



MODEL: OPTIM[®] VH VERTICAL HOLLOW SHAFT WPI
TYPE: AMRCNH

Effective 02-09-23
Supercedes All Previous

APPLICATIONS

- Pumps
- Irrigation

PRODUCT OVERVIEW

- 3-400 HP
- 3600*, 1800 & 1200 RPM (*Up to 150 HP)
- WPI Enclosure / IP22 Design
- 60Hz, 230V/460V, 460V or 575V
- High Thrust Vertical Hollow Shaft with P-Base
- NEMA Premium Efficiency

DESIGN FEATURES

- 1.15 S.F. Sine Wave Power; 1.0 S.F. VFD Power
- Class F Insulation
- Class B Temperature Rise
- Max Elevation 3300ft
- Continuous Duty
- NEMA Design B
- 40°C Ambient

MECHANICAL FEATURES

- Aluminum Rotor
- Cast Iron Frame, End Brackets, and Main Conduit Box
- Fabricated Steel Drip Cover
- 1045 Carbon Steel Hollow Shaft
- Solderless Lug Terminals on All Leads
- Number of Leads 575V: 6 Leads
- Shaft Grounding Ring Included 100HP and Larger
- Grounding Terminal Inside Main Terminal Box
- Paint System: Phenolic Rust Proof Base with Lacquer Top Coat
- Number of Leads 230/460V: 9 Leads 3-5 HP; 12 Leads 7.5-125 HP; 6 Leads 150 HP and Larger
- Stainless Steel Nameplate and Rodent Screens
- Metal Flinger at Flange Bracket End 320TP and Larger
- Standard Non-Reverse Ratchet with Heavy Duty Stainless Steel Balls
- Guide Bearings: Shielded Bearings Frames 210TP-280TP and Open Bearings with Regreaseable Provisions Frames 320TP and Larger
- Thrust Bearings: Re-Greasable Angular Contact 210TP-280TP and Oil Lubricated Angular Contact with Site Glass 320TP and Larger
- Polyrex EM Grease in all Regreaseable Bearings, Multemp SRL Grease in Shielded Bearings
- Thrust Bearing Oil Requirements: Turbine Oil With a Viscosity of 150 S.S.U. at 100°F for 2P, 300 S.S.U. at 100°F for 4P & 6P Frames 320TP-400TP; 300 S.S.U. at 100°F for 440TP and Larger
- Optional Steady Bushing
- CCW Rotation when Viewed from Top
- Space Heater Terminated in Main Terminal Box
- Coupling and Gib Key Included (See BX Table on Page 50)
- *HPE™ High Pulse Endurance Spike Resistant Wire
- Phenolic Alkyd Resin Varnish and Spray Enamel Coat

OTHER FEATURES

- CSA Certified & UL listed
- *Meets NEMA MG1 Part 31.4.4.2
- *Inverter Duty Speed Range: 450 RPM to Rated RPM, S.F.=1.0
- UL Listed (UL 1004-5) for Fire Pump Applications

* Precautions should be taken to eliminate or reduce voltage spikes and shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.