

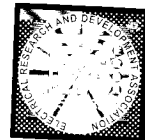


TEST REPORT

SHEET No. : 1 OF 8

NAME & ADDRESS OF CUSTOMER M/s. Diamond Power Transformers Limited Plot No. 101/B/7, G.I.D.C. Estate, Road No. 2, Ranoli - 391 350 Dist. : Vadodara.	TEST REPORT No. : HIMP/01/1797
	DATE : 28/03/2011
	CUSTOMER REF. No. : NIL
	DATE : 28/03/2011
SAMPLE DESCRIPTION DISTRIBUTION TRANSFORMER RATING : 1000 kVA VOLTS : 33000/433 V CURRENT : 17.50/1333.34 A PHASES : 03 COOLING : ONAN FREQUENCY : 50 Hz VECTOR GROUP : Dyn 11 CUSTOMER: Medilux Laboratories Pvt. Ltd. B.I.L. : H.V.: 70 kVrms/170 kVp L.V. : 3 kVrms/---	DATE OF SAMPLE RECEIPT : 28/03/2011
	DATE OF TESTING : 28/03/2011
SAMPLE IDENTIFICATION SR. No. : 12124 YEAR OF MFG. : 2011 MFG. BY : M/s. Diamond Power Transformers Limited ERDA I.D. No. : HIMPWO 00813095	ENCLOSURE Drg. No. : i) T8/1094 A4 Rev. No. 0 ii) T11/1100 A4 Rev. No. 0
	TEST SPECIFICATION IS : 2026 - (Part - III) - 1981, Cl. No. 13
	TEST CONDUCTED : Lightning Impulse Voltage Withstand Test chopped on the tail on all the three phases of HV Side at 170 kVp.
WITNESSED BY : Mr. Navshil Karena -	M/s. Diamond Power Transformers Limited
REMARKS : From the observation of enclosed oscillographic records, it is concluded that the transformer CONFORMS to the requirements of the above mentioned standard with respect to the test carried out.	
PREPARED BY <i>Kalpe</i>	CHECKED BY <i>220</i>
APPROVED BY <i>[Signature]</i>	
Note : 1. This report relates only to the particular sample received in good condition for testing at E.R.D.A. 2. This report cannot be reproduced in part under any circumstances. 3. Publication of this report requires prior permission in writing from Director, E.R.D.A. 4. Only the tests asked for by the customer have been carried out.	

0644335



TEST REPORT No.: HIMP/01/1797
DATE : 28/03/2011

SHEET No.: 2 OF 8

H. V. SIDE

TEST PARAMETERS:

RATED VOLTAGE : 33 kV
TEST VOLTAGE : 170 kVp \pm 3%
WAVE SHAPE : T1 1.401 μ s / T2 53.54 μ s
No. OF PHASE TESTED : 03

H. V. SIDE

Sr. No.	Test Application Detail	Peak Magnitude (kVp)		
		1U-Phase	1V-Phase	1W-Phase
		TAP No. 3	TAP No. 1	TAP No. 5
1.	Reduced Full Impulse Wave	Up -104.6	Up -107.4	Up -103.7
2.	100 % Full Impulse Wave	Up -170.9	Up -171.8	Up -167.6
3.	Reduced Chopped Impulse Wave	Up -105.9	Up -105.3	Up -106.4
4.	100 % Chopped Impulse Wave	Up -170.7	Up -169.0	Up -168.8
5.	100 % Chopped Impulse Wave	Up -169.8	Up -169.9	Up -171.9
6.	100 % Full Impulse Wave	Up -169.6	Up -170.3	Up -169.9
7.	100 % Full Impulse Wave	Up -170.1	Up -170.2	Up -171.8

Krupa

PREPARED BY

WAV

CHECKED BY

TE 0046683



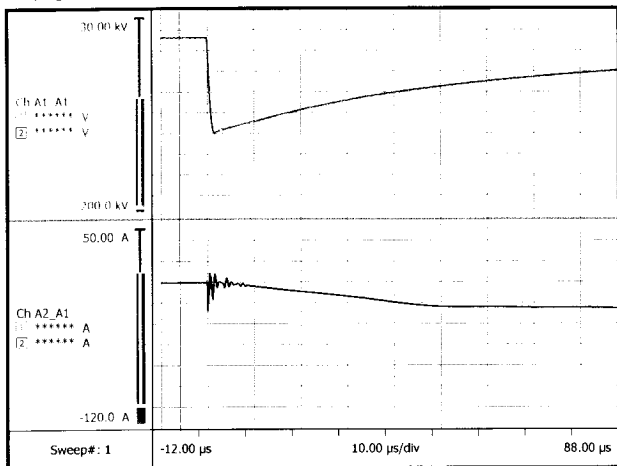
TEST REPORT No.: HIMP/01/1797

SHEET No.: 3 OF 8

DATE : 28/03/2011

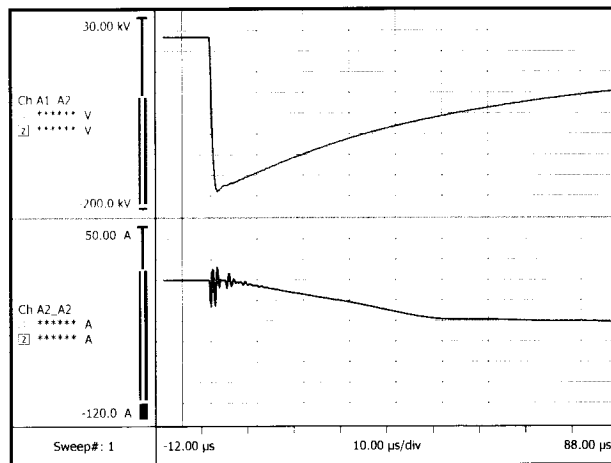
LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER

1U-PHASE



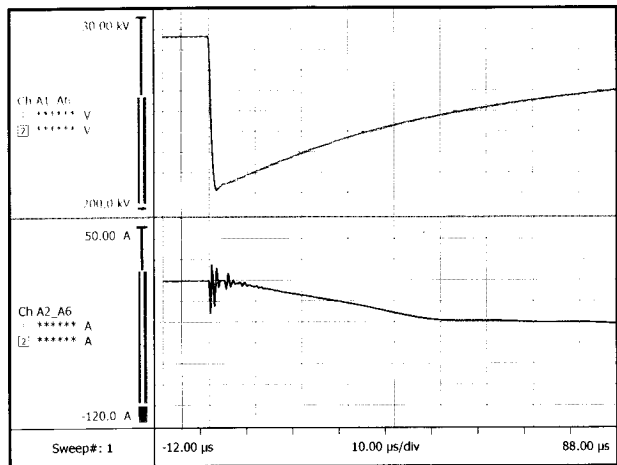
T1 1.401 μs	T2 53.54 μs
Up -104.6 kV	

1. REDUCED FULL IMPULSE WAVE



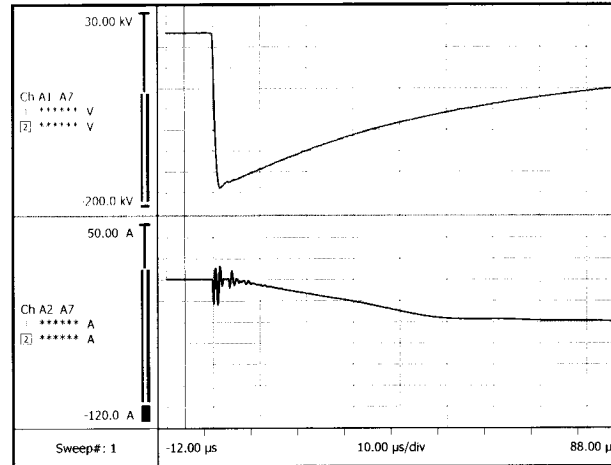
T1 1.401 μs	T2 53.13 μs
Up -170.9 kV	

2. 100% FULL IMPULSE WAVE



T1 1.403 μs	T2 53.72 μs
Up -169.6 kV	

6. 100% FULL IMPULSE WAVE



T1 1.402 μs	T2 53.75 μs
Up -170.1 kV	

7. 100% FULL IMPULSE WAVE

28/03/2011

Kulpa

PREPARED BY

300

CHECKED BY



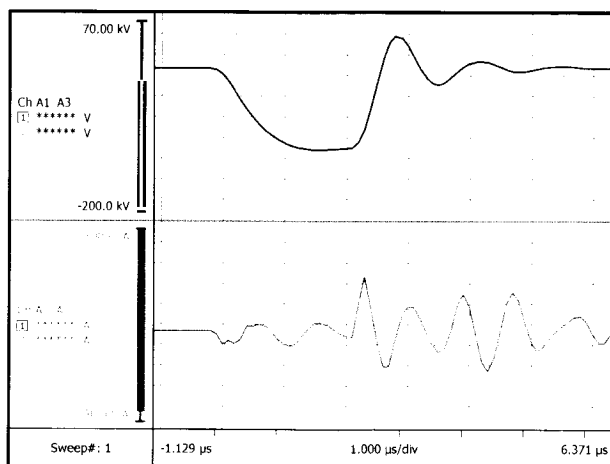
TEST REPORT No.: HIMP/01/1797

SHEET No.: 4 OF 8

DATE : 28/03/2011

LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER

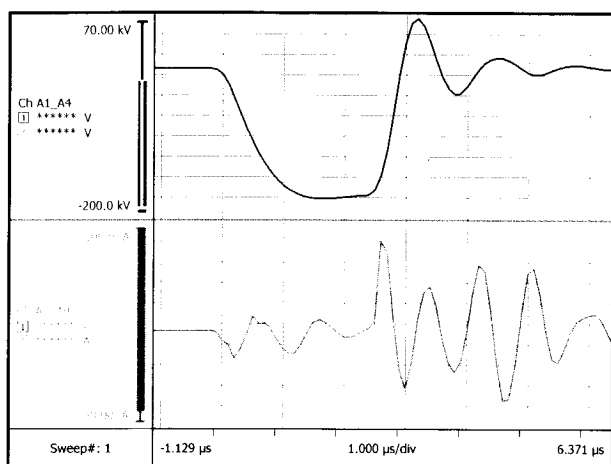
1U-PHASE



Tc 2.308 μs

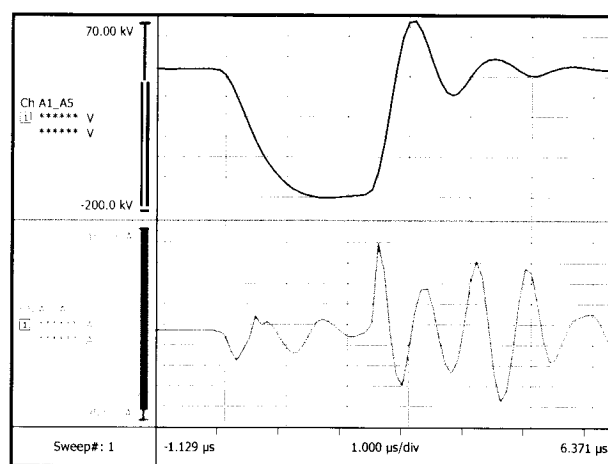
Up -105.9 kV

3. REDUCED CHOPPED IMPULSE WAVE



Tc 2.627 μs

Up -170.7 kV



Tc 2.472 μs

Up -169.8 kV

4. 100% CHOPPED IMPULSE WAVE

5. 100% CHOPPED IMPULSE WAVE

Krupa
PREPARED BY

[Signature]
CHECKED BY

82990
0646678



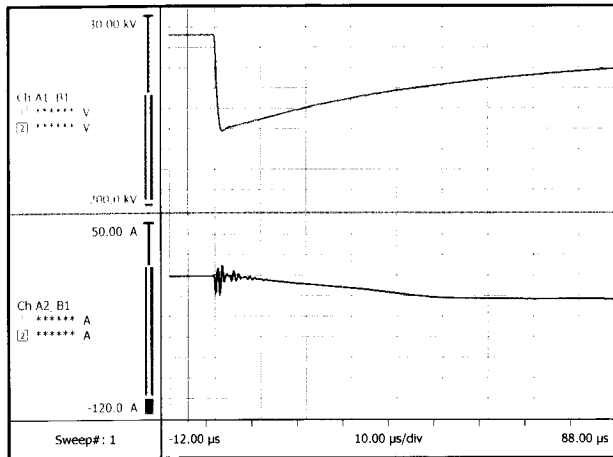
TEST REPORT No.: HIMP/01/1797

SHEET No.: 5 OF 8

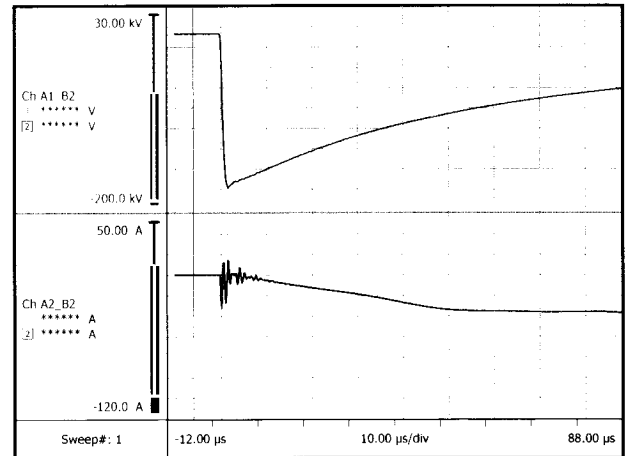
DATE : 28/03/2011

LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER

1V-PHASE



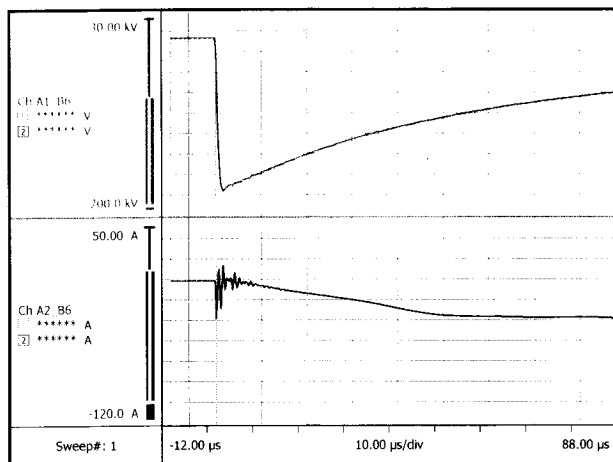
T1 1.409 μs	T2 54.22 μs
Up -107.4 kV	



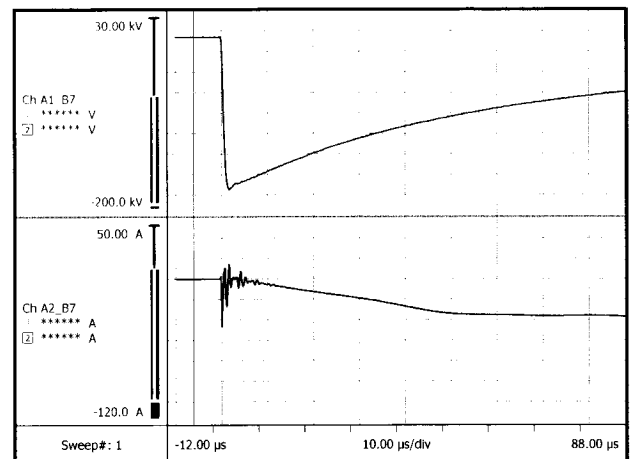
T1 1.417 μs	T2 54.39 μs
Up -171.8 kV	

1. REDUCED FULL IMPULSE WAVE

2. 100% FULL IMPULSE WAVE



T1 1.416 μs	T2 54.41 μs
Up -170.3 kV	



T1 1.416 μs	T2 54.55 μs
Up -170.2 kV	

6. 100% FULL IMPULSE WAVE

7. 100% FULL IMPULSE WAVE

6290790

Kemp
PREPARED BY

5200
CHECKED BY

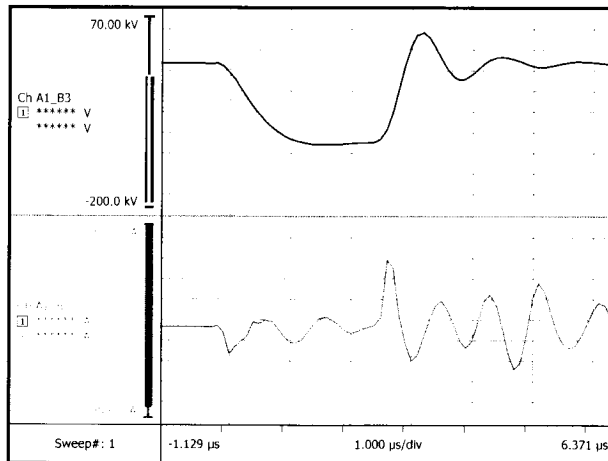


TEST REPORT No.: HIMP/01/1797

SHEET No: 6 OF 8

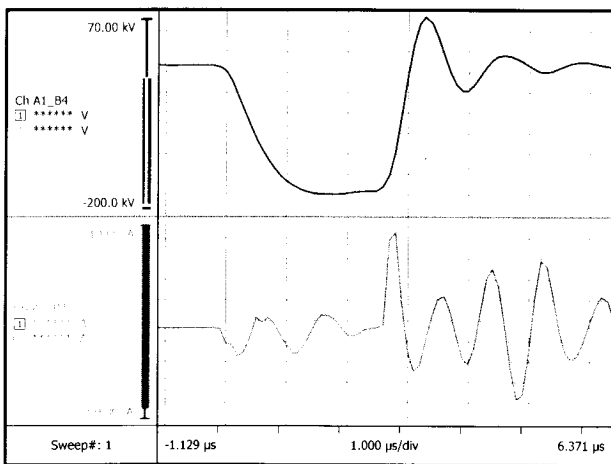
DATE : 28/03/2011

LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER
1V-PHASE

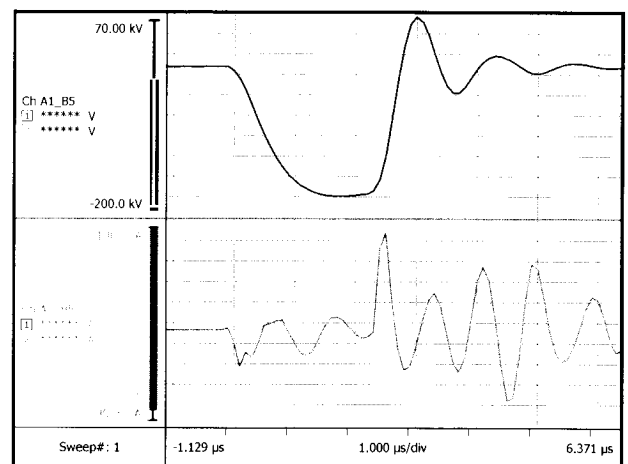


Tc 2.741 μs
Up -105.3 kV

3. REDUCED CHOPPED IMPULSE WAVE



Tc 2.735 μs
Up -169.0 kV



Tc 2.428 μs
Up -169.9 kV

4. 100% CHOPPED IMPULSE WAVE

5. 100%CHOPPED IMPULSE WAVE

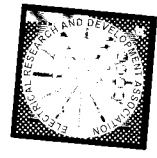
1E 0646680

Krupa

PREPARED BY

520

CHECKED BY



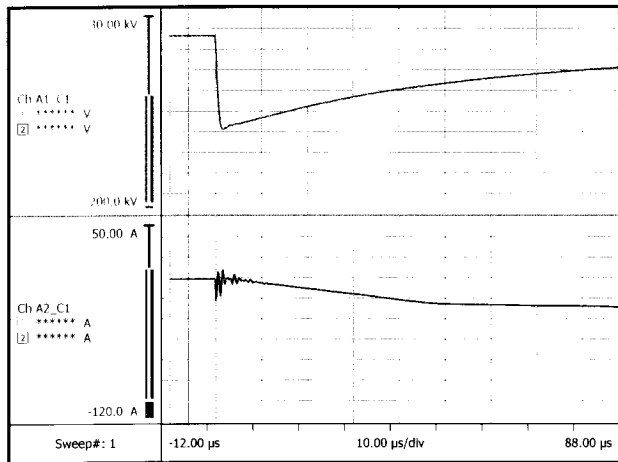
TEST REPORT No.: HIMP/01/1797

SHEET No.: 7 OF 8

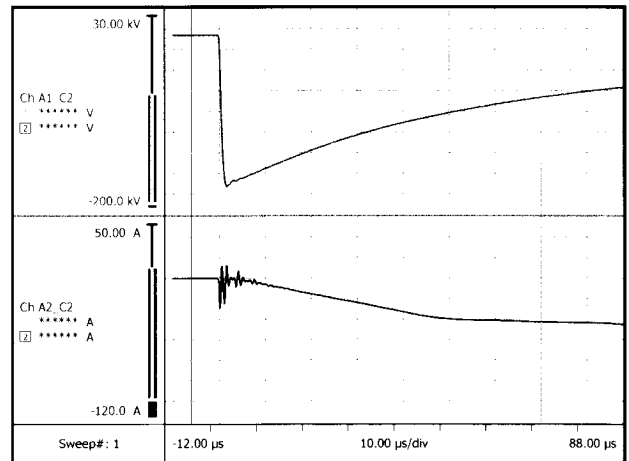
DATE : 28/03/2011

LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER

1W-PHASE



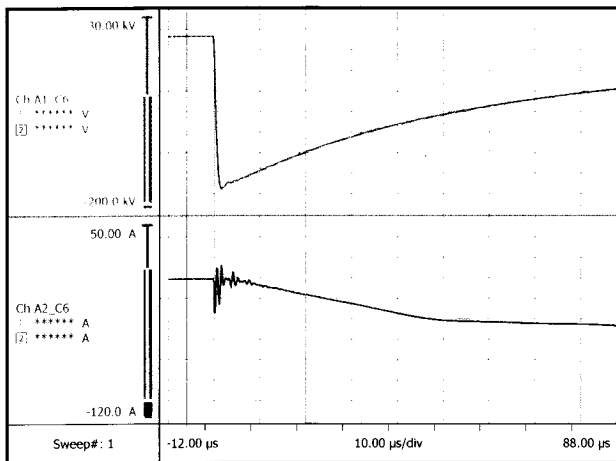
T1 1.408 μs	T2 52.78 μs
Up -103.7 kV	



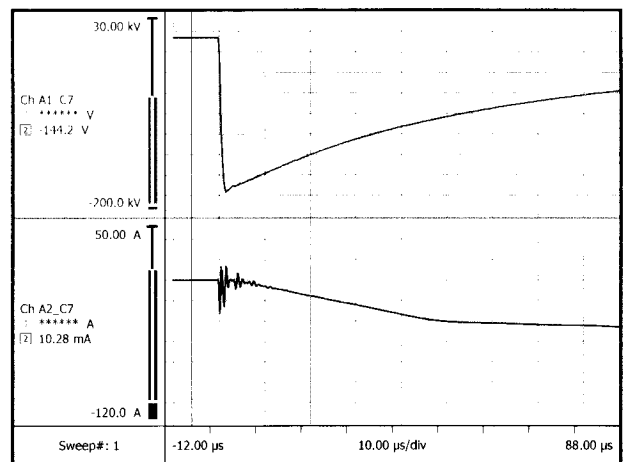
T1 1.419 μs	T2 53.03 μs
Up -167.6 kV	

1. REDUCED FULL IMPULSE WAVE

2. 100% FULL IMPULSE WAVE



T1 1.407 μs	T2 52.94 μs
Up -169.9 kV	



T1 1.408 μs	T2 53.05 μs
Up -171.8 kV	

6. 100% FULL IMPULSE WAVE

7. 100% FULL IMPULSE WAVE

E 0646681

Krupa
PREPARED BY

E-20
CHECKED BY

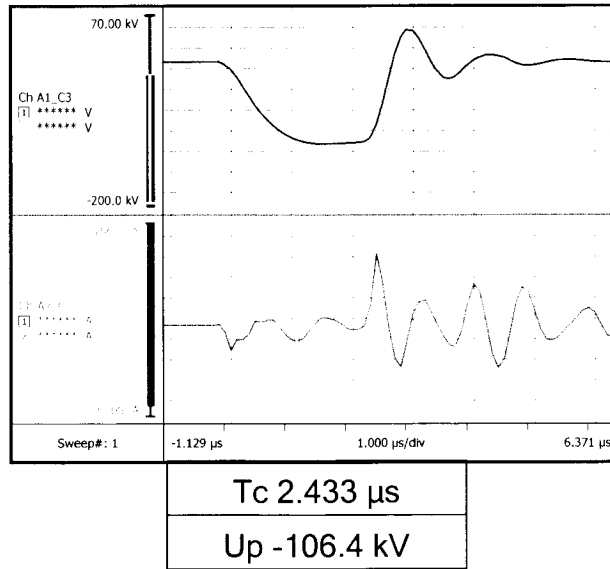


TEST REPORT No.: HIMP/01/1797

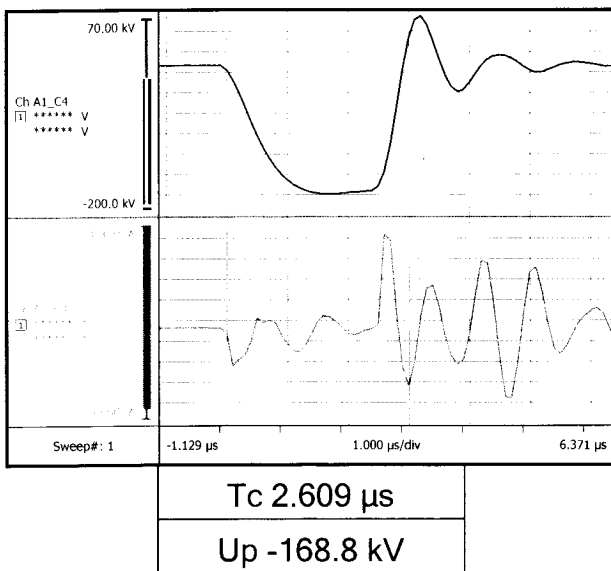
SHEET No.: 8 OF 8

DATE : 28/03/2011

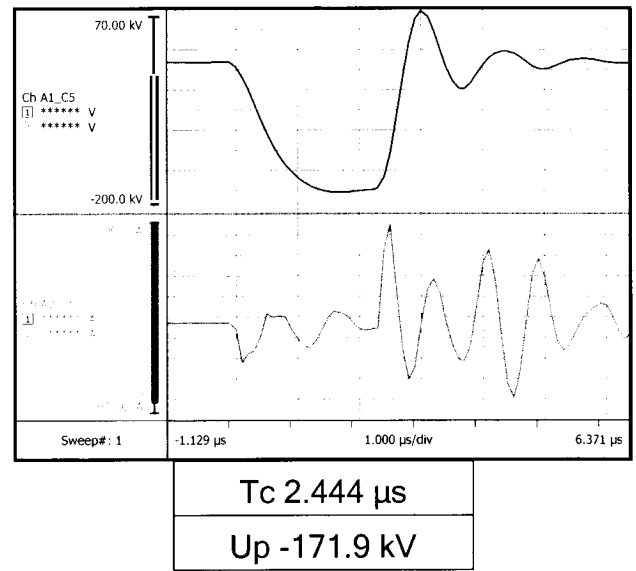
LIGHTNING IMPULSE VOLTAGE WITHSTAND TEST ON DISTRIBUTION TRANSFORMER
1W-PHASE



3. REDUCED CHOPPED IMPULSE WAVE



4. 100% CHOPPED IMPULSE WAVE



5. 100% CHOPPED IMPULSE WAVE

0646682

Krupa
PREPARED BY

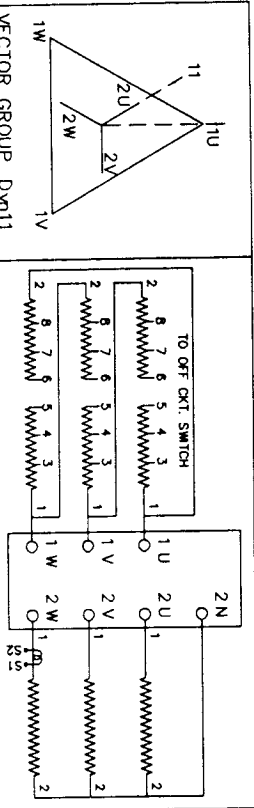
[Signature]
CHECKED BY

CUSTOMER :	M/S. MEDILUX LABORATORIES PVT. LTD.
P.O. NO. :	MLPL/0261/10-11 DTID:02.11.2010
TR. DETAILS	KVA:- 1000 KV:- 33/0/433 ONAN DYN11

DIAMOND POWER TRANSFORMERS LTD.



Plot No 101/B/7, GIDC ESTATE, ROAD NO. 2,
Ranoli - 391350, Dist- Vadodara.



VECTOR GROUP DYN11
WTI CT DETAILS : RATIO - 1335/5 A, CL-5, 15 VA

BASIC INSULATION LEVEL		SWITCH POSITION	H.V. LEADS CONNECTED	NO. LOAD VOLTAGE
H V	L V		H V	L V
IMPULSE VOLTAGE	170	1	5 - 6	34980
KV peak	-	2	6 - 4	33990
P. F.	H V 70	3	4 - 7	33000
VOLTAGE	L V	4	7 - 3	32010
KV rms	3	5	3 - 8	31020

RATING	1000 KVA	REF. I. S.	2026
N.O. LOAD VOLTAGE	33 KV	MAXIMUM AMB. TEMP.	50 °C
VOLTAGE	0.433 KV	MAX. TEMP. RISE OIL/WDG	50/55 °C
CURRENT	17.50 A	IMPEDANCE VOLTAGE	%
PHASE	1333.34 A	CORE AND WINDINGS	1750
FREQUENCY	3	WEIGHT OF OIL	935
COOLING	50 Hz	OIL QTY	1050
SERIAL NO. WO:	ONAN	TOTAL WEIGHT	4185
WINDING	12124	YEAR OF MANUFACTURE	2011
	COPPER	DATE OF DESPATCH	

CAUTION: DE ENERGISE TRANSFORMER BEFORE OPERATING TAP
CHANGING SWITCH

4 HOLES 6 Ø

NOTES:-

- (1) ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED.
- (2) R & D PLATE SUPPLIER'S SYMBOL SHOULD APPEAR AT BOTTOM RIGHT CORNER FOR REFERENCE ONLY.
- (3) RATING AND DIAGRAM PLATE REQUIRED IN ORIGINAL METAL FINISHED BACK GROUND WITH LETTERS AND FIGURE ETCHED AND PAINTED BLACK.
- (4) MATERIAL :- 22 SWG ALUMINIUM PLATE (ANODISED & ETCHED)
- (5) THE VALUE OF % IMPEDANCE VOLTAGE WILL BE INCORPORATED AFTER TRANSFORMER TESTING.

Handwritten:
HIMPLI 1197
25/03/2011
1000KVA WDG
D

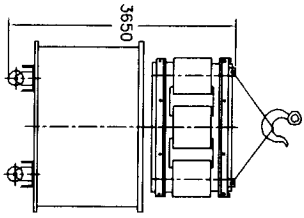
REV	DATE	BRIEF RECORD	DRN BY	W/O NO. - DPTL - 051	Sh No	Rev No
NO.			CHD BY	DRG NO. - TR/1094 A4	1/1	0
			APPD BY			
			SCALE			

DIAMOND POWER TRANSFORMERS LIMITED
 Plot No 101/B/7, GIDC Estate, Road No. 7, Ranoli - 391350
 Dist- Vadodara, Pin- 39240551

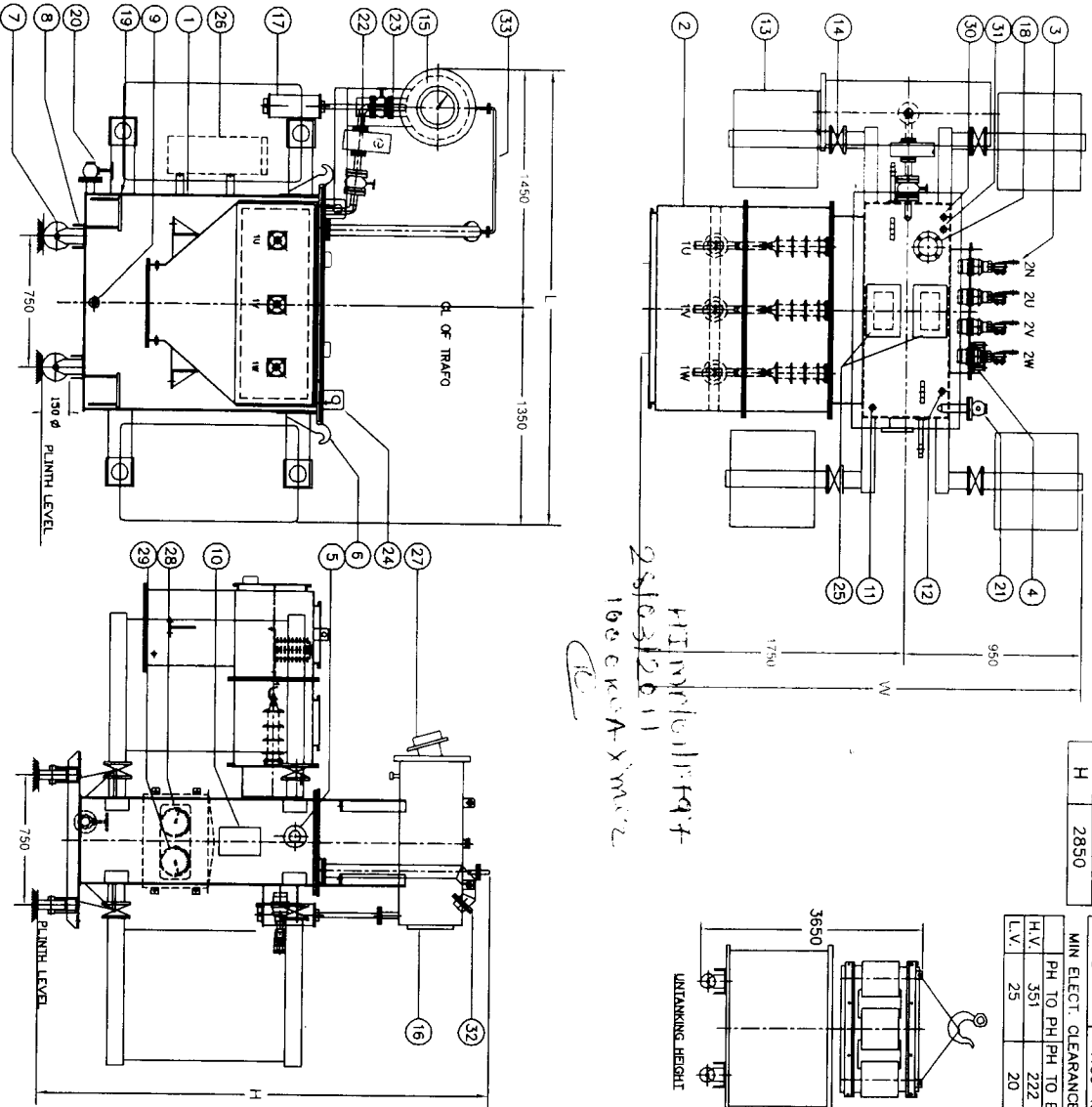
RATING AND DIAGRAM
PLATE
(1000 KVA 33/0/433 KV)

OVERALL DIMENSIONS IN mm	
L	2800
W	2700
H	2850

APPROXIMATE WT.	
CORE & COIL	1750 kg
OIL WT.	935 kg
OIL QUANTITY	1050 Litre
TOTAL WT.	4180 kg
MIN. ELECT. CLEARANCES	
PH TO PH	222
PH TO PL	20
L.V.	25



Handwritten notes: *25103/2011*, *100 C.K.A. X.M.V.Z.*, *HITACHI*, *1111111111*



CUSTOMER :	M/S. MEDILUX LABORATORIES PVT. LTD.
P.O. NO. :	M/LP/0261/10-11 DTD:02.11.2010
TR. DETAILS :	KVA:- 1000 KV:- 33/0.433 ONAN Dyn11 QTY : 1 NO

NOTES:-
 1 ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED.
 2 OVERALL DIMENSIONS ARE ±10% TOLERANCE.
 3 TAPINGS ON HV FOR HV VARIATION OF +6 TO -6% IN STEP OF 3.0 % BY OFF CRT.
 4 PAINT : EPOXY DARK GREY SHADE NO. 632 OF IS-5

S/N	DESCRIPTION	QTY
33	PRESSURE EQUALIZER PIPE	1
32	EXPLOSION VENT WITH OIL SIGHT GLASS AND DOUBLE DIAPHRAGM	1
31	POCKET FOR W.T.I.	1
30	POCKET FOR O.I.L	1
29	DIAL W.T.I. WITH M.R.P. R.S.D. AND ALARM AND TRIP CONTACTS	1
28	DIAL O.I.L. WITH M.R.P. R.S.D. AND ALARM AND TRIP CONTACTS	1
27	DIAL MAGNETIC OIL LEVEL GAUGE WITH LOW LEVEL ALARM CONTACT	1
26	MARSHALLING BOX	1
25	INSPECTION COVER	2
24	LIFTING LUGS FOR TOP COVER	2
23	SHUT-OFF VALVE (25 mmø D.S.F) G.M. GATE VALVE	2
22	DOUBLE FLOAT BUCHHOLZ RELAY WITH ALARM & TRIP CONTACTS	1
21	TOP FILTER VALVE (32 mmø S. S. F.) WITH PLUG	1
20	DRAIN VALVE (32 mmø S. S. F.) WITH PLUG	1
19	JACKING PADS	4
18	PRESSURE RELIEF VALVE	1
17	SILICA GEL BREATHER (HPO A)	1
16	PLAIN OIL LEVEL GAUGE	1
15	CONSERVATOR WITH LIFTING LUGS, OIL FILLING CAP & DRAIN PLUG	1
14	RADIATOR VALVES (BUTTERFLY TYPE)	8
13	P. S. RADIATORS WITH AIR RELEASE PLUG, LIFTING LUG & DRAIN PLUG	4
12	THERMOMETER POCKET	1
11	AIR RELEASE PLUG	1
10	RATING AND DIAGRAM PLATE	1
9	EARTHING TERMINALS	2
8	BASE CHANNEL	2
7	FLAT ROLLERS (BI-DIRECTIONAL)	4
6	LIFTING LUGS FOR COMPLETE TRANSFORMER	2
5	TAPPING SWITCH HANDLE WITH POSITION INDICATOR & LOCKING DEVICE	1
4	W.T.I. C.T.	1
3	L.V BUSDUOT WITH BUSHING 1.1KV/2000A	4
2	H.V. CABLE BOX (33 KV/250 Amps)	1
1	TRANSFORMER TANK	1

DIAMOND POWER TRANSFORMERS LIMITED
 Plot No. 10/18B, G.I.D.C. Estate, Road No. 2, Gandhinagar, Ahmedabad - 381 360
 Dist. Vadodra, Pin: 392025

DRN BY: _____
 APPD BY: _____
 SCALE: _____

GENERAL ARRANGEMENT OF TRANSFORMER

W.O. NO. - DPTL - 051
 DRG. NO. - 111/100 A4

Sh. No. Rev. No. 1/1 0