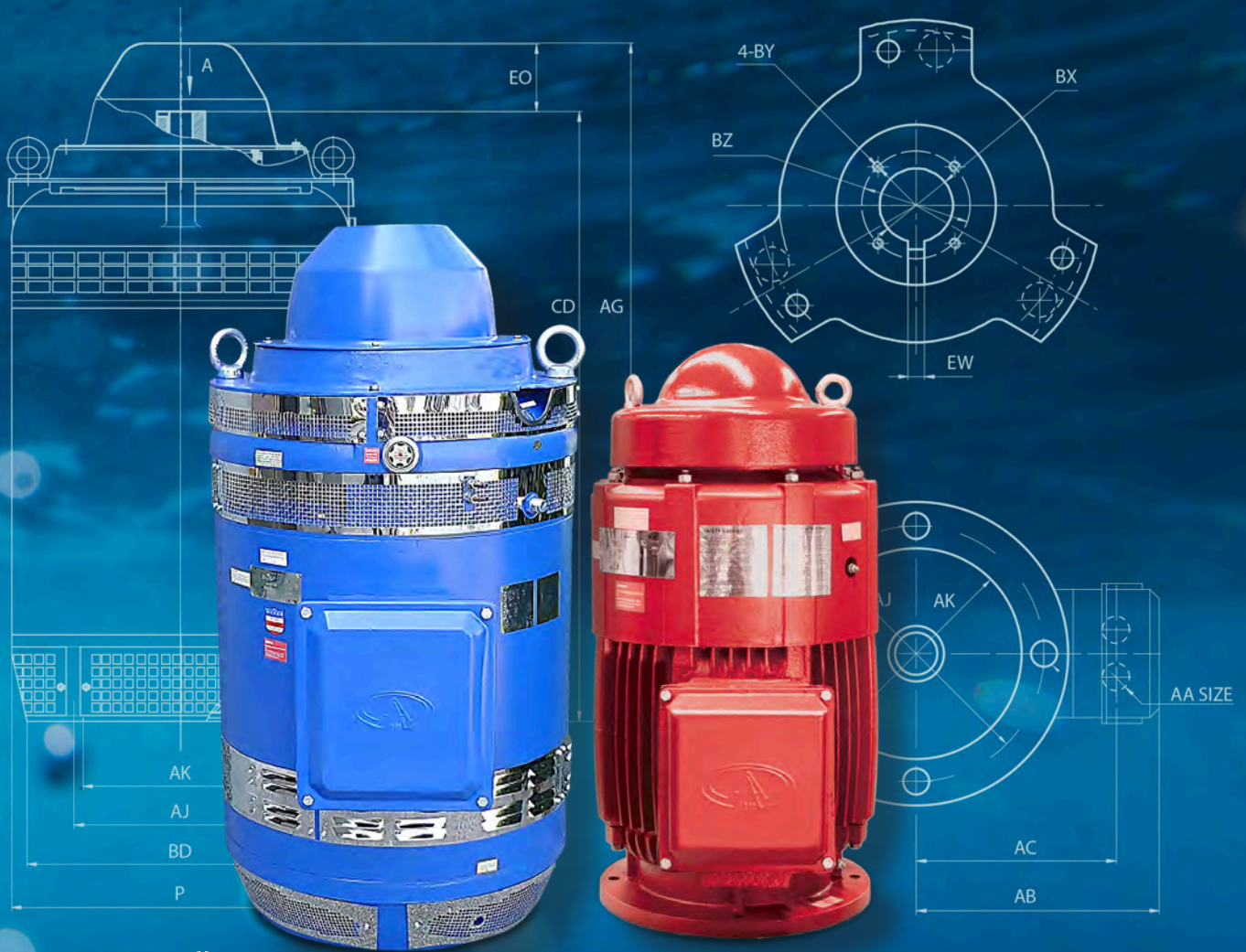




NEMA PREMIUM EFFICIENCY

# Vertical Pump Motors

WP1 or TEFC Enclosures available with Hollow Shaft or Solid Shaft



## 2024 Catalog

Version 1.0 – Effective January 1, 2024



Vertical Pump Motors

**RELIABILITY MATTERS**

Aurora Motors a leading global supplier of NEMA premium vertical pump motors for OEMs, electric motor distributors, well drillers, and municipalities. Our inverter-duty motors are precision manufactured to provide superior reliability and durability, with the lowest vibration levels in the industry. Our engineers and designers are among the most respected and recognized in the world. We work at the leading edge of technology, combining our product research and development with application knowledge and a comprehensive understanding of market demands.



**The Most Complete Line of UL Listed Vertical Pump Motors**

Our commitment to continual innovation and growth is reflected in our wide range of available products. In addition to the range of inverter-duty motor configurations below, we have a limited stock of 6-pole, TEFC, and solid shaft models.

Motor Efficiency	Configuration	HP Range Available	
		6-Lead	12-Lead
NEMA Premium Efficiency (WP1)	4-Pole	40hp – 1000hp	7.5hp – 1000hp
NEMA Premium Efficiency (TEFC)	4-Pole	40hp – 300hp	25hp – 300hp
Fire Protection NEMA Premium Efficiency (WP1 - 50Hz only)	2-Pole	7.5hp – 250hp	7.5hp – 250hp
Fire Protection NEMA Premium Efficiency (WP1)	4-Pole	40hp – 1000hp	7.5hp – 1000hp
Fire Protection NEMA Premium Efficiency (TEFC - 50Hz only)	2-Pole	40hp – 250hp	7.5hp – 250hp
Fire Protection NEMA Premium Efficiency (TEFC)	4-Pole	40hp – 300hp	7.5hp – 300hp
High Efficiency (WP1)*	4-Pole	40hp – 600hp	7.5hp – 600hp
Standard Efficiency (WP1)*	4-Pole	40hp – 350hp	7.5hp – 350hp

*\*Not available for the U.S. market*



**NEMA Premium Designation**

We offer DOE Certified Premium Efficiency motors featuring optimized systems efficiency, reduced electrical power consumption and costs, and improved reliability as established by the National Electrical Manufacturers Association.



**UL Certified**

Aurora vertical hollow shaft motors are listed by Underwriters Laboratories (UL). Our products have been evaluated by UL and meet their energy efficiency, safety standards, and fire protection.



**ISO 9001 Certification**

Aurora Motor's quality management principles meet ISO 9001 standards. These principles include a strong customer focus, the motivation and implication of our top management, our process approach, and our dedication to continual improvement.



**EASA Member**

Aurora Motors is an associate member of the Electrical Apparatus Service Association, Inc. (EASA). EASA is an international trade organization of nearly 1,800 electromechanical sales and service firms in nearly 80 countries.







### Superior Performance

NEMA Premium Aurora inverter-duty motors are among the most recognized brands in the industry. Available as WP1 or TEFC, our Vertical Hollow Shaft (VHS) and Vertical Solid Shaft (VSS) motors are built from the highest quality materials. Tailored to your specific requirements, our robust motors perform under the most strenuous and extreme conditions.

### Superior Durability

The Aurora insulation system has been designed to withstand a wide range of environmental conditions, thermal shocks, and voltage stresses. It contains all UL-approved, inverter-duty copper wire and a double VPI treatment with a non-water absorbent epoxy varnish for maximum winding protection.

### Applications



Water and waste water



Fire protection



Municipalities



Agriculture



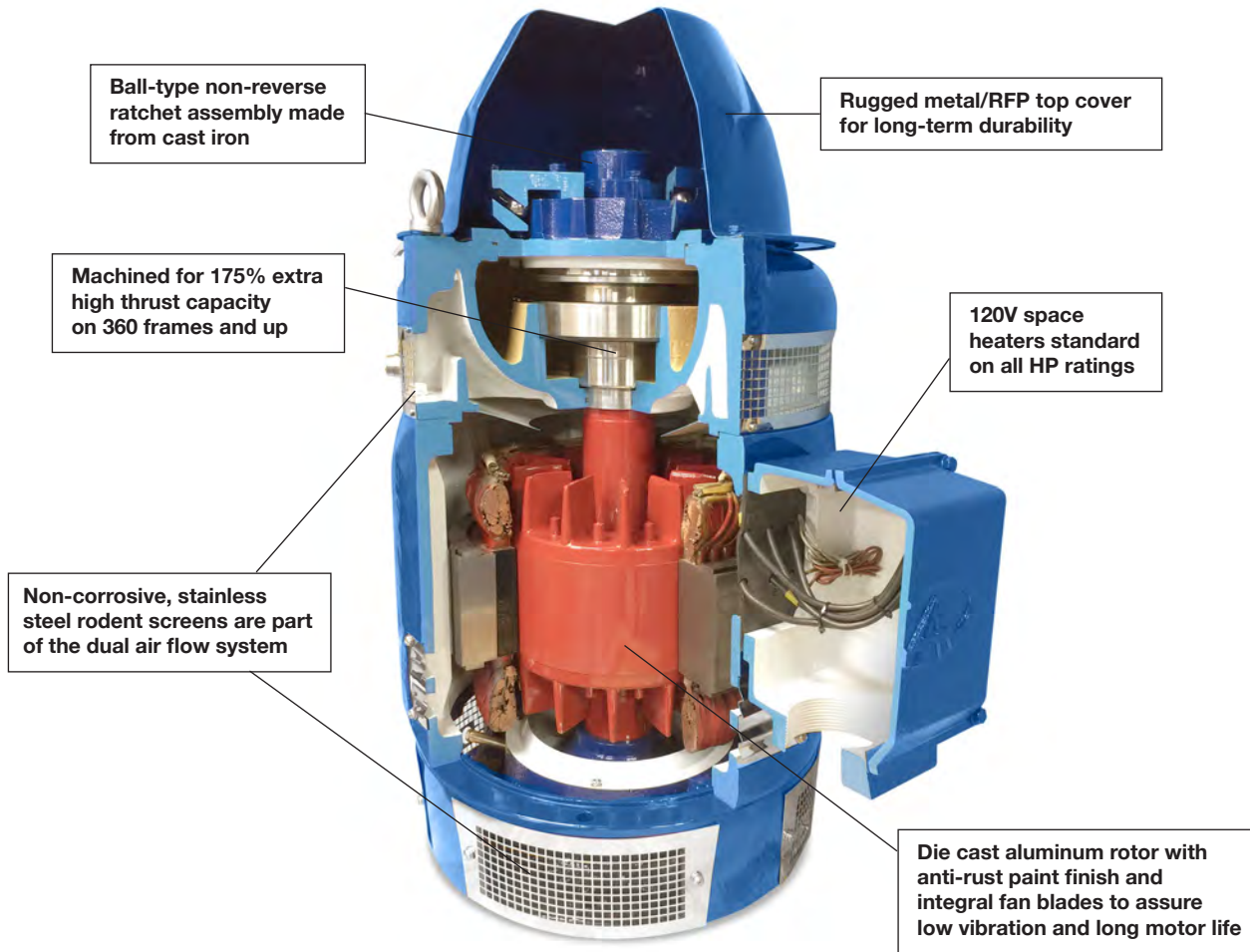
Well drilling



Mining

## OUR DIFFERENCE

Put your trust in a better built motor. Demand quality construction, lower total cost of ownership, and optimum efficiency from the motors that drive your business. Aurora Motors delivers the performance you expect with the reliability you need.



### Quality Construction

- UL Certified for both construction and efficiency levels
- UL Approved insulation system (NEMA MG-1 Part 31 Inverter Duty)
- Non-Hygroscopic epoxy varnish
- Dual air flow system

### Superior Durability

- Cast-iron construction
- Durable top cover
- Oversized conduit box
- Precision vibration tolerance as low as .02 velocity (IPS – Peak)

### Built-In Protection

- Positive Temperature Coefficient thermistors
- Space heaters
- Cast-iron ball-type non-reverse ratcheted
- Insulated Upper Thrust Bearings (an option)



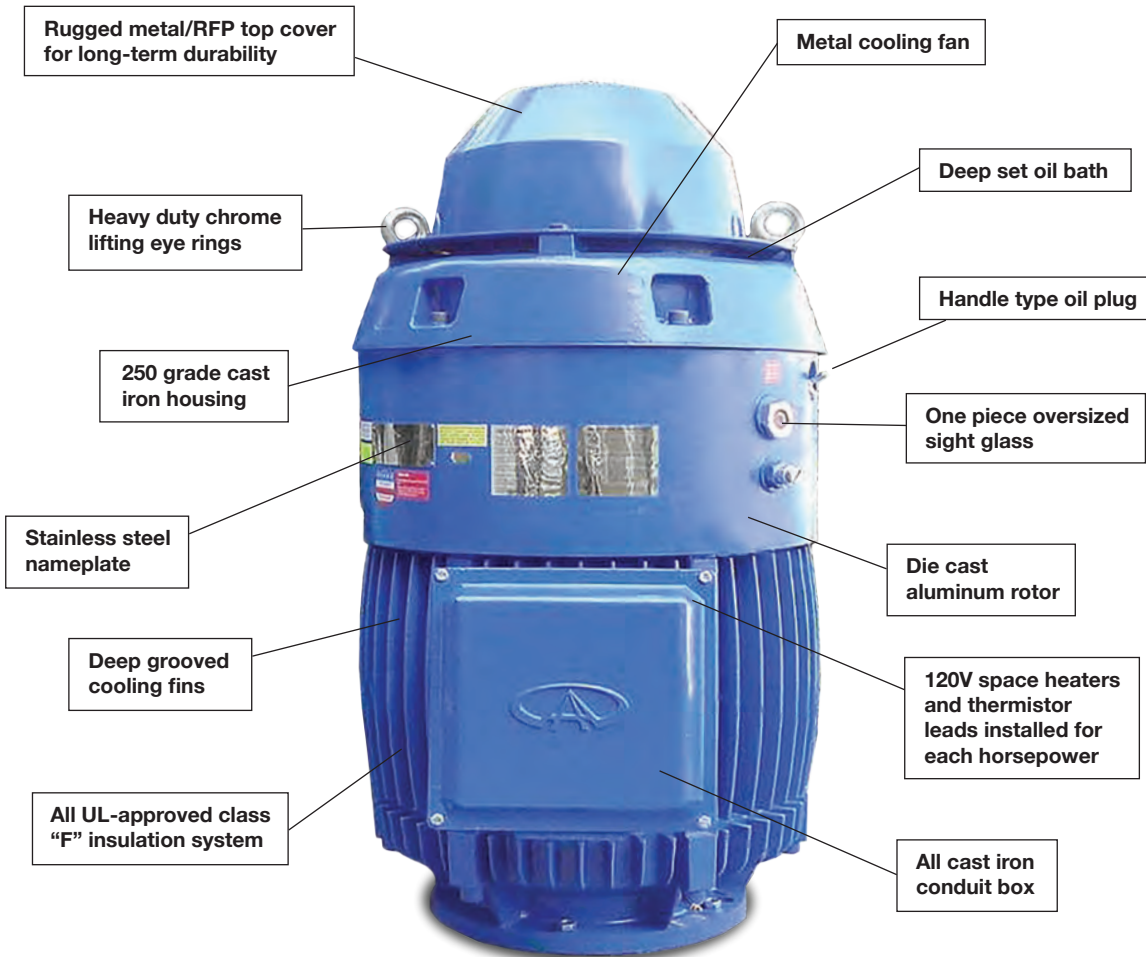
VHS WP1 Vertical Pump Motors

**NEMA PREMIUM EFFICIENCY**

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
7.5	1800	4WP1HS7.5PE	213TP	91	\$5,786	17.58	230/460	2515	275
10	1800	4WP1HS010PE	215TP	91.7	\$6,445	17.58	230/460	2515	286
15	1800	4WP1HS015PE	254TP	93	\$7,037	23.56	230/460	3213	561
20	1800	4WP1HS020PE	256TP	93	\$7,525	23.56	230/460	3333	590
25	1800	4WP1HS025PE	284TP	93.6	\$8,549	24.94	230/460	3333	651
30	1800	4WP1HS030PE	286TP	94.1	\$9,846	24.94	230/460	3333	682
40	1800	46WP1HS040PE	324TP	94.1	\$10,925	28.22	460	5713	884
50	1800	46WP1HS050PE	326TP	94.5	\$12,843	28.22	460	5713	924
60	1800	46WP1HS060PE	364TP	95	\$14,664	31.13	460	5713	1247
75	1800	46WP1HS075PE	365TP	95	\$17,160	31.13	460	5713	1333
100	1800	46WP1HS100PE	404TP	95.4	\$21,437	36.94	460	6743	1903
125	1800	46WP1HS125PE	405TP	95.4	\$26,126	36.94	460	6743	1923
150	1800	46WP1HS150PE	444TP	95.8	\$34,413	42.66	460	9835	2006
200	1800	46WP1HS200PE	445TP	95.8	\$41,532	42.66	460	9835	2097
250	1800	46WP1HS250PE	445TP	95.8	\$51,086	42.66	460	9835	2350
300	1800	46WP1HS300PE-4	447TP	95.8	\$59,532	49.76	460	10000	2397
300	1800	46WP1HS300PE-5	5804	95.8	\$61,153	53.25	460	15000	4032
350	1800	46WP1HS350PE-4	449TP	95.8	\$65,430	49.76	460	10000	2486
350	1800	46WP1HS350PE-5	5804	95.8	\$67,065	53.25	460	15000	4162
400	1800	46WP1HS400PE	5806	95.8	\$80,365	56.25	460	15000	4462
450	1800	46WP1HS450PE	5808	96.2	\$86,881	58.25	460	15000	4533
500	1800	46WP1HS500PE	5808	96.2	\$99,261	58.25	460	15000	4800
600	1800	46WP1HS600PE	5808	96.2	\$105,503	58.25	460	15000	5004
700	1800	46WP1HS700PE	5809	96.2	\$122,578	62.25	460	15000	5450
800	1800	46WP1HS800PE	5809	96.2	\$140,091	62.25	460	15000	5670
900	1800	46WP1HS900PE	5810	96.2	\$156,692	62.25	460	15000	5965
1000	1800	46WP1HS1000PE	5810	96.2	\$184,077	62.25	460	15000	6320

## INNOVATION AND QUALITY

Aurora Totally Enclosed Fan Cooled (TEFC) Vertical Pump Motors are robust inverter-duty motors that perform under the most strenuous and extreme conditions. They are built from the highest quality materials. Innovation and quality have always been among our top priorities and why we have made major strides in all sectors of the VHS market.



### Quality Construction

- NEMA Premium Efficiency
- UL Approved insulation system (NEMA MG-1 Part 31 Inverter Duty)
- Non-Hygroscopic epoxy varnish
- Dual air flow system

### Superior Durability

- Cast-iron construction
- Durable top cover
- Oversized conduit box
- Precision vibration tolerance as low as .02 velocity (IPS – Peak)

### Built-In Protection

- Positive Temperature Coefficient thermistors
- Space heaters
- Cast-iron ball-type non-reverse ratcheted
- Insulated Upper Thrust Bearings (an option)



TEFC Inverter-Duty Vertical Pump Motors

**N E M A P R E M I U M E F F I C I E N C Y**

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
25	1800	4TEHS025PE	284TP	93.6	\$11,360	24.94	230/460	3333	651
30	1800	4TEHS030PE	286TP	94.1	\$12,569	24.94	230/460	3333	682
40	1800	46TEHS040PE	324TP	94.1	\$14,234	28.22	460	5713	884
50	1800	46TEHS050PE	326TP	94.5	\$16,513	28.22	460	5713	924
60	1800	46TEHS060PE	364TP	95	\$19,408	31.13	460	5713	1247
75	1800	46TEHSS075PE	365TP	95	\$23,076	31.13	460	5713	1333
100	1800	46TEHS100PE	404TP	95.4	\$29,291	36.94	460	6743	1903
125	1800	46TEHS125PE	405TP	95.4	\$40,945	36.94	460	6743	1923
150	1800	46TEHS150PE	444TP	95.8	\$48,418	42.66	460	9835	2006
200	1800	46TEHS200PE	445TP	95.8	\$56,173	42.66	460	9835	2097
250	1800	46TEHS250PE	445TP	95.8	\$69,910	42.66	460	9835	2350

**D E S I G N O V E R V I E W**

Our insulation system has been designed to withstand a wide range of environmental conditions, thermal shock, and voltage stress. The system is composed of all UL and inverter-duty copper wire. For maximum winding protection, we use a double VPI treatment with a non-water-absorbent epoxy varnish. Plus, to maintain optimum performance and further protect the winding system in motors used in coastal areas, mining applications, and in locations with high humidity or hazardous particles, we apply a tropicalization varnish.

Aurora vertical hollow shaft motors are all MG-1 Part 31 Spec (Inverter-Duty Rated).



# DURABLE FIRE PUMP MOTORS

The Aurora Vertical Fire Pump Motor line extends our leading-edge vertical motor technology to fire protection. Available in both WP1 and TEFC designs, our robust, UL-certified fire pump motors meet the industry’s demanding safety requirements, including NFPA20. Built from the highest-quality materials, they perform under the most strenuous and extreme conditions at the highest efficiency levels, guaranteeing they are ready to go when needed.



### STANDARD FEATURES

- Cast iron/rolled-steel/RFP top cover
- Non-reverse ratchet
- Standard-sized couplings
- Thermistors
- Space heaters
- Cast iron and/or rolled-steel conduit box

### MOTOR OPTIONS

- Alternate bases
- Alternate couplings
- Extra high thrust bearings
- Steady bushings
- Available 50Hz 4-pole and 2-pole in WP1 and TEFC
- Available in voltages 208, 230, 380-415, 460, 575 for 60Hz, and 380-415 for 50Hz

### AURORA PREMIUM FEATURES

- P5 (aviation grade) angular contact thrust bearing
- Double VPI winding treatment (all horsepower)
- End turns capable of 2300V peak-to-peak
- Tropicalization treatment

## TEFC Vertical Fire Pump Motors

# NEMA PREMIUM EFFICIENCY

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
25	1800	4TEHS025PEFP	284TP	93.6	\$11,928	24.94	230/460	3333	651
30	1800	4TEHS030PEFP	286TP	94.1	\$13,197	24.94	230/460	3333	682
40	1800	46TEHS040PEFP	324TP	94.1	\$14,945	28.22	460	5713	884
50	1800	46TEHS050PEFP	326TP	94.5	\$17,339	28.22	460	5713	924
60	1800	46TEHS060PEFP	364TP	95	\$20,378	31.13	460	5713	1247
75	1800	46TEHS075PEFP	365TP	95	\$24,229	31.13	460	5713	1333
100	1800	46TEHS100PEFP	404TP	95.4	\$30,755	36.94	460	6743	1903
125	1800	46TEHS125PEFP	405TP	95.4	\$42,992	36.94	460	6743	1923
150	1800	46TEHS150PEFP	444TP	95.8	\$50,839	42.66	460	9835	2006
200	1800	46TEHS200PEFP	445TP	95.8	\$58,982	42.66	460	9835	2097
250	1800	46TEHS250PEFP	445TP	95.8	\$73,405	42.66	460	9835	2350





WP1 Vertical Fire Pump Motors

**NEMA PREMIUM EFFICIENCY**

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
7.5	1800	4WP1HS7.5PEFP	213TP	91	\$6,075	17.58	230/460	2515	275
10	1800	4WP1HS010PEFP	215TP	91.7	\$6,767	17.58	230/460	2515	286
15	1800	4WP1HS015PEFP	254TP	93	\$7,389	23.56	230/460	3213	561
20	1800	4WP1HS020PEFP	256TP	93	\$7,901	23.56	230/460	3333	590
25	1800	4WP1HS025PEFP	284TP	93.6	\$8,976	24.94	230/460	3333	651
30	1800	4WP1HS030PEFP	286TP	94.1	\$10,338	24.94	230/460	3333	682
40	1800	46WP1HS040PEFP	324TP	94.1	\$11,471	28.22	460	5713	884
50	1800	46WP1HS050PEFP	326TP	94.5	\$13,486	28.22	460	5713	924
60	1800	46WP1HS060PEFP	364TP	95	\$15,397	31.13	460	5713	1247
75	1800	46WP1HS075PEFP	365TP	95	\$18,018	31.13	460	5713	1333
100	1800	46WP1HS100PEFP	404TP	95.4	\$22,509	36.94	460	6743	1903
125	1800	46WP1HS125PEFP	405TP	95.4	\$27,432	36.94	460	6743	1923
150	1800	46WP1HS150PEFP	444TP	95.8	\$36,133	42.66	460	9835	2006
200	1800	46WP1HS200PEFP	445TP	95.8	\$43,609	42.66	460	9835	2097
250	1800	46WP1HS250PEFP	445TP	95.8	\$53,641	42.66	460	9835	2350
300	1800	46WP1HS300PE-4FP	447TP	95.8	\$62,509	49.76	460	10000	2397
300	1800	46WP1HS300PE-5FP	5804	95.8	\$64,211	53.25	460	15000	4032
350	1800	46WP1HS350PE-4FP	449TP	95.8	\$68,701	49.76	460	10000	2486
350	1800	46WP1HS350PE-5FP	5804	95.8	\$70,418	53.25	460	15000	4162
400	1800	46WP1HS400PEFP	5806	95.8	\$84,383	56.25	460	15000	4462
450	1800	46WP1HS450PEFP	5808	96.2	\$91,225	58.25	460	15000	4533
500	1800	46WP1HS500PEFP	5808	96.2	\$104,224	58.25	460	15000	4800
600	1800	46WP1HS600PEFP	5808	96.2	\$110,778	58.25	460	15000	5004
700	1800	46WP1HS700PEFP	5809	96.2	\$128,707	62.25	460	15000	5450
800	1800	46WP1HS800PEFP	5809	96.2	\$147,096	62.25	460	15000	5670
900	1800	46WP1HS900PEFP	5810	96.2	\$164,526	62.25	460	15000	5965
1000	1800	46WP1HS1000PEFP	5810	96.2	\$193,280	62.25	460	15000	6320

VHS WP1 Vertical Pump Motors

**H I G H E F F I C I E N C Y**

*Not available for the U.S. market*

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
7.5	1800	4WP1HS7.5HE	213TP	88.5	\$5,497	17.58	230/460	2515	262
10	1800	4WP1HS010HE	215TP	89.5	\$6,123	17.58	230/460	2515	277
15	1800	4WP1HS015HE	254TP	91	\$6,685	23.56	230/460	3213	487
20	1800	4WP1HS020HE	256TP	91	\$7,149	23.56	230/460	3333	523
25	1800	4WP1HS025HE	284TP	91.7	\$8,121	24.94	230/460	3333	535
30	1800	4WP1HS030HE	286TP	92.4	\$9,354	24.94	230/460	3333	561
40	1800	46WP1HS040HE	324TP	93	\$10,379	28.22	460	5713	752
50	1800	46WP1HS050HE	326TP	93	\$12,201	28.22	460	5713	782
60	1800	46WP1HS060HE	364TP	93.6	\$13,931	31.13	460	5713	1019
75	1800	46WP1HS075HE	365TP	94.1	\$16,302	31.13	460	5713	1061
100	1800	46WP1HS100HE	404TP	94.1	\$20,365	36.94	460	6743	1428
125	1800	46WP1HS125HE	405TP	94.5	\$24,820	36.94	460	6743	1608
150	1800	46WP1HS150HE	444TP	95	\$32,692	42.66	460	9835	1954
200	1800	46WP1HS200HE	445TP	95	\$39,456	42.66	460	9835	2131
250	1800	46WP1HS250HE	445TP	95.4	\$48,532	42.66	460	9835	2216
300	1800	46WP1HS300HE-4	447TP	95.4	\$56,556	49.8	460	10000	2397
300	1800	46WP1HS300HE-5	5804	95.4	\$58,096	53.25	460	15000	3958
350	1800	46WP1HS350HE-4	449TP	95.4	\$62,158	49.8	460	10000	2486
350	1800	46WP1HS350HE-5	5804	95.4	\$63,711	53.25	460	15000	4100
400	1800	46WP1HS400HE	5806	95.4	\$76,346	56.25	460	15000	4350
450	1800	46WP1HS450HE	5808	95.8	\$82,537	58.25	460	15000	4484
500	1800	46WP1HS500HE	5808	95.8	\$94,298	58.25	460	15000	4620
600	1800	46WP1HS600HE	5808	95.8	\$100,228	58.25	460	15000	4830



WP1 Vertical Fire Pump Motors

**H I G H E F F I C I E N C Y**

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
7.5	1800	4WP1HS7.5HEFP	213TP	91	\$5,771	17.58	230/460	2515	275
10	1800	4WP1HS010HEFP	215TP	91.7	\$6,429	17.58	230/460	2515	286
15	1800	4WP1HS015HEFP	254TP	93	\$7,020	23.56	230/460	3213	561
20	1800	4WP1HS020HEFP	256TP	93	\$7,506	23.56	230/460	3333	590
25	1800	4WP1HS025HEFP	284TP	93.6	\$8,527	24.94	230/460	3333	651
30	1800	4WP1HS030HEFP	286TP	94.1	\$9,821	24.94	230/460	3333	682
40	1800	46WP1HS040HEFP	324TP	94.1	\$10,898	28.22	460	5713	884
50	1800	46WP1HS050PEFP	326TP	94.5	\$12,811	28.22	460	5713	924
60	1800	46WP1HS060HEFP	364TP	95	\$14,627	31.13	460	5713	1247
75	1800	46WP1HS075HEFP	365TP	95	\$17,117	31.13	460	5713	1333
100	1800	46WP1HS100HEFP	404TP	95.4	\$21,383	36.94	460	6743	1903
125	1800	46WP1HS125HEFP	405TP	95.4	\$26,061	36.94	460	6743	1923
150	1800	46WP1HS150HEFP	444TP	95.8	\$34,327	42.66	460	9835	2006
200	1800	46WP1HS200HEFP	445TP	95.8	\$41,428	42.66	460	9835	2097
250	1800	46WP1HS250HEFP	445TP	95.8	\$50,959	42.66	460	9835	2350
300	1800	46WP1HS300HE-4FP	447TP	95.8	\$59,383	49.76	460	10000	2397
300	1800	46WP1HS300HE-5FP	5804	95.8	\$61,000	53.25	460	15000	4032
350	1800	46WP1HS350HE-4FP	449TP	95.8	\$65,266	49.76	460	10000	2486
350	1800	46WP1HS350HE-5FP	5804	95.8	\$66,897	53.25	460	15000	4162
400	1800	46WP1HS400HEFP	5806	95.8	\$80,164	56.25	460	15000	4462
450	1800	46WP1HS450HEFP	5808	96.2	\$86,663	58.25	460	15000	4533
500	1800	46WP1HS500HEFP	5808	96.2	\$99,013	58.25	460	15000	4800
600	1800	46WP1HS600HEFP	5808	96.2	\$105,239	58.25	460	15000	5004



VHS WP1 Vertical Pump Motors

**STANDARD EFFICIENCY**

*Not available for the U.S. market*

HP	RPM	Model No.	Frame	Eff %	List Price	CD H	Voltage	Down Thrust	Est. Ship Weight (lbs.)
7.5	1800	4WP1HS7.5SE	213TP	86	\$5,207	17.58	230/460	2515	255
10	1800	4WP1HS010SE	215TP	86.3	\$5,800	17.58	230/460	2515	266
15	1800	4WP1HS015SE	254TP	88	\$6,333	23.56	230/460	3213	473
20	1800	4WP1HS020SE	256TP	88.6	\$6,773	23.56	230/460	3333	499
25	1800	4WP1HS025SE	284TP	89.5	\$7,694	24.94	230/460	3333	502
30	1800	4WP1HS030SE	286TP	89.7	\$8,861	24.94	230/460	3333	534
40	1800	46WP1HS040SE	324TP	90.1	\$9,832	28.22	460	5713	722
50	1800	46WP1HS050SE	326TP	90.4	\$11,559	28.22	460	5713	759
60	1800	46WP1HS060SE	364TP	90.4	\$13,198	31.13	460	5713	926
75	1800	46WP1HS075SE	365TP	91.7	\$15,444	31.13	460	5713	946
100	1800	46WP1HS100SE	404TP	92.2	\$19,293	36.94	460	6743	1395
125	1800	46WP1HS125SE	405TP	92.8	\$23,514	36.94	460	6743	1509
150	1800	46WP1HS150SE	444TP	93.3	\$30,971	42.66	460	9835	1852
200	1800	46WP1HS200SE	445TP	93.4	\$37,379	42.66	460	9835	1969
250	1800	46WP1HS250SE	445TP	93.9	\$45,978	42.66	460	9835	2094
300	1800	46WP1HS300SE-4	447TP	94.3	\$53,579	49.8	460	10000	2389
300	1800	46WP1HS300SE-5	5804	94.3	\$55,038	53.25	460	15000	3948
350	1800	46WP1HS350SE-4	449TP	94.8	\$58,887	49.8	460	10000	2479
350	1800	46WP1HS350SE-5	5804	94.8	\$60,358	53.25	460	15000	3990





Vertical Pump Motors

# COUPLINGS

The following tables show the standard and alternate coupling that fit each of the HP/Frame sizes. Bore sizes highlighted in blue indicate the standard coupling for that particular frame size.



Standard Coupling

HP	Frame	Model No.	Bore Size (in)	List Price	Est. Weight (lbs.)		
7.5-10	210TP	C210-34	.75	\$380	4.5		
		C210-1	1	\$380	4.5		
		C210-1316	1.1875	\$380	4.5		
		C210-114	1.25	\$380	4.5		
15-20	250TP	C250-34	.75	\$384	5.5		
		C250-1	1	\$384	5.5		
		C250-1316	1.1875	\$384	5.5		
		C250-114	1.25	\$384	5.5		
		25-30	280TP	C280-34	0.75	\$428	5.5
				C280-1	1	\$428	5.5
C280-1316	1.1875			\$428	5.5		
C280-114	1.25			\$428	5.5		
C280-112	1.5			\$428	5.5		
40-50	320TP	C320-1	1	\$453	6.5		
		C320-1316	1.1875	\$453	6.5		
		C320-114	1.25	\$453	6.5		
		C320-1716	1.4375	\$453	6.5		
		C320-112	1.5	\$453	6.5		
		C320-11116	1.6875	\$453	6.5		
60-75	360TP	C360-1	1	\$461	6.5		
		C360-1316	1.1875	\$461	6.5		
		C360-114	1.25	\$461	6.5		
		C360-1716	1.4375	\$461	6.5		
		C360-112	1.5	\$461	6.5		
		C360-11116	1.6875	\$461	6.5		

HP	Frame	Model No.	Bore Size (in)	List Price	Est. Weight (lbs.)
100-125	400TP	C400-1316	1.1875	\$502	13
		C400-114	1.25	\$502	13
		C400-1716	1.4375	\$502	13
		C400-112	1.5	\$502	13
		C400-11116	1.6875	\$502	13
150-250	440TP	C440-1316	1.1875	\$558	16.8
		C440-114	1.25	\$558	16.8
		C440-112	1.5	\$558	16.8
		C440-11116	1.6875	\$558	16.8
		C440-11516	1.9375	\$558	16.8
300-350	447TP-449TP	C440-1316	1.1875	\$558	16.8
		C440-114	1.25	\$558	16.8
		C440-112	1.5	\$558	16.8
		C440-11116	1.6875	\$558	16.8
		C440-11516	1.9375	\$558	16.8
300-350	5800	C5800-11116	1.6875	\$624	28
		C5800-11516	1.9375	\$624	28
		C5800-2316	2.1875	\$624	28
		C5800-2716	2.4375	\$624	28
400-500	5800	C5800-11116	1.6875	\$624	28
		C5800-11516	1.9375	\$624	28
		C5800-2316	2.1875	\$624	28
		C5800-2716	2.4375	\$624	28
600-1000	5800	C5800-11116	1.6875	\$624	28
		C5800-11516	1.9375	\$624	28
		C5800-2316	2.1875	\$624	28
		C5800-2716	2.4375	\$624	28

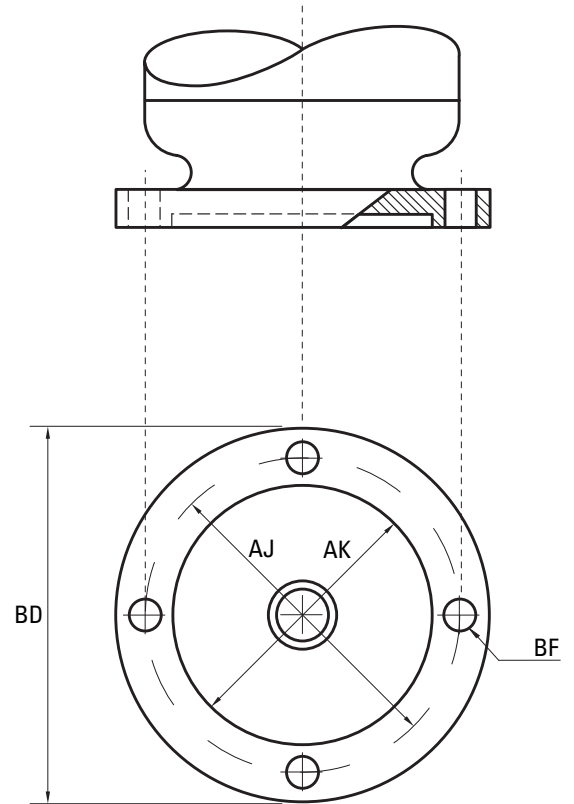
Parts shown are for WP1 Premium and WP1 Fire Protection motors. Parts for TEFC motors available upon request.

## Vertical Pump Motors

### P - B A S E

The following table shows the bases that fit each of the HP/Frame sizes. Models highlighted in blue indicate the standard P-Base for that particular frame size. Proper alignment of pump flange and motor flange is critical. Small errors in alignment are magnified by the distance from the flange to the top of the motor, resulting in vibration, electrical noise, premature bearing wear and oil leakage.

HP	Frame	P-Base Model No.	Base Size (in)	List Price	Est. Weight (lbs.)
7.5-10	210TP	PBASE210-10	10	\$578	33
		PBASE210-12	12	\$646	39.1
		PBASE210-1612	16.5	\$710	51.3
15-20	250TP	PBASE250-10	10	\$578	48.5
		PBASE250-12	12	\$710	55.1
		PBASE250-1612	16.5	\$734	68.3
25-30	280TP	PBASE280-10	10	\$578	48.5
		PBASE280-12	12	\$710	55.1
		PBASE280-1612	16.5	\$734	68.3
40-50	320TP	PBASE320-12	12	\$710	75
		PBASE320-1612	16.5	\$734	85
60-75	360TP	PBASE360-12	12	\$732	81.5
		PBASE360-1612	16.5	\$776	92
100-125	400TP	PBASE400-1612	16.5	\$906	182.1
		PBASE400-20	20	\$1,175	208
150-350	440TP	PBASE440-1612	16.5	\$1,100	198
		PBASE440-20	20	\$1,365	233.2
300-1000	5800	PBASE5800-2412	24.5	\$1,565	330







Vertical Pump Motors

**REPLACEMENT PARTS**

**Top Cover**

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	TC-210	\$322	11.1
10	215TP	TC-210	\$322	11.1
15	254TP	TC-250	\$372	19
20	256TP	TC-250	\$372	19
25	284TP	TC-280	\$429	19
30	286TP	TC-280	\$429	19
40	324TP	TC-320	\$473	7.1
50	326TP	TC-320	\$473	7.1
60	364TP	TC-360	\$693	8.1
75	365TP	TC-360	\$693	8.1
100	404TP	TC-400	\$1,064	10.4
125	405TP	TC-400	\$1,064	10.4
150	444TP	TC-440	\$1,320	12.3
200	445TP	TC-440	\$1,320	12.3
250	445TP	TC-440	\$1,320	12.3
300	447TP	TC-440	\$1,320	12.3
350	449TP	TC-440	\$1,400	12.3
300-1000	5804-5810	TC-5800	\$1,400	12.3

**Conduit Box**

HP	Frame	Description	Part No.	List Price	Est. Weight (lbs.)
7.5-10	213TP-215TP	Cover	CBC-210	\$168	4
		Base	CBB-210	\$168	6.9
15-30	254TP-286TP	Cover	CBC-250	\$260	8
		Base	CBB-250	\$260	12.9
40-50	324TP-326TP	Cover	CBC-320	\$425	8
		Base	CBB-320	\$425	12.9
60-75	364TP-365TP	Cover	CBC-360	\$598	8
		Base	CBB-360	\$598	12.9
100-125	404TP-405TP	Cover	CBC-400	\$706	8
		Base	CBB-400	\$706	12.9
150-350	444TP-449TP	Cover	CBC-440	\$831	15.5
		Base	CBB-440	\$831	33.5
300-1000	5804-5810	Cover	CBC-5800	\$2,153	5
		Base	CBB-5800	\$2,153	19.7

**Non-Reverse Ratchet**

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	NRR-210	\$475	16
10	215TP	NRR-210	\$475	16
15	254TP	NRR-250	\$645	25
20	256TP	NRR-250	\$645	25
25	284TP	NRR-280	\$753	25
30	286TP	NRR-280	\$753	25
40	324TP	NRR-320	\$798	36
50	326TP	NRR-320	\$798	36
60	364TP	NRR-360	\$928	36
75	365TP	NRR-360	\$928	36
100	404TP	NRR-400	\$1,298	68.3
125	405TP	NRR-400	\$1,298	68.3
150	444TP	NRR-440	\$1,838	90.4
200	445TP	NRR-440	\$1,838	90.4
250	445TP	NRR-440	\$1,838	90.4
300	447TP	NRR-440	\$1,838	90.4
350	449TP	NRR-440	\$1,838	90.4
300-1000	5804-5810	NRR-5800	\$2,250	127.9

**Oil Tubes**

HP	Frame	Description	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	Endbell Inlet/Outlet	OTE-210	\$75	0.1 / 0.1
		Bottom Inlet/Outlet	OTB-210	\$75	0.07 / 0.1
10	215TP	Endbell Inlet/Outlet	OTE-210	\$75	0.12 / 0.12
		Bottom Inlet/Outlet	OTB-210	\$75	0.07 / 0.1
15	254TP	Endbell Inlet/Outlet	OTE-250	\$81	0.12 / 0.12
		Bottom Inlet/Outlet	OTB-250	\$81	0.07 / 0.11
20	256TP	Endbell Inlet/Outlet	OTE-250	\$81	0.12 / 0.12
		Bottom Inlet/Outlet	OTB-250	\$81	0.07 / 0.11
25	284TP	Endbell Inlet/Outlet	OTE-280	\$88	0.12 / 0.12
		Bottom Inlet/Outlet	OTB-280	\$88	0.15 / 0.27
30	286TP	Endbell Inlet/Outlet	OTE-280	\$88	0.12 / 0.12
		Bottom Inlet/Outlet	OTB-280	\$88	0.15 / 0.27
40	324TP	Bottom Inlet/Outlet	OTB-320	\$88	0.16 / 0.16
50	326TP	Bottom Inlet/Outlet	OTB-320	\$94	0.16 / 0.16
60	364TP	Bottom Inlet/Outlet	OTB-360	\$94	0.14 / 0.14
75	365TP	Bottom Inlet/Outlet	OTB-360	\$100	0.14 / 0.14
100	404TP	Bottom Inlet/Outlet	OTB-400	\$100	0.11 / 0.11
125	405TP	Bottom Inlet/Outlet	OTB-400	\$106	0.11 / 0.11
150-350	444TP-449TP	Bottom Inlet/Outlet	OTB-440	\$106	0.18 / 0.18

Parts shown are for WP1 Premium and WP1 Fire Protection motors. Parts for TEFC motors available upon request.



Vertical Pump Motors

REPLACEMENT PARTS

Sight Glass

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	SG-210	N/A	N/A
10	215TP	SG-210	N/A	N/A
15	254TP	SG-250	N/A	N/A
20	256TP	SG-250	N/A	N/A
25	284TP	SG-280	N/A	N/A
30	286TP	SG-280	\$215	0.11
40	324TP	SG-320	\$215	0.11
50	326TP	SG-320	\$215	0.11
60	364TP	SG-360	\$215	0.11
75	365TP	SG-360	\$215	0.11
100	404TP	SG-400	\$215	0.33
125	405TP	SG-400	\$215	0.33
150	444TP	SG-440	\$215	0.33
200	445TP	SG-440	\$215	0.33
250	445TP	SG-440	\$215	0.33
300	447TP	SG-440	\$215	0.33
350	449TP	SG-440	\$215	0.33
300-1000	5804-5810	SG-5800	\$275	0.66

Oil Plug

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	OP-210	N/A	N/A
10	215TP	OP-210	N/A	N/A
15	254TP	OP-250	N/A	N/A
20	256TP	OP-250	N/A	N/A
25	284TP	OP-280	N/A	N/A
30	286TP	OP-280	\$188	0.67
40	324TP	OP-320	\$188	0.67
50	326TP	OP-320	\$188	0.67
60	364TP	OP-360	\$188	0.67
75	365TP	OP-360	\$188	0.67
100	404TP	OP-400	\$250	0.88
125	405TP	OP-400	\$250	0.88
150	444TP	OP-440	\$250	0.88
200	445TP	OP-440	\$250	0.88
250	445TP	OP-440	\$250	0.88
300	447TP	OP-440	\$250	0.88
350	449TP	OP-440	\$250	0.88
300-1000	5804-5810	OP-5800	\$313	1.15

Bearings

HP	Frame	Description	Part No.	List Price	Est. Weight (lbs.)
7.5	213TP	Angular Contact (Bottom)	7310BM	\$237	0.99
		Guided (Top)	6210	\$85	2.64
10	215TP	Angular Contact (Bottom)	7310BM	\$237	0.99
		Guided (Top)	6210	\$85	2.64
15	254TP	Angular Contact (Bottom)	7312BM	\$295	1.65
		Guided (Top)	6212	\$114	4.29
20	256TP	Angular Contact (Bottom)	7312BM	\$295	1.65
		Guided (Top)	6212	\$114	4.29
25	284TP	Angular Contact (Bottom)	7312BM	\$295	1.65
		Guided (Top)	6212	\$114	4.29
30	286TP	Angular Contact (Bottom)	7312BM	\$295	1.65
		Guided (Top)	6212	\$114	4.29
40	324TP	Angular Contact (Top)	7221BM	\$323	9.68
		Guided (Bottom)	6213	\$129	6.09
50	326TP	Angular Contact (Top)	7221BM	\$323	9.68
		Guided (Bottom)	6213	\$129	6.09
60	364TP	Angular Contact (Top)	7224BM	\$480	13.75
		Guided (Bottom)	6314	\$144	7.9
75	365TP	Angular Contact (Top)	7224BM	\$479.60	13.75
		Guided (Bottom)	6314	\$144	7.9
100	404TP	Angular Contact (Top)	7230BM	\$996	24.75
		Guided (Bottom)	6317	\$152	8.4
125	405TP	Angular Contact (Top)	7230BM	\$996	24.75
		Guided (Bottom)	6317	\$152	8.4
150-350	444-449TP	Angular Contact (Top)	7232BM	\$1,362	30.91
		Guided (Bottom)	6318	\$174	10.45
300-1000	5804-5810	Angular Contact (Top)	7238BM	\$1,678	47.4
		Guided (Bottom)	6220	\$182	12.1

Lifting Bolts

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5-10	213TP-215TP	LB-210	\$100	0.22
15-125	254TP-405TP	LB-250	\$108	0.57
150-350	444TP-449TP	LB-440	\$110	0.99
300-1000	5804-5810	LB-5800	\$138	1

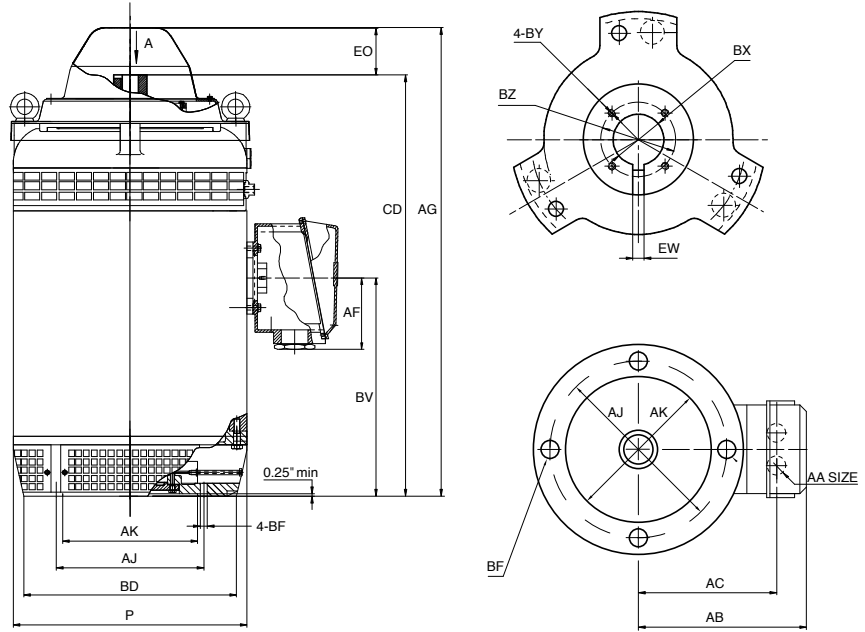
Steady Bushings

HP	Frame	Part No.	List Price	Est. Weight (lbs.)
7.5-10	213TP-215TP	SB-210	\$46	0.25
15-20	254TP-256TP	SB-250	\$52	0.3
25-30	284TP-286TP	SB-280	\$68	0.3
40-50	324TP-326TP	SB-320	\$92	0.35
60-75	364TP-365TP	SB-360	\$116	0.35
100-125	404TP-405TP	SB-400	\$124	0.4
150-350	444TP-449TP	SB-440	\$144	0.42
300-1000	5804-5810	SB-5800	\$165	0.5

Parts shown are for WP1 Premium and WP1 Fire Protection motors. Parts for TEFC motors available upon request.

Vertical Pump Motors

# DIMENSIONS



Dimensions shown are for WP1 Premium and WP1 Fire Protection motors. Dimensions for TEFC motors available upon request.

HP	Frame	Mounting Dimensions (in)											Overall Dimensions (in)			Bearings		Weight (lb)		
		BD	AJ	AK	BV	AF	BF	BX	BZ	EW	BY	CD	EO	P	AB	AC	AG		Drive End	Opposite Drive End
7.5	213TP	10	9.125	8.25	9.55	3.25	0.44	1	1.374	0.258	10-32	17.58	3	13.58	7.56	6.5	26.83	6210	7310B	305
10	215TP	10	9.125	8.25	9.55	3.25	0.44	1	1.374	0.258	10-32	17.58	3	13.58	7.56	6.5	26.83	6210	7310B	315
15	254TP	10	9.125	8.25	12.09	5.64	0.44	1	1.374	0.257	10-32	23.56	3	15.24	14.11	10.095	26.89	6212	7312B	532
20	256TP	10	9.125	8.25	12.09	5.64	0.44	1	1.374	0.257	10-32	23.56	3	15.24	14.11	10.095	26.89	6212	7312B	550
25	284TP	10	9.125	8.25	12.09	5.64	0.44	1	1.374	0.257	10-32	24.94	3	15.24	14.11	10.095	28.27	6212	7312B	585
30	286TP	10	9.125	8.25	12.09	5.64	0.44	1	1.374	0.257	10-32	24.94	3	15.24	14.11	10.095	28.27	6212	7312B	602
40	324TP	16.5	14.72	13.5	13.78	4	0.69	1.25	1.75	0.25	0.25-20	28.22	4	17.32	15.1	11.08	32.52	7221B	6213	825
50	326TP	16.5	14.72	13.5	13.78	4	0.69	1.25	1.75	0.25	0.25-20	28.22	4	17.32	15.1	11.08	32.52	7221B	6213	876
60	364TP	16.5	14.75	13.5	15.06	4	0.69	1.25	1.75	0.25	0.25-20	31.13	4.56	18.9	15.55	11.19	35.75	7224B	6314	1080
75	365TP	16.5	14.75	13.5	15.06	4	0.69	1.25	1.75	0.25	0.25-20	31.13	4.56	18.9	15.55	11.19	35.75	7224B	6314	1309
100	404TP	16.5	14.72	13.5	19.3	6	0.69	1.5	2.13	0.375	0.25-20	36.94	4.89	21	17.13	13.16	42.5	7230B	6317	1585
125	405TP	16.5	14.72	13.5	19.3	6	0.69	1.5	2.13	0.375	0.25-20	36.94	4.89	21	17.13	13.16	42.5	7230B	6317	1730
150	444TP	16.5	14.75	13.5	22.44	4.88	0.69	1.69	2.5	0.375	0.25-20	42.66	5.37	23.35	17.78	13.53	48.03	7232B	6318	2100
200	445TP	16.5	14.75	13.5	22.44	4.88	0.69	1.69	2.5	0.375	0.25-20	42.66	5.37	23.35	17.78	13.53	48.03	7232B	6318	2290
250	445TP	16.5	14.75	13.5	22.44	4.88	0.69	1.69	2.5	0.375	0.25-20	42.66	5.37	23.35	17.78	13.53	48.03	7232B	6318	2360
300	447TP	16.5	14.75	13.5	29.56	4.88	0.69	1.6875	2.5	0.375	.25-20	49.76	5.39	23.35	17.78	13.53	55.13	7232B	6318	2397
350	449TP	16.5	14.75	13.5	29.56	4.88	0.69	1.6875	2.5	0.375	.25-20	49.76	5.39	23.35	17.78	13.53	55.13	7232B	6318	2486
300	5804	24.5	22	13.5	28.72	9.55	0.69	1.9375	3.25	0.51	0.375-16	53.25	8	31.29	26.91	21.34	61.25	7238B	6220	4032
350	5804	24.5	22	13.5	28.72	9.55	0.69	1.9375	3.25	0.51	0.375-16	53.25	8	31.29	26.91	21.34	61.25	7238B	6220	4162
400	5806	24.5	22	13.5	28.72	9.55	0.69	1.9375	3.25	0.51	0.375-16	56.25	8	31.29	26.91	21.34	64.25	7238B	6220	4462
450	5808	24.5	22	13.5	30.74	9.55	0.69	1.9375	3.25	0.51	0.375-16	58.25	8	31.29	26.91	21.34	66.25	7238B	6220	4533
500	5808	24.5	22	13.5	30.74	9.55	0.69	2.1875	3.25	0.51	0.375-16	58.25	8	31.29	26.91	21.34	66.25	7238B	6220	4800
600	5808	24.5	22	13.5	30.74	9.55	0.69	2.1875	3.25	0.51	0.375-16	58.25	8	31.29	26.91	21.34	66.25	7238B	6220	5004
700	5809	24.5	22	13.5	34.74	9.55	0.69	2.4375	3.25	0.51	0.375-16	62.25	8	31.29	26.91	21.34	70.75	7238B	6220	5450
800	5809	24.5	22	13.5	34.74	9.55	0.69	2.4375	3.25	0.51	0.375-16	62.25	8	31.29	26.91	21.34	70.75	7238B	6220	5670
900	5810	24.5	22	13.5	38.74	9.55	0.69	2.4375	3.25	0.51	0.375-16	66.25	8	31.29	26.91	21.34	74.25	7238B	6220	5965
1000	5810	24.5	22	13.5	38.74	9.55	0.69	2.4375	3.25	0.51	0.375-16	66.25	8	31.29	26.91	21.34	74.25	7238B	6220	6320





Vertical Pump Motors

**CROSS REFERENCE GUIDE**

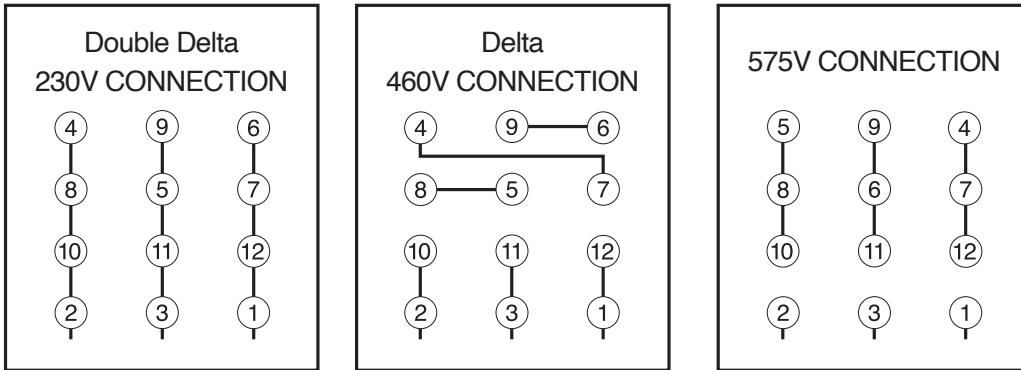
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UL Listed VHS & VSS from 7.5HP - 600HP PE	✓	✓	
UL Listed VHS & VSS from 650HP - 1000HP PE	✓		
7.5 - 250HP	✓	✓	✓
300 -500HP	✓	✓	✓
600 - 5000HP	✓	✓	✓
4 Pole 1800 RPM	✓	✓	✓
6 Pole 1200 RPM	✓	✓	✓
6 Lead PWS	✓	✓	✓
12 Leads	✓		
230/460V	✓	✓	✓
460V	✓	✓	✓
575V	✓	✓	✓
Premium Efficiency	✓	✓	
NEMA MG1-Part 31	✓	✓	✓
Double VPI Insulation	✓		
WP-1 Enclosure	✓	✓	✓
TEFC Enclosure	✓	✓	
Class F Temp Rise @ 1.15 S.F.	✓	✓	✓
Peak To Peak Insulation 2300V	✓		
Special Double Rotor Balanced	✓		
Angular Contact P-5 Aviation Bearings	✓		
Extra High Thrust Capable	✓	✓	✓
Ball Type Non Reverse Ratchet	✓	✓	

Aurora Motors Brand	NIDEC Brand	GE
7.5 HP - 700 HP STOCK	5 HP - 500 HP	5 HP - 300HP
3600 RPM, 1800 RPM, 1200 RPM	1200, 1800 & 3600 RPM	1800 RPM & 3600 RPM
6 Leads & 12 Leads	6 Leads & 9 Leads	6 Leads & 9 Leads
230/460V, 460V PWS & 575V	230/460V & 460 V	230/460V & 460V
WP-1 & TEFC	WP-1 & TEFC	WP-1 ONLY
Premium Efficiency	Premium Efficiency	Premium Efficiency
Meets or Exceeds NEMA	Meets or Exceeds NEMA	Meets or Exceeds NEMA
MG1 Part 31	MG1 Part 31	MG1 Part 31
Double VPI w/Tropicalized Epoxy Coating	Insulation System not VPI	Insulation System not VPI
Oversized P-5 Angular Contact Bearings	Standard Angular Contact Bearings	Standard Angular Contact Bearings
Balancing Standard NEMA	Balancing Standard NEMA	Balancing Standard NEMA
Grey 250 Cast Iron	Standard Casting	Standard Casting
Precision Cast Frames & EB	Standard Casting	Standard Casting
Non Reverse Ratchet Ball Type all Models	Non Reverse Ratchet Ball Type all Models	Non Reverse Ratchet Pin, Ball Type
Extra High Thrust Capable	Extra High Thrust Capable	Extra High Thrust Capable
Agency Approvals UL, CSA Equal, CE	Agency Approvals UL, CSA Equal, CE	Agency Approvals UL, CSA Equal, CE

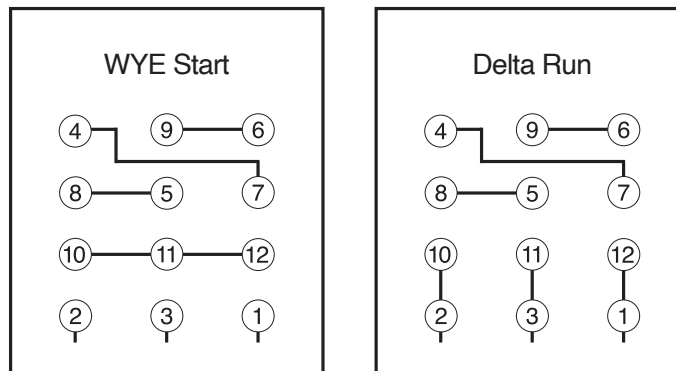
# LEAD CONNECTION DIAGRAMS

## 12-Leads Connection Diagrams

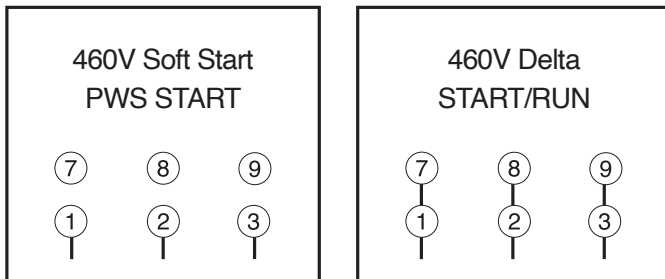
(575 volts for Canadian market or 230/460 volts for US market)



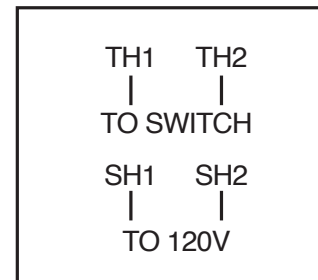
## WYE Delta Start



## 6-Leads Connection Diagrams (for US market 40HP and up)



## Thermistors and Space Heater Connection



TH1 ----- To Switch  
 TH2 ----- To Switch  
 SH1 ----- To 120V  
 SH2 ----- To 120V

Thermistors PTC type: The lead wire is red.  
 The space heater lead wire hook up to 120V is white.



## Vertical Pump Motors

# WARRANTY POLICY

Aurora Motors warrants its motor/product against defects in material and workmanship provided the motor/product has properly been cared for, installed, and operated in the application for which the motor/product was designed. Aurora Motors warrants its motor/product for 18 months from the date of shipment from the manufacturer, or 12 months from the installation date, whichever expires first. This warranty shall be in lieu of any other warranty expressed or implied including but limited to, any implied warranty of merchantability, or fitness for a particular purpose. A defective motor/product must be taken to an independent repair facility authorized by Aurora Motors for inspection or returned to Aurora Motors for completion of warranty. Any and all repairs must have a written authorization by Aurora Motors prior to such repair.

To claim a warranty on a motor/product, the purchaser must provide the original invoice, date of installation, authorized inspection report, cost of repair (authorized repair facility) and photographs/video of failure which support the warranty claim. Aurora Motors will be responsible for repairs or replacing the defective motor/product provided that the motor/product has an Aurora Motors nameplate on it and in fact is an Aurora Motors product, has never being altered, is returned, and freight pre-paid. Before returning the motor/product, a return merchandise authorized number (R.M.A.) must be obtained. Aurora Motors will pay the transportation charge one way only, from the warehouse to the customer. Aurora Motors is not responsible for any expenses in connection with any repair made by anyone other than the factory or an authorized service facility. Aurora Motors is not responsible for removal, installation, or other incidental expenses incurred in shipping the motor/product to or from facilities. The utilization of the thermistors and space heaters are required for warranty inspection.

Aurora Motors assumes no responsibility for consequential or incidental damages, including but not limited to, personal injury or labor costs arising from an operating failure of the motor/product for any reason whatsoever, nor does it assume responsibility for improper storage and handling by the distributor and/or end-user. Also, for warranty purposes, customer must be ready to provide relevant data to Aurora Motors such as the end-user and installer contact information, (preferably at the time of installation). Before a warranty can be determined, the warranty department needs documentation of what application the motor/product was being utilized for, date the motor/product was purchased, the date the motor/product was installed and if all wiring was properly connected, if both the thermistor and space heater had been installed correctly, if the motor/product had been properly filled with oil, and a complete description of the cause of failure.

## CUSTOMER SERVICE AND SUPPORT

### Our Customer Support Guarantee

Your business relies on Aurora Motors, and our Customer Support Services Team is here to help you with responsive and quick help.

### We promise to:

- Be responsive. If a problem happens, we will be there for you.
- Provide a quick turn-around. We will help you to get back up and running as soon as possible.
- Give you reliable answers. Our engineers and designers have both a thorough knowledge of our products and your application.
- Treat you like a respected partner.



Phone: 510-264-1318

Fax: 510-264-1317

[www.aurora-motors.com](http://www.aurora-motors.com)

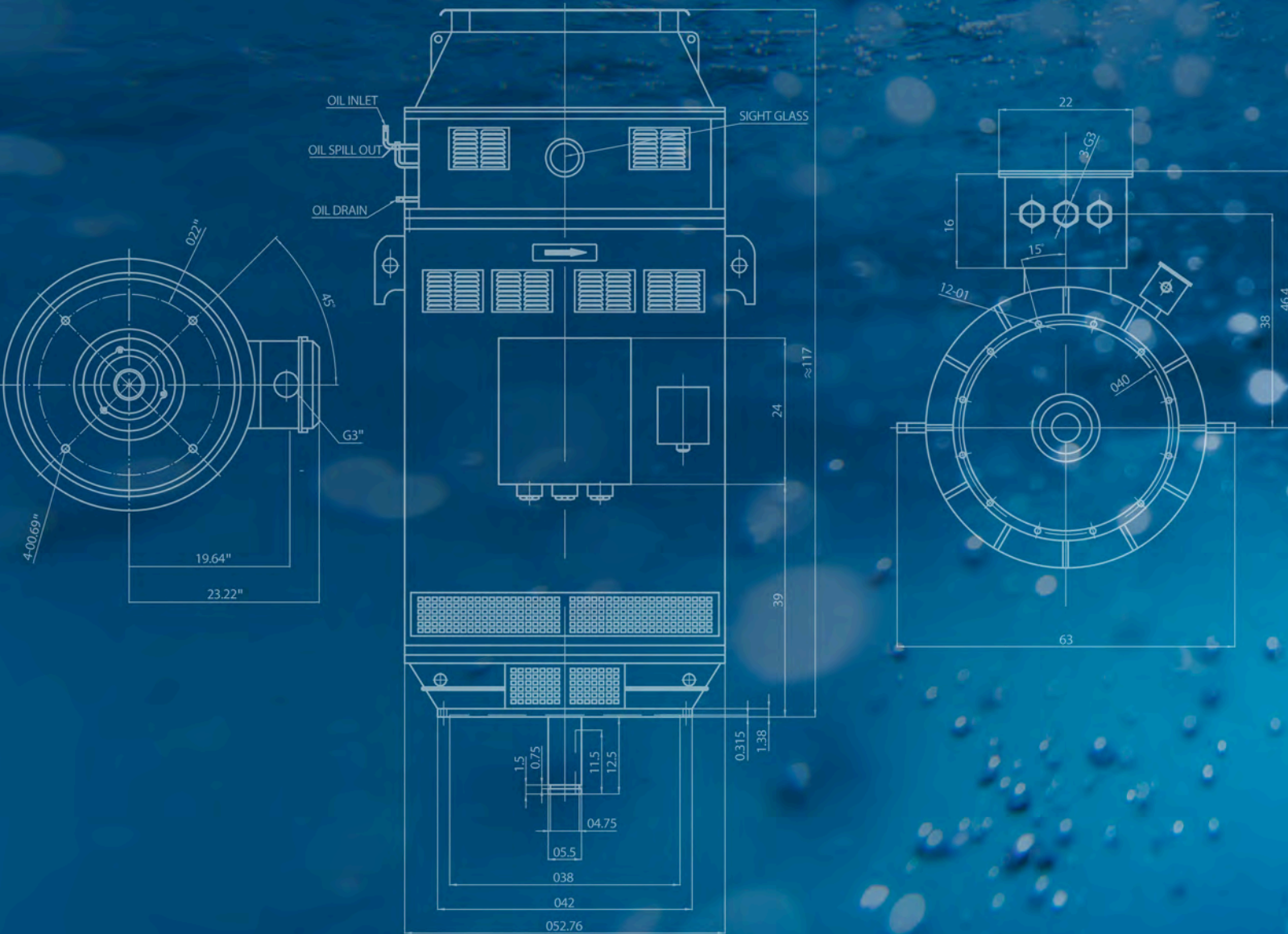




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**AURORA MOTORS** 2031 American Avenue Hayward, California 94545  
 telephone: (510) 264-1318 fax: (510) 264-1317 email: [sales@aurora-motors.com](mailto:sales@aurora-motors.com)