



SPEED POST / REGD.A.D / H.D. / COURIER

Our Reference : WO-2324-001675

16.06.2023

To,

Sun India Fire Safety Systems (C20231)
Kind Attn. :Mr. Rajendra Kumar Jethi
211, Sangam Apartment,
Pocket-24, Sector-24,
Rohini,
Delhi-110085
Delhi ,India
(M) :9871240226

Subject : Submission of Test Report & Invoice
Reference : SIF/ERDA/CE(MM)/23-24/28, 02.05.2023

Dear Sir,

With reference to your communication referred above, we are pleased to submit our Test Report No: RP-2324-007104 & Invoice No. SINV-2324-04194 dated 16-06-23 for the testing of samples sent by you.

Please find enclosed herewith Test Report Acknowledgement Form. You are requested to kindly acknowledge the receipt of Test Report and forward the form to the undersigned. We have also started publishing the gist of type test Reports in our website , subject to receipt of your consent. Our request letter for the same and the consent letter format required on your letter head with Stamp and signature is also enclosed here with. We request you to kindly Provide your consent to receive better publicity of your product.

In order to improve our services your feedback in the attached Feedback Form shall be appreciated.

Please arrange to collect the tested sample(s) personally or through your authorized representative with a letter of authority within 30 days from the date of this letter. Please note that ERDA will not be responsible for its safe custody beyond 30 days. The Sample(s) will be disposed off after that date. No claim, in this regard will be entertained.

In case of any complaint of disagreement regarding the test results, please inform immediately on e-mail ID crm@erda.org but not later than 30 days.

Note: This is system generated document hence no signature is required

Encl:

1. Test Report No. : RP-2324-007104
2. Invoice No. : SINV-2324-04194
3. Test Report Acknowledgement Form
4. Feedback Form

ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)

Head Office

ERDA Road, G. I. D. C., Makarpura,
Vadodara - 390 010, Gujarat, India.
T: +91 265 3043128-31, 2642942 | F: +91 265 2638382
Toll Free No: 1800 233 2668 | E: erda@erda.org

Registered Office & ERDA (West) Laboratory

R-336, TTC Industrial Area, MIDC Rabale,
Thane-Belapur Road, Navi Mumbai - 400 701.
T: +91 22 27606212/13/14 | E: erdarab@erda.org
Toll Free No: 1800 233 2668 | W: www.erda.org

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(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)

ERDA Road, GIDC, Makarpura, Vadodara - 390 010, Gujarat, India.

Tel.: +91-265-3043129-31, 2642942, 2642964, Toll Free : 1800 233 2668, Fax: +91-265-2638382

E-mail: erda@erda.org, crm@erda.org, Web: www.erda.org

**Tax Invoice**

To, Sun India Fire Safety Systems (C20231) Kind Attn.: Mr. Rajendra Kumar Jethi 211, Sangam Apartment, Pocket-24, Sector-24, Rohini, Delhi-110085 Delhi, India GSTIN/Unique ID : 07ABXFS3748K1Z9 State Code : DL Place of Supply : Delhi P.A.N. No. : ABXFS3748K	No. :	SINV-2324-04194	
	Date :	16-June-2023	
	Section:	HO-SCL2	
	IRN No:	74fc24befd87b9ed94cec755e52610863fb50103afae37e78 50d8f149010bc24	

Test Report Ref. :	RP-2324-007104
Your Ref. No. :	SIF/ERDA/CE(MM)/23-24/28, 02.05.2023
Received Date :	4-May-2023
BIS Code :	NA

SPECIMEN : FRP Isolators ROD

Sr. No.	Particulars	No. of Samples	Amount(INR)
1)	Development and Verification Testing	1	29,900.00
	Add : Additional Charges		0.00
	Less : Line Discount		0.00
	Less : Invoice Discount		0.00
	Taxable Value		29,900.00
	Add : IGST (18%)		5,382.00
	Add : Invoice Rounding		0.00
Total Rounded Amount			35,282.00

NOTE :

- Discrepancy if any, in this invoice, may please be intimated within 15 days from the date of invoice.
- For Payment through NEFT/RTGS the customer code (C20231) shall invariably be mentioned.
- Our Bank Details : Bank :IOB, SB Account No 156901000000002 , IFSC No. IOBA0001569 ,Swift code no :IOBAINBB001

E. & O.E.

for Electrical Research & development Association

Authorized Signatory

Work Order No: WO-2324-001675

Receipt No: _____

Tax is not payable on Reverse Charge Basis

Quote No : SQ-2324-000718**SAC : 998112-Research And Experimental Development Services in Engineering And Technology.**GSTIN: 24AAATE0499H2ZRPAN No: AAATE0499HTAN No: BRDE00131F

ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

ERDA Road, Makarpura Industrial Estate, Vadodara-390 010, India.

EPABX : +91 (0265) 2642942, 2642964, 2642377, 3043128 / 29 / 30 / 31 / 33,

Fax : +91 (0265) 2638382,

E-mail : erda@erda.org

Web : http://www.erda.org



TEST REPORT

SHEET 1 OF 5

NAME & ADDRESS OF CUSTOMER SUN INDIA FIRE SAFETY SYSTEMS 211, Sangam Apartments, Pocket - 24, Sector -24, Rohini, Delhi. 110085.	TEST REPORT NO.: RP-2324-007104 DATE OF ISSUE: 06/06/2023	
	CUSTOMER REF. NO: SIF/ERDA/CE(MM)/ 23-24/28	DATE: 02/05/2023
NAME OF MANUFACTURER ARC INSULATION & INSULATORS PVT. LTD.	DATE OF SAMPLE RECEIPT: 04/05/2023	DATE OF TESTING: 31/05/2023 to 05/06/2023
	SAMPLE DESCRIPTION (As provided by customer) 1C X 25 Sq. mm, 10 M Length PVC insulated ISI marked Flexible copper cable with accessories. Rated Voltage: 1100 V, Rated Current:80 A Rated Frequency: 50 Hz Rated Insulation Level: 3kVrms Length of cable with clamps: 10 Meter Cross section area of cable: 25 sq. mm Copper Rated short circuit current & its duration: 8 kArms for 1 sec. with 20 kApeak Quantity (tested): 1 No.	
TEST DETAILS Short - circuit current test (Cl. No. 5.7)		SAMPLE IDENTIFICATION ERDA SAMPLE CODE NO: ERDA-00518567 TYPE DESIGNATION: 1C X 25 Sq. mm PVC INSULATED ISI MARKED FLEXIBLE COPPER EARTHING CABLE
ENCLOSURES: Number of oscillograms : One Number of photograph : One Number of test circuit diagram : One Number of drawings : Two		TEST SPECIFICATIONS As per customer's requirement & test procedure followed as per IEC 61230 : 2008
TEST WITNESSED BY: Mr. Paviter Bakaya (Managing Partner, Sun India Fire Safety Systems)		
NOTE: Test was performed only one time as declared by customer.		
REMARKS: The sample conforms to the requirements of standard for short-circuit current test as specified by customer.		
CHECKED BY 	MUNAF PATEL APPROVED BY	

Note:

1. This report relates only to the particular sample received for testing in good condition at ERDA Vadodara.
2. This report cannot be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. This report shall not be used for any purpose such as PR brochures, propaganda, advertisement and/or legal proceedings, unless for the granted purpose.
5. Only the tests asked for by the customer have been carried out.
6. Particulars of manufacturer/supplier, given in this report are based on information supplied by the customer, along with the test request/sample. ERDA does not assume any responsibility for the correctness of the information for above mentioned Sample Under Test (SUT). ERDA will not be responsible for any changes in SUT made after the test. This test report is given as per instrument status while testing.
7. In case of any dispute, Vadodara will be the exclusive jurisdiction & shall be construed as where the cause has arisen.

Caution: ERDA is not responsible for the authenticity of photocopied or reproduced test reports.
ERDA provides support to customers for verification of the authenticity of test reports issued by ERDA within 10 years of date of issue of report.

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ERDA Road, Makarpura Industrial Estate, Vadodara-390 010, India.

EPABX: +91 (0265) 2642942, 2642964, 2642377, 3043128 / 29 / 30 / 31 / 33,

Fax : +91 (0265) 2638382,

E-mail : erda@erda.org

Web : http://www.erda.org



TEST REPORT NO.: RP-2324-007104

SHEET 2 OF 5

DATE OF ISSUE: 06/06/2023

Contents			
Short - circuit current test		Sheet No. 3 OF 5	
Oscillogram		Sheet No. 4 OF 5	
Photograph		Sheet No. 5 OF 5	
Oscillogram No.		0134/01	
Photograph No.		2324-001675/0110	
Test circuit diagram No.		OLSC/SWG/96	
Drawing No.	Issue Status		Description
	Revision	Date	
ARC/FRP/22-23/0006 SHEET - 01	00	06.07.2022	ALUMINIUM CONDUCTOR CLAMP
ARC/FRP/22-23/06 SHEET - 01	00	15.06.2022	FRP DISCHARGE ROD

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TEST REPORT NO.: RP-2324-007104
DATE OF ISSUE: 06/06/2023

SHEET 3 OF 5

SHORT - CIRCUIT CURRENT TEST:
(Cl. No. 5.7)

The short circuit current test was performed on the sample connected to the source as per test circuit diagram No. OLSC/SWG/96.

Condition of the equipment under test: New.

Supply frequency: 50 Hz.

Test No.	Oscillo-gram No.	Short circuit current (Test Current) (kA)		Duration (Test Time) (t _t) (sec.)	I ² t Value (Joule Integral) (A ² s x 10 ⁶)	Test Voltage (Vrms)	Observation During test
		Test first loop peak current (I _{tm})	A.C. Component of the test current (I _t)				
01	0134/01	20.216	8.064	1.002	64.946	149	No Current Interruption Observed

Observation after test:

- No abnormality was observed.
- No arcing observed.
- Insulation was hardened and blackened & burned out through the cable.
- No distortion in voltage and current.
- There was no current interruption during the test time.
- The value of test time, joule integral measured were in accordance as per standard.

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Fax : +91 (0265) 2638382,

E-mail : erda@erda.org

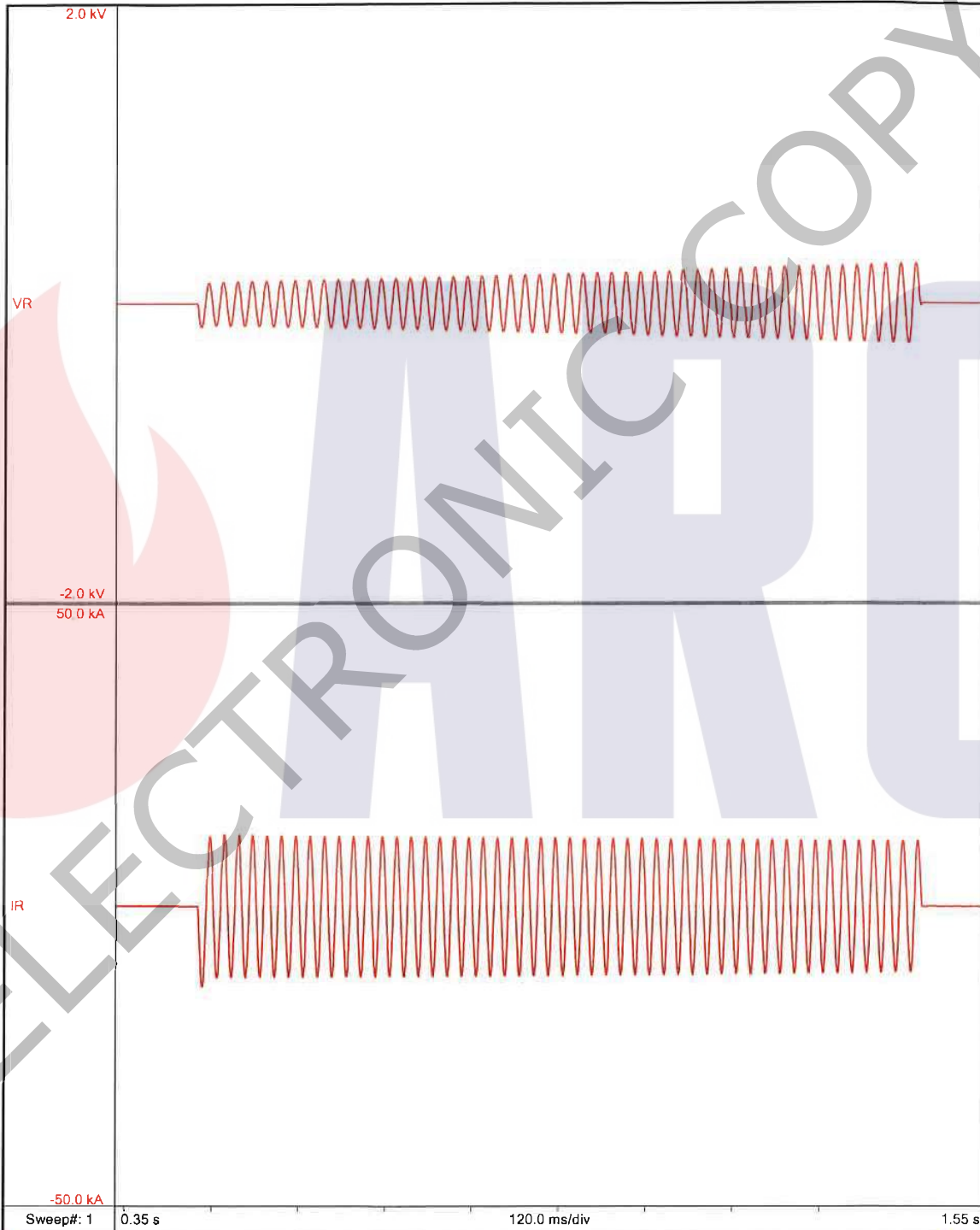
Web : http://www.erda.org



TEST REPORT NO.: RP-2324-007104

SHEET 4 OF 5

DATE OF ISSUE: 06/06/2023



2382508

OSCILLOGRAM NO. : 0134/01

CHECKED BY



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Fax : +91 (0265) 2638382,

E-mail : erda@erda.org

Web : <http://www.erda.org>



TEST REPORT NO.: RP-2324-007104

SHEET 5 OF 5

DATE OF ISSUE: 06/06/2023

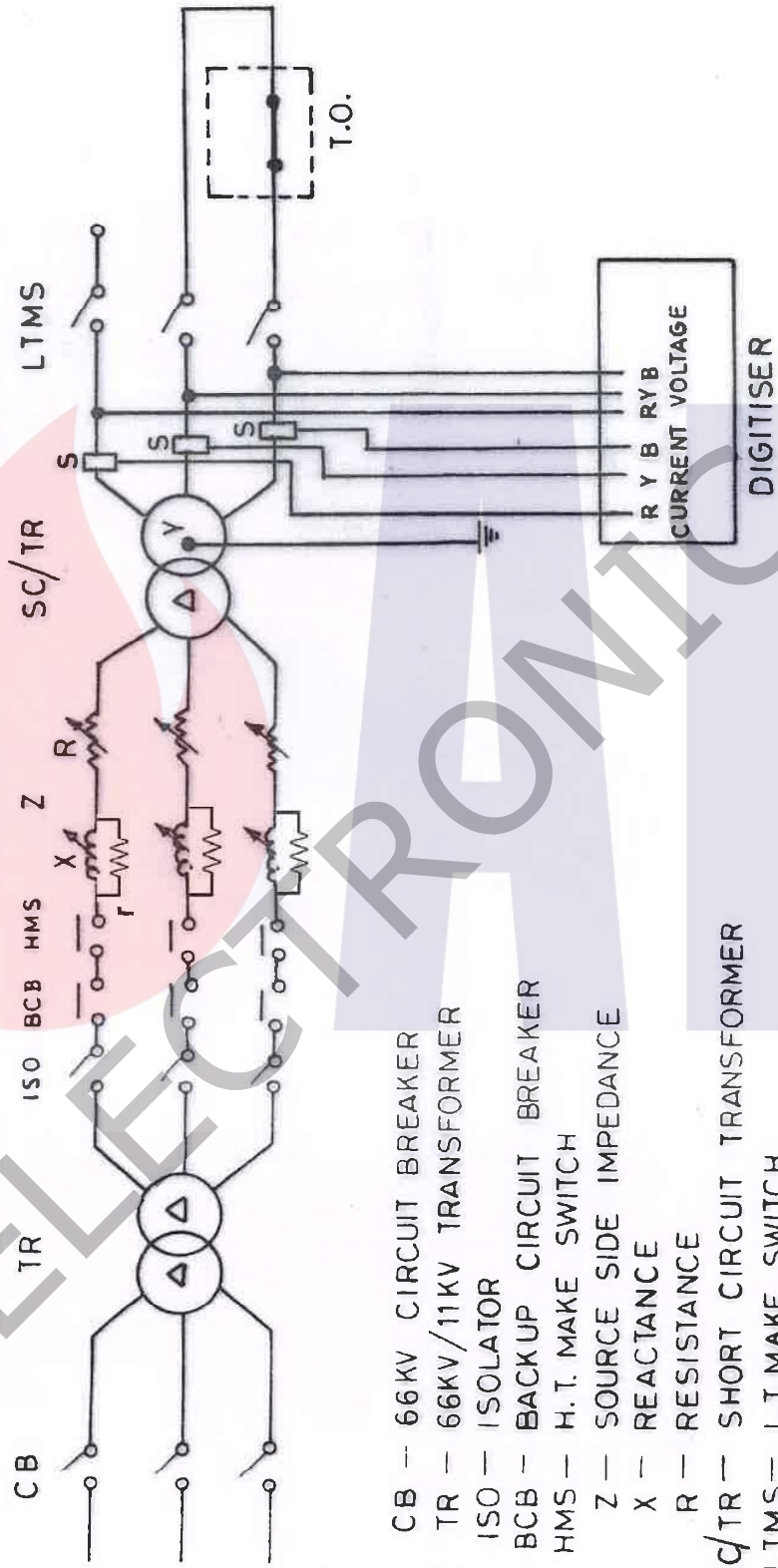


CHECKED BY

***** End of Test Report *****

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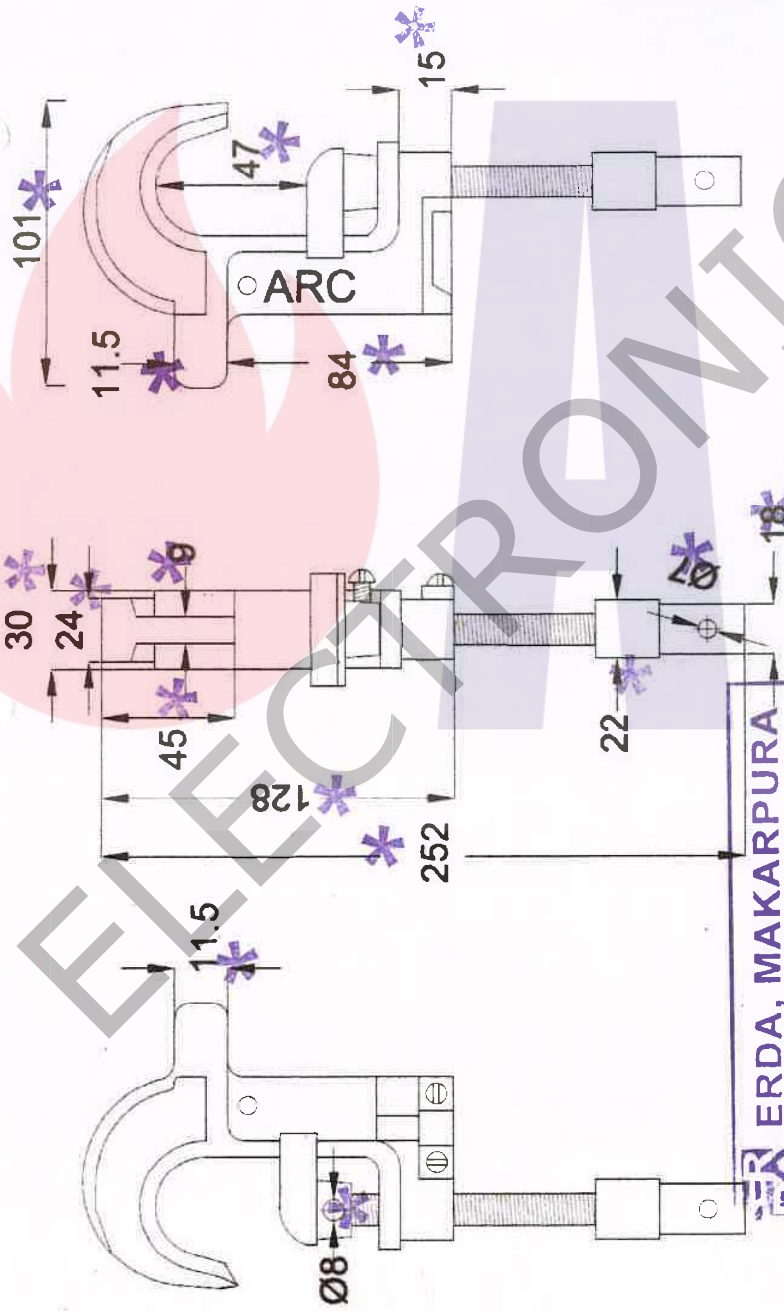
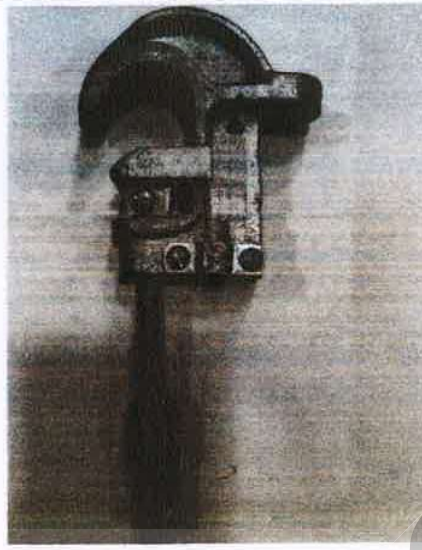
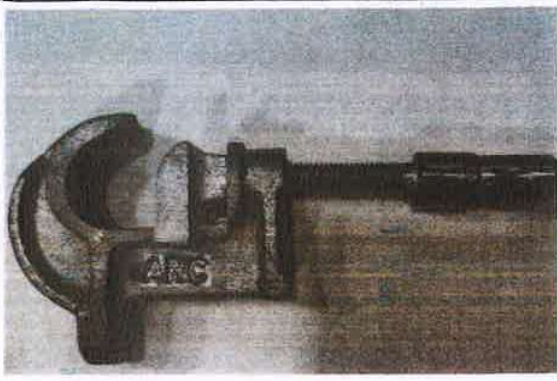


- CB — 66KV CIRCUIT BREAKER
- TR — 66KV/11KV TRANSFORMER
- ISO — ISOLATOR
- BCB — BACKUP CIRCUIT BREAKER
- HMS — H.T. MAKE SWITCH
- Z — SOURCE SIDE IMPEDANCE
- X — REACTANCE
- R — RESISTANCE
- SC/TR — SHORT CIRCUIT TRANSFORMER
- LTMS — L.T. MAKE SWITCH
- I.O. — TEST OBJECT
- S — SHUNTS
- r — SHUNT RESISTOR



RP-2324-007104
06/06/2023

ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION		SCHEMATIC CIRCUIT DIAGRAM	
DRN. BY	CKD.	DATE	DRG. NO.
S. B.S.	A.V.B.	10-6-98	OLSC/SWG/96



ERDA, MAKARPURA

Test Report No. RP-2324-007104

Date 06/06/2023

Product Flexible Copper cable with Accessories

Verified by _____

Verification of this drawing by ERDA is limited to relevant dimensional checks only. Verified dimensions are marked with '*'.



DRG / 09-001



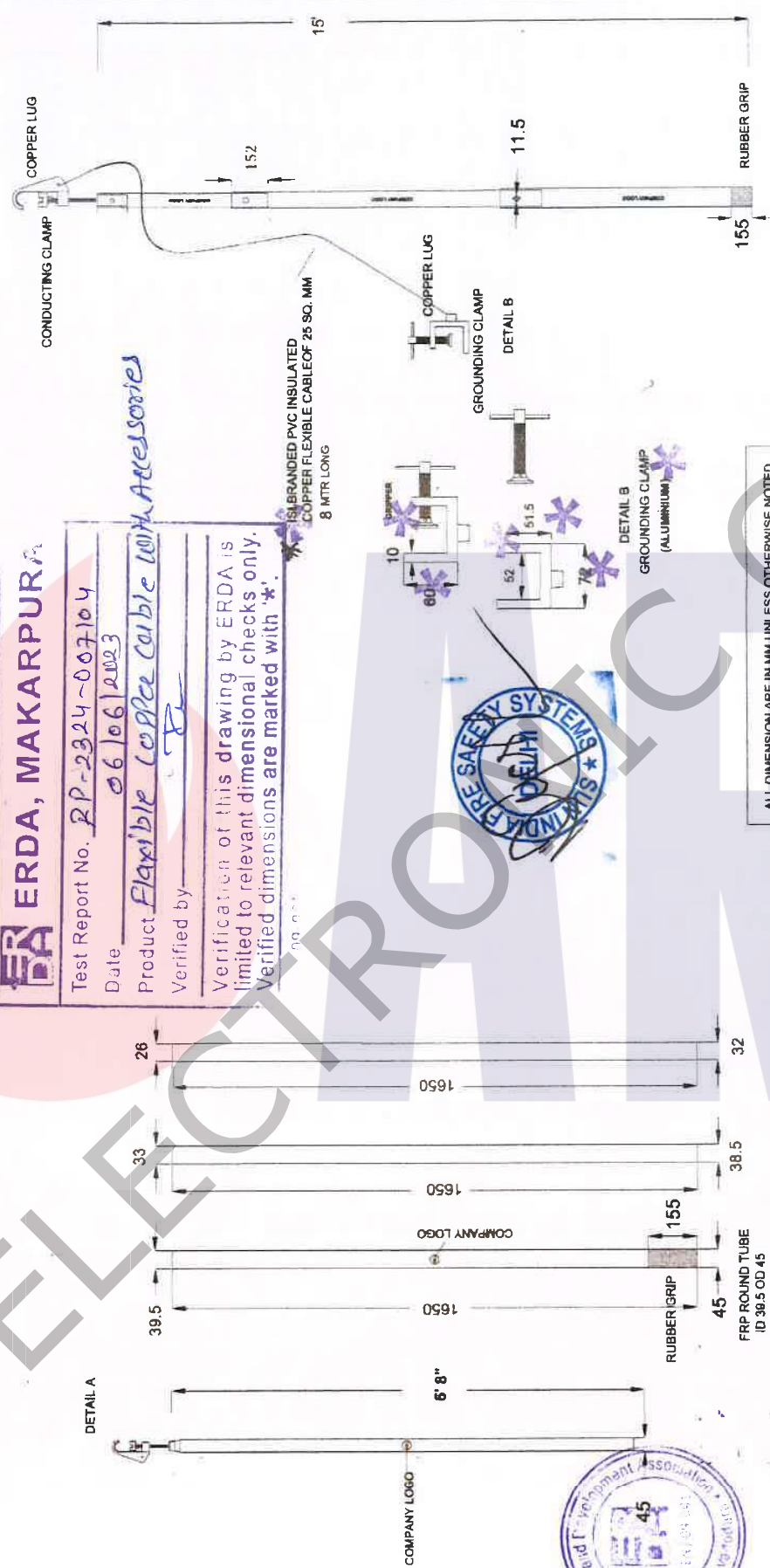
NOTES

1. ALL DIMENSION ARE IN MM
2. AS CASTING MATERIAL TOLERANCE SHALL BE +/- 3 MM
3. CLAMP MOC: ALUMINIUM *

ARC			
ARC INSULATION & INSULATORS PVT. LTD.			
VILL - RAMDEVPUR, P.O - BAWALI, DIST - 24 PGS. (S)			
DRAWN BY: SUBHADIP	DATE: 06.07.2022	REV - 00	SHEET - 01
CHECKED BY: ANUP	CLIENT - HIMACHAL PRADEH STATE ELECTRICITY BOARD		
APPROVED BY: MANISH	CONTRACTOR -		
TITLE - ALUMINIUM CONDUCTOR CLAMP			DRG. NO. - ARC/FRP/22-23/0006

ERDA, MAKARPUR

Test Report No. RP-2324-007104
 Date 06/06/2023
 Product Flexible Copper Cable Tools Accessories
 Verified by [Signature]
 Verification of this drawing by ERDA is limited to relevant dimensional checks only. Verified dimensions are marked with '*'.
 09.05.23



ALL DIMENSION ARE IN MM UNLESS OTHERWISE NOTED
 NO SCALE
 CASTING MATERIAL TOLERANCE +/- 3 MM

* Observation: During Testing 10 mtr. cable was used.

SL. NO.	DESCRIPTION	QTY	UOM
1	FRP ROUND TUBE ID 30.5 OD 45 L - 1650 MM	01	NOB
2	FRP ROUND TUBE ID 33 OD 38.5 L - 1650 MM	01	NOB
3	FRP ROUND TUBE ID 26 OD 32 FOAM FILLED L - 1650 MM	01	NOB
4	RUBBER GRIP	01	NOB
5	GROUNDING CLAMP WITH GRIPPER	01	NOB
6	CONDUCTING CLAMP	01	NOB
7	IS BRANDED 8C COPPER FLEXIBLE CABLE L - 8 MTR	01	NOB

ARC
ARC INSULATION & INSULATORS PVT. LTD.
 VILL - RAMDEVPUR, P.O. - BAWALI, DIST - 24 PGS. (S)
 DRAWN BY: SUBHADIP DATE: 15.06.2022 REV - 00 SHEET - 01
 CHECKED BY: ANUP CLIENT - HIMACHAL PRADESH STATE ELECTRICITY BOARD
 APPROVED BY: MANISH CONTRACTOR -
 TITLE - FRP DISCHARGE ROD DRG. NO. - ARC/FRP/22-23/06

