

Date: Jun./22/2008

TRANSFORMER TEST REPORT

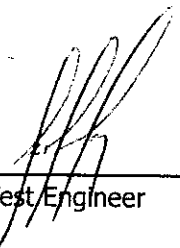
90/120/150/168 MVA

115/13.8/13.8 KV

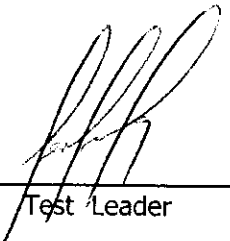
ONAN/ONAF1/ONAF2

Serial No. G2137-01

Purchaser: Equisales Associates, Inc.



Test Engineer



Test Leader



Design Engineer

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GE ENERGY
GE- PROLEC

Bld. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

POWER TRANSFORMERS

TEST REPORT

Purchaser: Equisales Associates, Inc.

Serial No.

G2137-01

Rating: 90/120/150/168 MVA 115/13.8/13.8 KV

Date:

Jun./22/2008

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TEST DEPARTMENT

CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./20/2008

GENERAL CHARACTERISTICS

Description: TRANSFORMER

Phases: 3
Frequency: 60 Hz
Altitude: 3300 FEET ABOVE SEA LEVEL

POWER RATING

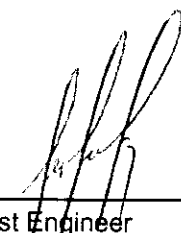
RATING (MVA)	COOLING	TEMPERATURE RISE
90.000	ONAN	55 °C.
120.000	ONAF1	55 °C.
150.000	ONAF2	55 °C.
168.000	ONAF2	65 °C.

TAP CHANGER


WINDING	TYPE	POSITIONS	NOMINAL	% / STEP
HIGH (H)	NLTC	5	POS 3	2.500

BASIC IMPULSE LEVEL

WINDING	VOLTAGE	CONNECTION	BIL	NEUTRAL BIL
HIGH (H)	115000 V	WYE	550 KV	150 KV
LOW (X)	13800 V	DELTA	110 KV	
LOW (Y)	13800 V	DELTA	110 KV	


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INSULATION RESISTANCE TEST

Correction Factor: 2.8

MEGGER 2.5 KV	H/X+Y+Gr MΩ	X/H+Y+Gr MΩ	Y/H+X+Gr MΩ	H+X+Y / Gr MΩ	H/X+Y+Gr MΩ	X/H+Y+Gr MΩ	Y/H+X+Gr MΩ	H+X+Y / Gr MΩ
TEMP. C	37.00 °C.	37.00 °C.	37.00 °C.	37.00 °C.	20.00 °C.	20.00 °C.	20.00 °C.	20.00 °C.
15 SEC	2160	2770	2270	2310	5983.848	7673.731	6288.581	6399.393
30 SEC	2480	3490	2690	2840	6870.344	9668.347	7452.107	7867.652
45 SEC	2820	3980	3110	3260	7812.246	11025.79	8615.633	9031.178
60 SEC	3140	4620	3470	3600	8698.742	12798.79	9612.941	9973.08
2 min	4350	6850	4790	4650	12050.81	18976.56	13269.74	12881.9
3 min	5310	8940	5950	5410	14710.29	24766.48	16483.29	14987.32
4 min	6160	10900	6970	5980	17065.05	30196.27	19308.99	16566.39
5 min	6880	12800	7920	6420	19059.66	35459.84	21940.78	17785.33
6 min	7500	14600	8780	6790	20777.25	40446.38	24323.23	18810.34
7 min	8030	16300	9580	7090	22245.51	45155.89	26539.47	19641.43
8 min	8540	17900	10000	7350	23658.36	49588.37	27703	20361.71
9 min	9010	19400	11000	7570	24960.4	53743.82	30473.3	20971.17
10 min	9370	20800	11600	7760	25957.71	57622.24	32135.48	21497.53
Polarization index (10/1)					2.984	4.502	3.343	2.156
Absortion Index (60/15s)					1.454	1.668	1.529	1.558



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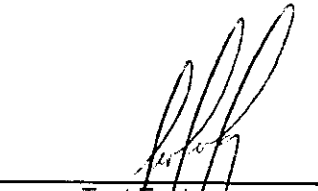
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INSULATION POWER FACTOR AND CAPACITANCE TEST, 10 KV.

WINDING					CURRENT			WATTS			%P.F.		CAPACITANCE (pF)
	E	Gr	G	UST	METER	K	mA	METER	K	W	34.0 °C	20 °C	
1	H	X	Y	-	35.50	1.00	35.5	6.1	0.20	1.22	0.344	0.175	9460
2	H	-	X+Y	-	68.80	0.20	13.8	8.1	0.10	0.81	0.589	0.300	3676
3	X	Y	H	-	30.50	1.00	30.5	4.3	0.20	0.86	0.282	0.144	8140
4	X	-	H+Y	-	29.00	1.00	29.0	4.0	0.20	0.80	0.276	0.141	7740
5	Y	H	X	-	53.80	1.00	53.8	6.2	0.20	1.24	0.230	0.118	14330
6	Y	-	H+X	-	31.50	1.00	31.5	4.1	0.20	0.82	0.260	0.133	8420
7	H+X+Y	Y	-	-	74.10	1.00	74.1	9.4	0.20	1.88	0.254	0.129	19820
8	H	Y	-	X	21.60	1.00	21.6	2.2	0.20	0.44	0.204	0.104	5810
9	X	H	-	Y	75.70	0.02	1.5	5.2	0.01	0.05	0.343	0.175	402
10	Y	X	-	H	22.20	1.00	22.2	2.4	0.20	0.48	0.216	0.110	5890

CORRECTION FACTOR =

0.51


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Test Department

Purchaser: Equisales Associates, Inc.

Serial No.: G2143-01

Inspector:

Date: Jun./21/2008

RATIO AND POLARITY TEST

H.V./L.V(X)

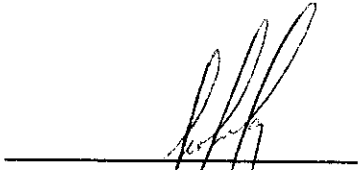
H.V. POSITION No	PHASE A	PHASE B	PHASE C
	H1 - H0	H2 - H0	H3 - H0
	X1 - X2	X2 - X3	X3 - X1
1	5.045	5.047	5.041
2	4.920	4.921	4.916
3	4.796	4.797	4.791
4	4.688	4.689	4.684
5	4.563	4.564	4.559

H.V./L.V(Y)

H.V. POSITION No	PHASE A	PHASE B	PHASE C
	H1 - H0	H2 - H0	H3 - H0
	Y1 - Y2	Y2 - Y3	Y3 - Y1
1	5.044	5.046	5.041
2	4.920	4.923	4.916
3	4.795	4.796	4.791
4	4.687	4.689	4.683
5	4.563	4.565	4.558

L.V(X)/L.V(Y)

H.V. POSITION No.		PHASE A		PHASE B		PHASE C	
		X1-X2		X2-X3		X3-X1	
		Y1-Y2		Y2-Y3		Y3-Y1	
NOM		0.9970		0.9980		0.9950	


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TEST DEPARTMENT

CUSTOMER: Equisales Associates, Inc.

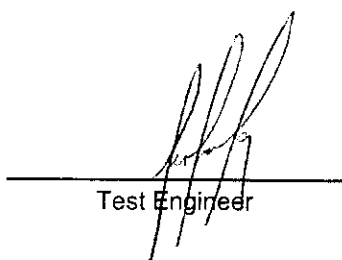
SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./22/2008

WINDING RESISTANCE

TEMPERATURE: 36.02 °C.					
HIGH VOLTAGE (H)					
TERMINAL.	POS 1	POS 2	POS 3	POS 4	POS 5
H1 - H2	173.620	169.280	164.730	161.150	156.410
H1 - H3	173.220	169.100	164.250	160.890	156.830
H2 - H3	173.710	169.340	164.360	160.930	156.940
K	0.001	0.001	0.001	0.001	0.001
RavgOHMS	0.17352	0.16924	0.16445	0.16099	0.15673
Ravg@20°C	0.16324	0.15922	0.15471	0.15146	0.14745
Ravg@75°C	0.198519	0.193626	0.18814	0.18419	0.17931
TEMPERATURE: 36.02 °C.					
LOW VOLTAGE (X)			LOW VOLTAGE (Y)		
TERMINAL	NOM	TERMINAL	NOM		
X1 - X2	3.6700	Y1 - Y2	3.8814		
X1 - X3	3.6983	Y1 - Y3	3.8350		
X2 - X3	3.6748	Y2 - Y3	3.8850		
K	0.001	K	0.001		
RavgOHMS	0.003681	RavgOHMS	0.003867		
Ravg@20°C	0.00346	Ravg@20°C	0.00364		
Ravg@75°C	0.00421	Ravg@75°C	0.00442		



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SERIAL No.: G2137-01

INSPECTOR:

CORE LOSSES TEST

BEFORE DIELECTRIC TESTS

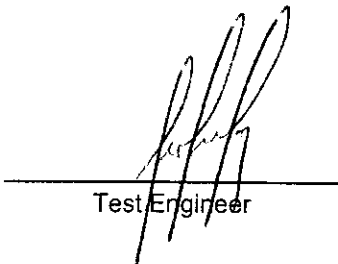
DATE: Jun./22/2008

L.V (X)

TEST VOLTAGE: 12420						90 %
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	12359	12385	3.114	56432	60	KVA: 90000
						WATTS: 56313
						% lex.: 0.083

TEST VOLTAGE: 13800						100 %
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	13830	13869	4.665	77709	60	KVA: 90000
						WATTS: 77490
						% lex.: 0.124

TEST VOLTAGE: 15180						110%
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	15038	15162	14.771	115904	60	KVA: 90000
						WATTS: 114952
						% lex.: 0.392



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INSPECTOR:

CORE LOSSES TEST

AFTER DIELECTRIC TESTS

DATE: Jun./25/2008

L.V (X)

TEST VOLTAGE: 12420						90 %
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	12360	12400	3.100	56270	60	KVA: 90000
						WATTS: 56088
						% lex.: 0.082

TEST VOLTAGE: 13800						100 %
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	13790	13880	4.720	76640	60	KVA: 90000
						WATTS: 76141
						% lex.: 0.125

TEST VOLTAGE: 15180						110%
READING	AVG VOLTS	RMS VOLTS	AMPERS	WATTS	Hz	READINGS
AVERAGE	15160	15780	23.270	125000	60	KVA: 90000
						WATTS: 119992
						% lex.: 0.618



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SERIAL No.: G2137-01

INSPECTOR:


DATE: Jun./22/2008

WINDING LOSSES

POSITION: H.V. (1) / L.V. (X) + L.V. (Y)							
* READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	431.167	8384	120290	60	37.66	KVA:	90000
			WATTS To 75 °C:			109430	
			% IMPEDANCE:			6.804	
			TOTAL WATTS:			186920	

POSITION: H.V. (3) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	455.733	8063	122225	60	37.66	KVA:	90000
			WATTS To 75 °C:			110853	
			% IMPEDANCE:			6.850	
			TOTAL WATTS:			188343	

POSITION: H.V. (5) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	474.033	7686	123970	60	37.66	KVA:	90000
			WATTS To 75 °C:			120445	
			% IMPEDANCE:			7.062	
			TOTAL WATTS:			197935	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	444.533	8233	122442	60	37.66	KVA:	90000
			WATTS To 75 °C:			109646	
			% IMPEDANCE:			6.809	
			TOTAL WATTS:			187136	

POSITION: H.V. (4) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	467.100	7922	125977	60	37.66	KVA:	90000
			WATTS To 75 °C:			117109	
			% IMPEDANCE:			6.982	
			TOTAL WATTS:			194600	



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WINDING LOSSES

POSITION: H.V. (1) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	571.600	11108	211597	60	37.66	KVA:	120000
			WATTS To 75 °C:			195643	
			% IMPEDANCE:			9.072	
			TOTAL WATTS:			273133	

POSITION: H.V. (3) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	607.533	10741	217149	60	37.66	KVA:	120000
			WATTS To 75 °C:			197667	
			% IMPEDANCE:			9.133	
			TOTAL WATTS:			275157	

POSITION: H.V. (5) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	636.500	10321	223899	60	37.66	KVA:	120000
			WATTS To 75 °C:			215215	
			% IMPEDANCE:			9.416	
			TOTAL WATTS:			292705	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	581.833	10771	209799	60	37.66	KVA:	120000
			WATTS To 75 °C:			195970	
			% IMPEDANCE:			9.078	
			TOTAL WATTS:			273460	

POSITION: H.V. (4) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	617,400	10478	220303	60	37.66	KVA:	120000
			WATTS To 75 °C:			209082	
			% IMPEDANCE:			9.310	
			TOTAL WATTS:			286573	


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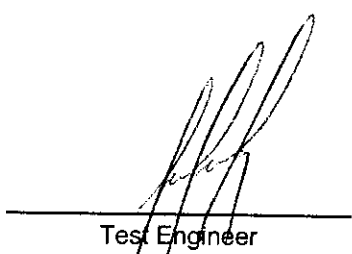
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WINDING LOSSES

POSITION: H.V. (1) / L.V. (X) + L.V. (Y)						
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS
AVERAGE	718.53	13970	334355	60	37.66	KVA: 150000
			WATTS To 75 °C:			307188
			% IMPEDANCE:			11.340
			TOTAL WATTS:			384678

POSITION: H.V. (3) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	756.27	13362	335778	60	37.66	KVA:	150000
			WATTS To 75 °C:			309480	
			% IMPEDANCE:			11.416	
			TOTAL WATTS:			386970	

POSITION: H.V. (5) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	794.00	12876	349533	60	37.66	KVA:	150000
			WATTS To 75 °C:			337295	
			% IMPEDANCE:			11.771	
			TOTAL WATTS:			414785	



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TEST DEPARTMENT

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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	735.036	13613	335036	60	37.66	KVA:	150000
			WATTS To 75 °C:			307777	
			% IMPEDANCE:			11.348	
			TOTAL WATTS:			385267	

POSITION: H.V. (4) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	775.767	13160	347764	60	37.66	KVA:	150000
			WATTS To 75 °C:			327809	
			% IMPEDANCE:			11.637	
			TOTAL WATTS:			405299	


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WINDING LOSSES

POSITION: H.V. (1) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	804.40	15604	418044	60	37.66	KVA:	168000
			WATTS To 85 °C:			397881	
			% IMPEDANCE:			12.904	
			TOTAL WATTS:			475371	

POSITION: H.V. (3) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	844.30	14918	417084	60	37.66	KVA:	168000
			WATTS To 85 °C:			398001	
			% IMPEDANCE:			12.959	
			TOTAL WATTS:			475492	

POSITION: H.V. (5) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	885.93	14362	436683	60	37.66	KVA:	168000
			WATTS To 85 °C:			433217	
			% IMPEDANCE:			13.174	
			TOTAL WATTS:			510707	


Test Engineer


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Blvd. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01


INSPECTOR:

DATE: Jun./22/2008

WINDING LOSSES

POSITION: H.V. (2) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	827.267	15327	423244	60	37.66	KVA:	168000
			WATTS To 85 °C:			398658	
			% IMPEDANCE:			12.934	
			TOTAL WATTS:			476148	

POSITION: H.V. (4) / L.V. (X) + L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	864.233	14664	431067	60	37.66	KVA:	168000
			WATTS To 85 °C:			421122	
			% IMPEDANCE:			13.091	
			TOTAL WATTS:			498612	


 Test Engineer


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SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./22/2008

WINDING LOSSES

POSITION: H.V. (1) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	215.877	7730	63665	60	37.66	KVA:	45000
			WATTS To 75 °C:			63816	
			% IMPEDANCE:			6.380	
			TOTAL WATTS:			141306	

POSITION: H.V. (3) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	232.210	7571	66897	60	37.66	KVA:	45000
			WATTS To 75 °C:			64025	
			% IMPEDANCE:			6.405	
			TOTAL WATTS:			141515	

POSITION: H.V. (5) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	235.887	7045	64852	60	37.66	KVA:	45000
			WATTS To 75 °C:			66487	
			% IMPEDANCE:			6.501	
			TOTAL WATTS:			143977	


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SERIAL No.: G2137-01

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DATE: Jun./22/2008

WINDING LOSSES

POSITION: H.V. (2) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	222.630	7604	64568	60	37.66	KVA:	45000
			WATTS To 75 °C:			63927	
			% IMPEDANCE:			6.387	
			TOTAL WATTS:			141417	

POSITION: H.V. (4) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	231.870	7259	65102	60	37.66	KVA:	45000
			WATTS To 75 °C:			65610	
			% IMPEDANCE:			6.470	
			TOTAL WATTS:			143100	


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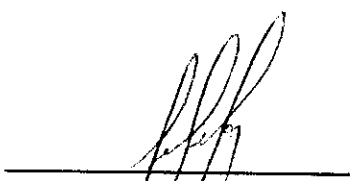
DATE: Jun./22/2008

WINDING LOSSES

POSITION: H.V. (1) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	286.143	10255	112125	60	37.66	KVA:	60000
			WATTS To 75 °C:			113690	
			% IMPEDANCE:			8.515	
			TOTAL WATTS:			191180	

POSITION: H.V. (3) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	301.620	9828	112974	60	37.66	KVA:	60000
			WATTS To 75 °C:			113916	
			% IMPEDANCE:			8.535	
			TOTAL WATTS:			191407	

POSITION: H.V. (5) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
•AVERAGE	315.943	9439	116622	60	37.66	KVA:	60000
			WATTS To 75 °C:			118448	
			% IMPEDANCE:			8.671	
			TOTAL WATTS:			195939	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	293.187	10016	112191	60	37.66	KVA:	60000
			WATTS To 75 °C:			113835	
			% IMPEDANCE:			8.517	
			TOTAL WATTS:			191325	

POSITION: H.V. (4) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	308.483	9655	115500	60	37.66	KVA:	60000
			WATTS To 75 °C:			116878	
			% IMPEDANCE:			8.624	
			TOTAL WATTS:			194368	


Test Engineer


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WINDING LOSSES

POSITION: H.V. (1) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	355.163	12713	172783	60	37.66	KVA:	75000
			WATTS To 75 °C:			177679	
			% IMPEDANCE:			10.630	
			TOTAL WATTS:			255169	

POSITION: H.V. (3) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	374.533	12203	174368	60	37.66	KVA:	75000
			WATTS To 75 °C:			178147	
			% IMPEDANCE:			10.668	
			TOTAL WATTS:			255637	

POSITION: H.V. (5) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	395.533	11809	183024	60	37.66	KVA:	75000
			WATTS To 75 °C:			185291	
			% IMPEDANCE:			10.831	
			TOTAL WATTS:			262781	



Test Engineer



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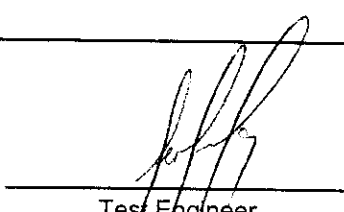
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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	366.857	12529	175669	60	37.66	KVA:	75000
			WATTS To 75 °C:			177879	
			% IMPEDANCE:			10.643	
			TOTAL WATTS:			255369	

POSITION: H.V. (4) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	384.467	12034	179670	60	37.66	KVA:	75000
			WATTS To 75 °C:			182856	
			% IMPEDANCE:			10.781	
			TOTAL WATTS:			260346	


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WINDING LOSSES

POSITION: H.V. (1) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	400.733	14349	220002	60	37.66	KVA:	84000
			WATTS To 85 °C:			223954	
			% IMPEDANCE:			11.910	
			TOTAL WATTS:			301444	

POSITION: H.V. (3) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	424.167	13823	223394	60	37.66	KVA:	84000
			WATTS To 85 °C:			224417	
			% IMPEDANCE:			11.951	
			TOTAL WATTS:			301907	

POSITION: H.V. (5) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	444.100	13264	230512	60	37.66	KVA:	84000
			WATTS To 85 °C:			233303	
			% IMPEDANCE:			12.136	
			TOTAL WATTS:			310793	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	412.867	14086	222185	60	37.66	KVA:	84000
			WATTS To 85 °C:			223974	
			% IMPEDANCE:			11.908	
			TOTAL WATTS:			301465	

POSITION: H.V. (4) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	432.933	13537	227568	60	37.66	KVA:	84000
			WATTS To 85 °C:			230228	
			% IMPEDANCE:			12.062	
			TOTAL WATTS:			307718	

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WINDING LOSSES

POSITION: H.V. (1) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	215.110	7740	64762	60	37.66	KVA:	45000
			WATTS To 75 °C:			65435	
			% IMPEDANCE:			6.411	
			TOTAL WATTS:			142925	

POSITION: H.V. (3) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	226.300	7410	65425	60	37.66	KVA:	45000
			WATTS To 75 °C:			65938	
			% IMPEDANCE:			6.433	
			TOTAL WATTS:			143428	

POSITION: H.V. (5) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	238.040	7162	67782	60	37.66	KVA:	45000
			WATTS To 75 °C:			68272	
			% IMPEDANCE:			6.549	
			TOTAL WATTS:			145762	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	221.720	7601	65478	60	37.66	KVA:	45000
			WATTS To 75 °C:			65432	
			% IMPEDANCE:			6.410	
			TOTAL WATTS:			142922	

POSITION: H.V. (4) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	238.230	7494	70663	60	37.66	KVA:	45000
			WATTS To 75 °C:			67481	
			% IMPEDANCE:			6.501	
			TOTAL WATTS:			144971	


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WINDING LOSSES

POSITION: H.V. (1) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	285.270	10259	114247	60	37.66	KVA:	60000
			WATTS To 75 °C:			116641	
			% IMPEDANCE:			8.544	
			TOTAL WATTS:			194131	

POSITION: H.V. (3) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	306.103	10017	119943	60	37.66	KVA:	60000
			WATTS To 75 °C:			117426	
			% IMPEDANCE:			8.572	
			TOTAL WATTS:			194916	

POSITION: H.V. (5) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	317.303	9544	120775	60	37.66	KVA:	60000
			WATTS To 75 °C:			121668	
			% IMPEDANCE:			8.730	
			TOTAL WATTS:			199158	


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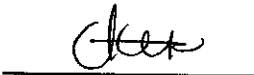
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WINDING LOSSES

POSITION: H.V. (2) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	292.707	10033	114496	60	37.66	KVA:	60000
			WATTS To 75 °C:			116660	
			% IMPEDANCE:			8.546	
			TOTAL WATTS:			194150	

POSITION: H.V. (4) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	307.110	9658	117664	60	37.66	KVA:	60000
			WATTS To 75 °C:			120173	
			% IMPEDANCE:			8.665	
			TOTAL WATTS:			197663	


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WINDING LOSSES

POSITION: H.V. (1) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	356.260	12811	178979	60	37.66	KVA:	75000
			WATTS To 75 °C:			182960	
			% IMPEDANCE:			10.679	
			TOTAL WATTS:			260450	

POSITION: H.V. (3) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	376.633	12332	181765	60	37.66	KVA:	75000
			WATTS To 75 °C:			183638	
			% IMPEDANCE:			10.721	
			TOTAL WATTS:			261128	

POSITION: H.V. (5) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	399.867	12021	192147	60	37.66	KVA:	75000
			WATTS To 75 °C:			190402	
			% IMPEDANCE:			10.906	
			TOTAL WATTS:			267892	


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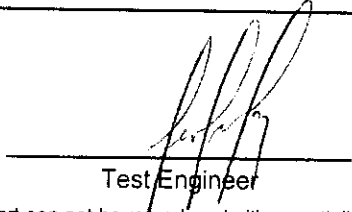
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WINDING LOSSES

POSITION: H.V. (2) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	364.453	12500	178371	60	37.66	KVA:	75000
			WATTS To 75 °C:			183056	
			% IMPEDANCE:			10.689	
			TOTAL WATTS:			260546	

POSITION: H.V. (4) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	388.267	12203	188442	60	37.66	KVA:	75000
						WATTS To 75 °C:	188095
						% IMPEDANCE:	10.825
						TOTAL WATTS:	265585


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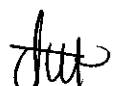
WINDING LOSSES

POSITION: H.V. (1) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	407.333	14658	235269	60	37.66	KVA:	84000
			WATTS To 85 °C:			231664	
			% IMPEDANCE:			11.969	
			TOTAL WATTS:			309154	

POSITION: H.V. (3) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	420.867	13787	226627	60	37.66	KVA:	84000
			WATTS To 85 °C:			231261	
			% IMPEDANCE:			12.013	
			TOTAL WATTS:			308751	

POSITION: H.V. (5) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	443.767	13335	236692	60	37.66	KVA:	84000
			WATTS To 85 °C:			239982	
			% IMPEDANCE:			12.210	
			TOTAL WATTS:			317473	


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WINDING LOSSES

POSITION: H.V. (2) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	413.167	14178	230725	60	37.66	KVA:	84000
			WATTS To 85 °C:			232032	
			% IMPEDANCE:			11.977	
			TOTAL WATTS:			309523	

POSITION: H.V. (4) / L.V. (Y)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	431.1	13541	232252	60	37.66	KVA:	84000
			WATTS To 85 °C:			237011	
			% IMPEDANCE:			12.117	
			TOTAL WATTS:			314501	


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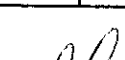
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WINDING LOSSES

POSITION: L.V.(Y) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
• AVERAGE	1003.0	880	44756	60	37.66	KVA:	45000
			WATTS To 75 °C:			149073	
			% IMPEDANCE:			11.976	
			TOTAL WATTS:			226563	

POSITION: L.V.(Y) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	1337.3	1174	79566	60	37.66	KVA:	60000
			WATTS To 75 °C:			265018	
			% IMPEDANCE:			15.968	
			TOTAL WATTS:			342508	

POSITION: L.V.(Y) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	1671.7	1467	124322	60	37.66	KVA:	75000
			WATTS To 75 °C:			414091	
			% IMPEDANCE:			19.960	
			TOTAL WATTS:			491581	

POSITION: L.V.(Y) / L.V. (X)							
READING	AMPERES	RMS VOLTS	WATTS	Hz	TEMP. °C.	READINGS	
AVERAGE	1872.3	1644	155950	60	37.66	KVA:	84000
			WATTS To 85 °C:			513354	
			% IMPEDANCE:			22.355	
			TOTAL WATTS:			590844	


Test Engineer
Design Engineer

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GE ENERGY
GE- PROLECBlvd. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

**PROLEC**

Power Division

PAGE 33

Test Department

Purchaser: Equisales Associates, Inc.

Serial. No. G2137-01

Rating: 90/120/150/168 MVA

Date: Jun./22/2008

% REGULATION

KVA =	168000	% Z =	12.9590
% Z =	12.959	% X =	12.9568
NLL kW =	77.49	% R =	0.2393
LL kW =	398.001	X/R =	54.151
AUX. =	3.975		
TL kW =	479.466		

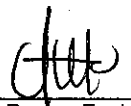
POWER FACTOR	1	0.95	0.9	0.85	0.8	0.75	0.7
% REG	1.079	5.021	6.531	7.621	8.488	9.206	9.816

% EFFICIENCY

% MVA	PF = 1	0.95	0.9	0.85	0.8	0.75	0.7
25	99.756	99.743	99.729	99.713	99.696	99.675	99.652
50	99.789	99.777	99.765	99.751	99.736	99.718	99.698
75	99.760	99.747	99.733	99.717	99.700	99.680	99.657
80	99.752	99.739	99.724	99.708	99.690	99.669	99.645
100	99.715	99.700	99.684	99.665	99.645	99.621	99.594
125	99.665	99.648	99.628	99.606	99.582	99.554	99.522
150	99.612	99.592	99.569	99.544	99.515	99.483	99.446
200	99.501	99.475	99.446	99.413	99.377	99.336	99.289

RESULTS: **APPROVED**

 Test Engineer


 Design Engineer

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GE ENERGY
 GE- PROLEC

 Blvd. Carlos Salinas de Gortari km 9.25
 Apodaca, N.L. 66600 México

TEST DEPARTMENT

CUSTOMER: Equisales Associates, Inc.

 Serial No.: **G2137-01**

Rating: 90/120/150/168 MVA

Date: Jun. / 22 / 2008

ZERO PHASE SEQUENCE IMPEDANCE Z₀

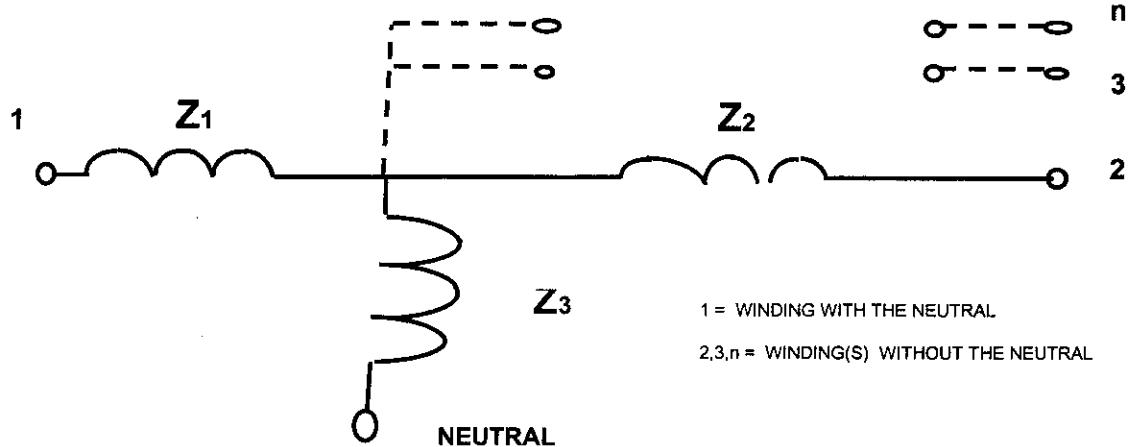
TRANSFORMERS WITH	2	AVAILABLE NEUTRAL(S) or AUTOTRANSFORMERS
CONNECTION	WINDING	No.
WYE	H	1
DELTA	X	2

WINDING TEMPERATURE: 32.9 °C

BASE RATING (MVA): 90.0

CORRECTION TO: 75 °C

Winding 1		Winding 2		Voltage rms (V)	Current rms (A)	Power (kW)	Power Corrected (kW)	Z (ohm) V/A	Zbase	R (%)	j X (%)	Z ₀ (%)	Z ₁ N ₀
TAP Position	Nominal Voltage	TAP Position	Nominal Voltage										
3	115.000	N	13.800	438.3	151.3	4.917	5.6911	2.896	146.944	0.507	5.891	5.913	

EQUIVALENT ZERO-PHASE SEQUENCE IMPEDANCE NETWORK


Test Engineer

Design Engineer

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 GE ENERGY
GE-PROLEC

 Blvd. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

POWER TRANSFORMERS

TEST REPORT

Purchaser: Equisales Associates, Inc.

Serial No. G2137-01

Rating: 90/120/150/168 MVA

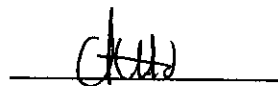
Date: Jun./23/2008

LIGHTNING IMPULSE TEST**REFERENCE TABLE**

Terminal	Measurements	Test values on the Test Report on pages:	Wave Shapes on pages:
H1	1 to 4	1 to 2	1
H2	5 to 8	2 to 3	2
H3	9 to 12	3 to 4	3
H0	13 to 15	4 to 5	4
X1	16 to 19	5 to 6	4 to 5
X2	20 to 23	6 to 7	5 to 6
X3	24 to 27	7 to 8	6 to 7
Y1	28 to 31	8 to 9	8 to 8
Y2	32 to 35	9 to 10	8 to 9
Y3	36 to 39	10 to 11	9 to 10

THE TEST VALUES ARE IN THE FOLLOWING: 11 PAGESTHE OSCILOGRAMS ARE IN THE FOLLOWING: 10 PAGES

NOTICE: _____

RESULTS: **APPROVED**
Test Engineer
Design Engineer

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Startup Impulse - T E S T R E P O R T

=====

Company Name : PROLEC GE
 Serial Number : G2137-01
 Customer Name : EQUISALES
 Order Number : G2137-01
 Comment : TEST DATE.06-23-2008
 Manufacturer : PROLEC GE
 Test Object : TRANSFORMER
 HV 115 KV
 BIL. 550 KV
 LV.(X) 13.8KV BIL 110K
 LV.(Y) 13.8KV BIL 110K
 Test Supervisor: MOISES RODRIGUEZ C.
 Test Technician: EDICH E. DOMINGUEZ
 Inspector :
 Standard : ANSI C57.12.90
 Note :
 Data Directory : C:\DATA\G2137-01\
 Note:

File: 21370101.DAT, Measm.No.1	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW , 50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:H1 ratio:844 V/V	-296.7kV	9.7899%	1.31us	31.2us	
Full ampl.(BIL) -550kV					
Ch2 measured with:Shunt					
Terminal:H0 ratio: 1 Ohm	-481.2A				
Full ampl.(BIL) -1kA	160.2A				

Note:

File: 21370102.DAT, Measm.No.2	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW , 110% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:H1 ratio:844 V/V	-602.1kV	7.5867%	1.3us		3.97us
Full ampl.(BIL) -550kV		-18.11%			
Ch2 measured with:Shunt					
Terminal:H0 ratio: 1 Ohm	-3.563A				
Full ampl.(BIL) -1kA	2.063A				

Data Directory : C:\DATA\G2137-01\
Note:

File: 21370103.DAT, Measm.No.3 Std.Nm: CW , 110% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with: Divider Terminal: H1 ratio: 844 V/V Full ampl. (BIL) -550kV	-601.9kV	8.3541% -18.63%	1.3us		4.4us
Ch2 measured with: Shunt Terminal: H0 ratio: 1 Ohm Full ampl. (BIL) -1kA	4.5A -3A				

Note:

File: 21370104.DAT, Measm.No.4 Std.Nm: FW , 100% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with: Divider Terminal: H1 ratio: 844 V/V Full ampl. (BIL) -550kV	-541.9kV	9.1288%	1.31us	31.4us	
Ch2 measured with: Shunt Terminal: H0 ratio: 1 Ohm Full ampl. (BIL) -1kA	-884.8A 296.4A				

Note:

File: 21370105.DAT, Measm.No.5 Std.Nm: FW , 50% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with: Divider Terminal: H2 ratio: 844 V/V Full ampl. (BIL) -550kV	-291.3kV	9.5664%	1.29us	31.6us	
Ch2 measured with: Shunt Terminal: H0 ratio: 1 Ohm Full ampl. (BIL) -1kA	-482A 159.4A				

Note:

File: 21370106.DAT, Measm.No.6 Std.Nm: CW , 110% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with: Divider Terminal: H2 ratio: 844 V/V Full ampl. (BIL) -550kV	-601.2kV	6.8438% -18.28%	1.28us		3.74us
Ch2 measured with: Shunt Terminal: H0 ratio: 1 Ohm Full ampl. (BIL) -1kA	5.775A -3.6A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370107.DAT, Measm.No.7	min/max	min/max	Front	Tail	Chopped
Std.Nm: CW , 110% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H2 ratio: 844 V/V	-606.9kV	7.7101%	1.29us		4.02us
Full ampl. (BIL) -550kV		-17.65%			
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	7.275A				
Full ampl. (BIL) -1kA	-3.975A				

Note:

File: 21370108.DAT, Measm.No.8	min/max	min/max	Front	Tail	Chopped
Std.Nm: FW , 100% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H2 ratio: 844 V/V	-554.6kV	8.7081%	1.28us	31.9us	
Full ampl. (BIL) -550kV					
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	-925.5A				
Full ampl. (BIL) -1kA	304.2A				

Note:

File: 21370109.DAT, Measm.No.9	min/max	min/max	Front	Tail	Chopped
Std.Nm: FW , 50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H3 ratio: 844 V/V	-295.6kV	9.6223%	1.3us	31.2us	
Full ampl. (BIL) -550kV					
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	-478.9A				
Full ampl. (BIL) -1kA	160.2A				

Note:

File: 21370110.DAT, Measm.No.10	min/max	min/max	Front	Tail	Chopped
Std.Nm: CW , 110% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H3 ratio: 844 V/V	-602.5kV	7.7571%	1.29us		4.09us
Full ampl. (BIL) -550kV		-17.53%			
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	5.625A				
Full ampl. (BIL) -1kA	-3.75A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370111.DAT, Measm.No.11	min/max	min/max	Front	Tail	Chopped
Std.Nm: CW , 110% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H3 ratio: 844 V/V	-605.9kV	7.5362%	1.29us		3.98us
Full ampl. (BIL) -550kV		-17.54%			
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	-5.475A				
Full ampl. (BIL) -1kA	3.9A				

Note:

File: 21370112.DAT, Measm.No.12	min/max	min/max	Front	Tail	Chopped
Std.Nm: FW , 100% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H3 ratio: 844 V/V	-544.5kV	9.0812%	1.29us	31.4us	
Full ampl. (BIL) -550kV					
Ch2 measured with: Shunt					
Terminal: H0 ratio: 1 Ohm	-889.5A				
Full ampl. (BIL) -1kA	296.4A				

Note:

File: 21370113.DAT, Measm.No.13	min/max	min/max	Front	Tail	Chopped
Std.Nm: FW , 50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H0 ratio: 436 V/V	-81.8kV	12.822%	1.41us	30.3us	
Full ampl. (BIL) -150kV					
Ch2 measured with: Shunt					
Terminal: H1H2H3 ratio: 1 Ohm	-389.9A				
Full ampl. (BIL) -1kA	145.3A				

Note:

File: 21370114.DAT, Measm.No.14	min/max	min/max	Front	Tail	Chopped
Std.Nm: FW , 100% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with: Divider					
Terminal: H0 ratio: 436 V/V	-146.2kV	13.051%	1.41us	30.3us	
Full ampl. (BIL) -150kV					
Ch2 measured with: Shunt					
Terminal: H1H2H3 ratio: 1 Ohm	-694.2A				
Full ampl. (BIL) -1kA	260.5A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370115.DAT, Measm.No.15	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,100%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:H0 ratio:436 V/V	-147.2kV	12.495%	1.4us	30.6us	
Full ampl.(BIL) -150kV					
Ch2 measured with:Shunt					
Terminal:H1H2H3 ratio: 1 Ohm	-701.8A				
Full ampl.(BIL) -1kA	263.8A				

Note:

File: 21370116.DAT, Measm.No.16	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X1 ratio:436 V/V	-57.73kV		1.37us	19.7us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X2X3 ratio: 500mOhm	-311.7A				
Full ampl.(BIL) -1kA	812.5mA				

Note:

File: 21370117.DAT, Measm.No.17	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X1 ratio:436 V/V	-120.9kV	5.5229%	1.37us		3.37us
Full ampl.(BIL) -110kV		-22.1%			
Ch2 measured with:Shunt					
Terminal:X2X3 ratio: 500mOhm	-4.078A				
Full ampl.(BIL) -1kA	2.953A				

Note:

File: 21370118.DAT, Measm.No.18	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X1 ratio:436 V/V	-118.7kV	5.0554%	1.38us		3.65us
Full ampl.(BIL) -110kV		-12.42%			
Ch2 measured with:Shunt					
Terminal:X2X3 ratio: 500mOhm	-5.719A				
Full ampl.(BIL) -1kA	3.656A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370119.DAT, Measm.No.19	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,100%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X1 ratio:436 V/V	-112.7kV		1.37us	19.9us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X2X3 ratio: 500mOhm	-607.4A				
Full ampl.(BIL) -1kA	1.969A				

Note:

File: 21370120.DAT, Measm.No.20	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X2 ratio:436 V/V	-55.32kV		1.34us	19.8us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X1X3 ratio: 500mOhm	-296.9A				
Full ampl.(BIL) -1kA	718.8mA				

Note:

File: 21370121.DAT, Measm.No.21	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X2 ratio:436 V/V	-122.3kV	5.8248%	1.34us		3.35us
Full ampl.(BIL) -110kV		-23.97%			
Ch2 measured with:Shunt					
Terminal:X1X3 ratio: 500mOhm	4.125A				
Full ampl.(BIL) -1kA	-2.906A				

Note:

File: 21370122.DAT, Measm.No.22	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X2 ratio:436 V/V	-119.7kV	5.7597%	1.34us		3.33us
Full ampl.(BIL) -110kV		-25.52%			
Ch2 measured with:Shunt					
Terminal:X1X3 ratio: 500mOhm	-3.234A				
Full ampl.(BIL) -1kA	1.453A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370123.DAT, Measm.No.23	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,100%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X2 ratio:436 V/V	-112.5kV		1.35us	19.9us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X1X3 ratio: 500mOhm	-607.7A				
Full ampl.(BIL) -1kA	1.656A				

Note:

File: 21370124.DAT, Measm.No.24	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X3 ratio:436 V/V	-58.07kV		1.34us	19.6us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X1X2 ratio: 500mOhm	-314.2A				
Full ampl.(BIL) -1kA	687.5mA				

Note:

File: 21370125.DAT, Measm.No.25	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X3 ratio:436 V/V	-119.3kV	6.1632%	1.35us		3.37us
Full ampl.(BIL) -110kV		-24.22%			
Ch2 measured with:Shunt					
Terminal:X1X2 ratio: 500mOhm	-4.313A				
Full ampl.(BIL) -1kA	2.719A				

Note:

File: 21370126.DAT, Measm.No.26	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X3 ratio:436 V/V	-121.9kV	4.368%	1.35us		2.9us
Full ampl.(BIL) -110kV		-32.64%			
Ch2 measured with:Shunt					
Terminal:X1X2 ratio: 500mOhm	-4.875A				
Full ampl.(BIL) -1kA	2.156A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370127.DAT, Measm.No.27	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,100%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:X3 ratio:436 V/V	-110.1kV		1.35us	19.9us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:X1X2 ratio: 500mOhm	-593.6A				
Full ampl.(BIL) -1kA	1.719A				

Note:

File: 21370128.DAT, Measm.No.28	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,50% of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:Y1 ratio:436 V/V	-56.79kV		1.36us	20.2us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:Y2Y3 ratio: 500mOhm	-310.1A				
Full ampl.(BIL) -1kA	859.4mA				

Note:

File: 21370129.DAT, Measm.No.29	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:Y1 ratio:436 V/V	-121.7kV	5.1038%	1.36us		3.1us
Full ampl.(BIL) -110kV		-30.04%			
Ch2 measured with:Shunt					
Terminal:Y2Y3 ratio: 500mOhm	3.844A				
Full ampl.(BIL) -1kA	-3.188A				

Note:

File: 21370130.DAT, Measm.No.30	min/max	min/max	Front	Tail	Chopped
Std.Nm:CW ,110%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:Y1 ratio:436 V/V	-122.3kV		1.37us		3.68us
Full ampl.(BIL) -110kV		-12.68%			
Ch2 measured with:Shunt					
Terminal:Y2Y3 ratio: 500mOhm	3.984A				
Full ampl.(BIL) -1kA	-3.047A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370131.DAT, Measm.No.31 Std.Nm:FW ,100%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y1 ratio:436 V/V Full ampl.(BIL) -110kV	-112.3kV		1.37us	20.3us	
Ch2 measured with:Shunt Terminal:Y2Y3 ratio: 500mOhm Full ampl.(BIL) -1kA	-613.8A 1.844A				

Note:

File: 21370132.DAT, Measm.No.32 Std.Nm:FW ,50% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y2 ratio:436 V/V Full ampl.(BIL) -110kV	-55.52kV		1.36us	20us	
Ch2 measured with:Shunt Terminal:Y1Y3 ratio: 500mOhm Full ampl.(BIL) -1kA	-301.5A 812.5mA				

Note:

File: 21370133.DAT, Measm.No.33 Std.Nm:FW ,110%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y2 ratio:436 V/V Full ampl.(BIL) -110kV	-118.9kV		1.36us	4.9us	
Ch2 measured with:Shunt Terminal:Y1Y3 ratio: 500mOhm Full ampl.(BIL) -1kA	-5.297A 4.078A				

Note:

File: 21370134.DAT, Measm.No.34 Std.Nm:CW ,110%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y2 ratio:436 V/V Full ampl.(BIL) -110kV	-122.5kV	5.4274% -25.67%	1.35us		3.38us
Ch2 measured with:Shunt Terminal:Y1Y3 ratio: 500mOhm Full ampl.(BIL) -1kA	-4.734A 2.297A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370135.DAT, Measm.No.35 Std.Nm:FW ,100%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y2 ratio:436 V/V Full ampl.(BIL) -110kV	-109.9kV		1.36us	20.2us	
Ch2 measured with:Shunt Terminal:Y1Y3 ratio: 500mOhm Full ampl.(BIL) -1kA	-593.7A 1.594A				

Note:

File: 21370136.DAT, Measm.No.36 Std.Nm:FW ,50% of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y3 ratio:436 V/V Full ampl.(BIL) -110kV	-57.32kV		1.33us	20.1us	
Ch2 measured with:Shunt Terminal:Y1Y2 ratio: 500mOhm Full ampl.(BIL) -1kA	-309.3A 812.5mA				

Note:

File: 21370137.DAT, Measm.No.37 Std.Nm:CW ,110%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y3 ratio:436 V/V Full ampl.(BIL) -110kV	-122.3kV	5.0774% -32.07%	1.33us		3.03us
Ch2 measured with:Shunt Terminal:Y1Y2 ratio: 500mOhm Full ampl.(BIL) -1kA	-2.953A 1.734A				

Note:

File: 21370138.DAT, Measm.No.38 Std.Nm:CW ,110%of Testlevel	min/max Peak measured	min/max Overshoot measured	Front Time T1	Tail Time T2	Chopped Time Tc
Ch1 measured with:Divider Terminal:Y3 ratio:436 V/V Full ampl.(BIL) -110kV	-122.5kV	5.4274% -31.18%	1.33us		3.08us
Ch2 measured with:Shunt Terminal:Y1Y2 ratio: 500mOhm Full ampl.(BIL) -1kA	-6.844A 2.531A				

Data Directory : C:\DATA\G2137-01\

Note:

File: 21370139.DAT, Measm.No.39	min/max	min/max	Front	Tail	Chopped
Std.Nm:FW ,100%of Testlevel	Peak	Overshoot	Time	Time	Time
	measured	measured	T1	T2	Tc
Ch1 measured with:Divider					
Terminal:Y3 ratio:436 V/V	-111.9kV		1.33us	20.3us	
Full ampl.(BIL) -110kV					
Ch2 measured with:Shunt					
Terminal:Y1Y2 ratio: 500mOhm	-604.7A				
Full ampl.(BIL) -1kA	1.563A				

Signatures :

TEST CONDUCTED BY :

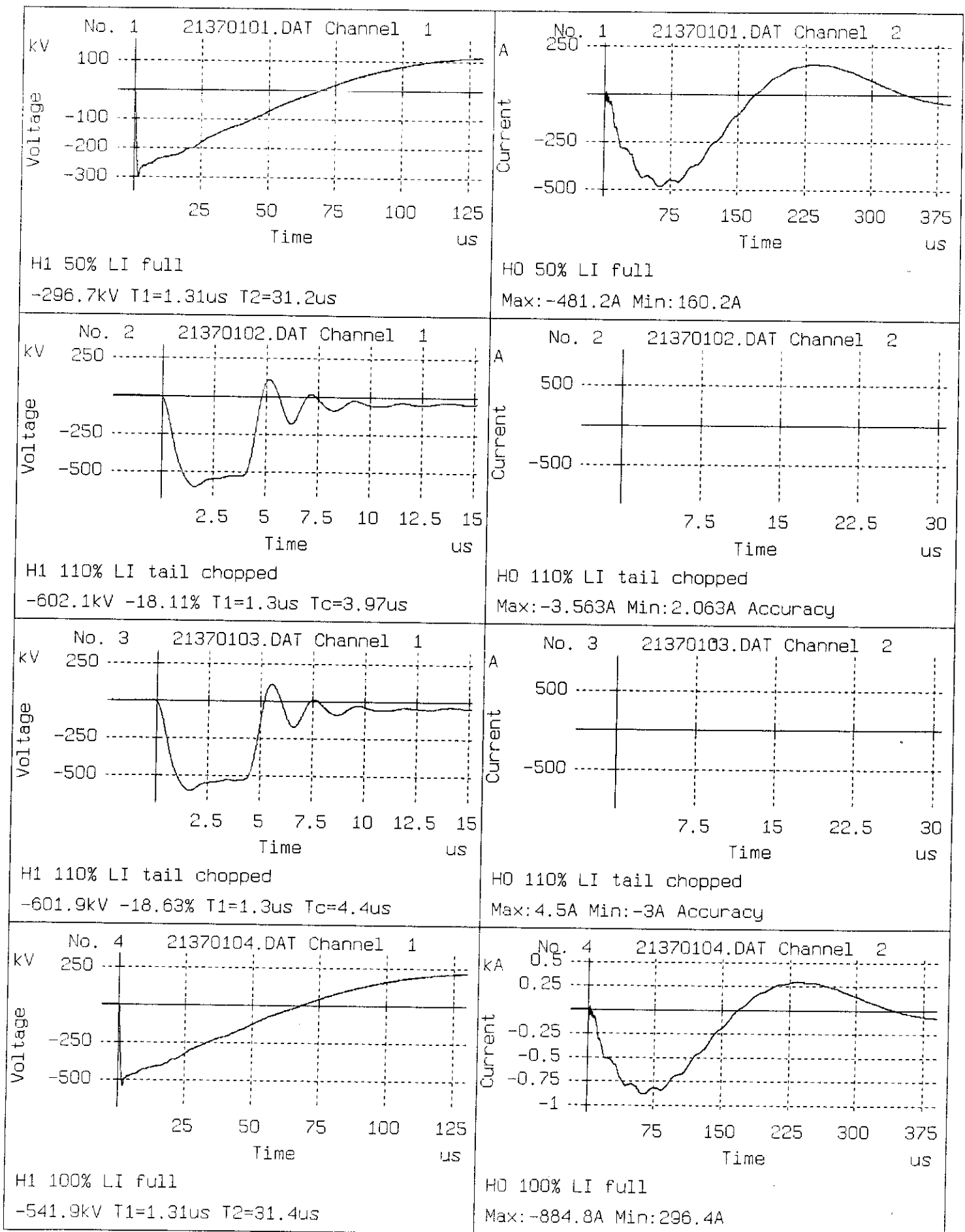
ENGINEER APPROVAL :

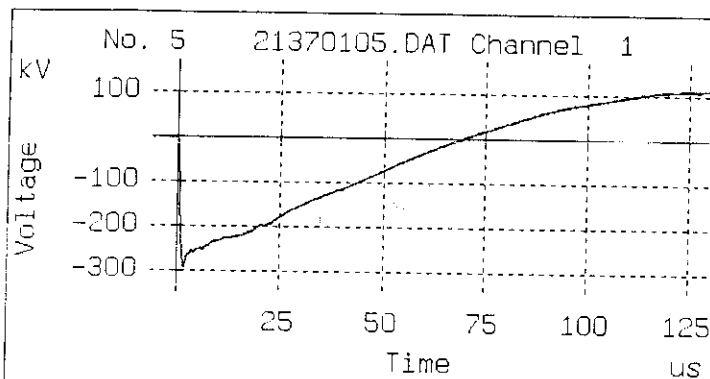
CUSTOMER WITNESSED :

DATE :

DATE :

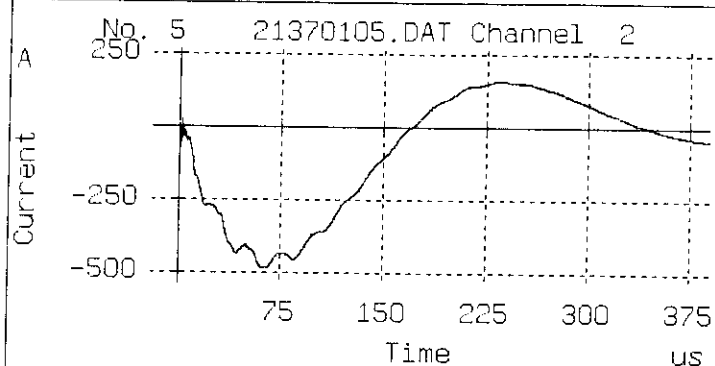
DATE :





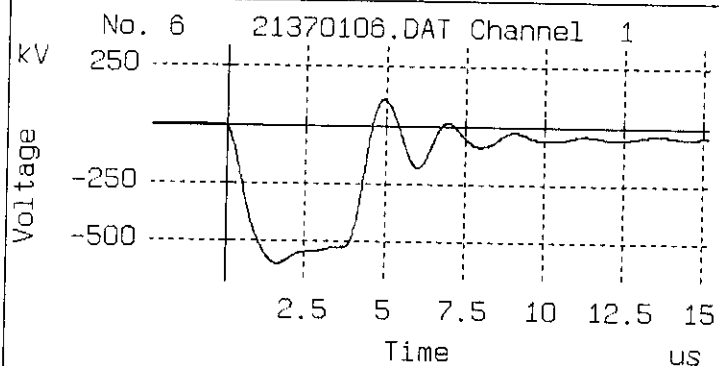
H2 50% LI full

-291.3kV T1=1.29us T2=31.6us



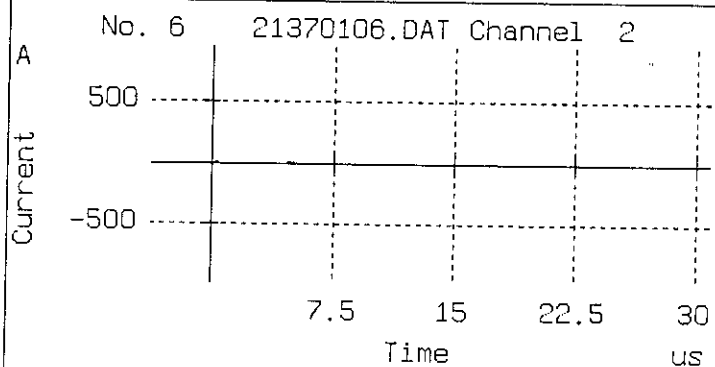
H0 50% LI full

Max:-482A Min:159.4A



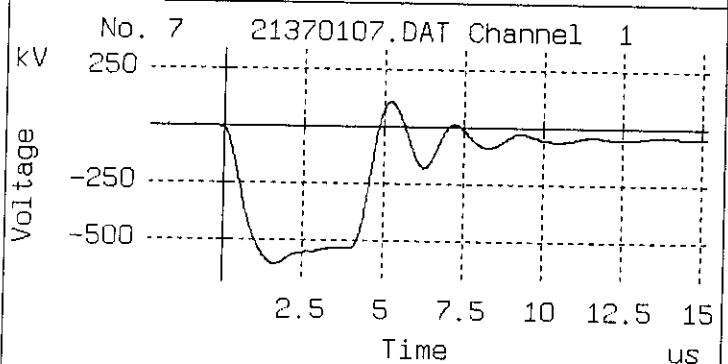
H2 110% LI tail chopped

-601.2kV -18.28% T1=1.28us Tc=3.74us



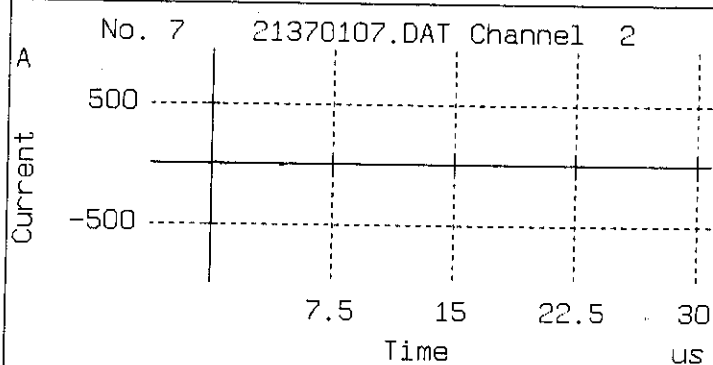
H0 110% LI tail chopped

Max:5.775A Min:-3.6A Accuracy



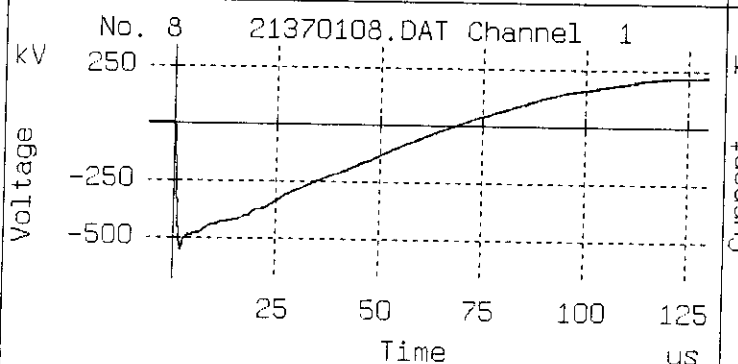
H2 110% LI tail chopped

-606.9kV -17.65% T1=1.29us Tc=4.02us



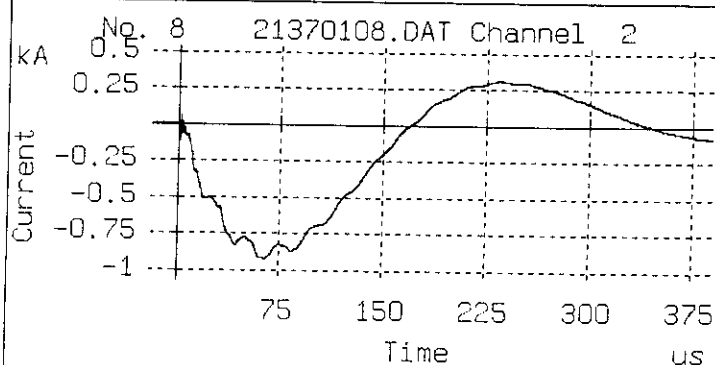
H0 110% LI tail chopped

Max:7.275A Min:-3.975A Accuracy



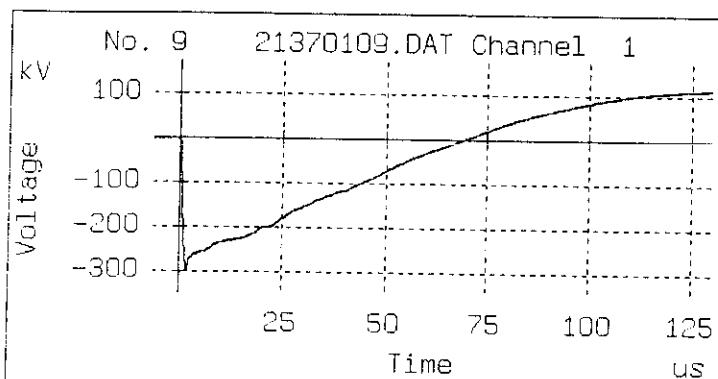
H2 100% LI full

-554.6kV T1=1.28us T2=31.9us



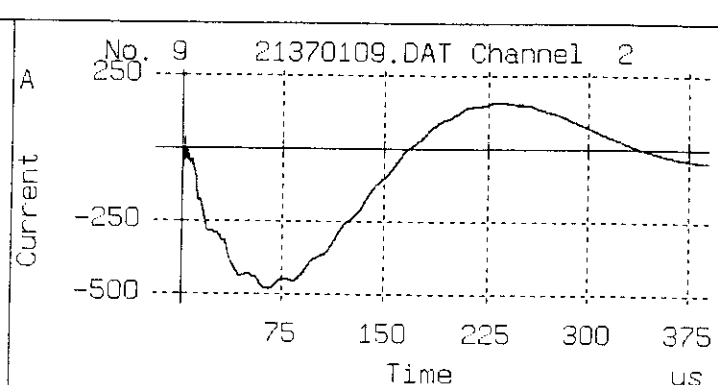
H0 100% LI full

Max:-925.5A Min:304.2A



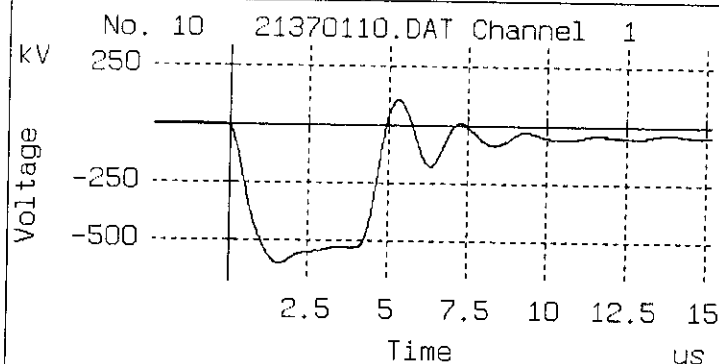
H3 50% LI full

-295.6kV T1=1.3us T2=31.2us



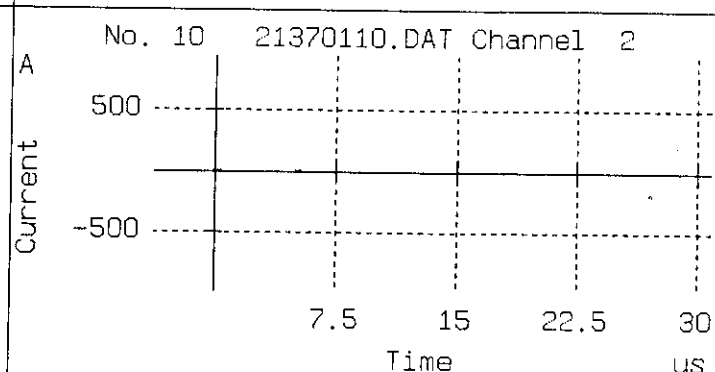
HO 50% LI full

Max:-478.9A Min:160.2A



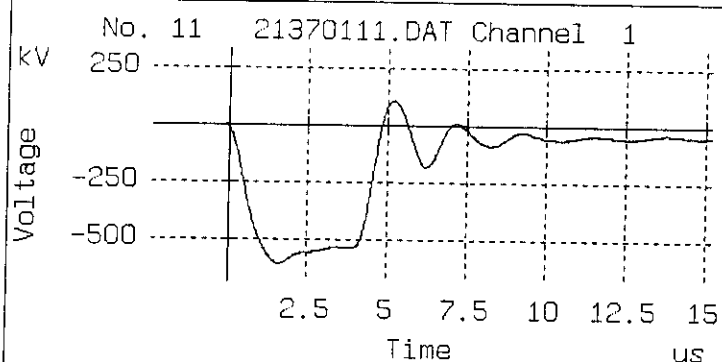
H3 110% LI tail chopped

-602.5kV -17.53% T1=1.29us Tc=4.09us



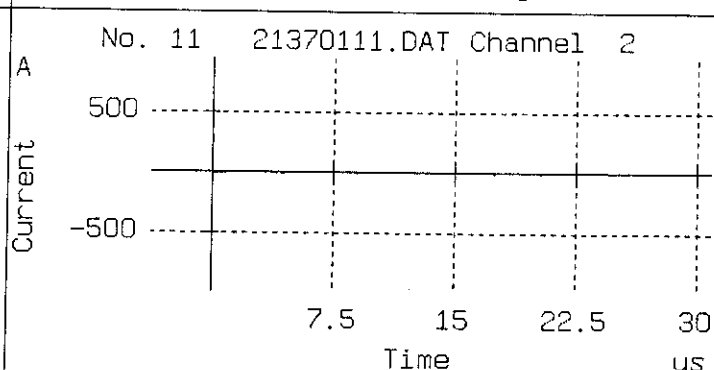
HO 110% LI tail chopped

Max:5.625A Min:-3.75A Accuracy



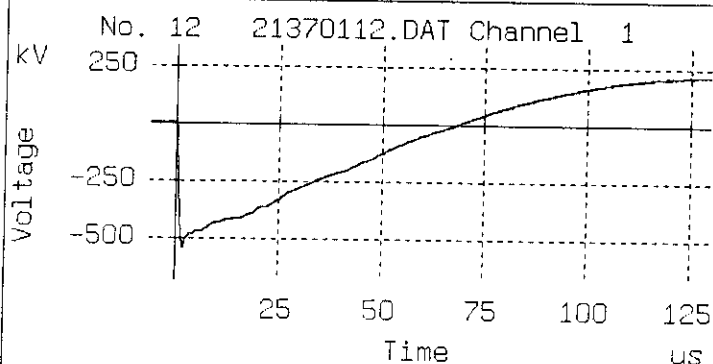
H3 110% LI tail chopped

-605.9kV -17.54% T1=1.29us Tc=3.98us



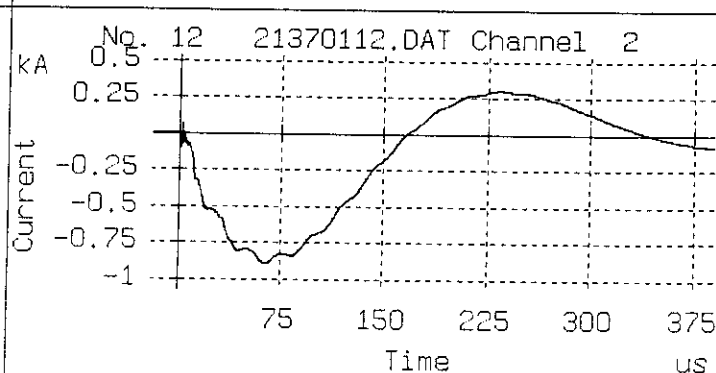
HO 110% LI tail chopped

Max:-5.475A Min:3.9A Accuracy



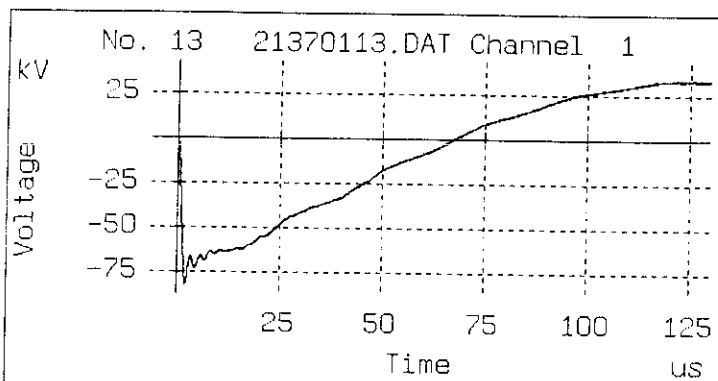
H3 100% LI full

-544.5kV T1=1.29us T2=31.4us



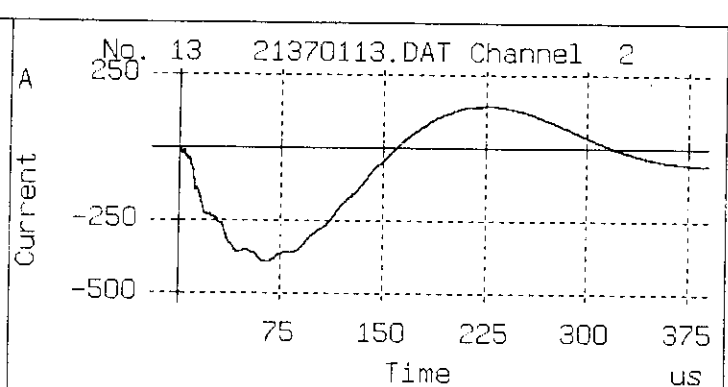
HO 100% LI full

Max:-889.5A Min:296.4A



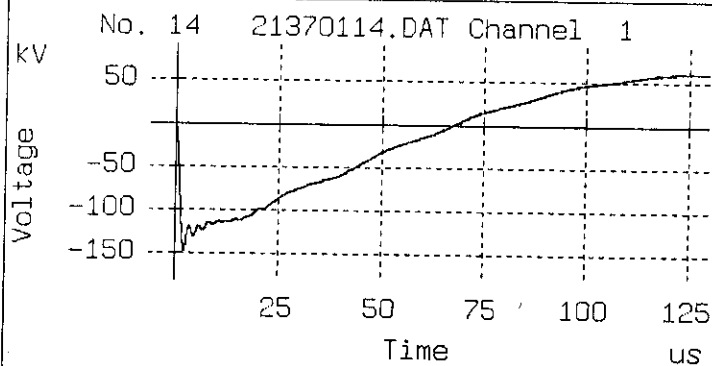
HO 50% LI full

-81.8kV T1=1.41us T2=30.3us



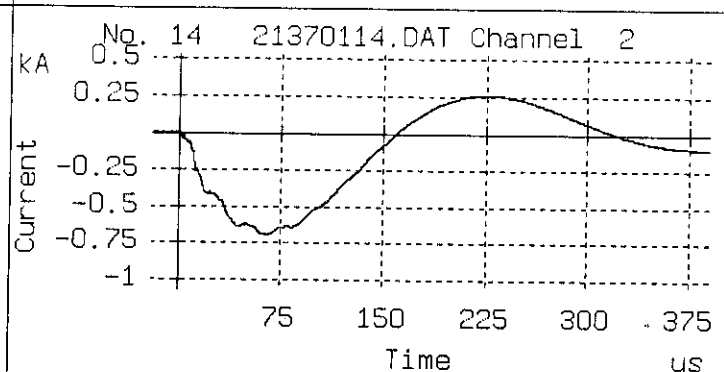
H1H2H3 50% LI full

Max: -389.9A Min: 145.3A



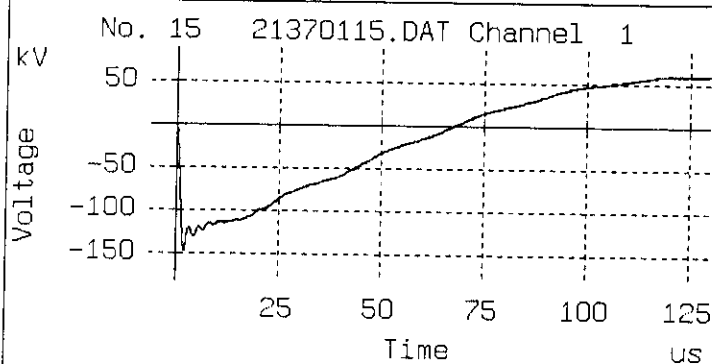
HO 100% LI full

-146.2kV T1=1.41us T2=30.3us



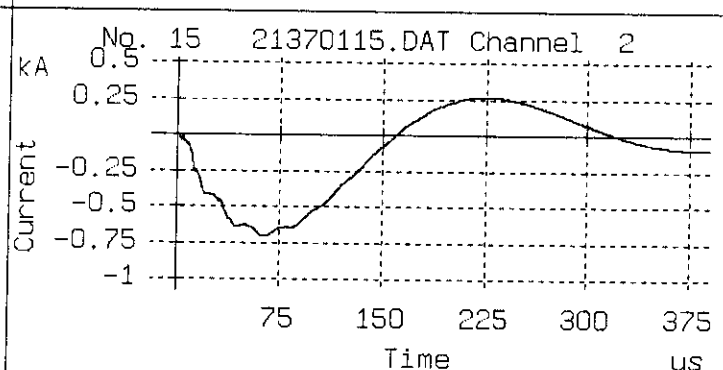
H1H2H3 100% LI full

Max: -694.2A Min: 260.5A



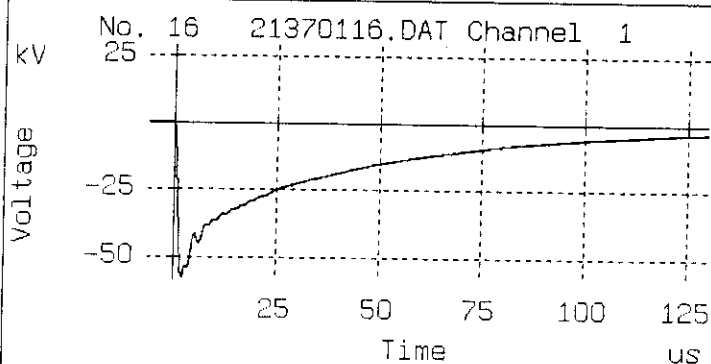
HO 100% LI full

-147.2kV T1=1.4us T2=30.6us



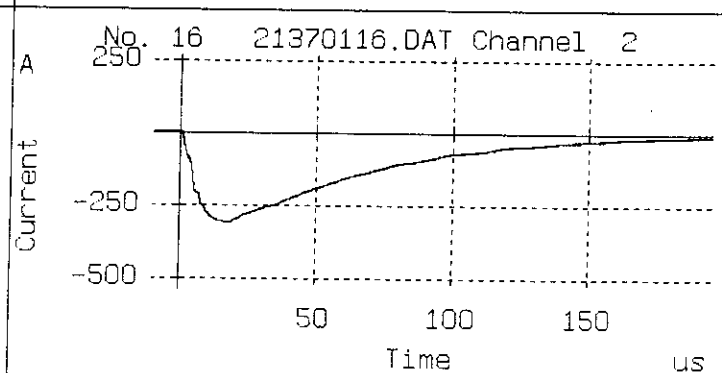
H1H2H3 100% LI full

Max: -701.8A Min: 263.8A



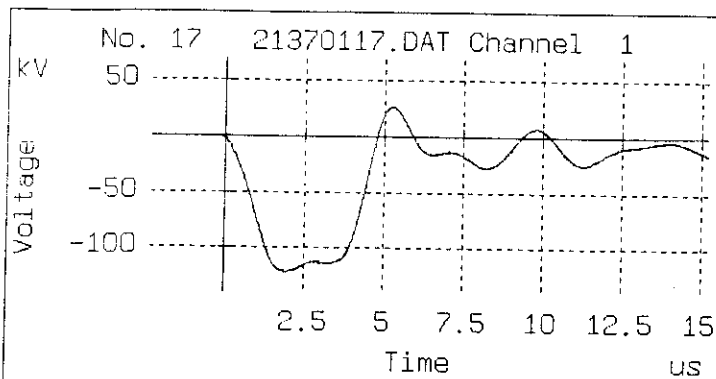
X1 50% LI full

-57.73kV T1=1.37us T2=19.7us

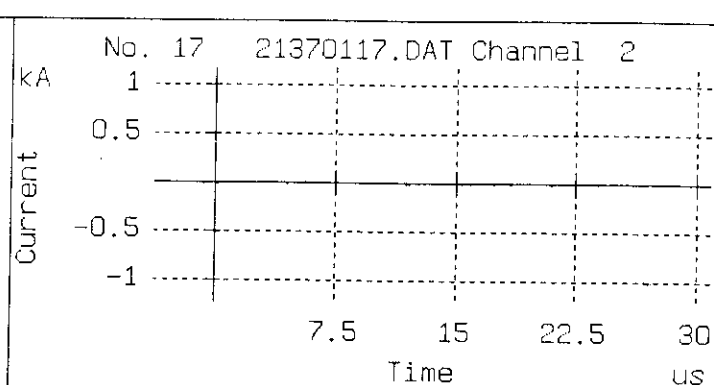


X2X3 50% LI full

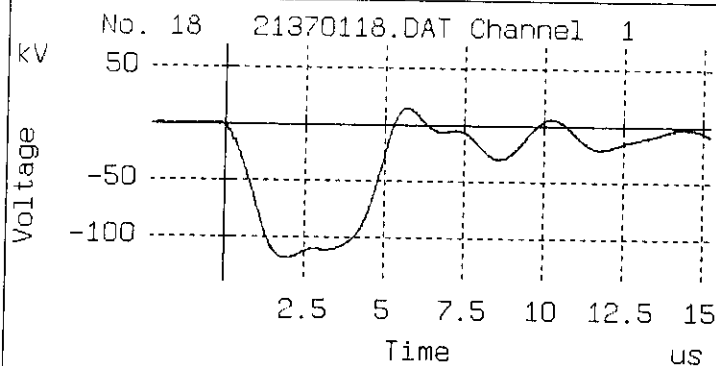
Max: -311.7A Min: 812.5mA



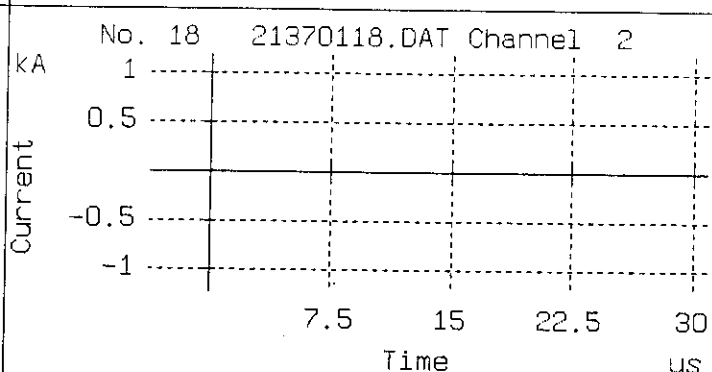
X1 110% LI tail chopped
 -120.9kV -22.1% T1=1.37 μ s Tc=3.37 μ s



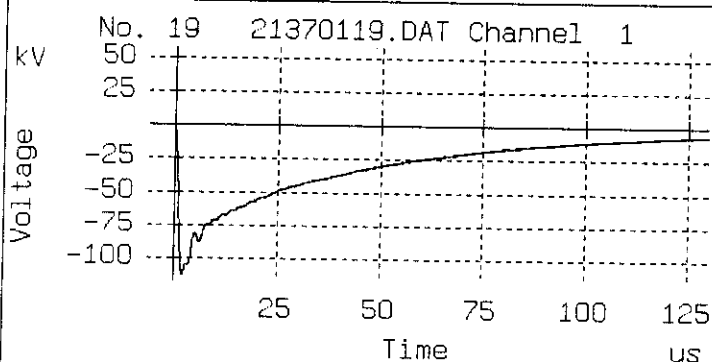
X2X3 110% LI tail chopped
 Max:-4.078A Min:2.953A Accuracy



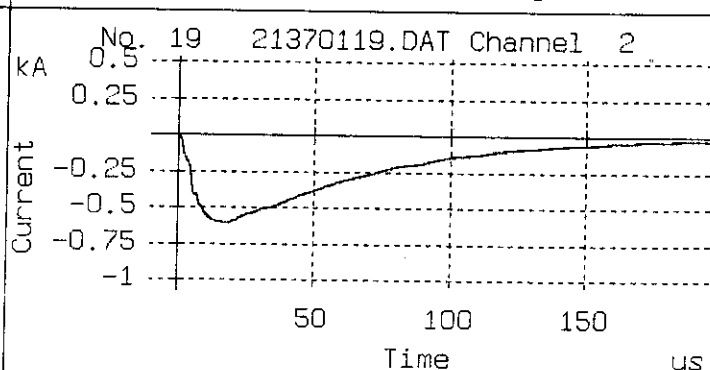
X1 110% LI tail chopped
 -118.7kV -12.42% T1=1.38 μ s Tc=3.65 μ s



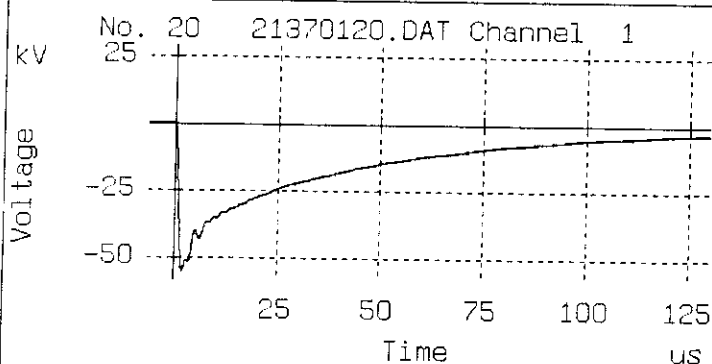
X2X3 110% LI tail chopped
 Max:-5.719A Min:3.656A Accuracy



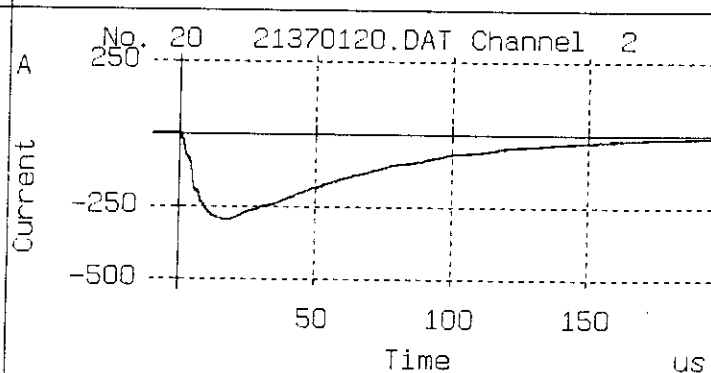
X1 100% LI full
 -112.7kV T1=1.37 μ s T2=19.9 μ s



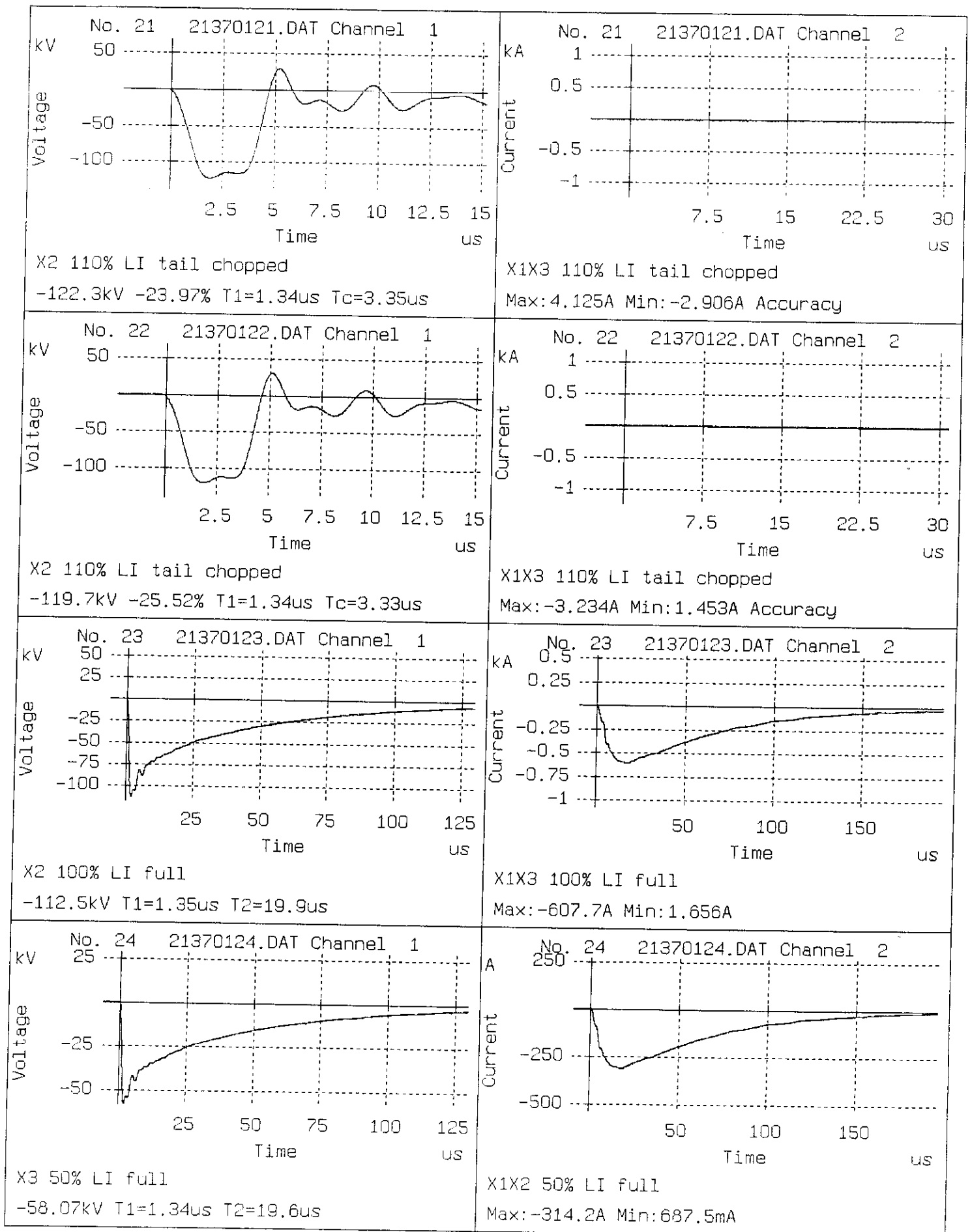
X2X3 100% LI full
 Max:-607.4A Min:1.969A

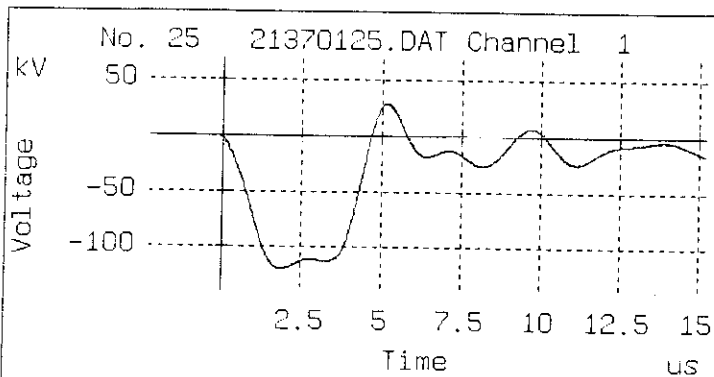


X2 50% LI full
 -55.32kV T1=1.34 μ s T2=19.8 μ s

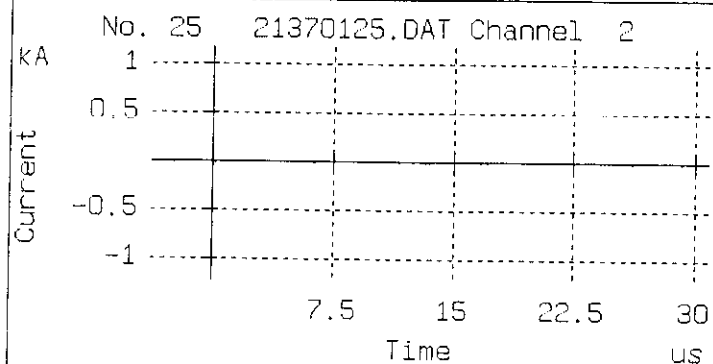


X1X3 50% LI full
 Max:-296.9A Min:718.8mA

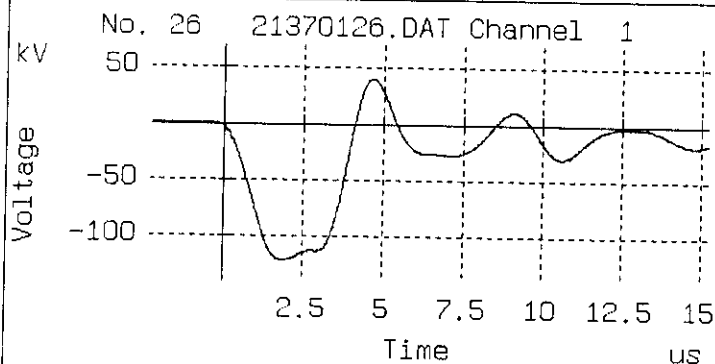




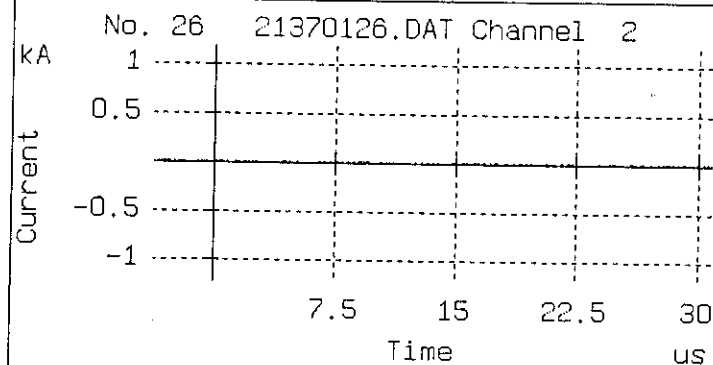
X3 110% LI tail chopped
 -119.3kV -24.22% T1=1.35us Tc=3.37us



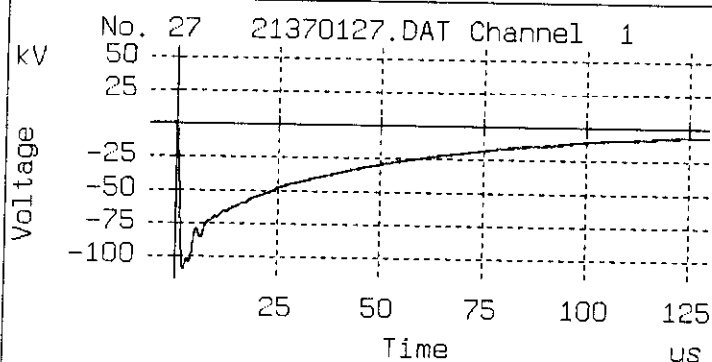
X1X2 110% LI tail chopped
 Max: -4.313A Min: 2.719A Accuracy



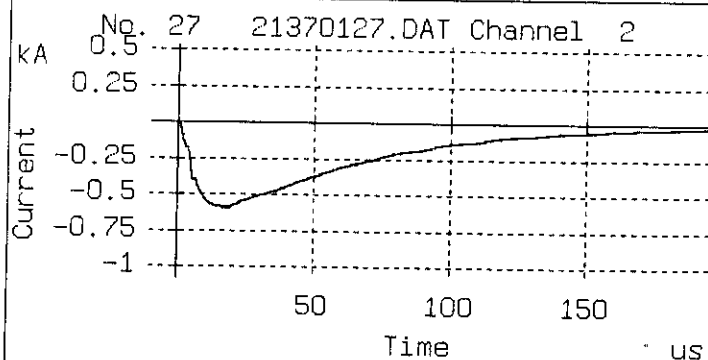
X3 110% LI tail chopped
 -121.9kV -32.64% T1=1.35us Tc=2.9us



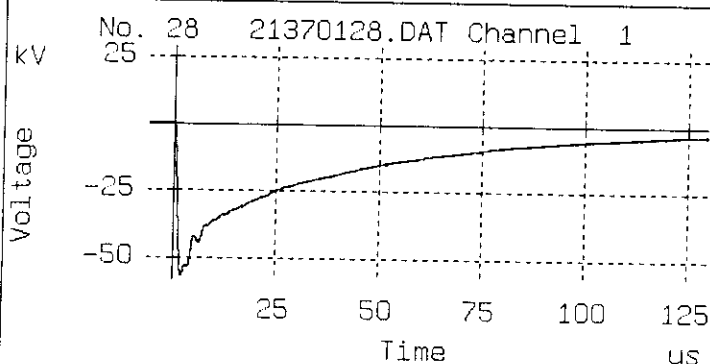
X1X2 110% LI tail chopped
 Max: -4.875A Min: 2.156A Accuracy



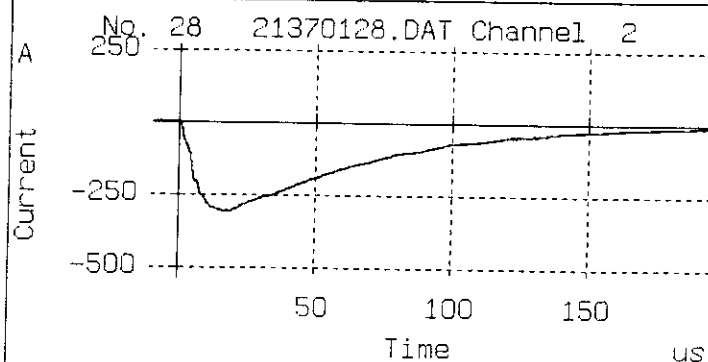
X3 100% LI full
 -110.1kV T1=1.35us T2=19.9us



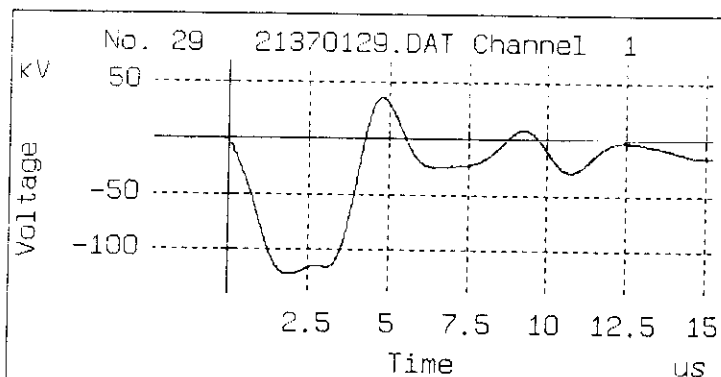
X1X2 100% LI full
 Max: -593.6A Min: 1.719A



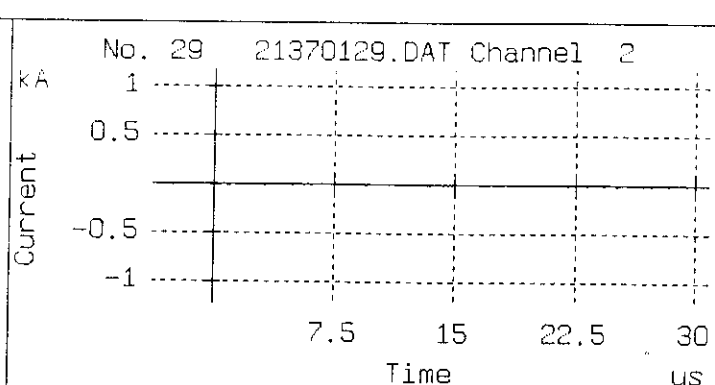
Y1 50% LI full
 -56.79kV T1=1.36us T2=20.2us



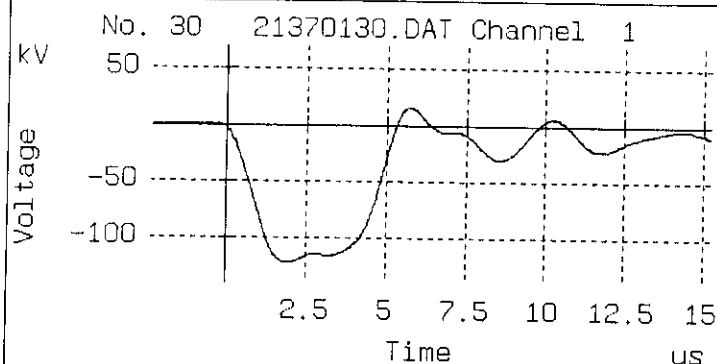
Y2Y3 50% LI full
 Max: -310.1A Min: 859.4mA



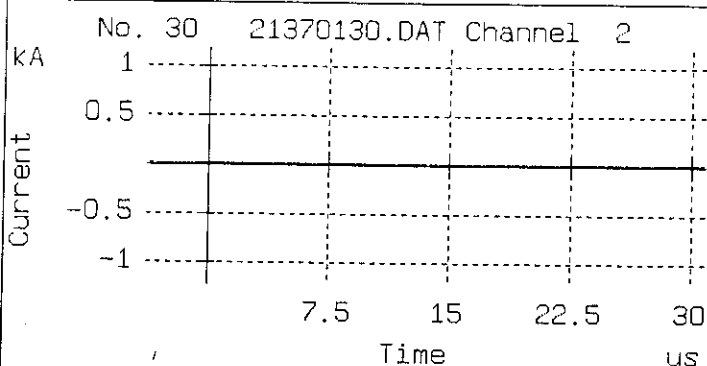
Y1 110% LI tail chopped
 -121.7kV -30.04% T1=1.36 μ s Tc=3.1 μ s



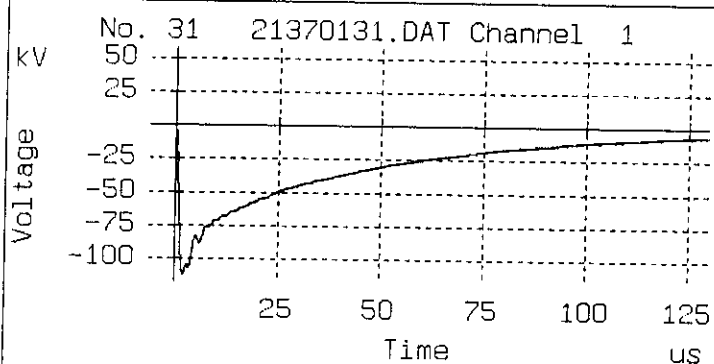
Y2Y3 110% LI tail chopped
 Max:3.844A Min:-3.188A Accuracy



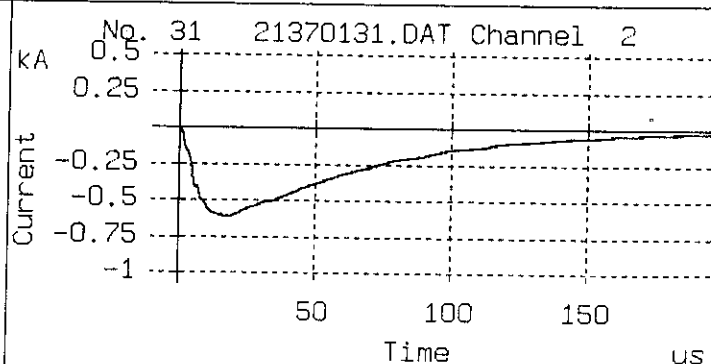
Y1 110% LI tail chopped
 -122.3kV -12.68% T1=1.37 μ s Tc=3.68 μ s



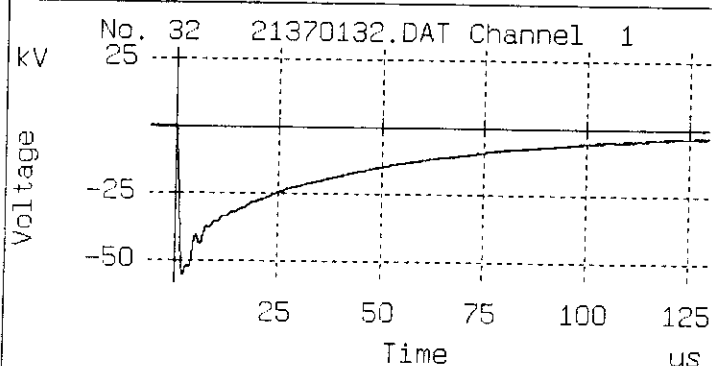
Y2Y3 110% LI tail chopped
 Max:3.984A Min:-3.047A Accuracy



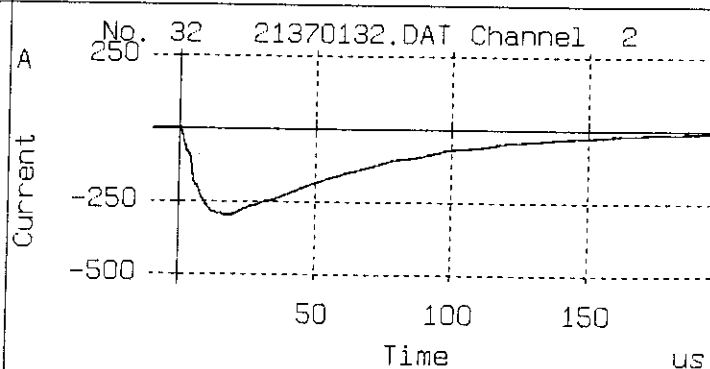
Y1 100% LI full
 -112.3kV T1=1.37 μ s T2=20.3 μ s



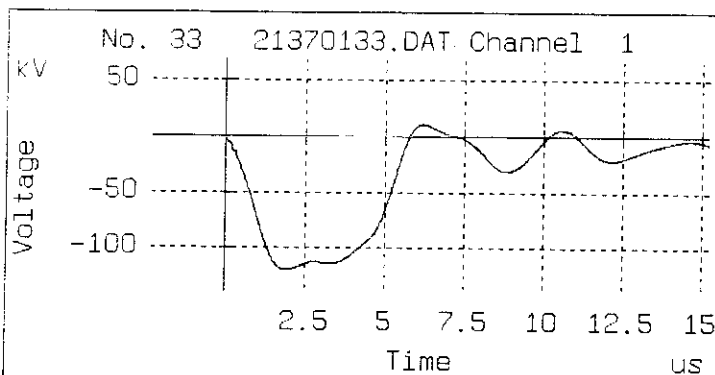
Y2Y3 100% LI full
 Max:-613.8A Min:1.844A



Y2 50% LI full
 -55.52kV T1=1.36 μ s T2=20 μ s

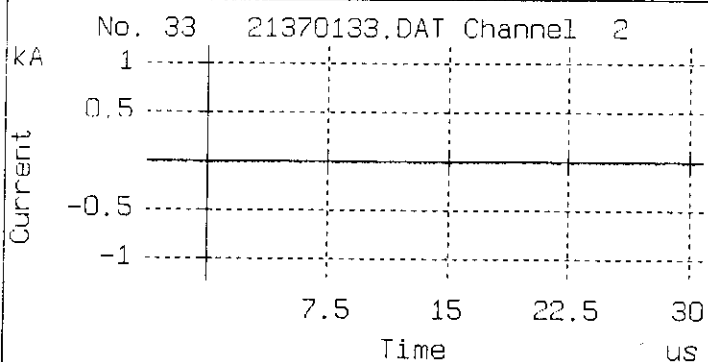


Y1Y3 50% LI full
 Max:-301.5A Min:812.5mA



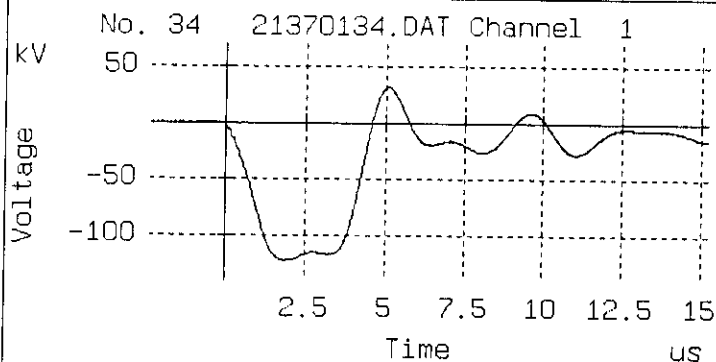
Y2 110% LI full

-118.9kV T1=1.36 μ s T2=4.9 μ s



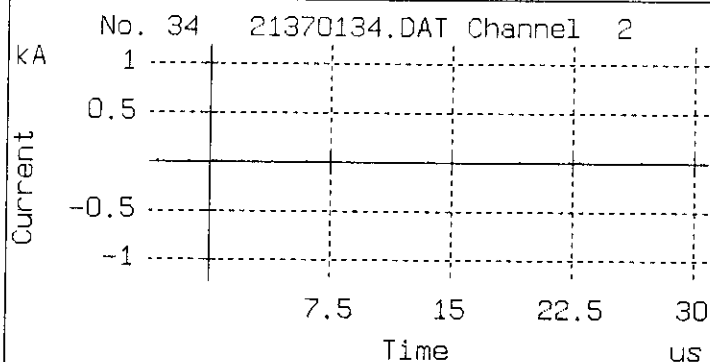
Y1Y3 110% LI full

Max:-5.297A Min:4.078A Accuracy



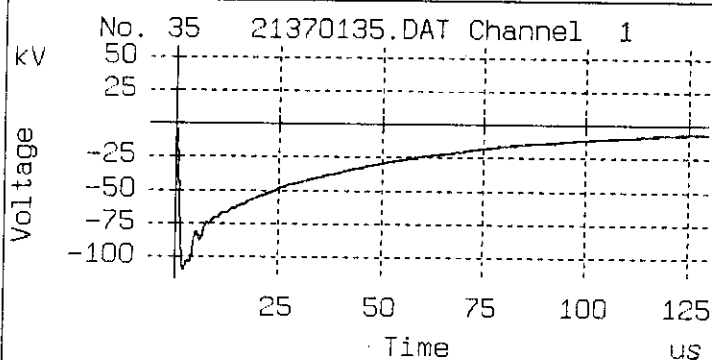
Y2 110% LI tail chopped

-122.5kV -25.67% T1=1.35 μ s Tc=3.38 μ s



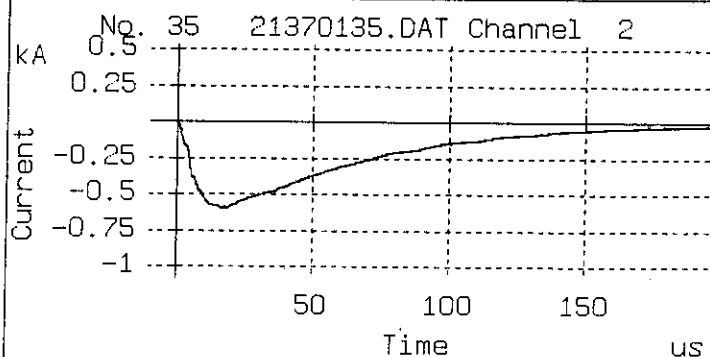
Y1Y3 110% LI tail chopped

Max:-4.734A Min:2.297A Accuracy



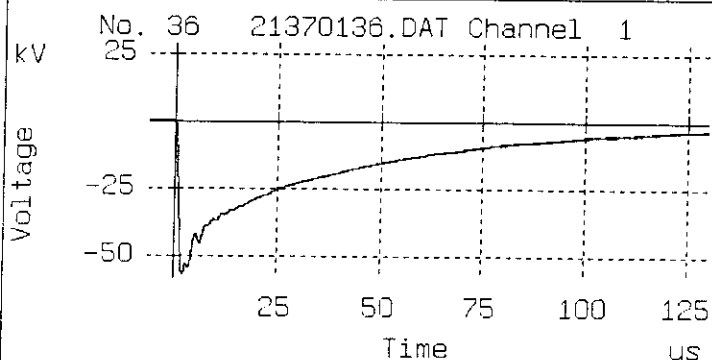
Y2 100% LI full

-109.9kV T1=1.36 μ s T2=20.2 μ s



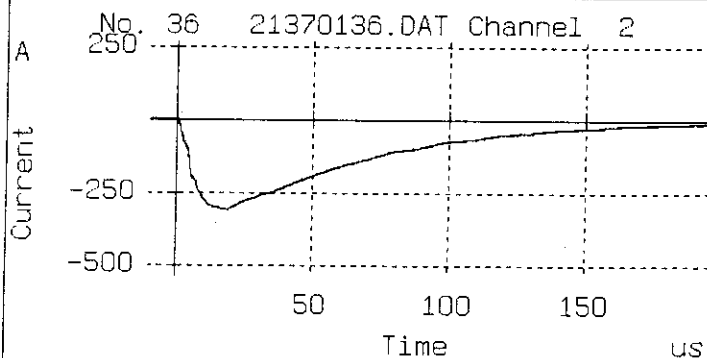
Y1Y3 100% LI full

Max:-593.7A Min:1.594A



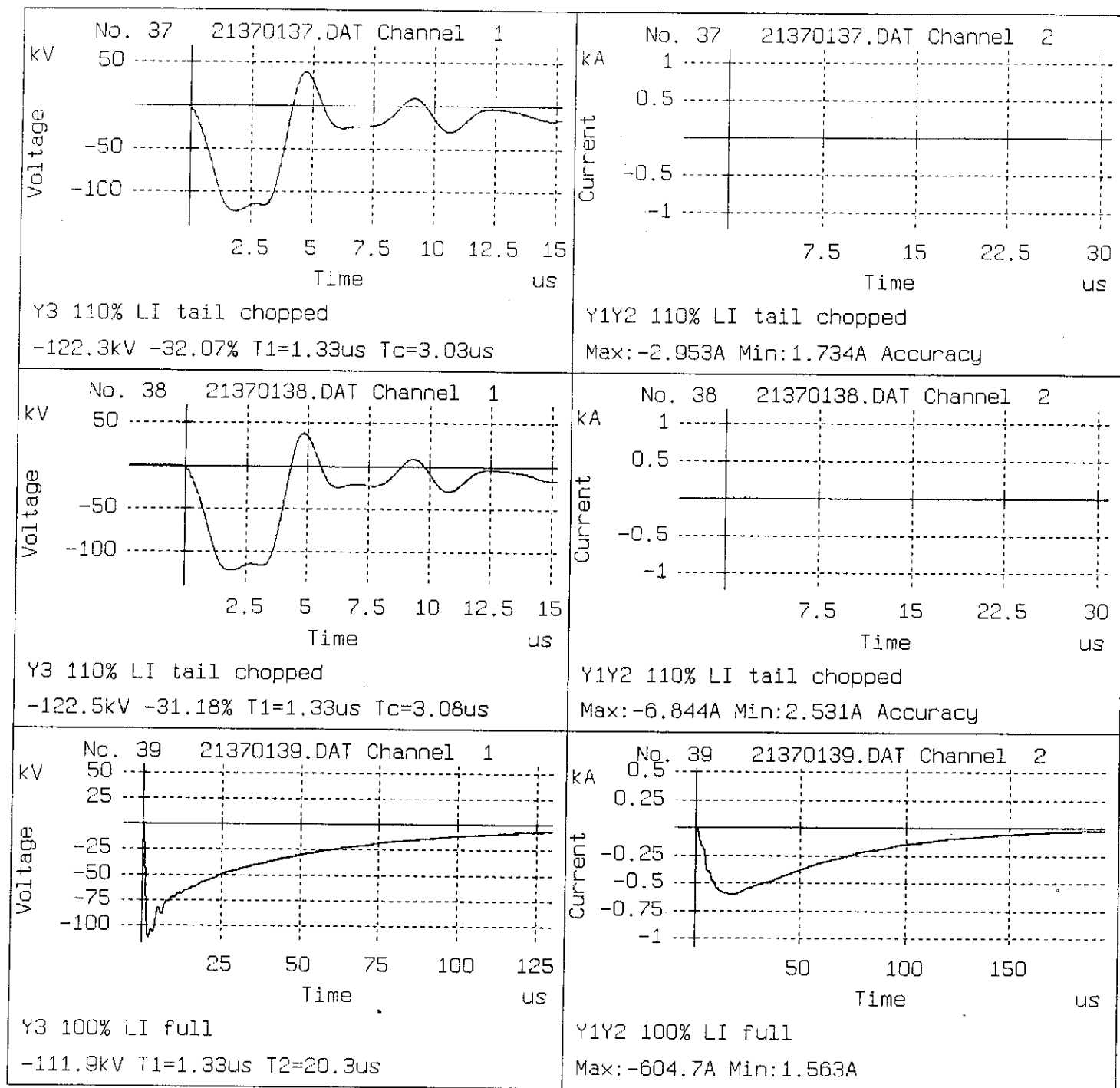
Y3 50% LI full

-57.32kV T1=1.33 μ s T2=20.1 μ s



Y1Y2 50% LI full

Max:-309.3A Min:812.5mA



CUSTOMER: Equisales Associates, Inc.


SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./23/2008

APPLIED VOLTAGE TEST

WINDING	APPLIED (KV.)	TIME (SEC.)	RESULT
H/L(X)+L(Y)Grd.	50	60	ACCEPTED
L(X)/H+L(Y)Grd.	34	60	ACCEPTED
L(Y)/H+L(X)Grd.	34	60	ACCEPTED



Test Engineer

Design Engineer

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CUSTOMER: Equisales Associates, Inc.


SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./23/2008

PARTIAL DISCHARGES TEST

TIME	% Vsys	VOLTAGE (KV) L-N	TERMINAL H1		TERMINAL H2		TERMINAL H3	
			P.D. (pC)	RIV (uV)	P.D. (pC)	RIV (uV)	P.D. (pC)	RIV (uV)
---	100	15.2	29	21	30	22	32	28
---	150	22.9	42	38	40	37	41	36
40.91 SEC.	173	26.4	78	51	71	49	74	47
05 MIN.	150	22.9	41	34	41	38	39	35
10 MIN.	150	22.9	40	35	42	36	39	36
15 MIN.	150	22.9	39	35	43	35	35	36
20 MIN.	150	22.9	40	34	41	35	38	36
25 MIN.	150	22.9	40	34	42	35	38	35
30 MIN.	150	22.9	41	33	42	36	38	36
35 MIN.	150	22.9	42	34	42	36	39	35
40 MIN.	150	22.9	41	35	42	36	39	34
45 MIN.	150	22.9	41	34	42	36	39	34
50 MIN.	150	22.9	42	32	43	36	41	35
55 MIN.	150	22.9	42	32	43	35	42	35
60 MIN.	150	22.9	40	35	44	34	42	34
TEST FREQUENCY = 176 Hz			(pC)	(uV)	(pC)	(uV)	(pC)	(uV)
LEVEL OF CALIBRATION			300	100	300	100	300	100
LEVEL OF READING			300	100	299	99	299	99


Test Engineer


Design Engineer

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TEST DEPARTMENT

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CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./25/2008

COOLING EQUIPMENT LOSSES

(ONAF1)

READING	AVG. VOLTS	RMS VOLTS	AMPERS	WATTS	Hz
AVERAGE	219.600	219.200	6.560	2004	60

(ONAF2)

READING	AVG. VOLTS	RMS VOLTS	AMPERS	WATTS	Hz
AVERAGE	217.300	217.400	13.270	3975	60

CORE TEST

INSULATION RESISTANCE =	1200	(MAIN) MOHMS @ 1000 D.C.V./1 MIN.
INSULATION RESISTANCE =	1750	(FRAME) MOHMS @ 1000 D.C.V./1 MIN.
APPLIED POTENTIAL =	2000	A.C.V./1 MIN.


Test Engineer
Design Engineer

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GE ENERGY
GE- PROLECBlvd. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

TEST DEPARTMENT

CUSTOMER: Equisales Associates, Inc.	SERIAL No.: G2137-01
INSPECTOR:	DATE: Jun./25/2008

LOW VOLTAGE EXCITATION CURRENT
(TEST VOLTAGE 10 KV.)

(TEST VOLTAGE 10 KV.)

MILIAMPERS										
TAP POSITION	PHASE A			PHASE B			PHASE C			TEST VOLTAGE
	READING	MULT.	mA.	READING	MULT.	mA.	READING	MULT.	mA.	
1	130.9	1	130.9	92.4	1	92.4	132.9	1	132.9	10 KV.
2	137.4	1	137.4	97.2	1	97.2	139.3	1	139.3	10 KV.
3	144.4	1	144.4	102.2	1	102.2	146.1	1	146.1	10 KV.
4	150.6	1	150.6	106.8	1	106.8	152.5	1	152.5	10 KV.
5	158.5	1	158.5	112.6	1	112.6	160.3	1	160.3	10 KV.


Test Engineer


Design Engineer

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Apodaca, N.L. 66600 México



Power Division

Test Department

PAGE 40

Purchaser:	Equisales Associates, Inc.	Serial No.:	G2137-01
Inspector:		DATE:	Jun./19/2008

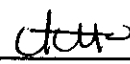
ACCESSORY TEST

CONTROL WIRING WERE TESTED WITH THE NEXT DRAWINGS

G213701B902	1/1.	REV,	1
G213701B903	1/2.	REV,	3
G213701B903	2/2.	REV,	2
G213701B901	1/1.	REV,	2

APPLIED VOLTAGE= 2000 A.C.V./1 MIN.
RESULT = ACCEPTED


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CUSTOMER: Equisales Associates, Inc.

SERIAL No. G2137-01

INSPECTOR:

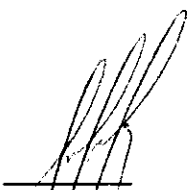
DATE: Jun./22/2008

WINDING RESISTANCE FOR THE SHUTDOWNS

(OHMS)

HIGH VOLTAGE (H)		
TERMINAL.	POS.5	TEMPERATURE °C
H2 - H0	0.078006	32.50
LOW VOLTAGE (X,Y)		
TERMINAL	NOM	TEMPERATURE °C
X2 - X3	0.0036505	32.50
Y2 - Y3	0.0038577	32.50

THE MEASUREMENTS WERE PERFORMED IN THE SAME CONDITIONS AS THE SHUTDOWNS WERE PERFORMED (USING THE SAME EQUIPMENT, WIRES, THERMOCOUPLES AND CABLES)


Test Engineer


Design Engineer

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CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./23/2008

TEMPERATURE RISE

TEST IN (ONAF2) 65°C.

RATING: 168000 KVA

POSITION: H.V. 5

TEST: 510707 WATTS

POSITION: L.V. (X) + L.V. (Y)

READING TIME		HOURS	HOURS	HOURS	HOURS
		6:00	7:00	8:00	9:00
TOP HEAD.	TEMP.1	81.20	81.74	81.72	82.01
BOTTOM HEAD	TEMP.2	62.50	62.86	62.91	63.39
TEMPERATURE	TEMP.3	34.40	34.09	34.76	35.32
AMBIENT	TEMP.4	29.18	29.10	29.29	29.75
	TEMP.5	31.08	31.11	31.55	31.20
OIL TEMPERATURE		79.14	79.77	79.76	80.21
BOTTOM OIL RISE		30.95	31.43	31.04	31.30
AVERAGE OIL RISE		38.24	38.90	38.49	38.81
TOP OIL RISE		47.59	48.34	47.89	48.12


Test Engineer


Design Engineer

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GE ENERGY
GE- PROLEC

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Apodaca, N.L. 66600 México

RESISTANCE - TIME CURVES OF WINDINGS FOR TEMPERATURE RISE TEST IN
THE TRANSFORMER G2137-01 IN ONAF (65°C) - (168 MVA)

HIGH VOLTAGE (H)		LOW VOLTAGE (X)	
TIME (min)	RESISTANCE(ohms)	TIME (min)	RESISTANCE(ohms)
3.00	.092580	3.40	.0042719
3.30	.092400	4.10	.0042644
4.00	.092211	4.40	.0042570
4.30	.092044	5.10	.0042511
5.00	.091887	5.40	.0042454
5.30	.091744	6.10	.0042401
6.00	.091607	6.40	.0042354
T_HV := 6.30	R_HV := .091477	T_LV := 7.10	R_LV := .0042310
7.00	.091358	7.40	.0042264
7.30	.091246	8.10	.0042233
8.00	.091134	8.40	.0042205
8.30	.091043	9.10	.0042168
9.00	.090947	9.40	.0042139
9.30	.090861	10.10	.0042111
10.00	.090777		

TERTIARY VOLTAGE (Y)

TIME (min)	RESISTANCE(ohms)
------------	------------------

	3.50	.0045201
	4.20	.0045120
	4.50	.0045066
	5.20	.0045005
	5.50	.0044958
T_TV := 6.20	R_TV := .0044912	
6.50	.0044869	
7.20	.0044836	
7.50	.0044800	
8.20	.0044765	
8.50	.0044753	
9.20	.0044717	

AOR := 38.81 °

Tini = 32.5 °C

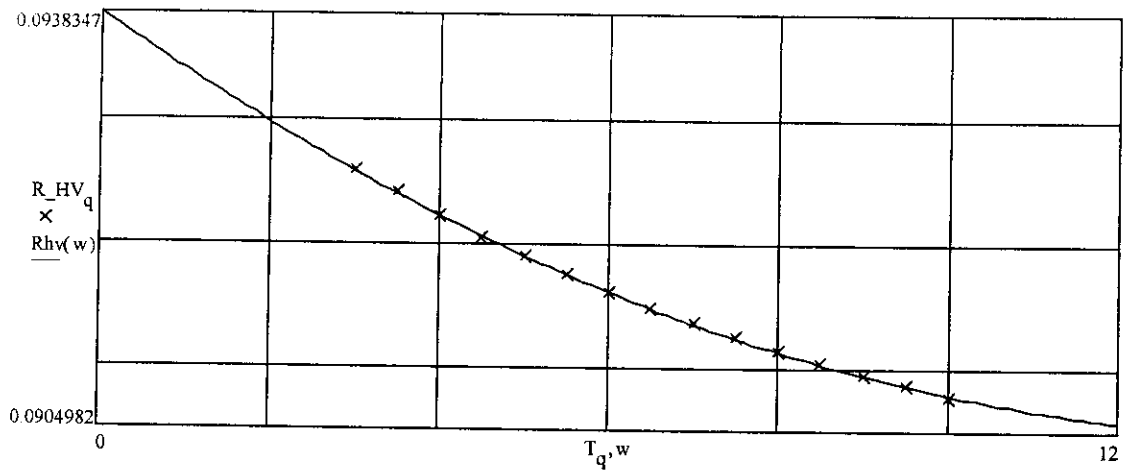
Altitude := 3300 FASL

TOR := 48.12 °C

oil_Temp_HV := 70.02 °C Rini_HV := 0.078006 Ω Mat_HV = 234.5 K_HV = 1.1
oil_Temp_LV := 70.02 °C Rini_LV := 0.0036505 Ω Mat_LV = 234.5 K_LV := 1.15
oil_Temp_TV := 70.02 °C Rini_TV := 0.0038577 Ω Mat_TV := 234.5 K_TV := 1.15

Serial: G2137-01

MEASUREMENTS BETWEEN H2 - H0



ZERO TIME RESISTANCE:

X axis: 1 min/div.

$$R_{hv}(0) = 0.093835 \quad \Omega$$

$$\text{final_Temp_HV} := R_{hv}(0) \cdot \frac{\text{Mat_HV} - T_{ini}}{R_{ini_HV}} - \text{Mat_HV}$$

$$\text{final_Temp_HV} = 86.68 \quad ^\circ\text{C}$$

$$\text{Grad_HV} := \text{final_Temp_HV} - \text{oil_Temp_HV}$$

$$\text{Grad_HV} = 16.66 \quad ^\circ\text{C}$$

$$\text{Hot_Spot_Rise_HV} := \text{Grad_HV} \cdot K_{HV} + \text{TOR}$$

$$\text{Temp_rise_HV} := \text{Grad_HV} + \text{AOR}$$

$$\text{Hot_Spot_Rise_HV} = 66.44 \quad ^\circ\text{C}$$

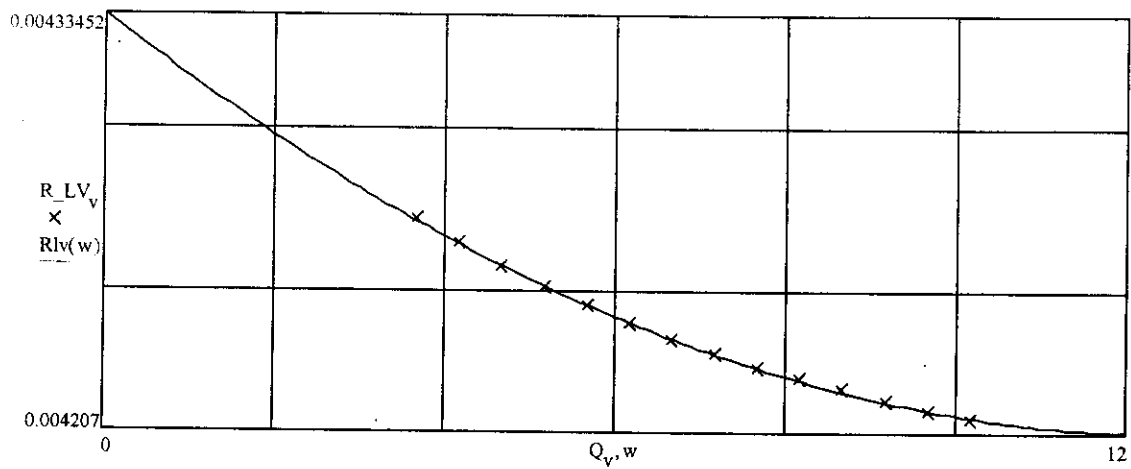
$$\text{Temp_rise_HV} = 55.47 \quad ^\circ\text{C}$$


 TEST ENGINEER

 INSPECTOR

Serial: G2137-01

MEASUREMENTS BETWEEN X2 - X3



ZERO TIME RESISTANCE:

X axis: 1 min/div.

$$Rlv(0) = 0.004335 \quad \Omega$$

$$final_Temp_LV := Rlv(0) \cdot \frac{Mat_LV + Tini}{Rini_LV} - Mat_LV$$

$$final_Temp_LV = 82.53 \quad ^\circ C$$

$$Grad_LV := final_Temp_LV - oil_Temp_LV$$

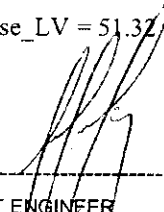
$$Grad_LV = 12.51 \quad ^\circ C$$

$$Hot_Spot_Rise_LV := Grad_LV \cdot K_LV + TOR$$

$$Temp_rise_LV := Grad_LV + AOR$$

$$Hot_Spot_Rise_LV = 62.51 \quad ^\circ C$$

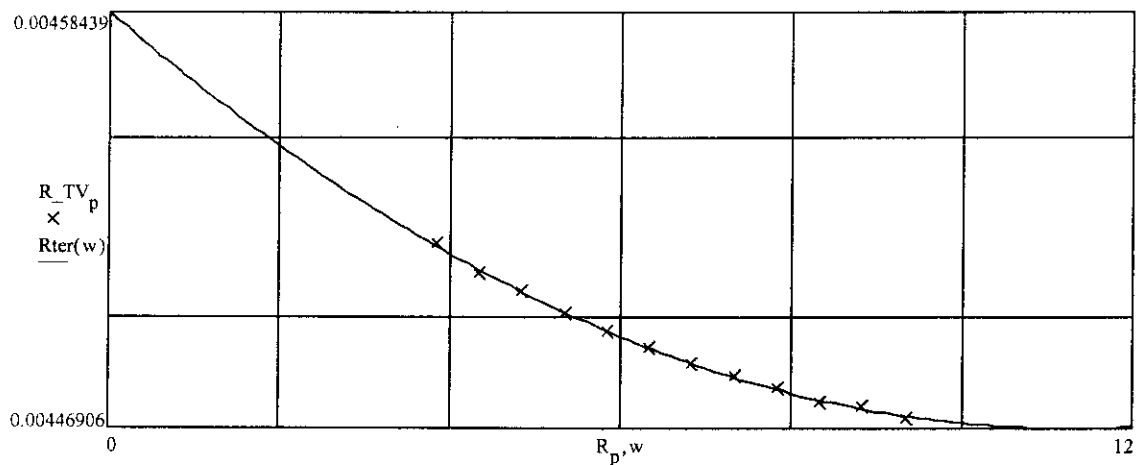
$$Temp_rise_LV = 51.37 \quad ^\circ C$$


 TEST ENGINEER

 INSPECTOR

Serial: G2137-01

MEASUREMENTS BETWEEN Y2 - Y3



ZERO TIME RESISTANCE:

X axis: 1 min/div.

$$R_{ter}(0) = 0.004584 \quad \Omega$$

$$final_Temp_TV := R_{ter}(0) \cdot \frac{Mat_TV + T_{ini}}{R_{ini_TV}} - Mat_TV$$

$$final_Temp_TV = 82.8 \quad ^\circ C$$

$$Grad_TV := final_Temp_TV - oil_Temp_TV$$

$$Grad_TV = 12.78 \quad ^\circ C$$

$$Hot_Spot_Rise_TV := Grad_TV \cdot K_TV + TOR$$

$$Temp_rise_TV := Grad_TV + AOR$$

$$Hot_Spot_Rise_TV = 62.81 \quad ^\circ C$$

$$Temp_rise_TV = 51.59 \quad ^\circ C$$

TEST ENGINEER

INSPECTOR



TEST DEPARTMENT

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CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./24/2008

TEMPERATURE RISE

TEST IN (ONAN) 55°C.

RATING: 90000 KVA

POSITION: H.V. 5

TEST: 197935 WATTS

POSITION: L.V. (X) + L.V. (Y)

READING TIME	HOURS 12:00	HOURS 13:00	HOURS 14:00	HOURS 15:00
TOP HEAD. TEMP.1	74.06	75.29	75.48	75.80
BOTTOM HEAD TEMP.2	60.66	62.55	62.69	63.07
TEMPERATURE TEMP.3	41.29	43.82	44.34	44.35
AMBIENT TEMP.4	33.25	35.58	35.74	36.04
TEMP.5	34.02	34.46	34.59	34.85
OIL TEMPERATURE	72.62	73.57	73.91	74.04
BOOTOM OIL RISE	24.47	24.60	24.47	24.66
AVERAGE OIL RISE	29.73	29.25	29.29	29.26
TOP OIL RISE	36.43	35.62	35.69	35.63


Test Engineer
Design Engineer

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GE ENERGY
GE- PROLECBlvd. Carlos Salinas de Gortari km 9.25
Apodaca, N.L. 66600 México

RESISTANCE - TIME CURVES OF WINDINGS FOR TEMPERATURE RISE TEST IN
THE TRANSFORMER G2137-01 IN ONAN (55°C) - (90 MVA)

HIGH VOLTAGE (H)		LOW VOLTAGE (X)	
TIME (min)	RESISTANCE(ohms)	TIME (min)	RESISTANCE(ohms)
3.00	.089723	3.40	.0041688
3.30	.089698	4.10	.0041642
4.00	.089667	4.40	.0041613
4.30	.089636	5.10	.0041584
5.00	.089616	5.40	.0041550
5.30	.089599	6.10	.0041531
6.00	.089572	6.40	.0041502
T_HV := 6.30	R_HV := .089551	T_LV := 7.10	R_LV := .0041481
7.00	.089531	7.40	.0041460
7.30	.089513	8.10	.0041442
8.00	.089495	8.40	.0041427
8.30	.089480	9.10	.0041414
9.00	.089463	9.40	.0041404
9.30	.089448	10.10	.0041378
10.00	.089436		

TERTIARY VOLTAGE (Y)

TIME (min)	RESISTANCE(ohms)
------------	------------------

	3.50		.0043801
	4.20		.0043720
	4.50		.0043666
	5.20		.0043605
	5.50		.0043558
T_TV :=	6.20	R_TV :=	.0043512
	6.50		.0043469
	7.20		.0043436
	7.50		.0043400
	8.20		.0043365
	8.50		.0043353
	9.20		.0043317

AOR := 29.26 °

Tini := 32.5 °C

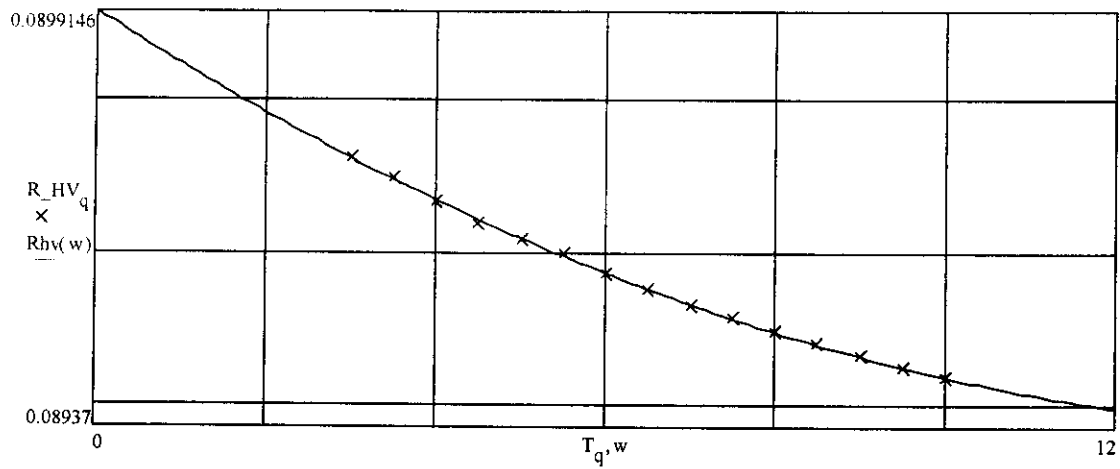
Altitude = 3300 FASL

TOR := 35.63 °C

oil_Temp_HV := 68.98 °C Rini_HV := 0.078006 Ω Mat_HV := 234.5 K_HV := 1.1
oil_Temp_LV := 68.98 °C Rini_LV := 0.0036505 Ω Mat_LV := 234.5 K_LV := 1.15
oil_Temp_TV := 68.98 °C Rini_TV := 0.0038577 Ω Mat_TV := 234.5 K_TV := 1.15

Serial: G2137-01

MEASUREMENTS BETWEEN H2 - H0



ZERO TIME RESISTANCE:

X axis: 1 min/div.

$$Rhv(0) = 0.089915 \quad \Omega$$

$$final_Temp_HV := Rhv(0) \cdot \frac{Mat_HV + Tini}{Rini_HV} - Mat_HV$$

$$final_Temp_HV = 73.26 \quad ^\circ C$$

$$Grad_HV := final_Temp_HV - oil_Temp_HV$$

$$Grad_HV = 4.28 \quad ^\circ C$$

$$Hot_Spot_Rise_HV := Grad_HV \cdot K_HV + TOR$$

$$Temp_rise_HV := Grad_HV + AOR$$

$$Hot_Spot_Rise_HV = 40.34 \quad ^\circ C$$

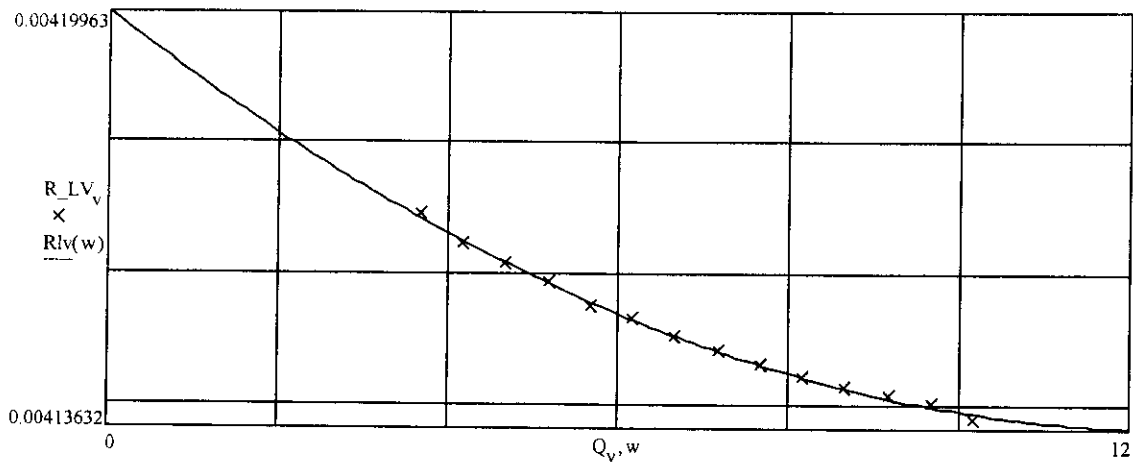
$$Temp_rise_HV = 33.54 \quad ^\circ C$$

TEST ENGINEER

INSPECTOR

Serial: G2137-01

MEASUREMENTS BETWEEN X2 - X3



ZERO TIME RESISTANCE:

X axis: 1 min/div.

$$R_{lv}(0) = 0.0042 \quad \Omega$$

$$\text{final_Temp_LV} := R_{lv}(0) \cdot \frac{\text{Mat_LV} + T_{ini}}{R_{ini_LV}} - \text{Mat_LV}$$

$$\text{final_Temp_LV} = 72.66 \quad ^\circ\text{C}$$

$$\text{Grad_LV} := \text{final_Temp_LV} - \text{oil_Temp_LV}$$

$$\text{Grad_LV} = 3.68 \quad ^\circ\text{C}$$

$$\text{Hot_Spot_Rise_LV} := \text{Grad_LV} \cdot K_{LV} + \text{TOR}$$

$$\text{Temp_rise_LV} := \text{Grad_LV} + \text{AOR}$$

$$\text{Hot_Spot_Rise_LV} = 39.87 \quad ^\circ\text{C}$$

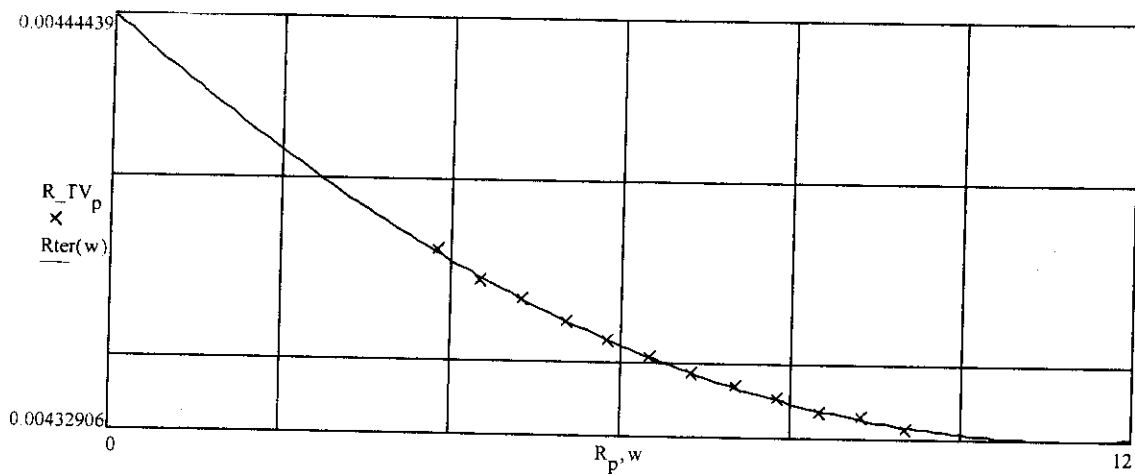
$$\text{Temp_rise_LV} = 32.94 \quad ^\circ\text{C}$$


 TEST ENGINEER

 INSPECTOR

Serial: G2137-01

MEASUREMENTS BETWEEN Y2 - Y3



ZERO TIME RESISTANCE:

$$R_{ter}(0) = 0.004444 \quad \Omega$$

$$final_Temp_TV := R_{ter}(0) \cdot \frac{Mat_TV + T_{ini}}{R_{ini_TV}} - Mat_TV$$

$$final_Temp_TV = 73.11 \quad ^\circ C$$

$$Grad_TV := final_Temp_TV - oil_Temp_TV$$

$$Grad_TV = 4.13 \quad ^\circ C$$

$$Hot_Spot_Rise_TV := Grad_TV \cdot K_TV + TOR$$

$$Temp_rise_TV := Grad_TV + AOR$$

$$Hot_Spot_Rise_TV = 40.38 \quad ^\circ C$$

$$Temp_rise_TV = 33.39 \quad ^\circ C$$

TEST ENGINEER

INSPECTOR

CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./25/2008

SOUND LEVEL TEST (ONAN)

"A" weighted sound pressure level measurement

	2.-Ambient + transformer		5.-Corrected transformer		1.-Before:	
pos	1/3rd Height	2/3rds Height	1/3rd Height	2/3rds Height	pos	Ambient
0	78.2	78.6	76.6	77.0	A	74.2
1	78.1	78.4	76.5	76.8	B	74.2
2	78.4	78.8	76.8	77.2	C	74.3
3	78.2	78.7	76.6	77.1	D	74.4
4	78.2	78.6	76.6	77.0	E	
5	78.4	78.7	76.8	77.1	F	
6	78.1	78.5	76.5	76.9	G	
7	78.2	78.5	76.6	76.9	H	
8	78.4	78.8	76.8	77.2		
9	78.0	78.6	76.4	77.0	3.-After	
10	78.3	78.9	76.7	77.3	pos	Ambient
11	78.1	78.7	76.5	77.1	A	74.0
12	78.2	78.7	76.6	77.1	B	74.1
13	77.7	78.4	76.1	76.8	C	74.1
14	78.0	78.6	76.4	77.0	D	74.3
15	78.3	78.8	76.7	77.2	E	
16	78.1	78.5	76.5	76.9	F	
17	78.1	78.3	76.5	76.7	G	
18	78.3	78.6	76.7	77.0	H	
19	78.2	78.6	76.6	77.0		
20	78.2	78.4	76.6	76.8	4.- Ave Ambient	
21	78.4	78.5	76.8	76.9	74	
22	78.4	78.6	76.8	77.0		
					6.- Ave Corrected	
					76	

Average transformer sound pressure level at ANSI surface (Lp)

Height of the transformer tank (H)

Length of the prescribed contour (Pm)

Measurement Surface Area (S)

Sound Power Level (Lw)

76	dB(A)
4.2	m
22	m
116	m²
97	dB(A)



Test Engineer



Design Engineer

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CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./25/2008

SOUND LEVEL TEST (ONAF1)

"A" weighted sound pressure level measurement

	2.-Ambient + transformer		5.-Corrected transformer		1.-Before:	
pos	1/3rd Height	2/3rds Height	1/3rd Height	2/3rds Height	pos	Ambient
0	79.3	79.7	77.7	78.1	A	74.2
1	79.1	79.6	77.5	78.0	B	74.2
2	79.4	79.9	77.8	78.3	C	74.3
3	79.6	79.3	78.3	78.0	D	74.4
4	79.7	79.4	78.4	78.1	E	
5	79.5	79.2	78.2	77.9	F	
6	79.7	79.5	78.4	78.2	G	
7	79.6	79.5	78.3	78.2	H	
8	79.4	79.3	77.8	77.7		
9	79.6	79.6	78.3	78.3	3.-After	
10	79.5	80.6	78.2	79.3	pos	Ambient
11	79.7	80.8	78.4	79.5	A	74.0
12	79.5	80.5	78.2	79.2	B	74.1
13	79.7	80.8	78.4	79.5	C	74.1
14	79.4	80.6	77.8	79.0	D	74.3
15	79.5	80.8	78.2	79.5	E	
16	79.6	80.5	78.3	79.2	F	
17	79.4	80.8	77.8	79.2	G	
18	79.4	80.6	77.8	79.0	H	
19	79.6	80.5	78.3	79.2		
20	79.7	80.7	78.4	79.4	4.- Ave Ambient	
21	79.4	80.5	77.8	78.9	74	
22	79.4	80.8	77.8	79.2		
23	79.5	80.4	78.2	79.1	6.- Ave Corrected	
24	79.6	80.6	78.3	79.3	78	
25	79.4	80.6	77.8	79.0		

Average transformer sound pressure level at ANSI surface (Lp)


Length of the prescribed contour (Pm)

Measurement Surface Area (S)

*Sound Power Level (Lw)

78	dB(A)
25	m
131	m²
99	dB(A)


 Test Engineer


 Design Engineer

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CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./25/2008

SOUND LEVEL TEST (ONAF2)

"A" weighted sound pressure level measurement

	2.-Ambient + transformer		5.-Corrected transformer		1.-Before:	
pos	1/3rd Height	2/3rds Height	1/3rd Height	2/3rds Height	pos	Ambient
0	81.4	81.9	80.4	81.1	A	74.2
1	81.6	82.0	80.8	81.2	B	74.2
2	81.1	81.7	80.1	80.9	C	74.3
3	81.0	81.5	80.0	80.7	D	74.4
4	81.6	82.1	80.8	81.3	E	
5	81.3	81.8	80.3	81.0	F	
6	81.0	81.6	80.0	80.8	G	
7	81.2	81.9	80.2	81.1	H	
8	81.4	82.2	80.4	81.4		
9	81.1	81.6	80.1	80.8	3.-After	
10	81.3	81.7	80.3	80.9	pos	Ambient
11	81.5	81.9	80.7	81.1	A	74.0
12	81.2	81.6	80.2	80.8	B	74.1
13	81.0	81.4	80.0	80.4	C	74.1
14	81.1	81.4	80.1	80.4	D	74.3
15	81.3	81.7	80.3	80.9	E	
16	81.0	81.5	80.0	80.7	F	
17	81.1	80.9	80.1	79.9	G	
18	81.3	81.2	80.3	80.2	H	
19	81.0	81.4	80.0	80.4		
20	81.4	82.0	80.4	81.2	4.- Ave Ambient	
21	81.6	81.6	80.8	80.8	74	
22	81.0	81.4	80.0	80.4		
23	81.4	81.8	80.4	81.0	6.- Ave Corrected	
24	81.5	81.7	80.7	80.9	79	
25	81.5	81.5	80.7	80.7		


Average transformer sound pressure level at ANSI surface (Lp)


Length of the prescribed contour (Pm)

Measurement Surface Area (S)

Sound Power Level (Lw)

79	dB(A)
25	m
131	m²
100	dB(A)


Test Engineer


Design Engineer

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TEST DEPARTMENT

CUSTOMER: Equisales Associates, Inc.

INSPECTOR:

SERIAL No.: G2137-01

DATE: Jun./19/2008

CURRENT TRANSFORMERS

SERIAL	BUSHING	ACCURACY	RATIO	VOLTS PER TURN	RATIO READING					POLARITY	SAT.	OHMIC RESISTANCE (Ω)					33°C
					X1 - X5	X1 - X4	X1 - X3	X1 - X2	X1 - X2			X1 - X5	X1 - X4	X1 - X3	X1 - X2	X1 - X2	
CT- 1	H1	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0813	0.876	0.630	0.324	0.272	0.272	
CT- 5	H1	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0845	0.874	0.629	0.323	0.270	0.270	
CT- 2	H2	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0908	0.872	0.627	0.324	0.271	0.271	
CT- 6	H2	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0932	0.876	0.628	0.326	0.273	0.273	
CT- 3	H3	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0881	0.875	0.631	0.325	0.273	0.273	
CT- 7	H3	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0882	0.874	0.632	0.323	0.271	0.271	
CT- 4	H0	C - 800	1200 / 5	3.333	240	160	60	40	40	+	0.0705	0.645	0.465	0.233	0.187	0.187	
CT- 21	X1	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0242	1.209	0.909	0.625	0.226	0.226	
CT- 25	X1	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0240	1.207	0.908	0.624	0.224	0.224	
CT- 22	X2	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0237	1.210	0.909	0.622	0.225	0.225	
CT- 26	X2	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0233	1.211	0.912	0.623	0.226	0.226	
CT- AX	X2	C - 200	4000 / 5	0.250	800	600	400	100	100	+	0.0297	0.767	0.564	0.412	0.176	0.176	
CT- 23	X3	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0233	1.212	0.913	0.625	0.225	0.225	
CT- 27	X3	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0229	1.210	0.912	0.624	0.224	0.224	
CT- 41	Y1	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0232	1.268	0.958	0.663	0.251	0.251	
CT- 45	Y1	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0241	1.266	0.960	0.662	0.251	0.251	
CT- 42	Y2	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0230	1.265	0.959	0.661	0.253	0.253	
CT- 46	Y2	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0233	1.269	0.961	0.660	0.249	0.249	
CT- AY	Y2	C - 200	4000 / 5	0.250	800	600	400	100	100	+	0.0343	0.805	0.613	0.440	0.198	0.198	
CT- 43	Y3	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0238	1.267	0.958	0.664	0.250	0.250	
CT- 47	Y3	C - 800	4000 / 5	1.000	800	600	400	100	100	+	0.0248	1.268	0.960	0.663	0.252	0.252	

Test Engineer

Design Engineer

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GE ENERGY

GE- PROLEC

Bldv. Carlos Salinas de Gortari km 9.25

Apodaca, N.L. 66600 México



POWER TRANSFORMERS

TEST REPORT

PAGE 56

Purchaser: Equisales Associates, Inc.

Serial No. G2137-01

Rating: 90/120/150/168 MVA

Date: Jun./22/2008

CURRENT TRANSFORMERS

**CT'S MANUFACTURED IN PROLEC GE ARE
IN THE FOLLOWING 75 PAGES**



Test Engineer

Design Engineer

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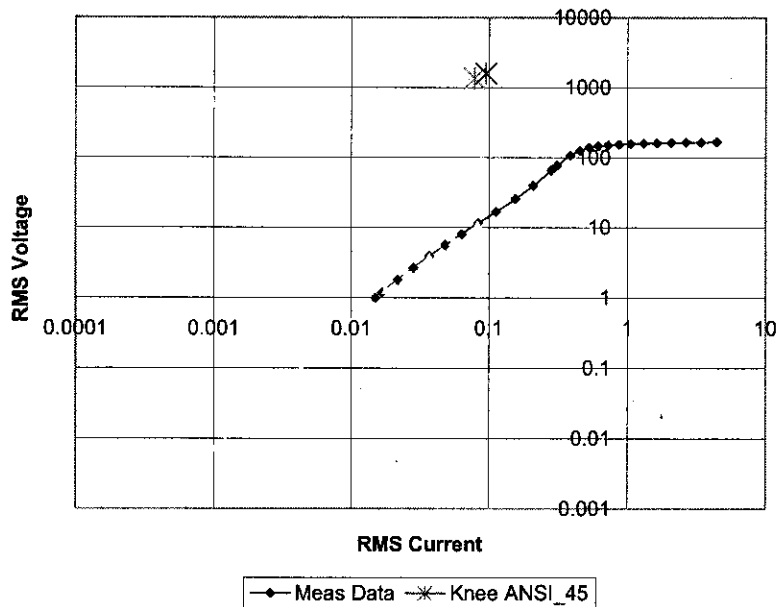
A:\G-2137-01\A-H1-R-1200-5-PC-800\X1-X2.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:03:01 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800\X1-X2.xml
Status Info:	Test successful

Identification:	X1-X2
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	200
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

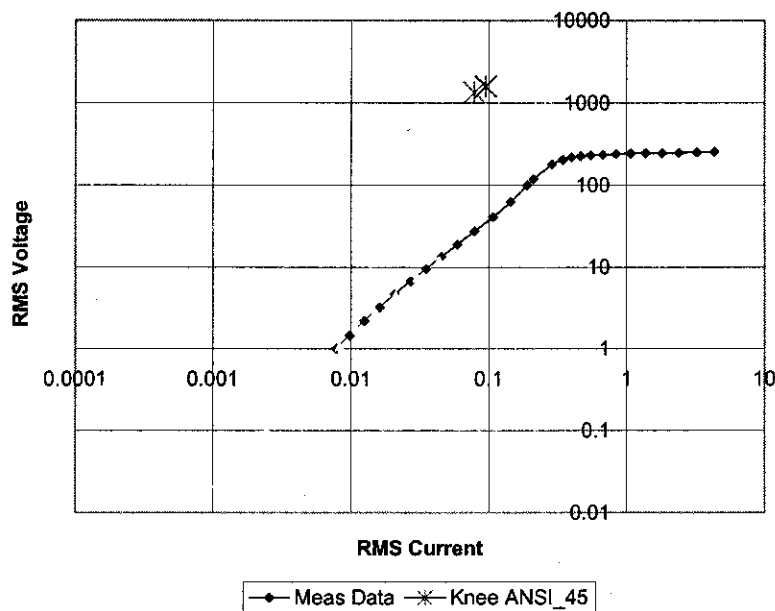


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:03:59 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01A-H1-R-1200-5-PC-800\X1-X3.xml
Status Info:	Test successful

Identification:	X1-X3
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	300
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

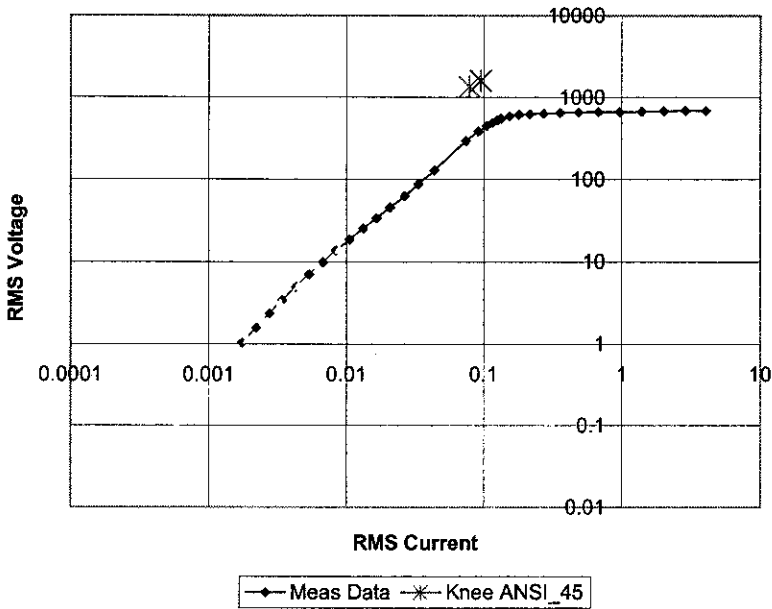


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:05:09 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800X1-X4.xml
Status Info:	Test successful

Identification:	X1-X4
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	800
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

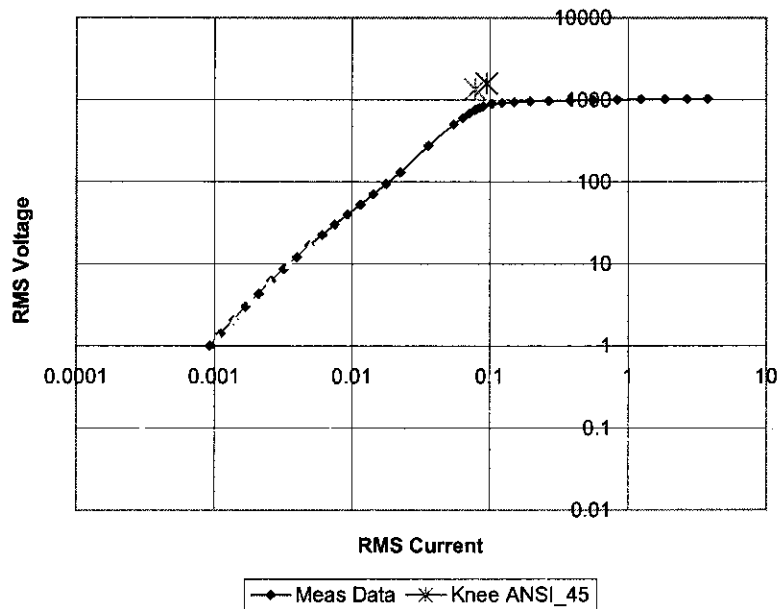


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:06:30 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01A-H1-R-1200-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	1200
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



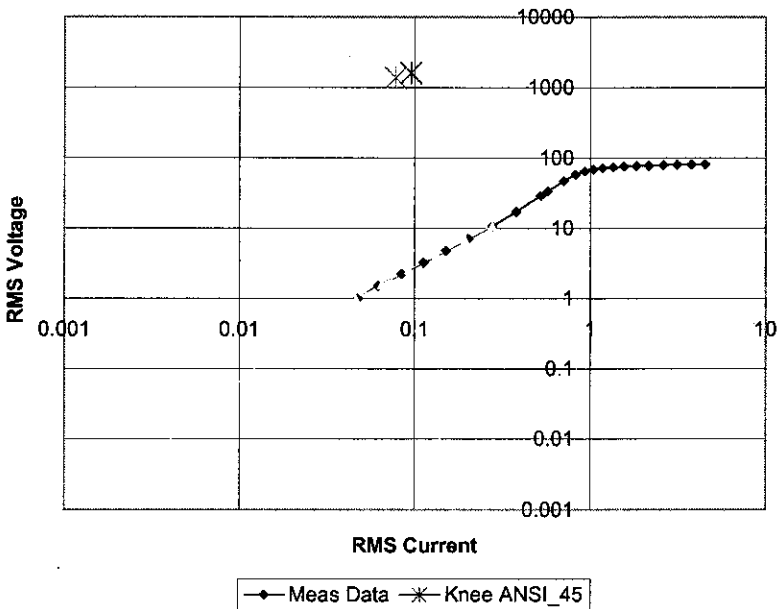
A:\G-2137-01\A-H1-R-1200-5-PC-800\X2-X3.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:07:36 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800\X2-X3.xml
Status Info:	Test successful

Identification:	X2-X3
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	100
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



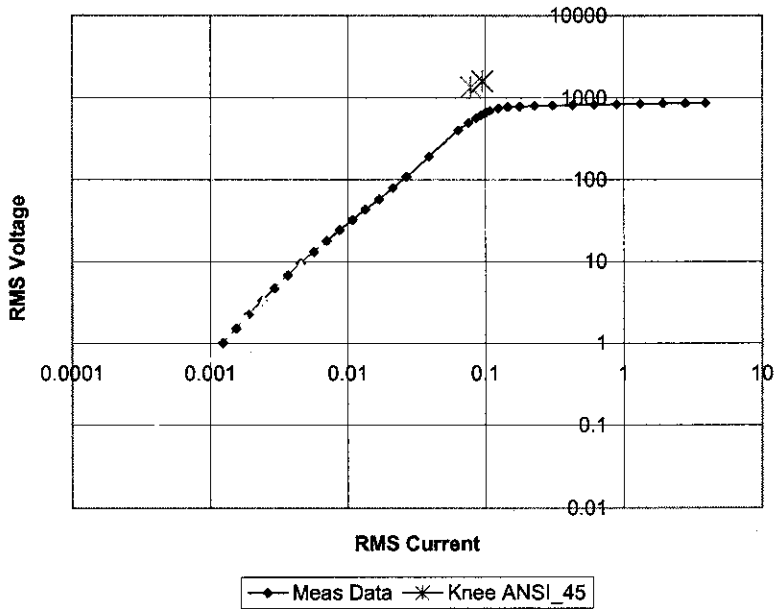
A:\G-2137-01\A-H1-R-1200-5-PC-800\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:09:52 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



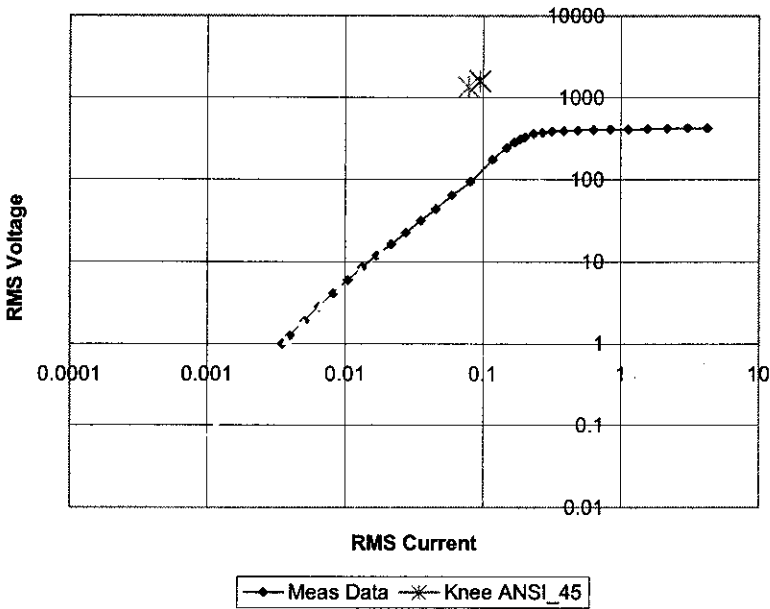
A:\G-2137-01\A-H1-R-1200-5-PC-800\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:10:59 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

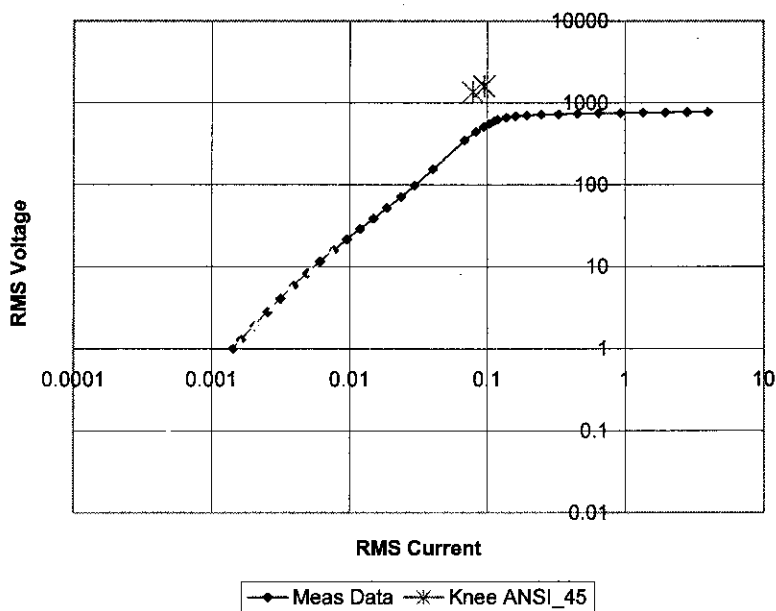


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:12:07 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01A-H1-R-1200-5-PC-800\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	900
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



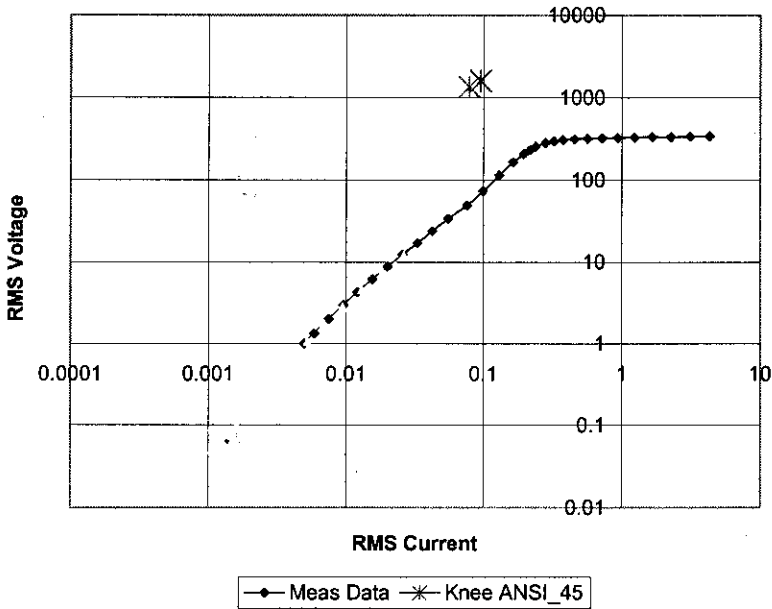
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Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:13:11 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\A-H1-R-1200-5-PC-800\X4-X5.xml
Status Info:	Test successful

Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	A
Core Number:	0
Primary Current I-pn:	400
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



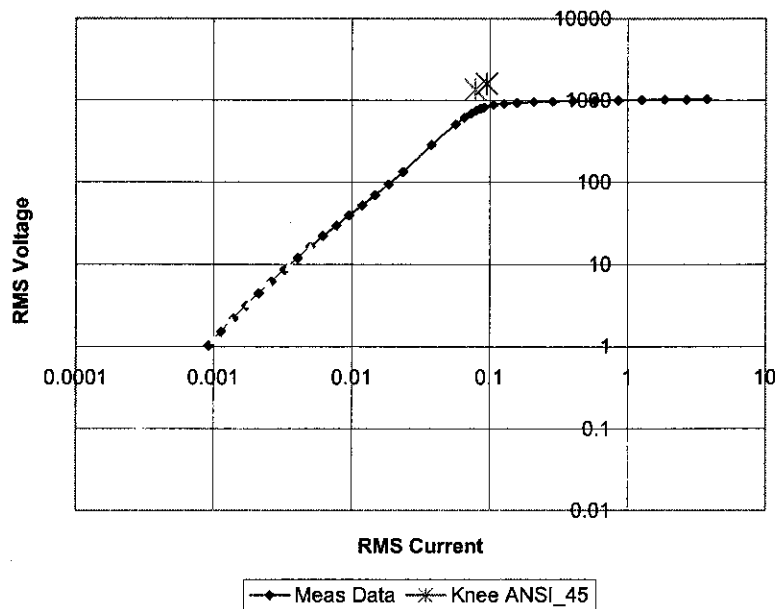
A:\G-2137-01\B-H2-R-1200-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 06:35:24 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\B-H2-R-1200-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	B
Core Number:	0
Primary Current I-pn:	1200
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



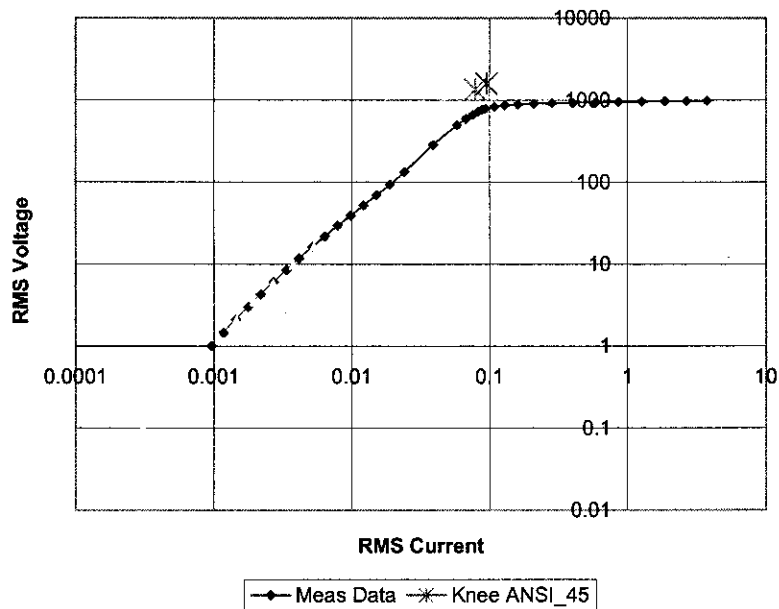
A:\G-2137-01\C-H3-R-1200-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 06:46:16 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\C-H3-R-1200-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	C
Core Number:	0
Primary Current I-pn:	1200
Secondary Current I-s:	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



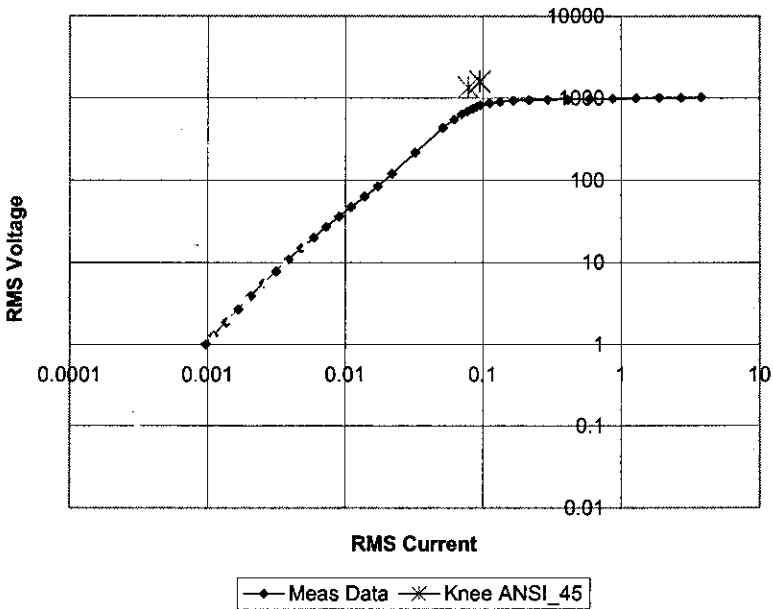
A:\G-2137-01\D-H1-R-1200-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 06:56:53 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\D-H1-R-1200-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	D
Core Number:	0
Primary Current I-pn:	1200
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

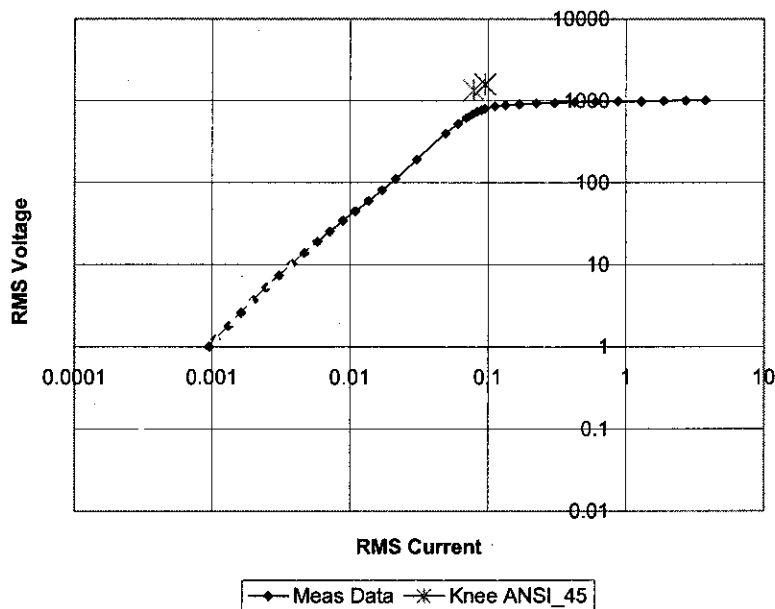


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 07:09:09 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\E-H2-R-1200-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	E
Core Number:	0
Primary Current I-pn:	1200
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



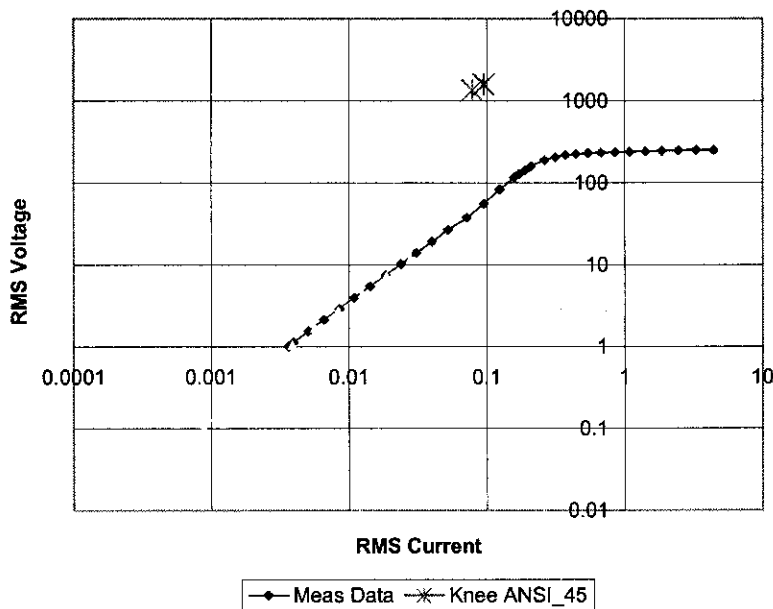
A:\G-2137-01\G-H0-R-1200-5-PC-800\X1-X3.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:12:06 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01G-H0-R-1200-5-PC-800\X1-X3.xml
Status Info:	Test successful

Identification:	X1-X3
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	300
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



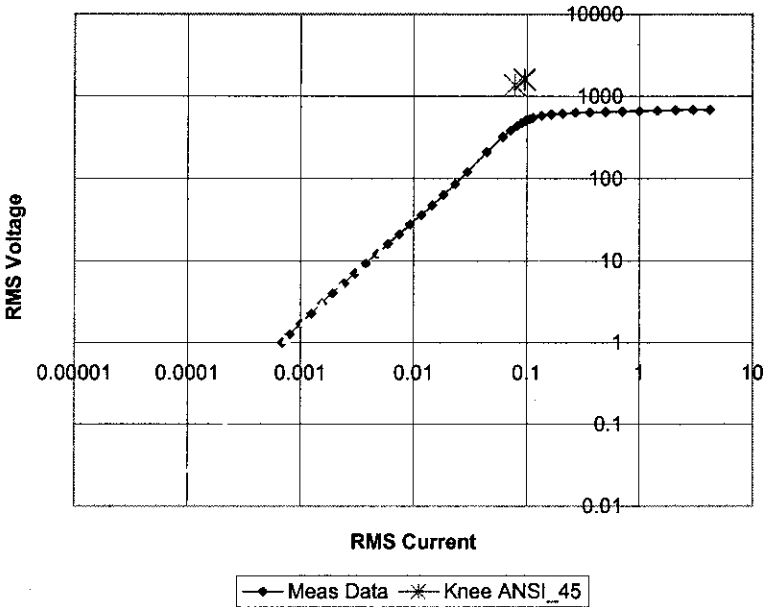
A:\G-2137-01\G-H0-R-1200-5-PC-800\X1-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:13:17 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X1-X4.xml
Status Info:	Test successful

Identification:	X1-X4
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	800
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
690.778	4.178
685.937	2.979
680.085	2.085
673.673	1.446
666.838	1.003
659.673	0.703
651.801	0.498
643.053	0.361
632.938	0.269
620.894	0.206
605.733	0.164
585.067	0.135
552.766	0.114
533.974	0.106
509.868	0.099
477.960	0.091
436.120	0.081
384.011	0.072
324.009	0.062
213.049	0.044
120.841	0.030
85.917	0.023
63.612	0.018
47.626	0.015
36.272	0.012
27.657	0.009
21.005	0.007
15.963	0.006
12.135	0.005
9.226	0.004
7.008	0.003
5.321	0.002
4.005	0.002
3.035	0.002
2.269	0.001
1.700	0.001
1.258	0.001
1.000	0.001

IEEE ANSI 45 Excitation Curve

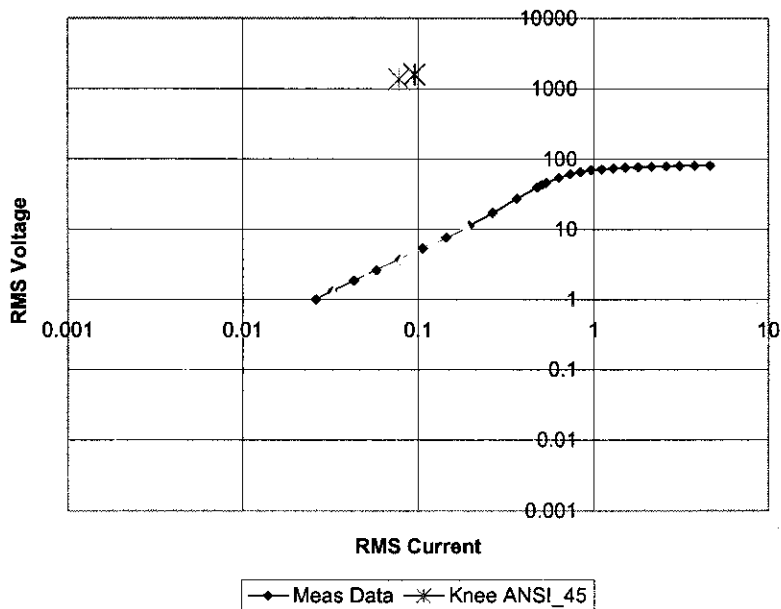


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:17:06 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X2-X3.xml
Status Info:	Test successful

Identification:	X2-X3
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	100
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

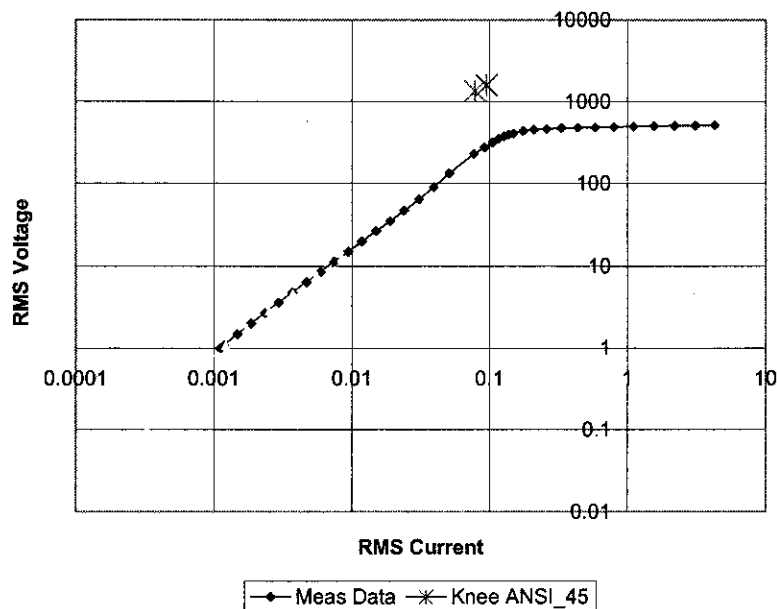


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:18:32 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X2-X4.xml
Status Info:	Test successful

Identification:	X2-X4
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	600
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



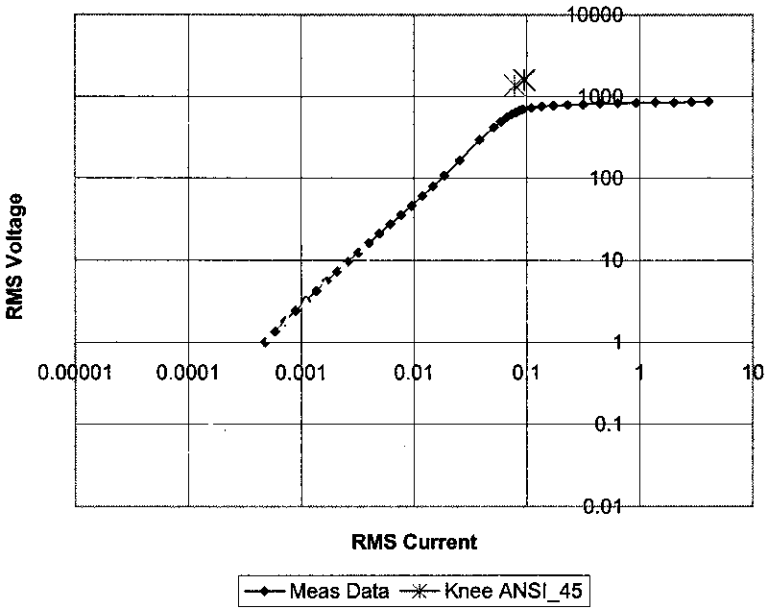
A:\G-2137-01\G-H0-R-1200-5-PC-800\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:20:09 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
866.548	4.054
861.104	2.880
854.091	2.001
846.089	1.365
837.497	0.929
828.410	0.636
818.155	0.442
807.028	0.313
794.251	0.228
779.102	0.172
760.221	0.134
734.803	0.110
695.531	0.092
673.249	0.086
644.925	0.080
607.308	0.073
557.301	0.067
493.629	0.059
419.080	0.051
292.877	0.038
165.962	0.025
107.272	0.019
79.878	0.015
60.705	0.012
46.170	0.010
35.673	0.008
27.331	0.006
20.950	0.005
16.066	0.004
12.328	0.003
9.455	0.003
7.242	0.002
5.538	0.002
4.207	0.001
3.207	0.001
2.414	0.001
1.817	0.001
1.355	0.001
1.000	0.000

IEEE ANSI 45 Excitation Curve



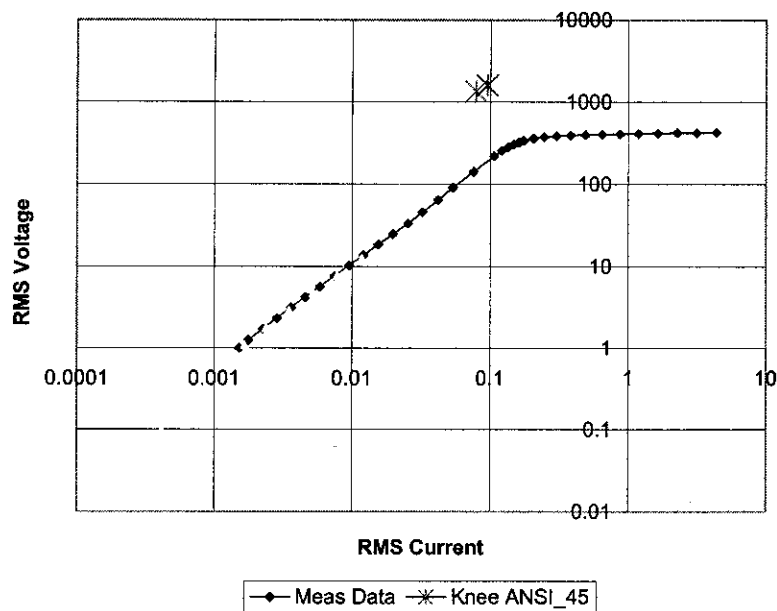
A:\G-2137-01\G-H0-R-1200-5-PC-800\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:23:10 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



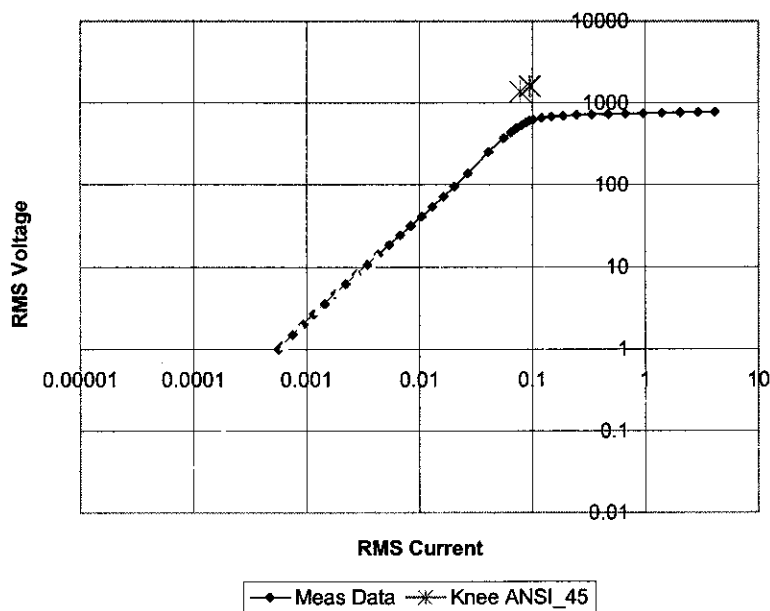
A:\G-2137-01\G-H0-R-1200-5-PC-800\X3-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:25:56 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	900
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
778.776	4.124
773.558	2.931
767.018	2.039
759.700	1.401
751.921	0.962
743.785	0.667
734.908	0.468
724.981	0.335
713.537	0.246
699.927	0.187
682.920	0.147
659.906	0.121
624.137	0.101
603.527	0.095
577.262	0.088
542.494	0.081
496.482	0.073
438.399	0.065
371.208	0.056
252.578	0.041
138.065	0.027
95.452	0.020
71.474	0.016
54.083	0.013
41.031	0.010
31.580	0.008
24.082	0.007
18.385	0.005
14.041	0.004
10.715	0.003
8.164	0.003
6.222	0.002
4.703	0.002
3.578	0.001
2.696	0.001
2.018	0.001
1.499	0.001
1.090	0.001
1.000	0.001

IEEE ANSI 45 Excitation Curve



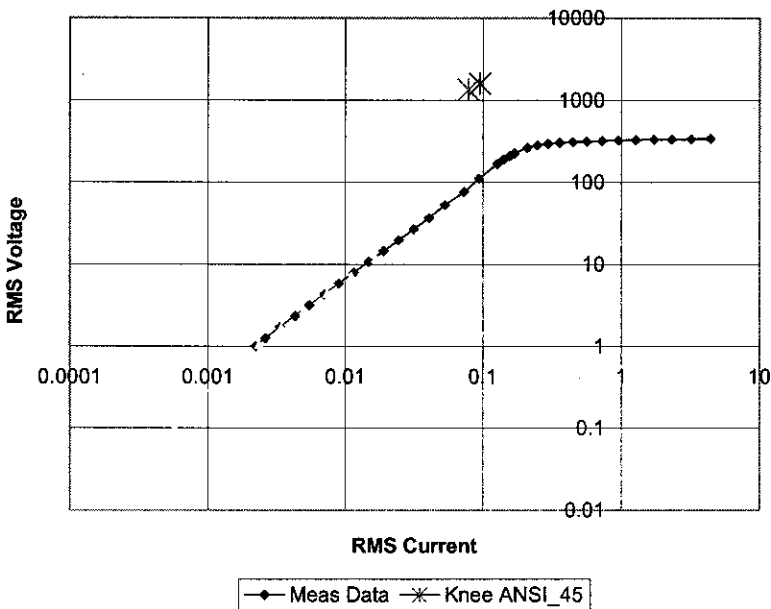
A:\G-2137-01\G-H0-R-1200-5-PC-800\X4-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 09:27:10 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\G-H0-R-1200-5-PC-800\X4-X5.xml
Status Info:	Test successful

Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	G
Core Number:	0
Primary Current I-pn:	400
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



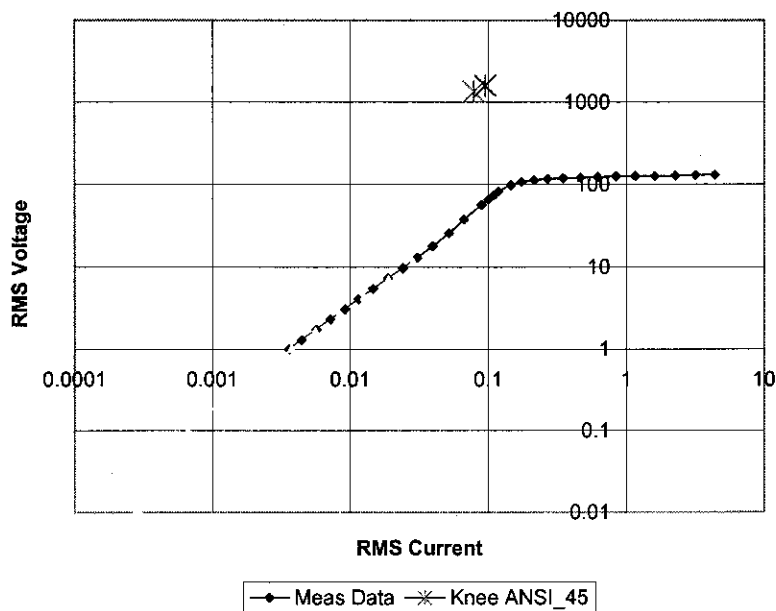
A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X2.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:27:10 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X2.xml
Status Info:	Test successful

Identification:	X1-X2
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

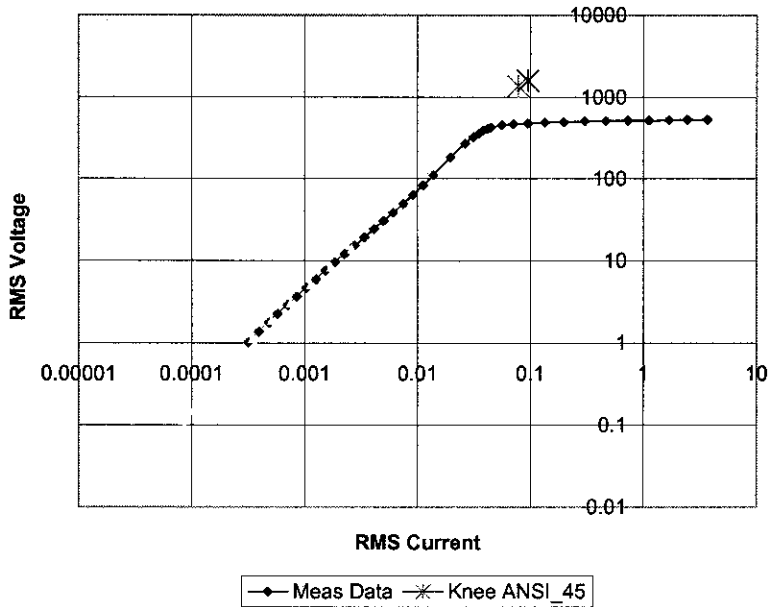


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:28:37 AM
Software Version:	2.06 (07-09/17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800X1-X3.xml
Status Info:	Test successful

Identification:	X1-X3
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
533.036	3.666
530.592	2.442
527.703	1.677
523.438	1.121
518.070	0.727
512.209	0.465
506.196	0.301
499.562	0.198
491.951	0.134
482.866	0.095
471.411	0.070
455.584	0.055
428.721	0.045
413.101	0.042
392.513	0.038
364.332	0.035
325.046	0.031
269.486	0.026
183.894	0.020
111.570	0.014
82.963	0.011
63.556	0.009
49.273	0.007
38.587	0.006
30.630	0.005
24.257	0.004
19.170	0.003
15.161	0.003
11.969	0.002
9.452	0.002
7.468	0.002
5.911	0.001
4.628	0.001
3.657	0.001
2.878	0.001
2.248	0.001
1.769	0.000
1.362	0.000
1.021	0.000

IEEE ANSI 45 Excitation Curve



A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X4.xml

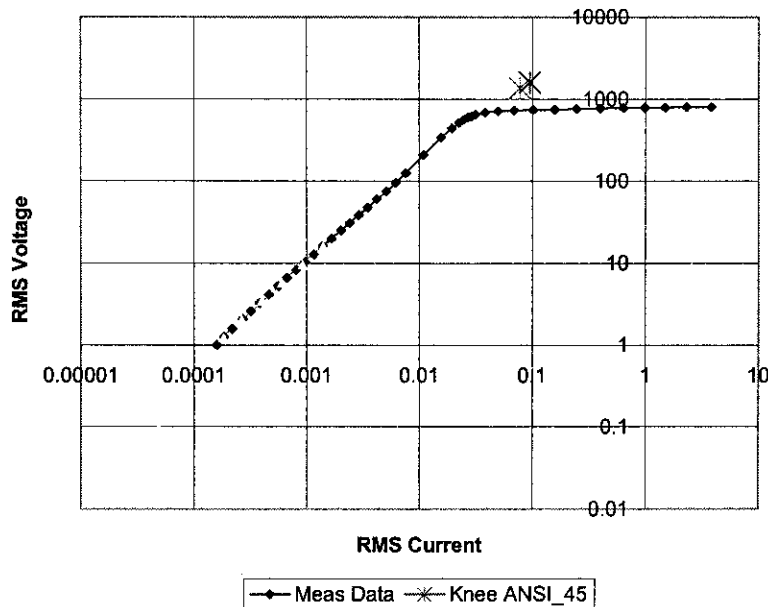
Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:29:58 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X4.xml
Status Info:	Test successful

Identification:	X1-X4
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	3000
Secondary Current I-s:	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

RMS Voltage	RMS Current
803.072	3.796
798.113	2.291
793.990	1.488
788.778	0.990
781.285	0.637
772.231	0.398
762.695	0.247
752.603	0.156
741.200	0.102
727.606	0.069
710.884	0.050
688.239	0.038
651.460	0.031
630.909	0.029
603.823	0.027
566.511	0.025
514.221	0.023
441.465	0.020
341.791	0.016
208.904	0.011
125.422	0.008
95.457	0.006
75.260	0.005
59.923	0.004
47.653	0.003
38.601	0.003
30.898	0.002
24.918	0.002
19.858	0.002
16.016	0.001
12.771	0.001
10.295	0.001
8.247	0.001
6.570	0.001
5.244	0.001
4.135	0.000
3.291	0.000
2.595	0.000
2.087	0.000
1.579	0.000
1.241	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X5.xml

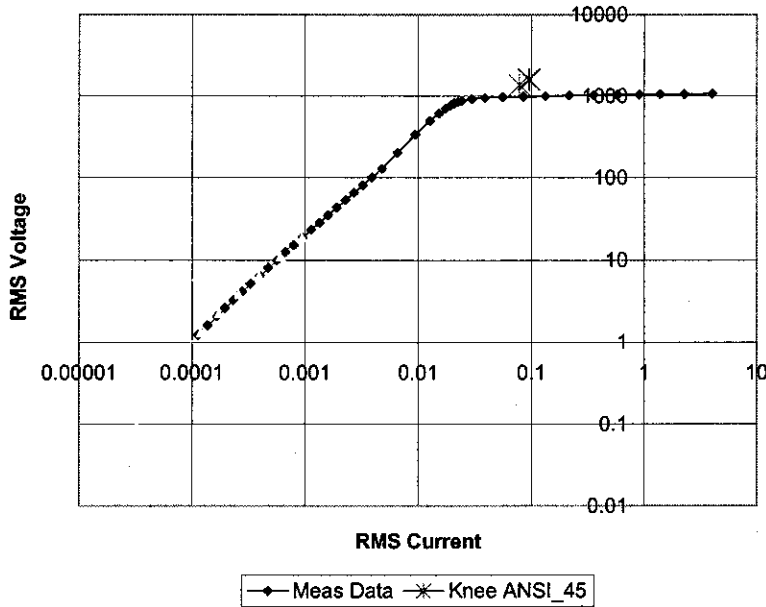
Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:31:44 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s:	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

RMS Voltage	RMS Current
1077.058	3.989
1068.291	2.260
1062.082	1.381
1055.749	0.900
1046.649	0.578
1034.603	0.356
1021.426	0.216
1007.801	0.133
992.573	0.084
974.508	0.056
952.329	0.039
922.832	0.030
876.171	0.024
850.904	0.022
817.628	0.021
771.723	0.019
706.722	0.018
615.694	0.015
496.960	0.013
338.092	0.009
201.788	0.007
130.006	0.005
101.508	0.004
81.459	0.003
65.841	0.003
53.564	0.002
43.200	0.002
35.074	0.002
28.518	0.001
23.305	0.001
18.777	0.001
15.216	0.001
12.351	0.001
9.969	0.001
8.063	0.000
6.475	0.000
5.168	0.000
4.149	0.000
3.288	0.000
2.640	0.000
2.071	0.000
1.613	0.000
1.224	0.000

IEEE ANSI 45 Excitation Curve



0.5
1

The graph displays the power characteristics of a 100W LED module. The x-axis represents RMS Current on a logarithmic scale from 0.00001 to 10 A. The y-axis represents RMS Voltage on a logarithmic scale from 0.01 to 10000 V. The data points (Meas Data) show a linear increase in voltage with current until the 'Knee' is reached at approximately 0.08 A and 1000 V. Beyond this point, the voltage remains relatively constant at about 3.2 V.

RMS Current (A)	RMS Voltage (V)
0.0005	0.5
0.001	1.0
0.002	2.0
0.005	5.0
0.01	10.0
0.02	20.0
0.05	50.0
0.08	1000.0
0.1	3.2
0.2	3.2
0.5	3.2
1.0	3.2
2.0	3.2
5.0	3.2

[illegible]

A:\G-2137-01\H-X1-R-4000-5-PC-800\X2-X4.xml

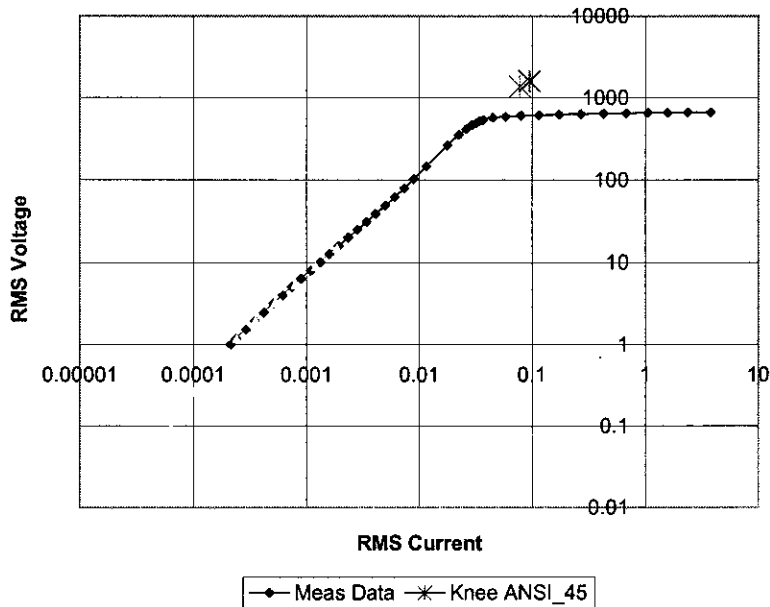
Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:37:48 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X2-X4.xml
Status Info:	Test successful

Identification:	X2-X4
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	2500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

RMS Voltage	RMS Current
667.857	3.771
664.057	2.362
660.538	1.575
655.668	1.052
649.140	0.679
641.632	0.428
633.823	0.271
625.449	0.174
615.935	0.116
604.623	0.080
590.615	0.059
571.404	0.045
539.718	0.037
521.665	0.034
497.851	0.032
465.102	0.029
419.447	0.026
355.476	0.022
266.043	0.018
147.654	0.012
102.494	0.009
79.461	0.007
62.297	0.006
49.393	0.005
39.148	0.004
31.353	0.003
24.944	0.003
19.938	0.002
15.875	0.002
12.659	0.002
10.079	0.001
8.004	0.001
6.349	0.001
5.034	0.001
3.987	0.001
3.164	0.001
2.456	0.000
1.933	0.000
1.524	0.000
1.171	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



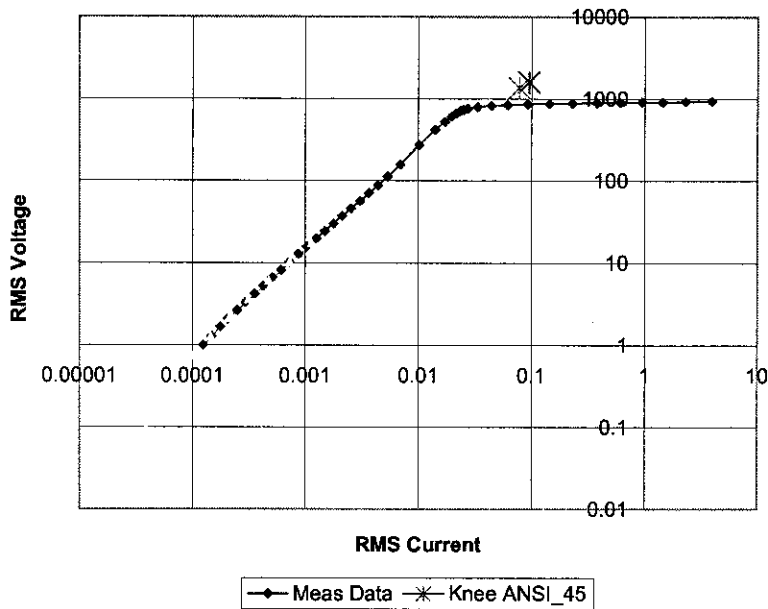
A:\G-2137-01\H-X1-R-4000-5-PC-800\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:39:12 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	3500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

IEEE ANSI 45 Excitation Curve



RMS Voltage	RMS Current
940.712	3.941
933.627	2.290
928.328	1.435
922.477	0.945
914.038	0.607
903.404	0.376
892.050	0.230
880.197	0.144
866.899	0.092
851.107	0.062
831.694	0.044
805.764	0.033
764.298	0.027
741.442	0.025
711.339	0.024
669.719	0.022
611.127	0.020
529.314	0.017
421.497	0.014
272.863	0.010
158.754	0.007
112.382	0.005
88.641	0.004
70.876	0.004
56.803	0.003
45.705	0.003
37.127	0.002
29.887	0.002
24.221	0.001
19.461	0.001
15.644	0.001
12.725	0.001
10.170	0.001
8.182	0.001
6.597	0.001
5.247	0.000
4.208	0.000
3.326	0.000
2.666	0.000
2.077	0.000
1.670	0.000
1.274	0.000
1.000	0.000

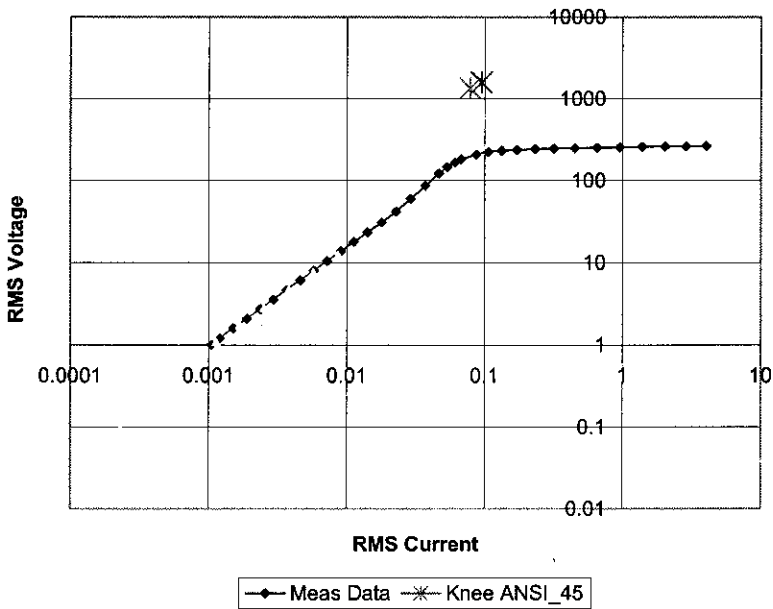
A:\G-2137-01\H-X1-R-4000-5-PC-800\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:40:54 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\H-X1-R-4000-5-PC-800\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



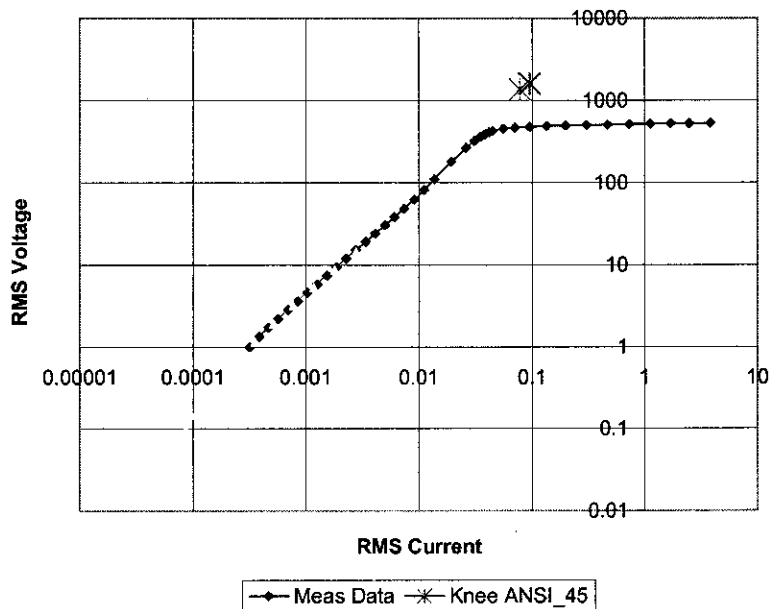
A:\G-2137-01\H-X1-R-4000-5-PC-800\X3-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 07:43:34 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01H-X1-R-4000-5-PC-800\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
533.140	3.807
530.172	2.490
526.972	1.690
522.519	1.127
517.050	0.731
511.108	0.466
505.012	0.301
498.368	0.198
490.754	0.134
481.652	0.095
470.203	0.071
454.345	0.056
427.453	0.045
411.835	0.042
391.235	0.039
363.102	0.035
323.756	0.031
268.391	0.026
182.904	0.020
111.298	0.014
82.276	0.011
63.237	0.009
48.705	0.007
38.578	0.006
30.476	0.005
24.088	0.004
19.070	0.003
15.052	0.003
11.896	0.002
9.391	0.002
7.417	0.002
5.825	0.001
4.593	0.001
3.619	0.001
2.845	0.001
2.210	0.001
1.715	0.000
1.331	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	H
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

The graph displays the relationship between RMS Current (x-axis, logarithmic scale from 0.0001 to 10) and RMS Voltage (y-axis, logarithmic scale from 0.01 to 10000). The data points (Meas Data) show a linear increase in voltage with current up to about 0.01A, followed by a knee region where the voltage increases more rapidly, and finally a saturation region where the voltage levels off around 200V. The 'Knee ANSI_45' is indicated by an asterisk at approximately (0.08, 1500).

RMS Current (A)	RMS Voltage (V)
0.001	1
0.002	2
0.005	5
0.01	10
0.02	20
0.05	100
0.08	1500 (Knee ANSI_45)
0.1	200
0.2	200
0.5	200
1.0	200
2.0	200
5.0	200

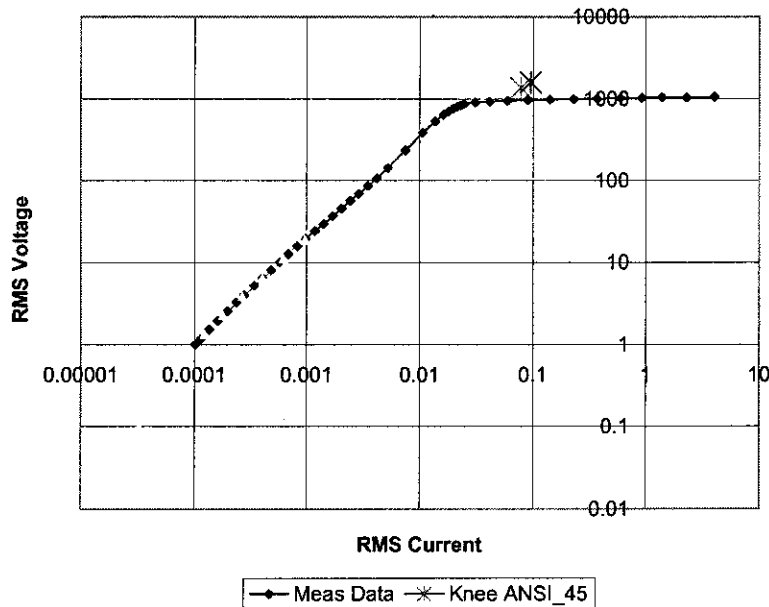
A:\G-2137-01\I-X2-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 08:07:59 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\I-X2-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	1
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1059.969	3.979
1051.540	2.277
1045.509	1.398
1039.494	0.917
1030.956	0.594
1019.512	0.371
1006.621	0.227
993.089	0.141
977.864	0.090
959.984	0.059
938.269	0.042
909.731	0.031
866.547	0.025
843.526	0.023
814.017	0.022
773.978	0.020
718.046	0.018
639.592	0.016
534.175	0.014
366.900	0.011
235.770	0.007
144.049	0.005
107.960	0.004
86.687	0.003
69.491	0.003
56.495	0.002
45.271	0.002
36.960	0.002
29.554	0.001
24.102	0.001
19.290	0.001
15.657	0.001
12.494	0.001
10.094	0.001
8.089	0.000
6.474	0.000
5.200	0.000
4.009	0.000
3.241	0.000
2.541	0.000
1.945	0.000
1.513	0.000
1.149	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



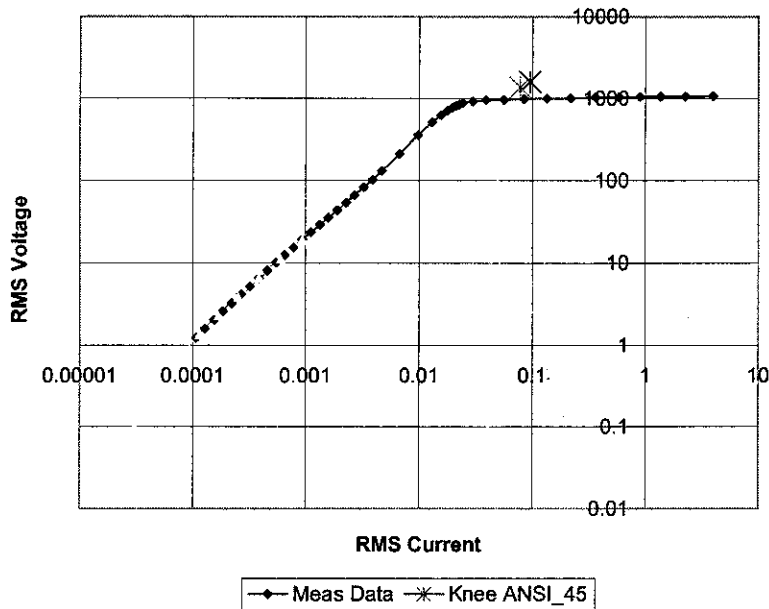
A:\G-2137-01\J-X3-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 08:13:13 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\J-X3-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	J
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

IEEE ANSI 45 Excitation Curve



RMS Voltage	RMS Current
1073.280	3.965
1064.760	2.252
1058.672	1.375
1052.563	0.898
1043.767	0.579
1031.926	0.357
1018.772	0.217
1005.253	0.133
990.464	0.085
973.073	0.056
951.746	0.039
923.206	0.030
878.361	0.024
853.877	0.023
821.573	0.021
777.050	0.020
714.626	0.018
628.051	0.016
512.654	0.013
357.246	0.010
213.146	0.007
130.703	0.005
102.557	0.004
82.930	0.003
66.745	0.003
54.190	0.002
43.809	0.002
35.597	0.002
28.974	0.001
23.573	0.001
19.051	0.001
15.312	0.001
12.413	0.001
10.049	0.001
8.097	0.000
6.548	0.000
5.174	0.000
4.154	0.000
3.245	0.000
2.587	0.000
2.037	0.000
1.582	0.000
1.235	0.000

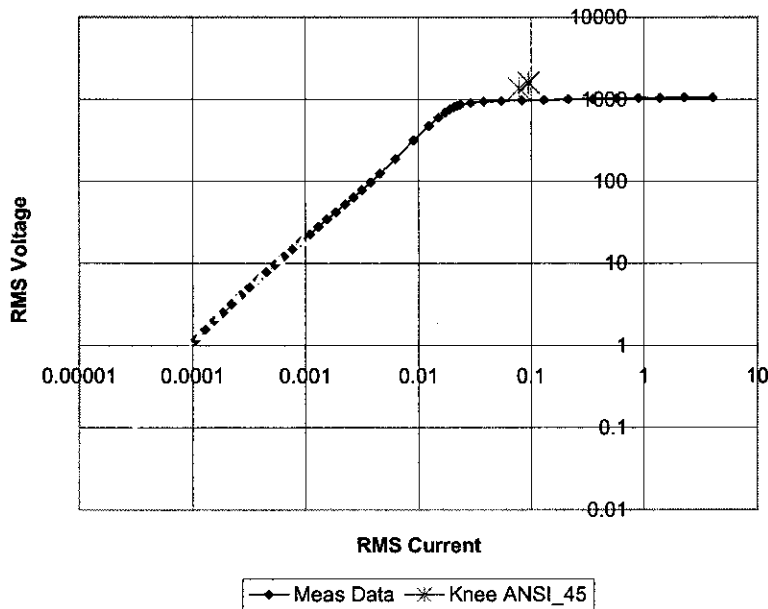
A:\G-2137-01\K-X1-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 08:18:19 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\K-X1-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	K
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1065.083	3.990
1056.381	2.257
1050.198	1.376
1043.943	0.898
1034.759	0.576
1022.463	0.353
1009.141	0.213
995.536	0.131
980.692	0.083
963.189	0.055
941.625	0.038
912.523	0.029
866.323	0.024
841.087	0.022
807.812	0.021
761.780	0.019
696.377	0.017
606.053	0.015
481.833	0.012
320.663	0.009
189.253	0.006
124.735	0.005
98.049	0.004
78.895	0.003
63.841	0.003
52.184	0.002
42.003	0.002
34.140	0.002
27.675	0.001
22.604	0.001
18.178	0.001
14.817	0.001
11.946	0.001
9.642	0.001
7.790	0.000
6.277	0.000
5.065	0.000
4.022	0.000
3.148	0.000
2.497	0.000
1.985	0.000
1.544	0.000
1.178	0.000

IEEE ANSI 45 Excitation Curve



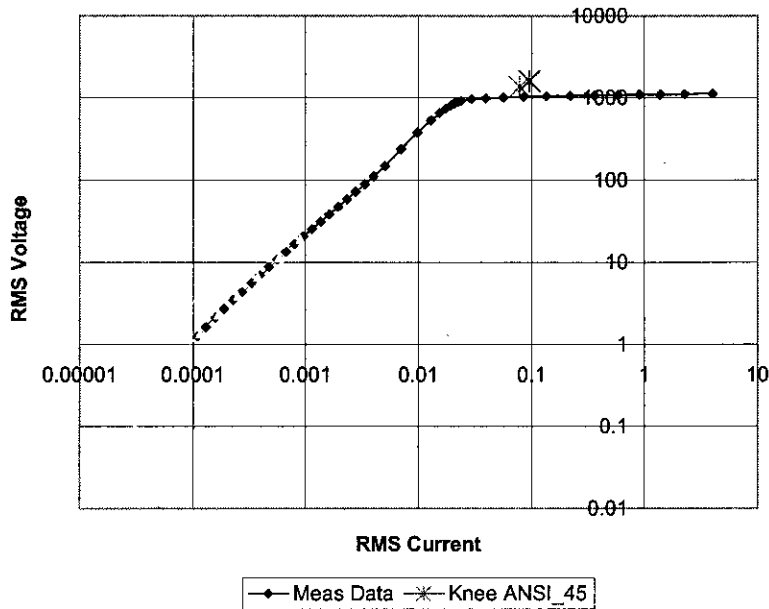
A:\G-2137-01\L-X2-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 08:23:20 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\L-X2-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	L
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

IEEE ANSI 45 Excitation Curve



RMS Voltage	RMS Current
1121.754	3.992
1112.612	2.266
1106.139	1.380
1099.741	0.902
1090.556	0.583
1077.990	0.360
1064.171	0.218
1050.035	0.134
1034.668	0.085
1016.726	0.056
994.929	0.040
965.942	0.030
919.981	0.024
894.901	0.022
861.506	0.021
814.750	0.019
748.046	0.018
655.236	0.015
535.188	0.013
379.374	0.010
236.995	0.007
149.713	0.005
112.139	0.004
89.785	0.003
72.524	0.003
58.730	0.002
47.529	0.002
38.469	0.002
31.216	0.001
25.392	0.001
20.516	0.001
16.584	0.001
13.343	0.001
10.738	0.001
8.717	0.000
6.919	0.000
5.542	0.000
4.351	0.000
3.442	0.000
2.696	0.000
2.107	0.000
1.616	0.000
1.246	0.000

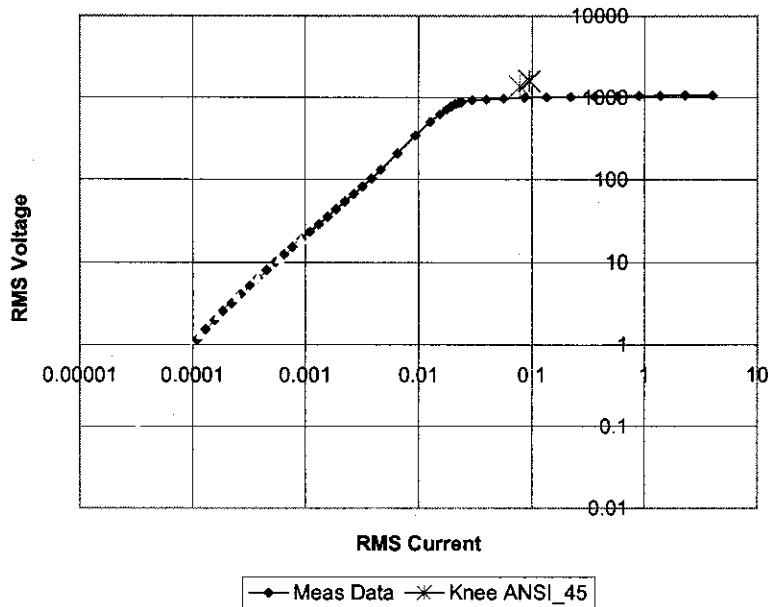
A:\G-2137-01\M-X3-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 08:28:48 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\M-X3-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	M
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1080.192	4.002
1071.314	2.277
1064.895	1.385
1058.589	0.898
1049.884	0.578
1038.288	0.358
1025.422	0.218
1012.045	0.134
997.149	0.086
979.412	0.057
957.893	0.040
929.511	0.030
885.771	0.024
861.498	0.023
829.605	0.021
785.439	0.019
722.290	0.018
631.352	0.015
505.722	0.013
343.275	0.009
206.123	0.006
130.714	0.005
102.702	0.004
82.225	0.003
66.595	0.003
54.147	0.002
43.657	0.002
35.485	0.002
28.694	0.001
23.437	0.001
19.020	0.001
15.286	0.001
12.431	0.001
10.009	0.001
8.053	0.000
6.471	0.000
5.202	0.000
4.076	0.000
3.215	0.000
2.560	0.000
1.994	0.000
1.542	0.000
1.152	0.000

IEEE ANSI 45 Excitation Curve



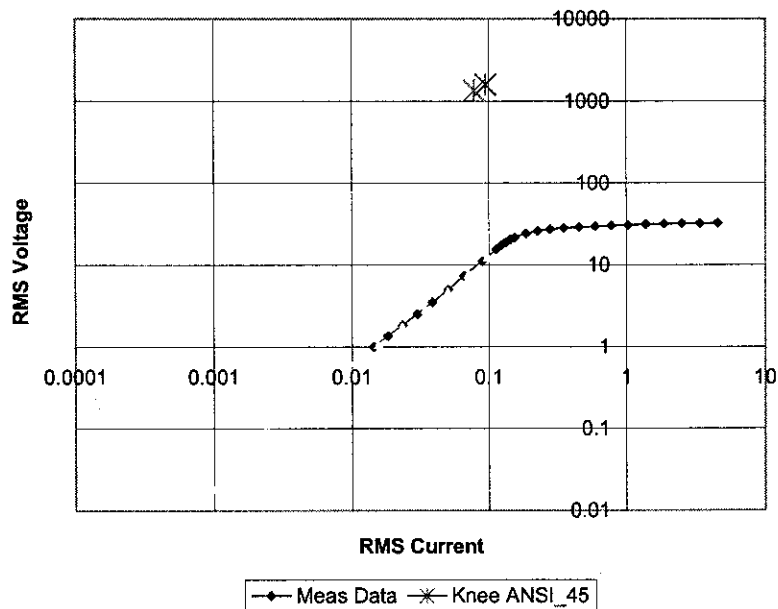
A:\G-2137-01\N-X2-R-4000-5-PC-200\X1-X2.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:31:45 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X1-X2.xml
Status Info:	Test successful

Identification:	X1-X2
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



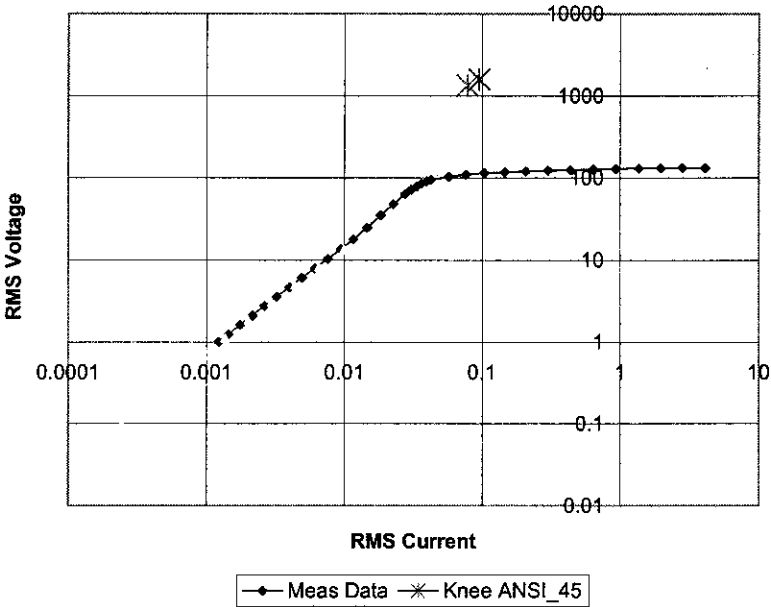
A:\G-2137-01\N-X2-R-4000-5-PC-200\X1-X3.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:33:14 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X1-X3.xml
Status Info:	Test successful

Identification:	X1-X3
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



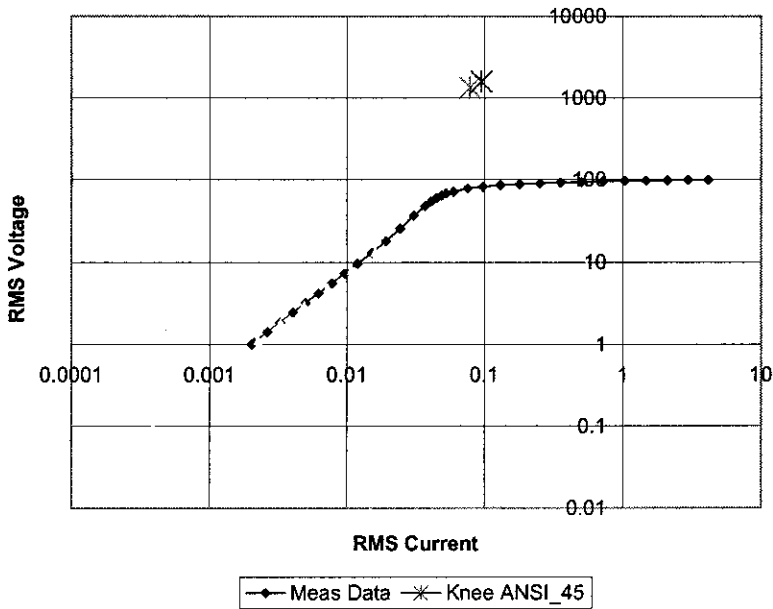
A:\G-2137-01\N-X2-R-4000-5-PC-200\X2-X3.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:38:29 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X2-X3.xml
Status Info:	Test successful

Identification:	X2-X3
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	1500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



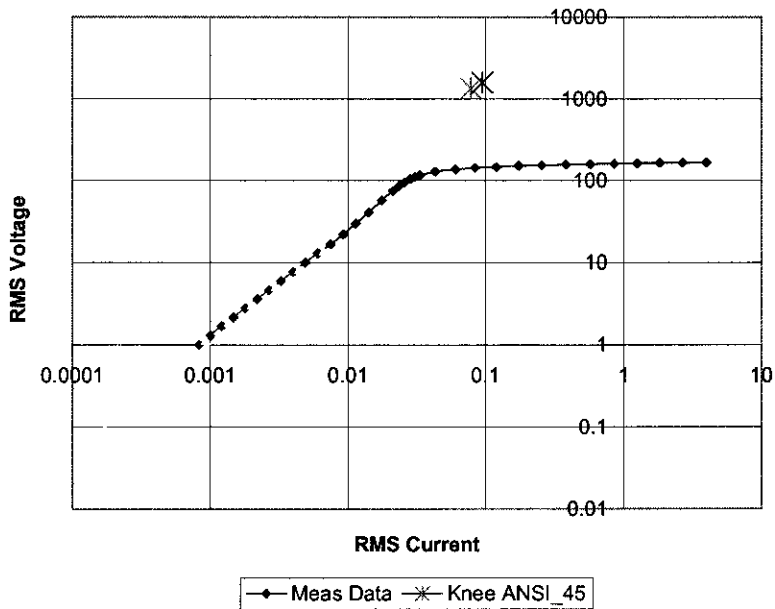
A:\G-2137-01\N-X2-R-4000-5-PC-200\X2-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:46:32 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X2-X4.xml
Status Info:	Test successful

Identification:	X2-X4
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



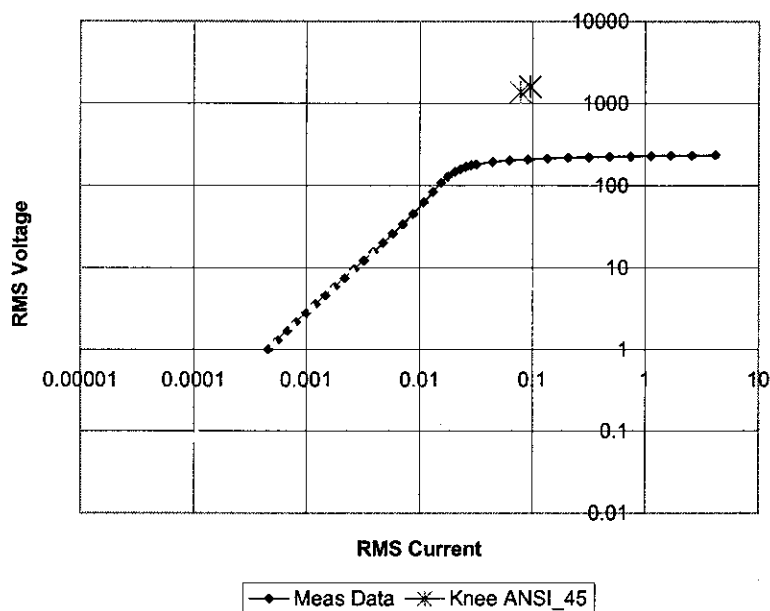
A:\G-2137-01\N-X2-R-4000-5-PC-200\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:48:06 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01N-X2-R-4000-5-PC-200\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	3500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



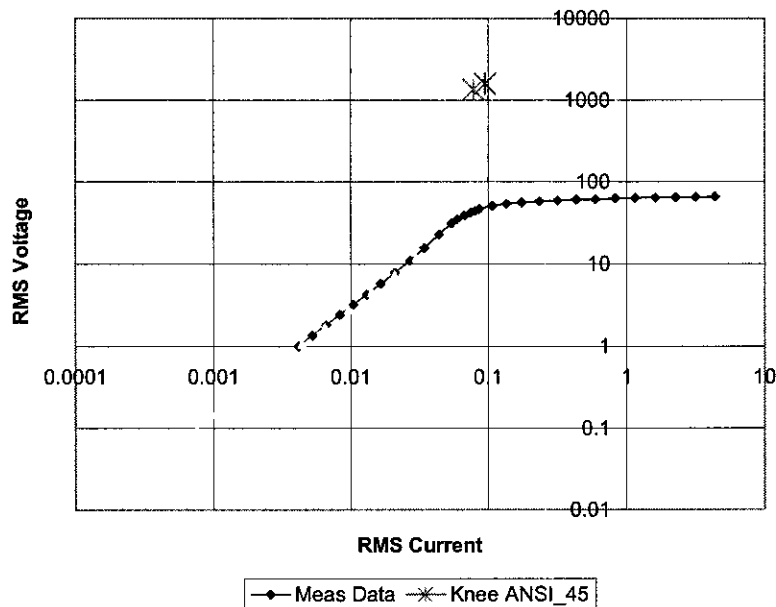
A:\G-2137-01\N-X2-R-4000-5-PC-200\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:50:30 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



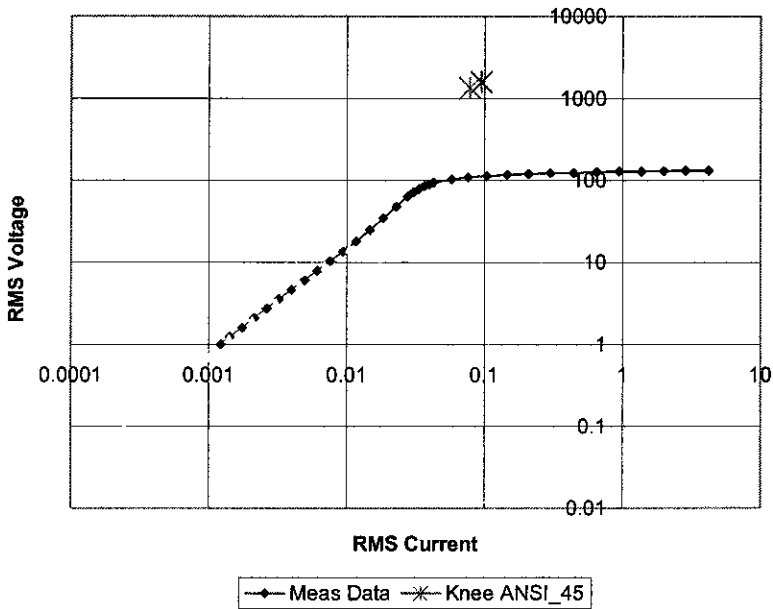
A:\G-2137-01\N-X2-R-4000-5-PC-200\X3-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:52:00 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-X2-R-4000-5-PC-200\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

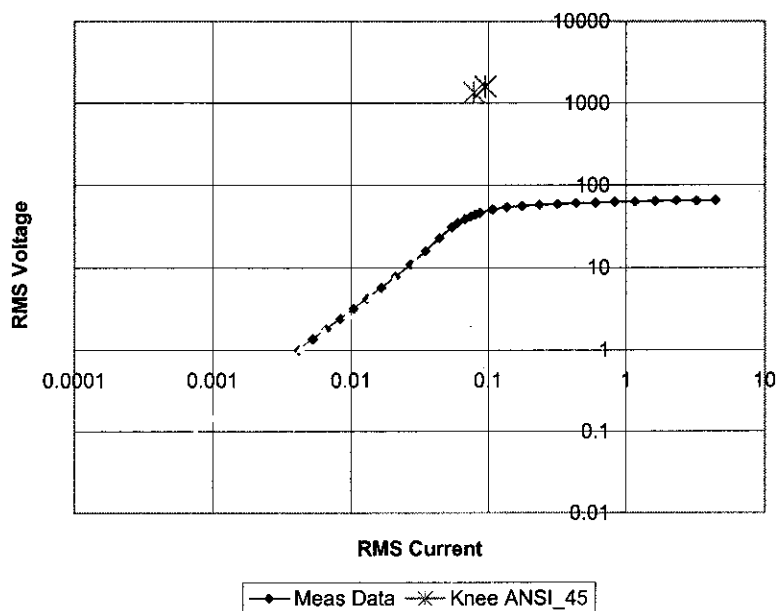


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 01:53:40 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01N-X2-R-4000-5-PC-200\X4-X5.xml
Status Info:	Test successful

Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

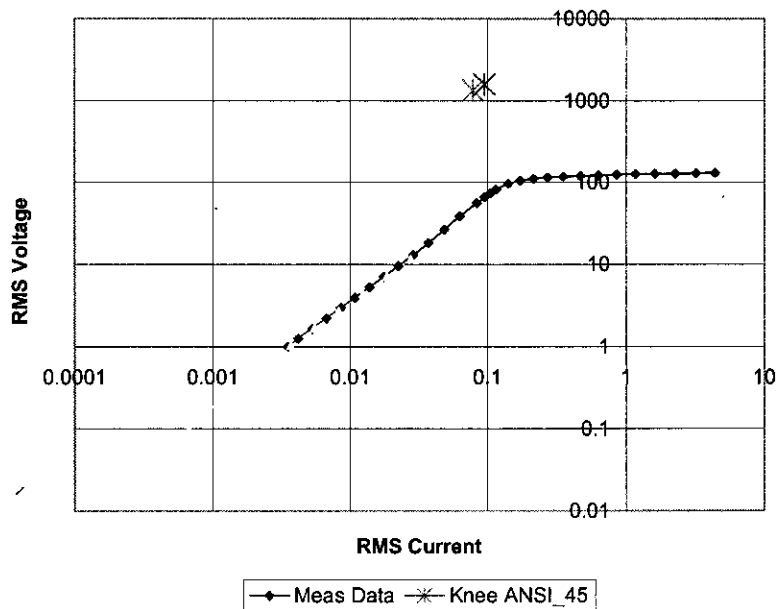


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:36:39 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01N-Y1-R-4000-5-PC-800\X1-X2.xml
Status Info:	Test successful

Identification:	X1-X2
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

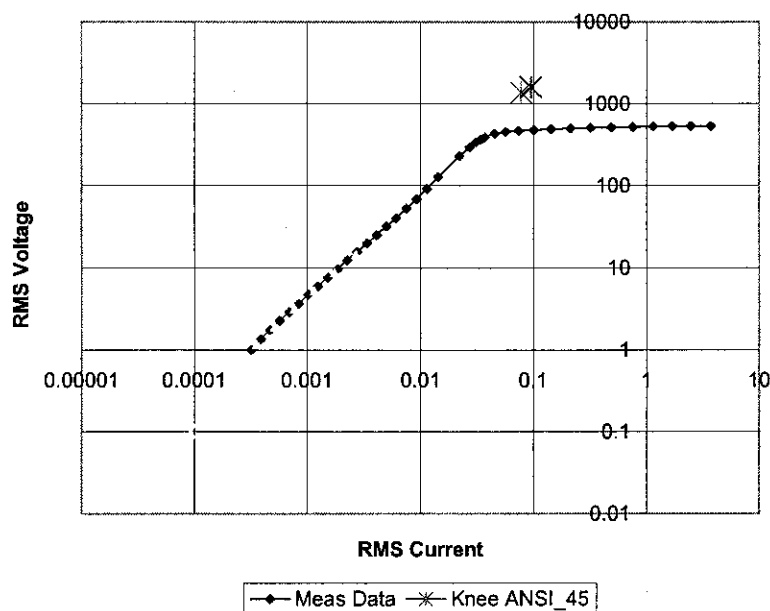


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:37:53 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X1-X3.xml
Status Info:	Test successful

Identification:	X1-X3
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



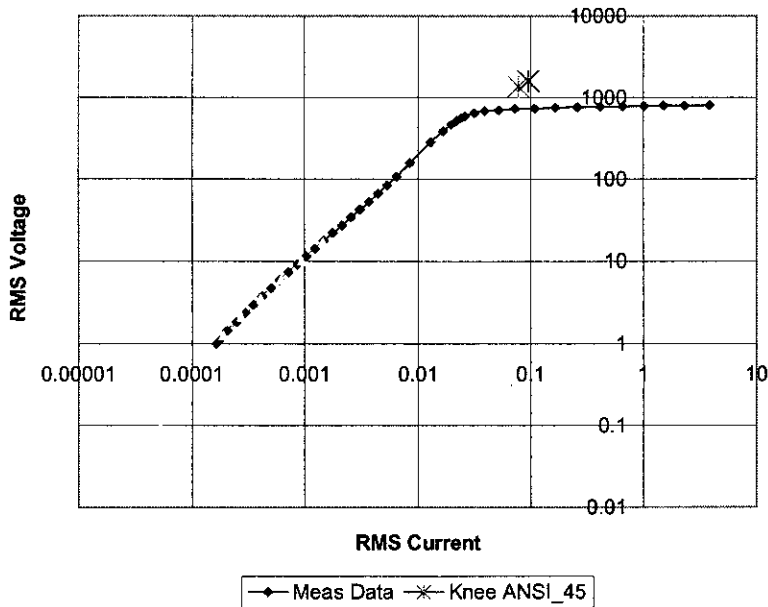
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X1-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:40:01 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X1-X4.xml
Status Info:	Test successful

Identification:	X1-X4
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	3000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
808.741	3.828
803.624	2.326
799.263	1.512
793.871	1.005
786.420	0.652
777.259	0.412
767.175	0.259
756.026	0.165
743.217	0.108
727.936	0.073
709.744	0.052
686.719	0.039
653.902	0.032
595.694	0.026
564.634	0.024
523.923	0.022
467.989	0.020
389.551	0.017
283.662	0.013
158.459	0.008
107.422	0.006
83.945	0.005
66.545	0.004
53.024	0.004
42.131	0.003
34.119	0.003
27.299	0.002
21.953	0.002
17.657	0.001
14.190	0.001
11.414	0.001
9.178	0.001
7.308	0.001
5.874	0.001
4.698	0.001
3.707	0.000
2.935	0.000
2.363	0.000
1.836	0.000
1.434	0.000
1.081	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



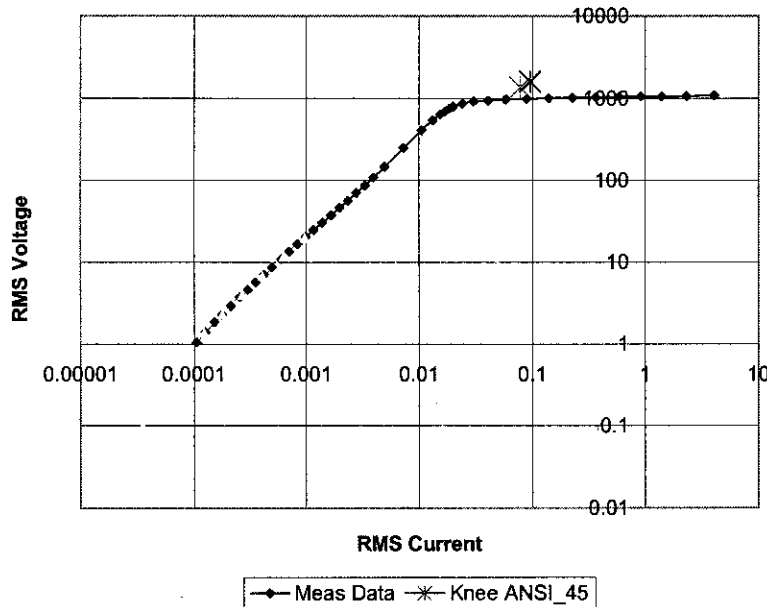
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:41:57 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1083.258	4.015
1074.277	2.298
1067.664	1.406
1060.965	0.912
1051.757	0.587
1039.652	0.365
1025.923	0.224
1010.934	0.139
993.772	0.088
973.278	0.058
948.745	0.041
918.008	0.030
874.973	0.024
798.679	0.020
759.370	0.019
707.673	0.017
639.224	0.015
543.041	0.013
412.410	0.011
250.896	0.007
148.237	0.005
108.737	0.004
87.703	0.003
70.330	0.003
56.878	0.002
46.338	0.002
37.742	0.002
30.487	0.001
24.754	0.001
20.265	0.001
16.580	0.001
13.428	0.001
10.877	0.001
8.691	0.000
7.016	0.000
5.670	0.000
4.615	0.000
3.714	0.000
2.917	0.000
2.277	0.000
1.849	0.000
1.391	0.000
1.039	0.000

IEEE ANSI 45 Excitation Curve



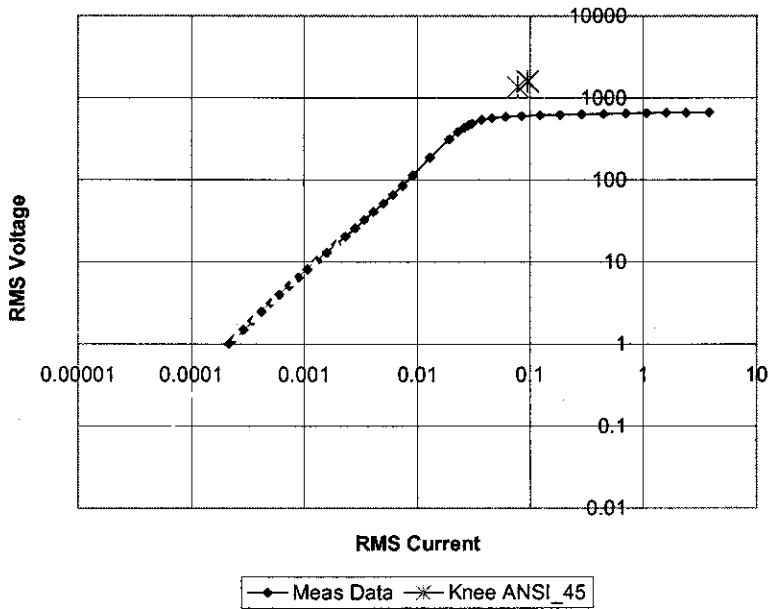
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X2-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:44:18 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X2-X4.xml
Status Info:	Test successful

Identification:	X2-X4
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
672.596	3.804
668.661	2.398
664.940	1.600
660.071	1.070
653.571	0.698
645.914	0.446
637.575	0.285
628.354	0.185
617.685	0.123
605.042	0.085
589.993	0.061
570.666	0.046
542.915	0.037
493.871	0.031
467.096	0.028
431.707	0.026
383.085	0.023
313.176	0.019
188.083	0.013
113.834	0.009
85.584	0.007
66.211	0.006
51.690	0.005
40.614	0.004
32.382	0.003
25.652	0.003
20.290	0.002
16.184	0.002
12.817	0.002
10.160	0.001
8.041	0.001
6.398	0.001
5.056	0.001
3.948	0.001
3.137	0.001
2.458	0.000
1.925	0.000
1.484	0.000
1.143	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



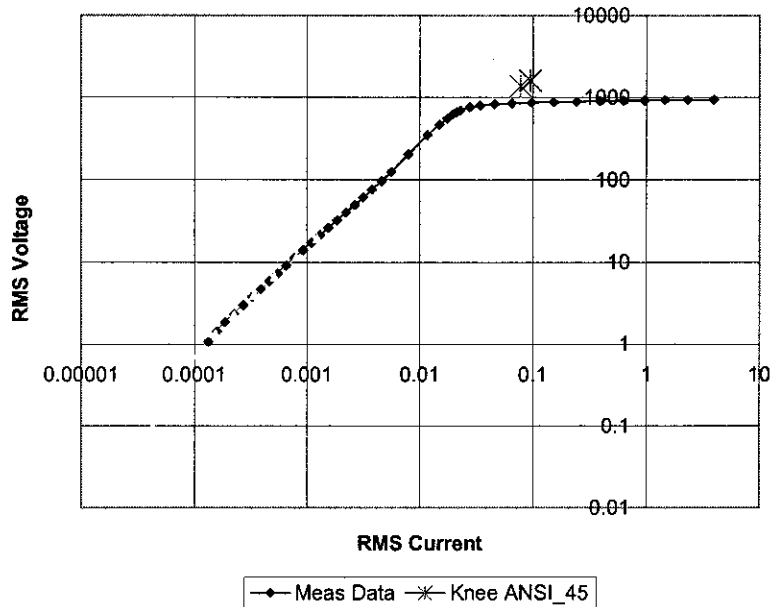
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:45:34 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	3500
Secondary Current I-s:	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

IEEE ANSI 45 Excitation Curve



RMS Voltage	RMS Current
946.025	3.974
938.731	2.328
933.113	1.463
926.936	0.959
918.499	0.619
907.786	0.387
895.894	0.241
882.883	0.151
867.929	0.097
850.113	0.065
828.856	0.046
802.163	0.034
764.554	0.028
698.313	0.023
663.358	0.021
617.528	0.019
554.553	0.017
469.345	0.015
350.127	0.012
205.156	0.008
126.022	0.006
97.089	0.005
77.176	0.004
61.506	0.003
49.977	0.003
40.139	0.002
32.437	0.002
26.147	0.002
21.290	0.001
17.173	0.001
13.947	0.001
11.173	0.001
9.018	0.001
7.293	0.001
5.873	0.000
4.715	0.000
3.770	0.000
2.991	0.000
2.343	0.000
1.843	0.000
1.428	0.000
1.070	0.000

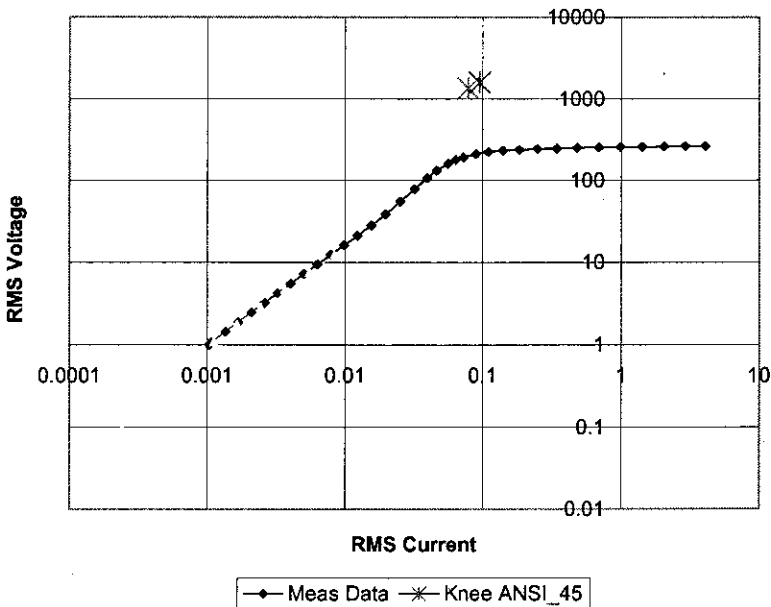
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:46:54 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

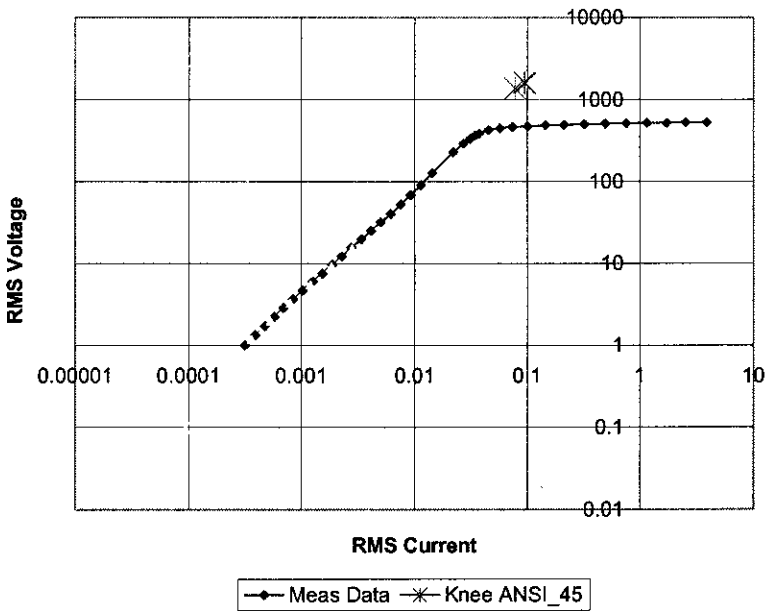


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:48:07 PM
Software Version:	2.06 (07-09/17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



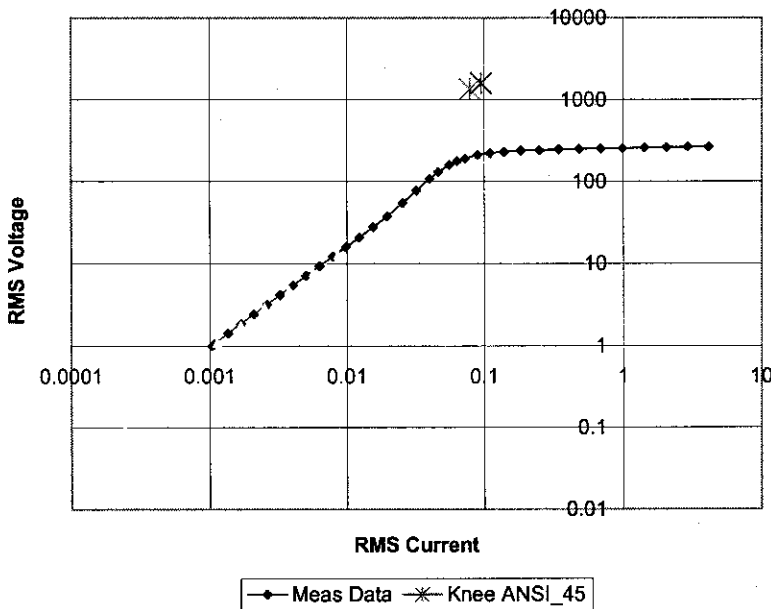
A:\G-2137-01\N-Y1-R-4000-5-PC-800\X4-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:49:16 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\N-Y1-R-4000-5-PC-800\X4-X5.xml
Status Info:	Test successful

Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	N
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



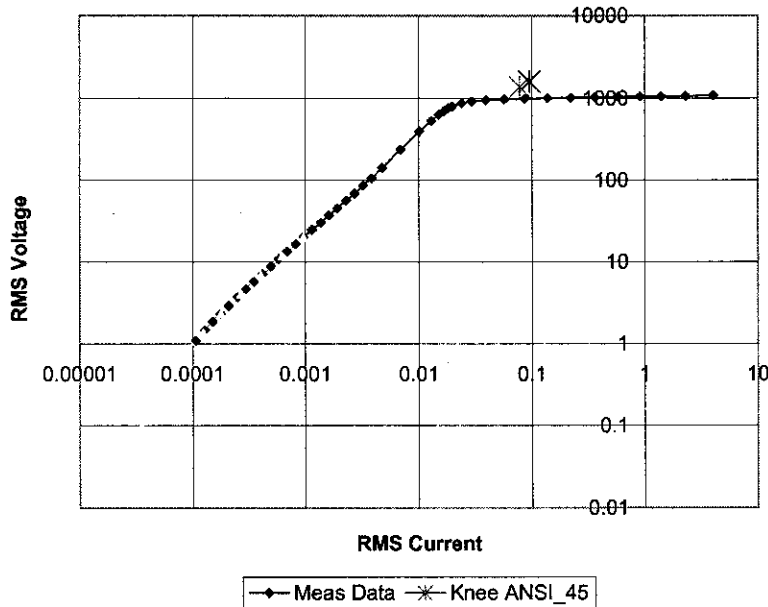
A:\G-2137-01\O-Y2-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-21, 02:58:23 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\O-Y2-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	0
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1083.911	4.014
1074.726	2.291
1068.133	1.402
1061.338	0.908
1052.021	0.582
1039.834	0.361
1026.137	0.221
1011.144	0.137
994.663	0.087
974.381	0.057
950.890	0.039
921.133	0.030
878.548	0.024
802.082	0.020
762.114	0.018
709.247	0.017
636.293	0.015
534.251	0.013
397.180	0.010
238.942	0.007
142.059	0.005
106.927	0.004
86.170	0.003
69.268	0.003
56.400	0.002
45.639	0.002
37.188	0.002
30.306	0.001
24.621	0.001
20.032	0.001
16.483	0.001
13.291	0.001
10.765	0.001
8.771	0.000
7.087	0.000
5.653	0.000
4.609	0.000
3.664	0.000
2.894	0.000
2.320	0.000
1.852	0.000
1.440	0.000
1.077	0.000

IEEE ANSI 45 Excitation Curve



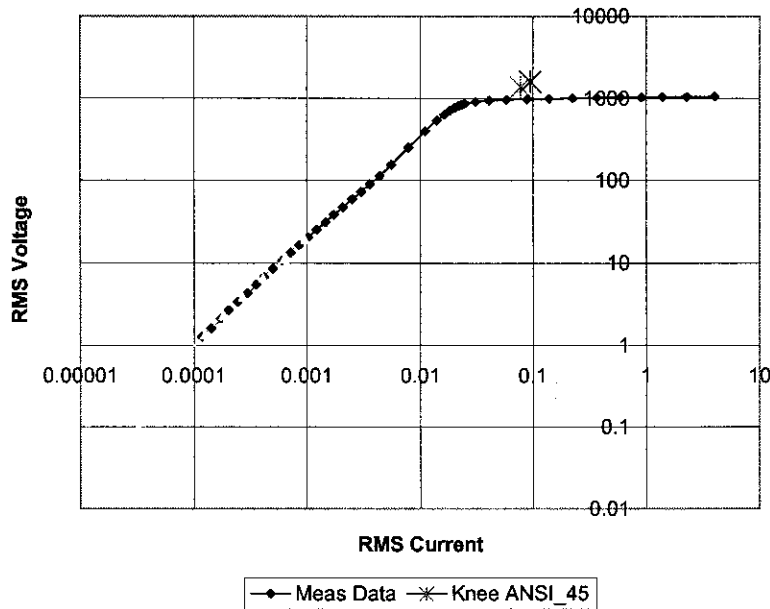
A:\G-2137-01\P-Y3-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 09:29:33 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\P-Y3-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	P
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1062.614	3.992
1053.998	2.276
1047.886	1.390
1041.893	0.913
1033.255	0.592
1021.556	0.367
1008.639	0.224
995.316	0.139
980.282	0.088
962.417	0.059
940.862	0.041
912.577	0.031
867.988	0.025
844.477	0.023
813.809	0.022
772.171	0.020
714.657	0.018
636.491	0.016
537.858	0.014
399.436	0.011
253.086	0.008
156.498	0.006
114.108	0.004
90.200	0.004
73.159	0.003
59.094	0.002
47.580	0.002
38.509	0.002
31.240	0.001
25.282	0.001
20.308	0.001
16.372	0.001
13.257	0.001
10.648	0.001
8.532	0.000
6.801	0.000
5.482	0.000
4.364	0.000
3.378	0.000
2.686	0.000
2.134	0.000
1.609	0.000
1.276	0.000

IEEE ANSI 45 Excitation Curve



A:\G-2137-01\Q-Y1-R-4000-5-PC-800\X1-X5.xml

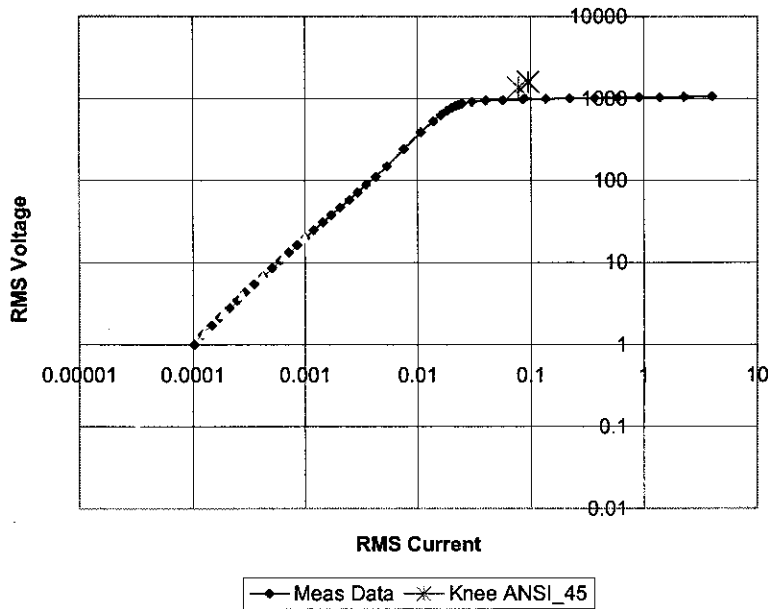
Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 09:36:16 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\Q-Y1-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	Q
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

RMS Voltage	RMS Current
1069.529	3.972
1061.010	2.261
1054.951	1.382
1048.916	0.906
1040.193	0.585
1028.440	0.363
1015.427	0.220
1002.143	0.135
987.823	0.086
971.269	0.057
950.903	0.040
923.358	0.030
878.487	0.025
854.499	0.023
822.861	0.022
779.079	0.020
718.019	0.018
635.032	0.016
532.355	0.014
390.028	0.011
244.054	0.008
150.857	0.005
111.957	0.004
89.014	0.004
71.654	0.003
58.320	0.002
46.770	0.002
37.999	0.002
30.830	0.001
24.853	0.001
20.048	0.001
16.230	0.001
13.118	0.001
10.513	0.001
8.500	0.001
6.799	0.000
5.437	0.000
4.291	0.000
3.422	0.000
2.783	0.000
2.140	0.000
1.696	0.000
1.317	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



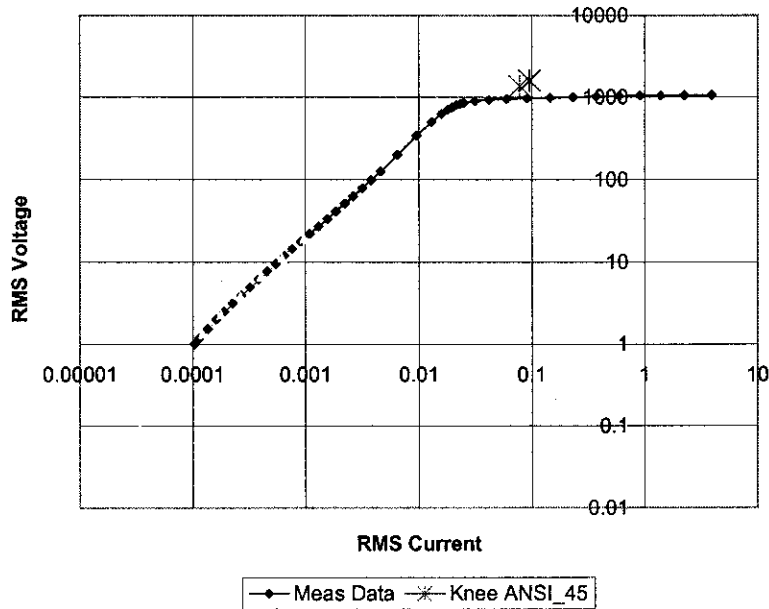
A:\G-2137-01\R-Y2-R-4000-5-PC-800\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 09:51:58 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\R-Y2-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	R
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s:	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

RMS Voltage	RMS Current
1065.538	3.935
1057.448	2.267
1051.435	1.397
1045.238	0.914
1036.534	0.592
1024.859	0.371
1011.456	0.230
996.009	0.144
977.777	0.091
956.683	0.060
932.084	0.042
900.951	0.031
856.052	0.025
831.833	0.023
801.432	0.021
761.359	0.020
705.261	0.018
625.418	0.016
503.763	0.013
343.620	0.010
200.590	0.006
126.731	0.005
98.767	0.004
79.094	0.003
63.230	0.003
51.582	0.002
41.314	0.002
33.542	0.002
27.279	0.001
22.060	0.001
17.893	0.001
14.425	0.001
11.785	0.001
9.482	0.001
7.647	0.000
6.179	0.000
4.939	0.000
3.921	0.000
3.118	0.000
2.482	0.000
2.000	0.000
1.535	0.000
1.178	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve



A:\G-2137-01\S-Y3-R-4000-5-PC-800\X1-X5.xml

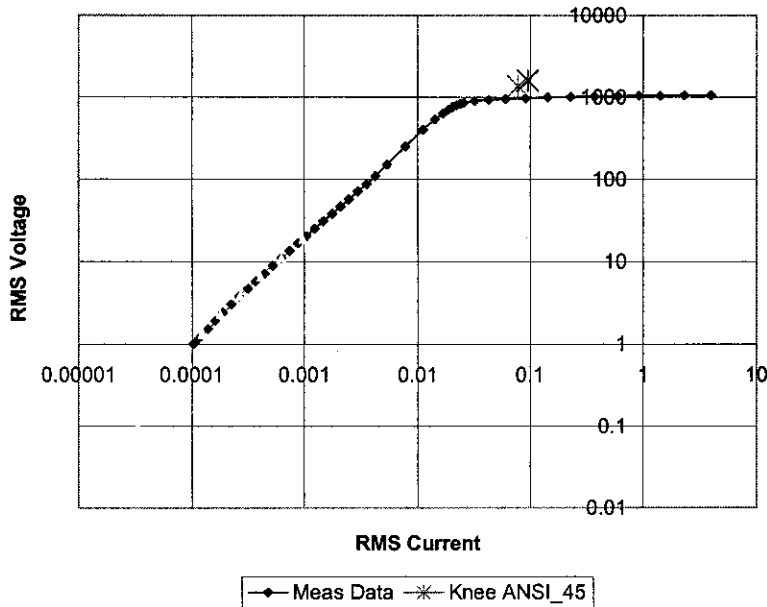
Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-22, 09:57:40 AM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\S-Y3-R-4000-5-PC-800\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	S
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

0.5
1

RMS Voltage	RMS Current
1066.197	3.970
1057.844	2.291
1051.604	1.412
1045.183	0.921
1036.335	0.595
1024.636	0.371
1011.584	0.229
997.329	0.143
980.605	0.091
960.671	0.061
936.701	0.043
905.616	0.032
859.279	0.026
835.250	0.024
805.082	0.022
765.439	0.020
711.586	0.019
638.270	0.017
539.896	0.014
403.041	0.011
252.669	0.008
152.377	0.005
110.592	0.004
88.750	0.004
71.326	0.003
57.546	0.002
46.799	0.002
38.139	0.002
30.878	0.001
25.026	0.001
20.343	0.001
16.542	0.001
13.442	0.001
10.924	0.001
8.806	0.001
7.114	0.000
5.738	0.000
4.672	0.000
3.709	0.000
3.015	0.000
2.378	0.000
1.888	0.000
1.522	0.000
1.159	0.000
1.000	0.000

IEEE ANSI 45 Excitation Curve

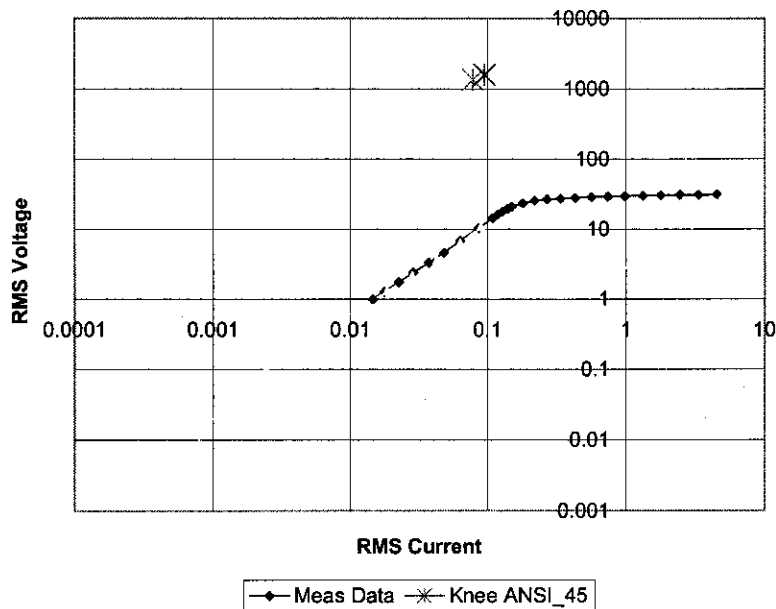


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:00:37 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200\X1-X2.xml
Status Info:	Test successful

Identification:	X1-X2
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



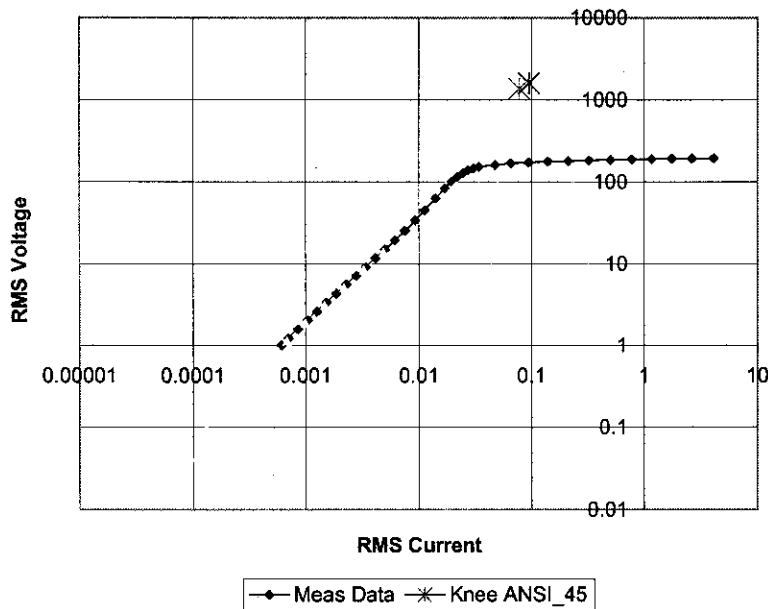
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X1-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:02:39 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200X1-X4.xml
Status Info:	Test successful

Identification:	X1-X4
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	3000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



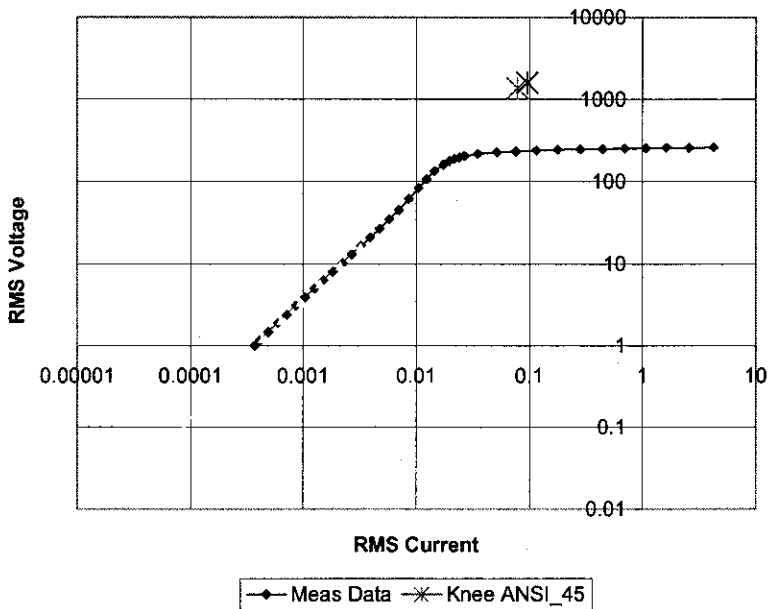
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X1-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:04:04 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200\X1-X5.xml
Status Info:	Test successful

Identification:	X1-X5
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	4000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



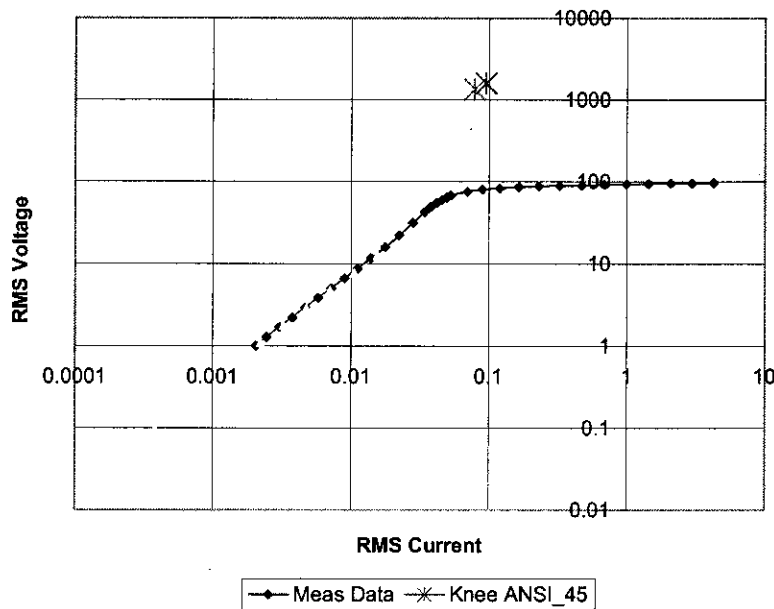
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X2-X3.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:05:18 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01T-Y2-R-4000-5-PC-200\X2-X3.xml
Status Info:	Test successful

Identification:	X2-X3
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	1500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



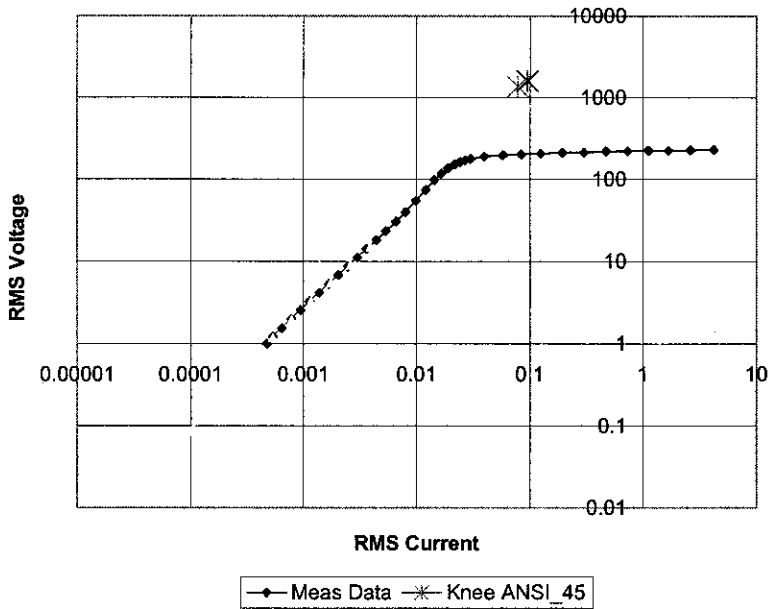
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X2-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:07:26 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200\X2-X5.xml
Status Info:	Test successful

Identification:	X2-X5
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	3500
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



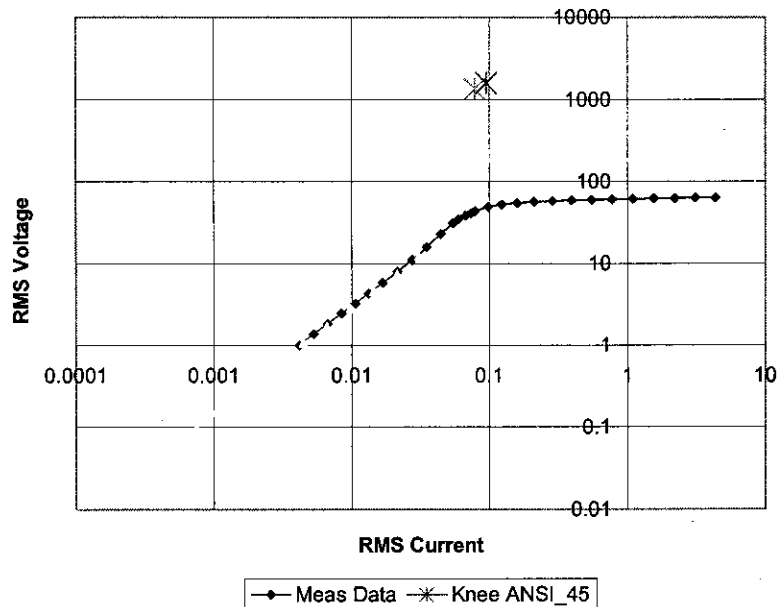
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X3-X4.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:09:01 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01(T-Y2-R-4000-5-PC-200)\X3-X4.xml
Status Info:	Test successful

Identification:	X3-X4
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



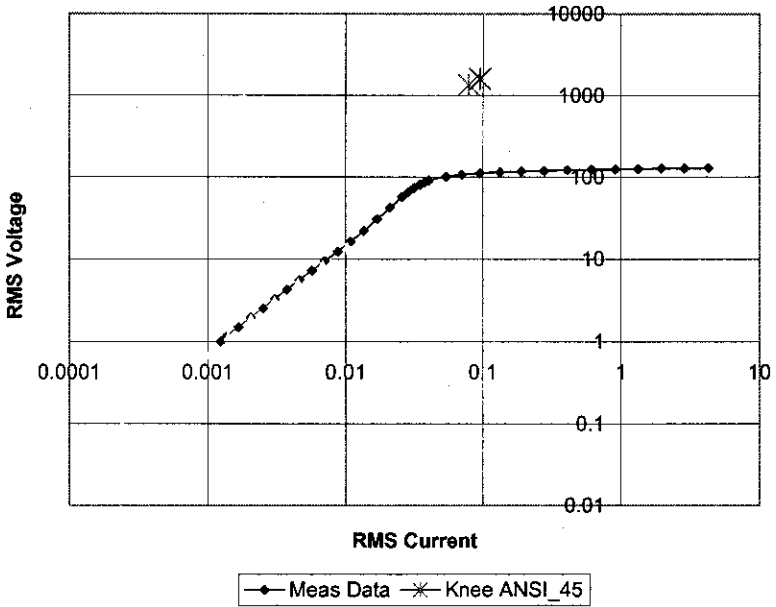
A:\G-2137-01\T-Y2-R-4000-5-PC-200\X3-X5.xml

Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:10:14 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200\X3-X5.xml
Status Info:	Test successful

Identification:	X3-X5
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	2000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve

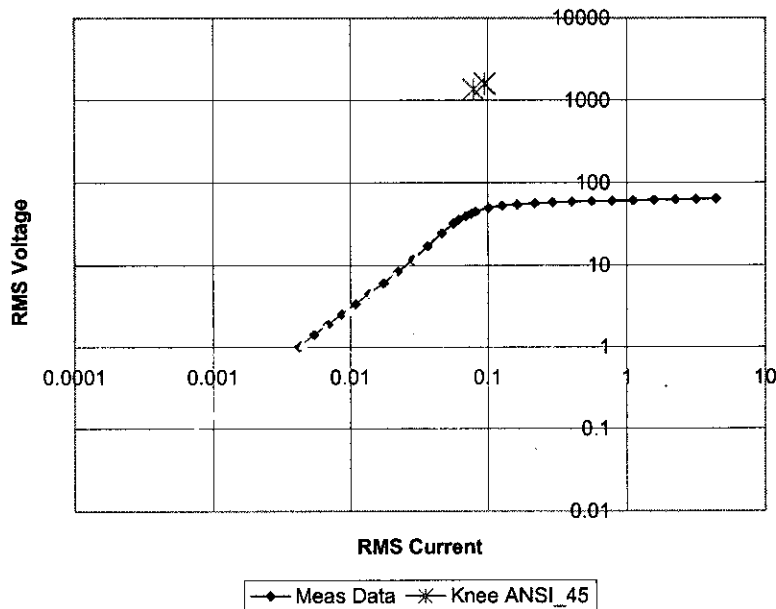


Test Device:	CT-Analyzer
Serial No.:	DJ519X
Date/Time:	2008-05-20, 02:11:21 PM
Software Version:	2.06 (07-09-17 09:34)
Hardware Version:	01/00/07/05/00/11
File Name:	A:\G-2137-01\T-Y2-R-4000-5-PC-200\X4-X5.xml
Status Info:	Test successful

Identification:	X4-X5
Manufacturer:	PROLEC-GE
Serial Number:	T
Core Number:	0
Primary Current I-pn:	1000
Secondary Current I-s	5
Applied Standard:	ANSI 45
Core Type (P/M):	P
Class Multiplier:	1
Frequency:	60
Nominal Burden:	25
Operating Burden:	25

[illegible]

IEEE ANSI 45 Excitation Curve



TEST DEPARTMENT

PAGE 57

CUSTOMER: Equisales Associates, Inc.

SERIAL No.: G2137-01

INSPECTOR:

DATE: Jun./20/2008

BUSHINGS POWER FACTOR TEST

(BEFORE DIELECTRIC TEST)

POWER FACTOR AND CAPACITANCE C 1, 10000 A.C.V.

BUSHINGS			MILIAMPERS			WATTS			%P.F.		CAPACITANCE (pf)
SERIAL	UST		READ.	K	mA	READ.	K	W	34.0	°C	
H1	08-122407	x	82.3	0.02	1.65	4.9	0.01	0.05	0.298		439
H2	08-122409	x	82.4	0.02	1.65	4.5	0.01	0.05	0.273		439
H3	07-121144	x	82.5	0.02	1.65	4.2	0.01	0.04	0.255		438
X1	08-122314	x	25.1	0.10	2.51	2.4	0.02	0.05	0.191		671
X2	08-122312	x	24.8	0.10	2.48	2.3	0.02	0.05	0.185		663
X3	07-121536	x	22.6	0.10	2.26	2.2	0.02	0.04	0.195		608
Y1	08-122311	x	24.5	0.10	2.45	2.3	0.02	0.05	0.188		655
Y2	08-122313	x	25.5	0.10	2.55	2.6	0.02	0.05	0.204		676
Y3	08-122316	x	24.9	0.10	2.49	2.4	0.02	0.05	0.193		659

DATE: Jun./25/2008

(AFTER DIELECTRIC TEST)

POWER FACTOR AND CAPACITANCE C 1, 10000 A.C.V.

BUSHINGS			MILIAMPERS			WATTS			%P.F.		CAPACITANCE (pf)
SERIAL	UST		READ.	K	mA	READ.	K	W	41.5	°C	
H1	08-122407	x	1.65	1.00	1.65	0.05	1.00	0.05	0.327		438
H2	08-122409	x	1.65	1.00	1.65	0.05	1.00	0.05	0.309		437
H3	07-121144	x	1.65	1.00	1.65	0.05	1.00	0.05	0.291		437
X1	08-122314	x	2.53	1.00	2.53	0.06	1.00	0.06	0.225		672
X2	08-122312	x	2.50	1.00	2.50	0.05	1.00	0.05	0.216		664
X3	07-121536	x	2.30	1.00	2.30	0.05	1.00	0.05	0.222		609
Y1	08-122311	x	2.47	1.00	2.47	0.06	1.00	0.06	0.223		655
Y2	08-122313	x	2.55	1.00	2.55	0.06	1.00	0.06	0.220		676
Y3	08-122316	x	2.49	1.00	2.49	0.06	1.00	0.06	0.225		660

Test Engineer

Design Engineer

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Purchaser: Equisales Associates, Inc.

Serial No.

G2137-01

Rating: 90/120/150/168 MVA


Date:

Jun./22/2008

BUSHINGS CERTIFIED TEST REPORTS

**THE MANUFACTURER'S CERTIFIED TEST
REPORTS ARE IN THE FOLLOWING:**

9 PAGES



Test Engineer

Design Engineer

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Bushing Certified Test Reports

Our Bushing Certified Test Reports are currently updated every Monday morning. To search our Bushing Certified Test Report database, please enter a Serial Number and click on Search. Information is available starting in year 2000.

Helpful Hint: Our Serial Numbers may end with either a 5 or 6 digit number.

Ex: 04-XXXXXX PRC

Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122407

Serial Number: 08-122407

Catalog Number: POC6501216CMS

Batch: 5955

kV Class: 650

BIL: 138

Current Rating: 1200/1600

60 Hz Withstand Level: 310

C1 Power Factor @ 10kV: 0.34

C1 Capacitance: 432

C2 Power Factor 2: 0.28

C2 Capacitance: 3739

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 2/19/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

1. VOLTAGE TAP WITHSTAND AT 20 KV OR TEST TAP WITHSTAND AT 2 KV FOR ONE MINUTE (WHERE APPLICABLE).
2. RI.V. (NEMA 107) AT 1.5 TIMES OPERATING VOLTAGE WITH NO MORE THAN 10 MICRO VOLTS TOTAL.
3. POWER FACTOR AND CAPACITANCE WERE MEASURED IN STEPS TO THE REQUIRED WITHSTAND LEVEL.
4. A 60 Hz ONE-MINUTE WITHSTAND AT THE ABOVE LEVEL.
5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
6. INTERNAL PRESSURE TEST AT 20 psig WITH NO LEAKAGE.

ALL GAGES AND EQUIPMENT HAVE BEEN CALIBRATED, TRACEABLE TO NATIONALLY RECOGNIZED STANDARDS. THIS UNIT WAS FILLED WITH PCB



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Ex: 04-XXXXXX PRC

Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

08-122409

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122409

Serial Number: 08-122409

Catalog Number: POC650G1216CMS

Batch: 5955

kV Class: 138

BIL: 650

Current Rating: 1200/1600

60 Hz Withstand Level: 310

C1 Power Factor @ 10kV: 0.33

C1 Capacitance: 432

C2 Power Factor 2: 0.29

C2 Capacitance: 3811

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 2/20/2008

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Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

07-121144

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 07-121144

Serial Number: 07-121144

Catalog Number: POC6501216CMS

Batch: 5947

kV Class: 650

BIL: 138

Current Rating: 1200/1600

60 Hz Withstand Level: 310

C1 Power Factor @ 10kV: 0.3

C1 Capacitance: 437

C2 Power Factor 2: 0.27

C2 Capacitance: 3755

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 2/19/2008

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Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

08-122314

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122314

Serial Number: 08-122314

Catalog Number: B-88742-70

Batch: 5951

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.21

C1 Capacitance: 670

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
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Ex: 04-XXXXXX POC

Find a Certified Test Report

Serial #:

08-122312

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122312

Serial Number: 08-122312

Catalog Number: B-88742-70

Batch: 5951

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.21

C1 Capacitance: 664

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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Ex: 04-XXXXXX PRC

Ex: 04-XXXXXX POC

Find a Certified Test Report

Serial #:

07-121536

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 07-121536

Serial Number: 07-121536

Catalog Number: B-88742-70

Batch: 5924

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.2

C1 Capacitance: 648

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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2. R.I.V. (NEMA 107) AT 1.5 TIMES OPERATING VOLTAGE WITH NO MORE THAN 10 MICRO VOLTS TOTAL.
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4. A 60 Hz ONE-MINUTE WITHSTAND AT THE ABOVE LEVEL.
5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
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Ex: 04-XXXXXX PRC

Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

08-122311

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122311

Serial Number: 08-122311

Catalog Number: B-88742-70

Batch: 5951

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.21

C1 Capacitance: 655

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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3. POWER FACTOR AND CAPACITANCE WERE MEASURED IN STEPS TO THE REQUIRED WITHSTAND LEVEL.
4. A 60 Hz ONE-MINUTE WITHSTAND AT THE ABOVE LEVEL.
5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
6. INTERNAL PRESSURE TEST AT 20 psig WITH NO LEAKAGE.

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Ex: 04-XXXXXX PRC

Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

08-122313

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122313

Serial Number: 08-122313

Catalog Number: B-88742-70

Batch: 5951

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.21

C1 Capacitance: 677

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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3. POWER FACTOR AND CAPACITANCE WERE MEASURED IN STEPS TO THE REQUIRED WITHSTAND LEVEL.
4. A 60 Hz ONE-MINUTE WITHSTAND AT THE ABOVE LEVEL.
5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
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Ex: 04-XXXXXX PRC

Ex: 04-XXXXX POC

Find a Certified Test Report

Serial #:

08-122316

Search

POC BUSHING CERTIFIED TEST REPORT FOR SERIAL NUMBER 08-122316

Serial Number: 08-122316

Catalog Number: B-88742-70

Batch: 5951

kV Class: 25

BIL: 150

Current Rating: 4000

60 Hz Withstand Level: 60

C1 Power Factor @ 10kV: 0.21

C1 Capacitance: 660

C2 Power Factor at .5kV: NA

IEEE Standards Applied: True

CAN Standards Applied: False

Date Certified: 3/6/2008

THE BUSHING WAS TESTED IN ACCORDANCE WITH IEEE C57.19.00 AND IEEE C57.19.01 (LATEST REVISION), USING THE ROUTINE TEST PROCEDURE. THE BUSHING HAS PASSED THE FOLLOWING TESTS:

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2. R.I.V. (NEMA 107) AT 1.5 TIMES OPERATING VOLTAGE WITH NO MORE THAN 10 MICRO VOLTS TOTAL.
3. POWER FACTOR AND CAPACITANCE WERE MEASURED IN STEPS TO THE REQUIRED WITHSTAND LEVEL.
4. A 60 Hz ONE-MINUTE WITHSTAND AT THE ABOVE LEVEL.
5. REPEAT STEPS 2 AND 3 COMPARING VALUES.
6. INTERNAL PRESSURE TEST AT 20 psig WITH NO LEAKAGE.

ALL GAGES AND EQUIPMENT HAVE BEEN CALIBRATED, TRACEABLE TO NATIONALLY RECOGNIZED STANDARDS. THIS UNIT WAS FILLED WITH PCB FREE (NON-DETECTABLE) DIELECTRIC FLUID IN ACCORDANCE WITH FEDERAL REGULATIONS. SAMPLES OF OIL ARE REGULARLY TESTED PER A.S.T.M. D 4059, TEST METHOD FOR ANALYZING FLUOROCARBONED INSULATING LIQUIDS BY GAS CHROMATOGRAPHY.

Purchaser: Equisales Associates, Inc.

Serial No.

G2137-01

Rating: 90/120/150/168 MVA

Date:

Jun./24/2008

INSULATING FLUID ANALYSIS

IN THE NEXT 8 PAGES ARE THE FOLLOWING REPORTS:

PCB'S CONTENT ANALYSIS REPORT

DISSOLVED GASES IN OIL ANALYSIS REPORT (BEFORE TEST)

INSULATING LIQUID TEST REPORT (BEFORE TEST)

DISSOLVED GASES IN OIL ANALYSIS REPORT (AFTER 12 HRS. ONAF)

DISSOLVED GASES IN OIL ANALYSIS REPORT (AFTER DIELECTRICS)

INSULATING LIQUID TEST REPORT (AFTER DIELECTRICS)

DISSOLVED GASES IN OIL ANALYSIS REPORT (AFTER ONAN)

INSULATING LIQUID TEST REPORT (AFTER ONAN)



Test Engineer

Design Engineer

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PCB,s CONTENT IN OIL ANALYSIS

CUSTOMER: <u>EQUI SALES ASSOCIATES</u>	SAMPLE DATE: <u>JUN-21-2008</u>
SAMPLE SOURCE : <u>G2137-01</u>	OIL TEMP: <u>24° C</u>
	SAMPLE FOR: <u>RAMIRO ROCHA</u>
	TEST DATE: <u>JUN-21-2008</u>

TRANSFORMER OIL SAMPLE, REPORT FOR CUSTOMER

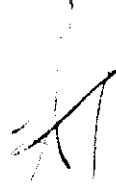
ANALYSIS TYPE: DETERMINATION OF PCB,s CONTENT (AS AROCLOR 1260)

RESULT (PPM)

QUANTITY	METHOD
<u>NO DETECTED</u>	<u>ASTM D-4059</u>

COMMENTS: OIL ACCEPTED
EQUIPMENT HP5890 SERIAL 02

FORM 10.15-A REV.1



APPROVAL



RAMIRO ROCHA
MATERIAL INSPECTOR



DISSOLVED GAS IN OIL ANALYSIS

CUSTOMER :	EQUI SALES ASSOCIATES	SAMPLE DATE :	JUN-21-2008
SAMPLE SOURCE :	G2137-01	TEST DATE :	JUN-21-2008
SAMPLE CONDITIONS:	BEFORE TEST TRANSFORMER OIL SAMPLE		

		RESULTS (PPM)	ACCEPTANCE (PPM) max.
HYDROGEN	(H2)	0.0	5.0
OXIGEN	(O2)	1230	1,500
NITROGEN	(N2)	3060	3,300
METHANE	(CH4)	0.0	2.0
CARBON MONOXIDE	(CO)	5.1	40.0
CARBON DIOXIDE	(CO2)	57.2	80.0
ETHYLENE	(C2H4)	0.0	2.0
ETHANE	(C2H6)	0.0	2.0
ACETYLENE	(C2H2)	0.0	0.0
TOTAL GAS :		4352.30	
COMBUSTIBLE GAS :		5.10	
COMBUSTIBLE GAS %		0.12	
GAS CONTENT %		0.44	


DIAGNOSTIC:

OIL IS ACCEPTED

METHOD : ASTM D3612

FORM. 10.2-F REV.2


APPROVAL


RAMIRO ROCHA
MATERIAL INSPECTOR



INSULATING LIQUID TEST REPORT

SAMPLE SOURCE: G2137-01 SAMPLE DATE: JUN-21-2008
AMBIENT TEMPERATURE: 25 °C RELATIVE HUMIDITY % : 40
SAMPLE TEMPERATURE: 25 °C TEST DATE: JUN-21-2008

TEST	METHOD	RESULTS				
POWER FACTOR A 25°C	ASTM D924	MEASUREMENT: 0.07		SAMPLE TEMP.: 25 °C		
		SCALA = 0.10				
		CORRECTION FACTOR: = 1.00				
		POWER FACTOR % =		0.007	ACCEPTED	
POWER FACTOR A 100°C	ASTM D-924	MEASUREMENT: 0.25		X	1.00	
		POWER FACTOR % =		0.25	ACCEPTED	
DIELEC. BREAKDOWN DISC ELECTRODES (Kv) GAP 0.100"	ASTM D-877	1st 58	2nd 56	3rd 54	4th 57	5th 59
		AVERAGE		56.8	Kv	ACCEPTED
DIELEC. BREAKDOWN VDE ELECTRODES (Kv) GAP 0.080"	ASTM D-1816	1st 68	2nd 69	3rd 67	4th 68	5th 66
		AVERAGE		67.6	Kv	ACCEPTED
GAS CONTENT (%)	ASTM D-3612	GAS% = 0.44				ACCEPTED
WATER CONTENT (PPM)	ASTM D-1533	1st 5	2nd 5	3rd 4		
		RESULTS :				5 ACCEPTED

COMMENTS :

BEFORE TEST

OIL SAMPLE

OIL IS ACCEPTED


APPROVAL


RAMIRO ROCHA
MATERIAL INSPECTOR



DISSOLVED GAS IN OIL ANALYSIS

CUSTOMER : EQUI SALES ASSOCIATES		SAMPLE DATE : JUN-23-2008	
SAMPLE SOURCE : G2137-01		TEST DATE : JUN-23-2008	
SAMPLE CONDITIONS:	AFTER TEMPERATURE TEST	12	HRS OF TEST
	TRANSFORMER OIL SAMPLE	ONAF	

		BEFORE TEST RESULTS (PPM)	AFTER TEMPERATURE TEST RESULTS (PPM)	INCREMENT (PPM)
HYDROGEN	(H2)	0.0	0.0	0.0
OXYGEN	(O2)	1230.0	7325	6095
NITROGEN	(N2)	3060.0	13285	10225
METHANE	(CH4)	0.0	0.0	0.0
CARBON MONOXIDE	(CO)	5.1	11.2	6.1
CARBON DIOXIDE	(CO2)	57.2	93.7	36.5
ETHYLENE	(C2H4)	0.0	0.0	0
ETHANE	(C2H6)	0.0	0.0	0
ACETYLENE	(C2H2)	0.0	0.0	0
TOTAL GAS :		4352.3	20714.9	
COMBUSTIBLE GAS :		5.1	11.2	
COMBUSTIBLE GAS %		0.1	0.1	
GAS CONTENT %		0.4	2.07	

LIMITS FOR GAS INCREMENT DURING TEMPERATURE RISE TEST

GAS	LIMIT	RESULTS	UNIT
ACETYLENE	< 0.3 ppm	0.0	ppm
HYDROGEN+METHANE+			
ETHYLENE+ETHANE	< 2.0 ppm/hr	0.0	ppm/hr
CARBON MONOXIDE	< 5.0 ppm/hr	0.5	ppm/hr
CARBON DIOXIDE	< 20.0 ppm/hr	3.0	ppm/hr

DIAGNOSTIC:

OIL IS ACCEPTED

METHOD : ASTM D3612

FORM 10.2-G REV. 2

APPROVAL

RAMIRO ROCHA
MATERIAL INSPECTOR



DISSOLVED GAS IN OIL ANALYSIS

CUSTOMER : EQUI SALES ASSOCIATES
SAMPLE SOURCE : G2137-01

SAMPLE DATE : JUN-23-2008

TEST DATE : JUN-23-2008

SAMPLE CONDITIONS: AFTER DIELECTRIC TEST TRANSFORMER OIL SAMPLE

		BEFORE TEST RESULTS (PPM)	AFTER DIELECTRIC TEST RESULTS (PPM)	INCREMENT (PPM)
HYDROGEN	(H2)	0.0	0.0	0.0
OXIGEN	(O2)	7325.0	8948.0	1623
NITROGEN	(N2)	13285.0	15725.0	2440
METHANE	(CH4)	0.0	0.0	0.0
CARBON MONOXIDE	(CO)	11.2	18.3	7.1
CARBON DIOXIDE	(CO2)	93.7	118.3	24.6
ETHYLENE	(C2H4)	0.0	0.0	0.0
ETHANE	(C2H6)	0.0	0.0	0.0
ACETYLENE	(C2H2)	0.0	0.0	0.0
TOTAL GAS :		20714.9	24810	
COMBUSTIBLE GAS :		11.2	18	
COMBUSTIBLE GAS %		0.1	0.1	
GAS CONTENT %		2.1	2.5	

LIMITS FOR GAS INCREMENT DURING DIELECTRIC TESTS

GAS	RESULTS.	LIMIT
ACETYLENE	0.0	< 0.3 ppm
HYDROGEN	0.0	< 5.5 ppm

DIAGNOSTIC: OIL IS ACCEPTED

METHOD : ASTM D3612

APPROVAL

RAMIRO ROCHA
MATERIAL INSPECTOR



INSULATING LIQUID TEST REPORT

SAMPLE SOURCE: G2137-01 SAMPLE DATE: JUN-23-2008
AMBIENT TEMPERATURE: 25 °C RELATIVE HUMIDITY % : 40
SAMPLE TEMPERATURE: 25 °C TEST DATE: JUN-23-2008

TEST	METHOD	RESULTS
POWER FACTOR A 25°C	ASTM D924	MEASUREMENT: <u>0.11</u> SAMPLE TEMP.: <u>25 °C</u> SCALA = <u>0.10</u> <u>1.00</u> POWER FACTOR % = <u>0.011</u> ACCEPTED
POWER FACTOR A 100°C	ASTM D-924	MEASUREMENT: <u>0.3</u> X <u>1.00</u> POWER FACTOR % = <u>0.3</u> ACCEPTED
DIELEC. BREAKDOWN DISC ELECTRODES (Kv) GAP 0.100"	ASTM D-877	1st <u>57</u> 2nd <u>54</u> 3rd <u>59</u> 4th <u>58</u> 5th <u>55</u> AVERAGE <u>56.6</u> Kv ACCEPTED
DIELEC. BREAKDOWN VDE ELECTRODES (Kv) GAP 0.080"	ASTM D-1816	1st <u>66</u> 2nd <u>64</u> 3rd <u>67</u> 4th <u>69</u> 5th <u>65</u> AVERAGE <u>66.2</u> Kv ACCEPTED
GAS CONTENT (%)	ASTM D-3612	GAS% = <u>2.5</u> ACCEPTED
WATER CONTENT (PPM)	ASTM D-1533	1st <u>4</u> 2nd <u>4</u> 3rd <u>5</u> RESULTS : <u>4</u> ACCEPTED

COMMENTS :

AFTER DIELECTRIC TEST

OIL SAMPLE

OIL IS ACCEPTED

APPROVAL

RAMIRO ROCHA
MATERIAL INSPECTOR



DISSOLVED GAS IN OIL ANALYSIS

CUSTOMER : EQUI SALES ASSOCIATES		SAMPLE DATE : JUN-24-2008	
SAMPLE SOURCE : G2137-01		TEST DATE : JUN-24-2008	
SAMPLE CONDITIONS:	AFTER TEMPERATURE TEST	12	HRS OF TEST
	TRANSFORMER OIL SAMPLE	ONAN	

		BEFORE TEST RESULTS (PPM)	AFTER TEMPERATURE TEST RESULTS (PPM)	INCREMENT (PPM)
HYDROGEN	(H2)	0.0	0.0	0.0
OXYGEN	(O2)	8948.0	12617	3669
NITROGEN	(N2)	15725.0	22658	6933
METHANE	(CH4)	0.0	0.0	0.0
CARBON MONOXIDE	(CO)	18.3	31.2	12.9
CARBON DIOXIDE	(CO2)	118.3	146.4	28.1
ETHYLENE	(C2H4)	0.0	0.0	0
ETHANE	(C2H6)	0.0	0.0	0
ACETYLENE	(C2H2)	0.0	0.0	0
TOTAL GAS :		24809.6	35452.6	
COMBUSTIBLE GAS :		18.3	31.2	
COMBUSTIBLE GAS %		0.1	0.1	
GAS CONTENT %		2.5	3.55	

LIMITS FOR GAS INCREMENT DURING TEMPERATURE RISE TEST

GAS	LIMIT	RESULTS	UNIT
ACETYLENE	< 0.3 ppm	0.0	ppm
HYDROGEN+METHANE+			
ETHYLENE+ETHANE	< 2.0 ppm/hr	0.0	ppm/hr
CARBON MONOXIDE	< 5.0 ppm/hr	1.1	ppm/hr
CARBON DIOXIDE	< 20.0 ppm/hr	2.3	ppm/hr

DIAGNOSTIC:

OIL IS ACCEPTED

METHOD : ASTM D3612

FORM 10.2-G REV. 2


APPROVAL


RAMIRO ROCHA
MATERIAL INSPECTOR



INSULATING LIQUID TEST REPORT

SAMPLE SOURCE: G2137-01 SAMPLE DATE: JUN-24-2008
AMBIENT TEMPERATURE: 25 °C RELATIVE HUMIDITY % : 40
SAMPLE TEMPERATURE: 25 °C TEST DATE: JUN-24-2008

TEST	METHOD	RESULTS
POWER FACTOR A 25°C	ASTM D924	MEASUREMENT: <u>0.09</u> SAMPLE TEMP.: <u>25 °C</u> SCALA = <u>0.10</u> CORRECTION FACTOR: = <u>1.00</u> POWER FACTOR % = <u>0.009</u> ACCEPTED
POWER FACTOR A 100°C	ASTM D-924	MEASUREMENT: <u>0.27</u> X <u>1.00</u> POWER FACTOR % = <u>0.27</u> ACCEPTED
DIELEC. BREAKDOWN DISC ELECTRODES (Kv) GAP 0.100"	ASTM D-877	1st <u>59</u> 2nd <u>54</u> 3rd <u>58</u> 4th <u>56</u> 5th <u>55</u> AVERAGE <u>56.4</u> Kv ACCEPTED
DIELEC. BREAKDOWN VDE ELECTRODES (Kv) GAP 0.080"	ASTM D-1816	1st <u>65</u> 2nd <u>67</u> 3rd <u>68</u> 4th <u>64</u> 5th <u>69</u> AVERAGE <u>66.6</u> Kv ACCEPTED
GAS CONTENT (%)	ASTM D-3612	GAS% = <u>3.55</u> ACCEPTED
WATER CONTENT (PPM)	ASTM D-1533	1st <u>6</u> 2nd <u>5</u> 3rd <u>4</u> RESULTS : <u>5</u> ACCEPTED

COMMENTS :

AFTER TEMP TEST
OIL SAMPLE
OIL IS ACCEPTED


APPROVAL


RAMIRO ROCHA
MATERIAL INSPECTOR