	\$40,510	113	2506DPAB21G-R	\$34,137	4
0754XSSC42A-P	\$9,880	58	1254FTCA21A-P	\$12,083	76	2004FTVB3RW-A	\$45,673	115	2506DPAC21E	\$31,015	4
0754XSSC44A-P	\$10,374	60	1254FTCC21A-P	\$12,083	76	2004FTVB3RX-A	\$46,587	116	2506DPAC21G-R	\$34,137	4
0756BCFB31A	\$27,322	87	1254FTVB1RX-A	\$23,733	113	2006FCAK11A-A	\$54,800	161	2506FCAB21A-R	\$32,647	18
0756DPPD11A-P	\$8,737	72	1254FTVB3RW-A	\$26,758	115	2006FCAK11B-A	\$54,800	161	2506FCAC21A-R	\$32,647	18
0756FTCA21A-P	\$9,577	76	1254FTVB3RX-A	\$27,293	116	2006FTCB21A-P	\$21,359	76	2506FCAK11A-A	\$56,263	161
0756FTCC21A-P	\$9,577	76	1256FCAK11A-A	\$52,318	161	2006FTCC21A-P	\$21,359	76	2506FCAK11B-A	\$56,263	161
0756FTVB1RX-A	\$21,838	113	1256FCAK11B-A	\$52,318	161	2006FTVB1SX-A	\$57,453	113	2506FTAL11E-A	\$58,512	161
0756FTVB3RW-A	\$25,197	115	1256FTCA21A-P	\$14,705	76	2006FTVB3SW-A	\$65,625	115	2506FTVB1SX-A	\$71,817	113
0756FTVB3RX-A	\$26,205	116	1256FTCC21A-P	\$14,705	76	2006FTVB3SX-A	\$67,593	116	2506FTVB3SW-A	\$82,030	115
0758FCSA21A-R	\$25,471	18	1256FTVB1RX-A	\$34,515	113	2006XPEB41A	\$45,372	93	2506FTVB3SX-A	\$84,492	116
0758FCSC21A-R	\$25,471	18	1256FTVB3RW-A	\$38,913	115	2006XPEB41A-R	\$46,572	93	2506XPEB41A	\$51,679	93
1/24FNWA32H	\$2,466	108	1256FTVB3RX-A	\$39,692	116	2006XPEC41A	\$45,372	93	2506XPEB41A-R	\$52,929	93
1/24FNWA34H	\$2,454	109	1258FCSB21A-R	\$33,554	18	2006XPEC41A-R	\$46,572	93	2506XPEB41B	\$51,679	93
1/24FNWC32H	\$2,466	108	1258FCSC21A-R	\$33,554	18	2008FCSB21A-R	\$47,635	18	2506XPEC41A	\$51,679	93
1/24FNWC34H	\$2,454	109	1501FTVB1RX-A	\$35,365	113	2008FCSB21E	\$59,543	18	2506XPEC41A-R	\$52,929	93
1/26FNWA32H	\$2,814	108	1501FTVB3RW-A	\$39,873	115	2008FCSB21G-R	\$62,664	18	2506XPEC41B	\$51,679	93
1/26FNWA34H	\$2,799	109	1501FTVB3RX-A	\$40,670	116	2008FCSC21A-R	\$47,635	18	2508FTAL11E-A	\$59,859	161
1/26FNWC32H	\$2,814	108	1503FCAK11B-A	\$44,390	161	2008FCSC21E	\$59,543	18	3/44FNWA32H	\$2,582	108
1/26FNWC34H	\$2,799	109	1504BCFB31A	\$32,054	87	2008FCSC21G-R	\$62,664	18	3/44FNWA34H	\$2,570	109

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3/44FNWC32H	\$2,582	108	3004FCAK11A-A	\$48,822	161	3504FCAC21A	\$32,478	19	4004DPAC21E	\$42,605	5
3/44FNWC34H	\$2,570	109	3004FCAK11B-A	\$48,822	161	3504FCAC21A-R	\$34,098	19	4004DPAC21G-R	\$42,026	5
3/46FNWA32H	\$2,946	108	3004FCFB31A	\$48,466	87	3504FCAK11A-A	\$49,393	161	4004FCAB21A	\$45,076	19
3/46FNWA34H	\$2,929	109	3004FTAL11E-A	\$51,150	161	3504FCAK11B-A	\$49,393	161	4004FCAB21A-R	\$46,696	19
3/46FNWC32H	\$2,946	108	3004FTAL11E-C	\$72,521	161	3504FTAL11E-A	\$52,002	161	4004FCAC21A	\$45,076	19
3/46FNWC34H	\$2,929	109	3004FTQL11E-A	\$68,706	161	3504FTAL11E-C	\$73,373	161	4004FCAC21A-R	\$46,696	19
3/46SDSC41A-P	\$548	36	3004FTQL11E-C	\$90,077	161	3504FTQL11E-A	\$69,556	161	4004FTAB41E-A	\$60,985	41
3/46SDSC42A-P	\$686	43	3004FTVB1SX-A	\$57,453	113	3504FTQL11E-C	\$90,929	161	4004FTAB41E-AR	\$64,188	41
3/46SDSC44A-P	\$754	46	3004FTVB3SW-A	\$65,625	115	3504FTVB1SX-A	\$67,031	113	4004FTAC41E-A	\$60,985	41
3/46SDSC47A-P	\$686	43	3004FTVB3SX-A	\$67,593	116	3504FTVB3SW-A	\$76,561	115	4004FTAC41G-AR	\$64,188	41
3/46SDSR41A-P	\$547	36	3004XPEB41A	\$51,807	94	3504FTVB3SX-A	\$78,859	116	4004FTAL11E-A	\$59,025	162
3/46SDSR42A-P	\$685	43	3004XPEB41A-R	\$53,057	94	3504XPEB41A	\$54,928	94	4004FTAL11E-C	\$80,397	162
3/46SDSR44A-P	\$754	46	3004XPEC41A	\$51,807	94	3504XPEB41A-R	\$56,178	94	4004FTQL11E-A	\$76,581	162
3/46SDSR47A-P	\$685	43	3004XPEC41A-R	\$53,057	94	3504XPEC41A	\$54,928	94	4004FTQL11E-C	\$97,952	162
3/46XDSB41A-P	\$829	61	3006DPAB21E	\$39,142	4	3504XPEC41A-R	\$56,178	94	4004FTVB1SX-A	\$76,607	113
3/46XDSB42A-P	\$938	65	3006DPAB21G-R	\$42,264	4	3506DPAB21E	\$40,050	4	4004WPAK11E-A	\$67,547	149
3/46XDSB44A-P	\$1,032	68	3006DPAC21E	\$39,142	4	3506DPAB21G-R	\$43,691	4	4004WPAK11E-C	\$88,919	149
3/46XDSB47A-P	\$938	65	3006DPAC21G-R	\$42,264	4	3506DPAC21E	\$40,050	4	4004WTAK11E-A	\$68,387	154
3/46XDSC41A-P	\$829	61	3006FCAB21A-R	\$42,208	19	3506DPAC21G-R	\$43,691	4	4004WTAK11E-C	\$85,942	154
3/46XDSC42A-P	\$938	65	3006FCAC21A-R	\$42,208	19	3506FCAB21A-R	\$44,500	19	4006FTAL11E-A	\$62,362	162
3/46XDSC44A-P	\$1,032	68	3006FTAL11E-A	\$59,342	161	3506FCAC21A-R	\$44,500	19	4006FTAL11E-C	\$83,733	162
3/46XDSC47A-P	\$938	65	3006FTAL11E-C	\$80,713	161	3506FTAB41E-A	\$59,739	40	4006WPAK11E-A	\$74,079	149
3/46XPEA41A	\$1,747	90	3006FTVB1SX-A	\$86,181	113	3506FTAB41E-AR	\$62,941	40	4006WPAK11E-C	\$95,450	149
3/46XPEC41A	\$1,747	90	3006FTVB3SW-A	\$98,438	115	3506FTAC41E-A	\$59,739	41	4006WTAK11E-A	\$77,905	154
3/46XSSB41A-P	\$610	49	3006FTVB3SX-A	\$101,391	116	3506FTAC41G-AR	\$62,941	41	4006WTAK11E-C	\$99,277	154
3/46XSSB42A-P	\$719	55	3006XPEB41A	\$55,518	93	3506FTAL11E-A	\$60,164	161	4008FTAL11E-A	\$77,853	162
3/46XSSB44A-P	\$791	58	3006XPEB41A-R	\$56,768	94	3506FTAL11E-C	\$81,536	161	4008WTAL11E-A	\$84,223	154
3/46XSSB47A-P	\$719	55	3006XPEC41A	\$55,518	93	3506FTVB1SX-A	\$100,546	113	4008WTAL11E-C	\$107,630	154
3/46XSSC41A-P	\$610	49	3006XPEC41A-R	\$56,768	94	3506FTVB3SX-A	\$118,288	116	4502DPAB21F	\$47,558	5
3/46XSSC42A-P	\$719	55	3008FTAL11E-A	\$62,932	161	3508FTAL11E-A	\$73,984	161	4502DPAC21F	\$47,558	5
3/46XSSC44A-P	\$791	58	3501FTVB1SX-A	\$76,887	113	4001FTVB1SX-A	\$87,871	113	4503FCAB21F	\$59,061	19
3/46XSSC47A-P	\$719	55	3501FTVB3SW-A	\$88,048	115	4002DPAB21B	\$44,010	5	4503FCAC21F	\$59,061	19
3001FTVB1SX-A	\$65,840	113	3501FTVB3SX-A	\$90,689	116	4002DPAC21B	\$44,010	5	4503FTAB41F-A	\$75,466	41
3001FTVB3SW-A	\$75,467	115	3502DPAB21B	\$37,905	4	4003FCAB21B	\$52,492	19	4503FTAC41F-A	\$75,466	41
3001FTVB3SX-A	\$77,733	116	3502DPAC21B	\$37,905	4	4003FCAC21B	\$52,492	19	4503FTAL11F-A	\$59,677	162
3002DPAB21B	\$34,913	4	3503FCAB21B	\$42,138	19	4003FTAB41F-A	\$67,073	41	4503FTAL11F-C	\$81,048	162
3002DPAC21B	\$34,913	4	3503FCAC21B	\$42,138	19	4003FTAC41F-A	\$67,073	41	4503FTQL11F-A	\$77,233	162
3003FCAB21B	\$37,743	19	3503FCAK11B-A	\$50,960	161	4003FTAL11F-A	\$57,741	161	4503FTQL11F-C	\$98,604	162
3003FCAC21B	\$37,743	19	3503FTAL11F-A	\$52,755	161	4003FTAL11F-C	\$79,113	161	4503WPAK11F-A	\$65,550	149
3003FCAK11B-A	\$49,633	161	3503FTAL11F-C	\$74,126	161	4003FTQL11F-A	\$75,297	162	4503WPAK11F-C	\$86,921	149
3003XPEB41B	\$62,015	93	3503FTQL11F-A	\$70,311	161	4003FTQL11F-C	\$98,668	162	4503WPQK11F-A	\$83,105	149
3003XPEC41B	\$62,015	93	3503FTQL11F-C	\$91,682	161	4003WPAK11F-A	\$65,086	149	4503WPQK11F-C	\$104,477	149
3004BCFB31A	\$53,551	87	3503XPEB41B	\$64,378	94	4003WPAK11F-C	\$86,458	149	4503WTAK11F-A	\$66,953	154
3004DPAB21A	\$27,441	4	3503XPEC41B	\$64,378	94	4003WPQK11F-A	\$82,641	149	4503WTAK11F-C	\$88,324	154
3004DPAB21A-R	\$29,010	4	3504BCFB31A	\$58,634	87	4003WPQK11F-C	\$104,013	149	4503WTQK11F-A	\$84,509	154
3004DPAC21A	\$27,441	4	3504DPAB21E	\$30,854	4	4003WTAK11F-A	\$65,873	154	4503WTQK11F-C	\$105,880	154
3004DPAC21A-R	\$29,010	4	3504DPAB21G-R	\$32,393	4	4003WTAK11F-C	\$87,245	154	4504DPAB21E	\$46,084	5
3004FCAB21A	\$28,885	19	3504DPAC21E	\$30,854	4	4003WTQK11F-A	\$83,429	154	4504DPAB21G-R	\$47,623	5
3004FCAB21A-R	\$30,505	19	3504DPAC21G-R	\$32,393	4	4003WTQK11F-C	\$104,800	154	4504DPAC21E	\$46,084	5
3004FCAC21A	\$28,885	19	3504FCAB21A	\$32,478	19	4004DPAB21E	\$42,605	5	4504DPAC21G-R	\$47,623	5
3004FCAC21A-R	\$30,505	19	3504FCAB21A-R	\$34,098	19	4004DPAB21G-R	\$42,026	5	4504FCAB21E	\$48,510	19

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4504FCAB21G-R	\$50,130	19	5004FCAC21G-R	\$55,519	19	6004WPAK11E-C	\$91,339	149	7008WPAK11E-C	\$117,033	150
4504FCAC21E	\$48,510	19	5004FTAB41E-A	\$72,073	42	6004WTAK11E-A	\$73,589	155	7008WTAL11E-A	\$97,574	155
4504FCAC21G-R	\$50,130	19	5004FTAB41E-AR	\$82,884	42	6004WTAK11E-C	\$94,960	155	7008WTAL11E-C	\$120,981	155
4504FTAB41E-A	\$65,186	41	5004FTAC41E-A	\$72,073	42	6006FTAL11E-A	\$85,933	162	8003TCAL11F-A	\$96,376	165
4504FTAB41E-AR	\$74,964	41	5004FTAC41G-AR	\$82,884	42	6006TCAL11E-A	\$110,757	164	8003TCAL11F-C	\$119,782	165
4504FTAC41E-A	\$65,186	41	5004FTAL11E-A	\$65,111	162	6006TCAL11E-C	\$134,163	164	8003TCQL11F-A	\$114,694	165
4504FTAC41G-AR	\$74,964	41	5004FTAL11E-C	\$86,482	162	6006WPAK11E-C	\$99,141	149	8003TCQL11F-C	\$138,101	165
4504FTAL11E-A	\$62,525	162	5004FTQL11E-A	\$82,665	162	6006WTAL11E-A	\$89,069	155	8003WPAK11F-A	\$78,079	150
4504FTAL11E-C	\$83,897	162	5004FTQL11E-C	\$104,037	162	6006WTAL11E-C	\$112,475	155	8003WPAK11F-C	\$99,450	150
4504FTQL11E-A	\$80,081	162	5004WPAK11E-A	\$68,981	149	6008TCAL11E-A	\$111,191	164	8003WPAL11F-A	\$89,680	150
4504FTQL11E-C	\$101,452	162	5004WPAK11E-C	\$90,353	149	6008TCAL11E-C	\$134,599	164	8003WPQK11F-A	\$95,633	150
4504WPAK11E-A	\$68,513	149	5004WTAK11E-A	\$72,210	155	6008WPAL11E-A	\$91,427	149	8003WPQK11F-C	\$117,006	150
4504WPAK11E-C	\$89,884	149	5004WTAK11E-C	\$93,582	155	6008WPAK11E-C	\$114,835	149	8003WTAK11F-A	\$80,606	155
4504WTAK11E-A	\$69,975	154	5004XSSB41E	\$73,568	54	6008WTAL11E-A	\$94,911	155	8003WTAK11F-C	\$101,977	155
4504WTAK11E-C	\$91,347	154	5004XSSB41G-AR	\$76,770	54	6008WTAL11E-C	\$118,317	155	8003WTAL11F-A	\$84,641	155
4506FTAL11E-A	\$67,381	162	5004XSSC41E	\$73,568	54	7003TCAL11F-A	\$93,727	164	8003WTAL11F-C	\$108,049	155
4506FTAL11E-C	\$90,248	162	5004XSSC41G-AR	\$76,770	54	7003TCAL11F-C	\$117,134	164	8003WTQL11F-A	\$102,960	155
4506WPAK11E-A	\$75,044	149	5006FTAL11E-A	\$76,346	162	7003TCQL11F-A	\$112,045	164	8003WTQL11F-C	\$126,367	155
4506WPAK11E-C	\$96,416	149	5006FTAL11E-C	\$101,390	162	7003TCQL11F-C	\$135,452	164	8004FTAB11E-A	\$101,643	17
4506WTAK11E-A	\$79,676	154	5006WPAK11E-A	\$75,513	149	7003WPAK11F-A	\$73,397	149	8004FTAC11E-A	\$101,643	17
4506WTAK11E-C	\$101,048	154	5006WPAK11E-C	\$96,884	149	7003WPAK11F-C	\$94,768	149	8004FTAL11E-A	\$89,513	163
4508FTAL11E-A	\$80,680	162	5006WTAK11E-A	\$83,182	155	7003WPQK11F-A	\$90,952	150	8004FTAL11E-C	\$112,920	163
4508TCAL11E-A	\$108,806	164	5006WTAK11E-C	\$104,553	155	7003WPQK11F-C	\$112,323	150	8004FTQL11E-A	\$107,831	163
4508TCAL11E-C	\$132,213	164	5008FTAB11E-A	\$98,500	17	7003WTAK11F-A	\$77,280	155	8004FTQL11E-C	\$131,239	163
4508WTAL11E-A	\$86,972	154	5008FTAB11G-AR	\$102,000	17	7003WTAK11F-C	\$98,651	155	8004WPAK11E-A	\$82,696	150
4508WTAL11E-C	\$110,378	154	5008FTAC11E-A	\$98,500	17	7003WTQK11F-A	\$94,835	155	8004WPAK11E-C	\$104,068	150
5002DPAB21F	\$52,829	5	5008FTAC11G-AR	\$102,000	17	7003WTQK11F-C	\$116,206	155	8004WTAK11E-A	\$82,511	155
5002DPAC21F	\$52,829	5	5008FTAL11E-A	\$87,297	162	7004FTAB11E-A	\$99,357	17	8005TCAL11E-A	\$108,207	165
5003FCAB21F	\$65,620	19	5008TCAL11E-A	\$109,211	164	7004FTAC11E-A	\$99,357	17	8005TCAL11E-C	\$131,614	165
5003FCAC21F	\$65,620	19	5008TCAL11E-C	\$132,618	164	7004FTAL11E-A	\$87,499	162	8005TCQL11E-A	\$126,525	165
5003FTAB41F-A	\$83,847	42	5008WTAL11E-A	\$89,523	155	7004FTAL11E-C	\$110,907	162	8005TCQL11E-C	\$149,933	165
5003FTAC41F-A	\$83,847	42	5008WTAL11E-C	\$112,930	155	7004FTQL11E-A	\$105,818	162	8005WTAL11E-A	\$88,517	155
5003FTAL11F-A	\$73,920	162	6003FTAL11F-A	\$77,363	162	7004FTQL11E-C	\$129,225	162	8005WTAL11E-C	\$111,924	155
5003FTAL11F-C	\$97,327	162	6003FTAL11F-C	\$100,769	162	7004WPAK11E-A	\$78,143	150	8005WTQL11E-A	\$106,835	155
5003FTQL11F-A	\$92,238	162	6003FTQL11F-A	\$95,682	162	7004WPAK11E-C	\$99,514	150	8005WTQL11E-C	\$130,243	155
5003FTQL11F-C	\$115,646	162	6003FTQL11F-C	\$119,088	162	7004WTAK11E-A	\$78,801	155	8006WPAK11E-A	\$94,989	150
5003WPAK11F-A	\$66,411	149	6003WPAK11F-A	\$68,218	149	7004WTAK11E-C	\$100,173	155	8006WPAL11E-C	\$118,397	150
5003WPAK11F-C	\$87,783	149	6003WPAK11F-C	\$89,589	149	7005TCAL11E-A	\$106,495	164	8006WTAL11E-A	\$98,816	155
5003WPQK11F-A	\$83,966	149	6003WPQK11F-A	\$85,773	149	7005TCAL11E-C	\$129,902	165	8006WTAL11E-C	\$122,222	155
5003WPQK11F-C	\$105,337	149	6003WPQK11F-C	\$107,144	149	7005TCQL11E-A	\$124,813	165	8008WPAK11E-C	\$188,192	150
5003WTAK11F-A	\$69,208	154	6003WTAK11F-A	\$72,103	155	7005TCQL11E-C	\$148,221	165	8008WPQL11E-C	\$202,999	150
5003WTAK11F-C	\$90,579	155	6003WTAK11F-C	\$93,475	155	7006FTAB11E-A	\$103,169	17	8008WTAL11E-C	\$193,838	155
5003WTQK11F-A	\$86,762	155	6003WTQK11F-A	\$89,659	155	7006FTAC11E-A	\$103,169	17	8008WTQL11E-C	\$209,089	155
5003WTQK11F-C	\$108,134	155	6003WTQK11F-C	\$111,030	155	7006FTAL11E-A	\$90,857	162	9003TCAL11F-A	\$103,535	165
5004DPAB21E	\$51,204	5	6004FTAB11E-A	\$90,458	17	7006TCAL11E-A	\$115,868	165	9003TCAL11F-C	\$126,942	165
5004DPAB21G-R	\$52,743	5	6004FTAC11E-A	\$90,458	17	7006TCAL11E-C	\$139,275	165	9003TCQL11F-A	\$121,854	165
5004DPAC21E	\$51,204	5	6004FTAL11E-A	\$79,663	162	7006WPAK11E-A	\$86,361	150	9003TCQL11F-C	\$145,260	165
5004DPAC21G-R	\$52,743	5	6004FTAL11E-C	\$103,069	162	7006WPAK11E-C	\$109,767	150	9003WPAK11F-A	\$90,155	150
5004FCAB21E	\$53,899	19	6004FTQL11E-A	\$97,981	162	7006WTAL11E-A	\$89,982	155	9003WPAK11F-C	\$113,562	150
5004FCAB21G-R	\$55,519	19	6004FTQL11E-C	\$121,387	162	7006WTAL11E-C	\$113,389	155	9003WPQL11F-A	\$108,431	150
5004FCAC21E	\$53,899	19	6004WPAK11E-A	\$69,968	149	7008WPAL11E-A	\$93,627	150	9003WPQL11F-C	\$131,881	150

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
9003WTAL11F-A	\$91,036	155	A3506FLF40MQ	\$42,565	82	B0016FLF3BMHJ01	\$1,339	31	B0024FLF30MHJ01	\$1,318	32
9003WTAL11F-C	\$114,442	155	A4004FLF4BMQ	\$40,595	83	B0016FLF30MHJ01	\$1,339	31	B0024YLT2ASH	\$2,052	95
9003WTQL11F-A	\$110,424	155	A4004FLF40MQ	\$40,595	83	B00183LC1BMHD	\$5,411	104	B0024YLT2OSH	\$2,052	95
9003WTQL11F-C	\$132,760	156	A4504FLF4BMQ	\$47,732	83	B00183LC10MHD	\$5,411	104	B00264LC1BMHD	\$4,946	104
9005TCAL11E-A	\$109,767	165	A4504FLF40MQ	\$47,732	83	B00183LC2AMH	\$3,570	102	B00264LC10MHD	\$4,946	104
9005TCAL11E-C	\$133,174	165	A5004FLF4BMQ	\$50,907	83	B00183LC20MH	\$3,570	102	B00264LC2AMH	\$3,054	102
9005TCQL11E-A	\$128,085	165	A5004FLF40MQ	\$50,907	83	B00183LF1BMHD	\$5,174	100	B00264LC20MH	\$3,054	102
9005TCQL11E-C	\$151,493	165	B0012FMC2AOZ	\$509	15	B00183LF10MHD	\$5,174	100	B00264LF1BMHD	\$4,757	100
9005WPAL11E-A	\$91,870	150	B0012FMC200Z	\$509	15	B00183LF2AMH	\$3,335	98	B00264LF10MHD	\$4,757	100
9005WPAL11E-C	\$115,276	150	B0012FMF2AOZ	\$507	14	B00183LF20MH	\$3,335	98	B00264LF2AMH	\$2,865	98
9005WPQL11E-A	\$110,189	150	B0012FMF200Z	\$507	14	B0018FLF1BMHD	\$1,831	27	B00264LF20MH	\$2,865	98
9005WPQL11E-C	\$133,596	150	B00142LC1BMHD	\$4,280	104	B0018FLF10MHD	\$1,831	27	B0026DLF2AMH02	\$1,292	9
9005WTAL11E-A	\$93,698	156	B00142LC10MHD	\$4,280	104	B0018FLF2AMH	\$1,724	23	B0026DLF20MH02	\$1,292	9
9005WTAL11E-C	\$117,105	156	B00142LC2AMH	\$2,483	102	B0018FLF20MH	\$1,724	23	B0026FLF1BMHD02	\$1,379	28
9005WTQL11E-A	\$112,016	156	B00142LC20MH	\$2,483	102	B0018FLF3BMHJ	\$3,065	31	B0026FLF10MHD02	\$1,379	28
9005WTQL11E-C	\$135,423	156	B00142LF1BMHD	\$4,091	100	B0018FLF30MHJ	\$3,065	31	B0026FLF2AMH03	\$1,312	24
9006WPAL11E-A	\$97,331	150	B00142LF10MHD	\$4,091	100	B0018YLF2ASH	\$2,211	90	B0026FLF20MH03	\$1,312	24
9006WPAL11E-C	\$120,739	150	B00142LF2AMH	\$2,294	98	B0018YLF2OSH	\$2,211	90	B0026FLF3BMHJ01	\$1,689	32
9006WTAL11E-A	\$101,219	156	B00142LF20MH	\$2,294	98	B0022DLF2AMH02	\$955	9	B0026FLF30MHJ01	\$1,689	32
9006WTAL11E-C	\$124,626	156	B0014DLF2AMH02	\$712	9	B0022DLF20MH02	\$955	9	B00284LF2AMH	\$6,124	98
9008WPAL11E-C	\$196,820	150	B0014DLF20MH02	\$712	9	B0022FLC2AOZ	\$638	15	B00284LF20MH	\$6,124	98
9008WPQL11E-C	\$211,627	150	B0014FLC2AOZ	\$533	15	B0022FLC200Z	\$638	15	B00284LF3BMHD	\$7,920	100
9008WTAL11E-C	\$202,725	156	B0014FLC200Z	\$533	15	B0022FLF1BMHD02	\$1,169	28	B00284LF30MHD	\$7,920	100
9008WTQL11E-C	\$217,976	156	B0014FLF1BMHD02	\$928	27	B0022FLF10MHD02	\$1,169	28	B00285LC2AMH	\$6,360	102
A1501FLG3BSHD01	\$22,709	52	B0014FLF10MHD02	\$928	27	B0022FLF2AMH03	\$1,125	24	B00285LC20MH	\$6,360	102
A1501FLG3BSHJ	\$27,710	64	B0014FLF2AMH03	\$853	23	B0022FLF2AOZ	\$623	15	B00285LC3BMHD	\$8,155	104
A1501FLG3OSH01	\$20,617	39	B0014FLF2AOZ	\$490	14	B0022FLF20MH03	\$1,125	24	B00285LC30MHD	\$8,155	104
A1501FLG3OSHD01	\$22,709	52	B0014FLF20MH03	\$853	23	B0022FLF200Z	\$623	15	B0028FLF1BMHD	\$2,711	28
A1501FLG3OSHJ	\$27,710	64	B0014FLF200Z	\$490	14	B0022FLF3BMHJ01	\$1,383	32	B0028FLF10MHD	\$2,711	28
A1501FLG3USH01	\$20,617	39	B0014FLF3BMHJ01	\$1,080	31	B0022FLF30MHJ01	\$1,383	32	B0028FLF2AMH	\$2,431	24
A1503FLG3BSHD01	\$22,709	52	B0014FLF30MHJ01	\$1,080	31	B0022YLT2AMH	\$2,062	95	B0028FLF20MH	\$2,431	24
A1503FLG3BSHJ	\$27,710	64	B0014YLT2ASH	\$1,849	95	B0022YLT20MH	\$2,062	95	B0028FLF3BMHJ	\$3,821	32
A1503FLG3OSH01	\$20,617	39	B0014YLT2OSH	\$1,849	95	B00243LC1BMHD	\$4,672	104	B0028FLF30MHJ	\$3,821	32
A1503FLG3OSHD01	\$22,709	52	B00163LC1BMHD	\$4,379	104	B00243LC10MHD	\$4,672	104	B0028YLF2ASH	\$3,302	90
A1503FLG3OSHJ	\$27,710	64	B00163LC10MHD	\$4,379	104	B00243LC2AMH	\$2,537	102	B0028YLF2OSH	\$3,302	90
A1503FLG3USH01	\$20,617	39	B00163LC2AMH	\$2,547	102	B00243LC20MH	\$2,537	102	B0032DLF2AMH02	\$1,031	9
A1508FLF4BMQ	\$31,341	82	B00163LC20MH	\$2,547	102	B00243LF1BMHD	\$4,483	100	B0032DLF20MH02	\$1,031	9
A1508FLF40MQ	\$31,341	82	B00163LF1BMHD	\$4,190	100	B00243LF10MHD	\$4,483	100	B0032FLF1BMHD02	\$1,337	28
A2504FLF4BMQ	\$26,879	82	B00163LF10MHD	\$4,190	100	B00243LF2AMH	\$2,348	98	B0032FLF10MHD02	\$1,337	28
A2504FLF40MQ	\$26,879	82	B00163LF2AMH	\$2,358	98	B00243LF20MH	\$2,348	98	B0032FLF2AMH03	\$1,245	24
A2506FLF4BMQ	\$34,461	82	B00163LF20MH	\$2,358	98	B0024DLF2AMH02	\$855	9	B0032FLF20MH03	\$1,245	24
A2506FLF40MQ	\$34,461	82	B0016DLF2AMH02	\$917	9	B0024DLF20MH02	\$855	9	B0032FLF3BMHJ01	\$1,698	32
A2508FLF4BMQ01	\$43,125	82	B0016DLF20MH02	\$917	9	B0024FLC2AOZ	\$605	15	B0032FLF30MHJ01	\$1,698	32
A2508FLF40MQ	\$43,125	82	B0016FLC2AOZ	\$671	15	B0024FLC200Z	\$605	15	B0032YLT2AMH	\$2,351	95
A3004FLF4BMQ	\$32,142	82	B0016FLC200Z	\$671	15	B0024FLF1BMHD02	\$1,136	28	B0032YLT20MH	\$2,351	95
A3004FLF40MQ	\$32,142	82	B0016FLF1BMHD02	\$1,160	27	B0024FLF10MHD02	\$1,136	28	B00344LC1BMHD	\$4,885	104
A3006FLF4BMQ	\$39,564	82	B0016FLF10MHD02	\$1,160	27	B0024FLF2AMH03	\$1,020	24	B00344LC10MHD	\$4,885	104
A3006FLF40MQ	\$39,564	82	B0016FLF2AMH03	\$1,062	23	B0024FLF2AOZ	\$592	15	B00344LC2AMH	\$2,962	102
A3504FLF4BMQ	\$34,697	82	B0016FLF2AOZ	\$656	14	B0024FLF20MH03	\$1,020	24	B00344LC20MH	\$2,962	102
A3504FLF40MQ	\$34,697	82	B0016FLF20MH03	\$1,062	23	B0024FLF200Z	\$592	15	B00344LF1BMHD	\$4,696	100
A3506FLF4BMQ	\$42,565	82	B0016FLF200Z	\$656	14	B0024FLF3BMHJ01	\$1,318	32	B00344LF10MHD	\$4,696	100

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
B00344LF2AMH	\$2,773	98	B0052FLF30MHJ01	\$1,925	32	B0058YLF2OSH	\$4,717	91	B01088LF2USH	\$12,107	99
B00344LF2OMH	\$2,773	98	B0052YLT2AMH	\$2,682	95	B0058YLF2USH	\$4,717	91	B01088LF3BSHD	\$15,185	101
B0034DLF2AMH02	\$930	9	B0052YLT2OMH	\$2,682	95	B0102DLF2OMH01	\$1,866	10	B01088LF3OSHD	\$15,185	101
B0034DLF2OMH02	\$930	9	B00544LC1BMHD	\$4,970	105	B0102DLF2UMH01	\$1,866	10	B0108FLF2OSH	\$5,943	24
B0034FLF1BMHD02	\$1,194	28	B00544LC10MHD	\$4,970	105	B0102FLF1BMHD04	\$2,151	28	B0108FLF2USH	\$5,943	24
B0034FLF10MHD02	\$1,194	28	B00544LC2AMH	\$3,040	102	B0102FLF10MHD04	\$2,151	28	B0108FLF3BMHD	\$6,320	28
B0034FLF2AMH03	\$1,171	24	B00544LC2OMH	\$3,040	103	B0102FLF2OMH04	\$1,979	24	B0108FLF3BMHJ	\$7,672	32
B0034FLF2OMH03	\$1,171	24	B00544LF1BMHD	\$4,781	101	B0102FLF2UMH04	\$1,979	24	B0108FLF30MHD	\$6,320	28
B0034FLF3BMHJ01	\$1,594	32	B00544LF10MHD	\$4,781	101	B0102FLF3BMHJ02	\$2,724	32	B0108FLF30MHJ	\$7,672	32
B0034FLF30MHJ01	\$1,594	32	B00544LF2AMH	\$2,851	99	B0102FLF30MHJ02	\$2,724	32	B0108YLF3AMH	\$6,561	91
B0034YLT2ASH	\$2,337	95	B00544LF2OMH	\$2,851	99	B0102YLT2OMH	\$3,552	95	B0108YLF30MH	\$6,561	91
B0034YLT2OSH	\$2,337	95	B0054DLF2AMH02	\$1,178	10	B0102YLT2UMH	\$3,552	95	B0152DLF2OMH01	\$2,364	10
B00365LC2AMH	\$5,320	102	B0054DLF2OMH02	\$1,178	10	B01046LC2OSH	\$5,816	103	B0152DLF2UMH01	\$2,364	10
B00365LC2OMH	\$5,320	102	B0054FLF1BMHD02	\$1,395	28	B01046LC2USH	\$5,816	103	B0152FLF1BMHD02	\$2,948	28
B00365LC3BMHD	\$7,203	104	B0054FLF10MHD02	\$1,395	28	B01046LC3BSHD	\$7,732	105	B0152FLF10MHD02	\$2,948	28
B00365LC30MHD	\$7,203	104	B0054FLF2AMH03	\$1,337	24	B01046LC3OSHD	\$7,732	105	B0152FLF2OSH02	\$2,721	25
B00365LF2AMH	\$5,084	98	B0054FLF2OMH03	\$1,337	24	B01046LF2OSH	\$5,579	99	B0152FLF2USH02	\$2,721	25
B00365LF2OMH	\$5,084	98	B0054FLF3BMHJ01	\$1,707	32	B01046LF2USH	\$5,579	99	B0152FLF3BMHJ01	\$3,747	32
B00365LF3BMHD	\$6,966	100	B0054FLF30MHJ01	\$1,707	32	B01046LF3BSHD	\$7,495	101	B0152FLF30MHJ01	\$3,747	33
B00365LF30MHD	\$6,966	100	B0054YLT2ASH	\$2,541	95	B01046LF3OSHD	\$7,495	101	B0152YLT2AMH	\$4,851	95
B0036DLF2AMH01	\$1,458	9	B0054YLT2OSH	\$2,541	95	B0104DLF2OSH01	\$1,712	10	B0152YLT2OMH	\$4,851	96
B0036DLF2OMH01	\$1,458	9	B00565LC2AMH	\$5,481	103	B0104DLF2USH01	\$1,712	10	B01547LC2OSH	\$7,693	103
B0036FLF1BMHD04	\$1,768	28	B00565LC2OMH	\$5,481	103	B0104FLF1BSHD04	\$2,145	28	B01547LC2USH	\$7,693	103
B0036FLF10MHD04	\$1,768	28	B00565LC3BMHD	\$7,406	105	B0104FLF10SHD04	\$2,145	28	B01547LC3BSHD	\$10,232	105
B0036FLF2AMH04	\$1,515	24	B00565LC30MHD	\$7,406	105	B0104FLF20SH04	\$1,911	24	B01547LC3OSHD	\$10,232	105
B0036FLF2OMH04	\$1,515	24	B00565LF2AMH	\$5,244	99	B0104FLF2USH04	\$1,911	24	B01547LF2OSH	\$7,315	99
B0036FLF3BMHJ01	\$2,165	32	B00565LF2OMH	\$5,244	99	B0104FLF3BSHJ01	\$2,790	32	B01547LF2USH	\$7,315	99
B0036FLF30MHJ01	\$2,165	32	B00565LF3BMHD	\$7,170	101	B0104FLF30SHJ01	\$2,790	32	B01547LF3BSHD	\$9,854	101
B00385LC2AMH	\$6,459	102	B00565LF30MHD	\$7,170	101	B0104YLT2OSH	\$3,639	95	B01547LF3OSHD	\$9,854	101
B00385LC2OMH	\$6,459	102	B0056DLF2AMH01	\$1,880	10	B0104YLT2USH	\$3,639	95	B0154DLF2OMH01	\$2,358	10
B00385LC3BMHD	\$8,814	104	B0056DLF2OMH01	\$1,880	10	B01067LC2OSH	\$8,380	103	B0154DLF2UMH01	\$2,358	10
B00385LC30MHD	\$8,814	104	B0056FLF1BMHD04	\$2,372	28	B01067LC2USH	\$8,380	103	B0154FLF1BMHD02	\$2,827	29
B00385LF2AMH	\$6,223	99	B0056FLF10MHD04	\$2,372	28	B01067LC3BSHD	\$11,150	105	B0154FLF10MHD02	\$2,827	29
B00385LF2OMH	\$6,223	99	B0056FLF2AMH04	\$2,121	24	B01067LC3OSHD	\$11,150	105	B0154FLF2OSH02	\$2,579	25
B00385LF3BMHD	\$8,578	100	B0056FLF2OMH04	\$2,121	24	B01067LF2OSH	\$8,002	99	B0154FLF2USH02	\$2,579	25
B00385LF30MHD	\$8,578	100	B0056FLF3BMHJ01	\$2,969	32	B01067LF2USH	\$8,002	99	B0154FLF3BMHJ01	\$3,681	33
B0038FLF2AMH	\$3,035	24	B0056FLF30MHJ01	\$2,969	32	B01067LF3BSHD	\$10,772	101	B0154FLF30MHJ01	\$3,681	33
B0038FLF2OMH	\$3,035	24	B00586LC2AMH	\$8,384	103	B01067LF3OSHD	\$10,772	101	B0154YLT2OSH	\$4,680	96
B0038FLF3BMHD	\$3,227	28	B00586LC2OMH	\$8,384	103	B0106DLF2OMH01	\$2,754	10	B0154YLT2USH	\$4,680	96
B0038FLF3BMHJ	\$4,447	32	B00586LC3BMHD	\$10,813	105	B0106DLF2UMH01	\$2,754	10	B01568LC2OSH	\$11,169	103
B0038FLF30MHD	\$3,227	28	B00586LC30MHD	\$10,813	105	B0106FLF1BMHD02	\$3,747	28	B01568LC2USH	\$11,169	103
B0038FLF30MHJ	\$4,447	32	B00586LF2AMH	\$3,661	99	B0106FLF10MHD02	\$3,747	28	B01568LC3BSHD	\$14,261	105
B0038YLF2AMH	\$3,852	91	B00586LF2OMH	\$3,661	99	B0106FLF2OSH02	\$3,267	24	B01568LC3OSHD	\$14,261	105
B0038YLF2OMH	\$3,852	91	B00586LF3BMHD	\$10,435	101	B0106FLF2USH02	\$3,267	24	B01568LF2OSH	\$10,614	99
B0052DLF2AMH02	\$1,240	9	B00586LF30MHD	\$10,435	101	B0106FLF3BMHJ01	\$4,715	32	B01568LF2USH	\$10,614	99
B0052DLF2OMH02	\$1,240	9	B0058FLF2AMH	\$4,034	24	B0106FLF30MHJ01	\$4,715	32	B01568LF3BSHD	\$13,706	101
B0052FLF1BMHD02	\$1,576	28	B0058FLF2OMH	\$4,034	24	B01088LC2OSH	\$12,662	103	B01568LF3OSHD	\$13,706	101
B0052FLF10MHD02	\$1,576	28	B0058FLF3BMHD	\$4,283	28	B01088LC2USH	\$12,662	103	B0156FLF3BMHD02	\$4,980	29
B0052FLF2AMH03	\$1,475	24	B0058FLF3BMHJ	\$5,647	32	B01088LC3BSHD	\$15,740	105	B0156FLF3BMHJ01	\$6,258	33
B0052FLF2OMH03	\$1,475	24	B0058FLF30MHD	\$4,283	28	B01088LC3OSHD	\$15,740	105	B0156FLF30MH02	\$4,580	25
B0052FLF3BMHJ01	\$1,925	32	B0058FLF30MHJ	\$5,647	32	B01088LF2OSH	\$12,107	99	B0156FLF30MHD02	\$4,980	29

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
B0156FLF30MHJ01	\$6,258	33	B02069LC30SHD	\$21,473	105	B0256FLF30MH02	\$6,836	25	B0308FLF30MHD	\$13,860	29
B0156FLF30UMH02	\$4,580	25	B02069LF20SH	\$20,421	99	B0256FLF30MHD01	\$7,462	29	B0308FLF30MHJ	\$15,230	33
B0156VLF10MH01	\$3,723	10	B02069LF2USH	\$20,421	99	B0256FLF30MHJ01	\$9,242	33	B0308FLF30UMH	\$13,011	25
B0156VLF1UMH01	\$3,723	10	B02069LF3BSHD	\$20,917	101	B0256FLF30UMH02	\$6,836	25	B0308YLF3AMH	\$14,718	92
B01589LC20SH	\$23,515	103	B02069LF30SHD	\$20,917	101	B0256VLF10MH01	\$5,161	10	B0308YLF30MH	\$14,718	92
B01589LC2USH	\$23,515	103	B0206FLF3BMHD02	\$5,861	29	B0256VLF1UMH01	\$5,161	10	B0402FLG3BMHD02	\$7,079	29
B01589LC3BSHD	\$24,026	105	B0206FLF3BMHJ01	\$7,626	33	B0258FLF3BMHD	\$11,742	29	B0402FLG3BMHJ01	\$8,770	33
B01589LC30SHD	\$24,026	105	B0206FLF30MH02	\$5,364	25	B0258FLF3BMHJ	\$13,006	33	B0402FLG30MH02	\$6,261	25
B01589LF20SH	\$22,960	99	B0206FLF30MHD02	\$5,861	29	B0258FLF30MH	\$10,994	25	B0402FLG30MHD02	\$7,079	29
B01589LF2USH	\$22,960	99	B0206FLF30MHJ01	\$7,626	33	B0258FLF30MHD	\$11,742	29	B0402FLG30MHJ01	\$8,770	33
B01589LF3BSHD	\$23,471	101	B0206FLF30UMH02	\$5,364	25	B0258FLF30MHJ	\$13,006	33	B0402FLG30UMH02	\$6,261	25
B01589LF30SHD	\$23,471	101	B0206VLF10MH01	\$4,349	10	B0258FLF30UMH	\$10,994	25	B0402VLG30MH	\$5,195	10
B0158FLF3BMHD	\$8,234	29	B0206VLF1UMH01	\$4,349	10	B0258YLF1AMH	\$12,367	92	B0402VLG30UMH	\$5,195	10
B0158FLF3BMHJ	\$9,541	33	B0208FLF3BMHD	\$10,066	29	B0258YLF10MH	\$12,367	92	B0404FLF3BSHD01	\$6,478	29
B0158FLF30MH	\$7,735	25	B0208FLF3BMHJ	\$11,402	33	B0302FLG3BMHD02	\$5,350	29	B0404FLF3BSHJ01	\$8,429	33
B0158FLF30MHD	\$8,234	29	B0208FLF30MH	\$9,455	25	B0302FLG3BMHJ01	\$6,669	33	B0404FLF30SH02	\$6,007	25
B0158FLF30MHJ	\$9,541	33	B0208FLF30MHD	\$10,066	29	B0302FLG30MH02	\$4,829	25	B0404FLF30SHD01	\$6,478	29
B0158FLF30UMH	\$7,735	25	B0208FLF30MHJ	\$11,402	33	B0302FLG30MHD02	\$5,350	29	B0404FLF30SHJ01	\$8,429	33
B0158YLF20SH	\$8,632	91	B0208FLF30UMH	\$9,455	25	B0302FLG30MHJ01	\$6,669	33	B0404FLF30USH02	\$6,007	25
B0158YLF2USH	\$8,632	91	B0208YLF3AMH	\$9,757	91	B0302FLG30UMH02	\$4,829	25	B0404VLF10MH01	\$4,974	10
B0202DLF20MH01	\$2,787	10	B0208YLF30MH	\$9,757	91	B0302VLG30MH	\$4,264	10	B0404VLF1UMH01	\$4,974	10
B0202DLF2UMH01	\$2,787	10	B0252DLF20MH01	\$3,404	10	B0302VLG30UMH	\$4,264	10	B0404YLT1AMH	\$10,447	96
B0202FLF1BMHD02	\$3,564	29	B0252DLF2UMH01	\$3,404	10	B03049LC20SH	\$20,258	103	B0404YLT10MH	\$10,447	96
B0202FLF10MHD02	\$3,564	29	B0252FLG3BMHD02	\$4,611	29	B03049LC2USH	\$20,258	103	B0406FLF3BMHD01	\$11,092	29
B0202FLF20SH02	\$3,357	25	B0252FLG3BMHJ01	\$5,714	33	B03049LC3BSHD	\$20,589	105	B0406FLF3BMHJ01	\$14,428	33
B0202FLF2USH02	\$3,357	25	B0252FLG30MH02	\$4,325	25	B03049LC30SHD	\$20,589	105	B0406FLF30MH02	\$10,399	25
B0202FLF3BMHJ01	\$4,634	33	B0252FLG30MHD02	\$4,611	29	B03049LF20SH	\$19,702	99	B0406FLF30MHD01	\$11,092	29
B0202FLF30MHJ01	\$4,634	33	B0252FLG30MHJ01	\$5,714	33	B03049LF2USH	\$19,702	99	B0406FLF30MHJ01	\$14,428	33
B0202YLT20SH	\$5,727	96	B0252FLG30UMH02	\$4,325	25	B03049LF3BSHD	\$20,034	101	B0406FLF30UMH02	\$10,399	25
B0202YLT2USH	\$5,727	96	B0252YLG30MH	\$7,652	96	B03049LF30SHD	\$20,034	101	B0406VLF30SH	\$9,113	10
B02048LC20SH	\$9,598	103	B0252YLG30UMH	\$7,652	96	B0304FLF3BMHD02	\$4,978	29	B0406VLF3USH	\$9,113	10
B02048LC2USH	\$9,598	103	B02548LC20SH	\$10,737	103	B0304FLF3BMHJ01	\$6,343	33	B0408FLF3BMHD	\$16,777	29
B02048LC3BSHD	\$12,154	105	B02548LC2USH	\$10,737	103	B0304FLF30MH02	\$4,646	25	B0408FLF3BMHJ	\$18,060	33
B02048LC30SHD	\$12,154	105	B02548LC3BSHD	\$13,543	105	B0304FLF30MHD02	\$4,978	29	B0408FLF30MH	\$15,735	25
B02048LF20SH	\$9,221	99	B02548LC30SHD	\$13,543	105	B0304FLF30MHJ01	\$6,343	33	B0408FLF30MHD	\$16,777	29
B02048LF2USH	\$9,221	99	B02548LF20SH	\$10,182	99	B0304FLF30UMH02	\$4,646	25	B0408FLF30MHJ	\$18,060	33
B02048LF3BSHD	\$11,776	101	B02548LF2USH	\$10,182	99	B0304VLF10SH01	\$4,001	10	B0408FLF30UMH	\$15,735	25
B02048LF30SHD	\$11,776	101	B02548LF3BSHD	\$12,988	101	B0304VLF1USH01	\$4,001	10	B0408YLF3AMH	\$17,679	92
B0204DLF20MH01	\$2,823	10	B02548LF30SHD	\$12,988	101	B0304YLT30MH	\$7,959	96	B0408YLF30MH	\$17,679	92
B0204DLF2UMH01	\$2,823	10	B0254FLF3BMHD02	\$4,262	29	B0304YLT3UMH	\$7,959	96	B0502FLG3BMHD02	\$8,752	29
B0204FLF1BMHD02	\$3,522	29	B0254FLF3BMHJ01	\$5,454	33	B0306FLF3BMHD01	\$8,183	29	B0502FLG3BMHJ01	\$11,386	33
B0204FLF10MHD02	\$3,522	29	B0254FLF30MH02	\$3,864	25	B0306FLF3BMHJ01	\$10,642	33	B0502FLG30MH02	\$8,266	25
B0204FLF20SH02	\$3,186	25	B0254FLF30MHD02	\$4,262	29	B0306FLF30MH02	\$7,949	25	B0502FLG30MHD02	\$8,752	29
B0204FLF2USH02	\$3,186	25	B0254FLF30MHJ01	\$5,454	33	B0306FLF30MHD01	\$8,183	29	B0502FLG30MHJ01	\$11,386	33
B0204FLF3BMHJ01	\$4,580	33	B0254FLF30UMH02	\$3,864	25	B0306FLF30MHJ01	\$10,642	33	B0502FLG30UMH02	\$8,266	25
B0204FLF30MHJ01	\$4,580	33	B0254VLF10SH01	\$3,442	10	B0306FLF30UMH02	\$7,949	25	B0502VLG30MH	\$6,175	10
B0204YLT20SH	\$5,519	96	B0254VLF1USH01	\$3,442	10	B0306VLF10MH01	\$5,905	10	B0502VLG30UMH	\$6,175	10
B0204YLT2USH	\$5,519	96	B0254YLT30MH	\$6,967	96	B0306VLF1UMH01	\$5,905	10	B0504FLF3BSHD01	\$7,527	29
B02069LC20SH	\$20,976	103	B0254YLT3UMH	\$6,967	96	B0308FLF3BMHD	\$13,860	29	B0504FLF3BSHJ01	\$10,350	33
B02069LC2USH	\$20,976	103	B0256FLF3BMHD01	\$7,462	29	B0308FLF3BMHJ	\$15,230	33	B0504FLF30SH02	\$7,326	25
B02069LC3BSHD	\$21,473	105	B0256FLF3BMHJ01	\$9,242	33	B0308FLF30MH	\$13,011	25	B0504FLF30SHD01	\$7,527	29

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B0504FLF3OSHJ01	\$10,350	33	B0608FLF3BSHJ	\$24,355	34	B1/262LC2AMH	\$2,395	102	B1251FLG30SHD01	\$18,903	51
B0504FLF3USH02	\$7,326	25	B0608FLF30SH	\$21,475	26	B1/262LC20MH	\$2,395	102	B1251FLG30SHJ	\$23,063	63
B0504VLF10MH01	\$5,908	11	B0608FLF30SHD	\$22,918	30	B1/262LF1BMHD	\$4,018	100	B1251FLG30USH	\$17,745	39
B0504VLF1UMH01	\$5,908	10	B0608FLF30SHJ	\$24,355	34	B1/262LF10MHD	\$4,018	100	B1251YLG30SH	\$34,442	93
B0504YLT1AMH	\$12,531	96	B0608FLF30USH	\$21,475	26	B1/262LF2AMH	\$2,206	98	B1251YLG30USH	\$34,442	93
B0504YLT10MH	\$12,531	96	B0608YLF3ASH	\$24,407	92	B1/262LF20MH	\$2,206	98	B1252VLG30SH	\$14,535	11
B0506FLF3BMHD01	\$12,733	29	B0608YLF30SH	\$24,407	92	B1/26FLF2AMH	\$957	23	B1252VLG30USH	\$14,535	11
B0506FLF3BMHJ01	\$16,565	33	B0752FLG3BMHD02	\$14,458	30	B1/26FLF20MH	\$957	23	B1253FLG3BSHD01	\$18,903	51
B0506FLF30MH02	\$12,140	25	B0752FLG3BMHJ01	\$16,929	34	B1/26FMC2AOZ	\$654	15	B1253FLG3BSHJ	\$23,063	63
B0506FLF30MHD01	\$12,733	29	B0752FLG30MH02	\$12,828	26	B1/26FMC20OZ	\$632	15	B1253FLG30SH01	\$17,745	39
B0506FLF30MHJ01	\$16,565	33	B0752FLG30MHD01	\$14,458	30	B1/26FMF2AOZ	\$632	14	B1253FLG30SHD01	\$18,903	51
B0506FLF3UMH02	\$12,140	25	B0752FLG30MHJ	\$16,929	34	B1/26FMF20OZ	\$632	14	B1253FLG30SHJ	\$23,063	63
B0506VLF30SH	\$10,643	11	B0752FLG3UMH02	\$12,828	26	B1002FLG3BSHD01	\$15,223	51	B1253FLG3USH01	\$17,745	39
B0506VLF3USH	\$10,643	11	B0752VLG30SH	\$9,617	11	B1002FLG3BSHJ	\$17,821	63	B1253YLG30SH	\$34,442	93
B0508FLF3BMHD	\$20,030	29	B0752VLG3USH	\$9,617	11	B1002FLG30SH02	\$13,470	38	B1253YLG30USH	\$34,442	93
B0508FLF3BMHJ	\$21,570	33	B0754FLF3BMHD01	\$13,700	30	B1002FLG30SHD01	\$15,223	51	B1254FLF3BSHD	\$17,567	51
B0508FLF30MH	\$18,800	25	B0754FLF3BMHJ01	\$16,939	34	B1002FLG30SHJ	\$17,821	63	B1254FLF3BSHJ	\$21,434	63
B0508FLF30MHD	\$20,030	29	B0754FLF30MH02	\$13,300	26	B1002FLG30USH02	\$13,470	38	B1254FLF30SH	\$16,168	39
B0508FLF30MHJ	\$21,570	33	B0754FLF30MHD01	\$13,700	30	B1002VLG30SH	\$12,030	11	B1254FLF30SHD	\$17,567	52
B0508FLF3UMH	\$18,800	25	B0754FLF30MHJ01	\$16,939	34	B1002VLG30USH	\$12,030	11	B1254FLF30SHJ	\$21,434	64
B0508YLF3ASH	\$21,459	92	B0754FLF30MH02	\$13,300	26	B1002YLG30SH	\$27,483	93	B1254FLF30USH	\$16,168	39
B0508YLF30SH	\$21,459	92	B0754VLF30SH	\$8,475	11	B1002YLG30USH	\$27,483	93	B1254FLF4BSHD01	\$17,567	51
B0602FLG3BMHD02	\$12,090	29	B0754VLF3USH	\$8,475	11	B1004FLF3BSHD01	\$13,298	51	B1254FLF4BSHJ01	\$21,434	64
B0602FLG3BMHJ	\$13,475	34	B0754YLT30MH	\$21,823	96	B1004FLF3BSHJ01	\$16,680	63	B1254FLF40SH01	\$16,168	39
B0602FLG30MH02	\$10,187	26	B0754YLT3UMH	\$21,823	96	B1004FLF30SH03	\$12,828	38	B1254FLF40SHD01	\$17,567	52
B0602FLG30MHD02	\$12,090	30	B0756FLF3BSHD01	\$13,802	51	B1004FLF30SHD01	\$13,298	51	B1254FLF40SHJ01	\$21,434	64
B0602FLG30MHJ	\$13,475	34	B0756FLF3BSHJ01	\$17,010	63	B1004FLF30SHJ01	\$16,680	63	B1254FLF4USH01	\$16,168	39
B0602FLG3UMH02	\$10,187	26	B0756FLF30SH02	\$13,770	38	B1004FLF30USH03	\$12,828	38	B1254VLF30SH	\$12,567	11
B0602VLG30MH	\$7,019	11	B0756FLF30SHD01	\$13,802	51	B1004VLF30SH	\$11,142	11	B1254VLF30USH	\$12,567	11
B0602VLG3UMH	\$7,019	11	B0756FLF30SHJ01	\$17,010	63	B1004VLF3USH	\$11,142	11	B1254YLF40SH	\$30,048	93
B0604FLF3BMHD01	\$11,416	30	B0756FLF30USH02	\$13,770	38	B1004YLF30SH	\$25,623	93	B1254YLF4USH	\$30,048	93
B0604FLF3BMHJ01	\$13,362	34	B0756VLF30SH	\$14,470	11	B1004YLF3USH	\$25,623	93	B1256FLF4BSHD01	\$22,013	52
B0604FLF30MH02	\$10,324	26	B0756VLF3USH	\$14,470	11	B1006FLF4BSHD01	\$18,864	51	B1256FLF4BSHJ01	\$26,862	64
B0604FLF30MHD01	\$11,416	30	B0756YLF30SH	\$24,369	92	B1006FLF4BSHJ01	\$22,087	63	B1256FLF40SH01	\$18,753	39
B0604FLF30MHJ01	\$13,362	34	B0756YLF3USH	\$24,369	92	B1006FLF40SH01	\$18,189	39	B1256FLF40SHD01	\$22,013	52
B0604FLF3UMH02	\$10,324	26	B0758FLF4BSHD	\$30,151	30	B1006FLF40SHD01	\$18,864	51	B1256FLF40SHJ01	\$26,862	64
B0604VLF30SH	\$7,109	11	B0758FLF4BSHJ	\$31,510	34	B1006FLF40SHJ01	\$22,087	63	B1256FLF4USH01	\$18,753	39
B0604VLF3USH	\$7,109	11	B0758FLF40SH	\$28,301	26	B1006FLF40USH01	\$18,189	39	B1256VLF40SH	\$20,814	11
B0604YLT30MH	\$17,923	96	B0758FLF40SHD	\$30,151	30	B1006VLF40SH	\$18,327	11	B1256VLF4USH	\$20,814	11
B0604YLT3UMH	\$17,923	96	B0758FLF40SHJ	\$31,510	34	B1006VLF4USH	\$18,327	11	B1256YLF40SH	\$36,392	93
B0606FLF3BSHD01	\$11,723	51	B0758FLF40SHJ	\$31,510	34	B1006YLF40SH	\$33,871	93	B1256YLF4USH	\$36,392	93
B0606FLF3BSHJ01	\$13,722	63	B0758YLF4ASH	\$29,453	92	B1006YLF4USH	\$33,871	93	B1258FLF4BMH	\$37,283	26
B0606FLF30SH02	\$11,953	38	B0758YLF40SH	\$29,453	93	B1008FLF4BSHD	\$37,327	30	B1258FLF4BMHL	\$41,106	26
B0606FLF30SHD01	\$11,723	51	B1/24EMC2AOZ	\$468	15	B1008FLF4BSHJ	\$38,470	34	B1258FLF4BSHD	\$40,795	30
B0606FLF30SHJ01	\$13,722	63	B1/24EMC20OZ	\$468	15	B1008FLF40SH	\$34,990	26	B1258FLF4BSHDL	\$42,836	30
B0606FLF30USH02	\$11,953	38	B1/24EMF2AOZ	\$435	14	B1008FLF40SHD	\$37,327	30	B1258FLF4BSHJ	\$41,727	34
B0606VLF30SH	\$12,418	11	B1/24EMF20OZ	\$435	14	B1008FLF40SHJ	\$38,470	34	B1258FLF4BSHJL	\$41,727	34
B0606VLF3USH	\$12,418	11	B1/24FLF2AMH	\$811	23	B1008FLF40USH	\$34,990	26	B1258FLF40MH	\$37,283	26
B0606YLF30SH	\$22,001	92	B1/24FLF20MH	\$811	23	B1251FLG3BSHD01	\$18,903	51	B1258FLF40MHL	\$41,106	26
B0606YLF3USH	\$22,001	92	B1/262LC1BMHD	\$4,207	104	B1251FLG3BSHJ	\$23,063	63	B1258FLF40SHD	\$40,795	30
B0608FLF3BSHD	\$22,918	30	B1/262LC10MHD	\$4,207	104	B1251FLG30SH	\$17,745	39	B1258FLF40SHDL	\$42,836	30

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B1258FLF4QSHJ	\$41,727	34	B2001FLG30SH	\$26,798	39	B2008FLF4BMW	\$55,150	18	B2504FLG30MH	\$29,310	40
B1258FLF4QSHJL	\$41,727	34	B2001FLG30SHD	\$28,727	52	B2008FLF4BSHD	\$71,291	30	B2504FLG30MHD	\$32,094	52
B1501YLG30SH	\$40,313	93	B2001FLG30SHJ	\$35,052	64	B2008FLF4BSHDL	\$54,257	30	B2504VLF4BMH	\$30,715	11
B1501YLG3USH	\$40,313	93	B2001YLG3BSH	\$49,194	93	B2008FLF4BSHJL	\$58,788	34	B2504VLF4OMH	\$30,715	11
B1502VLG30SH	\$17,681	11	B2001YLG30SH	\$49,194	93	B2008FLF40MH	\$69,627	26	B2504VLG3BMH	\$30,715	11
B1502VLG3USH	\$17,681	11	B2002VLG30SH	\$27,504	11	B2008FLF40MHL	\$52,928	26	B2504VLG30MH	\$30,715	12
B1503YLG30SH	\$40,313	93	B2002VLG3USH	\$27,504	11	B2008FLF40MW	\$55,150	18	B2506FLF4BMH01	\$38,959	40
B1503YLG3USH	\$40,313	93	B2003FLG3BSH01	\$26,798	39	B2008FLF40SHD	\$71,291	30	B2506FLF4BMHD	\$42,660	53
B1504FLF3BSHD	\$20,422	52	B2003FLG3BSHD	\$28,727	52	B2008FLF40SHDL	\$54,257	30	B2506FLF4BMHL	\$34,366	40
B1504FLF3BSHJ01	\$24,918	64	B2003FLG3BSHJ	\$35,052	64	B2008FLF40SHJL	\$58,788	34	B2506FLF4BSHDL	\$37,630	53
B1504FLF30SH	\$18,867	39	B2003FLG30SH01	\$26,798	39	B2008FLG3BMH	\$66,159	26	B2506FLF4BSHJL	\$40,972	64
B1504FLF30SHD	\$20,422	52	B2003FLG30SHD	\$28,727	52	B2008FLG3BMW	\$53,589	18	B2506FLF40MH01	\$38,959	40
B1504FLF30SHJ	\$24,918	64	B2003FLG30SHJ	\$35,052	64	B2008FLG3BSHD	\$67,823	30	B2506FLF40MHD	\$37,630	53
B1504FLF3USH	\$18,867	39	B2003YLG3BSH	\$49,194	93	B2008FLG30MH	\$66,159	26	B2506FLF40MHL	\$34,366	40
B1504FLF4BSHD01	\$20,422	52	B2003YLG30SH	\$49,194	93	B2008FLG30MW	\$53,589	18	B2506FLF40SHD	\$42,660	53
B1504FLF4BSHJ01	\$24,918	64	B2004FLF3BSH	\$22,677	39	B2008FLG30SHD	\$67,823	30	B2506FLF40SHJL	\$40,972	64
B1504FLF40SH01	\$18,867	39	B2004FLF3BSHD	\$24,840	52	B2501FLG3BMH	\$35,072	39	B2506FLG3BMH01	\$36,175	40
B1504FLF40SHD01	\$20,422	52	B2004FLF3BSHJ	\$30,312	64	B2501FLG3BMHD	\$38,404	52	B2506FLG3BMHD	\$39,611	53
B1504FLF40SHJ01	\$24,918	64	B2004FLF30SH	\$22,677	39	B2501FLG3BMHDL	\$36,865	52	B2506FLG30MH01	\$36,175	40
B1504FLF4USH01	\$18,867	39	B2004FLF30SHD	\$24,840	52	B2501FLG3BMHL	\$33,666	39	B2506FLG30MHD	\$39,611	53
B1504VLF40SH	\$18,147	11	B2004FLF30SHJ	\$30,312	64	B2501FLG30MH	\$35,072	39	B2506VLF4BMH	\$39,068	12
B1504VLF4USH	\$18,147	11	B2004FLF4BSH01	\$22,677	39	B2501FLG30MHD	\$38,404	52	B2506VLF40MH	\$39,068	12
B1504YLF40MH	\$35,522	93	B2004FLF4BSHD01	\$24,840	52	B2501FLG30MHD	\$36,865	52	B2506VLG3BMH	\$35,600	12
B1504YLF4USH	\$35,522	93	B2004FLF4BSHJ01	\$30,312	64	B2501FLG30MHL	\$33,666	39	B2506VLG30MH	\$35,600	12
B1506FLF4BSH01	\$21,896	39	B2004FLF40SH01	\$22,677	39	B2502VLG30MH	\$29,802	11	B2508FLF4BM	\$63,475	16
B1506FLF4BSHD01	\$24,628	52	B2004FLF40SHD01	\$24,840	52	B2502VLG3UMH	\$29,802	11	B2508FLF4BMH	\$69,454	26
B1506FLF4BSHJ01	\$30,054	64	B2004FLF40SHJ01	\$30,312	64	B2503FLG3BMH	\$35,072	39	B2508FLF4BMHDL	\$71,232	30
B1506FLF40SH01	\$21,896	39	B2004VLF40SH	\$21,882	11	B2503FLG3BMHD	\$38,404	52	B2508FLF4BMHL	\$66,147	26
B1506FLF40SHD01	\$24,628	52	B2004VLF4USH	\$21,882	11	B2503FLG3BMHDL	\$36,865	52	B2508FLF4BML	\$56,935	16
B1506FLF40SHJ01	\$30,054	64	B2004YLF4BSH	\$41,984	93	B2503FLG3BMHL	\$33,666	39	B2508FLF40M	\$63,475	16
B1506VLF4BSH	\$23,074	11	B2004YLF40SH	\$41,984	93	B2503FLG3BSHJL	\$40,168	64	B2508FLF40MH	\$69,454	26
B1506VLF40SH	\$23,074	11	B2006FLF4BMHL	\$27,242	39	B2503FLG30MH	\$35,072	39	B2508FLF40MHD	\$71,232	30
B1506VLG3BSH	\$23,074	11	B2006FLF4BSH	\$32,565	39	B2503FLG30MHD	\$38,404	52	B2508FLF40MHL	\$66,147	26
B1506VLG30SH	\$23,074	11	B2006FLF4BSHD	\$35,230	52	B2503FLG30MHD	\$36,865	52	B2508FLF40ML	\$56,935	16
B1508FLF4BMH	\$62,739	26	B2006FLF4BSHDL	\$31,007	52	B2503FLG30MHL	\$33,666	39	B2508FLG3BM	\$59,931	16
B1508FLF4BMHL	\$47,418	26	B2006FLF4BSHJL	\$36,822	64	B2503FLG30SHJL	\$40,168	64	B2508FLG30M	\$59,931	16
B1508FLF4BSHD	\$68,058	30	B2006FLF40MHL	\$27,242	39	B2504FLF3BMHL	\$30,282	39	B3/42FMC2AOZ	\$430	15
B1508FLF4BSHDL	\$51,673	30	B2006FLF40SH	\$32,565	39	B2504FLF3BSHDL	\$31,652	52	B3/42FMC20OZ	\$430	15
B1508FLF4BSHJL	\$52,234	34	B2006FLF40SHD	\$35,230	52	B2504FLF3BSHJL	\$33,112	64	B3/42FMF2AOZ	\$430	14
B1508FLF40MH	\$62,739	26	B2006FLF40SHDL	\$31,007	52	B2504FLF4BMH	\$32,094	39	B3/42FMF20OZ	\$430	14
B1508FLF40MHL	\$47,418	26	B2006FLF40SHJL	\$36,822	64	B2504FLF4BMHD	\$35,143	52	B3/44FLF2AMH	\$853	23
B1508FLF40SHD	\$68,058	30	B2006FLG3BSH	\$29,781	39	B2504FLF4BMHL	\$30,282	39	B3/44FLF20MH	\$853	23
B1508FLF40SHDL	\$51,673	30	B2006FLG3BSHD	\$32,445	52	B2504FLF4BSHDL	\$31,652	52	B3/44FMC2AOZ	\$500	15
B1508FLF40SHJL	\$52,234	34	B2006FLG30SH	\$29,781	39	B2504FLF4BSHJL	\$33,112	64	B3/44FMC20OZ	\$500	15
B1508FLG3BMH	\$59,271	26	B2006FLG30SHD	\$32,445	52	B2504FLF40MH	\$32,094	40	B3/44FMF2AOZ	\$468	14
B1508FLG3BSHD	\$64,590	30	B2006VLF4BMH	\$37,362	11	B2504FLF40MHD	\$35,143	52	B3/44FMF20OZ	\$468	14
B1508FLG30MH	\$59,271	26	B2006VLF40MH	\$37,362	11	B2504FLF40MHD	\$31,652	52	B3/462LC1BMHD	\$4,271	104
B1508FLG30SHD	\$64,590	30	B2006VLG3BMH	\$33,894	11	B2504FLF40MHL	\$30,282	40	B3/462LC10MHD	\$4,271	104
B2001FLG3BSH	\$26,798	39	B2006VLG30MH	\$33,894	11	B2504FLF40SHJL	\$33,112	64	B3/462LC2AMH	\$2,449	102
B2001FLG3BSHD	\$28,727	52	B2008FLF4BMH	\$69,627	26	B2504FLG3BMH	\$29,310	40	B3/462LC20MH	\$2,449	102
B2001FLG3BSHJ	\$35,052	64	B2008FLF4BMHL	\$52,928	26	B2504FLG3BMHD	\$32,094	52	B3/462LF1BMHD	\$4,082	100

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
B3/462LF10MHD	\$4,082	100	B3004FLF40MH01	\$36,488	40	B3504FLF4BMHD	\$44,538	53	B4501FLG80MH	\$65,623	41
B3/462LF2AMH	\$2,260	98	B3004FLF40MHD	\$39,955	53	B3504FLF4BMHL	\$36,087	40	B4501FLG80MHD	\$69,708	54
B3/462LF20MH	\$2,260	98	B3004FLF40MHD	\$35,143	53	B3504FLF4BSHDL	\$39,515	53	B4502VLG3BMH	\$52,842	12
B3/46DLF2AMH02	\$855	9	B3004FLF40MHL	\$32,094	40	B3504FLF40MH	\$40,674	40	B4502VLG30MH	\$52,842	12
B3/46DLF20MH02	\$855	9	B3004FLF40SHJL	\$38,361	64	B3504FLF40MHD	\$44,538	53	B4503FLG8BMH	\$65,623	41
B3/46FLC2AOZ	\$684	15	B3004FLG3BMH01	\$35,389	40	B3504FLF40MHD	\$39,515	53	B4503FLG8BMHD	\$69,708	54
B3/46FLC20OZ	\$684	15	B3004FLG3BMHD	\$36,906	53	B3504FLF40MHL	\$36,087	40	B4503FLG80MH	\$65,623	41
B3/46FLF1BMHD02	\$1,025	27	B3004FLG30MH01	\$35,389	40	B3504FLG3BMH01	\$37,890	40	B4503FLG80MHD	\$69,708	54
B3/46FLF10MHD02	\$1,025	27	B3004FLG30MHD	\$36,906	53	B3504FLG3BMHD	\$41,489	53	B4504FLF4BMH	\$56,684	41
B3/46FLF2AMH03	\$1,007	23	B3004VLF4BMH	\$32,234	12	B3504FLG30MH01	\$37,890	40	B4504FLF4BMHD	\$60,767	54
B3/46FLF2AOZ	\$647	14	B3004VLF40MH	\$32,234	12	B3504FLG30MHD	\$41,489	53	B4504FLF40MH	\$56,684	41
B3/46FLF20MH03	\$959	23	B3004VLG3BMH	\$32,234	12	B3504VLF4BMH	\$41,012	12	B4504FLF40MHD	\$60,767	54
B3/46FLF20OZ	\$647	14	B3004VLG30MH	\$32,234	12	B3504VLF40MH	\$41,012	12	B4504FLG3BMH	\$53,900	41
B3/46FLF3BMHJ01	\$1,254	31	B3006FLF3BSHJL	\$54,990	64	B3504VLG3BMH	\$37,544	12	B4504FLG3BMHD	\$57,983	54
B3/46FLF30MHJ01	\$1,254	31	B3006FLF30SHJL	\$54,990	64	B3504VLG30MH	\$37,544	12	B4504FLG30MH	\$53,900	41
B3/48FLF1BMHD	\$1,686	27	B3006FLF4BMH01	\$52,056	40	B3506FLF4BMH	\$54,731	40	B4504FLG30MHD	\$57,983	54
B3/48FLF10MHD	\$1,686	27	B3006FLF4BMHD	\$56,139	53	B3506FLF4BMHD	\$58,815	53	B4504VLF4BMH	\$56,724	12
B3/48FLF2AMH	\$1,638	23	B3006FLF4BMHDL	\$50,981	53	B3506FLF4BMHDL	\$53,528	53	B4504VLF40MH	\$56,724	12
B3/48FLF20MH	\$1,638	23	B3006FLF4BMHL	\$46,898	40	B3506FLF4BMHL	\$49,445	41	B4504VLG3BMH	\$53,256	12
B3/48FLF3BMHJ	\$2,785	31	B3006FLF4BSHJL	\$54,990	64	B3506FLF40MH	\$54,731	41	B4504VLG30MH	\$53,256	12
B3/48FLF30MHJ	\$2,785	31	B3006FLF40MH01	\$52,056	40	B3506FLF40MHD	\$58,815	53	B5001FKG8BMH	\$72,911	41
B3/48YLF2ASH	\$2,105	90	B3006FLF40MHD	\$56,139	53	B3506FLF40MHD	\$53,528	53	B5001FKG8BMHD	\$76,995	54
B3/48YLF2OSH	\$2,105	90	B3006FLF40MHD	\$50,981	53	B3506FLF40MHL	\$49,445	41	B5001FKG80MH	\$72,911	41
B3001FLG3BMHDL	\$46,020	53	B3006FLF40MHL	\$46,898	40	B3506FLG3BMH	\$51,947	41	B5001FKG80MHD	\$76,995	54
B3001FLG3BMHL	\$41,936	40	B3006FLF40SHJL	\$54,990	64	B3506FLG3BMHD	\$56,030	53	B5002VLG3BMH	\$58,700	12
B3001FLG30MHD	\$46,020	53	B3006FLG3BMH01	\$49,272	40	B3506FLG30MH	\$51,947	41	B5002VLG30MH	\$58,700	12
B3001FLG30MHL	\$41,936	40	B3006FLG3BMHD	\$53,355	53	B3506FLG30MHD	\$56,030	53	B5003FKG8BMH	\$72,911	41
B3001FLG8BMH	\$43,497	40	B3006FLG30MH	\$49,272	40	B4001FLG8BMH	\$58,324	41	B5003FKG8BMHD	\$76,995	54
B3001FLG8BMHD	\$47,580	53	B3006FLG30MHD	\$53,355	53	B4001FLG8BMHD	\$62,409	53	B5003FKG80MH	\$72,911	41
B3001FLG80MH	\$43,497	40	B3006VLF4BMH	\$46,961	12	B4001FLG80MH	\$58,324	41	B5003FKG80MHD	\$76,995	54
B3001FLG80MHD	\$47,580	53	B3006VLF40MH	\$46,961	12	B4001FLG80MHD	\$62,409	53	B5004VLF4BMH	\$64,057	12
B3002VLG3BMH	\$38,793	12	B3006VLG3BMH	\$43,493	12	B4002VLG3BMH	\$48,900	12	B5004VLF40MH	\$64,057	12
B3002VLG30MH	\$38,793	12	B3006VLG30MH	\$43,493	12	B4002VLG30MH	\$48,900	12	B5004VLG3BMH	\$60,686	12
B3003FLG3BMHDL	\$46,020	53	B3501FLG3BMHDL	\$50,904	53	B4003FLG8BMH	\$58,324	41	B5004VLG30MH	\$60,686	12
B3003FLG3BMHL	\$41,936	40	B3501FLG3BMHL	\$46,820	40	B4003FLG8BMHD	\$62,409	53	B6002VKG3BME	\$58,722	2
B3003FLG3BSHJL	\$49,783	64	B3501FLG30MHD	\$50,904	53	B4003FLG80MH	\$58,324	41	B6002VKG30ME	\$58,722	2
B3003FLG30MHD	\$46,020	53	B3501FLG30MHL	\$46,820	40	B4003FLG80MHD	\$62,409	53	B7002VKG3BMH	\$75,091	12
B3003FLG30MHL	\$41,936	40	B3502VLG3BMH	\$42,117	12	B4004FLF4BMH01	\$55,815	41	B7002VKG30MH	\$75,091	12
B3003FLG30SHJL	\$49,783	64	B3502VLG30MH	\$42,117	12	B4004FLF4BMHD	\$59,899	54	BY152DLF2AMH02	\$806	9
B3003FLG8BMH	\$43,497	40	B3503FLG3BMHDL	\$50,904	53	B4004FLF40MH01	\$55,815	41	BY152DLF20MH02	\$806	9
B3003FLG8BMHD	\$47,580	53	B3503FLG3BMHL	\$46,820	40	B4004FLF40MHD	\$59,899	54	BY152FLC2AOZ	\$560	15
B3003FLG80MH	\$43,497	40	B3503FLG30MHD	\$50,904	53	B4004FLG3BMH01	\$53,030	41	BY152FLC20OZ	\$560	15
B3003FLG80MHD	\$47,580	53	B3503FLG30MHL	\$46,820	40	B4004FLG3BMHD	\$57,115	54	BY152FLF1BMHD02	\$1,089	27
B3004FLF3BMHDL	\$35,144	53	B3503FLG8BMH	\$49,150	40	B4004FLG30MH01	\$53,030	41	BY152FLF10MHD02	\$1,089	27
B3004FLF3BMHL	\$32,094	40	B3503FLG8BMHD	\$53,233	53	B4004FLG30MHD	\$57,115	54	BY152FLF2AMH03	\$967	24
B3004FLF3BSHJL	\$38,361	64	B3503FLG80MH	\$49,150	40	B4004VLF4BMH	\$50,808	12	BY152FLF2AOZ	\$557	14
B3004FLF4BMH01	\$36,488	40	B3503FLG80MHD	\$53,233	53	B4004VLF40MH	\$50,808	12	BY152FLF20MH03	\$967	24
B3004FLF4BMHD	\$39,955	53	B3504FLF3BMHL	\$36,087	40	B4004VLG3BMH	\$47,340	12	BY152FLF20OZ	\$557	14
B3004FLF4BMHDL	\$35,143	53	B3504FLF3BSHDL	\$39,515	53	B4004VLG30MH	\$47,340	12	BY152FLF3BMHJ01	\$1,213	31
B3004FLF4BMHL	\$32,094	40	B3504FLF30SHDL	\$39,515	53	B4501FLG8BMH	\$65,623	41	BY152FLF30MHJ01	\$1,213	31
B3004FLF4BSHJL	\$38,361	64	B3504FLF4BMH01	\$40,674	40	B4501FLG8BMHD	\$69,708	54	BY152YLT2AMH	\$1,971	95

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BY152YLT20MH	\$1,971	95	BY158FLF1BMHD	\$2,161	28	BY756FLF30MHJ01	\$3,860	32	C0506FLF30MWQ	\$10,299	76
BY1543LC1BMHD	\$4,373	104	BY158FLF10MHD	\$2,161	28	BY7586LF20SH	\$9,936	99	C0506FLF3UMWQ	\$10,299	76
BY1543LC10MHD	\$4,373	104	BY158FLF2AMH	\$2,034	24	BY7586LF2USH	\$9,936	99	C0604FLF30MWQ	\$8,883	76
BY1543LC2AMH	\$2,527	102	BY158FLF20MH	\$2,034	24	BY7586LF3BSHD	\$12,558	101	C0604FLF3UMWQ	\$8,883	76
BY1543LC20MH	\$2,527	102	BY158FLF3BMHJ	\$3,373	32	BY7586LF30SHD	\$12,558	101	C0606FLF30SWQ	\$13,440	76
BY1543LF1BMHD	\$4,184	100	BY158FLF30MHJ	\$3,373	32	BY7587LC20SH	\$10,314	103	C0606FLF3USWQ	\$13,440	76
BY1543LF10MHD	\$4,184	100	BY158YLF2ASH	\$2,416	90	BY7587LC2USH	\$10,314	103	C1258FLF4BMQ	\$20,402	82
BY1543LF2AMH	\$2,338	98	BY158YLF20SH	\$2,416	90	BY7587LC3BSHD	\$12,936	105	C1258FLF4OMQ	\$20,402	82
BY1543LF20MH	\$2,338	98	BY752DLF2AMH02	\$1,648	10	BY7587LC30SHD	\$12,936	105	C2006FLF4BMQ	\$22,330	82
BY154DLF2AMH02	\$779	9	BY752DLF20MH02	\$1,648	10	BY758FLF20SH	\$5,090	24	C2006FLF4OMQ	\$22,330	82
BY154DLF20MH02	\$779	9	BY752FLF1BMHD04	\$1,925	28	BY758FLF2USH	\$5,090	24	C2008FLF4BMQ	\$38,901	82
BY154FLC2AOZ	\$566	15	BY752FLF10MHD04	\$1,925	28	BY758FLF3BMHD	\$5,414	28	C2008FLF4OMQ	\$38,901	82
BY154FLC200Z	\$566	15	BY752FLF20MH04	\$1,649	24	BY758FLF3BMHJ	\$6,748	32	CY154FLF20MWQ	\$666	74
BY154FLF1BMHD02	\$1,035	28	BY752FLF2UMH04	\$1,649	24	BY758FLF30MHD	\$5,414	28	CY154FLF2UMWQ	\$666	74
BY154FLF10MHD02	\$1,035	28	BY752FLF3BMHJ02	\$2,334	32	BY758FLF30MHJ	\$6,748	32	CY754FLF20SWQ	\$1,611	75
BY154FLF2AMH03	\$937	24	BY752FLF30MHJ02	\$2,334	32	BY758YLF20MH	\$5,199	91	CY754FLF2USWQ	\$1,611	75
BY154FLF2AOZ	\$549	14	BY752YLT20MH	\$3,314	95	BY758YLF2USH	\$5,199	91	F2002VLG3JF	\$27,398	148
BY154FLF20MH03	\$937	24	BY752YLT2UMH	\$3,314	95	C0014FLF20MWQ	\$603	74	F2004VLF3JF	\$30,311	148
BY154FLF200Z	\$549	14	BY7545LC20SH	\$5,185	103	C0014FLF2UMWQ	\$603	74	F2006VLF3JF	\$36,201	148
BY154FLF3BMHJ01	\$1,200	32	BY7545LC2USH	\$5,185	103	C0024FLF20MWQ	\$726	74	F2008VLF3JM	\$63,353	148
BY154FLF30MHJ01	\$1,200	32	BY7545LC3BSHD	\$7,047	105	C0024FLF2UMWQ	\$726	74	F2502VLG3JF	\$33,386	148
BY154YLT2AMH	\$1,951	95	BY7545LC30SHD	\$7,047	105	C0034FLF20MWQ	\$818	74	F2504VLF3JF	\$32,427	148
BY154YLT20SH	\$1,951	95	BY7545LF20SH	\$4,949	99	C0034FLF2UMWQ	\$818	74	F2506VLF3JF	\$37,505	148
BY1563LC1BMHD	\$4,729	104	BY7545LF2USH	\$4,949	99	C0054FLF20SWQ	\$949	74	F2508VLF3JM	\$65,955	148
BY1563LC10MHD	\$4,729	104	BY7545LF3BSHD	\$6,810	101	C0054FLF2UMWQ	\$949	74	F3002VLG3JF	\$34,762	148
BY1563LC2AMH	\$2,841	102	BY7545LF30SHD	\$6,810	101	C0104FLF20SWQ	\$1,701	75	F3004VLF3JF	\$34,884	148
BY1563LC20MH	\$2,841	102	BY754DLF20SH01	\$1,427	10	C0104FLF2USWQ	\$1,701	75	F3006VLF3JF	\$38,905	148
BY1563LF1BMHD	\$4,540	100	BY754DLF2USH01	\$1,427	10	C0106FLF20SWQ	\$2,887	75	F3008FLF4BM	\$66,543	16
BY1563LF10MHD	\$4,540	100	BY754FLF1BSHD04	\$1,823	28	C0106FLF2USWQ	\$2,887	75	F3008FLF4BMH	\$74,886	26
BY1563LF2AMH	\$2,652	98	BY754FLF10SHD04	\$1,823	28	C0154FLF20SWQ	\$2,359	75	F3008FLF4BMHD	\$75,983	30
BY1563LF20MH	\$2,652	98	BY754FLF20SH04	\$1,570	24	C0154FLF2USWQ	\$2,359	75	F3008FLF4BMQ	\$53,174	82
BY156DLF2AMH02	\$967	9	BY754FLF2USH04	\$1,570	24	C0156FLF30MWQ	\$4,301	75	F3008FLF40M	\$66,543	16
BY156DLF20MH02	\$967	9	BY754FLF3BSHJ01	\$2,317	32	C0156FLF3UMWQ	\$4,301	75	F3008FLF40MH	\$74,886	26
BY156FLC2AOZ	\$765	15	BY754FLF30SHJ01	\$2,317	32	C0204FLF20SWQ	\$2,854	75	F3008FLF40MHD	\$79,972	30
BY156FLC200Z	\$765	15	BY754YLT20MH	\$3,172	95	C0204FLF2USWQ	\$2,854	75	F3008FLF40MQ	\$53,174	82
BY156FLF1BMHD02	\$1,236	28	BY754YLT2USH	\$3,172	95	C0206FLF30MWQ	\$4,872	75	F3008FLG3BM	\$63,000	16
BY156FLF10MHD02	\$1,236	28	BY7566LC20SH	\$6,937	103	C0206FLF3UMWQ	\$4,872	75	F3008FLG3BMH	\$70,898	26
BY156FLF2AMH03	\$1,133	24	BY7566LC2USH	\$6,937	103	C0254FLF30MWQ	\$3,805	75	F3008FLG3BMHD	\$75,983	30
BY156FLF2AOZ	\$752	14	BY7566LC3BSHD	\$9,488	105	C0254FLF3UMWQ	\$3,805	75	F3008FLG30M	\$63,000	16
BY156FLF20MH03	\$1,079	24	BY7566LC30SHD	\$9,488	105	C0256FLF30MWQ	\$6,003	75	F3008FLG30MH	\$70,898	26
BY156FLF200Z	\$752	14	BY7566LF20SH	\$6,559	99	C0256FLF3UMWQ	\$6,003	75	F3008FLG30MHD	\$79,972	30
BY156FLF3BMHJ01	\$1,651	32	BY7566LF2USH	\$6,559	99	C0304FLF30MWQ	\$4,256	75	F3008VLF3JM	\$67,333	148
BY156FLF30MHJ01	\$1,651	32	BY7566LF3BSHD	\$9,110	101	C0304FLF3UMWQ	\$4,256	75	F3502VLG3JF	\$36,779	148
BY1584LC1BMHD	\$5,821	104	BY7566LF30SHD	\$9,110	101	C0306FLF30MWQ	\$6,169	75	F3504VLF3JF	\$37,059	148
BY1584LC10MHD	\$5,821	104	BY756DLF20MH01	\$2,352	10	C0306FLF3UMWQ	\$6,169	75	F3506VLF3JF	\$41,751	148
BY1584LC2AMH	\$3,930	102	BY756DLF2UMH01	\$2,352	10	C0404FLF30SWQ	\$5,683	76	F3508FLF4BM	\$77,043	16
BY1584LC20MH	\$3,930	102	BY756FLF1BMHD02	\$3,052	28	C0404FLF3USWQ	\$5,683	76	F3508FLF4BMH	\$86,701	26
BY1584LF1BMHD	\$5,586	100	BY756FLF10MHD02	\$3,052	28	C0406FLF30MWQ	\$9,161	76	F3508FLF4BMHD	\$87,800	30
BY1584LF10MHD	\$5,586	100	BY756FLF20SH02	\$2,674	24	C0406FLF3UMWQ	\$9,161	76	F3508FLF4BMQ	\$58,145	82
BY1584LF2AMH	\$3,694	98	BY756FLF2USH02	\$2,674	24	C0504FLF30SWQ	\$6,343	76	F3508FLF40M	\$77,043	16
BY1584LF20MH	\$3,694	98	BY756FLF3BMHJ01	\$3,860	32	C0504FLF3USWQ	\$6,343	76	F3508FLF40MH	\$86,701	26

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
F3508FLF4OMHD	\$91,788	30	F4506FLF4BM	\$74,418	16	F6002VLG3OMH	\$67,752	12	F7004VLF4OM	\$67,855	3
F3508FLF4OMQ	\$58,145	82	F4506FLF4BMH	\$67,242	41	F6003FLG8BM	\$89,775	17	F7004VLG3BM	\$64,312	3
F3508FLG3BM	\$73,499	16	F4506FLF4BMHD	\$71,325	54	F6003FLG8OM	\$89,775	17	F7004VLG3OM	\$64,312	3
F3508FLG3BMH	\$82,714	26	F4506FLF4BMQ	\$56,247	83	F6004FLF4BM	\$82,294	17	F7006VKF4BM	\$86,230	3
F3508FLG3BMHD	\$87,800	30	F4506FLF4OM	\$74,418	16	F6004FLF4BMH	\$74,357	42	F7006VKF4OM	\$86,230	3
F3508FLG3OM	\$73,499	16	F4506FLF4OMH	\$67,242	41	F6004FLF4BMQ	\$56,930	83	F7006VKG3BM	\$82,687	3
F3508FLG3OMH	\$82,714	26	F4506FLF4OMHD	\$71,325	54	F6004FLF4OM	\$82,294	17	F7006VKG3OM	\$82,687	3
F3508FLG3OMHD	\$91,788	30	F4506FLF4OMQ	\$56,247	83	F6004FLF4OMH	\$74,357	42	F7006VLF3JM	\$88,377	150
F3508VLF3JM	\$71,782	148	F4506FLG3BM	\$70,875	17	F6004FLF4OMQ	\$56,930	83	F8001VLG3BM	\$78,749	3
F4002VLG3JF	\$37,982	149	F4506FLG3BMH	\$64,040	41	F6004FLG3BM	\$78,749	17	F8001VLG3OM	\$78,749	3
F4004VLF3JF	\$38,170	149	F4506FLG3BMHD	\$68,124	54	F6004FLG3BMH	\$71,155	42	F8003VLG3BM	\$78,749	3
F4006FLF4BM	\$63,196	16	F4506FLG3OM	\$70,875	16	F6004FLG3OM	\$78,749	17	F8003VLG3OM	\$78,749	3
F4006FLF4BMH	\$62,152	41	F4506FLG3OMH	\$64,040	41	F6004FLG3OMH	\$71,155	42	F8004VLF3JM	\$89,742	150
F4006FLF4BMHD	\$66,236	54	F4506FLG3OMHD	\$68,124	54	F6004VLF3JM	\$85,533	149	F8004VLF4BM	\$77,043	3
F4006FLF4BMQ	\$49,240	83	F4506VLF3JF	\$57,537	149	F6004VLF4BM	\$58,669	2	F8004VLF4OM	\$77,043	3
F4006FLF4OM	\$63,196	16	F4506VLF4BM	\$56,700	2	F6004VLF4OM	\$58,669	2	F8004VLG3BM	\$73,499	3
F4006FLF4OMH	\$62,152	41	F4506VLF4OM	\$56,700	2	F6004VLG3BM	\$55,124	2	F8004VLG3OM	\$73,499	3
F4006FLF4OMHD	\$66,236	54	F4506VLG3BM	\$53,155	2	F6004VLG3OM	\$55,124	2	F9004VLF3JM	\$91,900	150
F4006FLF4OMQ	\$49,240	83	F4506VLG3OM	\$53,155	2	F6006FLF4BM	\$93,318	17	J1004FLF3I-C	\$126,170	163
F4006FLG3BM	\$59,653	16	F4508FLF4BM	\$98,043	17	F6006FLF4BMH	\$88,589	42	J1006FLF3I-C	\$143,532	163
F4006FLG3BMH	\$59,368	41	F4508FLF4BMQ	\$73,289	83	F6006FLF4BMQ	\$85,397	83	J1007WLF3I-A	\$230,513	166
F4006FLG3BMHD	\$63,452	54	F4508FLF4OM	\$98,043	17	F6006FLF4OM	\$93,318	17	J1007WLF3I-C	\$250,113	166
F4006FLG3OM	\$59,653	16	F4508FLF4OMQ	\$73,289	83	F6006FLF4OMH	\$88,589	42	J1007WLFLI-A	\$245,320	166
F4006FLG3OMH	\$59,368	41	F4508FLG3BM	\$94,500	17	F6006FLF4OMQ	\$85,397	83	J1007WLFLI-C	\$264,920	166
F4006FLG3OMHD	\$63,452	54	F4508FLG3OM	\$94,500	17	F6006FLG3BM	\$89,775	17	J1008FLF3I-C	\$172,723	163
F4006VLF3JF	\$51,088	149	F4508VLF3JM	\$76,202	149	F6006FLG3BMH	\$85,387	42	J1008WLF3I-C	\$255,213	166
F4006VLF4BM	\$50,793	2	F5002VLG3JF	\$42,761	149	F6006FLG3OM	\$89,775	17	J1008WLFLI-C	\$270,020	166
F4006VLF4OM	\$50,793	2	F5004VLF3JF	\$44,940	149	F6006FLG3OMH	\$85,387	42	J1008WLFUI-C	\$271,924	166
F4006VLG3BM	\$47,250	2	F5006FLF4BM	\$82,294	17	F6006VLF3JM	\$86,099	149	J1254FLF3I-C	\$145,447	163
F4006VLG3OM	\$47,250	2	F5006FLF4BMH	\$74,357	42	F6006VLF4BM	\$74,418	2	J1255WLF3I-A	\$191,322	166
F4008FLF4BM	\$87,544	16	F5006FLF4BMHD	\$78,440	54	F6006VLF4OM	\$74,418	2	J1255WLF3I-C	\$210,922	166
F4008FLF4BMH	\$98,518	26	F5006FLF4BMQ	\$71,163	83	F6006VLG3BM	\$70,875	2	J1255WLFLI-A	\$206,129	166
F4008FLF4BMHD	\$99,616	30	F5006FLF4OM	\$82,294	17	F6006VLG3OM	\$70,875	2	J1255WLFLI-C	\$225,729	166
F4008FLF4BMQ	\$68,259	83	F5006FLF4OMH	\$74,357	42	F7001VLG3BM	\$68,906	3	J1256FLF3I-C	\$172,511	163
F4008FLF4OM	\$87,544	16	F5006FLF4OMHD	\$78,440	54	F7001VLG3OM	\$68,906	3	J1257WLF3I-C	\$259,765	166
F4008FLF4OMH	\$98,518	26	F5006FLF4OMQ	\$71,163	83	F7002VKG3BM	\$68,906	3	J1257WLFLI-C	\$274,572	166
F4008FLF4OMHD	\$103,603	30	F5006FLG3BM	\$78,749	17	F7002VKG3OM	\$68,906	3	J1257WLFUI-C	\$276,476	166
F4008FLF4OMQ	\$68,259	83	F5006FLG3BMH	\$71,155	42	F7003FTAB11F-A	\$96,354	17	J1258FLF3I-C	\$210,511	163
F4008FLG3BM	\$83,999	16	F5006FLG3BMHD	\$75,239	54	F7003FTAC11F-A	\$96,354	17	J1258WLF3I-C	\$262,915	166
F4008FLG3BMH	\$94,530	26	F5006FLG3OM	\$78,749	17	F7003VLG3BM	\$68,906	3	J1258WLFLI-C	\$277,722	166
F4008FLG3BMHD	\$99,616	30	F5006FLG3OMH	\$71,155	42	F7003VLG3OM	\$68,906	3	J1258WLFUI-C	\$279,626	166
F4008FLG3OM	\$83,999	16	F5006FLG3OMHD	\$75,239	54	F7004FLF4BM	\$95,418	17	J1503WLFLI-C	\$229,574	166
F4008FLG3OMH	\$94,530	26	F5006VLF3JM	\$76,916	149	F7004FLF4BMH	\$86,216	42	J1503WLFUI-C	\$231,478	166
F4008FLG3OMHD	\$103,603	30	F5006VLF4BM	\$62,605	2	F7004FLF4OM	\$95,418	17	J1504FLF3I-C	\$171,319	163
F4008VLF3JM	\$73,031	149	F5006VLF4OM	\$62,605	2	F7004FLF4OMH	\$86,216	42	J1505WLF3I-A	\$206,269	166
F4008VLF4BM	\$56,043	2	F5006VLG3BM	\$59,062	2	F7004FLG3BM	\$91,875	17	J1505WLF3I-C	\$225,869	166
F4008VLF4OM	\$56,043	2	F5006VLG3OM	\$59,062	2	F7004FLG3BMH	\$83,014	42	J1505WLFLI-A	\$221,076	166
F4008VLG3BM	\$52,500	2	F5008VLF3JM	\$79,793	149	F7004FLG3OM	\$91,875	17	J1505WLFLI-C	\$240,676	166
F4008VLG3OM	\$52,500	2	F6002VLG3BM	\$64,467	2	F7004FLG3OMH	\$83,014	42	J1506FLF3I-C	\$189,064	163
F4502VLG3JF	\$41,639	149	F6002VLG3BMH	\$67,752	12	F7004VLF3JM	\$87,873	150	J1507WLF3I-C	\$265,752	166
F4504VLF3JF	\$43,320	149	F6002VLG3OM	\$64,467	2	F7004VLF4BM	\$67,855	3	J1507WLFLI-C	\$280,559	166

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J1507WLFUI-C	\$282,463	166	J2257WLFUI-C	\$312,573	167	J3008GLFUI-C	\$353,271	152	J4008WLF3I-C	\$435,957	168
J1508FLF3I-C	\$231,362	163	J2257WLFUI-C	\$314,477	167	J3008NLF3I-C	\$346,657	158	J4008WLFUI-C	\$450,764	168
J1508WLF3I-C	\$269,213	166	J2258GLF3I-C	\$281,390	152	J3008NLFUI-C	\$361,908	158	J4008WLFUI-C	\$452,668	168
J1508WLFUI-C	\$284,020	166	J2258GLFUI-C	\$296,197	152	J3008NLFUI-C	\$363,869	158	J4503GLFUI-C	\$353,574	153
J1508WLFUI-C	\$285,924	166	J2258GLFUI-C	\$298,101	152	J3008WLF3I-C	\$378,511	167	J4503NLFUI-C	\$364,181	158
J1753WLFUI-C	\$277,128	166	J2258NLF3I-C	\$289,832	157	J3008WLFUI-C	\$393,318	167	J4503WLFUI-C	\$427,979	168
J1753WLFUI-C	\$279,032	166	J2258NLFUI-C	\$305,083	157	J3008WLFUI-C	\$395,222	167	J4505GLF3I-C	\$328,580	153
J1754FLF3I-C	\$183,362	163	J2258NLFUI-C	\$307,044	157	J3503WLFUI-C	\$371,263	167	J4505GLFUI-C	\$343,387	153
J1755WLF3I-C	\$265,869	166	J2258WLF3I-C	\$334,468	167	J3505WLF3I-C	\$335,243	167	J4505GLFUI-C	\$345,291	153
J1755WLFUI-C	\$280,676	166	J2258WLFUI-C	\$349,275	167	J3505WLFUI-C	\$350,050	167	J4505NLF3I-C	\$338,437	158
J1755WLFUI-C	\$282,580	166	J2258WLFUI-C	\$351,179	167	J3505WLFUI-C	\$351,954	168	J4505NLFUI-C	\$353,689	158
J1756FLF3I-C	\$227,191	163	J2503WLFUI-C	\$325,000	167	J3507GLF3I-C	\$312,128	152	J4505NLFUI-C	\$355,650	158
J1757WLF3I-C	\$275,429	166	J2503WLFUI-C	\$326,904	167	J3507GLFUI-C	\$326,935	152	J4505WLFUI-C	\$385,618	168
J1757WLFUI-C	\$290,236	166	J2504FLF3I-C	\$235,532	163	J3507GLFUI-C	\$328,839	152	J4505WLFUI-C	\$387,522	168
J1757WLFUI-C	\$292,140	166	J2505WLF3I-C	\$305,196	167	J3507NLF3I-C	\$321,492	158	J4507GLF3I-C	\$363,957	153
J1758GLF3I-C	\$253,404	151	J2505WLFUI-C	\$320,003	167	J3507NLFUI-C	\$336,743	158	J4507GLFUI-C	\$378,764	153
J1758GLFUI-C	\$268,211	151	J2505WLFUI-C	\$321,907	167	J3507NLFUI-C	\$338,704	158	J4507GLFUI-C	\$380,668	153
J1758GLFUI-C	\$270,115	151	J2507WLF3I-C	\$308,617	167	J3507WLF3I-C	\$364,468	168	J4507NLF3I-C	\$374,876	158
J1758NLF3I-C	\$261,006	157	J2507WLFUI-C	\$323,424	167	J3507WLFUI-C	\$379,275	168	J4507NLFUI-C	\$390,127	158
J1758NLFUI-C	\$276,257	157	J2507WLFUI-C	\$325,328	167	J3507WLFUI-C	\$381,179	168	J4507NLFUI-C	\$392,088	158
J1758NLFUI-C	\$278,218	157	J2508GLF3I-C	\$314,068	152	J3508GLF3I-C	\$347,120	152	J4507WLF3I-C	\$414,255	168
J1758WLF3I-C	\$276,277	166	J2508GLFUI-C	\$328,875	152	J3508GLFUI-C	\$361,927	152	J4507WLFUI-C	\$429,062	168
J1758WLFUI-C	\$291,084	166	J2508GLFUI-C	\$330,779	152	J3508GLFUI-C	\$363,831	152	J4507WLFUI-C	\$430,966	168
J1758WLFUI-C	\$292,988	166	J2508NLF3I-C	\$323,490	157	J3508NLF3I-C	\$357,534	158	J4508GLF3I-C	\$389,470	153
J2003WLFUI-C	\$296,915	167	J2508NLFUI-C	\$338,741	157	J3508NLFUI-C	\$372,785	158	J4508GLFUI-C	\$404,277	153
J2003WLFUI-C	\$298,819	167	J2508NLFUI-C	\$340,702	157	J3508NLFUI-C	\$374,746	158	J4508GLFUI-C	\$406,181	153
J2004FLF3I-C	\$214,255	163	J2508WLF3I-C	\$356,489	167	J3508WLF3I-C	\$402,128	168	J4508NLF3I-C	\$401,154	158
J2005WLF3I-C	\$275,398	167	J2508WLFUI-C	\$371,296	167	J3508WLFUI-C	\$416,935	168	J4508NLFUI-C	\$416,405	158
J2005WLFUI-C	\$290,205	167	J2508WLFUI-C	\$373,200	167	J3508WLFUI-C	\$418,839	168	J4508NLFUI-C	\$418,366	158
J2005WLFUI-C	\$292,109	167	J2758GLF3I-C	\$326,790	152	J4003GLFUI-C	\$334,920	152	J5003GLFUI-C	\$362,820	153
J2006FLF3I-C	\$239,702	163	J2758GLFUI-C	\$341,597	152	J4003GLFUI-C	\$336,824	152	J5003NLFUI-C	\$373,705	158
J2007WLF3I-C	\$285,638	167	J2758GLFUI-C	\$343,501	152	J4003NLFUI-C	\$344,968	158	J5003WLFUI-C	\$463,723	168
J2007WLFUI-C	\$300,445	167	J2758NLF3I-C	\$336,594	157	J4003NLFUI-C	\$346,929	158	J5005GLFUI-C	\$358,689	153
J2007WLFUI-C	\$302,349	167	J2758NLFUI-C	\$351,845	157	J4003WLFUI-C	\$386,274	168	J5005GLFUI-C	\$360,593	153
J2008GLF3I-C	\$268,612	151	J2758NLFUI-C	\$353,806	157	J4005WLFUI-C	\$370,184	168	J5005NLFUI-C	\$369,449	158
J2008GLFUI-C	\$283,419	151	J3003WLFUI-C	\$340,000	167	J4005WLFUI-C	\$372,088	168	J5005NLFUI-C	\$371,410	158
J2008GLFUI-C	\$285,323	151	J3003WLFUI-C	\$341,904	167	J4007GLF3I-C	\$342,064	152	J5005WLFUI-C	\$401,348	168
J2008NLF3I-C	\$276,670	157	J3005WLF3I-C	\$320,000	167	J4007GLFUI-C	\$356,871	152	J5005WLFUI-C	\$403,252	168
J2008NLFUI-C	\$291,922	157	J3005WLFUI-C	\$334,807	167	J4007GLFUI-C	\$358,775	152	J5007GLF3I-C	\$378,511	153
J2008NLFUI-C	\$293,883	157	J3005WLFUI-C	\$336,711	167	J4007NLF3I-C	\$352,326	158	J5007GLFUI-C	\$393,318	153
J2008WLF3I-C	\$292,979	167	J3007GLF3I-C	\$297,245	152	J4007NLFUI-C	\$367,577	158	J5007GLFUI-C	\$395,222	153
J2008WLFUI-C	\$307,786	167	J3007GLFUI-C	\$312,052	152	J4007NLFUI-C	\$369,538	158	J5007NLF3I-C	\$389,866	158
J2008WLFUI-C	\$309,690	167	J3007GLFUI-C	\$313,956	152	J4007WLF3I-C	\$399,894	168	J5007NLFUI-C	\$405,118	158
J2253WLFUI-C	\$315,106	167	J3007NLF3I-C	\$306,162	157	J4007WLFUI-C	\$414,701	168	J5007NLFUI-C	\$407,079	158
J2253WLFUI-C	\$317,010	167	J3007NLFUI-C	\$321,414	157	J4007WLFUI-C	\$416,605	168	J5007WLF3I-C	\$435,957	168
J2254FLF3I-C	\$218,511	163	J3007NLFUI-C	\$323,375	158	J4008GLF3I-C	\$359,320	153	J5007WLFUI-C	\$450,764	168
J2255WLF3I-C	\$290,362	167	J3007WLF3I-C	\$340,532	167	J4008GLFUI-C	\$374,127	153	J5007WLFUI-C	\$452,668	168
J2255WLFUI-C	\$305,169	167	J3007WLFUI-C	\$355,339	167	J4008GLFUI-C	\$376,031	153	J5008GLF3I-C	\$402,766	153
J2255WLFUI-C	\$307,073	167	J3007WLFUI-C	\$357,243	167	J4008NLF3I-C	\$370,100	158	J5008GLFUI-C	\$417,573	153
J2256FLF3I-C	\$251,872	163	J3008GLF3I-C	\$336,560	152	J4008NLFUI-C	\$385,351	158	J5008GLFUI-C	\$419,477	153
J2257WLF3I-C	\$297,766	167	J3008GLFUI-C	\$351,367	152	J4008NLFUI-C	\$387,312	158	J5008NLF3I-C	\$414,849	158

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J5008NLF1-C	\$430,100	158	M205WTQL11E-A	\$115,954	156	M305WTAL11E-C	\$131,464	156	M455WTQL11E-C	\$260,497	157
J5008NLFUI-C	\$432,061	158	M205WTQL11E-C	\$139,361	156	M305WTQL11E-A	\$126,376	156	M458WPAL11E-C	\$249,680	152
J608FLF3I-C	\$134,380	162	M206WPAL11E-A	\$99,975	150	M305WTQL11E-C	\$149,783	156	M458WPQL11E-C	\$264,487	152
J708FLF3I-C	\$140,491	162	M206WPAL11E-C	\$123,383	150	M307WPAL11E-C	\$219,320	151	M458WTAL11E-C	\$257,170	157
J708WLF3I-A	\$204,660	165	M206WTAL11E-A	\$104,047	156	M307WPQL11E-C	\$234,127	151	M458WTQL11E-C	\$272,422	157
J708WLF3I-C	\$224,260	165	M206WTAL11E-C	\$127,453	156	M307WTAL11E-C	\$225,900	156	M503WPQL11F-C	\$278,639	152
J708WLF1I-A	\$219,467	165	M208WPAL11E-C	\$206,520	150	M307WTQL11E-C	\$241,151	156	M503WTQL11F-C	\$286,998	157
J708WLF1I-C	\$239,067	165	M208WPQL11E-C	\$221,327	150	M308WPAL11E-C	\$228,730	151	M505WPAL11E-C	\$247,402	152
J806FLF3I-C	\$120,170	163	M208WTAL11E-C	\$212,716	156	M308WPQL11E-C	\$243,537	151	M505WPQL11E-C	\$262,209	152
J807WLF3I-A	\$137,872	165	M208WTQL11E-C	\$227,967	156	M308WTAL11E-C	\$235,592	156	M505WTAL11E-C	\$254,824	157
J807WLF3I-C	\$157,472	165	M253TCAL11F-A	\$124,562	166	M308WTQL11E-C	\$250,843	156	M505WTQL11E-C	\$270,075	157
J807WLF1I-A	\$152,679	165	M253TCAL11F-C	\$147,968	166	M353WPAL11F-A	\$104,493	151	M507WTAL11E-C	\$269,160	157
J807WLF1I-C	\$172,279	165	M253TCQL11F-A	\$142,880	166	M353WPAL11F-C	\$127,900	151	M507WTQL11E-C	\$284,411	157
J808FLF3I-C	\$140,426	163	M253TCQL11F-C	\$166,287	166	M353WPQL11F-A	\$122,811	151	M508WPAL11E-C	\$261,320	152
J808WLF3I-A	\$213,681	165	M253WPAL11F-A	\$96,433	150	M353WPQL11F-C	\$146,219	151	M508WPQL11E-C	\$276,127	152
J808WLF3I-C	\$233,281	165	M253WPAL11F-C	\$119,840	150	M353WTAL11F-A	\$109,216	156	M553WPQL11F-C	\$293,765	152
J808WLF1I-A	\$228,488	165	M253WPQL11F-A	\$114,751	151	M353WTAL11F-C	\$132,622	156	M553WTQL11F-C	\$302,578	157
J808WLF1I-C	\$248,088	165	M253WPQL11F-C	\$138,158	151	M353WTQL11F-A	\$127,534	157	M555WPAL11F-C	\$259,730	152
J904FLF3I-C	\$118,638	163	M253WTAL11F-A	\$100,308	156	M353WTQL11F-C	\$150,941	157	M555WPQL11F-C	\$274,537	152
J906FLF3I-C	\$133,957	163	M253WTAL11F-C	\$123,716	156	M355WPAL11E-A	\$106,082	151	M555WTAL11F-C	\$267,522	157
J907WLF3I-A	\$147,766	165	M253WTQL11F-A	\$118,627	156	M355WPAL11E-C	\$129,488	151	M555WTQL11F-C	\$282,773	157
J907WLF3I-C	\$167,366	165	M253WTQL11F-C	\$142,034	156	M355WPAL11E-C	\$227,712	151	M557WPAL11F-C	\$272,190	152
J907WLF1I-A	\$162,573	165	M255WPAL11E-A	\$100,627	151	M355WPQL11E-A	\$124,400	151	M557WPQL11F-C	\$286,997	152
J907WLF1I-C	\$182,173	165	M255WPAL11E-C	\$124,034	151	M355WPQL11E-C	\$147,807	151	M557WTAL11F-C	\$280,356	157
J908FLF3I-C	\$162,596	163	M255WPQL11E-A	\$118,945	151	M355WPQL11E-C	\$242,519	151	M557WTQL11F-C	\$295,607	157
J908WLF3I-A	\$225,638	165	M255WPQL11E-C	\$142,353	151	M355WTAL11E-C	\$225,807	157	M603WPQL11F-C	\$306,465	152
J908WLF3I-C	\$245,238	165	M255WTAL11E-A	\$104,434	156	M355WTQL11E-C	\$241,058	157	M603WTQL11F-C	\$315,659	157
J908WLF1I-A	\$240,445	165	M255WTAL11E-C	\$127,840	156	M357WTAL11E-C	\$234,543	157	M605WPAL11E-C	\$272,389	152
J908WLF1I-C	\$260,045	165	M255WTQL11E-A	\$122,753	156	M357WTQL11E-C	\$249,795	157	M605WPQL11E-C	\$287,196	152
M203TCAL11F-A	\$117,844	165	M255WTQL11E-C	\$146,159	156	M358WPAL11E-C	\$227,712	151	M605WTAL11E-C	\$280,561	157
M203TCAL11F-C	\$141,252	165	M257WPAL11E-C	\$213,190	151	M358WPQL11E-C	\$242,519	151	M605WTQL11E-C	\$295,812	157
M203TCQL11F-A	\$136,163	165	M257WPQL11E-C	\$227,997	151	M403WPAL11F-A	\$108,298	151	M703WPQL11F-C	\$319,281	152
M203TCQL11F-C	\$159,570	165	M257WTAL11E-C	\$219,586	156	M403WPAL11F-C	\$131,704	151	M703WTQL11F-C	\$328,859	158
M203WPAL11F-A	\$91,390	150	M257WTQL11E-C	\$234,837	156	M403WPQL11F-A	\$126,616	151	M705WPAL11E-C	\$283,780	152
M203WPAL11F-C	\$114,797	150	M258WPAL11E-C	\$218,600	151	M403WPQL11F-C	\$150,023	151	M705WPQL11E-C	\$298,587	152
M203WPQL11F-A	\$109,708	150	M258WPQL11E-C	\$233,407	151	M403WPQL11F-C	\$248,541	151	M705WTAL11E-C	\$292,293	158
M203WPQL11F-C	\$133,115	150	M258WTAL11E-C	\$225,158	156	M403WTQL11F-C	\$157,329	157	M705WTQL11E-C	\$307,545	158
M203WTAL11F-A	\$96,083	156	M258WTQL11E-C	\$240,409	156	M403WTQL11F-CF	\$255,997	157	M805WPAL11E-C	\$297,360	152
M203WTAL11F-C	\$119,490	156	M303WPAL11F-A	\$101,155	151	M405WPAL11E-C	\$225,832	151	M805WPQL11E-C	\$312,167	152
M203WTQL11F-A	\$114,401	156	M303WPAL11F-C	\$124,562	151	M405WPQL11E-C	\$240,639	151	M805WTAL11E-C	\$306,281	158
M203WTQL11F-C	\$137,809	156	M303WPQL11F-A	\$119,473	151	M405WTAL11E-C	\$232,607	157	M805WTQL11E-C	\$321,532	158
M205TCAL11E-A	\$122,315	165	M303WPQL11F-C	\$142,880	151	M405WTQL11E-C	\$247,858	157	Y152DPSA31A-P	\$490	6
M205TCAL11E-C	\$145,721	165	M303WTAL11F-A	\$105,349	156	M407WTAL11E-C	\$245,768	157	Y152DPSC31A-P	\$490	6
M205TCQL11E-A	\$140,633	166	M303WTAL11F-C	\$128,756	156	M407WTQL11E-C	\$261,020	157	Y152FTSA24A-P	\$496	20
M205TCQL11E-C	\$164,040	166	M303WTQL11F-A	\$123,667	156	M408WPAL11E-C	\$238,610	151	Y152FTSC24A-P	\$496	20
M205WPAL11E-A	\$94,096	150	M303WTQL11F-C	\$147,075	156	M408WPQL11E-C	\$253,417	151	Y152SDSC41A-P	\$505	37
M205WPAL11E-C	\$117,502	150	M305WPAL11E-A	\$104,211	151	M453WPQL11F-C	\$265,389	152	Y152SDSC42A-P	\$641	43
M205WPQL11E-A	\$112,414	150	M305WPAL11E-C	\$127,617	151	M453WTQL11F-C	\$273,351	157	Y152SDSC44A-P	\$705	46
M205WPQL11E-C	\$135,820	150	M305WPQL11E-A	\$122,529	151	M455WPAL11E-C	\$238,103	152	Y152SDSC47A-P	\$641	43
M205WTAL11E-A	\$97,635	156	M305WPQL11E-C	\$145,935	151	M455WPQL11E-C	\$252,910	152	Y152SDSR41A-P	\$505	37
M205WTAL11E-C	\$121,043	156	M305WTAL11E-A	\$108,057	156	M455WTAL11E-C	\$245,246	157	Y152SDSR42A-P	\$641	43

Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page	Model No.	Price	Page
Y152SDSR44A-P	\$705	46	Y154XDSC44A-P	\$992	68	Y752DPSC31A-P	\$1,008	7	Y754SDSR42A-P	\$1,214	44
Y152SDSR47A-P	\$641	43	Y154XDSC47A-P	\$902	66	Y752FTSA24A-P	\$1,077	21	Y754SDSR44A-P	\$1,335	47
Y152XDSB41A-P	\$764	62	Y154XPEA41A	\$1,710	90	Y752FTSC24A-P	\$1,077	21	Y754SDSR47A-P	\$1,214	45
Y152XDSB42A-P	\$873	65	Y154XPEC41A	\$1,710	90	Y752FTVB1PX-A	\$3,387	112	Y754XDSB41A-P	\$1,532	62
Y152XDSB44A-P	\$960	68	Y154XSSB41A-P	\$615	50	Y752FTVB3PW-A	\$4,254	114	Y754XDSB42A-P	\$1,707	67
Y152XDSB47A-P	\$873	65	Y154XSSB42A-P	\$724	55	Y752FTVB3PX-A	\$4,517	115	Y754XDSB44A-P	\$1,878	69
Y152XDSC41A-P	\$764	62	Y154XSSB44A-P	\$796	58	Y752SDSC41A-P	\$1,039	37	Y754XDSB47A-P	\$1,707	67
Y152XDSC42A-P	\$873	65	Y154XSSB47A-P	\$724	56	Y752SDSC42A-P	\$1,214	44	Y754XDSC41A-P	\$1,532	62
Y152XDSC44A-P	\$960	68	Y154XSSC41A-P	\$615	50	Y752SDSC44A-P	\$1,335	47	Y754XDSC42A-P	\$1,707	67
Y152XDSC47A-P	\$873	65	Y154XSSC42A-P	\$724	56	Y752SDSC47A-P	\$1,214	44	Y754XDSC44A-P	\$1,878	69
Y152XPEA41A	\$1,730	90	Y154XSSC44A-P	\$796	58	Y752SDSR41A-P	\$1,039	37	Y754XDSC47A-P	\$1,707	67
Y152XPEC41A	\$1,730	90	Y154XSSC47A-P	\$724	56	Y752SDSR42A-P	\$1,214	44	Y754XPEA41A	\$2,844	91
Y152XSSB41A-P	\$616	49	Y156DPSA31A-P	\$597	6	Y752SDSR44A-P	\$1,335	47	Y754XPEC41A	\$2,844	91
Y152XSSB42A-P	\$725	55	Y156DPSC31A-P	\$597	6	Y752SDSR47A-P	\$1,214	44	Y754XSSB41A-P	\$1,206	50
Y152XSSB44A-P	\$798	58	Y156FCWA34A	\$4,353	109	Y752XDSB41A-P	\$1,543	62	Y754XSSB42A-P	\$1,381	57
Y152XSSB47A-P	\$725	55	Y156FCWA34H	\$4,353	109	Y752XDSB42A-P	\$1,718	66	Y754XSSB44A-P	\$1,519	59
Y152XSSC41A-P	\$616	49	Y156FCWC34A	\$4,353	109	Y752XDSB44A-P	\$1,890	69	Y754XSSB47A-P	\$1,381	57
Y152XSSC42A-P	\$725	55	Y156FCWC34H	\$4,353	109	Y752XDSB47A-P	\$1,718	66	Y754XSSC41A-P	\$1,206	50
Y152XSSC44A-P	\$798	58	Y156FTCA21A-P	\$598	74	Y752XDSC41A-P	\$1,543	62	Y754XSSC42A-P	\$1,381	57
Y152XSSC47A-P	\$725	55	Y156FTCC21A-P	\$598	74	Y752XDSC42A-P	\$1,718	66	Y754XSSC44A-P	\$1,519	59
Y154DPSA31A-P	\$495	6	Y156FTSA24A-P	\$634	20	Y752XDSC44A-P	\$1,890	69	Y754XSSC47A-P	\$1,381	57
Y154DPSC31A-P	\$495	6	Y156FTSC24A-P	\$634	20	Y752XDSC47A-P	\$1,718	67	Y756DPKB11A	\$3,597	78
Y154FCWA34A	\$3,689	109	Y156SDSC41A-P	\$615	37	Y752XPEA41A	\$2,986	91	Y756DPKB41A-Y	\$4,498	79
Y154FCWA34H	\$3,689	109	Y156SDSC42A-P	\$779	44	Y752XPEC41A	\$2,986	91	Y756DPKB41A-Z	\$5,171	80
Y154FCWA42A	\$4,442	109	Y156SDSC44A-P	\$857	46	Y752XSSB41A-P	\$1,212	50	Y756DPPD11A-P	\$1,337	72
Y154FCWA42H	\$4,442	109	Y156SDSC47A-P	\$779	44	Y752XSSB42A-P	\$1,387	56	Y756DPSA31A-P	\$1,680	7
Y154FCWC34A	\$3,689	109	Y156SDSR41A-P	\$615	37	Y752XSSB44A-P	\$1,526	59	Y756DPSC31A-P	\$1,680	7
Y154FCWC34H	\$3,689	109	Y156SDSR42A-P	\$779	44	Y752XSSB47A-P	\$1,387	56	Y756FTCA21A-P	\$1,571	75
Y154FCWC42A	\$4,442	109	Y156SDSR44A-P	\$857	46	Y752XSSC41A-P	\$1,212	50	Y756FTCC21A-P	\$1,571	75
Y154FCWC42H	\$4,442	109	Y156SDSR47A-P	\$779	44	Y752XSSC42A-P	\$1,387	56	Y756FTSA24A-P	\$1,751	21
Y154FNFB32A	\$1,555	86	Y156XDSB41A-P	\$1,092	62	Y752XSSC44A-P	\$1,526	59	Y756FTSC24A-P	\$1,751	21
Y154FNWA34K	\$3,689	109	Y156XDSB42A-P	\$1,223	66	Y752XSSC47A-P	\$1,387	56	Y756SDSC41A-P	\$1,768	37
Y154FNWC34K	\$3,689	109	Y156XDSB44A-P	\$1,345	68	Y754DPKB11A	\$3,191	78	Y756SDSC42A-P	\$2,031	45
Y154FTCA21A-P	\$401	74	Y156XDSB47A-P	\$1,223	66	Y754DPSA31A-P	\$1,008	7	Y756SDSC44A-P	\$2,234	47
Y154FTCC21A-P	\$401	74	Y156XDSC41A-P	\$1,092	62	Y754DPSC31A-P	\$1,008	7	Y756SDSC47A-P	\$2,031	45
Y154FTSA24A-P	\$496	20	Y156XDSC42A-P	\$1,223	66	Y754FCFB32A	\$2,622	86	Y756SDSR41A-P	\$1,768	37
Y154FTSC24A-P	\$496	20	Y156XDSC44A-P	\$1,345	68	Y754FCWA42A	\$8,042	109	Y756SDSR42A-P	\$2,031	45
Y154SDSC41A-P	\$510	37	Y156XDSC47A-P	\$1,223	66	Y754FCWC42A	\$8,042	109	Y756SDSR44A-P	\$2,234	47
Y154SDSC42A-P	\$646	44	Y156XPEA41A	\$1,918	90	Y754FNFB32A	\$3,019	86	Y756SDSR47A-P	\$2,031	45
Y154SDSC44A-P	\$711	46	Y156XPEC41A	\$1,918	90	Y754FTCA21A-P	\$827	75	Y756XDSB41A-P	\$2,553	62
Y154SDSC47A-P	\$646	44	Y156XSSB41A-P	\$735	50	Y754FTCC21A-P	\$827	75	Y756XDSB42A-P	\$2,816	67
Y154SDSR41A-P	\$510	37	Y156XSSB42A-P	\$866	56	Y754FTSA24A-P	\$1,053	21	Y756XDSB44A-P	\$3,098	69
Y154SDSR42A-P	\$646	43	Y156XSSB44A-P	\$953	58	Y754FTSC24A-P	\$1,053	21	Y756XDSB47A-P	\$2,816	67
Y154SDSR44A-P	\$711	46	Y156XSSB47A-P	\$866	56	Y754FTVB1PX-A	\$3,320	112	Y756XDSC41A-P	\$2,553	62
Y154SDSR47A-P	\$646	43	Y156XSSC41A-P	\$735	50	Y754FTVB3PW-A	\$4,170	114	Y756XDSC42A-P	\$2,816	67
Y154XDSB41A-P	\$793	62	Y156XSSC42A-P	\$866	56	Y754FTVB3PX-A	\$4,426	115	Y756XDSC44A-P	\$3,098	69
Y154XDSB42A-P	\$902	66	Y156XSSC44A-P	\$953	58	Y754SDSC41A-P	\$1,039	37	Y756XDSC47A-P	\$2,816	67
Y154XDSB44A-P	\$992	68	Y156XSSC47A-P	\$866	56	Y754SDSC42A-P	\$1,214	45	Y756XPEA41A	\$4,299	91
Y154XDSB47A-P	\$902	66	Y158FCSA21A	\$1,830	17	Y754SDSC44A-P	\$1,335	47	Y756XPEC41A	\$4,299	91
Y154XDSC41A-P	\$793	62	Y158FCSC21A	\$1,830	17	Y754SDSC47A-P	\$1,214	45	Y756XSSB41A-P	\$2,018	50
Y154XDSC42A-P	\$902	66	Y752DPSA31A-P	\$1,008	7	Y754SDSR41A-P	\$1,039	37	Y756XSSB42A-P	\$2,281	57

Model No.	Price	Page
Y756XSSB44A-P	\$2,509	59
Y756XSSB47A-P	\$2,281	57
Y756XSSC41A-P	\$2,018	50
Y756XSSC42A-P	\$2,281	57
Y756XSSC44A-P	\$2,509	59
Y756XSSC47A-P	\$2,281	57
Y758DPKB11A	\$4,244	78
Y758DPKB21A-Y	\$5,306	79
Y758DPKB21A-Z	\$6,102	80
Y758FCSA21A	\$4,581	18
Y758FCSC21A	\$4,581	18

Appendix A

Model Number Breakdown Type 1

First Field (One Digit)			Second Field - HP (Three Digits)			Third Field - Poles & Fan Type (One Digit)			Fourth Field - Construction (One Digit)		Fifth Field (One Digit)				
Symbol	Phase/Start	Design	Symbol	Output (HP)		Symbol	Pole	Fan Type	Symbol	Enclosure	Symbol	Ins.	S.F.		
A	Three-Phase Squirrel Cage	A	X	?	?	Reciprocal	1	2	Uni-CW	Single-Speed	A	Open	A	A	1
B		B	X	1	2	1/12	2		Bi		C	Underwater Type - Gas Filled	B		1.15
C		C	X	2	0	1/20	3		Uni-CCW		D	Open Drip Proof Guarded	C		1.25
D		D					4		Bi		E	Totally Enclosed	D		1.35
I (Note 8)	Explosion Proof Drive System (UL File E53559)		1	/	8	1/8	5	4	Uni		F	Totally Enclosed Fan Cooled	E	A	1.4
			1	/	2	1/2	6		Bi		G	Weather Protected Type-1	U		SPL
L	Single-Phase Condensor SKD	L	3	/	4	3/4	7	6	Uni		K	Open Pipe Ventilated	F	B	1
M		M				8	Bi		M		Splash Proof - Open Machine	G	1.15		
N		N	0	0	1	1	E		Uni		N	Weather Protected Type-2	H		1.25
O		O	0	2	0	20	9		Bi		O		I		1.35
P	Single-Phase Squirrel Cage SIK	L	1	5	0	150	F	10	Uni		P	Totally Enclosed Pipe-Ventilated Machine	J	B	1.4
Q		M				A	Bi					V	SPL		
R		N	Y	?	?	1/10 Times	G		Uni		Q	Underwater Type - Oil Filled	K		1
S		O	Y	1	5	1 1/2	B		Bi		S	Guarded - Open Machine	L		1.15
T	Single-Phase, Two-Condensor Start & Operate SIKD	L	Y	7	5	7 1/2	H	14	Uni		U	Underwater Type - Water-Filled	M	F	1.25
U		M	018 (Note 4)			18.5 kW	C		Bi		V	Dripproof	N		1.35
V		N					J		Uni	Y	Explosion Proof	O	1.4		
W		O					D		Bi	R	Corrosion Proof	W	SPL		
E	Three-Phase Wound Rotor					K	18	Uni	W	Totally Enclosed Fan Cooled - Outdoor Use	P	H	1.0		
F	Other Three-Phase					M		Bi	Z	Water-Proof Machine	Q		1.15		
						N		Uni	B	Totally Enclosed Air Over (TEAO)	R		1.25		
G	Single-Phase, One Condensor SIKD					W		One Winding	H	Open Drip Proof Air Over	S		1.35		
						X	Two Winding	L	Liquid Cooling	T	1.4				
						Y	Three Winding	I	Water Cooling	X	SPL				
X	Single-Phase Shaded Pole					Z	Other	J							
Y	Other Single-Phase					Bi = Bidirectional *			T	Totally Enclosed with Water Air Cooled (TEWAC)					
						Uni = Unidirectional *									
Z	IEC Metric					*Viewed from OPE			X	Other					
Use the Below for Motors over 1000 HP											2	Brake Motor: 6 lb. ft.			
											3	Brake Motor: 10 lb. ft.			
											4	Brake Motor: 15 lb. ft.			
											5	Brake Motor: 35 lb. ft.			
											6	Brake Motor: 50 lb. ft.			

H	Three-Phase Wound Rotor: Times 10
J	Three-Phase Squirrel Cage: Times 10
K	Three-Phase Squirrel Cage: Times 100
Example(s):	
H125 = 1,250 HP	
K125 = 12,500 HP	

Model Number Breakdown Type 1

Sixth Field - Mounting (One Digit)			Seventh Field - Bearings (One Digit)		Eighth Field - Voltage (One Digit)		Ninth Field (Not To Exceed Three Digits)		Tenth Field Optional Extensions (Note 6)	
Symbol	Mount Type	Shaft End	Symbol	Bearing Type	Symbol	Volts - Hz	Symbol	Features	Symbol	Features
F	Floor-Mount	Standard	1	Shielded Ball w/Plugs	A	230/460 - 60	0	Toshiba Internal Reference	A	Toshiba Internal Reference
G		Short	2	Shielded Ball w/o Plugs	B	460 - 60	1	Toshiba Internal Reference	B	Toshiba Internal Reference
A		Special	3	Open Ball Bearing w/ Plugs	C	230 - 60	2	Toshiba Internal Reference	C	Toshiba Internal Reference
R	Resilient Base	Standard	4	Roller Bearing on P.E. w/ Plugs	D	115/230 - 60	3	Toshiba Internal Reference	D	Toshiba Internal Reference
Q		Short	5	Roller Bearing on P.E. & O.P.E.	E	115 - 60	...n	Toshiba Internal Reference	E	Toshiba Internal Reference
I		Special	6	Sleeve Bearing w/Plugs	F	240/480 - 60	A	Toshiba Internal Reference	F	Toshiba Internal Reference
T	C-Face Footed	Standard	7	Sleeve Bearing w/o Plugs	G	2300 or 2400 - 60	B	Toshiba Internal Reference	G	Toshiba Internal Reference
H		Special	8	Roller Bearing on O.P.E. & Ball on P.E.	H	220/380 - 60	C	Toshiba Internal Reference	H	Toshiba Internal Reference
U		Short	9	Special Construction	I	4000 or 4160 - 60	D	Toshiba Internal Reference	I	Toshiba Internal Reference
C	C-Face Footless	Standard	0	Other	J	2300/4160 or 2300/4000 or 2400/4160 - 60	E	Toshiba Internal Reference	J	Toshiba Internal Reference
J		Special	F	Angular Contact Ball (P.E. & O.P.E.)			F	Toshiba Internal Reference	K	Toshiba Internal Reference
E	D-Flange Footed	Standard	G	Angular Contact Ball + Ball	K	6000 or 6600 - 60	G	Toshiba Internal Reference	L	Toshiba Internal Reference
K		Special	H	Angular Contact Ball + Roller	L	208/416 - 60	H	Toshiba Internal Reference	M	Toshiba Internal Reference
D	D-Flange Footless	Standard	J	Cylindrical Roller + Ball	M	13200 - 60	I	Toshiba Internal Reference	N	Toshiba Internal Reference
L		Special	K	Cylindrical Roller + Roller	N	220/440 - 60	J	Toshiba Internal Reference	O	Toshiba Internal Reference
M	Pad-Mount Footless w/o C- Face	Standard	L	Sleeve Bearing (Horiz.) - Self Lub.	O	575 - 60	K	Toshiba Internal Reference	P	Toshiba Internal Reference
P		Special	M	Sleeve Bearing for Vertical	P	Other - 60	L	Toshiba Internal Reference	Q	Toshiba Internal Reference
N	Footless Frame	Standard	N	Third Pedestal Bearing	Q	2300 - 50	M	Toshiba Internal Reference	R	Toshiba Internal Reference
V		Special	P	Fourth Pedestal Bearing (Jackshaft)	R	4000 or 4160 - 50	N	Toshiba Internal Reference	S	Toshiba Internal Reference
X	Other	---	Q	Ball + Forced Oil Lube	S	4600 - 50	O	Toshiba Internal Reference	T	Toshiba Internal Reference
S	OEM Motor	Special Shaft & Flange	R	Roller + Forced Oil Lube	T	6000 or 6600 - 50	P	Toshiba Internal Reference	U	Toshiba Internal Reference
			S	Angular Contact + Forced Oil Lube	U	230/460 - 60	Q	Toshiba Internal Reference	V	Toshiba Internal Reference
			T	Cylindrical Roller + Forced Oil Lube	V	190/380 - 50	R	Toshiba Internal Reference	W	Toshiba Internal Reference
B	OEM Motor	Standard	U	Sleeve Bearing (Horiz.) - Forced Oil Lube	W	200/400 - 50	S	Toshiba Internal Reference	X	Toshiba Internal Reference
			V	Sleeve for Vertical + Forced Oil Lube	X	220/440 - 50	T	Toshiba Internal Reference	Y	Toshiba Internal Reference
			W	Third Pedestal Bearing + Forced Oil Lube	Y	Other - 50	U	Toshiba Internal Reference	Z	Toshiba Internal Reference
			X	Fourth Pedestal Bearing + Forced Oil Lube (Jackshaft)	Z	Other	V	Toshiba Internal Reference		
							W	Toshiba Internal Reference		
							X	Toshiba Internal Reference		
							Y	Toshiba Internal Reference		
							Z	Toshiba Internal Reference		
							LX	Toshiba Internal Reference		
							LO	Toshiba Internal Reference		
							NH	Toshiba Internal Reference		
							Medium Voltage Ratings			
							C	Toshiba Internal Reference		
							D	Toshiba Internal Reference		
							E	Toshiba Internal Reference		
							F	Toshiba Internal Reference		
							M	Toshiba Internal Reference		

Appendix A

Model Number Breakdown Type 2

Horsepower or kW	Pole Speed	Enclosure / Construction	Product Family
(Three Digits)	(One Digit)	(Two Digit)	(One Digit)
— — —	—	— —	—
Horsepower 1/2 = 1/2 HP 3/4 = 3/4 HP Y75 = 7.5 HP 1000+ (HP) Rating First Digit = M <i>[M = 50 Multiplier]</i> 5000+ (HP) Rating First Digit = C <i>[C = 250 Multiplier]</i> Second & Third Digit = A Numerical Range from 20 to 99 <i>{Ex: M20 = 1000; 50 x 20 = 1000}</i> <i>{Ex: M25 = 1250; 50 x 25 = 1250}</i> KW³ X37 = 0.37 KW Y11 = 1.1 KW 018 = 18.5 KW	Single Speed 1 = 2-Pole (uni-CW) 2 = 2-Pole (Bi) 3 = 2-Pole (Uni-CCW) 4 = 4-Pole (bi) 5 = 4-Pole (Uni-CCW) 6 = 6-Pole (Bi) 7 = 6-Pole (Uni-CCW) 8 = 8-Pole (Bi) Multi-Speed N = 4/8-Pole 1 Wdg. P = 4/8-Pole 2 Wdg. Q = 4/6-Pole 2 Wdg.	BC = Blower Cooled DP = ODP FA = TEAO FC = TEFC (IP44) FN = TENV FT = TEFC (IP54) QD = Quarry Duty SD = Severe Duty TC = TEAAC WP = WP1 WT = WP2 XD = 841 Petro-Chem XP = TEXP XS = 840 Mill & Chem	A = Anti-Friction Brgs. B = Brake Motor C = Design C D = Single Label (Class I) E = Dual Label (Class I & II) F = VFD/ASD Motor H = Close-Coupled Pump (Steel) J = Close-Coupled Pump (Cast Iron) K = Dry Kiln M = Metric ³ (KW Only) N = Steel Frame P = OWP Q = Sleeve Bearing S = Standard (default) T = Triple Rate V = Vertical P-Base W = SS Washdown

The standard frame offering's catalog number ends after the initial eleventh digit (i.e. shaft column). All alternate frame size offerings use an alpha-numerical sequence.

EXAMPLE:

The defined standard frame assignment is N449T, the catalog number would be: 2504FC SB31A

Alternate Frames Available:

449T Frame: Catalog Number: 2504FC SB31A-F1

505UZ Frame: Catalog Number: 2504FC SB31G-F1

Model Number Breakdown Type 2

Voltage/ Frequency	Efficiency Type	Mounting	Shaft	Suffix (Optional)
(One Digit)	(One Digit)	(One Digit)	(One Digit)	(Three Digits) - All Are Required for Proper Usage
—	—	—	—	—
60 Hz A = 230/460 B = 460 C = 575 D = 230/460/796 G = 2300 J = 2300/4160 K = 2300/4000 L = 4000 50 Hz M = 230/400 60/50Hz R = 230/460V @ 60Hz and 190/380V @ 50 Hz T = 460V @ 60 Hz and 380V @50 Hz	NEMA 1 = Standard Eff. 2 = Epact Eff. 3 = Premium Eff. 4 = NEMA Prem. Eff. IEC 5 = IE1 6 = IE2 7 = IE3	NEMA 1 = Footed 2 = C-Face Footed 3 = D-Flange Footed 4 = C-Face Round 5 = D-Flange Round 6 = Round Body 7 = C-Face NEMA "BA" P = 10" P-Base (250~280 Frame) Q = 12" P-Base (250~320 Frame) R = 16" P-Base (280~440 Frame) S = 20" P-Base (440 Frame) T = 24" P-Base (440 Frame) IEC^{4, 5, 6} F = Footed (B3) G = FF Footed (B35) H = FT Footed (B35) J = FF Rd Body (B5) K = FT Rd Body (B5)	NEMA A = T-Shaft B = TS-Shaft C = TSS-Shaft D = TZ-Shaft E = US-Shaft F = USS-Shaft G = UZ-Shaft * H = 56C-Shaft * K = 140C-Shaft M = JM-Shaft N = Keyless Shaft P = JP-Shaft W = HP Solid Shaft (Normal Thrust) X = LP Solid Shaft (Medium Thrust) Y = VP Solid Shaft (High Thrust) Z = TP Hollow Shaft (High Thrust) IEC S = Std. Shaft Note: * = Shaft & Flange for Frame Series/Size Described	A = Alum. Rotor C = Cu Bar Rotor F = Alt. Frame Size H = Toshiba Internal Reference P = Purchased R = Roller Bearing T = Toshiba Internal Reference Y = 115°C Ambient Z = 135°C Ambient See Note #2

Notes:

- (2) HP ratings covered by multiple frame assignments will follow this format as an example.
Rating: EQPIII/4P/250 HP/460V/TEFC Available in 449, N449, & 505UZ Frames
- (3) To Be Used Only in Conjunction with IEC Metric Frame Ratings; 18.5 KW is Special Case
- (4) FF Flange is Similar to NEMA D-Flange with Clearance through Hole Construction
- (5) FT Flange is Same as FF Flange Except Holes are Tapped
- (6) FI Flange is Similar to NEMA C-Face Flange with Blind Threaded Holes (Not Very Popular)

Appendix B

Efficiency Tables

Full-Load Efficiencies for Energy Efficient Motors

(NEMA Table 12-11)

HP	2-Pole		4-Pole		6-Pole		8-Pole	
	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency
Open Drip Proof Motors								
1			82.5	80.0	80.0	77.0	74.0	70.0
1.5	82.5	80.0	84.0	81.5	84.0	81.5	75.5	72.0
2	84.0	81.5	84.0	81.5	85.5	82.5	85.5	82.5
3	84.0	81.5	86.5	84.0	86.5	84.0	86.5	84.0
5	85.5	82.5	87.5	85.5	87.5	85.5	87.5	85.5
7.5	87.5	85.5	88.5	86.5	88.5	86.5	88.5	86.5
10	88.5	86.5	89.5	87.5	90.2	88.5	89.5	87.5
15	89.5	87.5	91.0	89.5	90.2	88.5	89.5	87.5
20	90.2	88.5	91.0	89.5	91.0	89.5	90.2	88.5
25	91.0	89.5	91.7	90.2	91.7	90.2	90.2	88.5
30	91.0	89.5	92.4	91.0	92.4	91.0	91.0	89.5
40	91.7	90.2	93.0	91.7	93.0	91.7	91.0	89.5
50	92.4	91.0	93.0	91.7	93.0	91.7	91.7	90.2
60	93.0	91.7	93.6	92.4	93.6	92.4	92.4	91.0
75	93.0	91.7	94.1	93.0	93.6	92.4	93.6	92.4
100	93.0	91.7	94.1	93.0	94.1	93.0	93.6	92.4
125	93.6	92.4	94.5	93.6	94.1	93.0	93.6	92.4
150	93.6	92.4	95.0	94.1	94.5	93.6	93.6	92.4
200	94.5	93.6	95.0	94.1	94.5	93.6	93.6	92.4
250	94.5	93.6	95.4	94.5	95.4	94.5	94.5	93.6
300	95.0	94.1	95.4	94.5	95.4	94.5	—	—
350	95.0	94.1	95.4	94.5	95.4	94.5	—	—
400	95.4	94.5	95.4	94.5	—	—	—	—
450	95.8	95.0	95.8	95.0	—	—	—	—
500	95.8	95.0	95.8	95.0	—	—	—	—
Totally Enclosed Fan Cooled Motors								
1	75.5	72.0	82.5	80.0	80.0	77.0	74.0	70.0
1.5	82.5	80.0	84.0	81.5	85.5	82.5	77.0	74.0
2	84.0	81.5	84.0	81.5	86.5	84.0	82.5	80.0
3	85.5	82.5	87.5	85.5	87.5	85.5	84.0	81.5
5	87.5	85.5	87.5	85.5	87.5	85.5	85.5	82.5
7.5	88.5	86.5	89.5	87.5	89.5	87.5	85.5	82.5
10	89.5	87.5	89.5	87.5	89.5	87.5	88.5	86.5
15	90.2	88.5	91.0	89.5	90.2	88.5	88.5	86.5
20	90.2	88.5	91.0	89.5	90.2	88.5	89.5	87.5
25	91.0	89.5	92.4	91.0	91.7	90.2	89.5	87.5
30	91.0	89.5	92.4	91.0	91.7	90.2	91.0	89.5
40	91.7	90.2	93.0	91.7	93.0	91.7	91.0	89.5
50	92.4	91.0	93.0	91.7	93.0	91.7	91.7	90.2
60	93.0	91.7	93.6	92.4	93.6	92.4	91.7	90.2
75	93.0	91.7	94.1	93.0	93.6	92.4	93.0	91.7
100	93.6	92.4	94.5	93.6	94.1	93.0	93.0	91.7
125	94.5	93.6	94.5	93.6	94.1	93.0	93.6	92.4
150	94.5	93.6	95.0	94.1	95.0	94.1	93.6	92.4
200	95.0	94.1	95.0	94.1	95.0	94.1	94.1	93.0
250	95.4	94.5	95.0	94.1	95.0	94.1	94.5	93.6
300	95.4	94.5	95.4	94.5	95.0	94.1	—	—
350	95.4	94.5	95.4	94.5	95.0	94.1	—	—
400	95.4	94.5	95.4	94.5	—	—	—	—
450	95.4	94.5	95.4	94.5	—	—	—	—
500	95.4	94.5	95.8	95.0	—	—	—	—

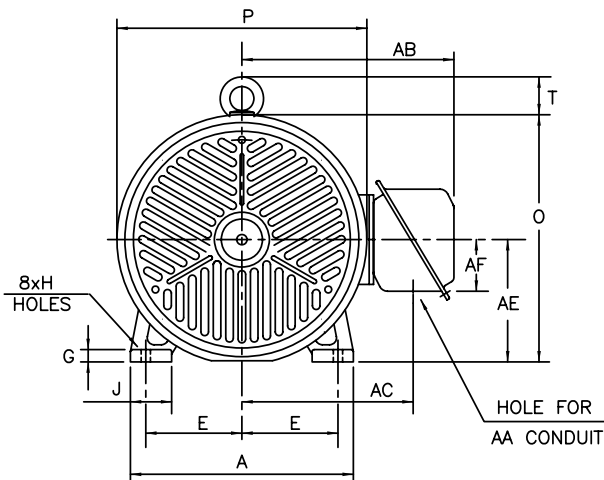
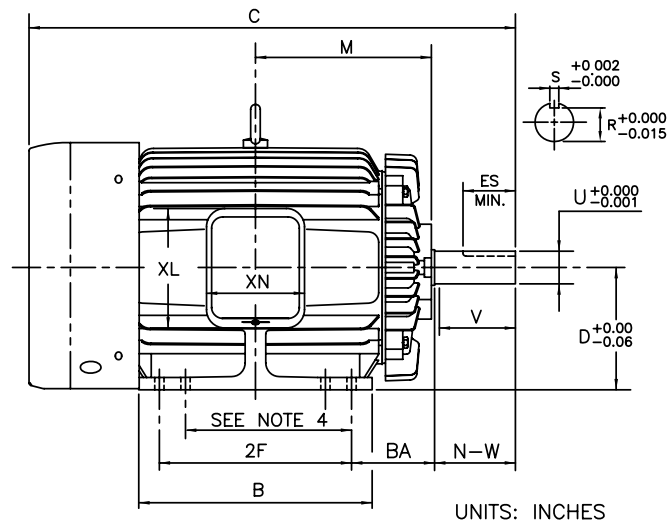
Full-Load Efficiencies for NEMA Premium® Efficiency Electric Motors Rated 600 V or Less

(NEMA Table 12-12)

HP	2-Pole		4-Pole		6-Pole		8-Pole	
	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency	Nominal Efficiency	Minimum Efficiency
Open Drip Proof Motors								
1	77.0	74.0	85.5	82.5	82.5	80.0	—	—
1.5	84.0	81.5	86.5	84.0	86.5	81.5	—	—
2	85.5	82.5	86.5	84.0	87.5	81.5	—	—
3	85.5	82.5	89.5	84.0	88.5	86.5	—	—
5	86.5	84.0	89.5	84.0	89.5	87.5	—	—
7.5	88.5	86.5	91.0	89.5	90.2	88.5	—	—
10	89.5	87.5	91.7	90.2	91.7	90.2	—	—
15	90.2	88.5	93.0	91.7	91.7	90.2	—	—
20	91.0	89.5	93.0	91.7	92.4	91.0	—	—
25	91.7	90.2	93.6	92.4	93.0	91.7	—	—
30	91.7	90.2	94.1	93.0	93.6	92.4	—	—
40	92.4	91.0	94.1	93.0	94.1	93.0	—	—
50	93.0	91.7	94.5	93.6	94.1	93.0	—	—
60	93.6	92.4	95.0	94.1	94.5	93.6	—	—
75	93.6	92.4	95.0	94.1	94.5	93.6	—	—
100	93.6	92.4	95.4	94.5	95.0	94.1	—	—
125	94.1	93.0	95.4	94.5	95.0	94.1	—	—
150	94.1	93.0	95.8	95.0	95.4	94.5	—	—
200	95.0	94.1	95.8	95.0	95.4	94.5	—	—
250	95.0	94.1	95.8	95.0	95.4	94.5	—	—
300	95.4	94.5	95.8	95.0	95.4	94.5	—	—
350	95.4	94.5	95.8	95.0	95.4	94.5	—	—
400	95.8	95.0	95.8	95.0	95.8	95.0	—	—
450	95.8	95.0	96.2	95.4	96.2	95.4	—	—
500	95.8	95.0	96.2	95.4	96.2	95.4	—	—
Totally Enclosed Fan Cooled Motors								
1	77.0	74.0	85.5	82.5	82.5	80.0	—	—
1.5	84.0	81.5	86.5	84.0	87.5	85.5	—	—
2	85.5	82.5	86.5	84.0	88.5	86.5	—	—
3	86.5	84.0	89.5	87.5	89.5	87.5	—	—
5	88.5	86.5	89.5	87.5	89.5	87.5	—	—
7.5	89.5	87.5	91.7	90.2	91.0	89.5	—	—
10	90.2	88.5	91.7	90.2	91.0	89.5	—	—
15	91.0	89.5	92.4	91.0	91.7	90.2	—	—
20	91.0	89.5	93.0	91.7	91.7	90.2	—	—
25	91.7	90.2	93.6	92.4	93.0	91.7	—	—
30	91.7	90.2	93.6	92.4	93.0	91.7	—	—
40	92.4	91.0	94.1	93.0	94.1	93.0	—	—
50	93.0	91.7	94.5	93.6	94.1	93.0	—	—
60	93.6	92.4	95.0	94.1	94.5	93.6	—	—
75	93.6	92.4	95.4	94.5	94.5	93.6	—	—
100	94.1	93.0	95.4	94.5	95.0	94.1	—	—
125	95.0	94.1	95.4	94.5	95.0	94.1	—	—
150	95.0	94.1	95.8	95.0	95.8	95.0	—	—
200	95.4	94.5	96.2	95.4	95.8	95.0	—	—
250	95.8	95.0	96.2	95.4	95.8	95.0	—	—
300	95.8	95.0	96.2	95.4	95.8	95.0	—	—
350	95.8	95.0	96.2	95.4	95.8	95.0	—	—
400	95.8	95.0	96.2	95.4	95.8	95.0	—	—
450	95.8	95.0	96.2	95.4	95.8	95.0	—	—
500	95.8	95.0	96.2	95.4	95.8	95.0	—	—

Appendix B

Frame Dimensions



NEMA Quick Reference Chart

NEMA Frames	D	E	2F	H	BA	N-W	U	R	ES	S
48	3.00	2.12	2.75	0.34	2.50	1.50	0.500	0.453	---	flat
56	3.50	2.44	3.00	0.34	2.75	1.88	0.625	0.517	---	0.188
143	3.50	2.75	4.00	0.34	2.25	2.00	0.750	0.643	1.41	0.188
143T	3.50	2.75	4.00	0.34	2.25	2.25	0.875	0.771	1.41	0.188
145	3.50	2.75	5.00	0.34	2.25	2.00	0.750	0.643	1.41	0.188
145T	3.50	2.75	5.00	0.34	2.25	2.25	0.875	0.771	1.41	0.188
182	4.50	3.75	4.50	0.41	2.75	2.25	0.875	0.771	1.41	0.188
182T	4.50	3.75	4.50	0.41	2.75	2.75	1.125	0.986	1.78	0.250
184	4.50	3.75	4.50	0.41	2.75	2.25	0.875	0.771	1.41	0.188
184T	4.50	3.75	4.50	0.41	2.75	2.75	1.125	0.986	1.78	0.250
213	5.25	4.25	5.50	0.41	3.50	3.00	1.125	0.986	2.03	0.250
213T	5.25	4.25	5.50	0.41	3.50	3.38	1.375	1.201	2.41	0.312
215	5.25	4.25	7.00	0.41	3.50	3.00	1.125	0.986	2.03	0.250
215T	5.25	4.25	7.00	0.41	3.50	3.38	1.375	1.201	2.41	0.312
254	6.25	5.00	8.25	0.53	4.25	3.37	1.125	0.986	2.03	0.250
254U	6.25	5.00	8.25	0.53	4.25	3.75	1.375	1.201	2.78	0.312
254T	6.25	5.00	8.25	0.53	4.25	4.00	1.625	1.416	2.91	0.375
256U	6.25	5.00	10.00	0.53	4.25	3.75	1.375	1.201	2.78	0.312
256T	6.25	5.00	10.00	0.53	4.25	4.00	1.625	1.416	2.91	0.375
284U	7.00	5.50	9.50	0.53	4.75	4.88	1.625	1.416	3.78	0.375
284T	7.00	5.50	9.50	0.53	4.75	4.62	1.875	1.591	3.28	0.500
284TS	7.00	5.50	9.50	0.53	4.75	3.25	1.625	1.416	1.91	0.375
286U	7.00	5.50	11.00	0.53	4.75	4.88	1.625	1.416	3.78	0.375
286T	7.00	5.50	11.00	0.53	4.75	4.62	1.875	1.591	3.28	0.500
286TS	7.00	5.50	11.00	0.53	4.75	3.25	1.625	1.416	1.91	0.375
324U	8.00	6.25	10.50	0.66	5.25	5.62	1.875	1.591	4.28	0.500
324S	8.00	6.25	10.50	0.66	5.25	3.25	1.625	1.416	1.91	0.375
324T	8.00	6.25	10.50	0.66	5.25	5.25	2.125	1.845	3.91	0.500
324TS	8.00	6.25	10.50	0.66	5.25	3.75	1.875	1.591	2.03	0.500
326U	8.00	6.25	12.00	0.66	5.25	5.62	1.875	1.591	4.28	0.500
326S	8.00	6.25	12.00	0.66	5.25	3.25	1.625	1.416	1.91	0.375
326T	8.00	6.25	12.00	0.66	5.25	5.25	2.125	1.845	3.91	0.500
326TS	8.00	6.25	12.00	0.66	5.25	3.75	1.875	1.591	2.03	0.500
364S	9.00	7.00	11.25	0.66	5.88	3.25	1.625	1.416	1.91	0.375
364U	9.00	7.00	11.25	0.66	5.88	6.37	2.125	1.845	5.03	0.500
364US	9.00	7.00	11.25	0.66	5.88	3.75	1.875	1.591	2.03	0.500
364T	9.00	7.00	11.25	0.66	5.88	5.88	2.375	2.021	4.28	0.625
364TS	9.00	7.00	11.25	0.66	5.88	3.75	1.875	1.591	2.03	0.500
365S	9.00	7.00	12.25	0.66	5.88	3.25	1.625	1.416	1.91	0.375
365U	9.00	7.00	12.25	0.66	5.88	6.37	2.125	1.845	5.03	0.500
365US	9.00	7.00	12.25	0.66	5.88	3.75	1.875	1.591	2.03	0.500
365T	9.00	7.00	12.25	0.66	5.88	5.88	2.375	2.021	4.28	0.625
365TS	9.00	7.00	12.25	0.66	5.88	3.75	1.875	1.591	2.03	0.500
404S	10.00	8.00	12.25	0.81	6.62	3.75	1.875	1.591	2.03	0.500
404U	10.00	8.00	12.25	0.81	6.62	7.12	2.375	2.021	5.53	0.625
404US	10.00	8.00	12.25	0.81	6.62	4.25	2.125	1.845	2.78	0.500
404T	10.00	8.00	12.25	0.81	6.62	7.25	2.875	2.45	5.65	0.750
404TS	10.00	8.00	12.25	0.81	6.62	4.25	2.125	1.845	2.78	0.500
405S	10.00	8.00	13.75	0.81	6.62	3.75	1.875	1.591	2.03	0.500
405U	10.00	8.00	13.75	0.81	6.62	7.12	2.375	2.021	5.53	0.625
405US	10.00	8.00	13.75	0.81	6.62	4.25	2.125	1.845	2.78	0.500
405T	10.00	8.00	13.75	0.81	6.62	7.25	2.875	2.45	5.65	0.750
405TS	10.00	8.00	13.75	0.81	6.62	4.25	2.125	1.845	2.78	0.500
444S	11.00	9.00	14.50	0.81	7.50	4.25	2.125	1.845	2.78	0.500
444U	11.00	9.00	14.50	0.81	7.50	8.62	2.875	2.45	7.03	0.750
444US	11.00	9.00	14.50	0.81	7.50	4.25	2.125	1.845	2.78	0.500
444T	11.00	9.00	14.50	0.81	7.50	8.50	3.375	2.88	6.91	0.875
444TS	11.00	9.00	14.50	0.81	7.50	4.75	2.375	2.021	3.03	0.625
445S	11.00	9.00	16.50	0.81	7.50	4.25	2.125	1.845	2.78	0.500
445U	11.00	9.00	16.50	0.81	7.50	8.62	2.875	2.45	7.03	0.750
445US	11.00	9.00	16.50	0.81	7.50	4.25	2.125	1.845	2.78	0.500
445T	11.00	9.00	16.50	0.81	7.50	8.50	3.375	2.88	6.91	0.875
445TS	11.00	9.00	16.50	0.81	7.50	4.75	2.375	2.021	3.03	0.625
447T	11.00	9.00	20.00	0.81	7.50	8.50	3.375	2.88	6.91	0.875
447TS	11.00	9.00	20.00	0.81	7.50	4.75	2.875	2.45	3.03	0.625
Toshiba Frames	D	E	2F	H	BA	N-W	U	R	ES	S
N449T	11.00	9.00	25.00	0.81	7.50	8.50	3.375	2.88	6.91	0.875
N449TS	11.00	9.00	25.00	0.81	7.50	4.75	2.375	2.021	3.03	0.625
505UZ	12.50	10.00	18.00	0.94	8.50	11.62	3.875	3.309	10.00	1.000
505US	12.50	10.00	18.00	0.94	8.50	4.75	2.875	2.45	3.00	0.750
505USS	12.50	10.00	18.00	0.94	8.50	4.75	2.375	2.021	3.00	0.625
507UZ	12.50	10.00	18.00	0.94	8.50	11.62	3.875	3.309	10.00	1.000
507US	12.50	10.00	22.00	0.94	8.50	10.13	3.375	2.88	8.50	0.875
507USS	12.50	10.00	22.00	0.94	8.50	4.75	2.375	2.021	3.00	0.625
5010UZ	12.50	10.00	32.00	1.12	8.50	11.62	4.375	3.817	10.00	1.000
5010US	12.50	10.00	32.00	1.12	8.50	6.25	3.625	3.134	5.00	0.875
5010USS	12.50	10.00	32.00	1.12	8.50	4.75	2.375	2.021	3.00	0.625
N587UZQ	14.50	11.50	25.00	1.12	10.00	11.62	4.375	3.817	10.00	1.000
N587UZ	14.50	11.50	25.00	1.12	10.00	11.62	3.875	3.309	10.00	1.000
N587US	14.50	11.50	25.00	1.12	10.00	4.75	2.875	2.45	3.00	0.750
N587USS	14.50	11.50	25.00	1.12	10.00	4.75	2.375	2.021	3.00	0.625
5810UZ	14.50	11.50	36.00	1.20	10.00	11.62	5.250	4.55	10.00	1.250
5810US	14.50	11.50	36.00	1.20	10.00	6.75	3.625	3.134	5.00	0.875
5810USS	14.50	11.50	36.00	1.20	10.00	6.75	2.375	2.021	5.00	0.625

Power - AC Circuits

$$\text{Efficiency} = \frac{746 \times \text{Output Horsepower}}{\text{Input Watts}}$$

$$\text{Three-Phase KW} = \frac{\text{Volts} \times \text{Amperes} \times \text{Power Factor} \times 1.732}{1000}$$

$$\text{Three-Phase Volt Amperes} = \text{Volt Amperes} \times 1.732$$

$$\text{Three-Phase Power Factor} = \frac{\text{Input Watts}}{\text{Volts} \times \text{Amperes} \times 1.732}$$

$$\text{Three-Phase Efficiency} = \frac{746 \times \text{Horsepower}}{\text{Volts} \times \text{Amperes} \times \text{Power Factor} \times 1.732}$$

$$\text{Three-Phase Amperes} = \frac{746 \times \text{Horsepower}}{1.732 \times \text{Volts} \times \text{Efficiency} \times \text{Power Factor}}$$

$$\text{Single-Phase KW} = \frac{\text{Volts} \times \text{Amperes} \times \text{Power Factor}}{1000}$$

$$\text{Single-Phase Amperes} = \frac{746 \times \text{Horsepower}}{\text{Volts} \times \text{Efficiency} \times \text{Power Factor}}$$

$$\text{Single-Phase Efficiency} = \frac{746 \times \text{Horsepower}}{\text{Volts} \times \text{Amperes} \times \text{Power Factor}}$$

$$\text{Single-Phase Power Factor} = \frac{\text{Input Watts}}{\text{Volts} \times \text{Amperes}}$$

$$\text{Horsepower (Three-Phase)} = \frac{\text{Volts} \times \text{Amperes} \times 1.732 \times \text{Efficiency} \times \text{Power Factor}}{746}$$

$$\text{Horsepower (Single-Phase)} = \frac{\text{Volts} \times \text{Amperes} \times \text{Efficiency} \times \text{Power Factor}}{746}$$

For Pumps

$$\text{Horsepower} = \frac{\text{GPM} \times \text{Head (ft.)} \times \text{Specific Gravity}}{3960 \times \text{Efficiency of Pump}}$$

For Fans and Blowers

$$\text{Horsepower} = \frac{\text{CFM} \times \text{Pressure (lbs./sq.ft.)}}{33,000 \times \text{Efficiency}}$$

Motor Application Equations

$$\text{Torque (lb. ft.)} = \frac{\text{Horsepower} \times 5250}{\text{RPM}}$$

$$\text{Horsepower} = \frac{\text{Torque (lb. ft.)} \times \text{RPM}}{5250}$$

$$\text{KW} = \text{HP} \times 0.746$$

Time for Motor to Reach Operating Speed (Seconds)

$$\text{Seconds} = \frac{\text{WK}^2 \times \text{Speed Change}}{308 \times \text{Average Accelerating Torque}}$$

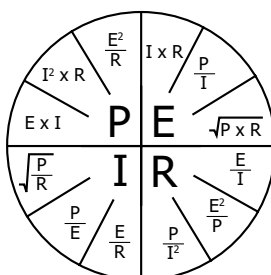
$$\text{WK}^2 = \text{Inertia of Rotor} + \text{Inertia of Load (lb.ft.}^2\text{)}$$

$$\text{Average Accelerating Torque} = \frac{[(\text{FLT} + \text{BDT})/2] + \text{BDT} + \text{LRT}}{3}$$

$$\text{Load WK}^2 \text{ (@ Motor Shaft)} = \frac{\text{WK}^2 \text{ (Load)} \times (\text{Load RPM})^2}{(\text{Motor RPM})^2}$$

$$\text{Shaft Stress (lbs. per in.}^2\text{)} = \frac{\text{HP} \times 321,000}{\text{RPM} \times (\text{Shaft Diameter})^3}$$

Ohm's Law



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