

Severe Duty - TEFC P-Base Motors

Vertical Solid Shaft - In-Line Thrust RGZVILESD

These motors are ideal for increasing energy savings in applications such as centrifugal and turbine pumps.

Performance Specifications

- 3 to 250 HP
- 1.15 service factor, 40°C ambient
- Continuous thrust:
 - Up: 785 to 3,735 lbs.
 - Down: 735 to 1,550 lbs.
 - Radial: 930 to 2,140 lbs.
- 3600, 1800, or 1200 RPM
- 3 phase, 60 Hz; 230/460 volt operation under 25 HP, 460 volt 25 HP and above; 200 & 575 volt available
- Class F insulation, Class B temperature rise
- NEMA design B, continuous duty
- 182LP through 449LP frame

Features for Long Life

Frame & End Shields – Vertical inline solid shaft severe duty motors feature a cast iron frame and end shields for exceptional structural integrity. A drive end T-drain, drip cover and lifting lugs are included.

Rotor – A unique offset rotor bar design provides improved efficiency while larger bars and end rings reduce resistance for lower rotor losses. Each die cast aluminum rotor assembly is dynamically balanced for extended bearing life, and includes a high-strength carbon steel (C1045) shaft for maximum rotor performance.

Stator/Windings – Manufactured with premium electrical grade steel laminations and copper electrical magnet wire to lower losses for improved efficiencies. A unique stator core design lowers flux density while increasing cooling capacity. Large conductor cross section reduces resistance, also lowering stator losses.

Insulation – Proprietary inverter-rated Class F non-hygroscopic insulation system with NEMA Class B temperature rise, provides an extra margin of thermal life. Varnish system application ensures maximum wire penetration to provide protection from moisture, corrosion and electrical shock. This insulation system meets or exceeds NEMA MG1-2006, Part 31, making all motors suitable for operation with variable frequency drives.

Cooling – A bi-directional, non-sparking fan is locked and keyed to the shaft. Its low-inertia design reduces windage losses, improves airflow, reduces noise and provides dependable cooling. Cast iron fan covers are provided on all frame sizes.

Bearings – Regreasable drive end is open ball bearing (182LP – 256LP frames), double shielded ball bearing (284LP – 449LP frames); opposite drive end is a duplex angular contact thrust bearing (143LP – 449LP frames) with cast iron caps. Alemite grease fittings on the inlets, and pipe plugs on the relief ports for ease of routine maintenance. Thrust limits are based on an L10 life of 2 years.



3
YEAR
WARRANTY

Lubrication – A specially formulated, high temperature tested, polyurea-based grease is used to provide more than four times the lubrication life of other polyurea greases.

Oversized Conduit Box – Cast iron construction that is larger than industry standards, diagonally-split, neoprene-gasketed and rotatable in 90° increments for quick and easy connections. Includes a ground lug and non-wicking, clearly and permanently marked leads.

Corrosion Resistance – Cast iron construction, zinc-plated hardware, epoxy enamel paint and stainless steel nameplate resist rust and corrosion.

Modifiable – All Siemens vertical motors are available with a wide variety of modifications to meet your specific motor needs.



Specifications table begins on the next page →

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Stock/Modifiable

HP	RPM	Frame	Voltage	Type	Cont. Thrust 2 Yr. Life Min.			Part Number	List Price \$	Multiplier Symbol	FL Amps 460V	FL Nom. Eff. (%)	Weight (lbs.)	Stock Model
					Up (lbs)	Down (lbs)	Rad. (lbs)							
3	3600	182LP	230/460	RGZVILESD	785	735	930	1PC28311DA416TA3	1182	SA-7EN	3.6	85.5	133	✓
3	1800	182LP	230/460	RGZVILESD	980	910	1160	1PC28311DB416TA3	1150	SA-7EN	3.9	86.5	133	✓
3	1200	213LP	230/460	RGZVILESD	1115	1055	1320	1PC28312AC516TA3	1374	SA-7EN	4	86.5	215	
5	3600	184LP	230/460	RGZVILESD	785	735	930	1PC28311DA516TA3	1306	SA-7EN	5.8	86.5	144	✓
5	1800	184LP	230/460	RGZVILESD	980	910	1160	1PC28311DB516TA3	1233	SA-7EN	6.5	86.5	144	✓
5	1200	215LP	230/460	RGZVILESD	1120	1050	1320	1PC28312AC616TA3	1788	SA-7EN	6.8	87.5	160	
7.5	3600	213LP	230/460	RGZVILESD	785	735	930	1PC28312AA516TA3	1613	SA-7EN	8.8	87.5	215	✓
7.5	1800	213LP	230/460	RGZVILESD	980	910	1160	1PC28312AB516TA3	1560	SA-7EN	9.5	88.5	215	✓
7.5	1200	254LP	230/460	RGZVILESD	1350	1240	1600	1PC28312BC516TA3	2130	SA-7EN	9.8	88.5	245	
10	3600	215LP	230/460	RGZVILESD	790	730	930	1PC28312AA616TA3	1755	SA-7EN	12	88.5	160	✓
10	1800	215LP	230/460	RGZVILESD	985	905	1160	1PC28312AB616TA3	1755	SA-7EN	12.5	88.5	160	✓
10	1200	256LP	230/460	RGZVILESD	1360	1230	1600	1PC28312BC616TA3	2405	SA-7EN	13	88.5	330	
15	3600	254LP	230/460	RGZVILESD	945	855	1100	1PC28312BA516TA3	2023	SA-7EN	17	88.5	245	✓
15	1800	254LP	230/460	RGZVILESD	1185	1075	1400	1PC28312BB516TA3	2098	SA-7EN	18.7	90.2	245	✓
15	1200	284LPH	230/460	RGZVILESD	1975	1785	2120	1PC28312EC116TA3	2896	SA-7EN	20	89.5	375	
20	3600	256LP	230/460	RGZVILESD	950	850	1100	1PC28312BA616TA3	2270	SA-7EN	23	88.5	285	✓
20	1800	256LP	230/460	RGZVILESD	1200	1060	1400	1PC28312BB616TA3	2390	SA-7EN	26	90.2	285	✓
20	1200	286LPH	230/460	RGZVILESD	1990	1770	2120	1PC28312EC416TA3	3410	SA-7EN	26	90.2	520	
25	3600	284LPH	460	RGZVILESD	1460	1320	1475	1PC28312EA112TA3	2714	SA-7EN	29	90.2	375	✓
25	1800	284LPH	460	RGZVILESD	1725	1535	1850	1PC28312EB112TA3	2665	SA-7EN	29	91.7	375	✓
25	1200	324LP	460	RGZVILESD	2010	1750	1875	1PC28313AC512TA3	3988	SA-7EN	33	91	565	
30	3600	286LPH	460	RGZVILESD	1470	1310	1475	1PC28312EA412TA3	2880	SA-7EN	34	90.2	430	✓
30	1800	286LPH	460	RGZVILESD	1740	1520	1850	1PC28312EB412TA3	2998	SA-7EN	35	91.7	430	✓
30	1200	326LP	460	RGZVILESD	2035	1725	1875	1PC28313AC612TA3	4458	SA-7EN	39	91	600	
40	3600	324LP	460	RGZVILESD	1490	1290	1600	1PC28313AA512TA3	3840	SA-7EN	45	92.4	565	✓
40	1800	324LP	460	RGZVILESD	1770	1490	1650	1PC28313AB512TA3	3715	SA-7EN	47	92.4	565	✓
40	1200	364LP	460	RGZVILESD	2540	2140	2120	1PC28313CC512TA3	5673	SA-7EN	52	92.4	800	

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Stock/Modifiable

HP	RPM	Frame	Voltage	Type	Cont. Thrust 2 Yr. Life Min.			Part Number	List Price \$	FL Multiplier Symbol	FL Amps 460V	Nom. Eff. (%)	Weight (lbs.)	Stock Model
					Up (lbs)	Down (lbs)	Rad. (lbs)							
50	3600	326LP	460	RGZVILESD	1505	1275	1600	1PC28313AA612TA3	4706	SA-7EN	55	92.4	600	✓
50	1800	326LP	460	RGZVILESD	1785	1475	1650	1PC28313AB612TA3	4359	SA-7EN	58	92.4	600	✓
50	1200	365LP	460	RGZVILESD	2560	2120	2120	1PC28313CC612TA3	6675	SA-7EN	66	92.4	875	
60	3600	364LP	460	RGZVILESD	1840	1510	1475	1PC28313CA512TA3	5857	SA-7EN	68	92.4	800	✓
60	1800	364LP	460	RGZVILESD	2330	2060	1850	1PC28313CB512TA3	5814	SA-7EN	71	92.4	800	✓
60	1200	404LP	460	RGZVILESD	2620	2060	2120	1PC28314AC512TA3	7610	SA-7EN	74	93	1290	
75	3600	365LP	460	RGZVILESD	1850	1500	1475	1PC28313CA612TA3	7140	SA-7EN	85	93	875	✓
75	1800	365LP	460	RGZVILESD	2345	1945	1850	1PC28313CB612TA3	7145	SA-7EN	87	93	875	✓
75	1200	405LP	460	RGZVILESD	2660	2020	2120	1PC28314AC612TA3	8951	SA-7EN	93	93.6	1300	
100	3600	405LP	460	RGZVILESD	1905	1445	1475	1PC28314AA612TA3	9633	SA-7EN	108	93	1300	✓
100	1800	405LP	460	RGZVILESD	2445	1845	1850	1PC28314AB612TA3	8682	SA-7EN	113	93.6	1300	✓
100	1200	444LP	460	RGZVILESD	2780	1900	2120	1PC28314JC112TA3	11876	SA-7EN	117	93.6	1740	
125	1800	444LP	460	RGZVILESD	2530	1760	1850	1PC28314JB112TA3	11031	SA-7EN	143	94.1	1740	
125	1200	445LP	460	RGZVILESD	2850	1830	2120	1PC28314JC212TA3	15335	SA-7EN	144	93.6	1930	
150	1800	445LP	460	RGZVILESD	2590	1700	1850	1PC28314JB212TA3	12880	SA-7EN	170	94.5	1930	
150	1200	447LP	460	RGZVILESD	2945	1735	2120	1PC28314JC312TA3	17835	SA-7EN	170	94.1	2280	
200	1800	447LP	460	RGZVILESD	2650	1645	1850	1PC28314JB312TA3	16848	SA-7EN	225	94.5	2280	
200	1200	449LP	460	RGZVILESD	3040	1640	2120	1PC28314JC512TA3	17866	SA-7EN	226	94.1	2600	
250	1800	449LP	460	RGZVILESD	2710	1590	1850	1PC28314JB512TA3	18458	SA-7EN	281	94.5	2600	
250	1200	449LP	460	RGZVILESD	3735	1550	2120	1PC28314JC612TA3	19328	SA-7EN	280	94.1	2600	

Introduction

HIGH EFFICIENT
General Purpose

HIGH EFFICIENT
Severe Duty

HIGH EFFICIENT
Multi Speed

HIGH EFFICIENT
Hazardous Duty

HIGH EFFICIENT
Definite Purpose

HIGH EFFICIENT
P-Base Vertical

NEMA PREMIUM
General Purpose

NEMA PREMIUM
Severe Duty