

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



AMRCNH, (MAX-VHP™) NEMA PREMIUM [VHP]\*  
AMRCFP, (MAX-VH™) HIGH EFFICIENCY [VH\_FP]\*

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



## APPLICATIONS:

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

## FEATURES:

- Output Range: 7.5 - 800 HP
- Speed: 1800 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: 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
- Optional Capability for 175% High Thrust Requirement for 444 - 449TP Frames
- Motor Design Suitable to handle 2 stacked bearings; Motors will ship with 1 bearing and 1 spacer as Standard
- 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 for F#449TP 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 AMRC (MAX-VH™): Dark Gray - Munsell 7.5B 3.5/0.5
- Paint Color for AMRCNH (MAX-VHP™): Blue - Munsell 5PB 3/8
- Guide Bearings: 213 - 286TP frames are Grease Pre-packed Double Shielded Bearings (MULTEMP SRL)  
324TP - 5009P frames are Re-Greasable (Mobil Polyrex EM)
- Thrust Bearings: 213 - 286TP frames are Re-Greasable Angular Contact (Mobil Polyrex EM);  
324 - 449TP frames are Oil Lubricated Angular Contact; F#5000 and Above with Spherical Roller
- Oil Sight Glass for 324TP Frames and Above
- Oil Requirements: 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Rodent Screens
- 12 Leads (PWS on 230V); Wye/Delta on 230V or 460V for 210TP-400TP
- 6 Leads (PWS on 230V, Wye/Delta on 460V for 444TP-5810P)
- 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 at stated per NEMA MG-1, part 31 for AMRCNH and Part 30 for AMRC.

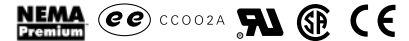
## EXTRAS/ OPTIONS:

Please refer to pages 147 - 154 which show 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.

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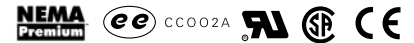


CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	
VHP7/54	7.5	1800	213TP	91.0	81.0	9.6	2,600	10	20.25	1.001	227	
VHP0104	10	1800	215TP	91.7	84.0	12.2	2,600	10	20.25	1.001	241	
VHP0154	15	1800	254TP	93.0	83.0	18.2	3,350	10	23.38	1.001	349	
VHP0204	20	1800	256TP	93.0	83.0	24.3	3,350	10	23.38	1.001	373	
VHP0254	25	1800	284TP	93.6	85.0	29.4	3,350	10	24.75	1.001	480	
VHP0304	30	1800	286TP	94.1	86.0	34.7	3,350	10	24.75	1.001	525	
VHP0404	40	1800	324TP	94.1	86.0	46.3	5,700	16.5	28.22	1.188	716	
VHP0504	50	1800	326TP	94.5	85.0	58.5	5,700	16.5	28.22	1.188	777	
VHP0604	60	1800	364TP	95.0	85.0	69.5	6,000	16.5	31.16	1.188	892	
VHP0754	75	1800	365TP	95.0	86.0	86.0	6,000	16.5	31.16	1.188	989	
VHP1004	100	1800	404TP	95.4	85.5	115	7,900	16.5	36.94	1.501	1,278	
VHP1254	125	1800	405TP	95.4	84.5	145	7,900	16.5	36.94	1.501	1,398	
VHP1504	150	1800	444TP	95.8	86.0	171	10,700	16.5	44.78	1.501	1,815	
VHP2004	200	1800	445TP	95.8	86.5	225	10,700	16.5	44.78	1.501	1,815	
VHP2504	250	1800	445TP20	95.8	86.5	284	13,400	20	44.78	1.501	2,312	
VHP3004	300	1800	447TP	95.8	87.5	337	13,400	20	49.78	1.688	2,841	
VHP3504	350	1800	447TP	95.8	88.0	390	13,300	20	49.78	1.688	3,335	
VHP4004	400	1800	449TP	95.8	88.5	444	13,200	20	53.91	1.938	3,818	
VHP4504	450	1800	5009P	96.2	88.6	494	30,900	24.5	57.06	2.188	3,940	
VHP5004	500	1800	5009P	96.2	88.8	548	30,900	24.5	57.06	2.188	4,070	
VHP6004	600	1800	5808P	96.2	82.0	647	30,100	30.5	61.30	2.376	5,700	
VHP7004	700	1800	5810P	96.2	90.7	751	30,100	30.5	68.78	2.376	6,100	
VHP8004	800	1800	5810P	96.2	90.7	859	30,100	30.5	68.78	2.376	6,400	

**Notes:**

- \* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 - EX6569.
- (1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock.
- (2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "VHP\_FP" catalog number.
- (3) See page125 in order to confirm the TWMC standard coupling size is suitable for customer requirements or to select an alternate coupling size. Required coupling size **must** be noted on all vertical hollow shaft motors orders. Coupling will be changed out prior to shipping if a non-TWMC standard coupling size is needed.
- (4) All data subject to change without notice.

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VHP7/54FP	7.5	1800	213TP	91.0	81.0	9.6	2,600	10	20.25	1.001	227	
VHP0104FP	10	1800	215TP	91.7	84.0	12.2	2,600	10	20.25	1.001	241	
VHP0154FP	15	1800	254TP	93.0	83.0	18.2	3,350	10	23.38	1.001	349	
VHP0204FP	20	1800	256TP	93.0	83.0	24.3	3,350	10	23.38	1.001	373	
VHP0254FP	25	1800	284TP	93.6	85.0	29.4	3,350	10	24.75	1.001	480	
VHP0304FP	30	1800	286TP	94.1	86.0	34.7	3,350	10	24.75	1.001	525	
VHP0404FP	40	1800	324TP	94.1	86.0	46.3	5,700	16.5	28.22	1.188	716	
VHP0504FP	50	1800	326TP	94.5	85.0	58.5	5,700	16.5	28.22	1.188	777	
VHP0604FP	60	1800	364TP	95.0	85.0	69.5	6,000	16.5	31.16	1.188	892	
VHP0754FP	75	1800	365TP	95.0	86.0	86.0	6,000	16.5	31.16	1.188	989	
VHP1004FP	100	1800	404TP	95.4	85.5	115	7,900	16.5	36.94	1.501	1,278	
VHP1254FP	125	1800	405TP	95.4	84.5	145	7,900	16.5	36.94	1.501	1,398	
VHP1504FP	150	1800	444TP	95.8	86.0	171	10,700	16.5	44.78	1.501	1,815	
VHP2004FP	200	1800	445TP	95.8	86.5	225	10,700	16.5	44.78	1.501	1,815	
VHP2504FP	250	1800	445TP20	95.8	86.5	284	13,400	20	44.78	1.501	2,312	
VHP3004FP	300	1800	447TP	95.8	87.5	337	13,400	20	49.78	1.688	2,841	
VHP3504FP	350	1800	447TP	95.8	88.0	390	13,300	20	49.78	1.688	3,335	
VHP4004FP	400	1800	449TP	95.8	88.5	444	13,200	20	53.91	1.938	3,818	

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VH0254FP	25	1800	284TP	91.7	86.0	29.7	3,350	10	24.75	1.001	480
VH0304FP	30	1800	286TP	92.4	86.5	35.1	3,350	10	24.75	1.001	525
VH0404FP	40	1800	324TP	93.0	88.0	45.7	5,700	16.5	28.22	1.188	716
VH0504FP	50	1800	326TP	93.0	88.0	57.0	5,700	16.5	28.22	1.188	777
VH0604FP	60	1800	364TP	93.6	84.5	71.0	6,000	16.5	31.16	1.188	892
VH0754FP	75	1800	365TP	94.1	84.5	88.5	6,000	16.5	31.16	1.188	989
VH1004FP	100	1800	404TP	94.1	86.0	116	7,900	16.5	36.94	1.501	1,278
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- (2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "VHP\_FP" catalog number.
- (3) Per DOE regulations, this High Efficiency motor line inventory will be available through June 2018, or until current inventory has been depleted, whichever occurs first.
- (4) Once product listed on this page has been depleted from current stock, that model will be sold only as Fire Pump.
- (5) Please see our new line of Premium Efficient motors on page 101 or contact your Application Specialist for details.
- (6) See page 125 in order to confirm the TWMC standard coupling size is suitable for customer requirements or to select an alternate coupling size. Required coupling size must be noted on all vertical hollow shaft motors orders. Coupling will be changed out prior to shipping if a non-TWMC standard coupling size is needed.
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