### **TOSHIBA**

Process Duty

## LOW VOLTAGE MOTORS

# **Vector Ready**

- Premium Efficiency
- Cast Iron Severe Duty Design
- Encoder-Ready
- Thermal Protection N/C Thermostats
- Design A for Vector Applications



PRODUCT SCOPE	
Horsepower	1 to 350 HP
Speed	1800 or 1200 RPM
Voltage	460 or 575 V
Enclosure	Totally Enclosed Fan Cooled, Totally Enclosed Non-Ventilated, & Totally Enclosed Blower Cooled
Frame Size	143T through N449T
Vibration (Unfiltered)	Typically 0.08 Inches/Second or Less
Insulation	Class F, Exceeds NEMA MG1 Part 31 (Inverter Duty)

# **VECTOR READY MOTORS**



Toshiba's Vector Ready motor series is designed for the extreme operational requirements of today's variable speed applications. This product line is 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 tooling, as well as many other process-oriented applications. The Vector Ready motor series is 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.)

#### **Standard Features**

- Cast Iron Frames
- Double Shaft Extension
  - 5/8" O.D. 140 to 210 Frame
  - 1" O.D. 250 to 440 Frame
- Double C-Face (140 to 250 Frame)
- EQPIII Bearing Sizes
- Normally-Closed Thermostat (155°C)
- TENV C-Face Footed (140 to 250 Frames)
- TEFC C-Face Footed (210 to 360 Frames)
- TEBC C-Face Footed (280 to 440 Frames)

#### **Options**

- Encoders (Hollow Shaft Designs)
- Blowers
- Symmetrical Frame for F1 or F2 Assembly 360 Frame & Below
- Cast Iron Parts
- Shaft Grounding
- Space Heaters
- Labyrinth Seals
- Insulated Bearings

#### **Operation**

- Constant HP 60 to 120 Hz (140 through 250 Frames) 60 to 90 Hz (280 through 400 Frames)
- 1.0 Service Factor on ASD Power
- Constant Torque 2000:1 for TEBC and TEFC (Vector Controlled Mode)
- Constant Torque 20:1 for TEFC (V/f Mode Only)

#### **Name Plate**

- Equivalent Circuit Data
- Rotor Inertia Wk<sup>2</sup>
- Performance Data



PLC

MOTORS ADJUSTABLE SPEED DRIVES

CONTROLS UPS

INSTRUMENTATION

Available Through:

# TOSHIBA

### TOSHIBA INTERNATIONAL CORPORATION

#### INDUSTRIAL DIVISION

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