

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



CPRI

Test Report Number : CPRI BPLSTNBMISC22T0312 Date: 26 December 2022

Name and Address of the Customer : PANNA AND SONS
1826/01, Old Amarnath Building, Bhagirath Palace,
Delhi- 110006

Name and Address of the Manufacturer : PANNA AND SONS
A-176, Harit Vihar, Pepsi Road, Sant Nagar, Burari, Delhi- 110084


Particulars of sample tested : 50mm Dia Copper Bonded Earth Electrode
Type : Electrode
Description of test sample : Refer sheet 2 of 6
Serial Number : Nil
Number of samples tested : One
Date(s) of Test(s) : 25 October 2022
CPRI Sample code Number(s) : STNBMISC22S0890

Particulars of tests conducted : Short time current test
Test in accordance with Standard/Specification : As per customer's requirement


Sampling Plan : Nil
Customer's Requirement : Short time current test to be conducted.
Deviations if any : Short time current test was conducted.

Name of the witnessing persons
Customers representative : Mr. Lalit Kumar
Other than customer's representatives : Nil
Test subcontracted with address of the laboratory : Nil

Documents constituting this report (in words)
Number of Sheets : Six
Number of Oscillogram(s) : One
Number of Graph(s) : Nil
Number of Photograph(s) : One
Number of Test Circuit Diagram(s) : One
Number of Drawing(s) : One


(Prabakaran T)
Test Engineer




(Sumbul Munshi)
Head of Division
Reviewed and Authorized by

CENTRAL POWER RESEARCH INSTITUTE

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DESCRIPTION OF SAMPLE TESTED

(As assigned by the manufacturer)


Test Sample : 50mm Dia Copper Bonded Earth Electrode
Type : Electrode
Designation : Nil
Serial number : Nil

Voltages
Rated Voltage (U_n) in V : NA
Rated Insulation Voltage (U_i) in V : NA
Rated impulse withstand voltage (U_{imp}) in kV : NA

Currents
Rated Current (I_{nA}) in A : Nil
Rated current of a main outgoing circuit (I_{nc}) in A : NA
Rated conditional short-circuit current (I_{cc}) in kA : NA
Rated short-time withstand current (I_{cw}) in kA : 20 kArms for 1.0 second with initial peak of 40 kApeak

Rated frequency (f_n) in hz : 50
Degree of protection : Nil
Number of Phases : Single
Extendable : NA

NA : Not Applicable


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SUMMARY OF TESTS CONDUCTED

1. Tests conducted : Short time current test
2. Rating for which tested : 20 kArms for 1.0 second with initial peak of 40 kApeak
3. Schedule of tests

Tests Conducted	Clause no.	Reference
Short time current test	Customer's requirement	Sheet 5 of 6

1. Oscillogram number(s) : CPRIBPLSTNBMISC22T0312S002
2. Graph Number(s) : Nil
3. Photograph Number(s) : CPRIBPLSTNBMISC22T0312P01
4. Test Circuit diagram number(s) : OLTS/TCD-STC-06
5. Drawing Number(s) : Refer sheet 4 of 6


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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 drawings

Sl. No.	Drawing Number	Sheet Number	Revision Number
1	PAS/22-23/117	-	01

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

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Short time current test

Test conditions :

Condition of the sample before test : New
No. of poles : Single
Source frequency : 50 Hz
Transformer neutral & short circuit point : Refer test circuit diagram no. OLTS/TCD-STC-06

Test results:

Oscillogram Number	Short time current in kApk/kArms	Duration (second)	Equivalent current in kArms for 1.0 second
CPRI BPLSTNBMISC 22T0312S002	41.80/20.47	1.0	20.47

Single phase STC test conducted on copper bonded earth electrode.

Observations:

During test : No abnormality
After test : No abnormality Copper bonded earth electrode found intact.

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

(Prabakaran T)
Test Engineer

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Date: 26 December 2022

Note

- a) The test results relate only to the sample(s) tested.
- b) Publication or reproduction of the Test Report/ Test Certificate in any form other than by complete set of the whole Test Report/ Test Certificate and in the language written is not permitted without the written consent of CPRI.
- c) Any correction/erasure invalidates this Test Report/Test Certificate.
- d) Any anomaly/discrepancy in the Test Report/Test Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- e) All documents constituting the Test Report/Test Certificate are stitched together with a continuous silk thread/silk ribbon, the two ends of which have been brought over the front sheet of the Test Report/Test Certificate and sealed with a CPRI logo printer paper sticker/embossed.

(Prabakaran T)
Test Engineer

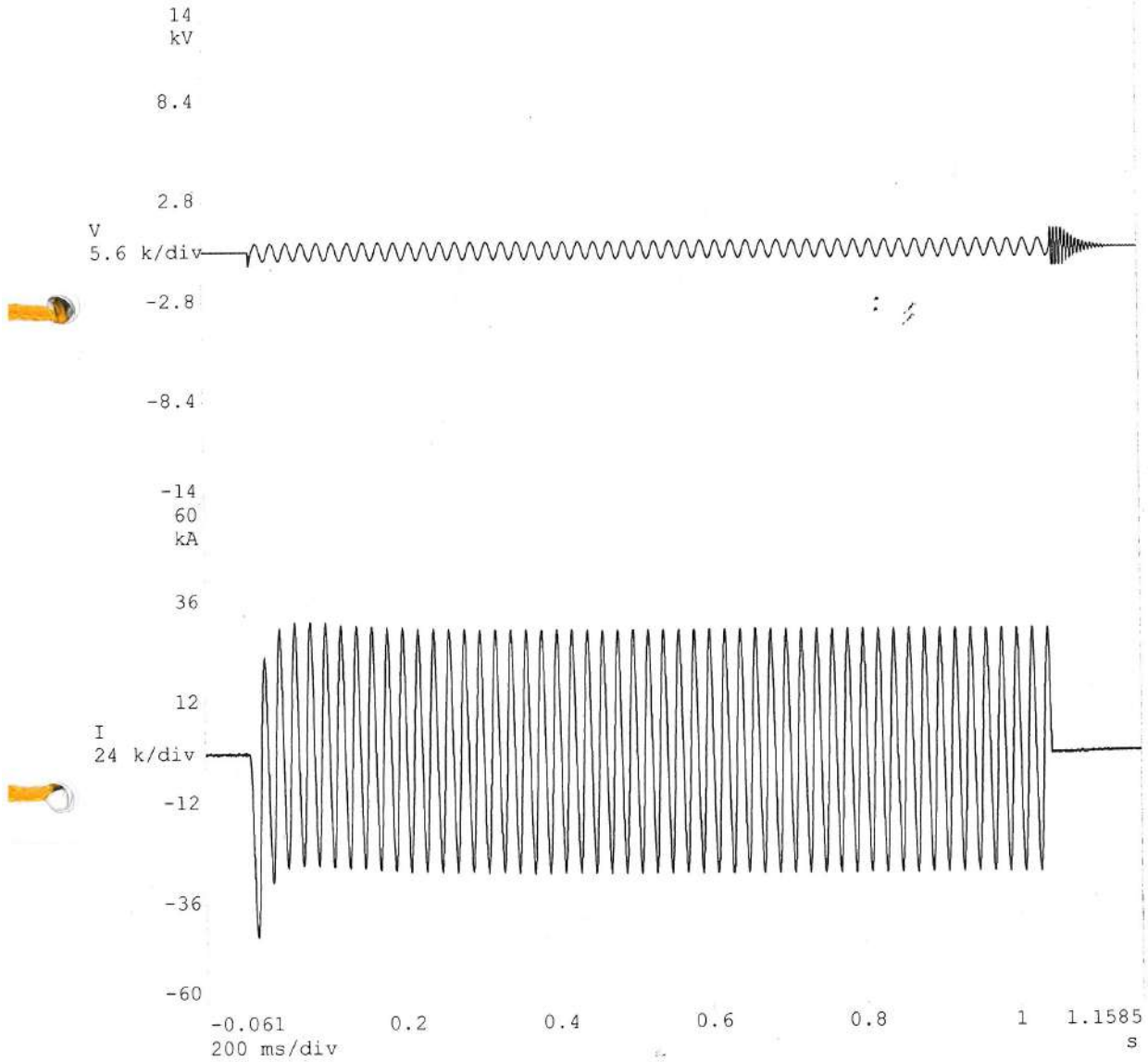
----- End of Test Report -----

Central Power Research Institute
(Member of STL)



Test Report Number : CPRIBPLSTNBMISC22T0312

TEST RESULTS



Oscillogram Number : CPRIBPLSTNBMISC22T0312S002

Test Engineer

SWITCHGEAR TESTING & DEVELOPMENT STATION
GOVINDPURA, BHOPAL-462023, INDIA
Phone: +91(0) 755 2586682 Fax: + 91(0) 755 2587774

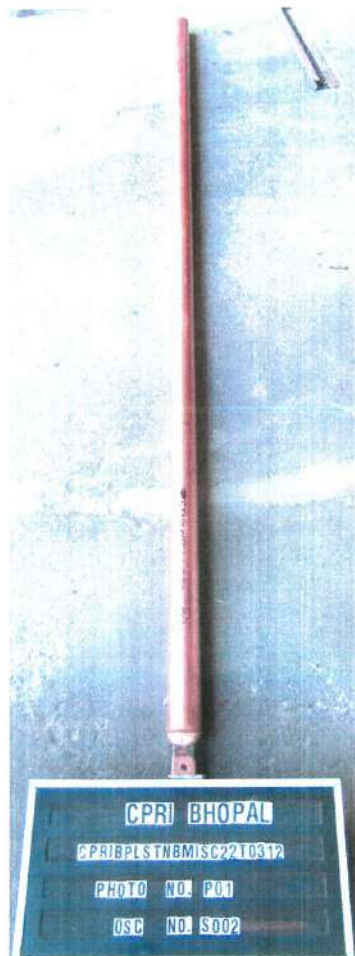
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(MEMBER OF STL)**



TEST REPORT

Test Report Number : CPRIBPLSTNBMISC22T0312

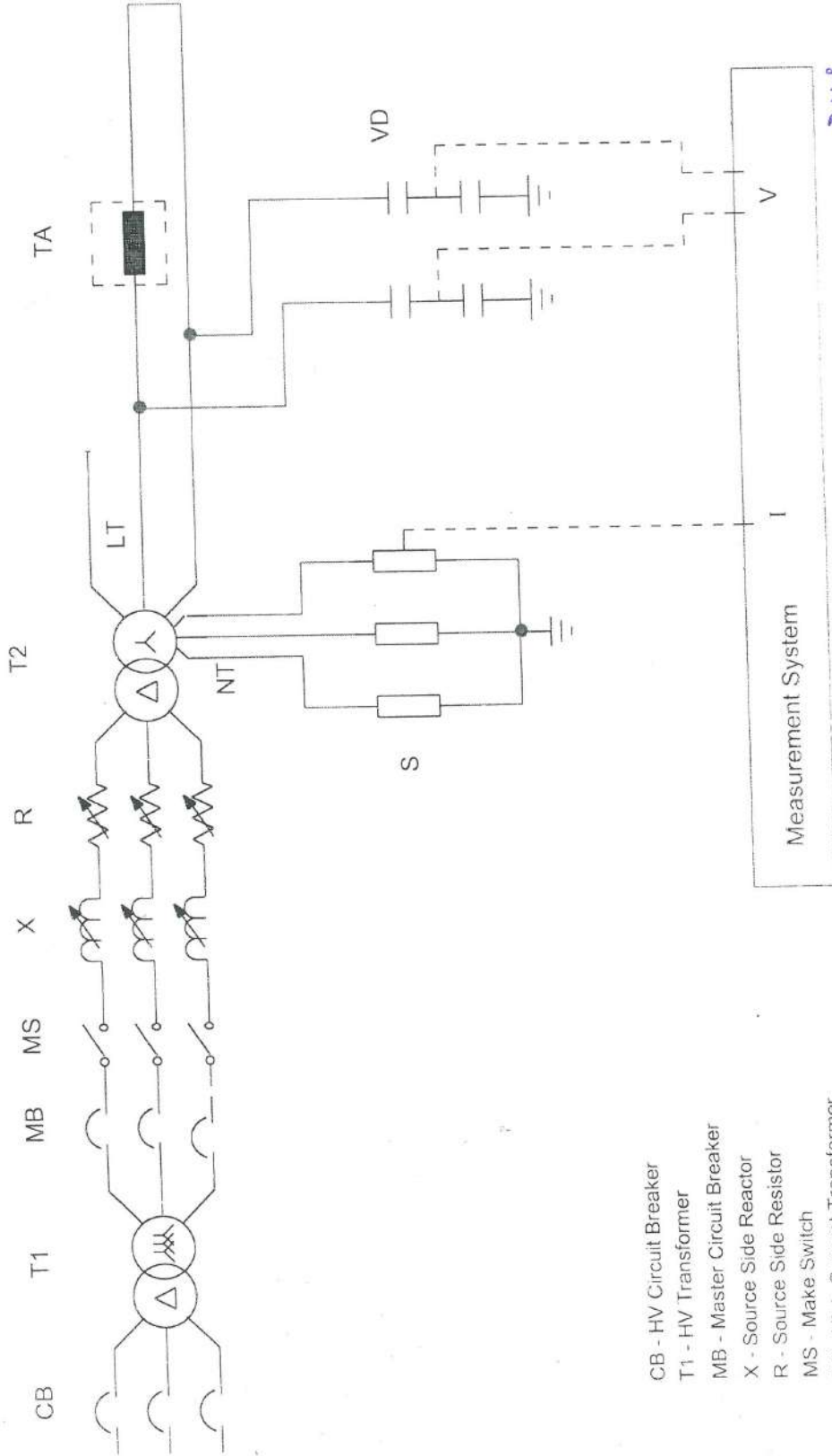
TEST RESULTS



Photograph Number : CPRIBPLSTNBMISC22T0312P01


Test Engineer

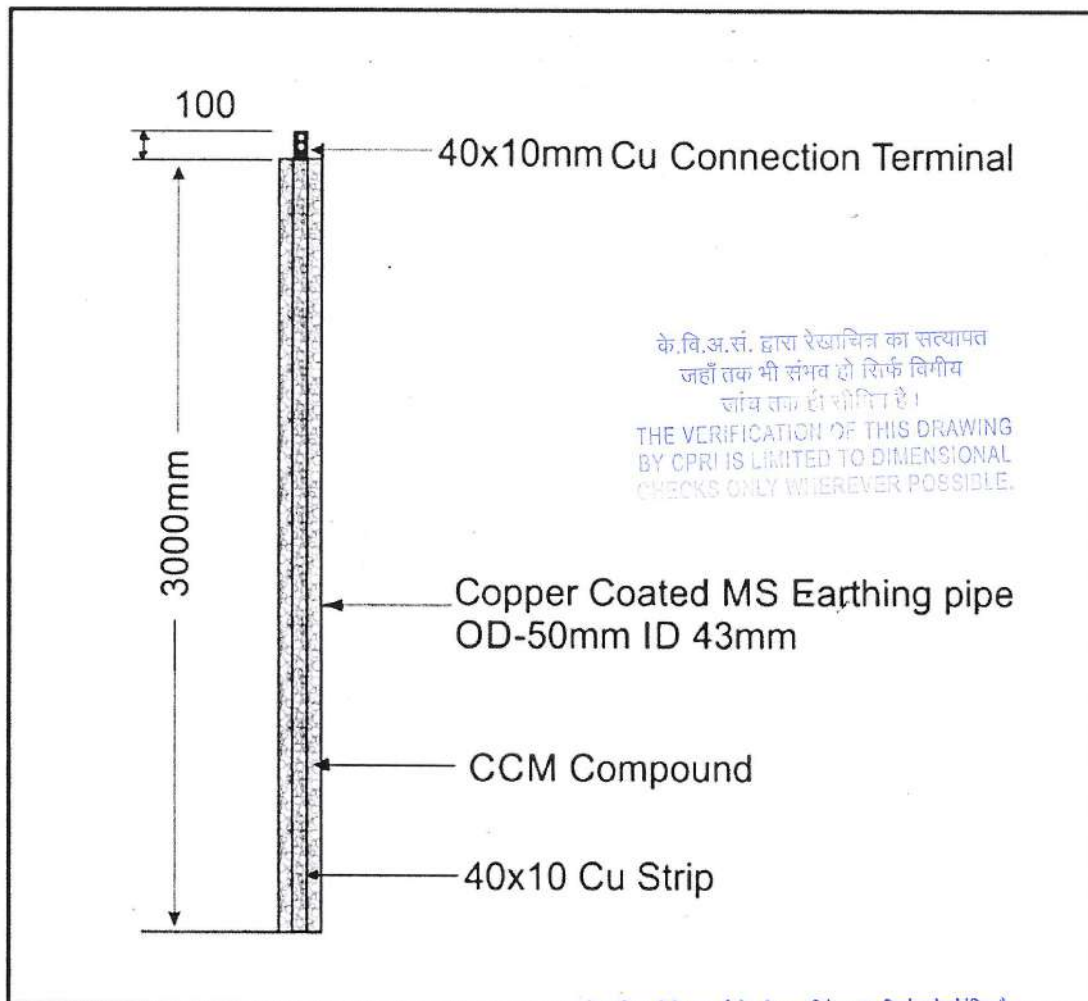
CPRI Bhopal



- CB - HV Circuit Breaker
- T1 - HV Transformer
- MB - Master Circuit Breaker
- X - Source Side Reactor
- R - Source Side Resistor
- MS - Make Switch
- T2 - High Current Transformer
- VD - RC Voltage Divider
- S - Shunt
- TA - Test Apparatus
- LT - Line terminals of the secondary windings of T2
- NT - Neutral terminals of the secondary windings of T2

TEST ENGINEER

OLTS/TCD-STC-06



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

यह रेखाचित्र सीपीआरआई के परीक्षण प्रतिवेदन क्र. दिनांक से संबंधित है।
THIS DRAWING PERTAINS TO CPRI TEST REPORT
क्र./No. CPRIBPLSTNB/MISC/2270312
दिनांक/Dated

परीक्षण इंजीनियर / Test Engineer

50mm Dia Copper Bonded Earth Electrode

Company Name and Address
PANNA AND SONS
1826/01, Old Amarnath Building
Bhagirath Palace, Delhi-110006
Factory Address :
A-176, Harit Vihar, Pepsi Road,
Sant Nagar, Burari, Delhi-110084

Drg No. PAS/22-23/117

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