
		SGP Series Type test certificate BS 6290 Pt 4 Standard Ed. 1997		TYPE TEST CERTIFICATE	
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				Qufu, Shandong 2007-06-27	

Characteristic	Clause reference	Requirement	Status
Safety			
Flammability of container	6.2.1	1) State the rating achieved	FV UL 94 V0
Container integrity	6.2.2	2) State whether pass or fail	Pass
Gas emission	6.3	3) State emission value(GE)(ml/cell/Ah/h)	0.008
High current endurance	6.4	4) State whether pass (H) or (L)	H
Performance			
Rated capacity conformity level	7.1	5) State % conformity at 5 min	99%
	7.1	6) State % conformity at 15 min	99%
	7.1	7) State % conformity at 1 hour	99%
	7.1	8) State % conformity at 3 hours	99%
	7.1	9) State % conformity at 8 hours	99%
	7.1	10) State % conformity at 10 hours	99%
Cycle endurance	7.2	11) State value	580cycles
Charge retention	7.3	12) State value (CR)	95%
Internal resistance	7.4	13) State value (Ri)	see documentation
Durability			
Life at elevated temperature	8.1	14) State endurance / float volts	500/8/13.5
	8.1	15) State endurance / float volts	500/1/13.5
	8.2.1 ¹⁾	16) State endurance / float volts ($<U_{fp}$)	13.5V \pm 0.05V
	8.2.3 ¹⁾	17) State maximum unit capacity reduction	2.2%
	8.2.2 ¹⁾	18) $U_{max} < (U_{fp} \pm 3\%) < U_{min}$	Pass
Pillar seal assembly	8.2.4 ¹⁾	19) $C_{2A} > C_3$	Pass
Mechanical strength	8.3	20) State which test E.3.1 or E.3.2	E.3.2
	8.3	21) State number of days on test	>450 days
	8.4	22) State whether pass or fail	Pass

¹⁾Float voltage characteristics

Manufacture: Shandong Sacred Sun Power Sources Industry Co.,Ltd
Address: No1, Shengyang Road, Qufu city, Shandong Province, China
Product: Valve Regulate Lead-acid Battery
Range: SGP series
SGP12-17/SGP12-24/SGP12-27/SGP12-30/SGP12-35/SGP12-40/SGP12-45/SGP12-50/SGP12-55/ SGP12-60/ SGP12-70/ SGP12-75/ SGP12-80/ SGP12-90/ SGP12-100/ SGP12-120/ SGP12-150/ SGP12-180/ SGP12-200/ SGP12-260/ SGP12-225/

	Name	Service	Date
Established by	Wei Nengrong	Shandong Sacred Sun Power Sources Industry Co., Ltd	2007-3-1
Approved by	Zhu Jiaowei	Shandong Sacred Sun Power Sources Industry Co., Ltd	2007-3-1

	SGP Series		TYPE TEST CERTIFICATE
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BS6290-4:1997 Classification Table

CLASSIFICATION TABLE												
Requirement Number	Safety class			Performance class				Durability class				
	1	2	3	1	2	3	4	1	2	3	4	5
1	FV0	FV1	FV2									
2	Pass	Pass	Pass									
3	*	*	*									
4	*	*	*									
5				≥99.9	≥99	≥95	≥90					
6				≥99.9	≥99	≥95	≥90					
7				≥99.9	≥99	≥95	≥90					
8				≥99.9	≥99	≥95	≥90					
9				≥99.9	≥99	≥95	≥90					
10				≥99.9	≥99	≥95	≥90					
11				50	50	50	50					
12				*	*	*	*					
13				*	*	*	*					
14								> 648	> 518	> 389	> 259	> 130
15								*	*	*	*	*
16								*	*	*	*	*
17								<3%	<3%	<3%	<3%	<3%
18								Pass	Pass	Pass	Pass	Pass
19								Pass	Pass	Pass	Pass	Pass
20								*	*	*	*	*
21								*	*	*	*	*
22								*	*	*	*	*
Manufacture: Shandong Sacred Sun Power Sources Industry Co.,Ltd												
Address: No1,Shengyang Road, Qufu city, Shandong Province, China												
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Types: SGP12-17/SGP12-24/SGP12-27/SGP12-30/SGP12-35/SGP12-40/SGP12-45/SGP12-50/SGP12-55/ SGP12-60/ SGP12-70/ SGP12-75/ SGP12-80/SGP12-90/ SGP12-100/ SGP12-120/ SGP12-150/ SGP12-180/ SGP12-200/ SGP12-260/ SGP12-225/												
* These values do not affect the classification, but may be obtained from the 'status' column of the Type Test Certificate.												

Classification according to BS6290-4: 1997			
Group	Safety	Performance	Durability
Class	1(H)	2	2
Product Label			

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