



परीक्षण रिपोर्ट TEST REPORT

केन्द्रीय विद्युत अनुसंधान संस्थान

(विद्युत मंत्रालय, भारत सरकार के अधीन एक स्वायत्त सोसायटी)

CENTRAL POWER RESEARCH INSTITUTE

(An Autonomous Society under Ministry of Power, Govt. of India)

एस टी एल के सदस्य

Member of STL

स्विचगियर परीक्षण तथा विकास केन्द्र

SWITCHGEAR TESTING & DEVELOPMENT STATION

गोविन्दपुरा, भोपाल - 462023

GOVINDPURA BHOPAL - 462023

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CENTRAL POWER RESEARCH INSTITUTE



TEST REPORT

CPRI

Test Report Number : CPRI BPLSTNC23T0196 Date: 23 August 2023

Name and Address of the Customer : M/s. E-Techno Switchgear (P) Ltd.,
F-7, Tilak Nagar, Bawadia Kalan,
Bhopal, Madhya Pradesh-462 026.

Name and Address of the Manufacturer : M/s. E-Techno Switchgear (P) Ltd.,
Shed No. 36, Plot No. 143-A, Sector-H,
Industrial Area, Govindpura, Bhopal-462 023.

Particulars of sample tested : 415V, 250A, LT Panel

Type : Outdoor

Description of test sample : 415V, 250A, LT Panel

Serial Number : ETSPL/IP55/001

Number of samples tested : One

Date(s) of Test(s) : 09 May 2023 & 10 May 2023

CPRI Sample code Number(s). : STNC23S0171

Particulars of tests conducted : Degree of Protection IP-55(Category-II)

Test in accordance with : IEC 61439 -1:2011.

Standard/specification

Sampling Plan : Nil

Customer's Requirement : Nil

Deviations, if any : Nil

Name of the witnessing persons

Customer's representative : Shri. Amit Vasant bhai Butiya
Shri. Asif Faraz.

Other than customer's representative : Nil

Test subcontracted with address of the laboratory : None

Documents constituting this report (in words)

Number of Sheets : Six

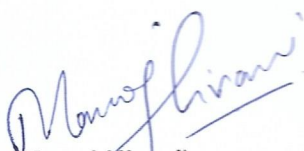
Number of Oscillogram(s) : Nil

Number of Graph(s) : Nil

Number of Photograph(s) : One

Number of Test Circuit Diagram(s) : Nil

Number of Drawing(s) : Two


(Manoj Hirani)
Test Engineer




(Sarita Dongre)
Head of Division
Reviewed and Authorized By

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



Test Report Number: CPRIBPLSTNC23T0196

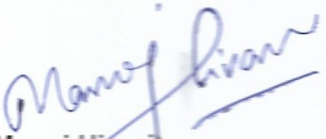
Date : 23 August 2023

CPRI

DESCRIPTION OF THE SAMPLE TESTED

(As assigned by the manufacturer)

Sample	: 415V, 250A, LT Panel
Designation	: LT panel
Rated voltage (V)	: 415
Rated current (Amps)	: 250
Frequency (Hz)	: 50
Insulation level (Vrms/kVp)	: 660/-
Number of Phases	: Three
Number of Poles	: Three
Rated short time withstand current (kArms)	: -
Dimensions of the sample	: As per drawing


(Manoj Hirani)
Test Engineer

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SUMMARY OF TESTS CONDUCTED

1. Tests conducted : Degree of Protection IP-55(Category-II)
2. Rating for which tested : 1.1) Protection against access to hazardous parts
IP-5X
1.2) Ingress protection against solid particles IP-5X
2) Ingress Protection against liquid IP-X5
3. Schedule of tests

Tests Conducted	Clause Numbers	Sheet
Degree of Protection IP-55 (Category-II)	Cl. 10.3 of IS/IEC 61439-1:2011.	5 of 6

4. Oscillogram No(s) : Nil
5. Graph Numbers : Nil
6. Photograph Numbers : CPRIBPLSTNC23T0196P01
7. Test Circuit Diagram Numbers : Nil
8. Drawing Numbers : Refer sheet 4 of 6


(Manoj Hirani)
Test Engineer

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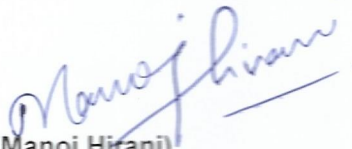
LIST OF DRAWINGS

Drawing Numbers

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

Sl.No.	Drawing Number	Sheet Number	Revision Number
1	ETSPL/IP55/01	01 of 02	00
2	ETSPL/IP55/01	02 of 02	00

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


(Manoj Hirani)
Test Engineer

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TEST RESULTS

1) Test conducted : Degree of Protection IP-5X (Category-II)
Date of test : 09 May 2023 & 10 May 2023
Condition of sample before test : New
Test Details : As per Standard

- 1.1) The test wire of 1.0 mm diameter was applied on all possible openings with a force of 1N as per standard.
1.2) The test object is placed inside a closed chamber in which talcum powder (unscented) is maintained in suspension by air current as per standard as given below.

Differential Pressure maintained	Duration of the test
Nil	8 hours

Observations : 1) The wire of specified diameter did not enter the enclosure.
2) No traces of powder observed inside the sample after IP-5X test.

2) Test conducted : Degree of Protection IP -X5
Date of test : 10 May 2023
Condition of sample before test : As such after IP 5X test.
Test details : Sample was placed in normal position and test was conducted by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as per standard.

Size of the nozzle used (mm)	Distance of the nozzle from the sample(mtr)	Water Delivery rate(litre/minute)	Duration of the test (minute)
6.3	3.0	12.5	3.0

Observations : No traces of water observed inside the sample after IP-X5 test.

CONCLUSION : The sample tested complies with the requirement of the Cl. 10.3 of IEC 61439-1:2011 for the test(s) conducted.


(Manoj Hirani)
Test Engineer

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NOTE

- The Test results relate only to the item(s) tested.
- Publication or reproduction of this test 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.
- Any Corrections/erasure invalidates the test Report.
- Any anomaly/discrepancy in the test report should be brought to the notice of CPRI within 45 days from the date of issue.
- All documents constituting the test report 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 and sealed with a CPRI logo printer paper sticker/embossed.
- NABL has Accredited this laboratory as per ISO/IEC 17025:2017, vide certificate no. TC-5181 for the tests carried out.



TC-5181

Manoj Hirani
(Manoj Hirani)
Test Engineer

.....End of Test Report.....

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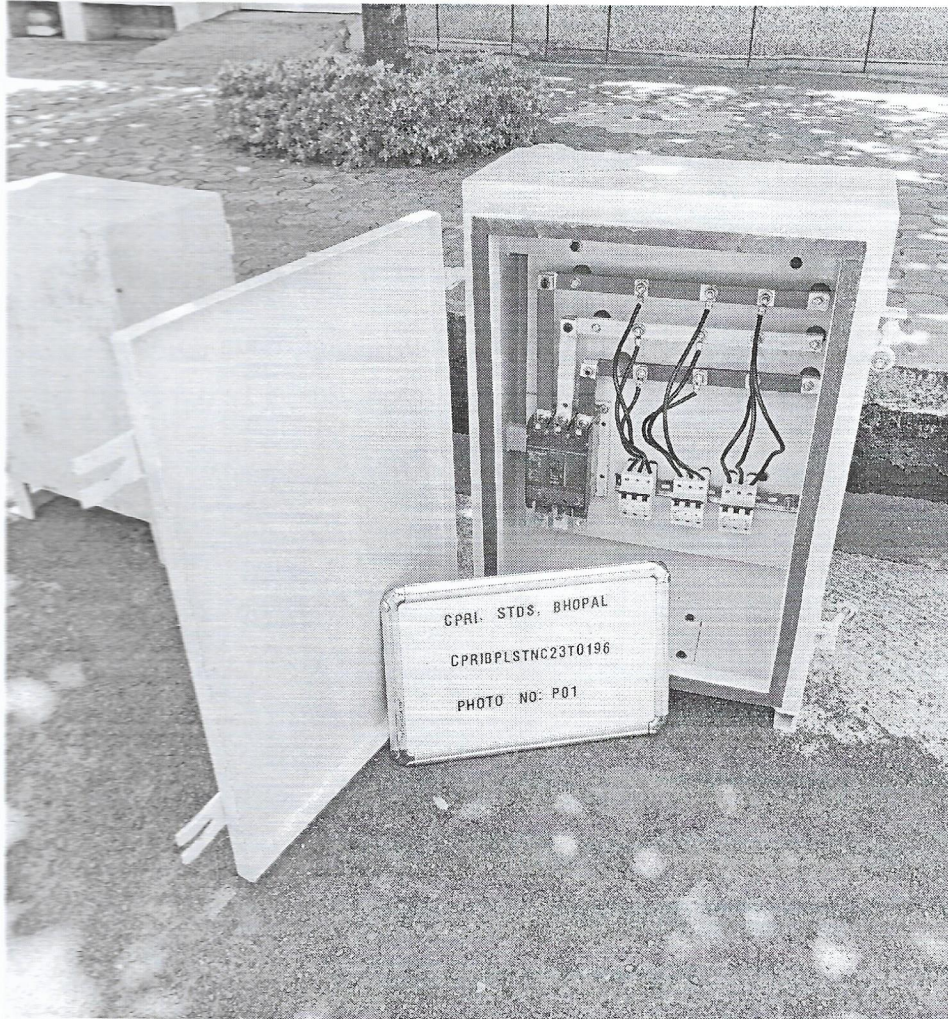
TEST REPORT



Test Report Number: CPRIBPLSTNC23T0196

Date : 23 August 2023
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TEST RESULTS



Photograph Number Number: CPRIBPLSTNC23T0196P01

Manoj Hirani
(Manoj Hirani)
Test Engineer

E-TECHNO SWITCHGEAR PVT LTD

SHED NO. 36, 143-A, SECTOR-H,
INDUSTRIAL AREA, GOVINDPURA BHOPAL.
462026.

L.T. PANEL

Sr. No. : ETSPL/IP55/001

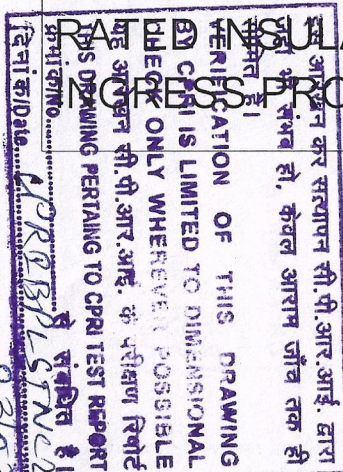
RATED CURRENT : 250 AMPS

RATED VOLTAGE : 415 VOLTS

RATED INSULATION : 660 VOLTS

PROTECTION : IP55

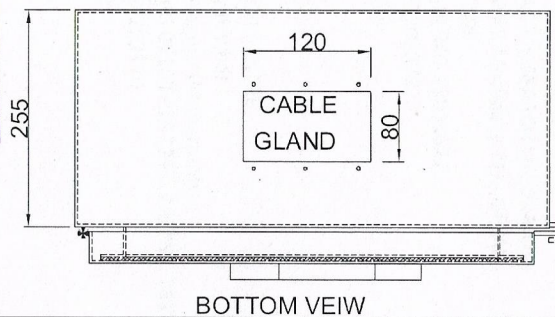
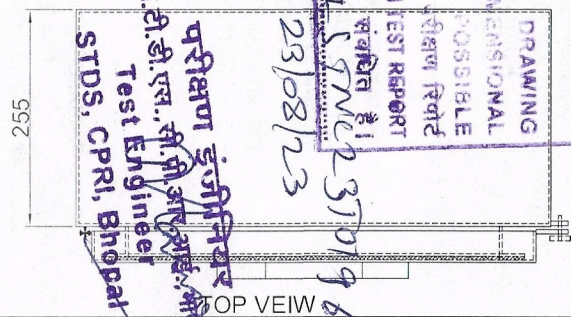
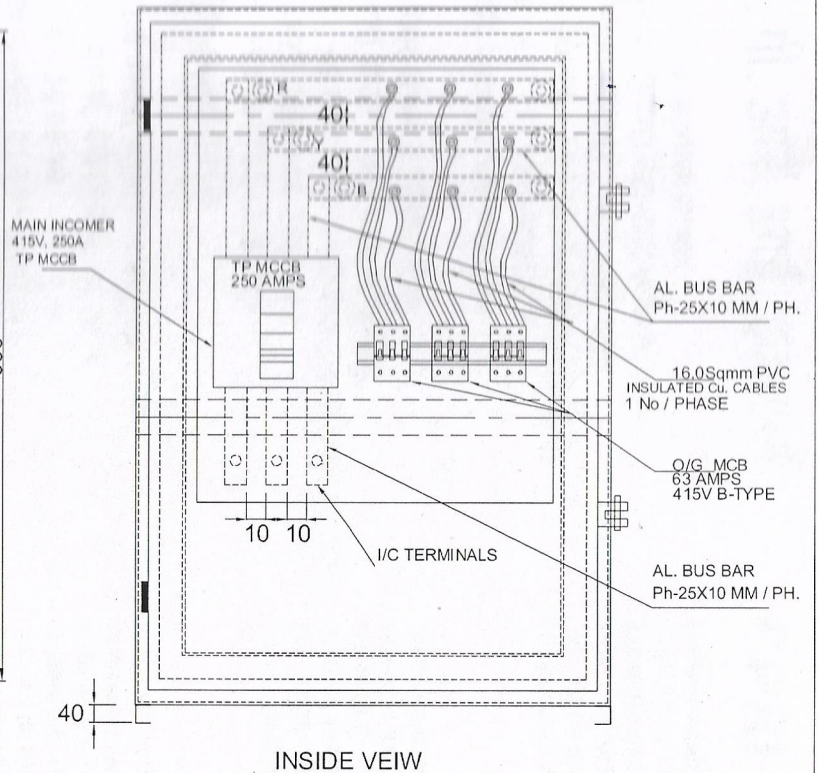
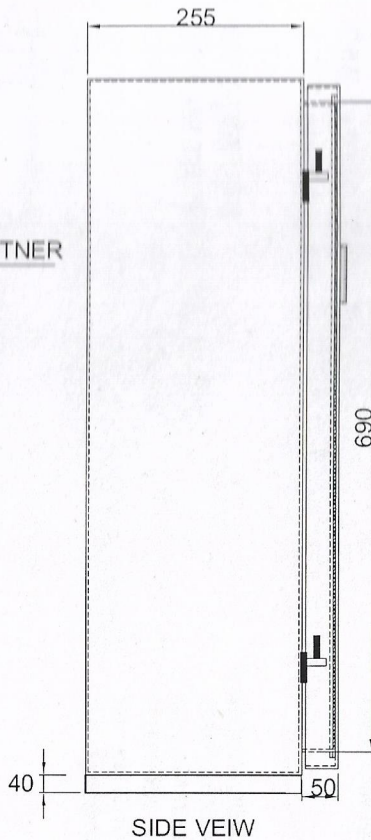
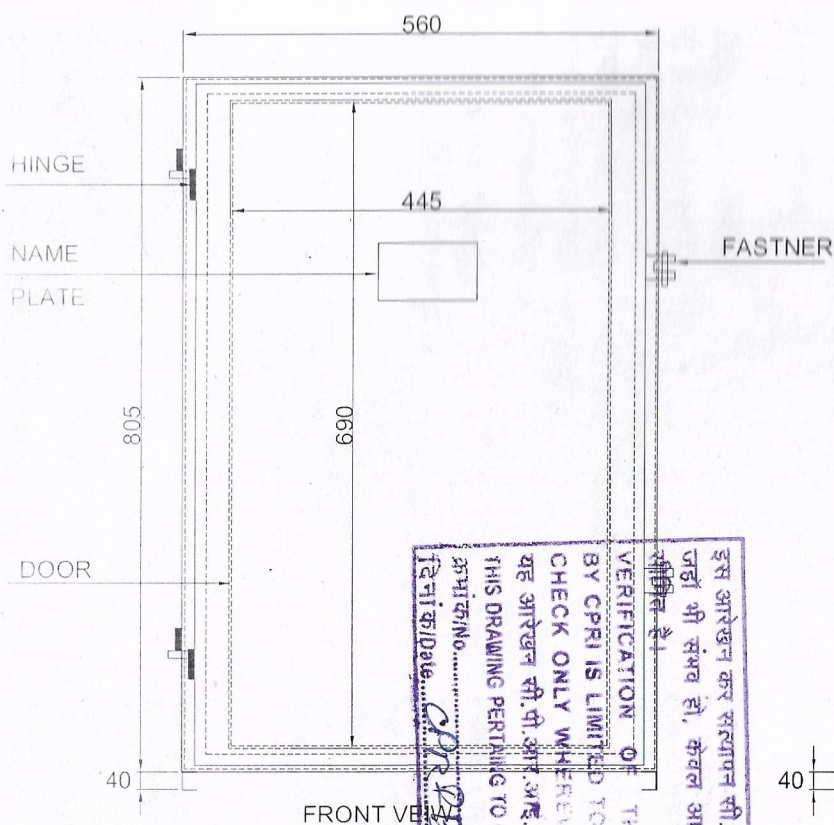
NAME PLATE



परीक्षण इंजीनियर
एस.टी.डी.एस. सी.पी.आई.आई.ओ.
Test Engineer
STDS, CPRI, Bhopal

(a) ALL DIMENSION IN MM

A) REGSTD ADDRESS: M/s. E-TECHNO SWITCHGEAR PVT.LTD F-7, TILAK NAGAR, BAWADIA KALA, Dist. BHOPAL Pin. - 462039			(b) MANUFACTURED BY: M/s. E-TECHNO SWITCHGEAR PVT LTD SHED NO. 36, 143-A, SECTOR-H, INDUSTRIAL AREA, GOVINDPURA BHOPAL. 462026.			(c) CLIENT: PROJECT: DETAIL: 415 VOLTS 250 AMPS LT PANEL		CHECKED BY: Ankit		(d) JOB NO:					
										DRWN.BY		Amit	DRG. NO.		ETSPL/IP55/01
										SCALE		NTS	REV.		01
										DATE		22.03.23	SHEET NOS.		2
								NO.OF SHEET.		2					
A	B	C	D	E	F	G	H	I	J						



NOTE:-

- 1) ALL DIMENTIONS ARE IN MM,
- 2) FLAT FOAM TYPE GASKET SIZE: 25X5MM (2 RUN) ON DOOR COLLAR
- 3) GENERAL TOLERANCE : $\pm 5\%$

इस आरेखन कर सत्यापन सी.पी.आर.आई. द्वारा
जहाँ भी संभव हो, केवल आयास जाँच तक ही
सीमित है।
VERIFICATION OF THIS DRAWING
BY CPRI IS LIMITED TO DIMENSIONAL
CHECK ONLY WHEREVER POSSIBLE
यह आरेखन सी.पी.आर.आई. के सीमित रिपोर्ट
THIS DRAWING PERTAINING TO CPRI TEST REPORT
क्रमांक/No. 23/08/23
दिनांक/Date 23/08/23

परीक्षणा इंजीनियर
एस.डी.डी.एस. सी.पी.आर.आई. भोपाल
Test Engineer
STDS, CPRI, Bhopal

(A) REGSTD ADDRESS: M/s. E-TECHNO SWITCHGEAR PVT LTD F-7, TILAK NAGAR, BAWADIA KALIA, Dist. BHOPAL Pin. - 462039	(b) MANUFACTURED BY: M/s. E-TECHNO SWITCHGEAR PVT LTD SHED NO. 36, 143-A, SECTOR-H, INDUSTRIAL AREA, GOVINDPURA BHOPAL. 462026.	(c) CLIENT: PROJECT:		(d) JOB NO:				
				DRWN.BY	Amit	DRG. NO.	ETSPL/IP55/01	
		DETAIL: 415 VOLTS 250 AMPS LT PANEL		CHECKED BY: Ankit	SCALE	N.T.S.	REV.	01
					DATE	22.03.23	SHEET NOS.	1
						NO.OF SHEET.	2	

सी. पी. आर. आई. इकाइयाँ

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केन्द्रीय विद्युत अनुसंधान संस्थान

(विद्युत मंत्रालय, भारत सरकार के अधीन एक स्वायत्त सोसायटी)

CENTRAL POWER RESEARCH INSTITUTE

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स्विचगियर परीक्षण तथा विकास केन्द्र

SWITCHGEAR TESTING & DEVELOPMENT STATION

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0755-2602257 (एनर्जी मीटर टेस्ट लैब/ EMTL) 0755-2586944 (सप्लीमेंट्री टेस्ट लैब / STL)

0755-2586344 (आयल टेस्ट लैब /OTL)

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