Severe Duty - TEFC Design C Motors

RGZTESD

NEMA Design C motors are specially designed for applications that require high starting torques to break away standing loads such as reciprocating conveyors, crushers and mixers. These motors feature starting torques up to 280% with normal slip and low starting current. Their high efficiency and severe duty design makes them cost effective choices for a variety of applications that require rugged power.

Performance Specifications

- 5 to 200 HP
- 1.15 service factor, 40°C ambient
- 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
- Meets or exceeds NEMA Energy Efficiency standards
- Class F insulation, Class B temperature rise
- NEMA Design C, Continuous Duty
- 184T through 449TS 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 213T to 449TS.

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.

Specifications table begins on the next page→

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, 143T-256T frames have a drive end shaft seal and 284T-449T 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.

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RGZTESD — 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
Horizontal, Foot Mounted												
5	1800	184T	230/460	RGZTESD	Ball	**1PC29711CB316AA3**	**630**	SA-7XSD	6.5	87.5	100	✔
5	1200	215T	230/460	RGZTESD	Ball	**1PC29712AC216AA3**	**1070**	SA-7XSD			160	
7.5	1800	213T	230/460	RGZTESD	Ball	**1PC29712AB116AA3**	**855**	SA-7XSD	9.5	87.5	157	✔
7.5	1200	254T	230/460	RGZTESD	Ball	**1PC29712BC116AA3**	**1422**	SA-7XSD			245	
10	1800	215T	230/460	RGZTESD	Ball	**1PC29712AB216AA3**	**1030**	SA-7XSD	12.5	87.5	160	✔
10	1200	256T	230/460	RGZTESD	Ball	**1PC29712BC216AA3**	**1738**	SA-7XSD			285	
15	1800	254T	230/460	RGZTESD	Ball	**1PC29712BB116AA3**	**1355**	SA-7XSD	19	89.5	245	✔
15	1200	284T	230/460	RGZTESD	Ball	**1PC29712CC116AA3**	**2306**	SA-7XSD			375	
20	1800	256T	230/460	RGZTESD	Ball	**1PC29712BB216AA3**	**1690**	SA-7XSD	24	90.2	285	✔
20	1200	286T	230/460	RGZTESD	Ball	**1PC29712CC216AA3**	**2809**	SA-7XSD			450	
25	1800	284T	460	RGZTESD	Ball	**1PC29712CB112AA3**	**2015**	SA-7XSD	29	93	375	✔
25	1200	324T	460	RGZTESD	Ball	**1PC29713AC112AA3**	**3406**	SA-7XSD			565	
30	1800	286T	460	RGZTESD	Ball	**1PC29712CB212AA3**	**2340**	SA-7XSD	35	93	450	✔
30	1200	326T	460	RGZTESD	Ball	**1PC29713AC212AA3**	**3923**	SA-7XSD			600	
40	1800	324T	460	RGZTESD	Ball	**1PC29713AB112AA3**	**3110**	SA-7XSD	49	93	565	✔
40	1200	364T	460	RGZTESD	Ball	**1PC29713CC112AA3**	**5316**	SA-7XSD			831	
50	1800	326T	460	RGZTESD	Ball	**1PC29713AB212AA3**	**3815**	SA-7XSD	59	93	600	✔
50	1200	365T	460	RGZTESD	Ball	**1PC29713CC212AA3**	**6104**	SA-7XSD			875	
60	1800	364T	460	RGZTESD	Ball	**1PC29713CB112AA3**	**5475**	SA-7XSD	73	93	831	✔
60	1200	404T	460	RGZTESD	Ball	**1PC29714AC112AA3**	**7152**	SA-7XSD			1135	
75	1800	365T	460	RGZTESD	Ball	**1PC29713CB212AA3**	**6940**	SA-7XSD	91	93.6	875	✔
75	1200	405T	460	RGZTESD	Ball	**1PC29714AC212AA3**	**8421**	SA-7XSD			1300	
100	1800	405T	460	RGZTESD	Ball	**1PC29714AB212AA3**	**8570**	SA-7XSD	114	94.5	1300	✔
100	1200	444TS	460	RGZTESD	Ball	**1PC29714DC112AA3**	**11508**	SA-7XSD			1625	
125	1800	444TS	460	RGZTESD	Ball	**1PC29714DB112AA3**	**11281**	SA-7XSD			1625	
125	1200	445TS	460	RGZTESD	Ball	**1PC29714DC212AA3**	**14135**	SA-7XSD			1900	
150	1800	445TS	460	RGZTESD	Ball	**1PC29714DB212AA3**	**13114**	SA-7XSD			1900	
150	1200	447TS	460	RGZTESD	Ball	**1PC29714DC312AA3**	**15815**	SA-7XSD			2280	
200	1800	447TS	460	RGZTESD	Ball	**1PC29714DB312AA3**	**15951**	SA-7XSD			2280	
200	1200	449TS	460	RGZTESD	Ball	**1PC29714DC512AA3**	**19360**	SA-7XSD			2600	

Note:
1. 1-3HP available as custom build.