

भारत सरकार

Government of India

राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

National Test House (Eastern Region)

11/1 जजेस कोई रोड, अलीपुर, कोलकाता - 700 027 11/1, Judges Com Road, Appole, Roikata - 700 027

TEST CERTIFICATE

INTERIMFINAL REPORT

Date: 25/08/2017

परीक्षण प्रमाण पत्र सं Test Certificate No. NTH(ER)/EL(B)/2017/0010

जारी होने की तिथि Date of Issue 09/02/2018

कोड नं Code No. 1508839603465

पुष्ठ Page पष्ठों की संख्वा No of Pages

जिसे जारी करना है **Issued To**

OKAYA POWER PRIVATE LIMITED

पता

Address

D-7, Udyog Nagar, Rohtak Road, New Delhi - 110041.

ग्राहक का सन्दर्भ सं एवं दिनांक Customer's Ref. No.

पंजिका सं एवं दिनांक

Register No & Date

परीक्षण सामग्री का विवरण Description of Test tem

परीक्षण सामग्री का पहचान Identification of Test Item **Email**

0010/NTH(ER)/EL(B)/27/10/2017

One sample consisting of five nos. stationary Lead Acid Batteries stated to be 12V,20Ah @C10 rate,Brand:Okaya.

Marking: As in the attached sheet "BAT-13369".

नमुना का विशिष्टि (यदि हों) Product Specification (Flamy)

नम्ना प्राप्ति की तिथि Date of Receipt of the Test Item

कार्य सम्पादन की तिथि Date(s) of Performance of Tests

व्यावद्वत प्रणाली का पहचान Method(s) used for Test

नम्ना प्रकिश जही प्रासंगिक हों Sampling Procedure where relevant Not Applicable

24/10/2017

From: 01/11/2017

31/01/2018 To:

IS:13369-1992(Amndt. 1 to 3)

Not Applicable

Tested By

Men

Sayantan Das SO Electrical

Checked By

Pradip Kumar Bera Scientist-SB(Electrical) Approved By



परीक्षण जमाण पत्र सं

Test Certificate No.

NTH(ER)/EL(B)/2017/0010

Government of India

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जारी होने की तिथि Date of Issue 09/02/2018

कोड नं Code No 1508839603465

पुष्ठ Page पृष्ठों की संख्वा No of Pages

SI. No.

Test Name

Test Result

Limit

Interim Report

As in the attached sheet "BAT-

As in the attached sheet

टि जणी

'Final Report' will be issued after completion of 'Endurance Test'.

Note

केफियत

Remarks

The sample so far as it has been examined and tested conforms the requirements of IS:13369-1992 (amends 1 to 3) in respect of tests carried out.

Tested By

Sayantan Das

SO Electrical

Checked By

Pradip Kumar Bera

Scientist-SB(Electrical)

Approved By

Biswa Ranjan Mandal

Scientist-SB(Electrical)



भारत सरकार Government of India

राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

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TEST CERTIFICATE

Test certificate no NTH(ER)/EL(B)/2017/0010 Date of Issue 09/02/2018

Code No 1508839603465

Page 1 No. of Pages 4

"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

ST020H

Capacity 20Ah @ C₁₀, Sp. Gr.:1.240±0.005 (27°C)

(ii) sticker pasted on body of the Battery:

Source of manufacturer : Fujikawa Power

Ah Capacity at 10-h rate: 20Ah Year of manufacturing: 2017 Country of origin: India

(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:

OKAYA

OB-50Z

HSUHR01602817662

The marking of the other Batteries are same & identical except Nos. HSUHR01602811424, HSUHR01602812693, HSUHR01602817653 & HSUXR01603340313. Five nos. 12V,20Ah Batteries were marked randomly as FN1,FN2,FN3,FN4 & FN5 by this laboratory for identification purpose.

Tested By

8pon

Sayantan Das SO (Electrical) Checked By

RBM

Pradip Kumar Bera Scientist-SB(Electrical) Approved By



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 जंजस काट राइ, अलापुर, कालकाता - 700 027 11/1, Judges' Court Road, Alipore, Kolkata - 700 027



TEST CERTIFICATE

Test certificate no NTH(ER)/EL(B)/2017/0010 Date of Issue

Code No 1508839603465

Page 2 No. of Pages 4

"BAT-13369"

Tests:

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

SI.	Test Name	Requirements	THE WATER	SULLY MEL	est Resu	It was	वर्षास्त्रा	Remarks
lo.	HOUSE THE THE THE THE THE	NATIONAL TEST HOUSE	Sha White	Ba	ttery marl	ked	जि वरायः व	TITETT WATLOWAL
ALTE	EST HOUSE STEPH THE PARTY STEPH	NATIONAL TEST HOUSE	FN1	FN2	FN3	FN4	FN5	LALLEN MALICIA
1/1/A	Verification of marking: (Carried out as per Cl.11.3 of the specification)							Satisfactory
NATIO	a) Indicating the source of manufacturer	The information shall be indelibly	OUSE THE	TA TATHET FO	ijikawa Po	wer	SE TREPA	प्रशिक्षण आसी
n N	b) Ah capacity at 10-h rate	and durably marked on the outside of the Battery	12V20Ah	12V20Ah	12V20Ah	12V20Ah	12V20Ah	A MANAGE AND
	c) Year of manufacture	THE STORY NATIONA	TEST HOUSE THE THE 2017 THE TOWAL TEST HOUSE					The state of the s
u al	d) Country of origin	THE THE WATER	India	India	India	India	India	The text of the
JEHOL HOLI	e)Electrolyte level indicator	CELES LEGISLAL SHOUL NY	Opac	que contair	ner, level in	dicator pro	vided.	USE TREATED
2	Verification of dimensions : (Carried out as per Cl.11.4 of the		HARTONAL TEST HOUSE Test Result TITAL NATIONAL TEST					Satisfactor
			Battery marked					THOUSE THE
gra.	specification)	THE THE PARTY TAVELLY SAL	FN1	FN2	FN3	FN4	FN5	TEST HOUSE IT
	(i) Length (in mm):	535 (Max.)	267	266	267	266	267	TEST HOUSE
31	(ii) Width (in mm):	295 (Max.)	171	170	171	171	170	NAL TEST HOUSE
	(iii) Height (in mm):	450 (Max.)	239	238	239	239	239	DHAL TEST HOU

Tested By

Sayantan Das SO (Electrical)

Checked By

Pradip Kumar Bera Scientist-SB(Electrical) Approved By



Government of India

राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र) National Test House (Eastern Region)

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TEST CERTIFICATE

Test certificate no NTH(ER)/EL(B)/2017/0010 Date of Issue 09/02/2018

Code No 1508839603465

Page 3 No. of Pages 4

SI.	Test Name	Requirements	क्ष्या गाला	Test R	esult	मेरा गरीक्षा	Remarks	
No.	हर राष्ट्रांच पर्यासमा आ	NATIONAL TEST HOUSE THETE	astern such	Battery	marked	प्रदेशिय प्रति		
TEST HO	USE THEFTY THEFTY ST	MATIONAL TEST HOUSE TROPA	FN1	FN2 FN	13 FN4	FN5		
HATIONAL NATIONAL NAT	First charge: (Carried out as per Cl.10.3 of the specification)	Samples shall be filled with electrolyte and shall be given first charging as per manufacturer's instruction. After full charge specific gravity of electrolyte shall be 1.240±0.005 corrected to 27°C.	condition. per manuf gravity of	Samples acturer's i electroly	were given	n fresheni After full c	ng charge as harge specific	
4	Test for Capacity: (Carried out as per	CI.11.5 of the specification.	FT HOUSE TO	TO THE THE	NATION WATER	NALTEST HOUS	Satisfactory	
ण आह	Capacity in	Shall not be less than the	LEST HOUSE	OUSE THEFT				
Han A	ampere-hours (Ah) at C ₁₀ rate	rated capacity and not more than 130% of the	FN1	FN2	FN3	FN5	HOUSE THE	
	corrected to 27°C	rated capacity.	25.340 (126.7%)	24.008 (120%)	24.412 (122.1%)	25.562 (127.8%)	TESTHOUSE TO	
5		att-hour efficiency Test: CL.11.8 of the specification	NATIONAL TEST	THOUSE TH	होय जे प्रतिस्ता औ विस्ता प्रतिस्ता	STILL HALLO	Satisfactory	
	TABLETT SHEET WATOWAL	TEST HOUSE THE TEST THE THE STILL	MATIONAL TO	Battery	marked	UL SHOUL NY	ATIONAL TEST HOUSE	
	(i) Ampere-Hour efficiency:(in %)	Shall not be less than 90%	THETT NATIONAL THE	- CONTRACTOR	N1	स्थात शाला स्था	NATIONAL TEST HO	
	(ii) Watt-Hour efficiency :(in %	Shall not be less than 75%	W TENTE TOTAL	TIONAL TEST HO	34 TO TO	स्य त्रत्राध्यम् अ	NATIONAL TES	

Tested By

Sayantan Das SO (Electrical) Checked By

Pradip Kumar Bera

Approved By



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



TEST CERTIFICATE

Test certificate no NTH(ER)/EL(B)/2017/0010 Date of Issue 09/02/2018

Code No 1508839603465

Page 4 No. of Pages 4

"BAT-13369"

SI. No.	Test Name	Requirements	Test Result	Remarks			
H6SE	Test for loss of capacity o (Carried out as per Cl.11.6 o		ATIONAL TEST HOUSE TOTAL TO	Satisfactory			
ESTHO	OUSE THEY THERE THEY WATTO	WALTEST HOUSE THE THETH STIME	Battery marked	प्रसिक्ता साला ह			
TES!	HOUSE STEETS THE THE WALL SHEET WAL	CHALTEST HOUSE THE TATE TO THE	FN2 FN3	a rister street			
DNALTE	Loss of capacity (in %):	Shall not exceed 10%	NATONAL TEST HOUSE TH	िर्मुख प्रमास्त्रामा आस्त्र			
ATIONAL LATIONAL	7 Loss of Water Test: (Carried out as per Cl.11.9 of the specification)						
NAME	WAT LEEL HOUSE THE THE LINE ALL	MET NATIONAL TEST HOUSE THE TATE	Battery marked	The Hallen			
TI HAT	Loss of Water	THET HATIONAL TEST HOUSE THE TR	TRATT PHENT FN5 WALLEST HO	NEE WEST WHE			
TEAL D	(in g/Ah/Battery):	18 (Maximum)	TIPE TO ATOMAL TEST	HOUSE THE THE			
8	Test for Equilibrium Float (Carried out as per Cl.11.10 c		THE STREET STREET NATIONAL TE	Satisfactory.			
TOI SIL	THE NATIONAL TEST HOUSE THEFT	TEST HOUSE ET	Battery marked	TEST HOUSE THE			
STEATT.	Equilibrium Float Current	TITIETO STITET NATIONAL TEST HOUSE	FN5	UNI TEST HOUSE TO			
O STERE	(in mA/Ah/Battery):	10 (Maximum)	TOOLS THE WATER WATER	ONAL TEST HOUSE			

Tested By

Sayantan Das SO (Electrical) Checked By

Pradip Kumar Bera Scientist-SB(Electrical) Approved By

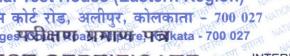


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राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

National Test House (Eastern Region)

11/1 जजेस कोर्ट रोड, अलीपुर, कोलकाता - 700 027 11/1. Judge 456 8 4 7 10 027





INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र सं Test Certificate No NTH(ER)/EL(B)/2017/0010

जारी होने की तिथि Date of Issue 23/03/2018

कोड नं Code No. 1508839603465

OKAYA POWER PRIVATE LIMITED

पुच्छ Page

पुष्ठी की संख्या No of Pages

जिसे वारी करना है ssued To

पता Address

D-7, Udyog Nagar, Rohtak Road, New Delhi - 110041.

पाहक का सन्दर्भ सं एवं दिनांक

Customer's Ref. No.

Email

Date: 25/08/2017

पंजिका सं एवं दिनांक Register No & Date

परीक्षण सामग्री का जिवरण Description of Test tem

परीक्षण सामग्री का पहचान Identification of Test Item 0010/NTH(ER)/EL(B)/27/10/2017

One sample consisting of five nos stationary lead acid batteries stated to be 12V,20Ah @ C10 rate,Brand:Okaya.

Marking: Refer "Interim Test Certificate" vide no.NTH(ER)/EL(B)/2017/0010 dated:09/02/2018.

नम्ना का विशिष्टि (यदि ही) Product Specification (Fany)

नम्ना प्राप्ति की तिथि Date of Receipt of the Test tem.

कार्य सम्पादन की तिथि Date(s) of Performance of Tests

व्याबद्धत प्रणाली का पहचान Method(s) used for Test

नमना प्रकिया जही प्रासंगिक हों Sampling Procedure where relevant Not Applicable.

24/10/2017

01/11/2017

22/03/2018

IS:13369-1992(Amndt.1 to 3)

Not Applicable.

Tested By

80m

Sayantan Das SO Electrical

Checked By

Pradip Kumar Bera

Scientist- B (Electrical)

Approved By



Government of India

राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

National Test House (Eastern Region)

11/1 जजेस कोर्ट रोड, अलीपुर, कोलकाता - 700 027 11/1, Judgeअक्टीक्स फाउस माध्यालमस्त्री kata - 700 027



TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण	प्रमाण	पन्न सं
Test Ce	rtificate	No.
NTH(ER)/	EL(B)/201	7/0010

जारी होने की	ति
Date of Issue	
23/03/2018	

कोंड नं Code No 1508839603465

पृष्ठ Page 2 पृष्ठों की संख्या No of Pages

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MALTEST HOW

Interim Report

Test Result

Limit

As in the attached sheet "BAT-13369". As in attached sheet "BAT-13369".

13303

Final Report

As in attached sheet "BAT-13369".

As in attached sheet "BAT-13369".

कैफियत

Remarks

The sample so far as it has been examined and tested meets the requirements of IS:13369-1992 (amends 1 to 3).

Tested By

Sayantan Das

SO Electrical

Checked By

Pradip Kumar Bera
Scientist- B (Electrical)

Approved By



THE WATIONAL TEST HOUSE TREET राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

11/1 जजेस कोर्ट रोड, अलीपुर, कोलकाता - 700 027 11/1, Judges' Court Road, Alipore, Kolkata - 700 027



TEST CERTIFICATE

महोत्र प्रमुख्या विदेश प्रमुख्या	भाग आस्त्र भागास्त्र	I NATIONAL TEST HOUSE TO THE NATIONAL TEST HOUSE	TEST CERTIF	FICATE	THEM STIET NATIONAL TE	EST HOUSE TREATER TO
E THEY'RE TO	स्ट्रोड्स इंड्रिया	Test certificate no NTH(ER)/EL(B)/2017/0010	Date of Issue 23/03/2018	STHOUSE THE THE THE THE THE THE THE THE THE TH	Code No 1508839603465	HALTEST HOUSE THE THE
HOUSE TOOK	य प्रदेश द्वाय प्रदेश	THE THE THE NATIONAL TEST HOLD THE	OUSE TOTAL THEM "BAT-13369"	WALTEST HOUSE TO OWALTEST HOUSE	Page 1 No. c	of Pages 1 THOUSE
STHOUSE TESTHOUSE TESTHOUSE	राष्ट्रीय	Tests: or and MATIONAL TEST	ST HOUSE TIETH THE THE STEAM NOT	NATIONAL TEST HOUSE NATIONAL TEST HOUSE NATIONAL TEST HOUSE	RE LISTA ASPARA SUCA	NATIONAL TEST HOUSE TOWAL TEST HOUSE TOWAL TEST HOUSE TOWAL TEST HOUSE
TEST HOUSE			369-1992 (Amndt. no.1 to 3).]	NATIONAL TEST HE	OUSE THE THE THE THE	STETT MATIONAL TEST H
AL TEST HOUSE	SI.	Test Name	Requirements	NATIONAL TE TE	st Result	Remarks
MALTESTIM	No.	THE THE THESTON TO NATE	WALTEST HOUSE TOOKE TETRATOR ?	MATION Batt	ery marked	TOT STOTE NATIONAL TO
ATIONAL TEST	HOUSE	E THE THE THE PARTY STILLY IN	TIONAL TEST HOUSE THEFTON	FN1 FN2	FN3 FN4 FN	15TT MATIONAL
NATIONAL TES	1. Verification of constructional requirements: (Carried out as per Cl.11.2 of the specification)					Satisfactory.
TOWN TION	TEST !	(i) Electrolyte level Indicator :	Each cell shall be provided level indicator	Level Indicators	provided in each ca	Se. TRAM STEAM NAME OF THE PARTY NAME OF THE PARTY OF THE
TETT NATION NATIONAL	NAL TONAL T	(ii) Terminal Posts:	Positive and negative terminal posts shall be clearly and unmistakably identifiable	Positive and n were clearly er	negative terminal posts mbossed in each cas	इंट्रोवे प्रतिकृति शाली हार्या प्रतिकृता शाली
हिंसमा कार्या हिंसमा कार्या	NATION NATION	(iii) Connections:	Shall be made of lead plated aluminium /copper strips or of flexible cables	Lead pla	ited in each case	The state of the s
य तर्राक्षण आ	CAL M	(iv) Terminal Connectors :	Shall be effectively lead coated	Lead coa	ated in each case	HOUSE THE THE THE
भूता प्रश्निम्मण भूषा प्रश्निम्मण	2.Al	Endurance Test: (Carried out as per Cl.11	1,7 of the specification)	OUSE सार्ट्रोश प्रशेष	SALL SUCH WALLOWY LES	Satisfactory.
Theyen which	या। श	Final Discharge	The battery shall give not less	HOUSE THE Bat	tery Marked	TESTHOUSE THESTE
THE THE	JENON .	duration in Hrs. at C ₁₀	than 9 Hrs.of discharge at the final test discharge of the last	ST HOUSE THEIR	FN4 STON NATION	MALTEST HOUSE TOOK
NE TEST	TE TETT	Endurance cycles period of 2000 Hrs.	period of charge.	TEST HOUSE THE	5.91 Hrs.	IONAL TEST HOUSE TO

Tested By

Sayantan n-SO (Electrical)

ATTOMAL TEST HOUSE TO Checked By STOTAL MATTOMAL TEST HOUSE TO THE Pradip Kumar Bera Scientist-B(Electrical)

NATIONAL TEST HOUSE Approved By Approved By MATIONAL TEST HOUSE BISW-Biswa Ranjan Mandal Scientist-B(Electrical)