# VERTICAL HOLLOW SHAFT TEFC HIGH THRUST with "P" BASE - MEDIUM VOLTAGE



**AEHCNH, NEMA PREMIUM [VHKTP]** 

Effective 07-08-18 Supercedes 03-24-17



## **APPLICATIONS:**

■ Deep Well Turbine Pumps ■ Irrigation ■ Water/Wastewater

#### **FEATURES:**

- Output Range: 200 700 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 2300/4000V
- Motors Suitable for Reduced Starting Voltage
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- Standard Features: Coupling w/ Gib Key, Non-Sparking Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
  - 5000 Frames and Above also include Mounting Provisions for bearing RTD's and Insulated Bearing Housing
  - CSA Certified for Class I, Div. 2, Groups B,C, D; Temp Code T3 minimum
  - Class F Insulation with VPI Epoxy Resin Varnish
  - Class B Temperature Rise
  - NEMA Design B Torques
  - Oversized Main Conduit Box Rotatable in 90 Degree Increments Fully Gasketed with NPT Threaded Entrance
  - Steel Plate Conduit Box with Threaded Connection Opening(s)
  - Designed for 40°C Ambient Temperature<sup>(1)</sup>
  - Designed for 3300 ft. Elevation<sup>(2)</sup>
  - Oversized Angular Contact or Spherical Thrust Bearing Installed
  - Counterclockwise (CCW) Rotation; Viewed from Top
  - Cast Iron Frame & End Brackets
  - 1045 Hollow Carbon Steel Shaft
  - Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP
  - Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000 and Above
  - Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
  - Paint Color: Blue Munsell 5PB 3/8
  - Vacuum De-Gassed Re-Greasable Ball Bearings Frames -5007TP & Up with Mobil Polyrex™ EM Grease
  - Guide Bearings: 324TP 5810P Frames are Re-Greasable with Mobil Polyrex™ EM Grease
  - Thrust Bearings: 449 5810P Frames are Oil Lubricated Angular Contact or Spherical Thrust Bearing with Site Glass
  - Oil Requirements for 444TP 5810P Frames: 300 S.S.U. @ 100°F
  - Grease Discharge Fittings on Frames with Re-Greasable Motors
  - Bronze Labyrinth Type Metal Flinger on Lower End Bracket
- Grounding Terminal Inside Main Box
  - Stainless Steel Nameplate
- Suitable for Inverter Use per NEMA MG-1.4.4.2, Part 31.
- Speed Ranges: 10:1 Variable Torque
- 6 Leads
- UL Recognized and CSA Approved
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by VFD as stated per NEMA MG-1. Part 31.
- Ball Type NRR Provided

## **EXTRAS/OPTIONS:**

Please refer to the modifications document for common modifications that can be performed.

### Notes:

- (1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
- (2) Consult a Stock Product Application Specialist for suitability at higher elevations.