

Comprehensive Specification Sheet

Low-Voltage AC Alternator Electrical and Mechanical Data



World-Class Alternators

Setting new standards in all aspects from design, manufacturing, material selection and production to testing equipment, tooling and quality control.

Tough: Our alternators are trusted as a component in the production of stationary diesel generator sets, mobile power plants and other power generation equipment which is supplied to various commercial, agricultural, refrigeration, residential, government and military services.

Trusted: Our product is highly regarded for its superior quality and performance. The alternators are used as the main power supply for three major satellite launch bases, for a station in Antarctica and for a spacecraft series.

Tested: Our products are thoroughly tested in different environments to ensure unsurpassed quality and reliability. Our stringent tests verify overall performance and align our products with most internationally-recognised standards.

Standards

- StromerPower alternators meet all key international standards and regulations
- The 4-pole alternator complies with the following major domestic and international standards and regulations: GB755, BS5000, IEC60034, VDE0530, CSAC22.2 100 and NEMA MG-1.22
- It is designed, manufactured and marketed in an ISO 9001 quality assurance environment
- Alternator can be integrated in CE-marked generator set

Electrical Characteristics and Performance

- Class H insulation
- 2/3 pitch winding
- Voltage Range: 50Hz: 220v 240v and
- 380v 415v (440v)
- High efficiency and motor starting capacity
- Low reactances

Specifications Overview

Three Phase / 50Hz / 400V / PF = 0.8					
Continu	ous 40℃	Stand	lby 40°C		
kw kVA		kw	kVA		
320	400	352	440		

Rated Frequency	Voltage	Voltage Regulation	Voltage Regulation Change	Phase Change Rate	Power
Hz	V	v	% UN	%	Factor
50	400	+/- 1%	< +/- 10	+/- 1	8.0

Insulation Class	Туре	Phase and Connection	
н	Brushless	Three Phase	4 Pole

AVR Model	Stator	Rotor	
SX440	2/3 Pitch	Single Bearing	



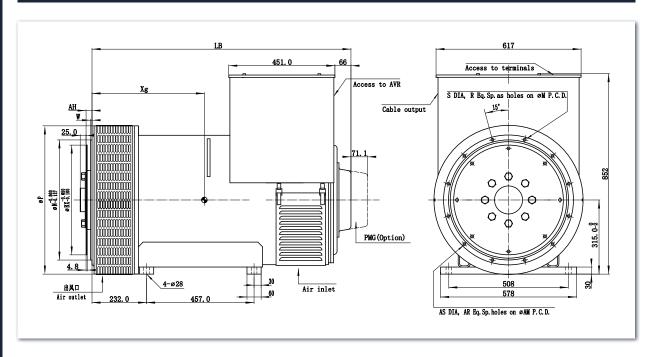
Mechanical Construction

- StromerPower enclosures are IP23
- All rotors are dynamically balanced in strict accordance with the requirements of the ISO1940 standard
- Robust flanges and shields
- The large junction box makes wiring and adjustment of the AVR easier
- Space for current transformers or other optional modules to be installed
- Compact design and sturdy assembly to withstand generator vibrations
- All our alternators use long-term sealed bearings
- Steel base

Excitation System Regulations

- · Self-Excitation Standard
- Parallel Use: When the appropriate modules (AVR, current transformer and control equipment) are installed, all 4-pole alternators can be used in parallel
- Bearing Capacity: NEMA specifications
- **Waveform:** According to the IEC standard, the total harmonic distortion rate is less than 5% under
- no-load or non-linear load. The telephone interference factor (TIF) is less than 50 in accordance with NEMA specifications
- **Frequency:** To be used at a frequency of 50Hz (standard windings) (No. B31, B32)
- **Power Factor:** The alternator is designed for loads with a power factor of 0.8

Single-Bearing Outline Schematic



SAE Rating

	LB		· ,	Weight
Model	SAE	LC	Xg	kg
SP4-G320E8	1191	451	542	1033

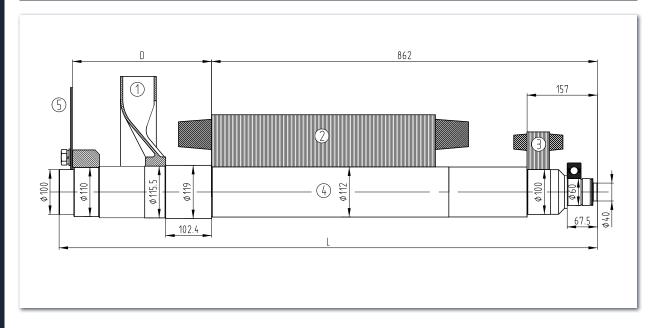
Adapter

0.45	ВХ	BX AM AR - ØAS					
SAE	mm						
14	466.725	438.15	8 - ø14	25.40			

Flange

215	Р	N	М	R - øS	w	D	a°
SAE	SAE mm						
1	617	511.175	530.225	12 - ø12	6	232	15

Torsional Analysis Data



Fa	an	Main	Main Rotor Excitation Ro		on Rotor	Shaft		Total	
Weight (kg)	J(kgm²)	Weight (kg)	J(kgm²)	Weight (kg)	J(kgm²)	Weight (kg)	J(kgm²)	Weight (kg)	J(kgm²)
10.2	0.0619	263.8	5.8527	18.3	0.1516	96.9	0.0647	389.1	6.1308

245	5	Shafts Coupling Flex Plate			
SAE	D	L	Weight (kg)	J(kgm²)	
14	310.6	1202.6	5.8	0.0862	

Dimensions

Unpacked				Pac	ked		
Length Width Height Net Weight			Length	Width	Height	Gross Weight	
mm		kg	mm			kg	
1240	632	852	1033	1380	770	1085	1117



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The accuracy cannot be guaranteed as StromerPower have an ongoing process of development and reserve the right to change the specification of their products without notice.

