

भारत सरकार Government of India

राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

National Test House (Eastern Region) 11/1 जजेस कोर्ट रोड, अलीपुर, कोलकाता - 700 027

11/1, Judges' Court Road, Alipore, Kolkata - 700 027

Judges Court Road, Anpore, Kolkata - 700 UZ



Test certificate no NTH(ER)/EL(B)/2018/003

Date of Issue 04/05/2018 Code No 1517388687294

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"BAT-13369"

Marking: (i) Printed on both wider sides of a Battery:

OKAYA

Chalti Rahe Yeh Zindagi

SOLAR

TUBULAR BATTERY

Zindagi Ka Roop

Badhaye Shaandar Dhoop

ST150S

Capacity 150Ah @ C₁₀ , Sp. Gr.:1.240±0.005 (27°C)

(ii) Paper sticker pasted on top of the Battery:

Capacity: 150 Ah @ 10h rate

Battery Model: ST150S

Country of Origin: India

Mfg. Address – Fujikawa Power, Baddi (H.P.)

(iii) On the top of a Battery:

Positive polarity embossed with '+' symbol & marked with red colour. Negative polarity embossed with '-' symbol & marked with blue colour.

(iv) Embossed on the top of a Battery:

FSUN098503514397

The marking of the other Batteries are same & identical except Nos. FSUN098503514406, FSUN098503514407, FSUN098503514396 & FSUN098503514404. Five nos. 12V,150Ah Batteries were marked randomly as FX1,FX2,FX3,FX4 & FX5 by this laboratory for identification purpose.

Tested By

Sayantan Das SO (Electrical)

Checked By

Pradip Kumar Bera Scientist - B (Electrical) Approved By

Biswa Ranjan Mandal Scientist – B (Electrical)



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	SI.	Test Name	Requirements	Test Result Remarks
E	lo.	IN TELEVIOR SILVER WAL	ONAL TEST HOUSE THE THE PARTY THE	Battery marked
JBE	27	इतिय सरिहर्ति। शास्त्रा भ	TIONAL TEST HOUSE TESTS	FX1 FX2 FX3 FX4 FX5
HOUNT FET TEST ALL TOWN	3 NUSE HOUSE HOUSE HOUSE HOUSE HOUSE HOUSE TEST HO	First charge: (Carried out as per Cl.10.3 of the specification & customer requirements)	with electrolyte and shall be given first charging as per manufacturer's	THETE WHENT SHOTH NATIONAL TEST HOUSE TRETTY WHENT
NATH	4	Test for Capacity: (Carried out as per	Cl.11.5 of the specification))) SE TO THE TREETING STITLE NATIONAL TEST HOUSE Satisfactory
MA	$U_{N}^{\prime\prime}$	1 st Capacity in	On the First discharge the	
4 4	NATIO	ampere-hours (Ah) at C ₁₀ rate	cell Shall give not less than 85% of the rated	
ENCH ENCH ENCH	NA THE	corrected to 27°C	capacity.i.e.Min.127.5Ah and shall not be more than 130% of the rated capacity i.e Max.195Ah & the	158.725 159.820 164.186 159.597
देखात अंदा दो	्र शाल	HATIONAL TEST HOUSE	rated capacity shall be reached within 10 discharges	CHALTEST HOUSE TREET TETERIN STEM NATIONAL TEST HOUSE TOOMAL TEST HOUSE TREET TOTAL TEST HOUSE THOUSE THOUS

ATIONAL TEST HOUSE Sayantan Das yantan Das Janova Test House SO (Electrical)

वरिक्षिण शाला IONAL TEST HOUSE Checked By Trans

Pradip Kumar Bera Scientist - B (Electrical)

पिक्षा मिलिया शाला

Biswa Ranjan Mandal Scientist - B / F Scientist – B (Electrical)



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Test certificate no

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SI. No.	Test Name NATIONAL TRANSPORT	EST HOUSE Requirements	Test Result	Remarks		
01 5 4019E	Ampere-hour & Watt-hour (Carried out as per CL.11.8		NATIONAL TEST HOUSE TO NATIONAL TEST HOUSE	Satisfactory		
57 HOV	JSE राज्येय वर्षास्त्रामा सार्था । NA	TOWAL TEST HOUSE TOO THE TELEVISION OF	Battery marked	गानुवा परीक्षण		
7EST Y AL TEST AL TEST	(i) Ampere-Hour efficiency:(in %)	Shall not be less than 90%	93.17 TEST HOUS	SE TIESTA TATES		
ONAL TONAL	(ii) Watt-Hour efficiency : (in %)	Shall not be less than 75%	THE THE B2.21 OWN TEST	HOUSE THE THE THE THE THE THE THE THE THE TH		
6	Test for loss of capacity on storage : (Carried out as per Cl.11.6 of the specification)					
COLL N	ATTOMAL TEST HOUSE TOOTH	THEY STIENT NATIONAL TEST HOUSE	Battery marked	WAL TEST HOUSE OWAL TEST HOUSE		
SUCAL SUCAL	NATIONAL TEST HOUSE TREPER	TREAD STIFFT NATIONAL TEST HOUSE	FX2 FX3	TIONAL TEST HOUS		
al suc	Loss of capacity (in %):	Shall not exceed 10%	9.02 2.42	NATIONAL TEST HO		

Sayantan Das SO (Electrical)

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"BAT-13369"

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AL TEC

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ATOT STEEL WATER THOUSE STEETE WEEKING STEEL

Tests:

[Carried out as per IS:13369-1992 (Amndt. no.1 to 3) & customer requirements]

SI.	Test Name	Requirements	Test Result	Remarks
OUSE.			Battery marked	
			FX1 FX2 FX3 FX4 FX5	
ST TO	Verification of const (Carried out as per Cl	Satisfactory.		
	(i) Electrolyte level Indicator:	Each cell shall be provided level indicator	Level Indicators provided in each case.	
	(ii) Terminal Posts:	Positive and negative terminal posts shall be clearly and unmistakably identifiable	Positive and negative terminal posts were clearly embossed in each case	
	(iii) Connections:	Shall be made of lead plated aluminium/copper strips or of flexible cables	Lead plated in each case	
	(iv) Terminal Connectors :	Shall be effectively lead coated	Lead coated in each case	
	Loss of Water Test: (Carried out as per Cl.1	Satisfactory. Satisfactory. Satisfactory.		
क्षण श	TIGHT NATIONAL TEST HOUSE	E TIESTO OTTO STOTE NATIONAL TE	Battery marked	TIONAL TEST HOUSE
नक्षण :	THETT NATIONAL TEST HOU	DEE STOCKED TENETONAL WATTONAL	TESTHOUSE TEXA TOTAL	VATIONAL TEST HOUSE
·	Loss of Water (in g/Ah/Battery) :	18 (Maximum)	MITEST HOUSE 11.4 THEORY STORY	NATIONAL TEST YOU

Tested By

Sayantan Das SO (Electrical) **Checked By**

Pradip Kumar Bera Scientist - B (Electrical) Approve@\By

Biswa Ranjan Mandal Scientist – B (Electrical)





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Test Name	Requirements	Test Result	Remarks		
Test for Equilibrium Float Current: (Carried out as per Cl.11.10 of the specification & customer requirements)					
OSE TIEGHT TOTAL STIENT WATER	THE TEST HOUSE TREAT TESTED STIEN	Battery marked	ेतः वर्षक्षिया शाद		
Equilibrium Float Current (in mA/Ah/Battery) :	10 (Maximum)	MATION FX4	राष्ट्रीय प्रशिक्षण राष्ट्रीय प्रशिक्षण		
Endurance Test: (Carried out as per Cl.11.7 of the specification & customer requirements)					
ALTEST HOUSE TOOT THERE	TOT NATIONAL TEST HOUSE TREAT THE	Battery marked	URE TESTS IS		
NA TEST HOUSE TREAT THE	TICH NATIONAL TEST HOUSE TREAT	FX5	HOUSE TOOKS		
hrs. at C ₁₀ rate at the end of	than 9 Hrs.of discharge at the	10.92 NATIONAL	LEZLHONZE TLEĞI ZLHONZE TLEĞI		
	Test for Equilibrium Float (Carried out as per Cl.11.10 of Equilibrium Float Current (in mA/Ah/Battery): Endurance Test: (Carried out as per Cl.11.7) Final Discharge duration in hrs. at C ₁₀ rate at the end of	Test for Equilibrium Float Current: (Carried out as per Cl.11.10 of the specification & customer red Equilibrium Float Current (in mA/Ah/Battery): Endurance Test: (Carried out as per Cl.11.7 of the specification & customer red Final Discharge duration in hrs. at C ₁₀ rate at the end of than 9 Hrs. of discharge at the	Test for Equilibrium Float Current: (Carried out as per Cl.11.10 of the specification & customer requirements) Battery marked FX4 Equilibrium Float Current (in mA/Ah/Battery): Endurance Test: (Carried out as per Cl.11.7 of the specification & customer requirements) Battery marked FX5 Final Discharge duration in hrs. at C ₁₀ rate at the end of than 9 Hrs.of discharge at the		

Tested By

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