



# TEST REPORT



Government of India  
Ministry of Communications and Information Technology  
Department of Electronics & Information Technology  
Standardisation Testing and Quality Certification Directorate  
**ELECTRONICS REGIONAL TEST LABORATORY (EAST)**  
Block DN, Sector V, Salt Lake, Kolkata 700 091  
INDIA





### **MEMORANDUM**

This Test Report is issued by ELECTRONICS REGIONAL TEST LABORATORY (EAST), under STQC Directorate, Ministry of Communications and Information Technology, Department of Electronics & Information Technology, Government of India. This Report is the record of result of tests conducted on the product(s) submitted to the Laboratory for testing. Unless otherwise specified in the report, the test relusts are applicable only to THOSE ITEMS OF PRODUCT WHICH HAVE BEEN TESTED and do not apply to other products even though declared to be identical.

The Test Report, if reproduced for any purpose, commercial or otherwise, should be reproduced in full. The reproduction of a part, or an abstract thereof, has to be got specially approved from Director, Electronics Regional Test Labotatory (East).

The results given in the test report are valid at the time of and under the stated conditions on measurement.

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Department of Electronics & Information Technology, Standardisation Testing & Quality Certification Directorate  
**ELECTRONICS REGIONAL TEST LABORATORY (EAST)**

<b>TEST REPORT ON : LT DISTRIBUTION BOX</b>	<b>PAGE 01 OF 3</b>
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## 1.0 SCOPE

1.1 Service Request No. : TE/0014/12-17

1.2 Test Report No. : ERTL(E)/TES/S317/0016/12-17  
Date : 27-12-20171.3 Requested by : S.R. AUTOMATION PVT. LTD  
(Name & address of the organisation) SONARPUR STATION ROAD.P.O NARENDRAPUR  
KOLKATA-700103  
WEST BENGAL1.4 Description Item : LT DISTRIBUTION BOX  
Identification Make : S.R AUTOMATION (P) LTD  
of the item Model : 63KVALTDB  
to be tested Sl.No. : 001/63KVA/LTDB  
Qty : 1

1.4.1 Applicable Spec. of the item(s) tested : 63KVA

1.4.2 Characterisation and Condition : Not applicable  
condition of item Condition : Satisfactory

1.5 Date of receipt of item : 12-12-2017

1.6 Date of start of testing : 22-12-2017

1.6.1 Date of completion of testing : 26-12-2017

1.7 Location where testing performed : IN HOUSE

1.8 Ambient condition during measurement : 25+/-2 °C  
45-70%RH

1.9 Spec. used for testing : IP-55 AS PER IEC:60529 &amp; CUSTOMERS SPECIFICATION

1.9.1 Details of non standard method followed (if any):



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TEST REPORT NO: ERTL(E) / TES / S 317 /0016/12-17

REPORT ON: L T DISTRIBUTION BOX .  
MAKE: S.R.AUTOMATION (P) LTD.  
Model : 63KVALTDB, SL. NO. : 001/63KVA/LTDB.

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TEST RESULT:

Sl. No	Test of Environment	Clause No.	Quantity		Specifications Limit	Test Result	Notes						
			Tested	Failed									
1.	Initial Measurement : a. Insulation Resistance(IR) At 500V DC between all live terminals shorted and body. b. High Voltage Test at 2KV AC between all live terminals shorted and body for 1 minute.	Customer's spec	1 1	0 0	a.IR value shall be greater than 100 MΩ. b. There shall be no breakdown or flashover.	a. IR : 6 GΩ. b. No breakdown or flashover observed.							
2.	IP 5X Test Dust protected Test: Dust : Talcum Powder. Vacuum :200 mm of water column. Duration : 8 hours.	13.4 and 13.5.2, of IEC 60529 Edition 2.2, 2013-08	1	0	Amount of dust if entered inside the enclosure shall not interfere with correct operation of the equipment or impair safety.	No dust observed inside the enclosure.							
3.	Intermediate Measurement (Post Dust) : a. Insulation Resistance(IR) At 500V DC between all live terminals shorted and body. b. High Voltage Test at 2KV AC between all live terminals shorted and body for 1 minute.	Customer's spec	1 1	0 0	a.IR value shall be greater than 100 MΩ. b. There shall be no breakdown or flashover.	a. IR : 12.87 GΩ. b. No breakdown or flashover observed.							
4.	IP X5 Test: Protection against water jet : Internal nozzle diameter : 6.3mm. Water flow rate: 12.5 l/min. Distance: 2.5 meters from nozzle to enclosure Duration : 3 minutes.	14.2.5 of IEC 60529 Edition 2.2 2013-08	1	0	Amount of water if entered inside the enclosure would not interfere with intended operation of the equipment.	No water entered inside the enclosure.							
5.	Final Measurement : a. Insulation Resistance(IR) At 500V DC between all live terminals shorted and body. b. High Voltage Test at 2KV AC between all live terminals shorted and body for 1 minute.	Customer's spec	1 1	0 0	a.IR value shall be greater than 100 MΩ. b. There shall be no breakdown or flashover.	a. IR : 11.6 GΩ. b. No breakdown or flashover observed.							
6.	Drawing Verification: Major dimensions verified.	Customer's Spec	1	0	Tolerance ±5mm specified.	Drawing No. SRA/SD/ 63KVA/17-18.Dated 03-08-2017 of S.R.Automation Pvt. Ltd. Verified. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>A</td> <td>1012</td> </tr> <tr> <td>B</td> <td>1003</td> </tr> <tr> <td>C</td> <td>328</td> </tr> </table>	A	1012	B	1003	C	328	
A	1012												
B	1003												
C	328												

**Abhijit Dasgupta**  
Scientist 'C'  
Authorized Signatory



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TEST REPORT NO. : ERTL(E)/TES/S317/0016/12-17  
Date : 27-12-2017

3.0 Equipment used	MAKE	MODEL	CAL.VALID UPTO
EQPT_NO NAME			

Please see the ANNEXURE--'EQUIPMENT USED'-- for details of equipment used for testing.

4.0 Remarks (if any) :

- The findings of all tests conducted have been mentioned under head 'TEST RESULT'



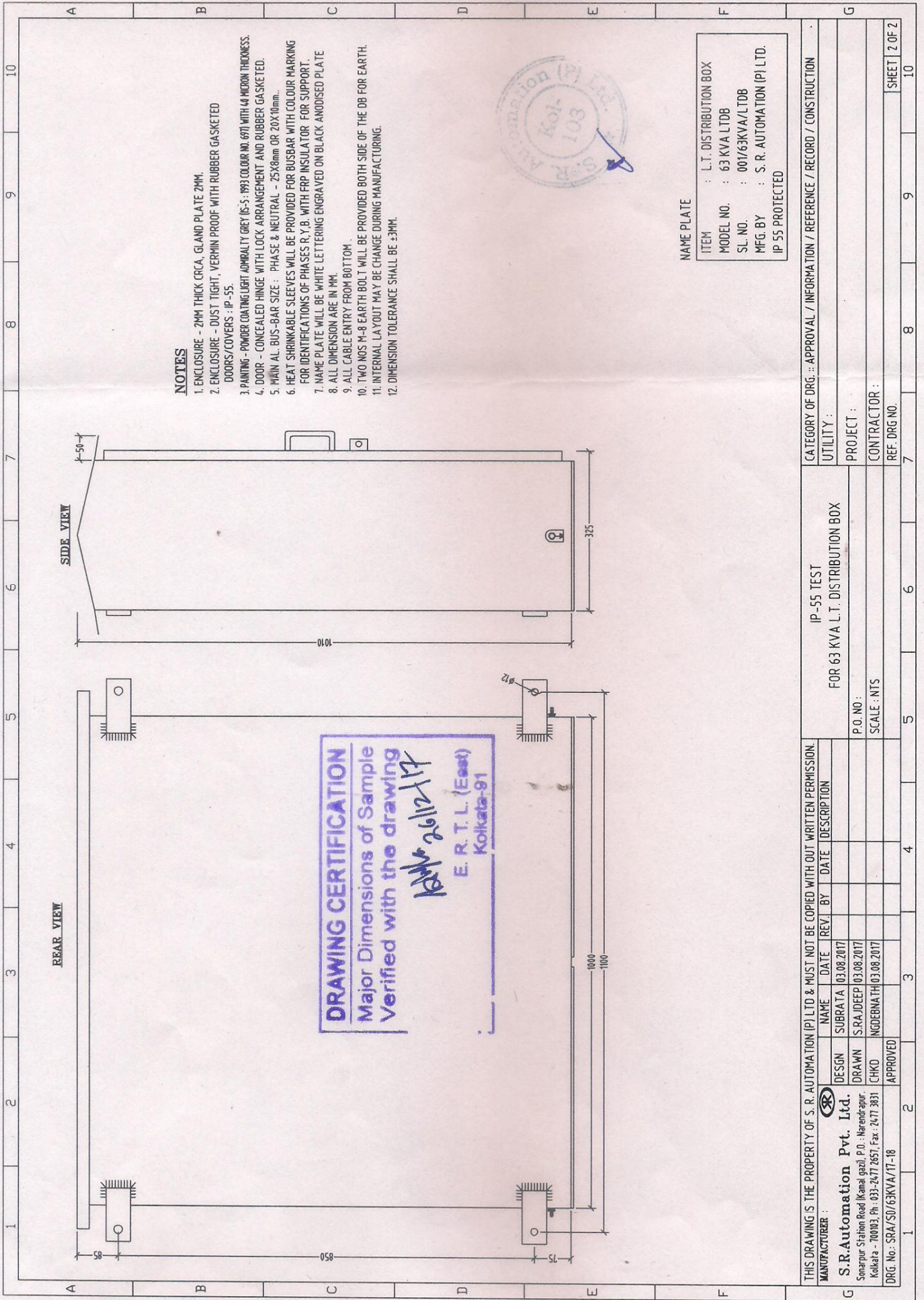
Certificate No.: T1397

RELEASED BY  
( Signature & Date )

*Sonia*  
08.01.18

SONALI JANA  
Scientist  
ERTL (E), STQC Directorate  
Govt. of India, Ministry of Electronics & IT  
DN-63, Sector-V, Salt Lake, Kolkata-700091





**NOTES**

1. ENCLOSURE - 2MM THICK CRCA, GLAND PLATE 2MM.
2. ENCLOSURE - DUST TIGHT, VERMIN PROOF WITH RUBBER GASKETED DOORS/COVERS : IP-55.
3. PAINTING - POWDER COATING LIGHT LUMINALITY GREY (IS-5: 1993 COLOUR NO. 697) WITH 40 MICRON THICKNESS.
4. DOOR - CONCEALED HINGE WITH LOCK ARRANGEMENT AND RUBBER GASKETED.
5. MAIN AL. BUS-BAR SIZE : PHASE & NEUTRAL - 25X80mm OR 20X100mm.
6. HEAT SHRINKABLE SLEEVES WILL BE PROVIDED FOR BUSBAR WITH COLOUR MARKING FOR IDENTIFICATIONS OF PHASES R, Y, B. WITH FRP INSULATOR FOR SUPPORT.
7. NAME PLATE WILL BE WHITE LETTERING ENGRAVED ON BLACK ANODISED PLATE
8. ALL DIMENSION ARE IN MM.
9. ALL CABLE ENTRY FROM BOTTOM.
10. TWO NOS M-8 EARTH BOLT WILL BE PROVIDED BOTH SIDE OF THE DB FOR EARTH.
11. INTERNAL LAYOUT MAY BE CHANGE DURING MANUFACTURING.
12. DIMENSION TOLERANCE SHALL BE ±3MM.

**NAME PLATE**

ITEM	: L.T. DISTRIBUTION BOX
MODEL NO.	: 63 KVA LTDB
SL. NO.	: 001/63KVA/LTDB
MFG. BY	: S. R. AUTOMATION (P) LTD.
	IP 55 PROTECTED

THIS DRAWING IS THE PROPERTY OF S. R. AUTOMATION (P) LTD & MUST NOT BE COPIED WITH OUT WRITTEN PERMISSION.

MANUFACTURER :	NAME	DATE	REV.	BY	DATE	DESCRIPTION
S.R. Automation Pvt. Ltd. Sagar Station Road (Kamal gas), P.O. : Narandipur Kolkata - 700083, Ph. 033-2471 2857, Fax. 2471 3831 DRG. No.: SRA/SO/63KVA/17-18	DESIGN	SUBRATA	03.08.2017			
	DRAWN	S.RA/DEEP	03.08.2017			
	CHKD	NGDEBNATH	03.08.2017			
APPROVED						

CATEGORY OF DRG. :	APPROVAL / INFORMATION / REFERENCE / RECORD / CONSTRUCTION
UTILITY :	IP-55 TEST
PROJECT :	FOR 63 KVA L.T. DISTRIBUTION BOX
CONTRACTOR :	P.O. NO :
REF. DRG. NO.	SCALE : NTS

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**ANNEXURE - EQUIPMENT USED**

Details of equipment used for testing

TEST REPORT NO. : ERTL(E)/TES/S317/0016/12-17  
Date : 27-12-2017

<u>EQPT_NO</u>	<u>NAME</u>	<u>MAKE</u>	<u>MODEL</u>	<u>CAL.VALID UPTO</u>
1658	MEASURING TAPE(5m)	FREEMAN	IND/091/98/219	13-12-2018
1689	INSULATION RESISTANCE METER	SCIENTIFIC	SME 1202A	15-05-2018
1690	AC DC HIGH VOLTAGE TESTER	SCIENTIFIC	SME 1105-1	22-05-2018
1120	DUST CHAMBER	KASCO INDUSTRIES	PUNE	20-01-2018
1091	WATER JET(PRES GAUGE )	A.N.INSTRUMENTS	0-2.5 KG	08-12-2018

Note: All testing were conducted within the validity period of respective equipment shown above.



## ACCREDITATIONS

### INTERNATIONAL

- ▶ Independent Test Laboratory under IECQ System of International Electrotechnical Commission
- ▶ Approved test laboratory (CBTL) for safety under IECEE-CB Scheme
- ▶ FCC (Federal Communications Commission) USA approved Open Area Test Site (10 meters) for EMI/EMC testing
- ▶ Recognised laboratory of Saudi Arabia Standards Organisations (SASO)

### NATIONAL

- ▶ Approved Laboratory under National Accreditation Board for Testing and Calibration Laboratories (NABL) for Testing and Calibration
- ▶ Approved flameproof and intrinsic safety testing laboratory of
  - Directorate General of Mines Safety
  - Chief Controller of Explosives
  - Directorate General Factory Advice Service and Labour Institutes
- ▶ Approved laboratory for testing of Solar Photovoltaic products by Ministry of Non-conventional Energy Sources, Govt. of India.
- ▶ Approved laboratory of Bureau of Indian Standards in specific fields



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