

# VERTICAL SOLID SHAFT WPI HIGH THRUST with "P" BASE - LOW VOLTAGE

NEMA Premium CE

ee CCO02A UL SP

AMRCED (MAX-VSP™) NEMA PREMIUM [VSP]\*

Effective 07-08-18

Supersedes 03-24-17



## APPLICATIONS:

- Deep Well Turbine Pumps
- Fluid Handling Systems
- Irrigation
- Water/Wastewater
- Fire Pumps\*

## FEATURES:

- Output Range: 15 - 800 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 230/460V(Usable on 208V); 150HP and Larger is 460V 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: 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 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#449VP 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 Solid Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449VP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color for AMRCED (MAX-VSP™): Blue - Munsell 5PB 3/8
- Guide Bearings: 213VP - 286VP frames are Double Shielded
- Guide Bearings: 324VP - 5810 frames are Re-Greasable with Mobil Polyrex™ EM
- Thrust Bearings: 213VP - 286VP frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM
- Thrust Bearings: 324VP - 405VP frames are Oil Lubricated Angular Contact with Site Glass
- Oil Requirements for 324VP-405VP - 145 to 175 S.S.U. @100°F
- Oil Requirements for 444VP-5810VP - 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Rodent Screens
- 12 Leads (PWS on 230V) on 213 - 405VP;<sup>(3)</sup>  
6 Leads on 444VP to 449VP; 5000 Frames and Above with Connection Studs<sup>(4)</sup>
- Suitable for Inverter Use per NEMA MG-1.4.4.2, Part 31.  
- 10:1 Variable Torque with NRR. 10:1 C.T., 20:1 VT 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:

\* Fire Pump available. See product page for more details.

(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.

(3) Suitable for Wye/Delta start at 230V or 460V.

(4) Suitable for Wye/Delta start at 460V.