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TEST REPORT

SHEET 1 OF 9

NAME & ADDRESS OF CUSTOMER RAJASTHAN POWERGEN TRANSFORMER PVT. LTD. Khasra No. 911-914, Karola-Bhinmal Road, Karola, Sanchore, Rajasthan-343041 (India).	REPORT NO.: RP-1718-052239 DATE: 22.01.2018	
	CUSTOMER REF. No.: NP/ERDA/TT/40/ 2017-18	DATED: 29.11.2017
	DATE OF SAMPLE RECEIPT: 05.12.2017	DATE OF TESTING: 07.12.2017 to 13.01.2018
	SAMPLE DESCRIPTION 315kVA DISTRIBUTION TRANSFORMER (Energy efficiency level 2) 11000/433 Volts, 16.53/420.02 Amps, Oil filled, Vector Group: Dyn-11 Further details as per sheet No. 3 of 9	
SAMPLE IDENTIFICATION ERDA Sample Code No.: ERDA-00229815 SERIAL NO.: RPTPL/315KVA/2017-18/001 TYPE: Outdoor Oil cooled YEAR OF MFG.: 2017 DRAWING NO.: RPTPL/315KVA/001, RPTPL/315KVA/002, RPTPL/315KVA/003.		
TEST DETAILS Short-circuit withstand test (Ability of transformers to withstand external short circuit) (Cl. No. 17 & 21.4 b) ENCLOSURES: NUMBER OF OSCILLOGRAMS : Eleven NUMBER OF PHOTOGRAPH : One NUMBER OF TEST CIRCUIT DIAGRAM : One NUMBER OF DRAWINGS : Three		
TEST SPECIFICATIONS IS 1180 (Part 1): 2014 [AMENDMENT NO. 1 AUGUST 2016] [AMENDMENT NO. 2 JANUARY 2017]		
REMARKS: The sample conforms to the requirements of short circuit withstand test as per standard.		
PREPARED BY	CHECKED BY	APPROVED BY (YASHINKHAN I. PATHAN)

NOTE: 1. This report relates only to the particular sample received in good condition for testing at ERDA.

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 test asked by customer have been carried out.

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SHEET 2 OF 9

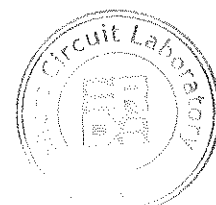
DATE: 22.01.2018

Contents	
1. Technical specifications of test object assigned by customer.	Sheet No. 3 of 9
2. Routine tests results before short circuit	Sheet No. 4 of 9 to Sheet No. 5 of 9
3. Short-circuit withstand test (Ability of transformers to withstand external short circuit)	Sheet No. 6 of 9 to Sheet No. 7 of 9
4. Routine tests after short circuit	Sheet No. 8 of 9 to Sheet No. 9 of 9
5. Oscillogram No.	710/01 to 710/11
6. Photograph No.	1718-014492-614
7. Test circuit diagram No.	OLSC/DTC/03
8. Drawing No.	RPTPL/315KVA/001, RPTPL/315KVA/002, RPTPL/315KVA/003.

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SHEET 3 OF 9

DATE: 22.01.2018

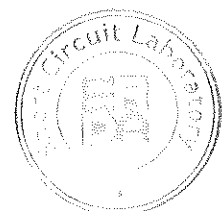
TECHNICAL SPECIFICATIONS ASSIGNED BY CUSTOMER

1. Name of Manufacturer	: RAJASTHAN POWERGEN TRANSFORMER PVT. LTD.
2. Equipment	: 315kVA Distribution Transformer
3. Standard No.	: IS 1180 (Part 1): 2014 [AMENDMENT NO. 1 AUGUST 2016] [AMENDMENT NO. 2 JANUARY 2017]
4. Serial No.	: RPTPL/315KVA/2017-18/001
5. Type	: Outdoor, Oil cooled
6. kVA rating	: 315
7. Rated voltage H.V. (volts)	: 11000
L.V. (volts)	: 433
8. Rated current H.V. (Amp.)	: 16.53
L.V. (Amp.)	: 420.02
9. Number of phases	: 3
10. Energy efficiency level	: 2
11. Connection H.V. / L.V.	: Delta/Star
12. Frequency	: 50 Hz
13. Type of cooling	: ONAN
14. Temperature rise of oil	: 40 °C
15. Percentage Impedance	: 4.5 %
16. Primary winding conductor	: Copper wire, bare dia. 2.85 mm
17. Secondary winding conductor	: Copper strip, bare size(11.75mm x 3.0mm) x 8 Nos. in Parallel
18. Quantity of oil (Litre)	: 375
19. Weight of oil (Kg.)	: 310
20. Weight of core and winding (Kg.)	: 1110
21. Total weight (Kg.)	: 1820
22. Vector group	: Dyn-11
23. Year of manufacture	: 2017
24. Insulation level H.V.	: 28 kVrms
25. Insulation level L.V.	: 03 kVrms
26. Total losses at 75°C (Watts)	: At 50 % load=1025 : At 100 % load=3100

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SHEET 4 OF 9

ROUTINE TEST RESULTS BEFORE SHORT CIRCUIT

Condition of sample before test: New.

a) WINDING RESISTANCE

Measurement at average oil temperature: 24.5 °C					
LV Winding resistance (mΩ)			HV Winding resistance (Ω)		
u - v	v - w	w - u	U - V	V - W	W - U
2.900	2.906	2.926	2.378	2.378	2.379

b) VOLTAGE RATIO AND CHECK OF VOLTAGE VECTOR RELATIONSHIP

Vector group: Dyn-11 was verified.

Rated voltage Ratio	Measured voltage ratio between Terminals					
	U-V/u-n	Difference (%)	V-W/v-n	Difference (%)	W-U/w-n	Difference (%)
44.001	43.986	-0.034	43.986	-0.034	44.021	0.045

c) MEASUREMENT OF IMPEDANCE VOLTAGE/SHORT CIRCUIT IMPEDANCE LOAD LOSSES

1) At 100% LOAD:-

Average oil temp.: 24.6 °C, Frequency: 50.053 Hz.

Test current (Amp.) Iavg.	Impedance voltage (V) Vavg.	Load loss measured (Watts)	Impedance Voltage (%Z) At 50 Hz.	Load loss computed at 75°C (Watts)	%Z at 75°C
16.50	483.59	1949	4.399	2261	4.414

2) At 50% LOAD:-

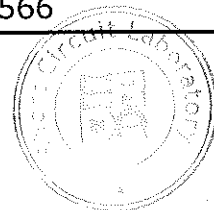
Average oil temp.: 24.6 °C, Frequency: 50.044 Hz.

Test current (Amp.) Iavg.	Impedance voltage (V) Vavg.	Load loss measured (Watts)	Load loss computed at 75°C (Watts)
8.25	241.50	488	566

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DATE: 22.01.2018

d) NO LOAD CURRENT AND LOSSES

Average oil temp.: 24.6°C, Frequency: 50.000 Hz.

Applied Voltage (V) Vavg	Current (Amp.) Iavg.	Losses Measured (Watts)
432.82	0.806	390

Total losses at 100 % of the full load current, computed at 75°C : 2651 W
Total losses at 50 % of the full load current, computed at 75°C : 956 W

e) INSULATION RESISTANCE TEST

Average oil temp.: 24.5°C, Measured at Voltage: 1000 V DC

	IR value (MΩ)
HV to LV winding	>2000
HV winding to LV +EARTH	>2000
LV winding to HV + EARTH	>2000

f) SEPARATE SOURCE POWER FREQUENCY WITHSTAND TEST

Sr. No.	Test	Applied voltage (kV)	Duration (sec.)	Remarks
1.	Between HV windings and LV windings connected to the tank and earth	28	60	Withstood
2.	Between LV windings and HV windings connected to the tank and earth	03	60	Withstood

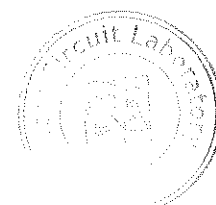
g) INDUCED OVER VOLTAGE WITHSTAND TEST

Sr. No.	Test	Applied voltage (V)	Applied Freq. (Hz.)	Duration (sec.)	Remarks
1.	Between LV windings with tank connected to earth.	866	100	60	Withstood

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**REPORT NO.:** RP-1718-052239**SHEET 6 OF 9****DATE:** 22.01.2018**SHORT-CIRCUIT WITHSTAND TEST:**

(Ability of transformers to withstand external short circuit)

The verification of the short-circuit withstand test was performed by connecting the low voltage winding to three phase balanced source and high voltage winding short circuited using synchronization switch. The test conducted with short circuiting of the high voltage winding, follow the application of the voltage to the low voltage winding of the transformer as per schematic circuit diagram No.: OLSC/DTC/03.

Condition of the equipment under test: As after routine tests.

Test No.	Oscillogram No.	Applied voltage (Vrms)	Short circuit current on LV (kA)			Duration (sec.)	Remarks
			Peak	Rms	Average		
1.	710/01	-	- - 19.485	8.433 8.433 8.621	8.499	0.078	Calibration Shot
2.	710/02	433.7	- 21.013 -	9.899 9.773 9.814	9.828	0.509	No Abnormality
3.	710/03	433.4	- 22.652 -	9.659 9.612 9.810	9.694	0.509	No Abnormality
4.	710/04	433.7	- 22.652 -	9.652 9.626 9.817	9.699	0.504	No Abnormality
5.	710/05	433.2	20.924 - -	9.681 9.401 9.714	9.599	0.509	No Abnormality
6.	710/06	433.8	21.524 - -	9.766 9.425 9.961	9.718	0.509	No Abnormality
7.	710/07	433.9	21.611 - -	9.639 9.704 9.696	9.680	0.510	No Abnormality
8.	710/08	433.6	- - 21.845	9.609 9.396 9.860	9.622	0.510	No Abnormality
9.	710/09	433.7	- - 22.167	9.663 9.496 10.150	9.770	0.509	No Abnormality
10.	710/10	433.6	- - 22.285	9.670 9.711 10.329	9.903	0.509	No Abnormality
11.	710/11	433.8	- 21.917 -	9.638 9.385 9.630	9.551	2.011	No Abnormality (Thermal Shot)

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Measurement of the % reactance during the short circuit test

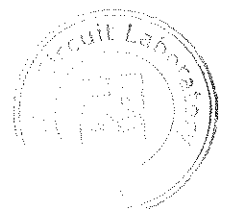
LV winding was short circuited. Three phase AC supply was connected to HV winding to pass test current. Before the short circuit test and after each shot, the per phase percentage reactance was measured and compared to the values before the short circuit test.

Sr. No.	Measurement performed		Measured value of % reactance at 50 Hz.			%Change in % reactance		
			U	V	W	U	V	W
1.	Before test		4.354	4.378	4.344	-	-	-
2.	After the test no.	2.	4.350	4.385	4.347	-0.092	0.160	0.069
3.	After the test no.	3.	4.353	4.387	4.344	-0.023	0.206	0.000
4.	After the test no.	4.	4.352	4.383	4.349	-0.046	0.114	0.115
5.	After the test no.	5.	4.349	4.387	4.349	-0.115	0.206	0.115
6.	After the test no.	6.	4.350	4.386	4.351	-0.092	0.183	0.161
7.	After the test no.	7.	4.352	4.385	4.350	-0.046	0.160	0.138
8.	After the test no.	8.	4.354	4.385	4.349	0.000	0.160	0.115
9.	After the test no.	9.	4.354	4.385	4.348	0.000	0.160	0.092
10.	After the test no.	10.	4.356	4.387	4.348	0.046	0.206	0.092
11.	After the test no.	11.	4.355	4.386	4.349	0.023	0.183	0.115

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**REPORT NO.:** RP-1718-052239**SHEET 8 OF 9****DATE:** 22.01.2018**ROUTINE TEST RESULTS AFTER SHORT CIRCUIT****a) WINDING RESISTANCE**

Measurement at average oil temperature: 30.6 °C					
LV Winding resistance (mΩ)			HV Winding resistance (Ω)		
U - V	V - W	W - U	U - V	V - W	W - U
2.942	2.946	2.983	2.439	2.441	2.442

b) VOLTAGE RATIO AND CHECK OF VOLTAGE VECTOR RELATIONSHIP

Vector group: Dyn-11 was verified.

Rated voltage Ratio	Measured voltage ratio between Terminals					
	U-V/u-n	Difference (%)	V-W/v-n	Difference (%)	W-U/w-n	Difference (%)
44.001	43.969	-0.073	43.970	-0.070	44.002	0.002

c) MEASUREMENT OF IMPEDANCE VOLTAGE/SHORT CIRCUIT IMPEDANCE LOAD LOSSES**1) At 100% LOAD:-**

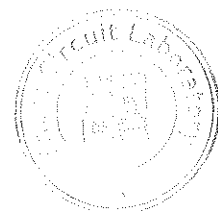
Average oil temp.: 29.1 °C, Frequency: 49.964 Hz.

Test current (Amp.) Iavg.	Impedance voltage (V) Vavg.	Load loss measured (Watts)	Impedance Voltage (%Z) At 50 Hz.	Load loss computed at 75 °C (Watts)	%Z at 75 °C
16.53	484.40	1981	4.407	2258	4.421

2) At 50% LOAD:-

Average oil temp.: 29.1 °C, Frequency: 49.984 Hz.

Test current (Amp.) Iavg.	Impedance voltage (V) Vavg.	Load loss measured (Watts)	Load loss computed at 75 °C (Watts)
8.27	242.85	497	566

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**REPORT NO.:** RP-1718-052239**SHEET 9 OF 9****DATE:** 22.01.2018**d) NO LOAD CURRENT AND LOSSES**

Average oil temp.: 29.1 °C, Frequency: 49.998 Hz

Applied Voltage (V) Vavg	Current (Amp.) Iavg.	Losses Measured (Watts)
432.90	0.804	388

Total losses at 100 % of the full load current, computed at 75°C : 2646 W**Total losses at 50 % of the full load current, computed at 75°C : 954 W****e) INSULATION RESISTANCE TEST**

Average oil temp.: 30.7 °C, Measured at Voltage: 1000 V DC

	IR value (MΩ)
HV to LV winding	>2000
HV winding to LV +EARTH	>2000
LV winding to HV + EARTH	>2000

f) SEPARATE SOURCE POWER FREQUENCY WITHSTAND TEST

Sr. No.	Test	Applied voltage (kV)	Duration (sec.)	Remarks
1.	Between HV winding and LV winding connected to the tank and earth	28	60	Withstood
2.	Between LV winding and HV winding connected to the tank and earth	03	60	Withstood

g) INDUCED OVER VOLTAGE WITHSTAND TEST

Sr. No.	Test	Applied voltage (V)	Applied Freq. (Hz.)	Duration (sec.)	Remarks
1.	Between LV windings with tank connected to earth.	866	100	60	Withstood

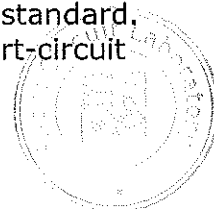
Observation after test: The transformer was untanked and inspected.

- Condition of conductor, core and clampings:
- No visible damage, deformation or displacement.
- Condition of spacers : Intact
- Condition of oil : Clear

Results: 1) % Change in % reactance is **within** tolerance limits as per standard.
2) The results of routine tests carried out before and after short-circuit withstand test found **within** limits as per standard.

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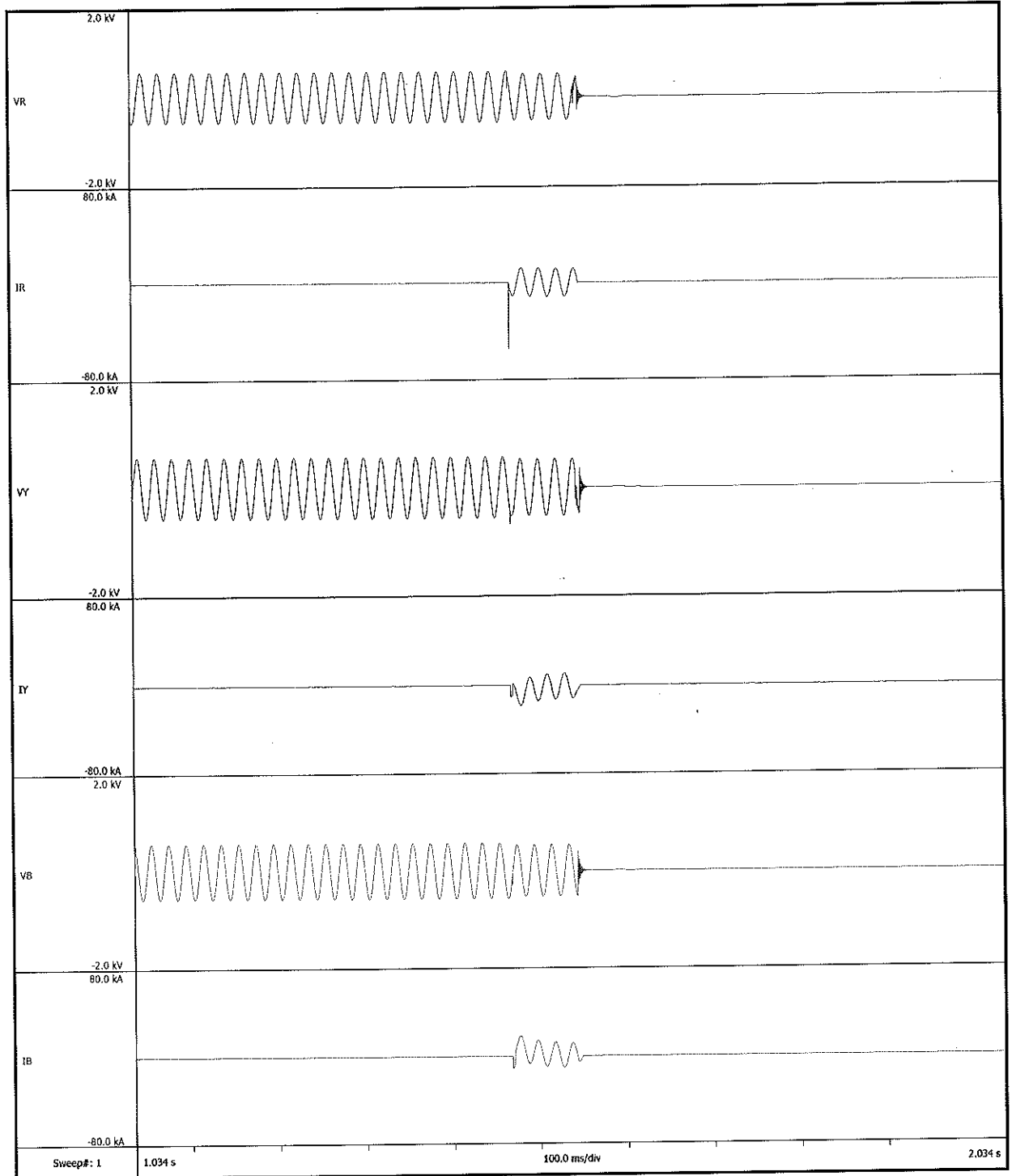
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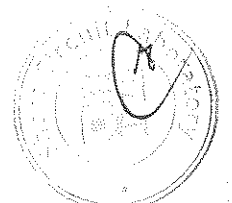


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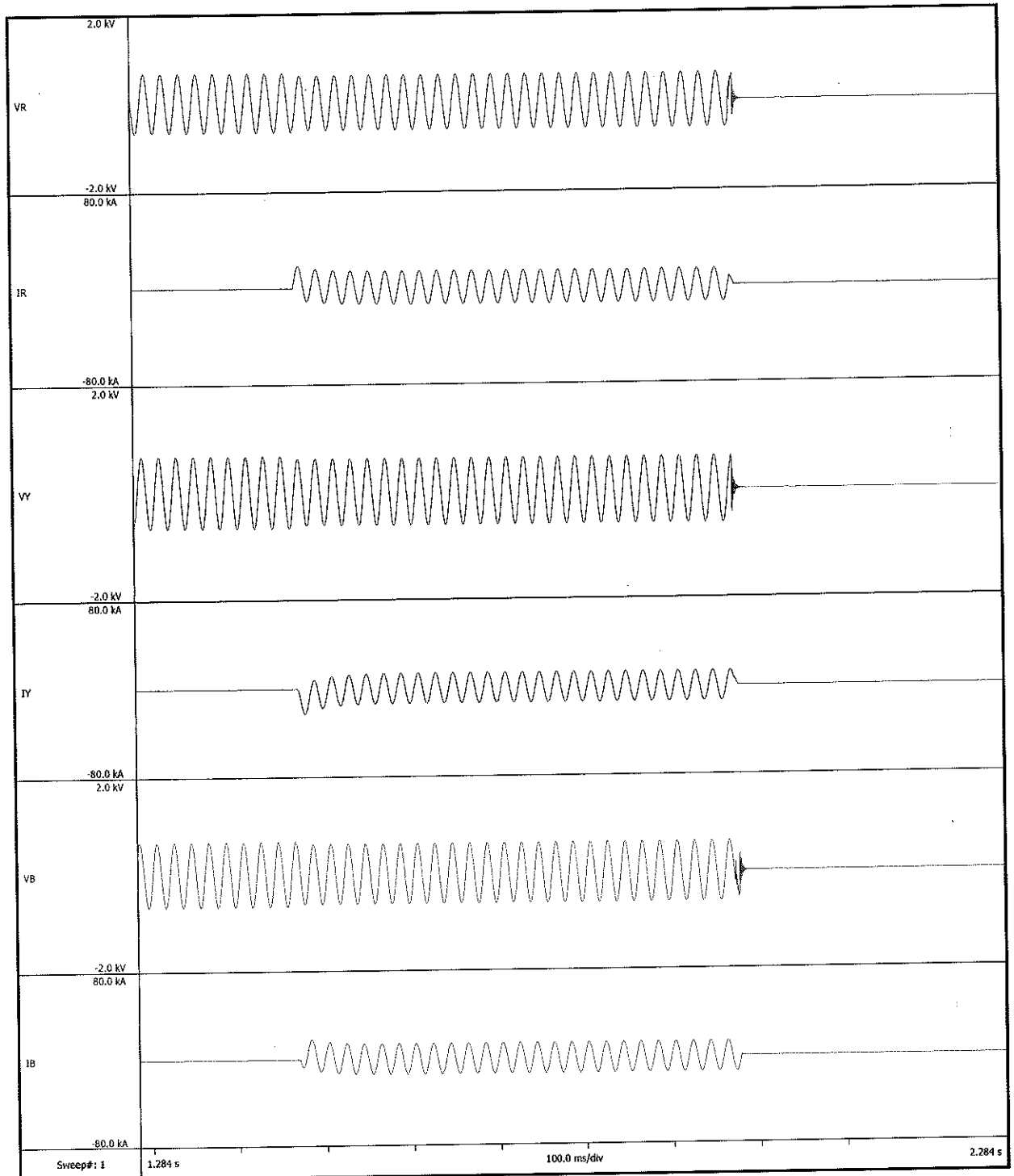
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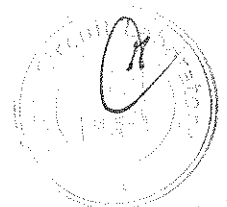


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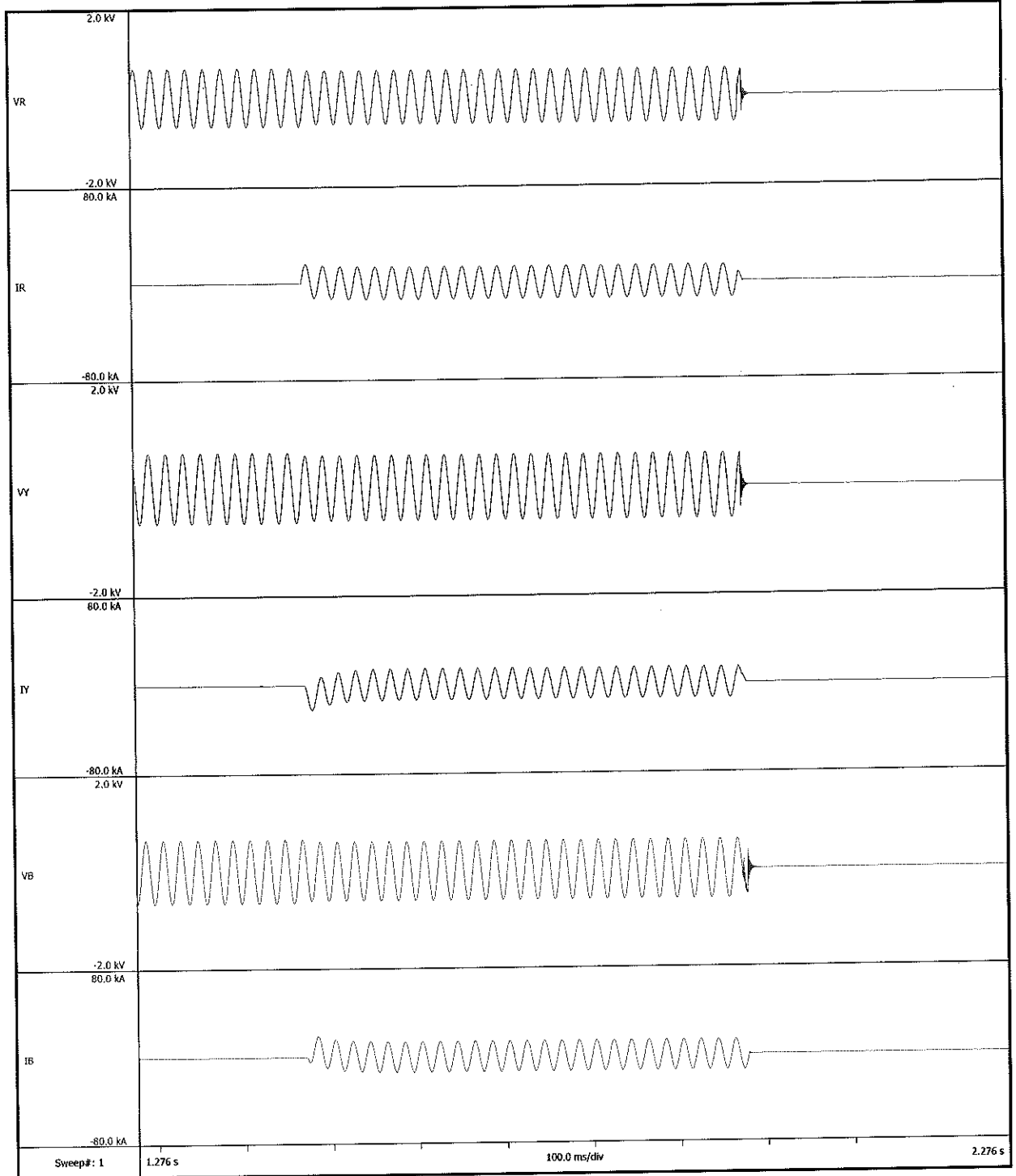
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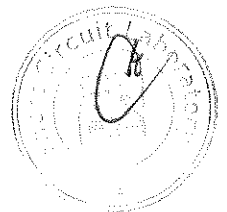


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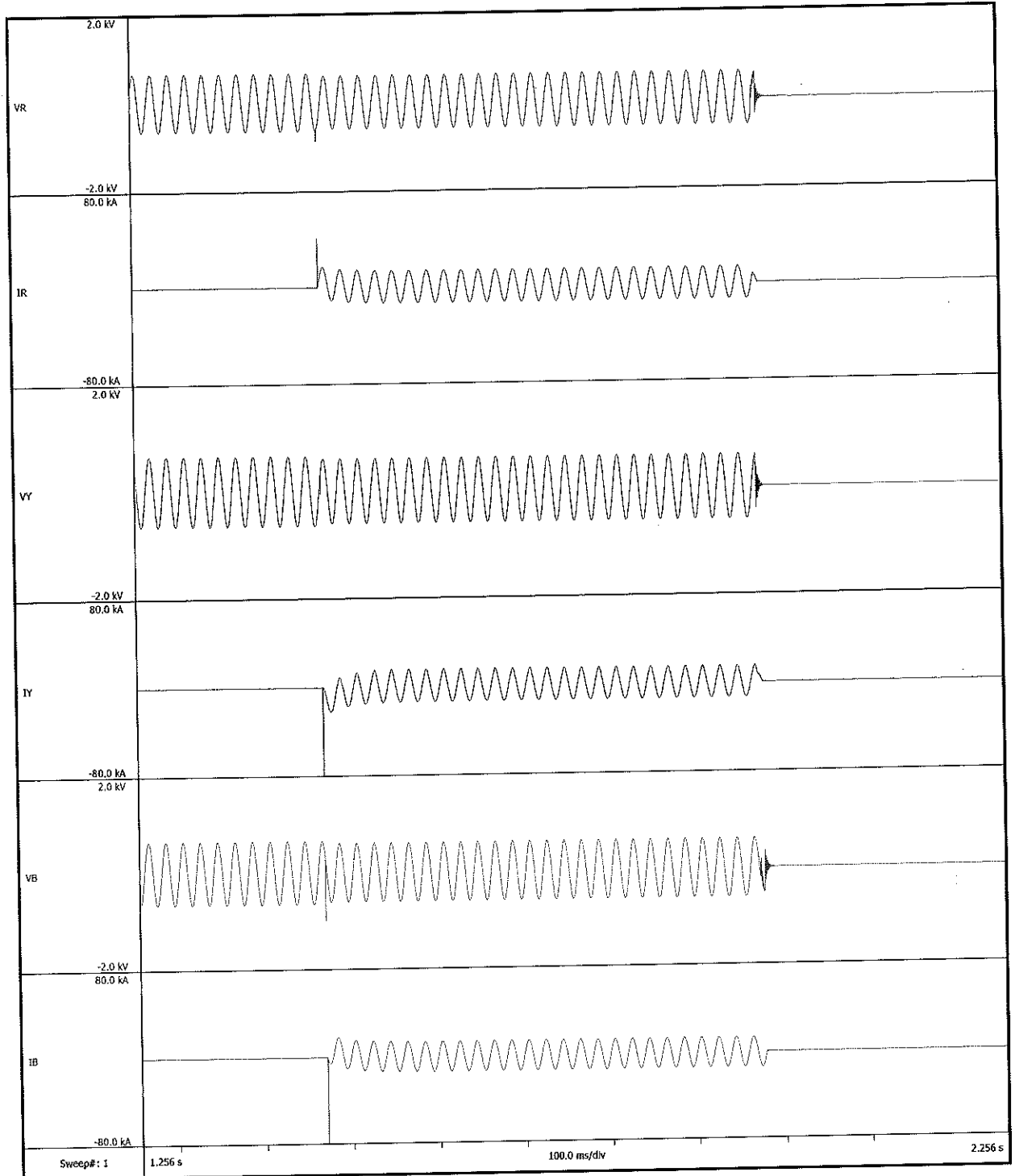
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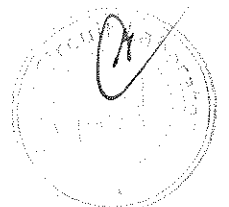


REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/04



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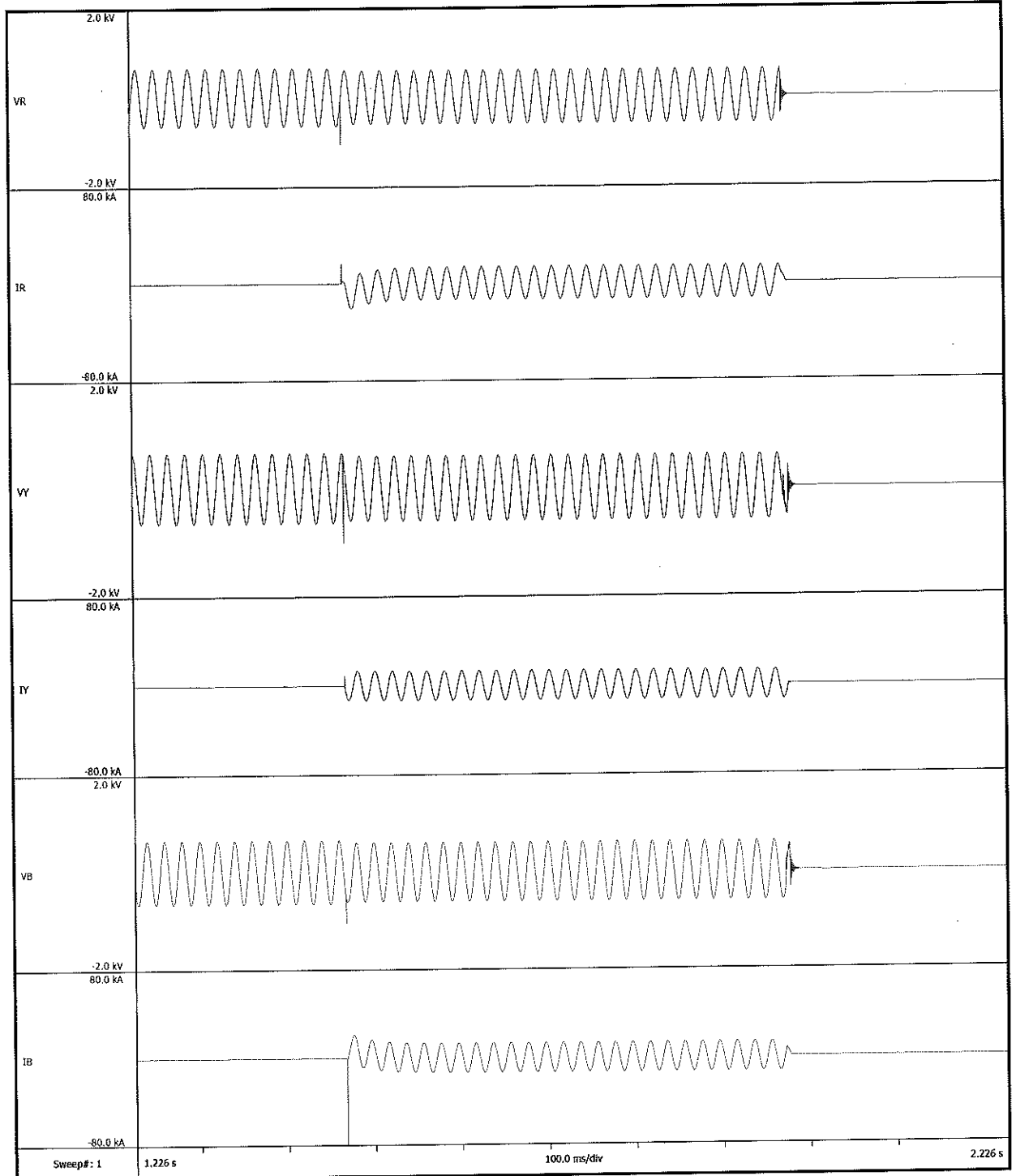
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Fax : +91 (0265) 2638382

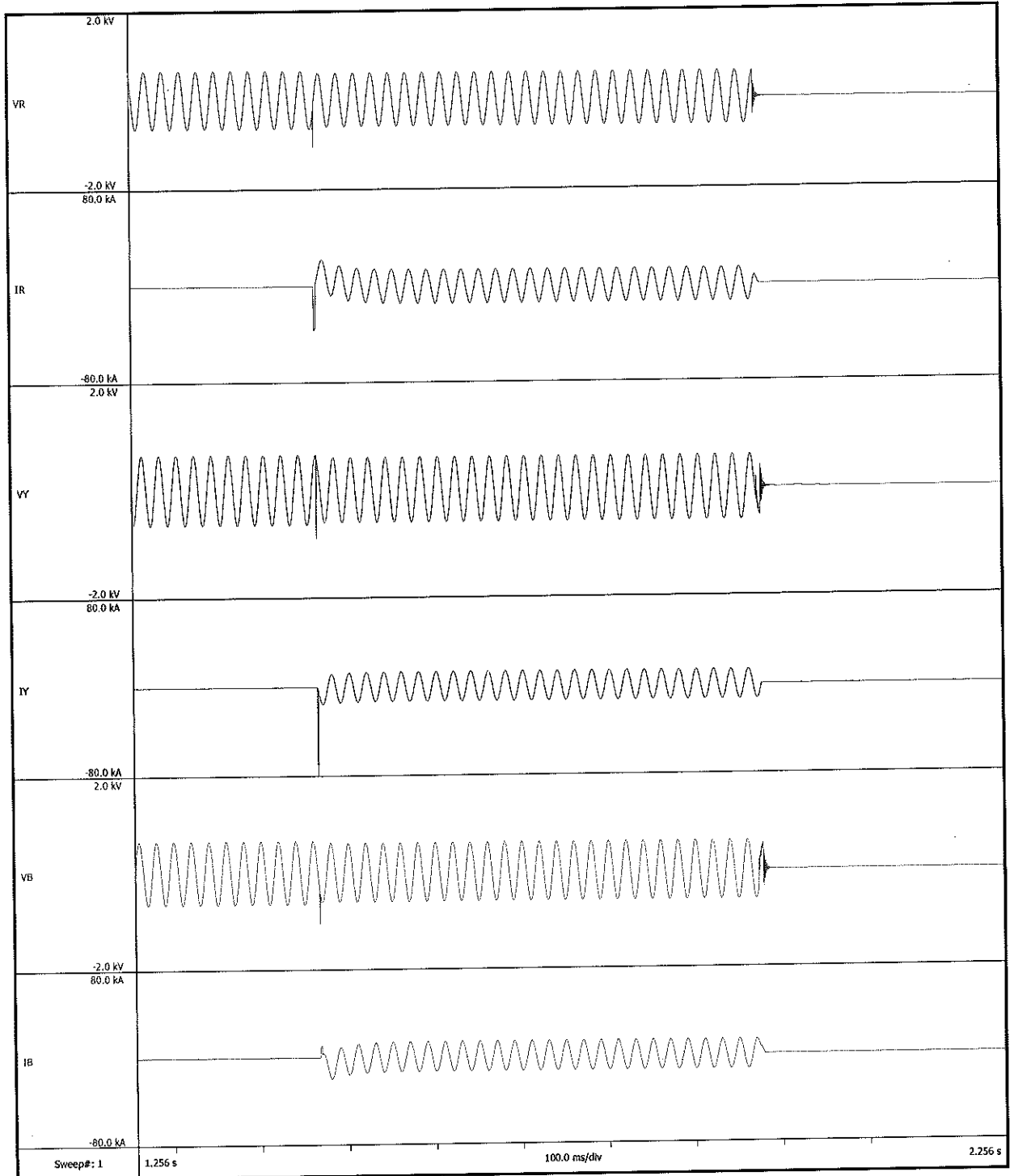
E-mail : erda@erda.org

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



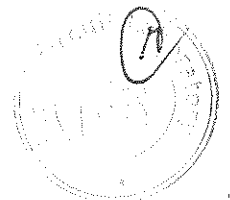
REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/06

TC 2386592





Certificate No. : TC-5389

ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

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

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Fax : +91 (0265) 2638382

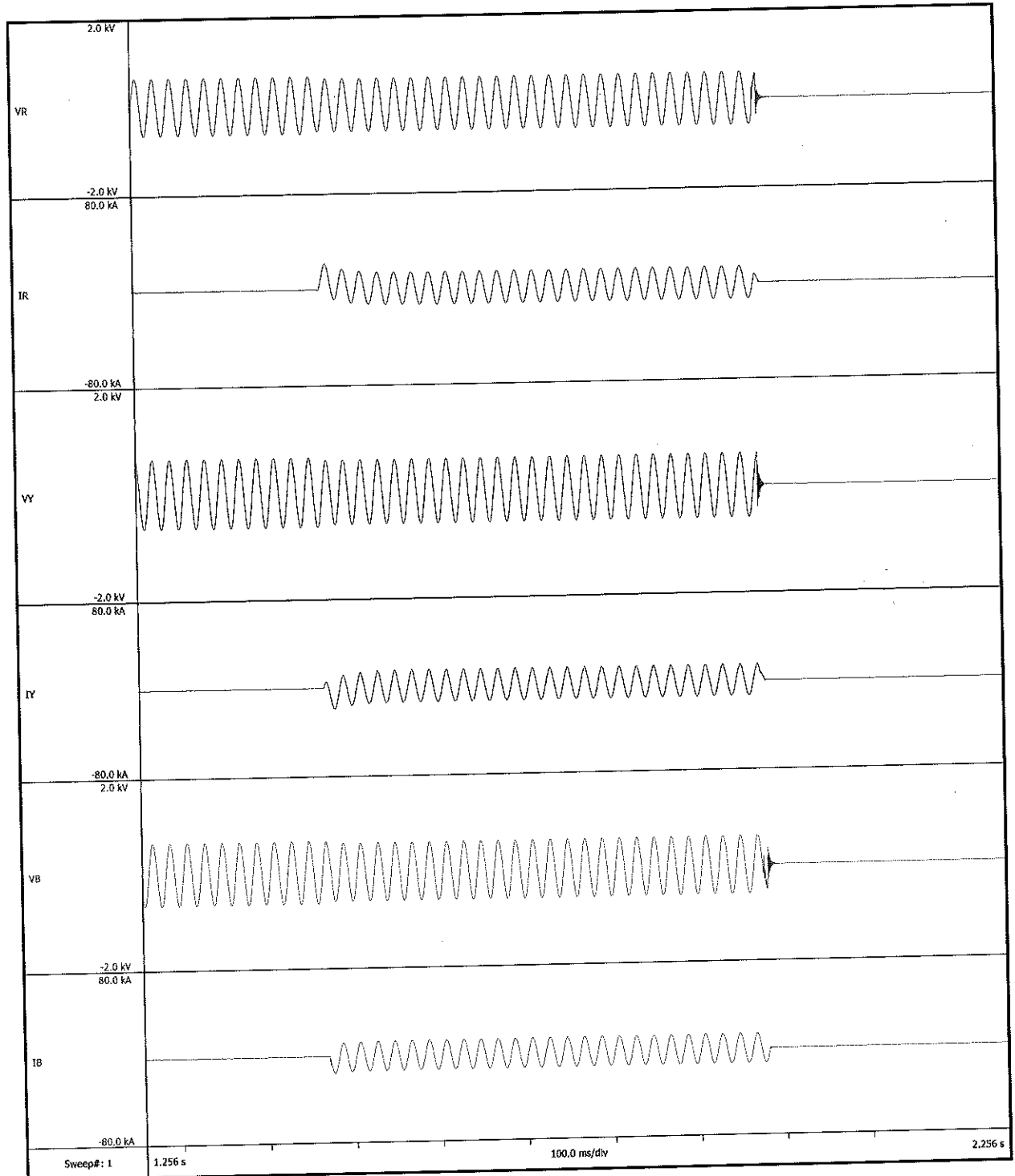
E-mail : erda@erda.org

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



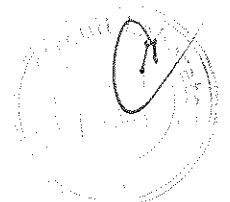
REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/07

TC 2386593





Certificate No. : TC-5389

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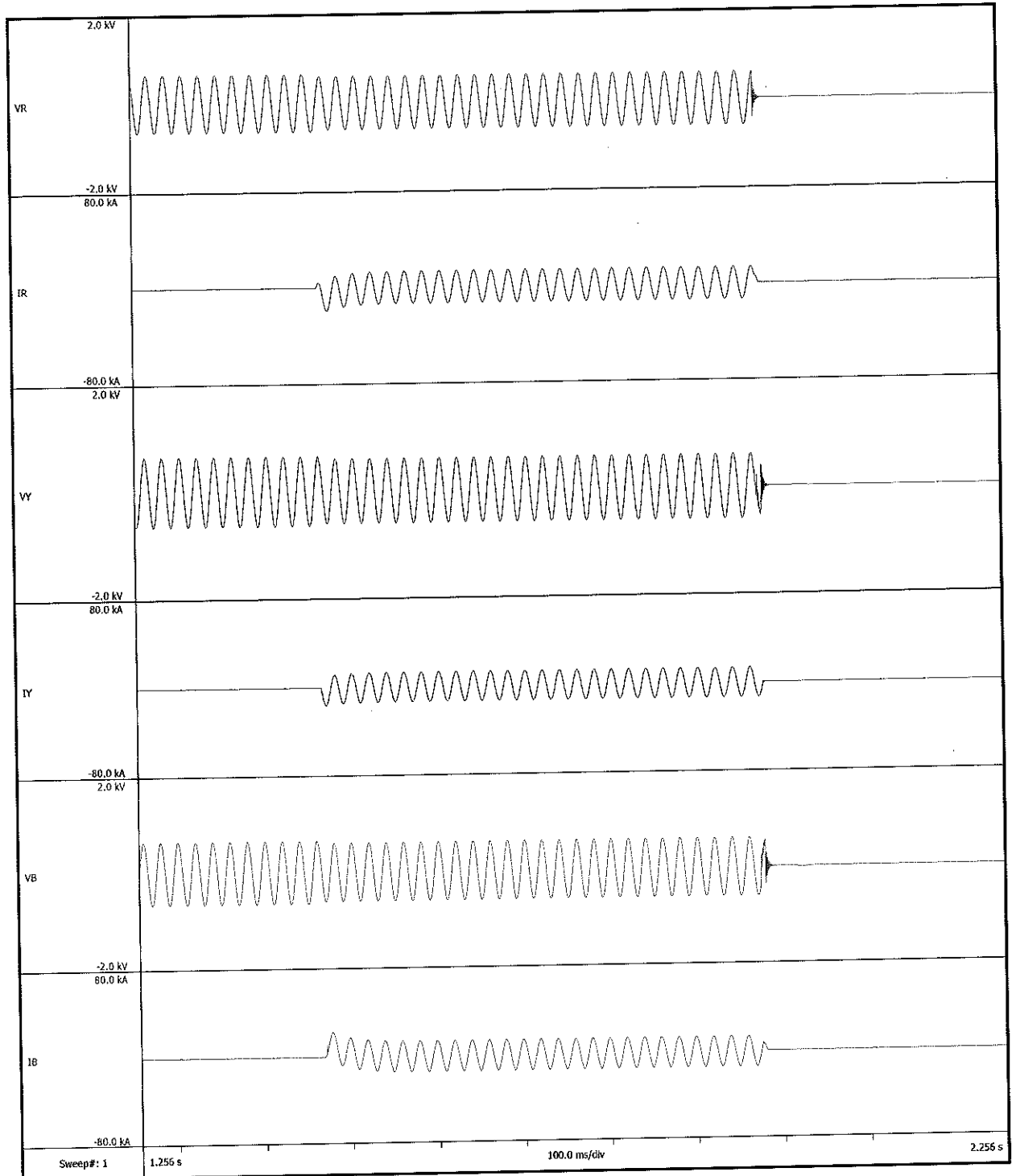
E-mail : erda@erda.org

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



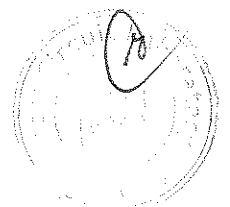
REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/08

TC 2386594





Certificate No. : TC-5389

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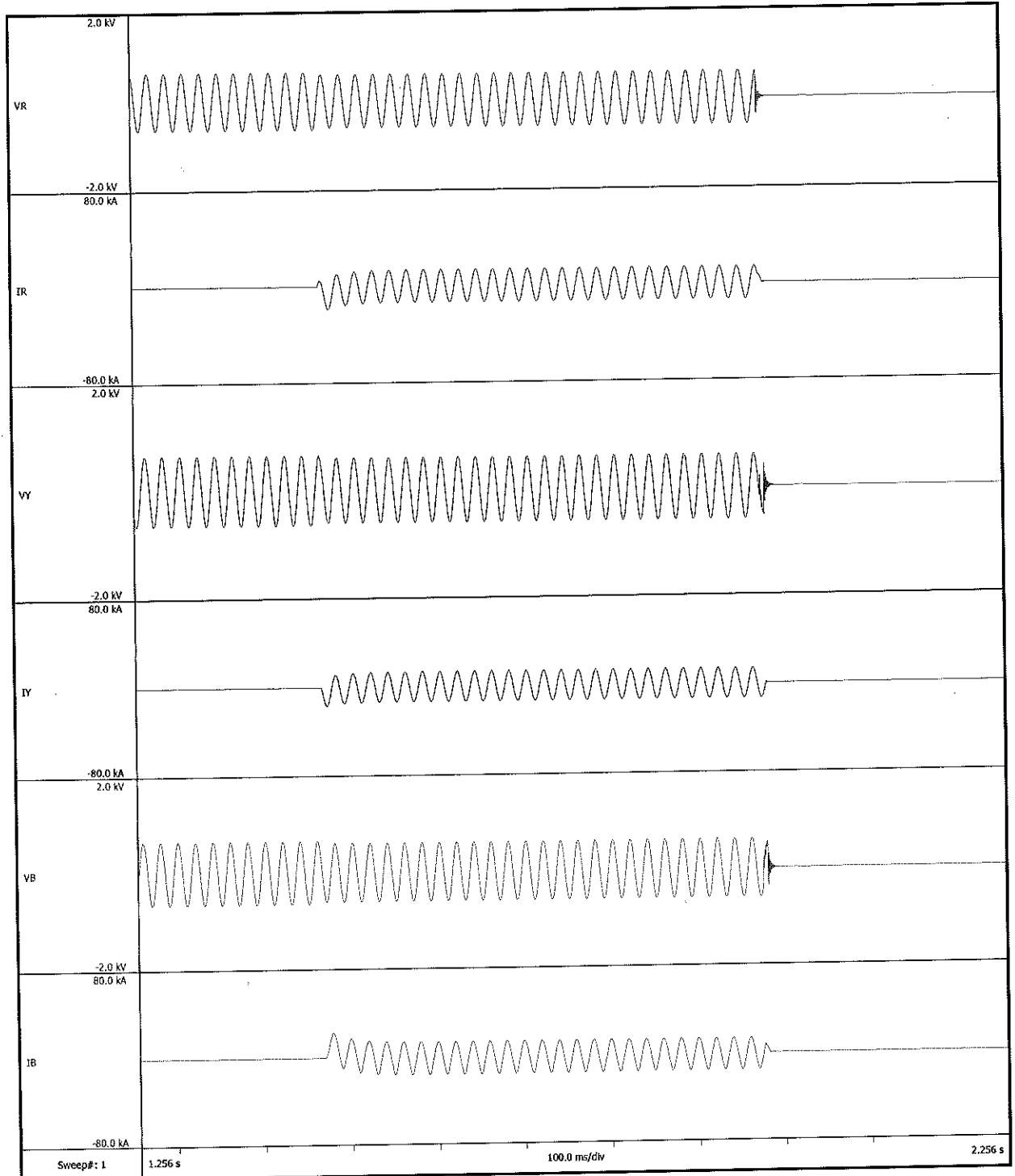
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REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/09



TC 2386595



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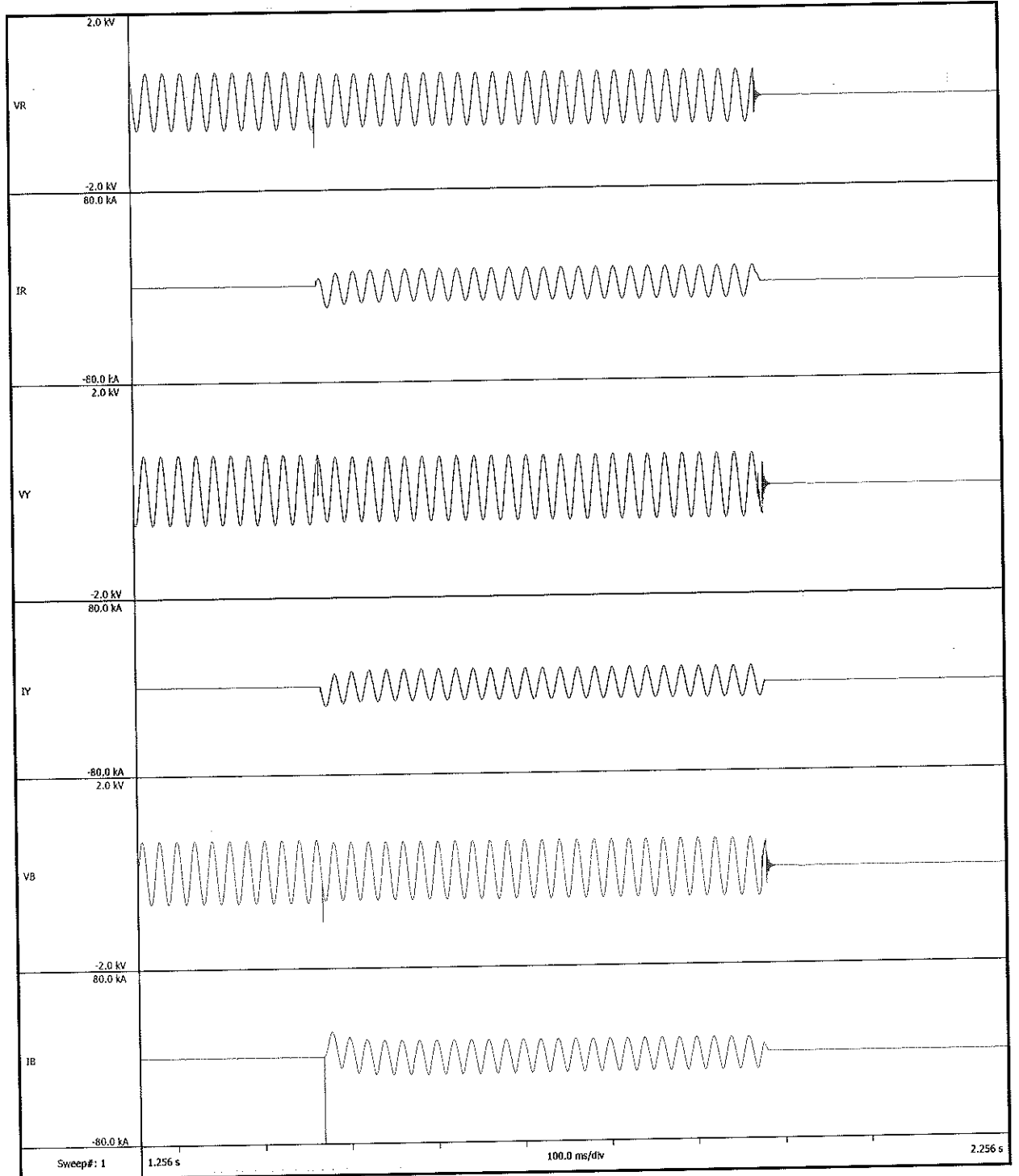
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Web : <http://www.erda.org>

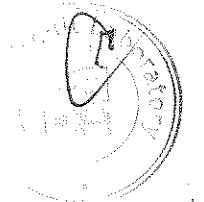


REPORT NO.: RP-1718-052239

DATE: 22.01.2018



OSCILLOGRAM NO. : 710/10



TC 2386596

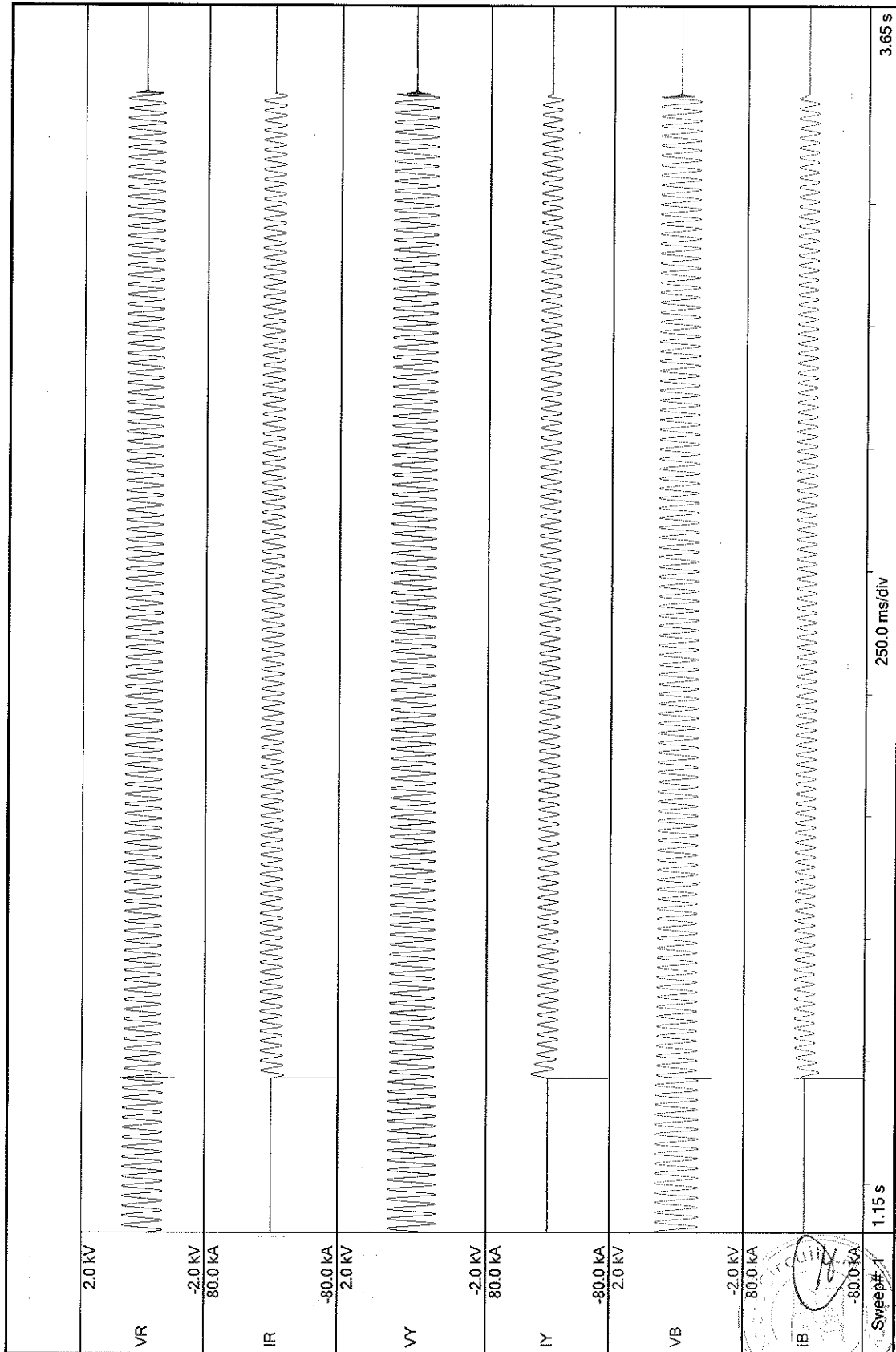
TC 2386597

REPORT NO.: RP-1718-052239

DATE: 22.01.2018



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Oscillogram No.:710/11



Certificate No. : TC-5389

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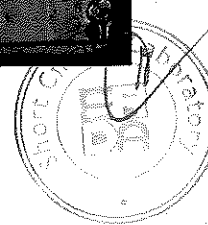


REPORT NO.: RP-1718-052239

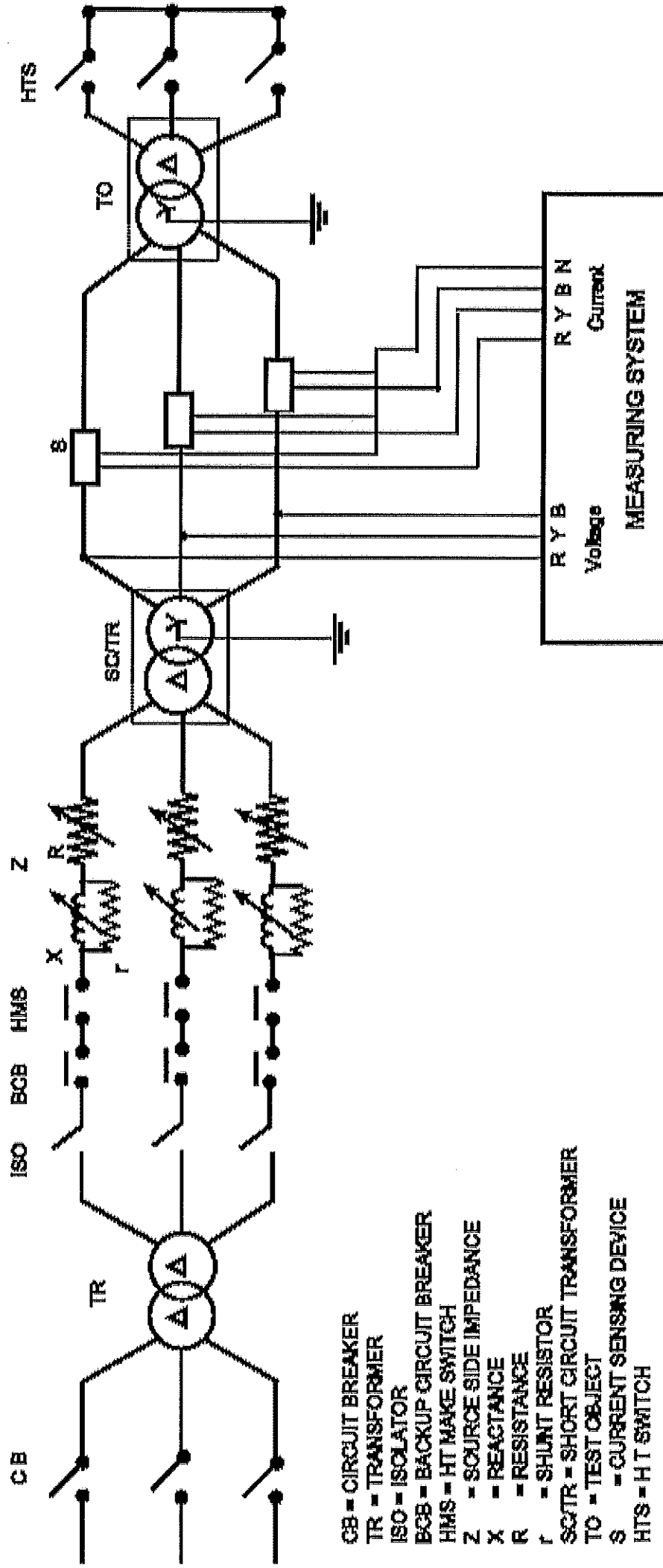
DATE: 22.01.2018



DISTRIBUTION TRANSFORMER			
RAJASTHAN POWERGEN TRANSFORMER PVT. LTD.			IS: 1180
Karola-Bhimmal Road, Karola, Sanchores, 343 041, Dist: Rajasthan INDIA			PART I
CUM. 1000/1000			
3 PHASE TRANSFORMER		ENERGY EFFICIENCY LEVEL 2	
STANDARD	IS: 1180(PART-I) 2014	MAX. TOTAL LOSSES	1025
KVA	315	AT 50% LOAD W	
VOLTS AT NO LOAD	HV 11000 LV 433	MAX. TOTAL LOSSES AT 100% LOAD W	3100
OIL	HV LIASAC28 LV 11-AC3	TYPE OF COOLING	ONAN
AMPERES	HV 1853 LV 420.02	TEMP RISE	Oil 45°C Wdg 65°C
FREQUENCY	Hz 50	MASS OF OIL	Kg. 3418
VECTOR GROUP REF.	DYN11	TOTAL MASS	Kg. 1820
IMPEDANCE VOLT %	4.5	VOLUME OF OIL LTRS	375
TAPPING	NA	MONTH & YEAR OF MFG.	2017
CUSTOMER	SERIAL NO. PTP/13/11/11/11/11/11		
ORDER NO.			
MADE IN INDIA			



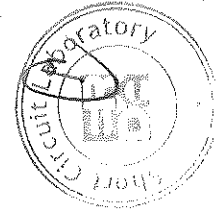
TC 2424619



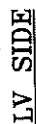
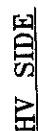
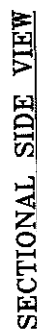
ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

SCHEMATIC CIRCUIT DIAGRAM

DRN H. A. S.	CKD BY M. B. M.	DATE 13/11/2008	DRAWING No. OLSC/DTC/03
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REPORT NO.: 88-7318-053339
 DATE: 11.01.18



ITEM No	N O M E N C L A T U R E	QTY.
9.	M.S. FOOT PLATE CHANNEL (100X50)MM	2
8.	M.S. TIE ROD ϕ 16 mm.	8
7.	P.B. SPACER BETWEEN SECTION *	10
6.	P.B. SEPARATOR (1.5 mm X2)	2
5.	L.V. COIL/LIMB 1 No.	3
4.	H.V. COIL/LIMB 6 Nos.	18
3.	M.S. CORE BOLTS ϕ 16 mm.	8
2.	M.S. CORE CHANNEL (150 X 75)	4
1.	SRBP TUBES	3

RAJASTHAN POWERGEN TRANSFORMER PVT. LTD
KAROLA-BHINMAL ROAD, KAROLA, SANCHORE
RAJASTHAN - 343041

Title:— CORE COIL ASSEMBLY DRAWING OF 315KVA,11/0.433KV
COPPER WOUND ENERGY EFFICIENCY LEVEL-2 DISTRIBUTION TRANSFORMER

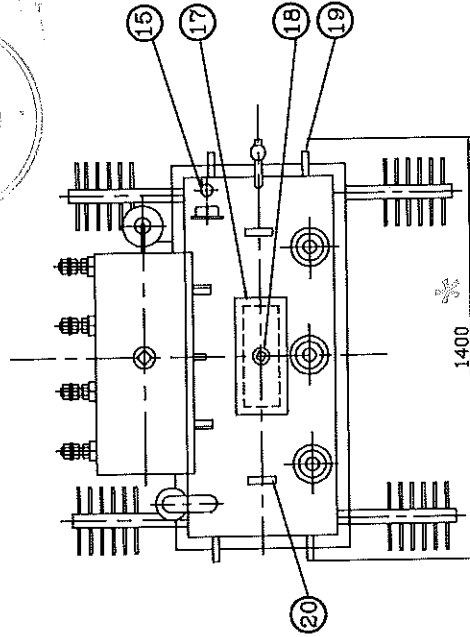
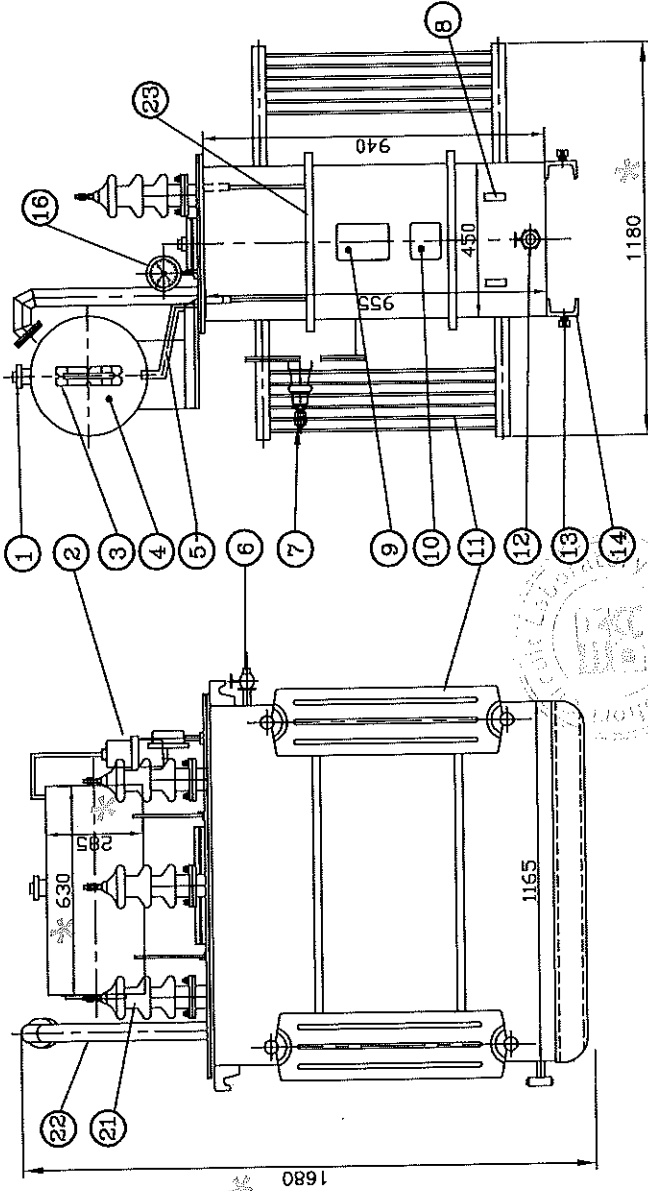
DRN.	CUSTOMER
	T. NO
APPD.	SCALE
DATE	DRG. No.

Notes:-

1. All Dimensions are in mm
2. HV Conductor Bare Size : 2.85 mm Dia
3. LV Conductor Bare Size : 11.75X3.0mm x 8Nos.
4. Winding Material - Copper
5. Insulation of conductor-DPC
6. +/- 10% Tolerances on Weights & Dimensions

NOTES:-

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
2. $\pm 10\%$ TOLERANCES ON WEIGHTS & DIMENSIONS



Test Report No. RR7218-057339
 Date: 24.01.18
 Product: Transformers
 Verified By: [Signature]
 Verification is done according to ERDA is limited to relevant dimensional checks only.
 Verified [Signature] and [Signature] are not liable for any error.

TANK DIMENSIONS	
LENGTH	1165
BREADTH	450
HEIGHT	940/955

SHEET THICKNESS	
TOP	5 mm
BOTTOM	5 mm

WEIGHT DETAILS

MIN. ELECTRICAL CLEARANCE		Core & Windings	
PHASE TO PHASE		Tank & Fitting	
HV	LV	Weight of Oil	Total Weight
255	75	140	1820 Kgs.
		Quantity of Oil	375 Ltrs.

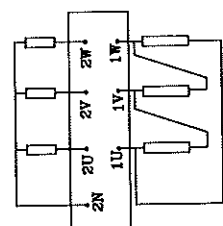
REV.No.	DATE	SIGN.	REMARKS
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ITEM	DESCRIPTION	QTY.
23.	STIFFENER-(40X40X6)MM ANGLE	2
22.	EXPLOSION VENT	1
21.	HV OUTDOOR BUSHINGS	3
20.	LIFTING LUGS FOR TANK COVER	2
19.	TRANSFORMER LIFTING LUGS	4
18.	AIR RELEASE PLUG	1
17.	INSPECTION HOLE	1
16.	4" DIAL TYPE THERMOMETER WITH MAX. DEMAND POINTER	1
15.	THERMOMETER POCKET	1
14.	UNDERBASE CHANNELS (100X50)MM	2
13.	EARTING TERMINALS M-12X40L	2
12.	OIL DRAIN CUM SAMPLING VALVE	1
11.	COOLING PSR RADIATORS 700C/CX300W-6FINS	4
10.	IDENTITY PLATE	1
9.	NAME & RATING PLATE	1
8.	PULLING LUGS	4
7.	LV BUSHING	4
6.	OIL FILTER VALVE-20MM GUN METAL	1
5.	CONSERVATOR PIPE	1
4.	OIL CONSERVATOR WITH DRAIN PLUG	1
3.	OIL LEVEL GAUGE	1
2.	DEHYDRATING BREATHER	1
1.	OIL FILLING HOLE WITH CAP	1

RAJASTHAN POWERGEN TRANSFORMER PVT. LTD
 KAROLA-BHINMAL ROAD, KAROLA, SANCHORE
 RAJASTHAN - 343041

Title:- OUTLINE GENERAL ARRANGEMENT DRAWING OF 315KVA
 11/0.433KV ENERGY EFFICIENCY LEVEL-2 TRANSFORMER

DRN.	CUSTOMER	---
CKD.	SPEC. No.	---
APPD.	SCALE	N T S
DATE	DRG. No.	RPTPL/315KVA/002

DISTRIBUTION TRANSFORMER RAJASTHAN POWERGEN TRANSFORMER PVT. LTD KAROLA-BHINMAL ROAD, KAROLA, SANCHORE RAJASTHAN (INDIA)																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">3 PHASE TRANSFORMER ENERGY LEVEL 2</td> </tr> <tr> <td>STANDARD IS:1190(Part-1)/2014</td> <td>MAX. TOTAL LOSS W 1025</td> </tr> <tr> <td>KVA 315</td> <td>AT 50% LOAD</td> </tr> <tr> <td colspan="2">MAX. TOTAL LOSS W 3100</td> </tr> <tr> <td colspan="2">AT 100% LOAD</td> </tr> <tr> <td>VOLTS AT HV 11000</td> <td>TYPE OF COOLING ONAN</td> </tr> <tr> <td>NO LOAD LV 433</td> <td>TEMP. RISE (OIL 40° C)</td> </tr> <tr> <td colspan="2">WDG. 45° C</td> </tr> <tr> <td>BIL HV 1195/AC28</td> <td>MASS OF OIL(KG) 310</td> </tr> <tr> <td>LV 11-AC3</td> <td>TOTAL MASS (KG) 1820</td> </tr> <tr> <td>AMPERES HV 16.53</td> <td>VOLUME OF OIL LTRS 375</td> </tr> <tr> <td>FREQUENCY HZ 50</td> <td>MONTHLY YEAR OF MFG 2017</td> </tr> <tr> <td>VECTOR GROUP Dyn11</td> <td>S.N.O. 1774/315KVA/2017-10/001</td> </tr> <tr> <td>IMPEDANCE VOLT % 4.5</td> <td>TAPPING NA</td> </tr> <tr> <td>CUSTOMER</td> <td>ORDER NO.</td> </tr> </table>	3 PHASE TRANSFORMER ENERGY LEVEL 2		STANDARD IS:1190(Part-1)/2014	MAX. TOTAL LOSS W 1025	KVA 315	AT 50% LOAD	MAX. TOTAL LOSS W 3100		AT 100% LOAD		VOLTS AT HV 11000	TYPE OF COOLING ONAN	NO LOAD LV 433	TEMP. RISE (OIL 40° C)	WDG. 45° C		BIL HV 1195/AC28	MASS OF OIL(KG) 310	LV 11-AC3	TOTAL MASS (KG) 1820	AMPERES HV 16.53	VOLUME OF OIL LTRS 375	FREQUENCY HZ 50	MONTHLY YEAR OF MFG 2017	VECTOR GROUP Dyn11	S.N.O. 1774/315KVA/2017-10/001	IMPEDANCE VOLT % 4.5	TAPPING NA	CUSTOMER	ORDER NO.	MADE IN INDIA  MADE IN INDIA
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IMPEDANCE VOLT % 4.5	TAPPING NA																														
CUSTOMER	ORDER NO.																														



Test Report No. **RP-718-052339**
 Date: **23.01.18**
 Product: **Transformers**
 Verified By: **[Signature]**
 Verification of drawings by ESDA's
 limited to relevant dimensional checks only.
 Verified dimensions are marked with 'V'.

RAJASTHAN POWERGEN TRANSFORMER PVT. LTD
 KAROLA-BHINMAL ROAD, KAROLA, SANCHORE
 RAJASTHAN - 343041

**TITLE:— NAME PLATE DRAWING OF 315KVA,11/0.433KV
 COPPER WOUND ENERGY EFFICIENCY LEVEL-2 TRANSFORMER**

CUSTOMER	---
T.S.No.	RPTPL/17-18/315KVA/001
SCALE	N T S
DRG. No.	RPTPL/315KVA/003