中国认可
国际互认
检测
TESTING
CNAS L2885

TEST REPORT

Report No. .....:	**HST201910-19597-WT**
Sample Description.....:	**Valve Regulated Lead Acid Battery**
Model.....:	**See the Table 1**
Assessment Category.:	**Entrusted**
Applicant.....:	**JYC POWER CO., LIMITED**

Digitally signed by Gnidaş Bogdan
Date: 2021.10.26 00:01:50 EEST
Reason: MoldSign Signature
Location: Moldova

Guangdong Huesent Testing & Inspection Technology Co., Ltd.

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TEST REPORT

Sample Description	Valve Regulated Lead Acid Battery	Trademark	/
Model	See the Table 1	Specification	See the Table 1
Assessment Category	Entrusted	Sample Quantity	6 pieces
Applicant	JYC POWER CO., LIMITED	Sample Status	The samples are sound, intact and fit for test.
Sample Received Date	2019.10.15	Test Date	2019.10.15-2019.10.27
Manufacturer	JYC Battery Manufacturer Co.,Ltd		
Address	Wengcheng Industrial Park, Guandu development Zone,Wengyuan, Shaoguan, Guangdong,China		
Factory	JYC Battery Manufacturer Co.,Ltd		
Address	Wengcheng Industrial Park, Guandu development Zone,Wengyuan, Shaoguan, Guangdong,China		
Test address	Unit 102,4th Building, HongJi e Valley International Enterprises Port, Tongji West Road, NantouTown, Zhongshan City, Guangdong.		
Test Items	See the report below.		
Test standard	IEC 61056-1:2012 General purpose lead-acid batteries (valve-regulated types) – Part 1: General requirements, functional characteristics – Methods of test IEC 61056-2:2012 General purpose lead-acid batteries (valve-regulated types) – Part 2: Dimensions, terminals and marking		
Test Conclusion	The results conform to the requirements of standards with respect to the test items. (Stamp of Test Unit)		
Remarks	There are thirty-eight models (See theTable 1) for application, shown in this report, with the difference being the outer sizes and capacity. All of the tests were performed on 12V70AH.		
Tested by ： Ben	Sign： Ben		
Reviewed by： John	Sign： John		
Approved by： Louis	Sign： Louis		

Table 1:Models for application			
No.	Models	No.	Models
1	12V1.2AH	20	12V45AH
2	12V2.2AH	21	12V50AH
3	12V3.3AH	22	12V70AH
4	12V3.4AH	23	12V75AH
5	12V3.5AH	24	12V80AH
6	12V5.5AH	25	12V90AH
7	12V6AH	26	12V100AH
8	12V6.5AH	27	12V110AH
9	12V7.2AH	28	12V120AH
10	12V8AH	29	12V150AH
11	12V8.5AH	30	12V180AH
12	12V10AH	31	12V200AH
13	12V15AH	32	12V220AH
14	12V20AH	33	12V230AH
15	12V22AH	34	12V250AH
16	12V28AH	35	BATTERY 12V12Ah Deep Cycle
17	12V34AH	36	BATTERY 12V18Ah Deep Cycle
18	12V35AH	37	BATTERY 12V26Ah Deep Cycle
19	12V42AH	38	BATTERY 12V36Ah Deep Cycle

TEST RESULT

Items	IEC 61056-1:2012	Result - Remark	Verdict
	7 Test methods		
1	**7.2 Capacity C_a (actual capacity at the 20 h discharge rate)**		
	The test methods are according to clause 7.2.1 to 7.2.4 which are stated in the standard IEC 61056-1:2012	1#: Ca =78.1Ah 2#: Ca =77.5Ah 3#: Ca =77.8Ah	P
	Specific requirements: C_a shall be equal to, or higher than, C_{20}.		
2	**7.3 High rate capacity**		
	The test methods are according to clause 7.3.1 to 7.3.3 which are stated in the standard IEC 61056-1:2012	4#: 34min 5#: 32min 6#: 33min	P
	Specific requirements: During discharge with 20 × I_{20}, the discharge time shall reach 27 min or more within 5 cycles of charging and discharging.		
3	**7.8 Maximum permissible current**		
	The test methods are according to clause 7.8.1 to 7.8.7 which are stated in the standard IEC 61056-1:2012	The battery have no distortion or other damage	P
	Specific requirements: Batteries shall be suitable to maintain a current of I_m = 40 × I_{20} for 300 s and of I_h = 300 × I_{20} for 5 s, unless otherwise specified by the manufacturer, without distortion or other damage to the battery.		
4	**7.9 Charge acceptance after deep discharge**		
	The test methods are according to clause 7.9.1 to 7.9.4 which are stated in the standard IEC 61056-1:2012	1#: C_a =69.5Ah 2#: C_a =69.2Ah 3#: C_a =68.8Ah	P
	Specific requirements: The resulting capacity in ampere-hours shall be ≥ 0,75 × C_{20} (Ah).		
5	**7.10 Gas emission intensity**		
	7.10.1 Gas emission intensity with constant voltage	At the rated float charge voltage. Unit of Ge is ml/(hour•Ah•cell) 4#: Ge=0,0017 5#: Ge=0,0016 6#: Ge=0,0016	P
	The test methods are according to clause 7.10.1.1 to 7.10.1.7 which are stated in the standard IEC 61056-1:2012		
	Specific requirements: When the gas emission intensity is determined during constant voltage float charging , the value G_e shall not be greater than 0,05 ml × cell^{-1} × h^{-1} × Ah^{-1}.		

TEST RESULT

Items	IEC 61056-1:2012	Result - Remark	Verdict
6	**Operation of regulating valve and over pressure resistance**		
	The test methods are according to clause 7.11.1 to 7.11.2 which are stated in the standard IEC 61056-1:2012	Valve pressure: 20,1kpa~24,0kpa	P
	Specific requirements: When the test is performed in accordance with 7.11.1, the operating pressure of vent valve shall be 0,98 kPa to 196,1 kPa.		
7	**7.12 Vibration resistant characteristics**		
	The test methods are according to clause 7.12.1 to 7.12.2 which are stated in the standard IEC 61056-1:2012	No deformation, damage or leakage U=13.13V	P
	Specific requirements: During the test according to 7.12, terminal voltage shall be not less than nominal voltage. The battery shall be free from cracks and liquid leakage when inspected visually. Thedeformations shall not exceed the range of dimensions given in Table 1 and Table 2 of IEC 61056-2:2011.		
8	**7.13 Shock resistant characteristics**		
	The test methods are according to clause 7.13.1 to 7.13.2 which are stated in the standard IEC 61056-1:2012	No deformation, damage or leakage U=13.15V	P
	Specific requirements: During the test according to 7.13, terminal voltage shall be not less than nominal voltage. The battery shall be free from cracks and liquid leakage when inspected visually. Thedeformations shall not exceed the range of dimensions given in Table 1 and Table 2 of IEC 61056-2:2011.		

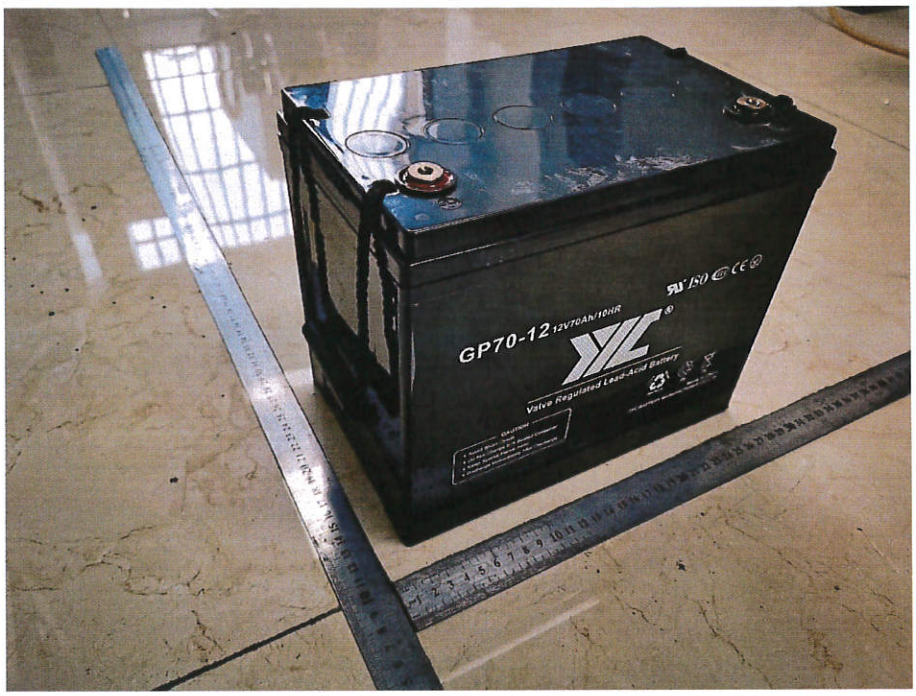
TEST RESULT

Item	IEC 61056-2:2012	Result - Remark	Verdict
9	**4 Dimensions**		
	The standardized battery dimensions are listed in the standard IEC 61056-2:2012, tables 1 and 2, together with nominal voltage, configuration, and capacity.	Length: 260mm Width: 169mm Height: 210mm	P
10	**5 Terminals**		
	Terminal types and dimensions are depicted in the standard IEC 61056-2:2012, Figures 3, 4, 5, 6 and 7.	Compliance	P
	6 Marking		
11	**6.1 Marking of polarity**		
	The polarity shall be marked by the symbol of "+" on the positive pole and "–" on the negative pole. The case where the battery carries a marking of polarity of both terminals by the color of the lead wire connected to the battery shall be as specified in IEC 60445.	Compliance	P
12	**6.2 Marking items**		
	The marking contains the minimum information which has to be supplied with the battery. The following information shall be clearly and permanently marked on each battery: a) supplier's or manufacturer's name or trade mark; b) type designation or product name; NOTE The standardized type designation is a mnemonic term to define the batteries covered under this standard. c) nominal voltage (n × 2,0 V); d) rated capacity C20; e) polarity; f) date of manufacture, its abbreviation or code; g) safety symbols according to national or international standards; h) recycling symbol (see IEC 61429).	Compliance	P

Photo(s) of the tested samples

12V70AH:

12V70AH:



--End of Report --

Report Statement

1.Thistest report is invalid ifaltered, additions and deletions.

2.Thistest report is responsible for tested samples only .

3.Objections to the test report must be submitted to Guangdong HuesentTesting & Inspection Technology Co., Ltd. within 15 days.

4.The test report is invalid without the signatures of tester, reviewer ,approver ,and official stamp of test unit.

5.Without permission of Guangdong Huesent Testing & Inspection Technology Co., Ltd., This report is not permitted to be duplicated in extracts.

6."P"=Pass=Test item conform to the requirement

"F"= Fail=Test item not conform to the requirement

"N"= Not Applicable =Test item Not Applicable to the test object