



TEST REPORT

Issued by :

G. Paglioli

Date :

27/12/13

CUSTOMER	:	SFIR RAFFINERIA DI BRINDISI SPA
AREA	:	CENTRALE
UNIT	:	M2
CUST. ORD.	:	4699 DEL 13.12.2013
DATE	:	19/12/2013

SOGGETTO : TEST ELETTRICI NON DISTRUTTIVI

TABELLA CONTENUTI

- DATI DI TARGA.
- MISURA RESISTENZA OHMICA DI STATORE
- TEST RESISTENZA DI ISOLAMENTO E INDICE DI POLARIZZAZIONE STATORE
- MISURA $Tg\Delta$ e ΔC STATORE E MISURA SCARICHE PARZIALI AVVOLGIMENTO STATORICO
- CONSIDERAZIONI E RACCOMANDAZIONI

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DATI DI TARGA:

Constructor :	CONVERTEAM	IP :	23
Type :	D27SV12	IM :	
S / N :	P160164-10	IC :	0A1
P [kVA] :	21345	Ins. Class:	F - F
V ₁ [V] :	11000	Amb. [°C]	13 HR 63,5%
I ₁ [A] :	1120	Δt [°C]	
Connex. ₁ :	Y	Dir.of Rot. :	
RPM	500	W _{stator} [Kg] :	-
Freq. [Hz]	50	W _{rotor} [Kg] :	-
P.F. :	0,8	W _{total} [Kg] :	58200
Duty :	S1	Bearing DE :	
Constr. year	2009	BearingNDE :	
Item cust. :	M2	Plant :	BRINDISI

Temperatura Avvolgimento:

Fase U : 18°C

Fase V : 15°C

Fase W : 15°C

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MISURA DELLA RESISTENZA OHMICA FASE U:

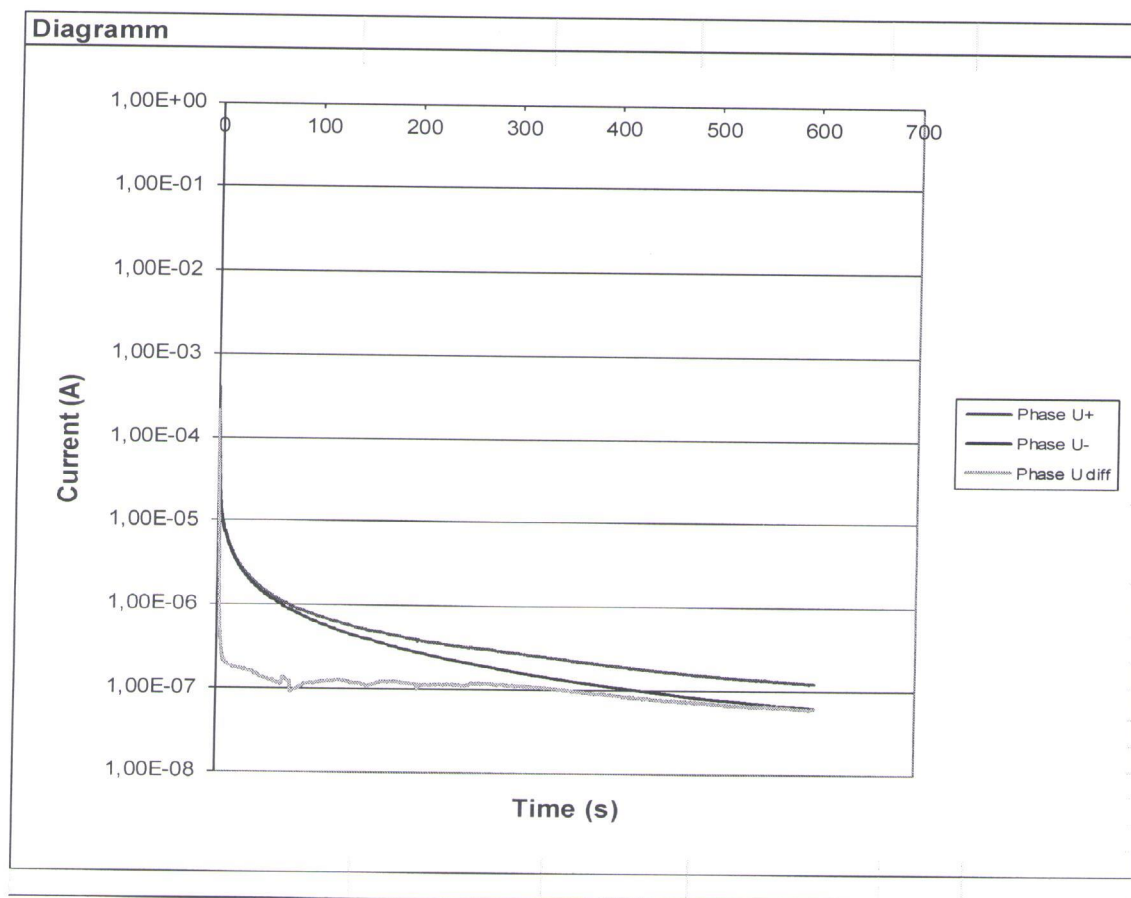


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Calculations

Ai1 (i15/I60):	3,75
Ai2 (i300/i900):	
Polarisation index:	9,92E+00
Ri 1min. (Ohm):	1.03G
Ri 10min. (Ohm):	10.2G
Iew (Ohm) Headwinding:	
Ien (Ohm) Slotpart:	

MISURA DELLA RESISTENZA OHMICA FASE V :

Diagramm

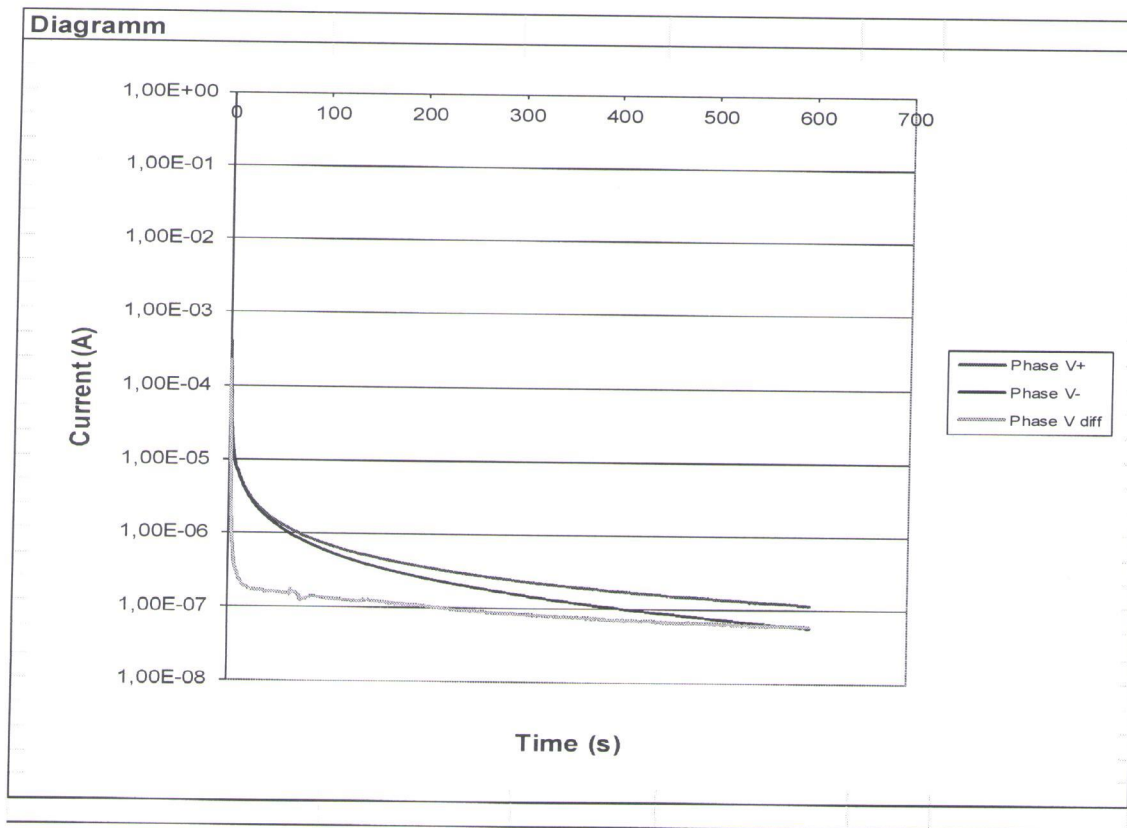


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Calculations

Ai1 (i15/I60):	3,90				
Ai2 (i300/i900):					
Polarisation index:	1,05E+01				
Ri 1min. (Ohm):	1.02G				
Ri 10min. (Ohm):	10.7G				
I _{ew} (Ohm) Headwinding:					
I _{en} (Ohm) Slotpart:					

MISURA DELLA RESISTENZA OHMICA FASE W :

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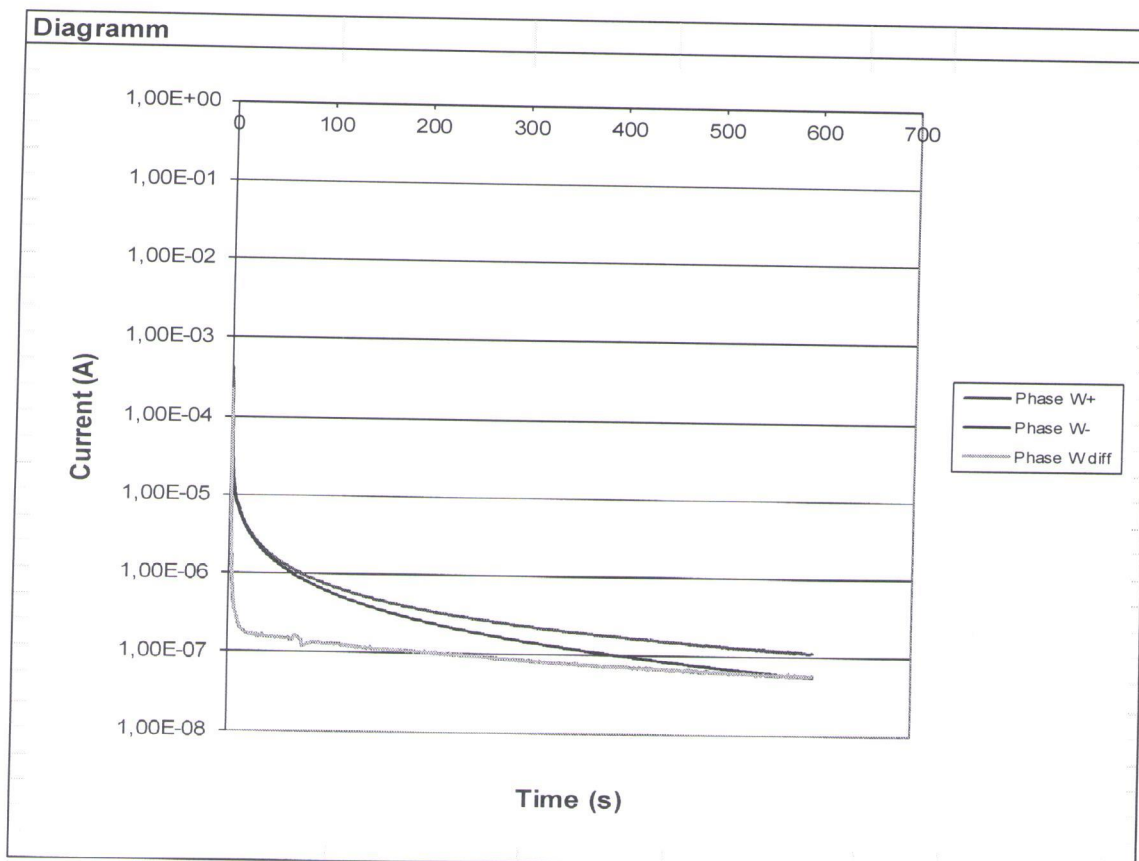
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Calculations

Ai1 (i15/I60):	3,88
Ai2 (i300/i900):	
Polarisation index:	1,12E+01
Ri 1min. (Ohm):	988M
Ri 10min. (Ohm):	11.0G
Iew (Ohm) Headwinding:	
Ien (Ohm) Slotpart:	

MISURA DELLA RESISTENZA OHMICA FASE UVW :

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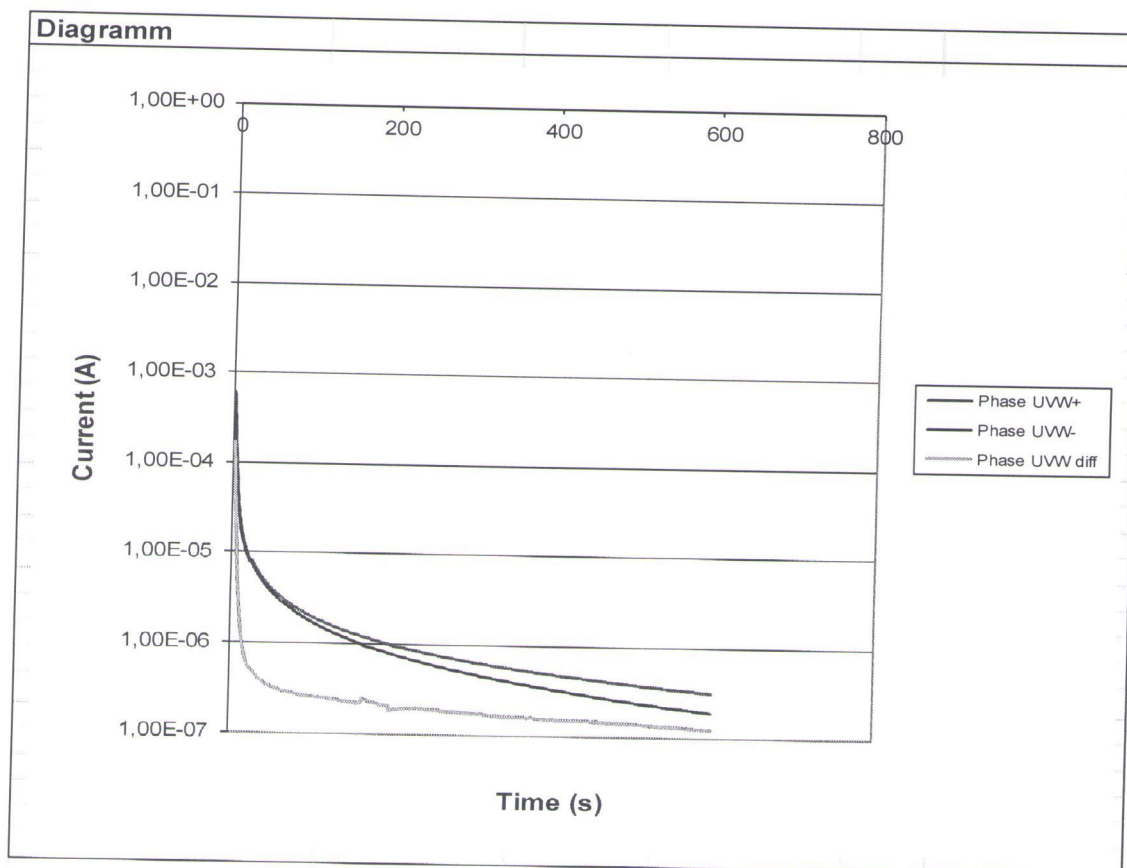
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Calculations	
Ai1 (i15/i60):	4,56
Ai2 (i300/i900):	
Polarisation index:	1,10E+01
Ri 1min. (Ohm):	364M
Ri 10min. (Ohm):	4.00G
Iew (Ohm) Headwinding:	
Ien (Ohm) Slotpart:	

MISURA $Tg\Delta$ e ΔC AVVOLGIMENTO STATORICO FASE U :

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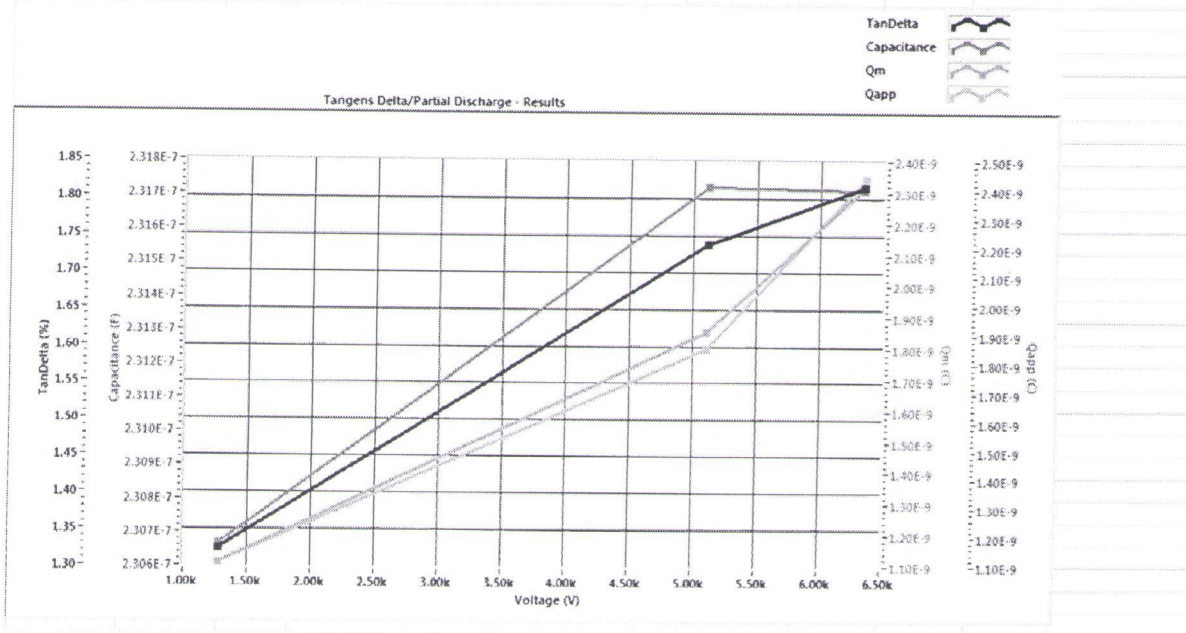
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TD Voltage (V)	Current (mA)	Cap. (nF)	TanDelta ((sci))	Frequ. (Hz)	Time-Stamp	-	-	PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	Time-Stamp
1280	92,6	230,7	0,013243	49,99	20/12/2013 16:44:24			1275,2	1,1116E-09	1,1116E-09	49,99	20/12/2013 16:43:42
2560	183	230,9	0,013801	49,99	19/12/2013 16:26:26			2561,1	2,213E-09	2,2532E-09	50	19/12/2013 16:25:47
3820	274	231,3	0,014723	49,99	19/12/2013 16:28:22			3822,4	3,5407E-09	3,6212E-09	49,99	19/12/2013 16:27:40
5110	372	231,7	0,017373	50	20/12/2013 16:47:30			5108,8	1,8527E-09	1,8527E-09	49,99	20/12/2013 16:46:50
6350	462	231,7	0,018147	49,97	20/12/2013 16:50:22			6358,5	2,3159E-09	2,4394E-09	49,98	20/12/2013 16:49:08



MISURA SCARICHE PARZIALI AVVOLGIMENTO STATORICO INNESCO FASE U :

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PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	LLD (%)	Num Gain	HW Gain	Acq time (s)
2561,1	2,213E-09	2,2532E-09	50	2	1	5	30

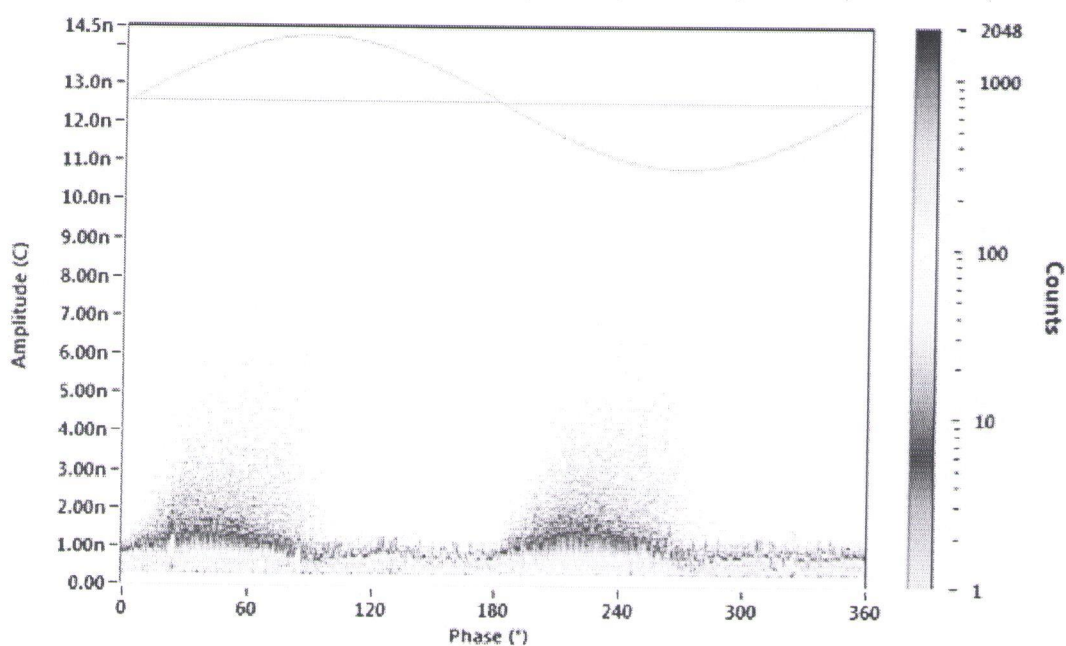


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MISURA SCARICHE PARZIALI AVVOLGIMENTO STATORICO TENSIONE DI ESERCIZIO FASE U :

PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	LLD (%)	Num Gain	HW Gain	Acq time (s)
6358,5	2,3159E-09	2,4394E-09	49,98	2	1	5	30

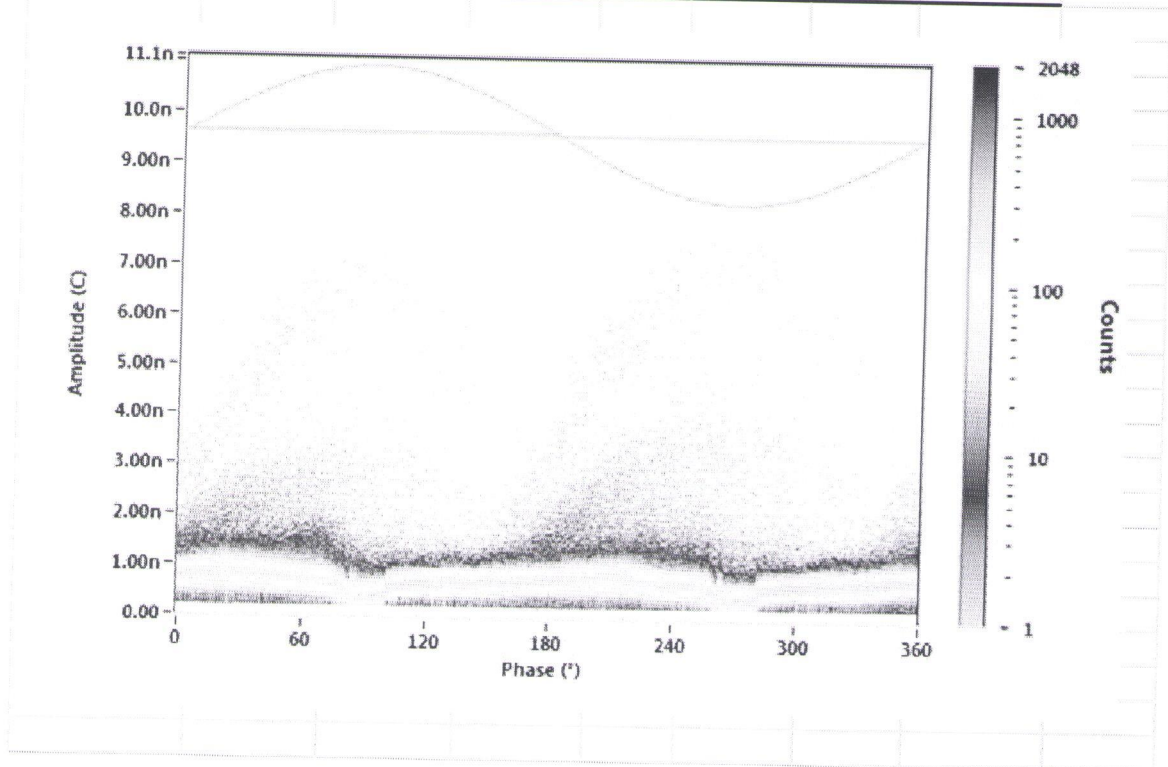


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MISURA $Tg\Delta$ e ΔC AVVOLGIMENTO STATORICO FASE V :

TD Voltage (V)	Current (mA)	Cap. (nF)	TanDelta (sci)	Frequ. (Hz)	Time-Stamp	-	-	PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	Time-Stamp
2590	186	228,5	0,011981	50,04	19/12/2013 17:24:31			2596,2	1,2473E-09	1,2473E-09	50,03	19/12/2013 17:23:54
3840	276	228,6	0,012979	50,03	19/12/2013 17:26:30			3842,8	1,4082E-09	1,4082E-09	50,02	19/12/2013 17:25:52
5070	365	229	0,014454	50,02	19/12/2013 17:28:26			5063,5	2,5751E-09	2,7763E-09	50,03	19/12/2013 17:27:48
6370	459	229,4	0,015543	50,02	19/12/2013 17:30:17			6369	3,7017E-09	3,9431E-09	50,01	19/12/2013 17:29:38

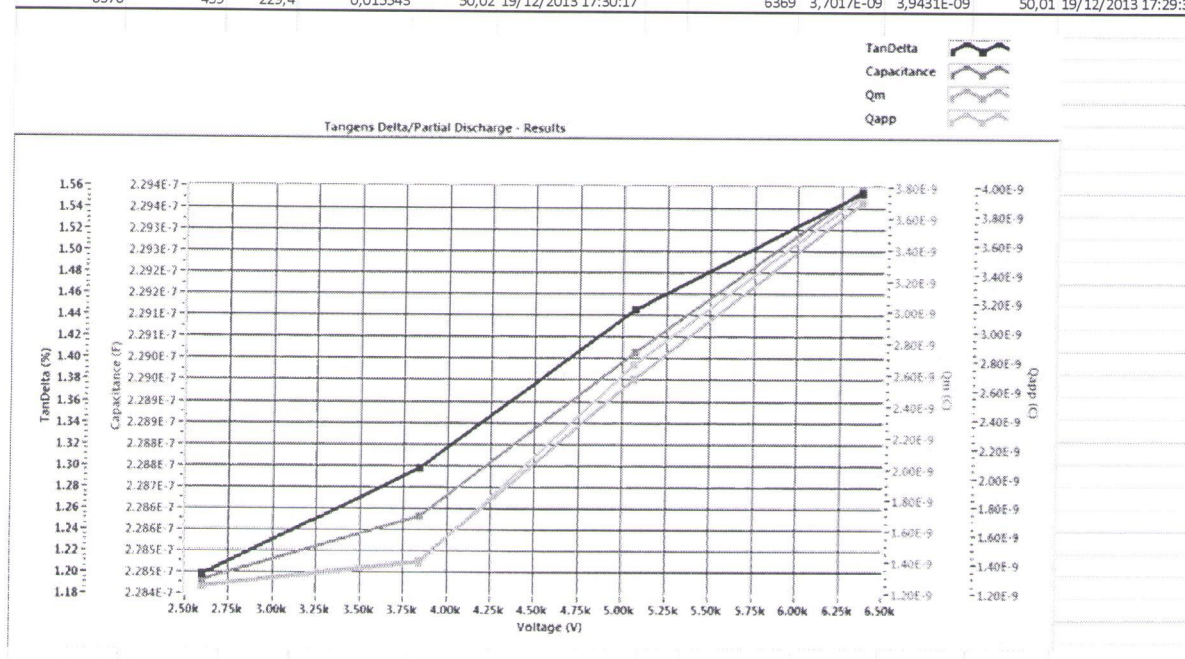


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PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	LLD (%)	Num Gain	HW Gain	Acq time (s)
2596,2	1,2473E-09	1,2473E-09	50,03	2	1	5	30

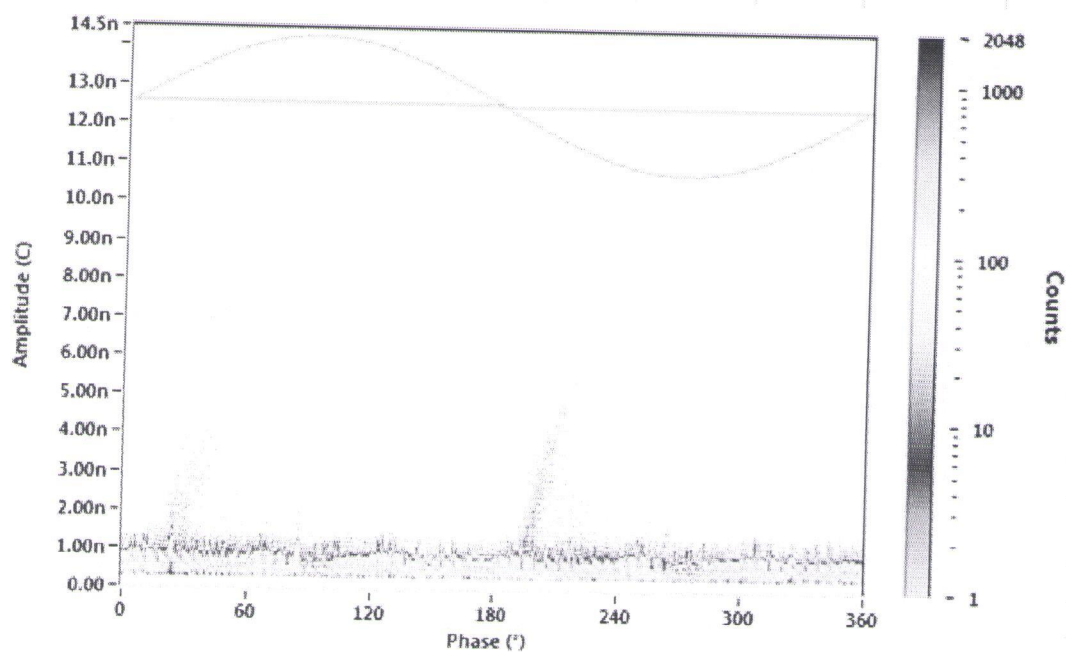


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MISURA SCARICHE PARZIALI AVVOLGIMENTO STATORICO A TENSIONE DI ESERCIZIO FASE V :

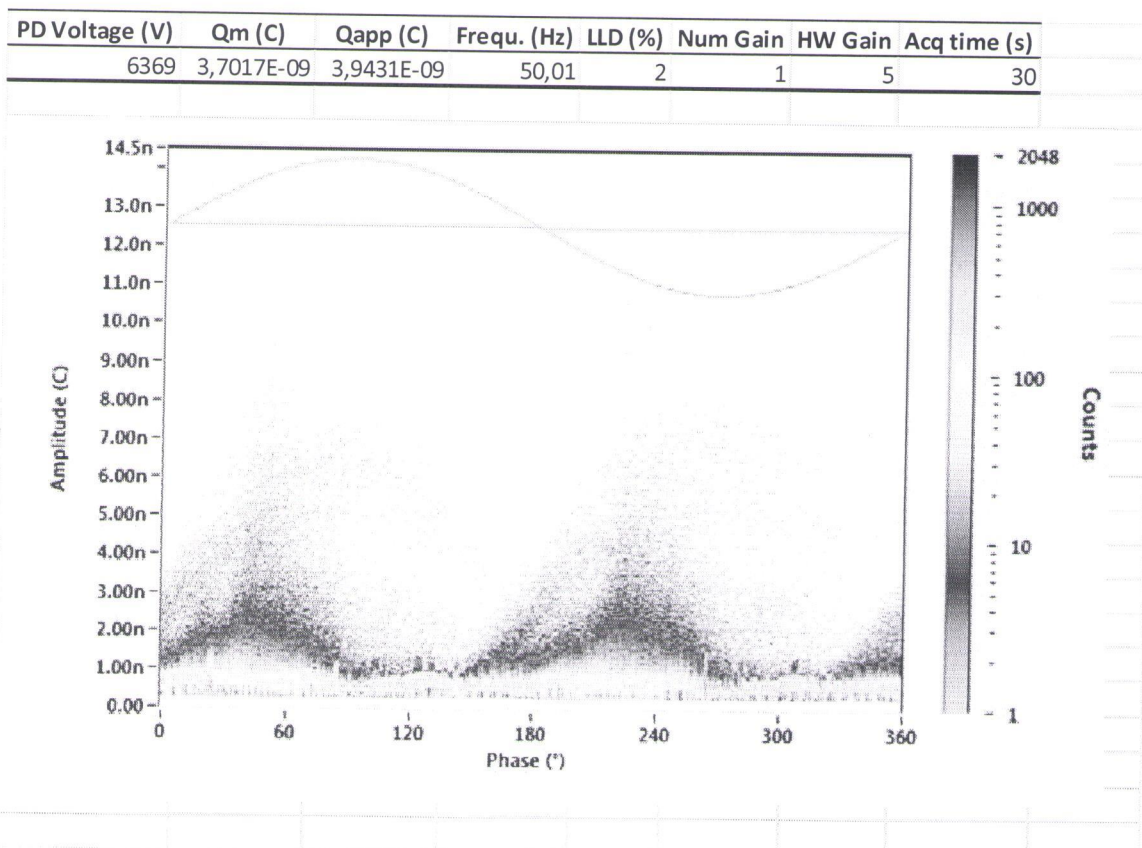


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MISURA $Tg\Delta$ e ΔC AVVOLGIMENTO STATORICO FASE W :

TD Voltage (V)	Current (mA)	Cap. (nF)	TanDelta ((sci))	Frequ. (Hz)	Time-Stamp	-	PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	Time-Stamp
2540	182	228,5	0,012228	49,97	19/12/2013 16:57:50		2538,7	1,2875E-09	1,2875E-09	49,97	19/12/2013 16:57:13
3840	276	228,7	0,013588	49,97	19/12/2013 16:59:54		3840,5	3,0579E-09	3,0981E-09	49,97	19/12/2013 16:59:18
5080	366	229,2	0,015165	49,99	19/12/2013 17:03:12		5078,3	3,9029E-09	3,9431E-09	49,97	19/12/2013 17:01:20
6350	458	229,6	0,01648	50,04	19/12/2013 17:05:46		6336,4	5,3111E-09	5,3111E-09	50,02	19/12/2013 17:05:02

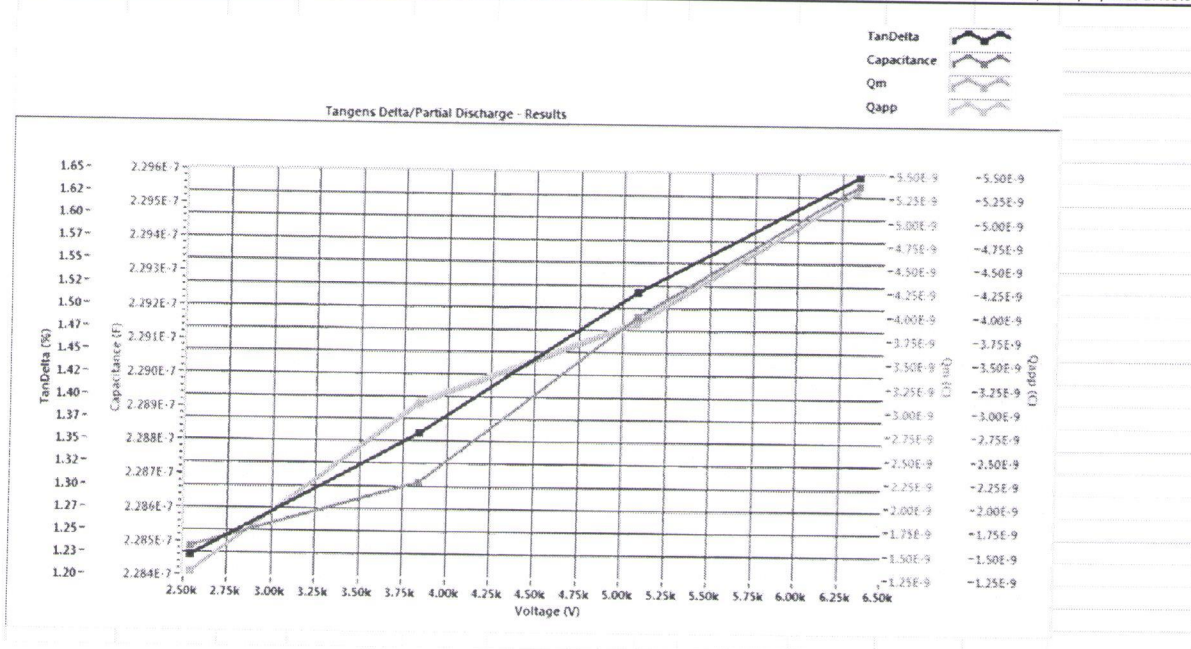


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PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	LLD (%)	Num Gain	HW Gain	Acq time (s)
3840,5	3,0579E-09	3,0981E-09	49,97	2	1	5	30

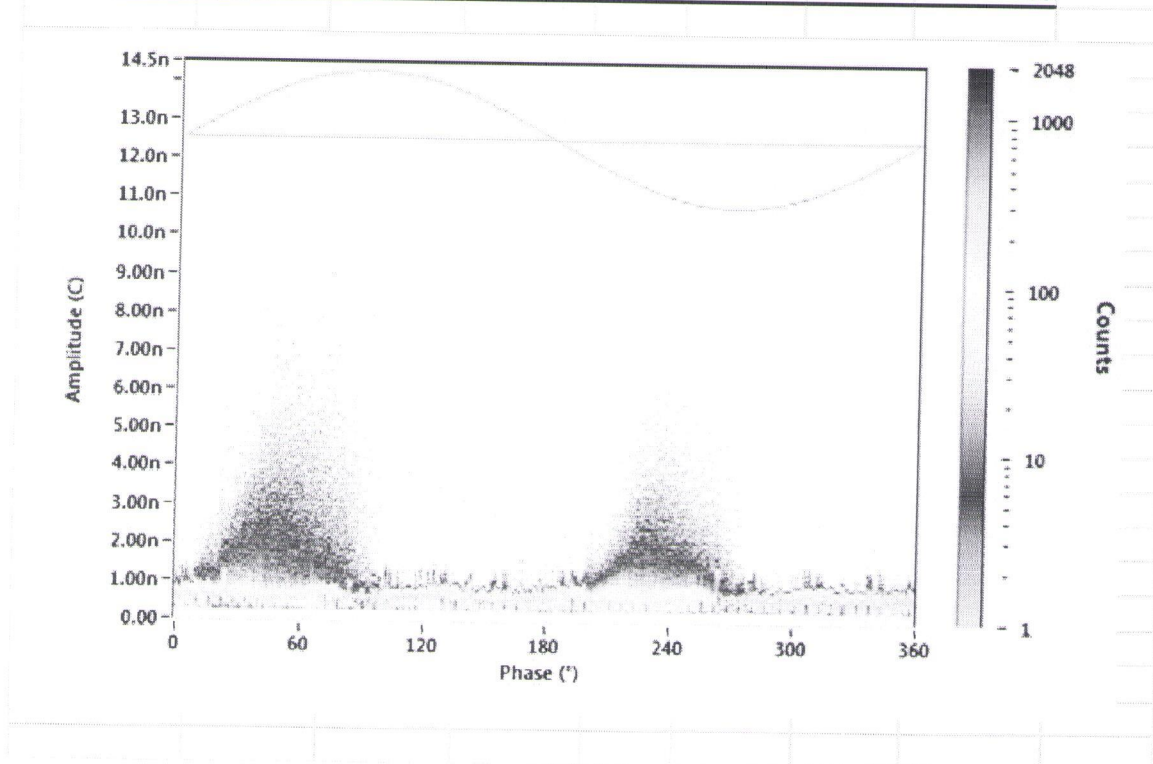


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MISURA SCARICHE PARZIALI AVVOLGIMENTO STATORICO TENSIONE DI ESERCIZIO FASE W :

PD Voltage (V)	Qm (C)	Qapp (C)	Frequ. (Hz)	LLD (%)	Num Gain	HW Gain	Acq time (s)
6336,4	5,3111E-09	5,3111E-09	50,02	2	1	5	30

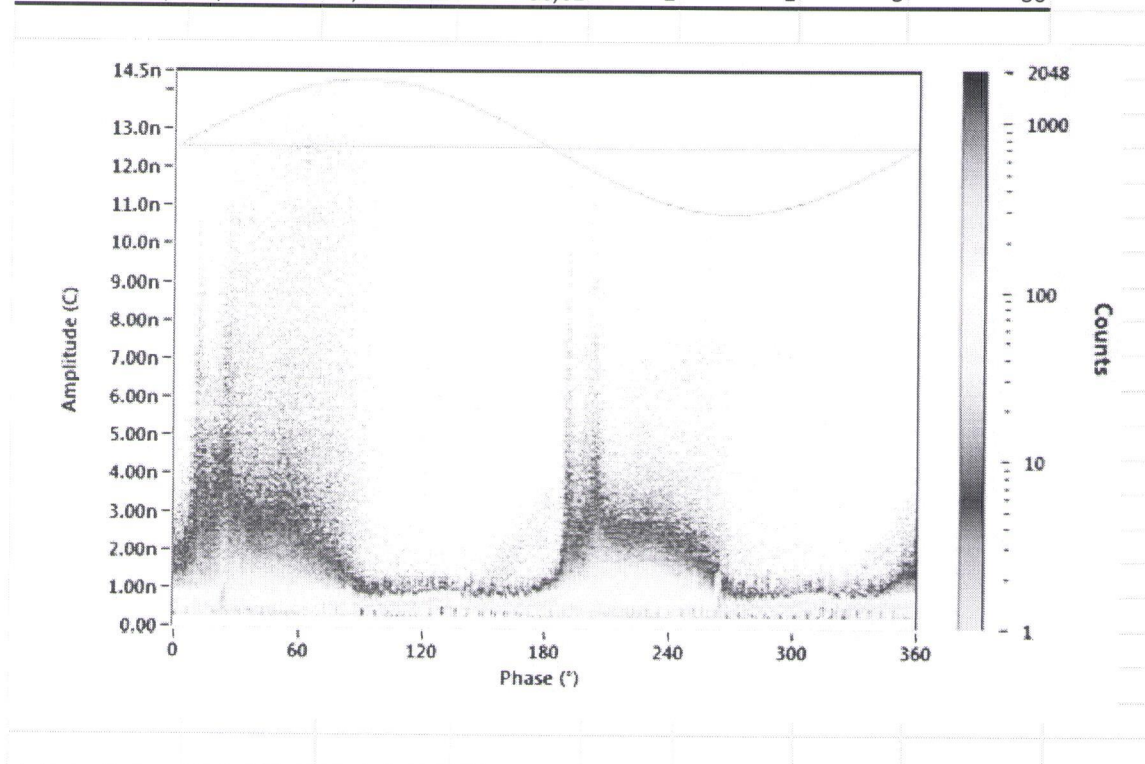


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