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ULR-TC609319000030909F

TEST REPORT

NAME & ADDRESS OF CUSTOMER M/s. TOROTRANS, S,No. 49/1A, Gokul Nagar, Vrindavan Nagar, Lane No. 2, Katraj Road, Kondhwa (BK), Pune-411 048.	**REPORT NO.** : RP-1920-025541 **DATE** : 9-October-2019 **CUSTOMER REF. No. & DATE:** Nil Dated 08/09/2019 **DATE OF SAMPLE RECEIPT** : 30-September-2019 **START DATE OF TESTING** : 3-October-2019 **END DATE OF TESTING** : 3-October-2019
SAMPLE DESCRIPTION Current Transformer Make :TOROTRANS; Ratio : 2500/5 A ; Burden: 15VA; Accuracy Class :5P; ALF:20; N.S.V./H.S.V.: 0.66/0.72 kV; B.I.L.: 0.66/3 kV ; Frequency :50 Hz ; Type: Tape Wound; Insulation Class: A; No of Core: 01	**SAMPLE IDENTIFICATION** SERIAL No.: 619593/09/2019 ENCLOSURES: 1) Annexure-I (sheet : 01 No.) 2) Drawing Nos.: TW-CT–01 Rev.: 2 ERDA SAMPLE CODE No. :ERDA-00337148

TEST DETAILS

Test Details as per sheet 2 of 5

REMARKS:
The sample conforms to the requirement of above mentioned test specification with respect to test carried out.

CHECKED BY

NITIN DOSHI
APPROVED BY

NOTE :
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TEST REPORT NO.: RP-1920-025541 **SHEET :** 2 OF 5

DATE : 9-October-2019

Sr. No.	TEST DETAILS	TEST SPECIFICATIONS
1	Verification of markings	As per Cl. No.7.3.6 of IS 16227 (Part 1) : 2016
2	Power frequency voltage withstand test on primary terminals	As per Cl. No. 7.3.1 of IS 16227 (Part 2) : 2016
3	Power-frequency voltage withstand tests on secondary terminals	As per Cl.No. 7.3.4 of IS 16227 (Part 1) : 2016
4	Inter-turn overvoltage test	As per Cl.No. 7.3.204 of IS 16227 (Part 2) : 2016
5	Test for ratio error and phase displacement of class P and PR protective current transformers	As per Cl.No. 7.3.5.202 of IS 16227 (Part 2) : 2016
6	Test for composite error of class P and PR protective current transformers	As per Cl.No. 7.3.5.203 of IS 16227 (Part2) : 2016

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TEST REPORT NO.: RP-1920-025541 **SHEET :** 3 OF 5

DATE : 9-October-2019

TEST RESULT:

1. **Verification of markings**
   (As per Cl. No.7.3.6 of IS 16227 (part 1) : 2016)

   a) Primary winding terminals : P1-P2

   b) Secondary winding terminals : S1-S2

   c) The terminals marked clearly and indelibly.

   d) All terminals marked and have the same polarity.

   e) Terminal marking and Polarity found ok.

   REMARKS: Conforms

2. **Power frequency voltage withstand test on primary terminals.**
   (As per Cl. No. 7.3.1 of IS 16227 (part 2) : 2016)

   The power frequency voltage of 3 kV (rms) was applied between the primary Windings terminals (all) connected together and the earth. The secondary winding terminals and body were shorted and connected to the earth. The test voltage was applied for one minute. There was no disruptive discharge observed.

   The test object withstood the test voltage satisfactorily.

   REMARKS: Conforms

3. **Power frequency voltage withstand test on secondary terminals.**
   (As per Cl. No. 7.3.4 of IS 16227 (part 1) : 2016)

   The power frequency voltage of 3 kV (rms) was applied between the secondary Windings terminals (all) connected together and the earth. The primary winding terminals and body were shorted and connected to the earth. The test voltage was applied for one minute. There was no disruptive discharge observed.

   The test object withstood the test voltage satisfactorily.

   REMARKS: Conforms

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4. Inter-turn overvoltage test.
(As per Cl.No. 7.3.204 of IS 16227 (Part 2) : 2016)

PROCEDURE-A

With secondary winding connected to oscilloscope, a substantially sinusoidal current at 50 Hz frequency & of rms value equal to rated primary current (i.e. 2500 A) was applied for 60 seconds to the primary winding.

The test object withstood the test voltage for S1-S2 of secondary site for 60 seconds.

REMARKS: Conforms

5. Test for ratio error and phase displacement of class P and PR protective current transformer (As per Cl.No. 7.3.5.202 of IS 16227 (Part2) : 2016)

% OF RATED CURRENT	RATIO ERROR IN %	PHASE DISPLACEMENT IN MIN.

RATIO : 2500/5 A, BURDEN : 15 VA, CLASS : 5P, CORE : S1-S2

BURDEN : 100 % at 0.8 P.F.		
100	-0.058	2.13

REMARKS: Conforms

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TEST REPORT NO.: RP-1920-025541 **SHEET :** 5 OF 5

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6. Test for composite error of class P and PR protective current transformers:
(As per Cl.No. 7.3.5.203 of IS 16227 (Part 2) :2016)

Secondary winding terminals	S1-S2
Secondary winding Resistance @ 28.5° C	0.760 Ω
Resistance @ 75 ° C	0.894 Ω
Ratio	2500/5A
S.L.V. Computed	142.04 V
Excitation Current Measured	35.70 mA
Composite Error	0.04 %

REMARKS: Conforms

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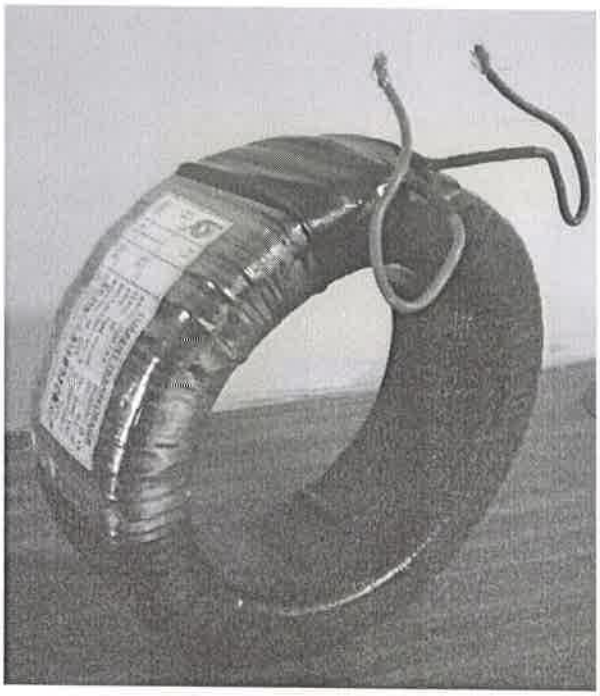
ANNEXURE-I

TEST REPORT NO.: RP-1920-025541 **SHEET :** 1 OF 1

DATE : 9-October-2019

PHOTOGRAPHS OF TEST SAMPLE



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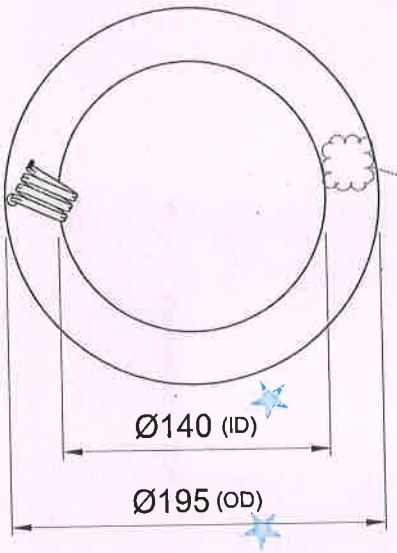
TAPE WOUND PROTECTION CURRENT TRANSFORMER

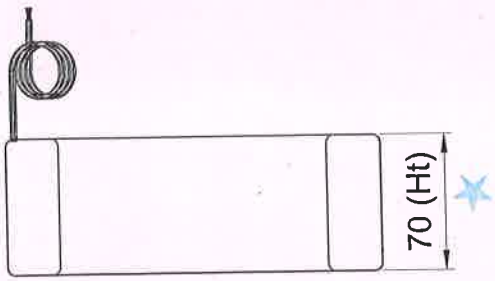
Specifications

Ratio	2500 / 5A
Class	5P
Type	Tape Wound
Insulation Class	A
Batch No. ~~Sr.No~~ Sr.No	08/2019 619599/09/2019

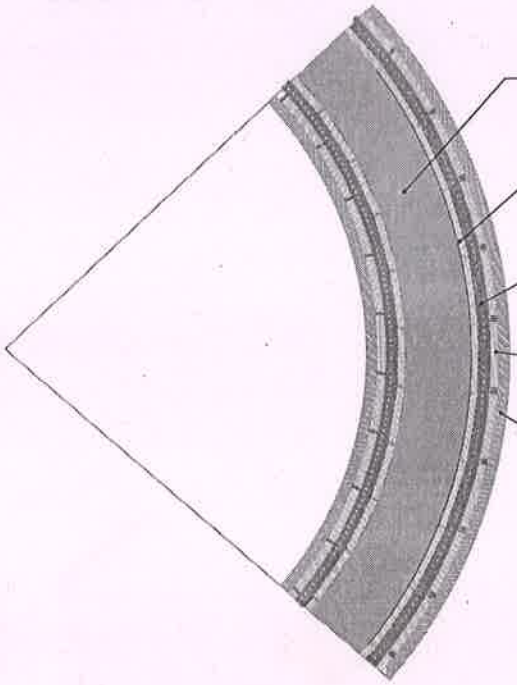
Burden	15 VA
ISF: --	ALF: 20
I.L.	0.66 / 3 KV
IS	16227 / ~~2012~~ 2016
CPS	50 Hz

Product Sketch





Sectional View



Product Image

Test Report No. RP-1920-02554
Date 9/10/19
Product
Verified by
Verification of this drawing by ERDA is limited to relevant dimensional checks only. Verified dimensions are marked with '*'

All dimensions are in mm. and Tolerance ±3%

Document No.: TW-CT-01	Document Rev.: 2	Date of Issue.: 14/09/2019

Document Title: Preliminary Drawing of Tape Wound Protection Current Transformer

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