

Automotive Duty - TEFC U-Frame Motors

RGZEAD

Automotive Duty TEFC motors are approved for use by major U.S. automobile manufacturers. They meet or exceed the requirements per GM7EH, GM7EQ, Ford EM 1, and Chrysler NPEM 100 and previous NEMA U-Frame motor standards.

These motors are ideal for applications where automotive approved motors are required, such as pump, fan, compressor, conveyor and other constant speed applications.

Performance Specifications

- 1 to 100 HP
- 1.15 service factor, 40°C ambient
- 1.0 service factor, 65°C ambient
- 3600, 1800 or 1200 RPM
- 3 phase, 60 Hz; 460 volt; 200, 230 & 575 volt available
- Meets or exceeds NEMA Energy Efficiency standards
- Class F insulation, Class B temperature rise
- NEMA Design B, Continuous Duty
- 182U through 445U frame

Features for Long Life

Frame & End Shields – Cast iron construction for exceptional structural integrity with condensation T-drains. Lifting eyebolts are included for frames 213U to 445U.

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 and lowers stator losses.

Insulation – Proprietary inverter-rated NEMA Class F non-hygroscopic insulation system with 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, oversized single shielded with cast iron inner caps. Alemite grease fittings on the inlets and pipe plugs on the relief ports for ease of routine maintenance. For added bearing protection, 182U-256U frames have a drive end shaft seal and 284U-445U frames have a drive end shaft V-ring slinger.



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 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	DE Bearing	Part Number	List Price \$	Multiplier Symbol	FL Amps 460V	FL Nom. Eff. (%)	Weight (lbs.)	Stock Model
1	1800	182	460	RGZEAD	Ball	1PC29811FB112AA3	379	SA-7AE	1.4	85.5	85	✓
1	1200	184	460	RGZEAD	Ball	1PC29811FC212AA3	463	SA-7AE	1.6	81.5	100	✓
1.5	3600	182	460	RGZEAD	Ball	1PC29811FA112AA3	438	SA-7AE	1.9	82.5	85	✓
1.5	1800	184	460	RGZEAD	Ball	1PC29811FB212AA3	406	SA-7AE	2	86.5	100	✓
1.5	1200	184	460	RGZEAD	Ball	1PC29811FC312AA3	511	SA-7AE	2.3	85.5	100	✓
2	3600	184	460	RGZEAD	Ball	1PC29811FA212AA3	485	SA-7AE	2.5	84	100	✓
2	1800	184	460	RGZEAD	Ball	1PC29811FB312AA3	428	SA-7AE	2.5	87.5	100	✓
2	1200	213	460	RGZEAD	Ball	1PC29812FC112AA3	566	SA-7AE	2.8	86.5	130	✓
3	3600	184	460	RGZEAD	Ball	1PC29811FA312AA3	549	SA-7AE	3.7	86.5	100	✓
3	1800	213	460	RGZEAD	Ball	1PC29812FB112AA3	492	SA-7AE	4	87.5	130	✓
3	1200	215	460	RGZEAD	Ball	1PC29812FC212AA3	701	SA-7AE	4.1	87.5	162	✓
5	3600	213	460	RGZEAD	Ball	1PC29812FA112AA3	652	SA-7AE	6	87.5	130	✓
5	1800	215	460	RGZEAD	Ball	1PC29812FB212AA3	652	SA-7AE	6.3	88.5	162	✓
5	1200	254U	460	RGZEAD	Ball	1PC29812GC112AA3	975	SA-7AE	6.6	89.5	250	✓
7.5	3600	215	460	RGZEAD	Ball	1PC29812FA212AA3	770	SA-7AE	8.7	88.5	162	✓
7.5	1800	254U	460	RGZEAD	Ball	1PC29812GB112AA3	857	SA-7AE	9.5	89.5	250	✓
7.5	1200	256U	460	RGZEAD	Ball	1PC29812GC212AA3	1246	SA-7AE	9.8	90.2	296	✓
10	3600	254U	460	RGZEAD	Ball	1PC29812GA112AA3	923	SA-7AE	11	89.5	250	✓
10	1800	256U	460	RGZEAD	Ball	1PC29812GB212AA3	1041	SA-7AE	12	89.5	296	✓
10	1200	284U	460	RGZEAD	Ball	1PC29812HC112AA3	1527	SA-7AE	13	90.2	375	✓
15	3600	256U	460	RGZEAD	Ball	1PC29812GA212AA3	1175	SA-7AE	17	90.5	296	✓
15	1800	284U	460	RGZEAD	Ball	1PC29812HB112AA3	1430	SA-7AE	18	91.7	375	✓
15	1200	324U	460	RGZEAD	Ball	1PC29813EC112AA3	2056	SA-7AE	19	91	565	✓
20	3600	286U	460	RGZEAD	Ball	1PC29812HA212AA3	1598	SA-7AE	23.5	92.4	430	✓
20	1800	286U	460	RGZEAD	Ball	1PC29812HB212AA3	1756	SA-7AE	25	91.7	430	✓
20	1200	326U	460	RGZEAD	Ball	1PC29813EC212AA3	2513	SA-7AE	26	91.7	600	✓
25	3600	324S	460	RGZEAD	Ball	1PC29813FA312AA3	2051	SA-7AE			565	
25	1800	324U	460	RGZEAD	Ball	1PC29813EB112AA3	2198	SA-7AE	29	93	565	✓
25	1200	364U	460	RGZEAD	Ball	1PC29813GC112AA3	3034	SA-7AE	33	92.4	800	✓
30	3600	326S	460	RGZEAD	Ball	1PC29813FA412AA3	2473	SA-7AE			600	
30	1800	326U	460	RGZEAD	Ball	1PC29813EB212AA3	2568	SA-7AE	34	93	600	✓
30	1200	365U	460	RGZEAD	Ball	1PC29813GC212AA3	3433	SA-7AE	39	92.4	875	✓
40	3600	364US	460	RGZEAD	Ball	1PC29813HA112AA3	3228	SA-7AE			800	
40	1800	364U	460	RGZEAD	Ball	1PC29813GB112AA3	3386	SA-7AE	46	93.6	800	✓
40	1200	404U	460	RGZEAD	Ball	1PC29814KC112AA3	4407	SA-7AE			1135	
50	3600	365US	460	RGZEAD	Ball	1PC29813HA212AA3	4075	SA-7AE			875	
50	1800	365U	460	RGZEAD	Ball	1PC29813GB212AA3	3972	SA-7AE	57	93.6	875	✓
50	1200	405U	460	RGZEAD	Ball	1PC29814KC212AA3	5091	SA-7AE			1300	
60	3600	405US	460	RGZEAD	Ball	1PC29814LA212AA3	4848	SA-7AE			1300	
60	1800	405U	460	RGZEAD	Ball	1PC29814KB212AA3	4932	SA-7AE	68	94.1	1300	✓
60	1200	444U	460	RGZEAD	Roller	1PC29814MC112AA3	5976	SA-7AE			1625	
75	3600	444US	460	RGZEAD	Ball	1PC29814NA112AA3	6369	SA-7AE			1625	
75	1800	444U	460	RGZEAD	Roller	1PC29814MB112AA3	6083	SA-7AE	89	94.1	1625	✓
75	1200	445U	460	RGZEAD	Roller	1PC29814MC212AA3	7087	SA-7AE			1900	
100	3600	445US	460	RGZEAD	Ball	1PC29814NA212AA3	8418	SA-7AE			1900	
100	1800	445U	460	RGZEAD	Roller	1PC29814MB212AA3	7561	SA-7AE	114	94.5	1900	✓

*FL Amps are at 460V or 575V depending on the voltage rating of the motor.

Shaded ratings will be discontinued when present stock is depleted.