TEST REPORT

TUV India Pvt. Ltd,
Plot No.105, Sy.no 90, 92 & 93 Peenya village, Peenya 3rd phase, Yeshwanthapura Hobli, Bangalore North, Bangalore – 560058, Karnataka, India.
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Report No: TUVB/PTL/21-22/BA/0003	**Date of issue: 11-10-2021**

1.	**Job Card No.**	:	TUVB/21-22/BA/0003
2.	**Job Order No.**	:	8119618744
3.	**Sample ID**	:	TUV/BLR210929-0006
4.	**Service Requested by**	:	**SAI ACCUMULATOR INDUSTRIES** Plot No. 52,53 & 76 Sangamner Co. Op., Ind. Estate. Ltd, Sangamner, Maharashtra 422608.
5.	**Report Issued to**	:	**SAI ACCUMULATOR INDUSTRIES** Plot No. 52,53 & 76 Sangamner Co. Op., Ind. Estate. Ltd, Sangamner, Maharashtra 422608.

Issued By:
Mahalakshmi T.G Technical Testing Services TUV India **Mahalakshmi T G** **(Officer- Front Office &Customer relation)**
Date: 11-10-2021

Test Report

TUV INDIA PRIVATE LIMITED
Plot No.105, Sy.no 90, 92 & 93 Peenya village,
Peenya 3rd phase, Yeshwanthapura Hobli,
Bangalore North, Bangalore – 560058,
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TEST REPORT
IEC 60896
Stationary lead-acid batteries —
Part 11:Vented types — General requirements and Methods of tests

Report Number. .....:	**TUVB/PTL/21-22/BA/0003**
Date of issue .....:	**11-10-2021**
Total number of pages.....:	**06**
Name of Testing Laboratory preparing the Report.....:	**TUV India Private Limited**
Applicant's name.....:	**SAI ACCUMULATOR INDUSTRIES**
Address .....:	Plot No. 52,53 & 76 Sangamner Co. Op., Ind. Estate. Ltd, Sangamner, Maharashtra 422608
Other Aspects:	This test report relates to the test sample submitted. This report contains total of 7 pages including one attachment.
Test specification:	
Standard .....:	IEC 60896-11:2002
Test procedure .....:	IEC 60896-11:2002
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC 60896_11
Date (s) of Performance Tests..... :	04-10-2021 to 05-10-2021

General disclaimer:

1. The Released Test Report/s relates ONLY to the specific sample/s submitted for testing and under the stated conditions
2. Any corrections/erasures invalidate the Test Reports. TUV India does not accept any liability whatsoever for the tampering or any unlawful or inadvertent alteration of documents that have been handed over to the Customer.
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5. All services rendered by TUV India will be treated as strictly Confidential.
6. TUV India will respond to clarifications requested by the Customer for a maximum period of 1 (One) Month from the date of receipt by the Customer. Samples will not be retained by TUV India after testing is completed or as applicable regulatory requirements

Test item description.....:	240 Ah Deep Cycle Solar Tubular Battery
Trade Mark(s) .....:	SAI SAMRAT Delivering Energy
Manufacturer.....:	**SAI ACCUMULATOR INDUSTRIES**
Model/Type reference.....:	TT240
Ratings.....:	12V240Ah@C20

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☐ **Testing Laboratory:**	**TUV India Private Limited**	
Testing location/ address .....:	Plot No.105, Sy.no 90, 92 & 93 Peenya village, Peenya 3rd phase, Yeshwanthapura Hobli, Bangalore North, Bangalore – 560058, Karnataka, India.	
Tested by (name, function, signature).....:	**Mr. Lukesh Bramhapurikar (Test Engineer)**	
Approved by (name, function, signature) ..:	**Mr. Athith Kumar V H (Senior Engineer)**	

TUV Technical Testing Services TUV India

IEC 60896-11			
Clause	Requirement + Test	Result - Remark	Verdict
	Functional Characteristics	See Below	P
	TEST SET-UP (IEC 60896-11:2002)	See Below	P
12	Accuracy of measuring instruments	See Below	P
12.1	Electrical Measuring Instruments	See Below	P
12.1.1	Ranges of Measuring Devices	See Below	P
12.1.2	Voltage measurements	See Below	P
	The instruments used shall be of an accuracy class 0,5 or better where required. The resistance of the voltmeters shall be at least 1KΩ/V.	Accurate Instrument used	P
12.1.3	Current measurements	See Below	P
	The instruments used shall be of an accuracy class 0,5 or better where required.	Accurate Instrument used	
12.2	Temperature measurement	See Below	P
	For measuring temperature, thermometers shall be used having suitable measuring range in which the value of each graduated division is not exceed of 1°C.	Accurate Instrument used	P
12.4	Time measurements	See Below	P
	The time measurements shall have of an accuracy of ±1 % or better where required.	Accurate Instrument used	P

Clause No. 7	Discharge capacity	Verdict:	P
Test method	The Purpose of this test is to confirm the capacity of the cells/ Batteries to a specific end voltage at the selected discharge rate. Regarding the 240 Ah plate Discharge Rate for 240Ah conducted at 20 hour rate up to specified final voltage.		

Discharge Capacity C_{20} (20 h rate)

1. The discharge shall be started within 1 h to 24 h after fully charged.
2. Discharged with a constant current I_{10} to U_{final} = 10.93 V
3. Recorded discharge time and calculated capacity.

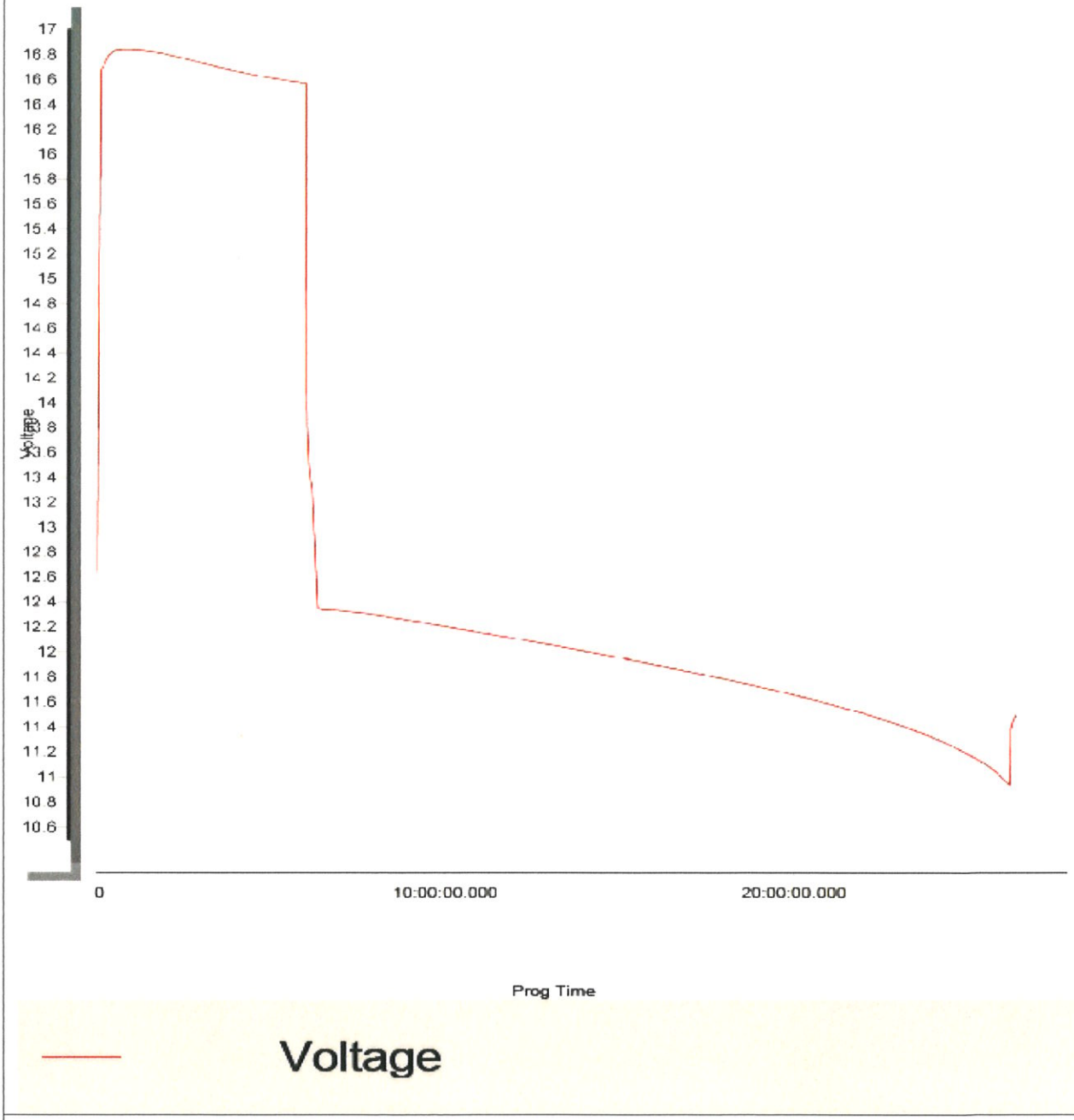
Model name:	TT240
Requirements	Discharge Capacity found within limit.

Summary Of Test Results

Rate	C_{20} (20 Hour rate)
Charge Current Rate	20A
Discharge Current Rate	12A
Nominal Voltage	12V
Final Discharge Voltage	10.93V
Test Temperature	22°C
Battery Nominal Capacity (20h Rate)	240Ah
Measured Capacity	239.99
Result	99.99% of rated capacity

Supplementary Information : Nil

Measurement [897] Battery Name [00001] Circuit [Circuit-003] Program [102 - SaiAccumulator240Ah 8Acharge] Start Time [04-10-2021 11:21] Stop Time [05-10-2021 13:42] Order No [] Test Section [TS000895]



Graph

List of test equipment used:

Sl No.	Model No. / Name of Equipment	Equipment ID	Last Calibration date	Calibration due date
1	UBT 25-018-6 ME Universal Battery Tester	TUVB-PTL-BA-001A	18-09-2021	18-09-2022

***** End of Test Report *****