



केन्द्रीय विद्युत अनुसंधान संस्थान

(भारत सरकार की सोसाइटी, विद्युत मंत्रालय)

पो. वी. रामन रोड, सदाशिवनगर डाक घर, पो. बा. सं. 8066, बंगलूरु - 560 080.

CENTRAL POWER RESEARCH INSTITUTE

(A Govt. of India Society under Min. of Power)

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मापयंत्रण प्रभाग / INSULATION DIVISION

ताप प्रचाल परीक्षण प्रयोगशाला / HEAT RUN TEST LABORATORY

सं/ No. HRTL/December/2017/350/103

दिनांक/ Dated: 13.12.2017

मेसर्स / M/s. S.R.Automation Pvt Ltd,
Sonarpur Station Road, P.O.
Narendrapur, Kolkata-700103

ध्यानाकर्षक / Kind Attention: Mr. Biswajit Sarkar (Mobile: +91 9903050297)

विषय/Subject: 415V,60A,50Hz,LT Distribution board पर तापमान वृद्धि परीक्षण / Temperature rise test on 415V,60A,50Hz,LT Distribution board.

संदर्भ / Ref: ग्राहक अनुरोध फॉर्म, दिनांक: 23.11.2017 / Customer request form, dated: 23.11.2017

महोदय / Dear Sir,

कृपया 415V,60A,50Hz,LT Distribution board पर तापमान वृद्धि परीक्षण के संबंध में उपरोक्त पत्र का संदर्भ ग्रहण करें। परीक्षण पूरा किया गया और परीक्षण रिपोर्ट सं. HRTL/112/November/2017 dated: 24.11.2017 संलग्न पाए।

Kindly refer to above letter regarding Temperature rise test on 415V, 60A, 50Hz, LT Distribution board. The test has been completed and the test report bearing No. HRTL/112/November/2017 dated: 24.11.2017 is enclosed.

परीक्षण रिपोर्ट में हेरफेर रोकने के लिए, 01.10.2007 से प्रभावी परीक्षण रिपोर्ट(मूल प्रति) के प्रथम पृष्ठ पर होलोग्राम शुरू किया है।

In order to prevent tampering of test report, CPRI has introduced hologram on the first page of the test report (Original Copy) with effect from 01.10.2007.

परीक्षण रिपोर्ट में कोई विसंगति पाने पर कृपया परीक्षण रिपोर्ट के प्रेषण की तिथि से 45 दिनों के भीतर ध्यान में लाया जाए।

Any discrepancy in the test report may please be brought to the notice within 45 days from the date of dispatch of the test report.

परीक्षण रिपोर्ट की कृपया पावती भेजे।

Receipt of the Test Report may please be acknowledged.

सादर/ Best Regards,

भवदीय/ Yours Sincerely,

(Handwritten Signature)
(गंगा. एस)/ (GANGA.S)

अपर निदेशक / ADDITIONAL DIRECTOR

CPRI

TEST REPORT



Central Power Research Institute

(A Govt. of India Society)

**P.B.No. 8066, Sadhashivanagar Post Office,
Prof. Sir C.V. Raman Road,
Bangalore - 560 080 (INDIA)**

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



CPRI

Test Report Number : HRTL/112/November/2017 **Dated:** 24.11.2017

Name & Address of the Customer : M/s. S.R.Automation Pvt Ltd,
Sonarpur Station Road, P.O.
Narendrapur,Kolkata-700103.
Ref.: Customer request form, dated: 23.11.2017


Name & Address of the Manufacturer : M/s. S.R.Automation Pvt Ltd,
Sonarpur Station Road, P.O.
Narendrapur,Kolkata-700103

Particulars of sample tested : 60A, 415V AC, LT Distribution board
Condition of the Sample on Receipt : New
Type : Outdoor
Description of test sample : 60A, 415V AC, LT Distribution board
Serial Number : 001/25KVA
Number of samples tested : One
Date(s) of Test(s) : 23.11.2017
CPRI sample code no : HRT17S0070
Particulars of tests conducted : Temperature rise test at 60A Amps

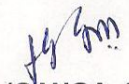
Test in accordance with standard/specification : IS 8623 (Part-1):1993 / IEC Pub 439-1 (1985) (RA-2013)
Sampling plan : Nil
Customers requirement : Nil
Deviations if any : Nil

Name of the witnessing persons
Customers representatives : Mr.Biswajit Sarkar
Other than Customers representatives : Nil
Test subcontracted with address of the laboratory. : NA

Documents constituting this report (in words)
Number of Sheets : Three
Number of oscillograms/s : Nil
Number of graphs : Nil
Number of photos : Nil
Number of Test Circuit Diagrams : Nil
Number of Drawings : Two
1)Drawing No: SRA/SD/25KVA/17-18,SHEET NO: 1OF2,REV:NIL
2)Drawing No: SRA/SD/25KVA/17-18,SHEET NO: 2OF2,REV:NIL


(RAKESH. K. G)
Test Engineer




(GANGA. S)
Head of Division
Approved By

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



CPRI

Test Report No.: HRTL/112/November/2017

Dated: 24.11.2017

TEST RESULTS

Temperature rise test:

Procedure: Temperature rise test was carried out by using the temporary connections mentioned in the table below and passing a current of 60A at frequency of 50Hz. The temperature measurements were recorded at different locations as per the standard at steady state, which are indicated in the drawing enclosed (Drawing No: SRA/SD/25KVA/17-18,SHEET NO: 1 OF 2,REV:NIL). **The average ambient Temperature during the test was 27.8°C.**

Temporary Connections	Material	Quantity (Numbers)	Length (mm)	Cross-Section mm ²	Remarks
Incoming side	PVC Insulated Copper Cables	One	1000	35	Each phase
Outgoing Side	PVC Insulated Copper Cables	One	1000	35	Each phase

Note: The Outgoing Cables are Shorted at the end by using Suitable Links

Location of Thermocouples as per Standard	Temperature Rise (K)	
	Specified Values as per standard	Recorded values
Incoming Terminal R-Phase (T1)	70	7.42
Incoming Terminal Y-Phase (T2)	70	6.12
Incoming Terminal B-Phase (T3)	70	5.57
Incoming Side Busbar R-Phase (T4)	--	6.97
Incoming Side Busbar Y-Phase (T5)	--	5.62
Incoming Side Busbar B-Phase (T6)	--	5.27
Outgoing Terminal R-Phase (T7)	70	7.27
Outgoing Terminal Y-Phase (T8)	70	5.62
Outgoing Terminal B-Phase (T9)	70	5.62
Internal Ambient (T10)	--	3.02
Enclosure (T11)	40	1.62

Results: The Sample tested complies with the Clause 7.3 of standard IS 8623 (Part 1):1993/ IEC Pub 439 Part 1:1985 (RA-2013)

R.K. G.
(Rakesh. K. G)
Test Engineer

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



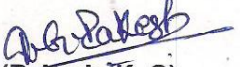
CPRI

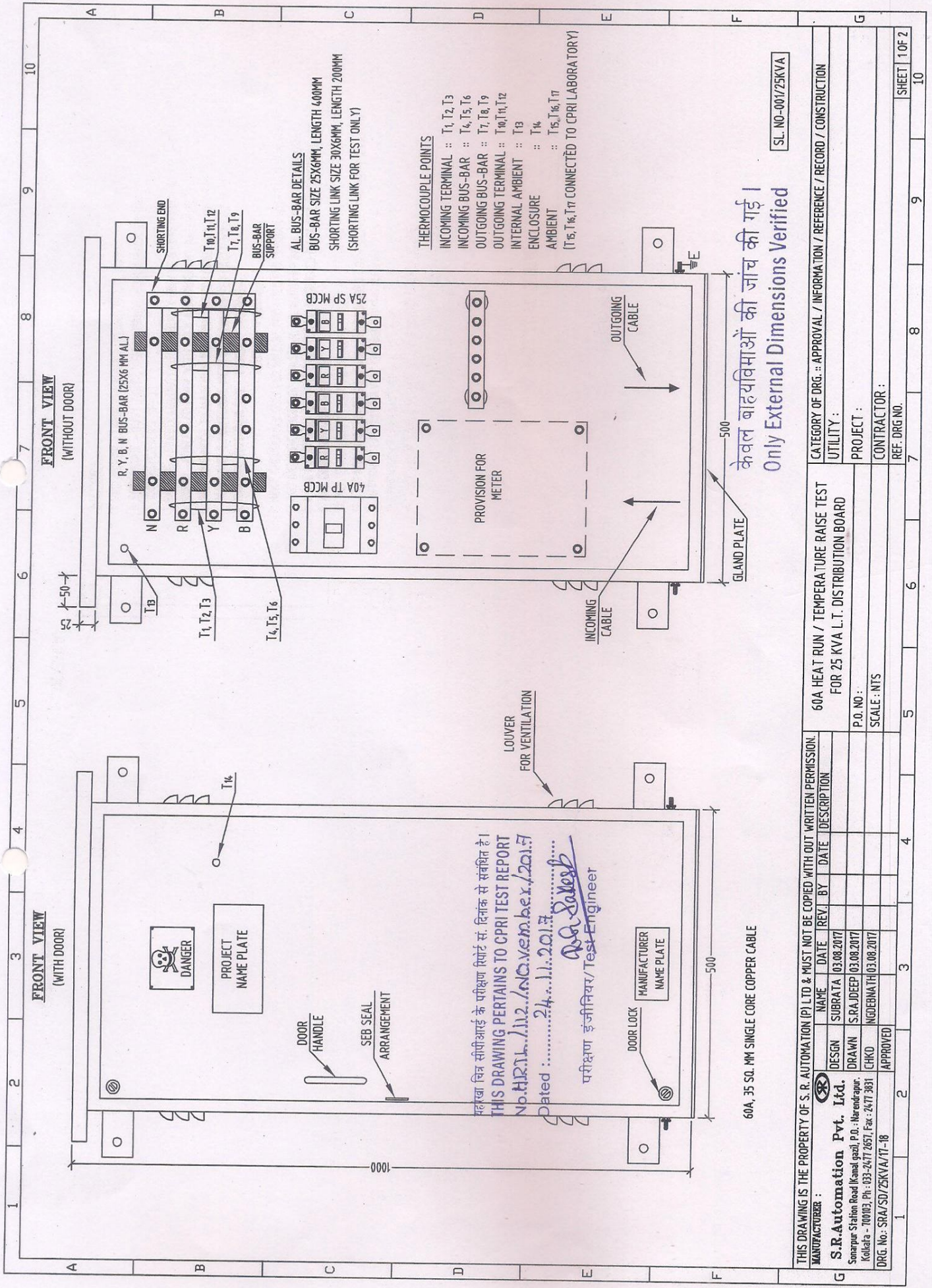
Test Report No.: HRTL/112/November/2017

Dated: 24.11.2017

NOTE

- a) The Test results relate only to the item(s) tested.
- b) Publication or reproduction of the test Report /Certificate in any form other than by complete set of the whole test Report /Certificate and in the language written is not permitted without the written consent of CPRI.
- c) Any Corrections/erasure invalidates the test Report/Certificate
- d) NABL has Accredited this laboratory as per ISO 17025-2005 standard, vide certificate no.TC-5452 for the tests carried out.
- e) Any anomaly/discrepancy in the test Report /Certificate should be brought to the notice of CPRI within 45 days from the date of issue.


(Rakesh. K. G)
Test Engineer



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MANUFACTURER :

S.R.Automation Pvt. Ltd.
 Sonapur Station Road (Kamal gazi), P.O. : Har endapur.
 Kollida - 70003, Ph : 03-2477 2657, Fax : 2471 3831
 DRG. No. : SRA/SD/25KVA/11-18

DESIGN	DATE	REV.	BY	DATE	DESCRIPTION
DESIGN	SUBRATA	03.08.2017			
DRAWN	S.RAJDEEP	03.08.2017			
CHKD	NGDEBATH	03.08.2017			
APPROVED					

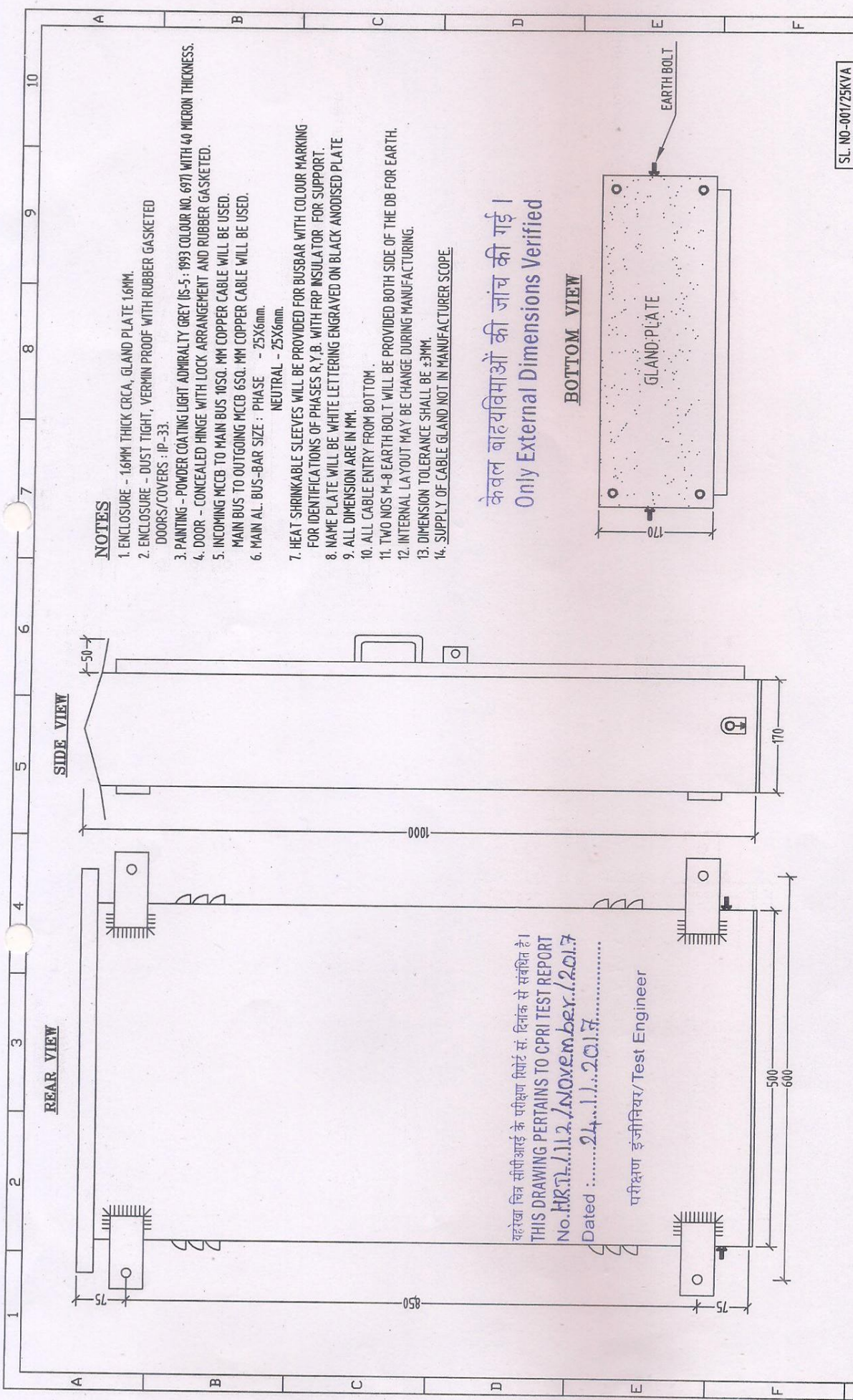
60A HEAT RUN / TEMPERATURE RAISE TEST FOR 25 KVA L.T. DISTRIBUTION BOARD

P.O. NO :

SCALE : NTS

CONTRACTOR :

REF. DRG. NO.

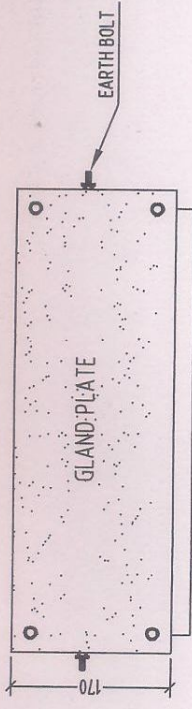


NOTES

1. ENCLOSURE - 1.6MM THICK CRCA, GLAND PLATE 1.6MM.
2. ENCLOSURE - DUST TIGHT, VERMIN PROOF WITH RUBBER GASKETED DOORS/COVERS : IP-33.
3. PAINTING - POWDER COATING LIGHT ADMIRALTY GREY (IS-5 : 1993 COLOUR NO. 697) WITH 40 MICRON THICKNESS.
4. DOOR - CONCEALED HINGE WITH LOCK ARRANGEMENT AND RUBBER GASKETED.
5. INCOMING MCCB TO MAIN BUS 10SQ. MM COPPER CABLE WILL BE USED. MAIN BUS TO OUTGOING MCCB 6SQ. MM COPPER CABLE WILL BE USED.
6. MAIN AL. BUS-BAR SIZE : PHASE - 25X6mm.
NEUTRAL - 25X6mm.
7. HEAT SHRINKABLE SLEEVES WILL BE PROVIDED FOR BUSBAR WITH COLOUR MARKING FOR IDENTIFICATIONS OF PHASES R,Y,B. WITH FRP INSULATOR FOR SUPPORT.
8. NAME PLATE WILL BE WHITE LETTERING ENGRAVED ON BLACK ANODISED PLATE
9. ALL DIMENSION ARE IN MM.
10. ALL CABLE ENTRY FROM BOTTOM.
11. TWO NOS M-8 EARTH BOLT WILL BE PROVIDED BOTH SIDE OF THE DB FOR EARTH.
12. INTERNAL LAYOUT MAY BE CHANGE DURING MANUFACTURING.
13. DIMENSION TOLERANCE SHALL BE ±3MM.
14. SUPPLY OF CABLE GLAND NOT IN MANUFACTURER SCOPE.

केवल बाह्यविमाओं की जांच की गई।
Only External Dimensions Verified

BOTTOM VIEW



SL. NO-001/25KVA

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MANUFACTURER :	NAME	DATE	REV.	BY	DATE	DESCRIPTION
S.R.Automation Pvt. Ltd. Sonapur Station Road (Kansal gazi), P.O. : Harandrapur. Kolkata - 70003, Ph : 03-24772657, Fax : 24773831 DRG. No. : SRA/SD/25KVA/17-18	DESIGN	SUBRATA	03.08.2017			
	DRAWN	S.RA DEEPT	03.08.2017			
	CHKD	NGOERNATH	03.08.2017			
	APPROVED					

60A HEAT RUN / TEMPERATURE RAISE TEST
FOR 25 KVA L.T. DISTRIBUTION BOARD

P.O. NO :
SCALE : NTS

CATEGORY OF DRG. :: APPROVAL / INFORMATION / REFERENCE / RECORD / CONSTRUCTION

UTILITY :

PROJECT :

CONTRACTOR :

REF. DRG.NO.

7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

SHEET 2 OF 2