

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



AMRKNH, NEMA PREMIUM [VHKP]

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



## APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

## FEATURES:

- Output Range: 200 - 1000 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 2300/4000V
- 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, 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
- 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
- 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 for F#449TP and Below
- 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
- Guide Bearings: Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 449TP frames are Oversized Angular Contact Oil Lubricated
- Thrust Bearings: 5000 Frame and above are Oil Lubricated Spherical Roller with Site Glass
- Oil Requirements: 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- 6 Leads
- Suitable for Inverter Use per NEMA MG-1.4.4.2, Part 31. - 10:1 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 VFD as stated per NEMA MG-1. Part 31.

## 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.