

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



AEHNNH, (MAX-VHP™) NEMA PREMIUM [VHTP]

Effective 03-24-17  
Supersedes 06-14-15



## APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

## FEATURES:

- Output Range: 15 - 800 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only
- 230/460V Motors Suitable for Partial Winding Start (at 230V Only)
- 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
- New Dual Column (60/50 Hz) Design Nameplate as Standard; 50 Hz Data 190/380V at 1.0 S.F.
- Standard Features: Coupling w/ Gib Key, Non-Sparking Ball Type NRR<sup>(2)</sup>, Drip/Splash Cover, Space Heaters (120V)
- CSA Certified for Class I, Div. 2, Groups B,C, D; Temp Code T3 Maximum
- Class F Insulation with Phenolic Alkyd 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
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40°C Ambient Temperature<sup>(1)</sup>
- Designed for 3300 ft. Elevation<sup>(2)</sup>
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: 254 - 286TP frames are Grease Pre-packed Double Shielded Bearings (MULTEMP SRL)  
324TP - 5810P frames are Re-Greasable (Mobil Polyrex™ EM Grease)
- Thrust Bearings: 254 - 365TP frames are Re-Greasable Angular Contact (Mobil Polyrex™ EM Grease);  
404 - 449TP frames are Oil Lubricated Angular Contact; F#5000 & Above with Spherical Roller or Angular Contact
- Oil Sight Glass for 324TP Frames and Above
- Oil Requirements: 300 S.S.U. @ 100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- 12 Leads (PWS on 230V) on 254 - 405TP  
6 Leads on 444TP to 449TP; 5000 Frames and Above with Connection Studs
- Inverter Duty - 4:1 Variable Torque with NRR; 20:1 Variable Torque without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.3

## EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show 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.