



Certificate No. : TC-5389

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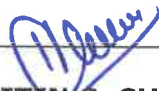
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**TEST REPORT**

ULR No.: TC538920000025832F

Sheet No.: 1 of 6

NAME & ADDRESS OF CUSTOMER : M/s. Laxmi Electronics 1383, Dattanagar, Bamanoli, MIDC, Kupwad, Sangli - 416436	REPORT NO. : RP-2021-021440	
	DATE OF ISSUE : 02/12/2020	
	CUSTOMER REF. NO. : NIL	
	DATED : 30/11/2020	
	DATE OF SAMPLE RECEIPT	DATE OF TESTING
	30/11/2020	01/12/2020
SAMPLE DESCRIPTION : AIR CORE DRY TYPE SERIES REACTOR RATED KVAR : 2.42 KVAR RATED VOLTS : 11000 V RATED CURRENT : 165.75 A NO. OF PHASE : 01 TYPE OF COOLING : AN FREQUENCY : 50 Hz REACTANCE : 0.088 Ohm B.I.L. : 28 kVrms / 75 kVp	SAMPLE IDENTIFICATION : SR. NO. : 3107 YEAR OF MFG. : 2020 MFG. BY : M/s. Laxmi Electronics ERDA Sample Code No.: ERDA-00391692	
TEST DETAIL : Lightning Impulse Test on T1 Terminal at 75 kVp.	TEST SPECIFICATION : As per IS:2026 (Part-6)-2017, Cl.No. 8.9.12 & Test Procedure was followed as per IEC:60076-3-2018 Cl. No. 13.2 Amendment No. 1	
ENCLOSURE : DRG. NO.: i) LE-GA-03-11-20 REVISION 00 ii) LE-NP-04-11-20 REVISION 00		
WITNESS BY: 1. Mr. Vaibhav Jamdar - M/s. Laxmi Electronics 2. Mr. Tushar Teli - M/s. Laxmi Electronics		
REMARKS : From the observation of enclosed oscillographic records, it is concluded that the sample conforms to the requirements of the above mentioned standard with respect to the test carried out.		
 PREPARED BY	 CHECKED BY	 NITIN S. CHITTE APPROVED BY
Note : 1. This report relates only to the particular sample received in good condition for testing 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. Only the tests asked for by the customer have been carried out. 5. In case of any dispute, Vadodara will be the exclusive jurisdiction & shall be constructed as where the cause has arised		
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Discipline: Electrical

TEST REPORT NO.: RP-2021-021440

DATE OF ISSUE : 02/12/2020

Group : Inductors and Transformers

SHEET 2 OF 6

Waveform	Comment	Ut / kVp	T1 / μ s	T2 / μ s	Tc / μ s
T1 TERMINAL					
1	LI RW	-44.888	1.179	50.519	
2	100% LI FW	-74.750	1.179	49.816	
3	100% LI FW	-74.991	1.180	49.811	
4	100% LI FW	-75.183	1.186	49.843	

TC 3051952

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Discipline: Electrical

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TEST REPORT NO.: RP-2021-021440

SHEET 3 OF 6

DATE OF ISSUE : 02/12/2020

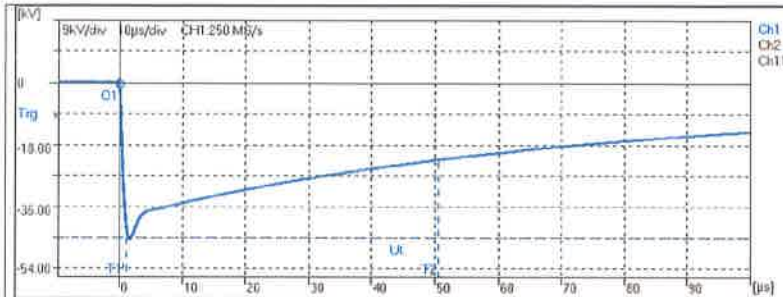


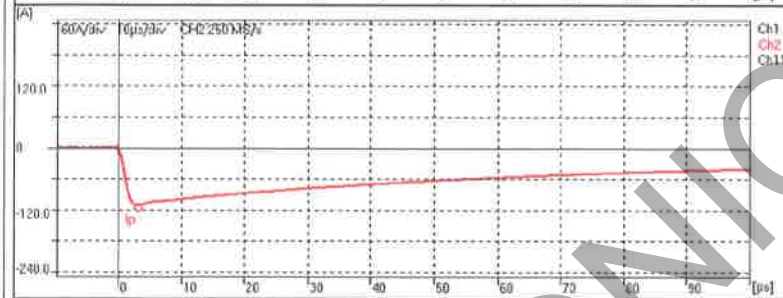
Fig.: 1

$U_p = -44.89 \text{ kV}$

$T_1 = 1.18 \text{ } \mu\text{s}$

$T_2 = 50.52 \text{ } \mu\text{s}$

$T_c = \text{ } \mu\text{s}$



Comment: LI RW

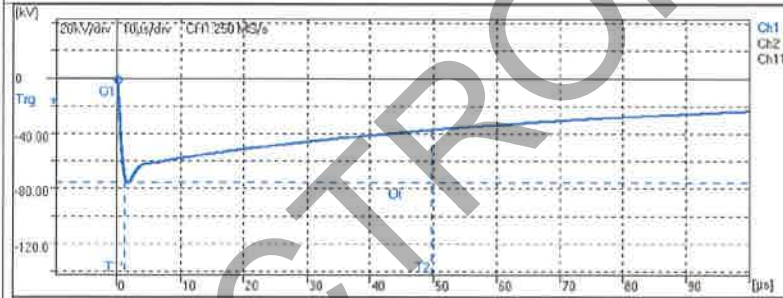


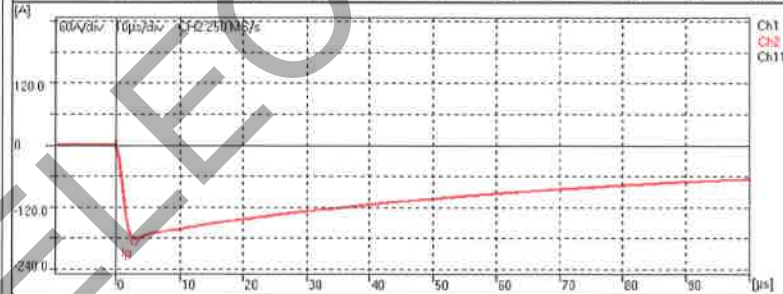
Fig.: 2

$U_p = -74.75 \text{ kV}$

$T_1 = 1.18 \text{ } \mu\text{s}$

$T_2 = 49.82 \text{ } \mu\text{s}$

$T_c = \text{ } \mu\text{s}$



Comment: 100% LI FW

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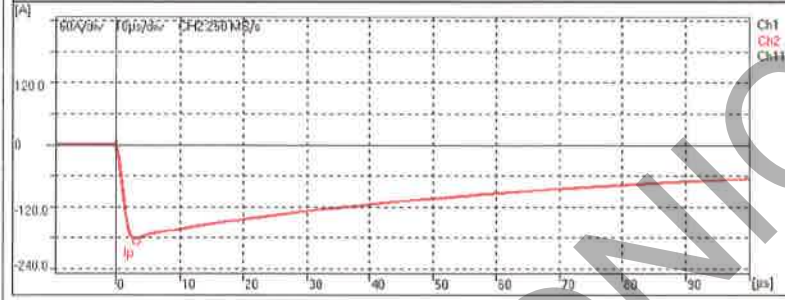
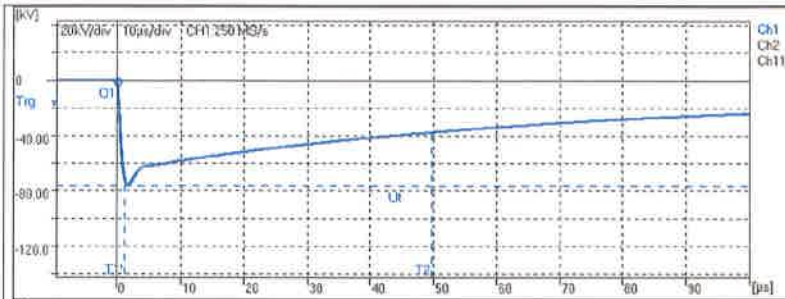
Discipline: Electrical

Group : Inductors and Transformers

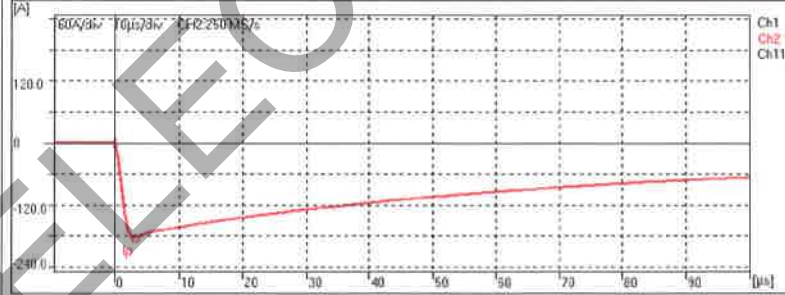
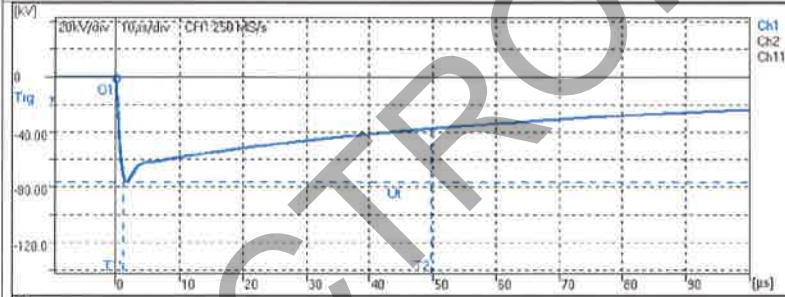
TEST REPORT NO.: RP-2021-021440

SHEET 4 OF 6

DATE OF ISSUE : 02/12/2020



Comment: 100% LI FW



Comment: 100% LI FW

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TEST REPORT NO.: RP-2021-021440

DATE OF ISSUE : 02/12/2020

Group : Inductors and Transformers

SHEET 5 OF 6

PHOTOGRAPH OF TEST SAMPLE



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TEST REPORT NO.: RP-2021-021440

SHEET 6 OF 6

DATE OF ISSUE : 02/12/2020

PHOTOGRAPH OF RATING AND TERMINAL MARKING PLATE



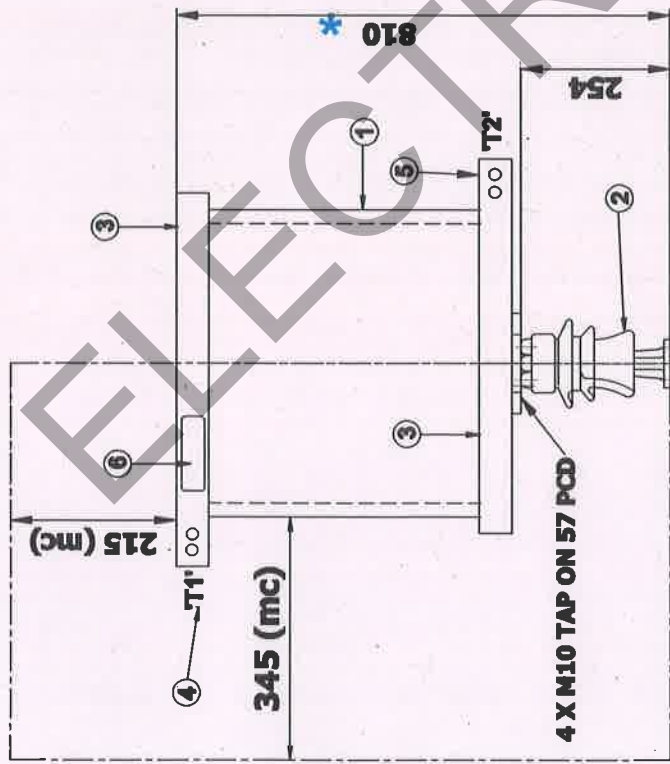
ELECTRONIC COPY

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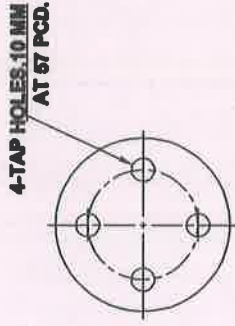


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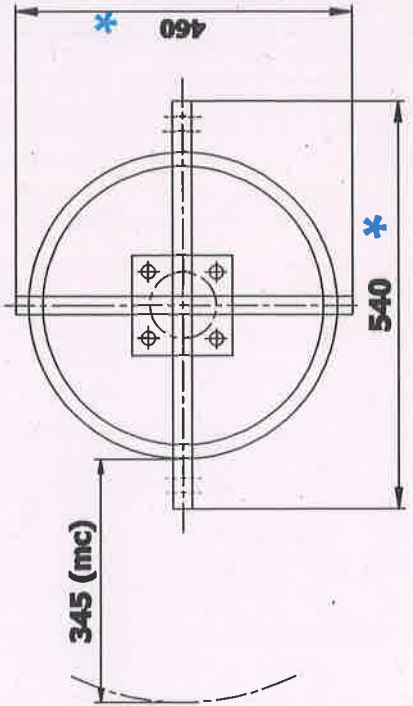
TC 3051956



FOUNDATION DETAIL AT 'D'



ELEVATION



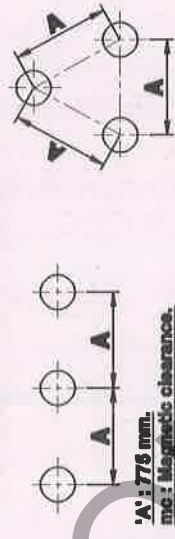
PLAN

Verification of this drawing
INCOMING & OUTGOING TERMINALS (T1, T2)
 dimensional checks only.
 Verified dimensions are marked with '*'.
 Note: The manufacturer has guaranteed that the equipment is (No.) fitted for REVISION MADE ON DATE DRN CHD
 CUSTOMER NAME:- accordance verified by
 REF: AIR CORE REACTOR SUITABLE FOR 3 MVAR, 12.65 KV/3 PH CAP. BANK.
 TITLE :- G.A. DRAWING OF AIR CORE, AIR COOLED, 11 KV, 2.42 KVAR ALUMINIUM WOUND, OUTDOOR, DRY TYPE SERIES REACTOR.

No.	BILL OF MATERIAL	QTY
1	REACTOR COIL	1
2	11 KV POST INSULATOR	1
3	ALUMINIUM CLAMPING SPIDER	2
4	INCOMING TERMINAL 'T1'	1
5	OUTGOING TERMINAL 'T2'	1
6	RATING AND DIAGRAM PLATE	1

TYPE OF REACTOR	REF. SPECIFICATION	COOLING	REACTOR RATING (KVAR)	SYSTEM VOLTAGE (KV)	INDUCTANCE (mH)	NO. OF PHASES	RATED CURRENT (AMP)	SHORT TIME CURRENT	MAX. CONT. CURRENT	FREQUENCY (HZ)	INSULATION LEVEL (KV / KVP)	INSULATION CLASS	TEMP. RISE IN WINDING OVER AMBIENT (°C)	TOTAL WEIGHT WITH POST INSULATOR IN Kgs. (APPROX.)
"LAXMI ELECTRONICS" MAKE AIR CORE, DRY TYPE ALU. WOUND OUT DOOR TYPE REACTOR	IS :- 2026 PART - 6	AN	2.42	11	0.280	ONE	165.75	276 KA / 2 Sec.	130 % In	50	26/75	F	90°	~33

MINIMUM DISTANCES BETWEEN COILS.



- NOTES :-
- 1) ALL DIMENSIONS ARE IN mm.
 - 2) DRAWING NOT TO SCALE.
 - 3) OVERALL DIMENSIONAL & WEIGHT TOLERANCE ± 10%.
 - 4) ALL TERMINALS ARE ALUMINIUM.

LAXMI ELECTRONICS
 1363, DATTANAGAR,
 MIDC, KUPWAD, SANGLI-416 436

DRAWN	SIGN	DATE	DRAWING NO.:
VCJ	VCJ	05-11-2020	LE-GA-03-11-20
CHECKED	CDJ	05-11-2020	REVISION REF.
APPROVED	CDJ	05-11-2020	00 WO-TS-20



LAXMI ELECTRONICS

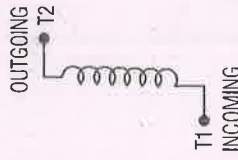
1383, DATTANAGAR, BAMNOLI,
M.I.D.C KUPWAD, SANGLI - 416 436, mail : laxmielectronics2011@gmail.com

AIR CORE DRY TYPE SERIES REACTOR

REF. STD. IS:2326 PART 6

kVAR	2.42	SYSTEM VOLTAGE	11 KV	FREQUENCY	50 Hz	P-HASE	ONE
XL / PHASE	0.088 Ohm	RATED CURRENT	165.75 A	CLASS OF INSULATION	F	ISC	2.76 KA / 2 Sec
MFG. YEAR	2020	WEIGHT Kg.	33 kg	TEMP. RISE	90 °C	BiL	28 KV / 75 kV
CUSTOMER							
P.O. No.							
	S. No. 3107 *						

CONNECTION DIAGRAM



Verification of this drawing by ERDA is limited to relevant dimensional checks only. Verified dimensions are marked with '*'.
Note: The manufacturer has guaranteed that the equipment submitted for tests has been manufactured in accordance with the drawings submitted.

RP-2021-021440
Test Report No. _____
Date 02/12/2020
Product 2.42 kVAR series Reactor
Verified by _____



No.	REVISION MADE	DATE	DRN	CHD
CUSTOMER NAME :- POWER PROJECTS A/C- MSEDCL				
END USER :- MSEDCL				
REF :- AIR CORE REACTOR SUITABLE FOR Capacitor Bank.				
TITLE : NAME PLATE DRAWING OF AIR CORE, AIR COOLED, 11 KV, 2.42 KVAR ALUMINIUM WOUND, OUTDOOR, DRY TYPE SERIES REACTOR.				
DRAWN	VCJ	05-11-2020		
CHECKED	CDJ	05-11-2020		
APPROVED	CDJ	05-11-2020	REVISION	REF.
SHEET :-	4	5	00	WO-1950

- NOTES :-
- 1) ALL DIMENSIONS ARE IN mm.
 - 2) DRAWING NOT TO SCALE.
 - 3) OVERALL DIMENSIONAL & WEIGHT TOLERANCE ± 10%.
 - 4) ALL TERMINALS ARE ALUMINIUM.



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DRAWING NO.:-	
LE-NP-04-11-20	
REVISION	REF.
00	WO-1950