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

AEEHED (MAX-VSP™) NEMA PREMIUM [VSTP]

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

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)(3)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- CSA Certified for Class I, Div. 2, Group B, C, D - Temp Code T3 Minimum
- 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: 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 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(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Solid 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: 213VP - 286VP frames are Double Shielded
- Guide Bearings: 324VP - 5810VP frames are Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 213VP - 286VP frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM Grease
- Thrust Bearings: 324VP - 5810VP 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 - 405TP;(3)
  6 Leads on 444TP to 449TP; 5000 Frames and Above with Connection Studs(4)
- Suitable for Inverter Use per NEMA MG-1 Part 31.4.4.2
  - 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 pages 147 - 154 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.
(3) Suitable for Wye/Delta start at 230V or 460V.
(4) Suitable for Wye/Delta start at 460V.

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CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BD DIM (in.)	APPROX. SHIPPING WT. (lbs.)	
VSTP0154	15	1800	254VP	92.4	88.0	17.3	3,350	10.00	350	
VSTP0156	15	1200	284VP	92.4	83.5	16.4	3,850	10.00	460	
VSTP0158	15	900	286VP	90.2	78.0	20.0	4,400	10.00	520	
VSTP0204	20	1800	256VP	93.0	87.5	23.0	3,350	10.00	450	
VSTP0206	20	1200	286VP	91.7	84.0	22.1	3,850	10.00	520	
VSTP0208	20	900	324VP	91.0	81.0	25.4	6,000	16.50	700	
VSTP0254	25	1800	284VP	93.6	86.0	29.1	3,350	10.00	520	
VSTP0256	25	1200	324VP	93.0	83.0	26.9	5,200	16.50	700	
VSTP0258	25	900	326VP	91.0	80.0	32.2	6,000	16.50	740	
VSTP0304	30	1800	286VP	93.6	87.5	34.3	3,350	10.00	558	
VSTP0306	30	1200	326VP	93.0	80.5	32.3	5,200	16.50	740	
VSTP0308	30	900	364VP	93.0	78.0	38.7	7,500	16.50	900	
VSTP0404	40	1800	324VP	94.1	86.0	46.3	4,500	16.50	720	
VSTP0406	40	1200	364VP	94.1	86.5	42.3	6,600	16.50	900	
VSTP0408	40	900	365VP	93.0	78.0	51.5	7,500	16.50	970	
VSTP0504	50	1800	326VP	94.5	87.0	57.0	4,500	16.50	780	
VSTP0506	50	1200	365VP	94.1	86.0	53.0	6,600	16.50	970	
VSTP0508	50	900	404VP	93.0	81.0	62.0	10,500	16.50	1,400	
VSTP0604	60	1800	364VP	95.0	86.5	68.4	6,000	16.50	900	
VSTP0606	60	1200	404VP	94.5	87.0	63.0	9,000	16.50	1,400	
VSTP0608	60	900	405VP	93.0	81.0	74.5	10,500	16.50	1,600	
VSTP0754	75	1800	365VP	95.4	86.5	85.1	6,000	16.50	970	
VSTP0756	75	1200	405VP	94.5	86.5	78.5	9,000	16.50	1,600	
VSTP1004	100	1800	405VP	95.4	87.5	112	7,900	16.50	1,415	
VSTP1006	100	1200	444VP	95.0	79.8	123	10,000	16.50	1,980	
VSTP1254	125	1800	444VP	95.4	85.6	143	8,800	16.50	2,050	
VSTP1256	125	1200	445VP	95.0	79.0	155	10,000	16.50	2,090	
VSTP1504	150	1800	445VP	95.8	88.0	166	8,800	16.50	2,150	
VSTP1506(2)	150	1200	447VP	95.8	77.2	189	11,400	20.00	2,110	
VSTP2004(2)	200	1800	447VP	96.2	82.5	235	10,000	20.00	2,530	
VSTP2006(2)	200	1200	449VP	95.8	76.6	254	11,400	20.00	2,850	
VSTP2504(2)	250	1800	449VP	96.2	83.1	292	10,000	20.00	2,890	
VSTP2506(2)	250	1200	449VP	95.8	74.3	328	11,400	20.00	3,040	
VSTP3004(2)	300	1800	449VP	96.2	83.1	351	10,000	20.00	3,580	
VSTP3006(2)	300	1200	5009VP	95.8	84.8	345	12,300	24.50	3,880	
VSTP3504(2)	350	1800	5009VP	96.2	86.3	394	10,700	24.50	4,080	
VSTP3506(2)	350	1200	5808VP	95.8	80.6	424	20,200	30.00	5,800	
VSTP4004(2)	400	1800	5009VP	96.2	86.6	449	10,700	24.50	4,260	
VSTP4006(2)	400	1200	5808VP	95.8	80.9	482	20,200	30.00	6,040	
VSTP4504(2)	450	1800	5808VP	96.2	84.0	521	9,900	30.00	6,000	
VSTP4506(2)	450	1200	5808VP	95.8	80.2	547	20,200	30.00	6,250	
VSTP5004(2)	500	1800	5808VP	96.2	84.0	578	9,900	30.00	6,220	
VSTP5006(2)	500	1200	5808VP	95.8	81.2	601	20,200	30.00	6,770	
VSTP6004(2)	600	1800	5810VP	96.2	84.0	694	9,900	30.00	6,770	
VSTP6006(2)	600	1200	5810VP	95.8	81.7	717	20,200	30.00	7,260	
VSTP7004(2)	700	1800	5810VP	96.2	85.0	800	9,900	30.00	7,160	
VSTP7006(2)	700	1200	5810VP	95.8	81.3	840	20,200	30.00	8,830	
VSTP8004(2)	800	1800	5810VP	96.2	86.0	904	9,900	30.00	9,340	

Notes:

(1) All data subject to change without notice.

(2) These specified ratings have larger shafts. Please make sure to check drawing and/or consult AE specialist for solutions on replacment motors.
TWMC larger shaft dimensions for reference:
447VP - U Dim=2.625" AH Dim=5.00"
449VP - U Dim=2.625" AH Dim=5.00"
5000VP - U Dim=2.875" AH Dim=5.00"
5800VP - U Dim=3.750" AH Dim=8.50"