

**CENTRAL POWER RESEARCH INSTITUTE**  
(Member of STL)



**CPRI**

**TEST REPORT**

**Test Report Number** : CPRI BLR SCLMISC24T0315 **Date:** 15 March 2024

**Name and Address of the Customer** : M/s. Shreenath Enterprises,  
247, Harnkul, Gangakhed,  
Parbhani - 431 514, Maharashtra, India.

**Name and Address of the Manufacturer** : M/s. Shreenath Enterprises,  
247, Harnkul, Gangakhed,  
Parbhani - 431 514, Maharashtra, India.

**Particulars of sample tested** : 76mm dia (OD) 2900 mm long GI Earthing Electrode

**Type** : Strip in Pipe, backfill compound filled  
**Description of the sample** : Refer Sheet 2 of 6  
**Serial Number** : ---  
**Number of samples tested** : One  
**Date (s) of Test (s)** : 28 February 2024  
**CPRI sample code no(s)** : SCLMISC24S0323  
**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** : 25kA rms for 1.0 s & 50kA peak  
**Deviations if any** : ---


**Name of the witnessing persons**  
**Customer's representatives** : Mr. Subrat Kumar Mandal  
**Other than customer's representatives** : 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 Photo(s)** : Two  
**Number of Test Circuit Diagram(s)** : One  
**Number of Drawing(s)** : One

  
(Sakthivel. P)  
Test Engineer



  
(Swaraj Kumar Das)  
Head of Division  
Reviewed and Authorized by

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**CPRI**


**TEST REPORT**

**Test Report Number: CPRIBLRSCLMISC24T0315**

**Date: 15 March 2024**

**DESCRIPTION OF SAMPLE TESTED**  
(As assigned by the manufacturer)

Test sample : GI Earthing Electrode  
Type : Strip in Pipe, backfill compound filled  
Size & length of earthing electrode : 76mm dia (OD) & 2900 mm long  
Short-time current withstand current & peak withstand current : 25kA rms for 1.0 s & 50kA peak

  
(Sakthivel. P)  
**Test Engineer**

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**SUMMARY OF TEST CONDUCTED**

- 1 Tests conducted : Short-time withstand current and peak withstand current
- 2 Rating for which tested : 25kA rms for 1.0 s & 50kA peak
- 3 Schedule of tests : Refer Sheet 5 of 6
- 4 Oscillogram Numbers : CPRI BLSCLMISC24T0315S002
- 5 Photograph Numbers : CPRI BLSCLMISC24T0315P01 & CPRI BLSCLMISC24T0315P02
- 6 Test Circuit Diagram Numbers : CRTL/SC/STC-01A
- 7 Drawing Numbers : Refer Sheet 4 of 6
- 8 Criteria for evaluation : There shall be no visible damage to GI Earthing Electrode.

  
(Sakthivel. P)  
**Test Engineer**

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**LIST OF DRAWINGS**

**Drawing Numbers**

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

Sl. No.	Drawing Number	Sheet Number	Revision Number
1	SH23198400	---	---

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

  
(Sakthivel, P)  
**Test Engineer**

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**TEST REPORT**

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**Date: 15 March 2024**

**TEST RESULTS**

**SHORT-TIME WITHSTAND CURRENT AND PEAK WITHSTAND CURRENT TESTS**  
(as per customer's instruction)

**TEST CONDITIONS**

<u>Source</u>	Short-circuit generator
Number of phases	Single
Frequency	50 Hz
<u>Test sample</u>	
Condition of the sample	Good; terminal end of the earthing 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 earthing electrode
Short-circuit point	Grounded

Ambient Temperature: 26°C

Oscillogram Number	Current (kA)		Duration (s)	Observation
	Peak	Rms		
CPRIBLRSCLMISC 24T0315S002	53.41	24.30*	1.08	<b>During test:</b> No abnormality

\*Equivalent to 25.25 kA rms for 1.0 s

**Physical Inspection:** No visible damage to earthing electrode

**Conclusion:** The sample tested complies with the requirement of customer for the test conducted.

  
(Sakthivel. P)  
**Test Engineer**

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**Date: 15 March 2024**

**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) 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**

-----End of Test Report-----

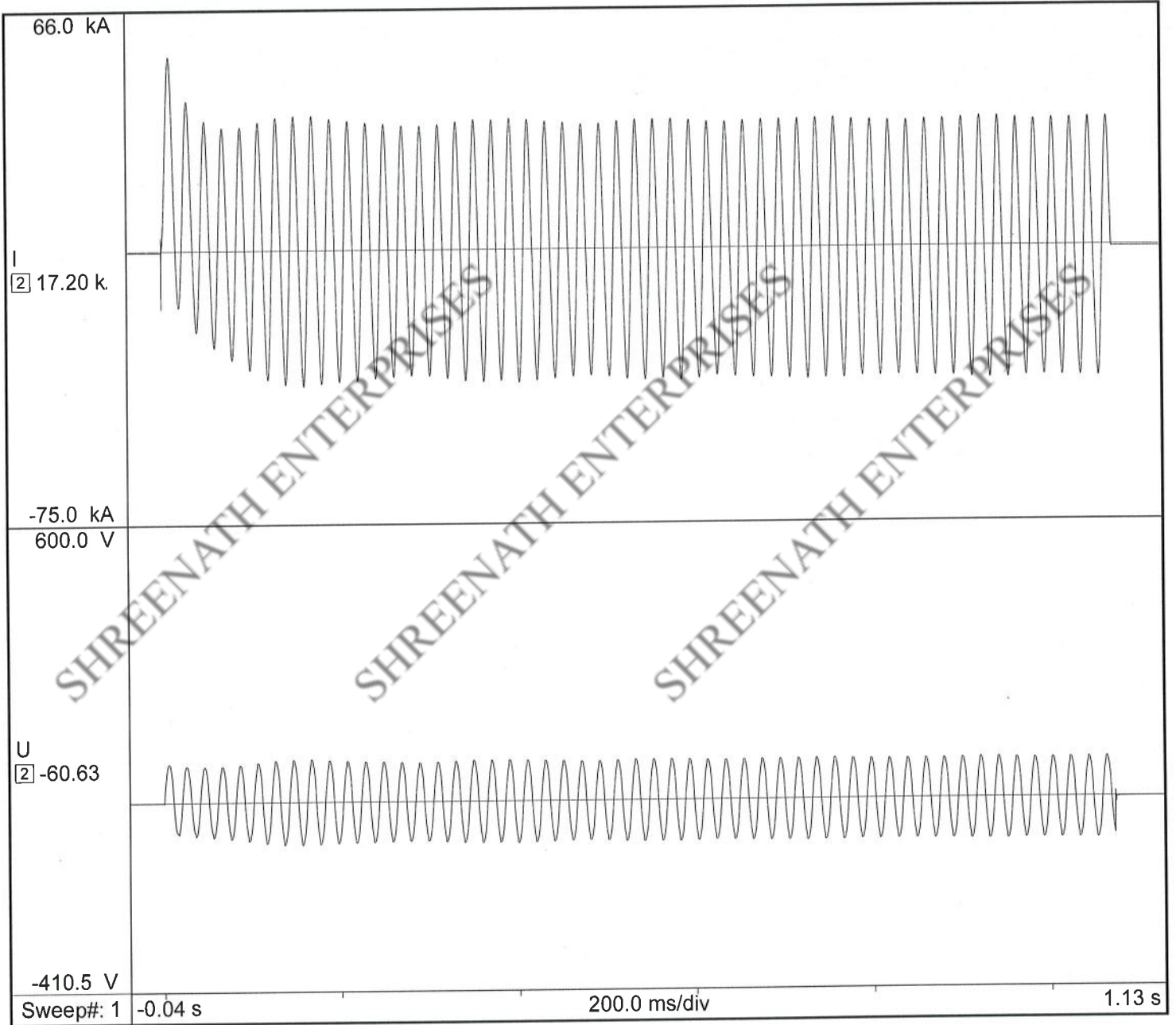


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Test Report Number: CPRI BLR SCLMISC24T0315

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CPRI BLR SCLMISC24T0315S002



(Sakthivel. P)  
Test Engineer

28-02-2024

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**TEST REPORT**

Test Report Number: CPRI BLSCLMISC24T0315

Date: 15 March 2024



Mounting arrangement (Before test)

CPRI BLSCLMISC24T0315P01

  
(Sakthivel. P)  
Test Engineer

SHORT CIRCUIT LABORATORY  
P.B.NO.8066, SADASHIVANAGAR POST OFFICE  
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**TEST REPORT**


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Date: 15 March 2024



Condition of the sample (After test)

CPRI BLSCLMISC24T0315P02

  
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Test Engineer

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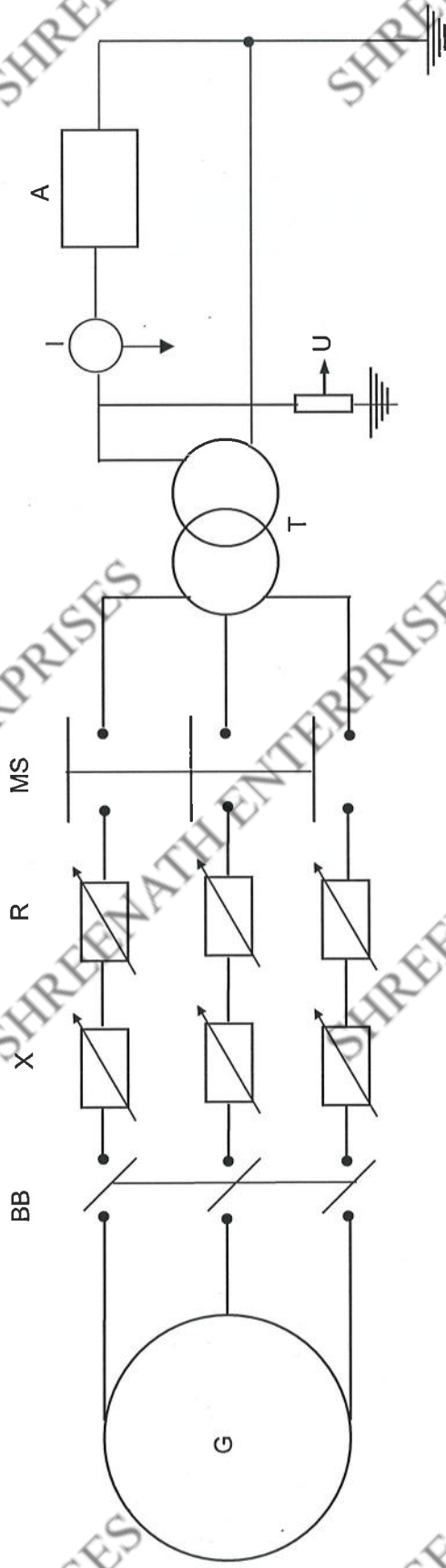
CPRI

Test Report Number: CPRI/BLR/SCL/MISC/24T0315

Date: 15 March 2024

### 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

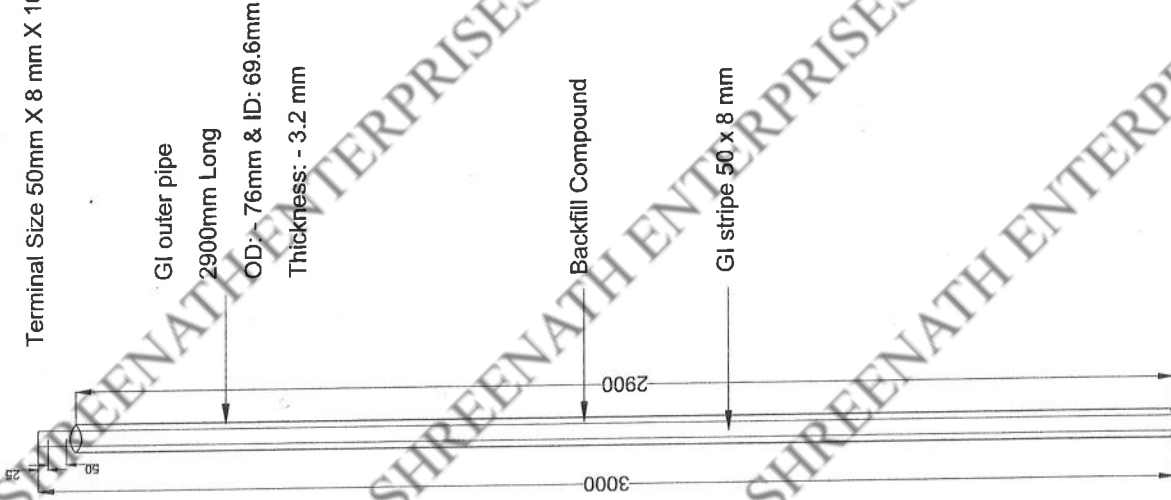
A Sample under test


I Current Sensor

U Voltage divider

(Sakthivel. P)  
Test Engineer


Terminal Size 50mm X 8 mm X 100mm & Hole 2xø14mm



MFG. ADDRESS	SHREENATH ENTERPRISES 247, HARNGUL, GANGAKHED, PARBHANI, MAHARASHTRA, 431514	
TITLE	GI EARTHING ELECTRODE STRIP IN PIPE	
DRAWING NO.	SH23198400	
	 NOTE:	

परिक्षण रिपोर्ट संख्या सीपीआईआईबीएलआरएससीएल  
एएमआईएस्सी..... से संबंधित दस्तावेज़  
Document Pertaining to Test Report  
No: CPRI/RSCLMISC/26.12.2015.  
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एएमआईएस्सी..... से संबंधित दस्तावेज़  
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No: CPRI/RSCLMISC/26.12.2015.

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

GI EARTHING ELECTRODE 76MM OD X 3MTR LONG – STRIP IN PIPE