

TEST REPORT



केन्द्रीय विद्युत अनुसंधान संस्थान
CENTRAL POWER RESEARCH INSTITUTE
INDIA

RESEARCH | EVALUATION | CONSULTANCY | TRAINING

TEST REPORT

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CPRI

TEST REPORT



Central Power Research Institute

(A Govt. of India Society)

P.B.No. 8066, Sadashivanagar Post Office,

Sir C.V. Raman Road,

Bengaluru - 560 080 (INDIA)

CENTRAL POWER RESEARCH INSTITUTE
(Member of STL)



CPRI

TEST REPORT

Test Report Number : CPRI BLR SCLMISC19T0256 **Date:** 26 November 2019

Name and Address of the Customer : M/s. Veraizen Earthing Pvt. Ltd.,
Gala No. 4, Bldg. No. 2, Raj Prabha Mohan Ind. Est.,
Village Waliv, Naikpada, Vasai (E),
Palghar – 401 208, Maharashtra, India.

Name and Address of the Manufacturer : M/s. Veraizen Earthing Pvt. Ltd.,
Gala No. 4, Bldg. No. 2, Raj Prabha Mohan Ind. Est.,
Village Waliv, Naikpada, Vasai (E),
Palghar – 401 208, Maharashtra, India.

Particulars of sample tested : Copper Bonded Electrode

Type : --

Description of test sample : 17.2 mm dia, 3000 mm Long Copper Bonded
Mild Steel Electrode with welded clamp

Serial Number(s) : ---

Number of samples tested : One

Date (s) of Test (s) : 14 November 2019

CPRI Sample code Number(s) : SCLMISC19S0346

Particulars of tests conducted : Short-time withstand current and peak withstand current

Test in accordance with Standard / specification : Customer's instruction

Sampling plan : Not applicable

Customer's requirement : 15 kA rms for 1.0 s & 30 kA peak

Deviations if any : ---

Name of the witnessing persons

Customer's representative : Mr. Sharup Jain, Director

Other than customer's representative : None

Test subcontracted with address of the laboratory : None

Documents constituting this report (In words)

Number of Sheet(s) : Six

Number of Oscillograms(s) : One

Number of Graph(s) : Nil

Number of Photograph(s) : Two

Number of Test Circuit Diagram(s) : One

Number of Drawings(s) : One


(Sakthivel. P)
Test Engineer




(Swaraj Kumar Das)
Head of Division
Approved by

CENTRAL POWER RESEARCH INSTITUTE
(Member of STL)




TEST REPORT

Test Report Number: CPRIBLRSCLMISC19T0256

Date: 26 November 2019

DESCRIPTION OF SAMPLE TESTED
(As assigned by the manufacturer)

Test sample : Copper Bonded Electrode
Size & length of electrode : 17.2 mm dia & 3000 mm long
Short-time withstand current and peak withstand current : 15 kA rms for 1.0 s & 30 kA peak


(Sakthivel. P)
Test Engineer

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TEST REPORT

Test Report Number: CPRI BLSCLMISC19T0256

Date: 26 November 2019

SUMMARY OF TESTS CONDUCTED

1. Test conducted : Short-time withstand current and peak withstand current
2. Rating for which tested : 15 kA rms for 1.0 s & 30 kA peak
3. Schedule of test results

Tests conducted	Clause Numbers	Sheet
Short-time withstand current and peak withstand current	Customer's instruction	5 of 6

4. Oscillogram Number(s) : SC190256.S01
5. Photograph Number(s) : CPRI BLSCLMISC19T0256P01 & CPRI BLSCLMISC19T0256P02
6. Test Circuit Diagram Number(s) : CRTL/SC/STC-01A
7. Drawing Number(s) : Refer Sheet 4 of 6


(Sakthivel. P)
Test Engineer

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Date: 26 November 2019

LIST OF DRAWINGS

Sample Drawing Numbers

The manufacturer has guaranteed that the sample submitted for the test has been manufactured in accordance with the following drawing.

Sl. No.	Drawing Number	Sheet Number	Revision Number
1	VZE 17x3	---	---

It is verified that this drawing adequately represent the sample tested. The verification of the sample drawing by CPRI is limited to dimensional checks only wherever possible.


(Sakthivel. P)
Test Engineer

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TEST REPORT

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Date: 26 November 2019

TEST RESULTS

SHORT-TIME WITHSTAND CURRENT AND PEAK WITHSTAND CURRENT TESTS

TEST CONDITIONS

<u>Source</u>	Short-circuit generator
Number of phases	Single
Frequency	50 Hz
<u>Test sample</u>	
Condition of the sample	In clean & good condition; one end of the electrode connected to source
Mounting	Horizontal, isolated from ground
<u>Test details</u>	
Test circuit drawing number	CRTL/SC/STC-01A
Short-circuit applied	On the other end of the electrode
Short-circuit point	Grounded

Oscillogram Number	Current (kA)		Duration (s)	Observation
	peak	rms		
SC190256.S01	32.34	15.43	1.09	During test: No Abnormality After test: No visible damage

Physical Inspection: No visible damage


(Sakthivel. P)
Test Engineer

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TEST REPORT

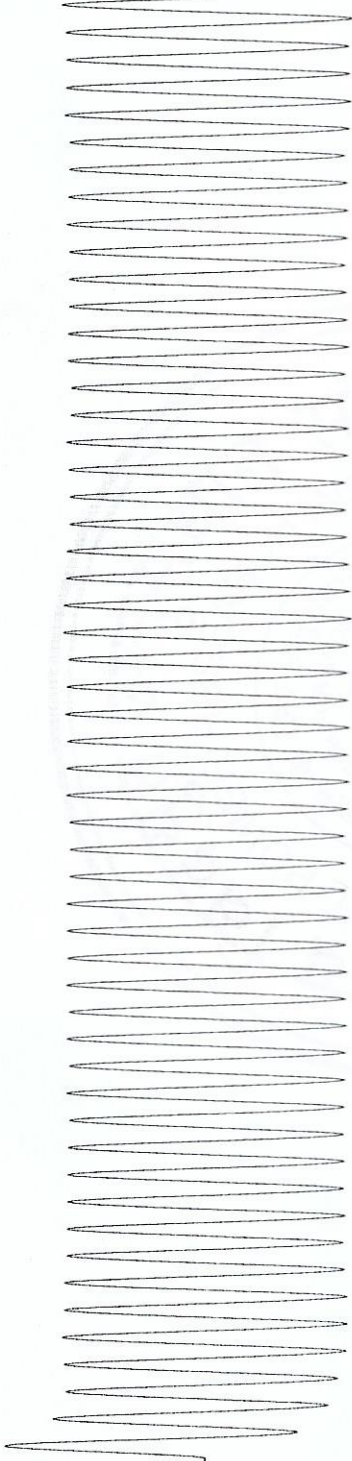
Test Report Number: CPRIBLRSCLMISC19T0256

Date: 26 November 2019

NOTE

- a) The Test results relate only to the item(s) tested.
- b) Publication or reproduction of this report in any form other than by complete set of the whole test report and in the language written is not permitted without the written consent of CPRI.
- c) Any Corrections / erasure invalidate the test report.
- d) Any anomaly / discrepancy in the test report should be brought to notice of CPRI within 45 days from the date of issue.
- e) The verification of the sample drawing by CPRI is limited to dimensional checks only wherever possible.
- f) All the documents consisting the test report are stitched together with a continuous silk thread, the two ends of which have been brought over the front sheet of the test report and seal with a CPRI logo printed paper sticker.

(Sakthivel. P)
Test Engineer



12.16 kA

लघु पथन प्रयोगशाला
Short Circuit Laboratory
केन्द्रीय विद्युत अनुसंधान संस्थान
Central Power Research Institute
बेंगलूरु / Bengaluru - 560 080



84.16 V

U

170.10 milli seconds


TEST ENGINEER

SC190256.S01 Dt: 14-11-2019

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TEST REPORT



Mounting arrangement (Before test)

CPRIBLRSCLMISC19T0256P01

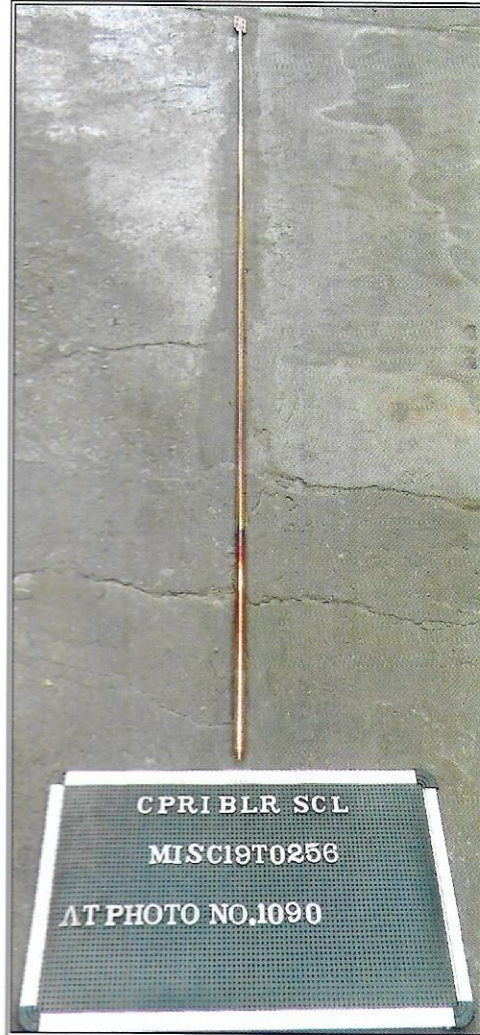

(Sakthivel. P)
Test Engineer

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TEST REPORT



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Condition of the sample (After test)

CPRIBLRSCLMISC19T0256P02

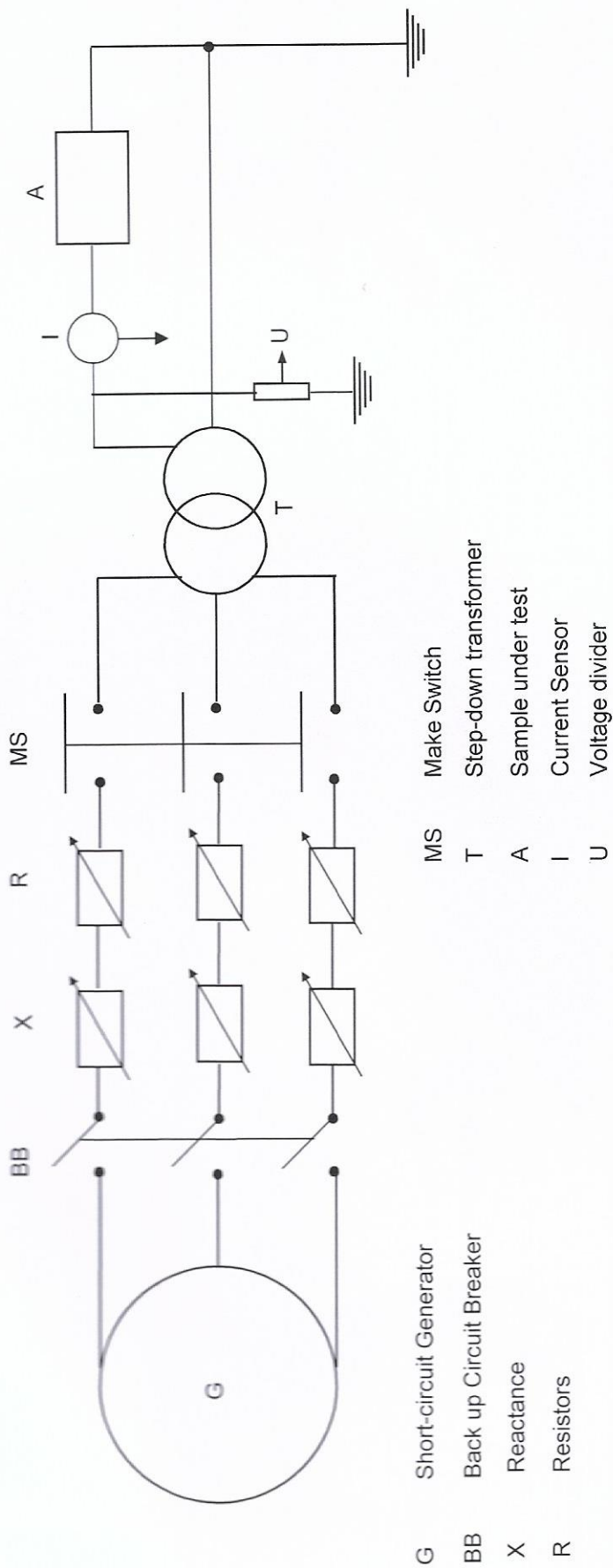

(Sakthivel. P)
Test Engineer



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Schematic of main & measurement circuits - Single phase test

Circuit Number: CRTL/SC/STC-01A

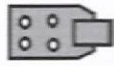


- G Short-circuit Generator
- BB Back up Circuit Breaker
- X Reactance
- R Resistors
- MS Make Switch
- T Step-down transformer
- A Sample under test
- I Current Sensor
- U Voltage divider

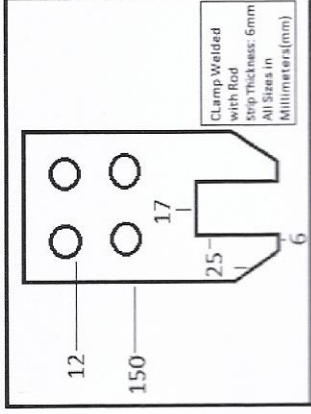
(Signature)
 (Sakthivel. P)
 Test Engineer

VERAIZEN MAKE COPPER BONDED SOLID ELECTRODE 17.2MM X 3000MM (WITH WELDED CLAMP)

Clamp Welded with Earth Rod



Solid Copper Bonded Rod
17.2mm x 3000mm



के.वि.अ.सं. द्वारा इस रेखाचित्र का सत्यापन जहाँ जारी भी संभव हो निर्दिष्ट विमीय जांच तक ही सीमित है।
THE VERIFICATION OF THIS DRAWING BY CPRI IS LIMITED TO DIMENSIONAL CHECKS ONLY WHEREVER POSSIBLE

परीक्षण रिपोर्ट सं सीपीआरआई बीएन भारद्वाज सीएलएमआई
.....एससी से संबंधित दस्तावेज़

Document Pertaining to Test Report
No: CPRI/BLR/SCL/MISC./4./I.O.2.56

Dr. Ankur
परीक्षण अभियन्ता / Test Engineer
ल.प. प्रयोगशाला / S. C. LAB
सी. पी. आर. आई. / CPRI
बेंगलूरु / Bengaluru

COPPER BONDED ELECTRODE 17.2MM x 3 METERS

M.O.C. : MILD STEEL STANDARD : IS 3043 TOLERANCE : ±5% COATING : COPPER THICKNESS : 254+ MICRONS

PARTICULARS	NAME	DATE
DRAWN BY	BHAWAR RAVAL	31/08/2019
CHECKED BY	SHARUP JAIN	09/09/2019
DRAWING NO.	VZE 17x3	
NOT TO SCALE SHEET SIZE A4		

Manufactured By

Veraizen Earthing Pvt Ltd

Gala No.4, Bldg No.2, Raj Prabha Mohan Ind Est, Village Waliv,
Naikpada, Vasai(E), Palghar-401208, Maharsashtra.

Email ID : info@veraizenearthing.com

Website : www.veraizenearthing.com



For information please contact

Additional Director (Information & Publicity Division)



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