

Outline

- Introduction
- Pictures
- PVSS View
- CMS MCS Test Report
- Fast Acquisition Analyzing
- Conclusion

MCS Introduction

- Goal
 - PLC
 - Process Programming
 - Communication to PVSS Supervisor
 - PVSS Supervisor
 - Standard object for Panel
 - Alarm Screen
 - Historical Trend & Trending Online
- Unicos & PVSS Generation
 - Standard CERN Tools for generation
 - Excel file to be completed
 - File for PLC
 - File for PVSS

Pictures



MCS, MSS, VAC and CDS Racks

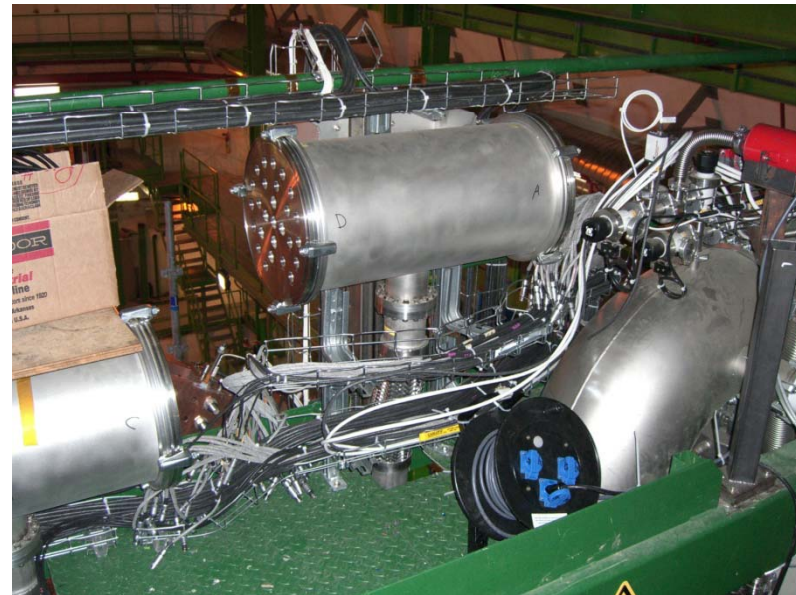


Primary vacuum pump and rack

Pictures

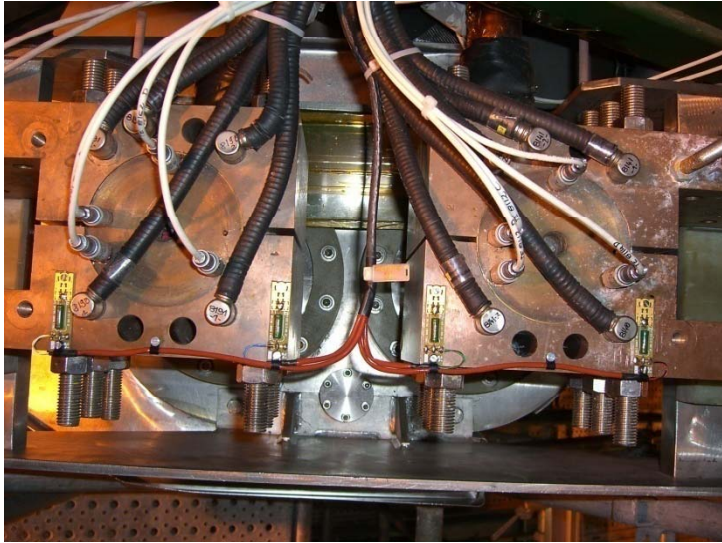


Instrumentation Cables UX Side

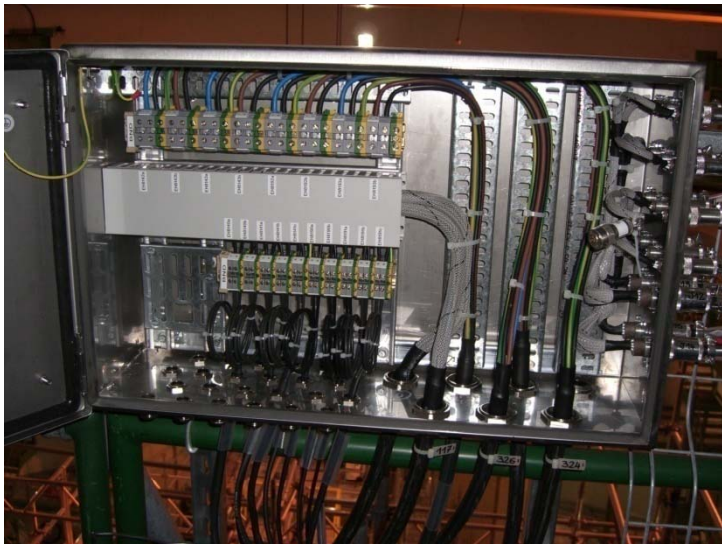


Flanges instrumentation

Pictures



Current Leads instrumentation

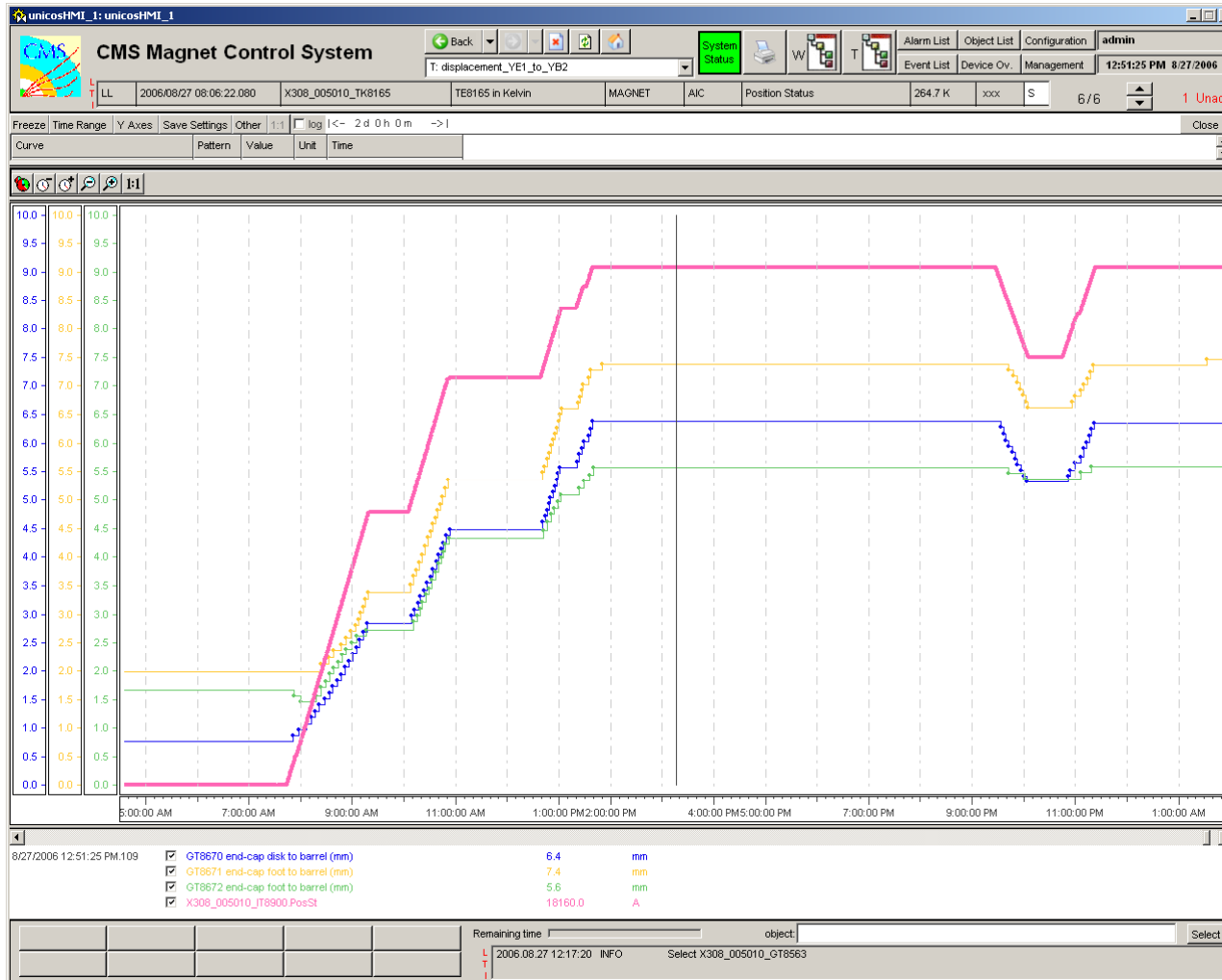


New Connection Box of CL instrumentation



Phase Separator

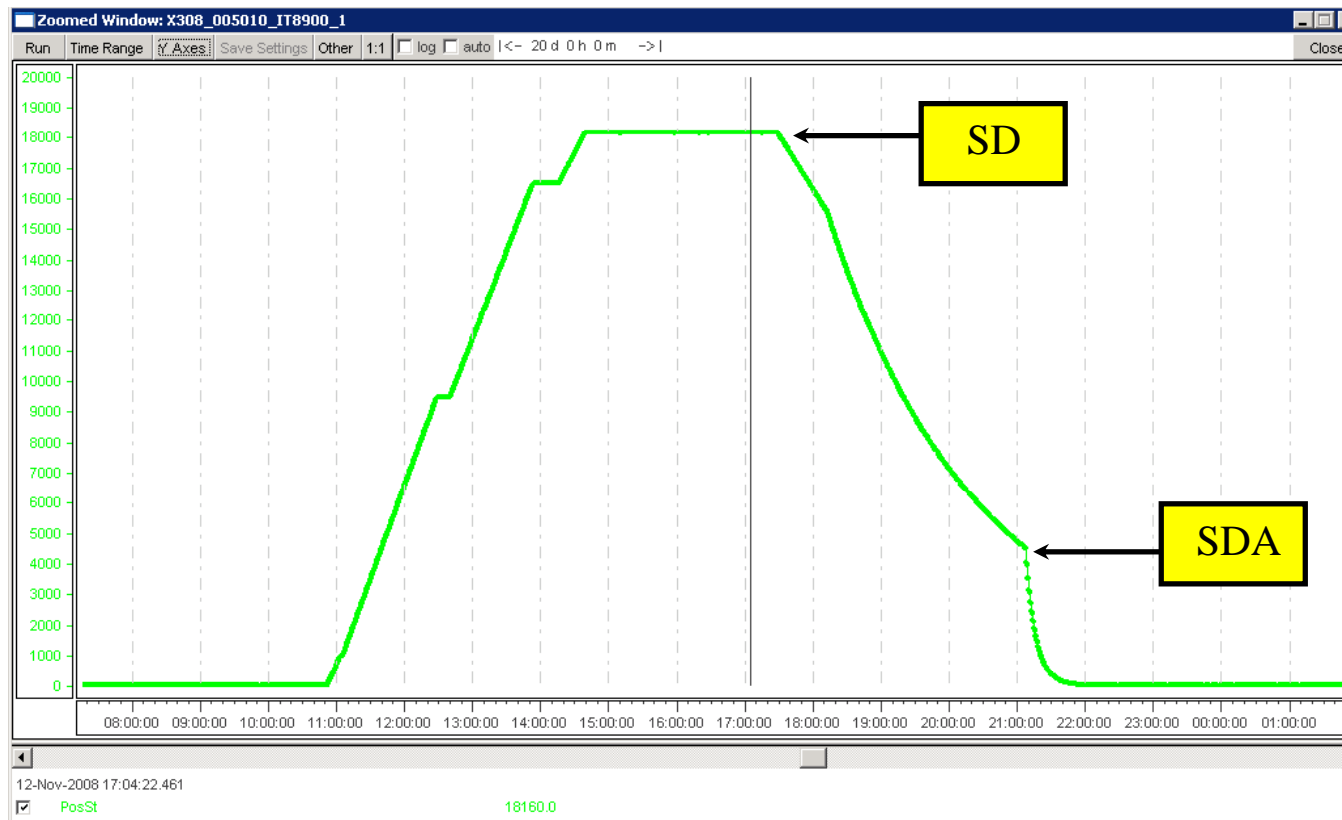
PVSS View



Displacement End Cap to Barrel during Ramp Up current at 18160A

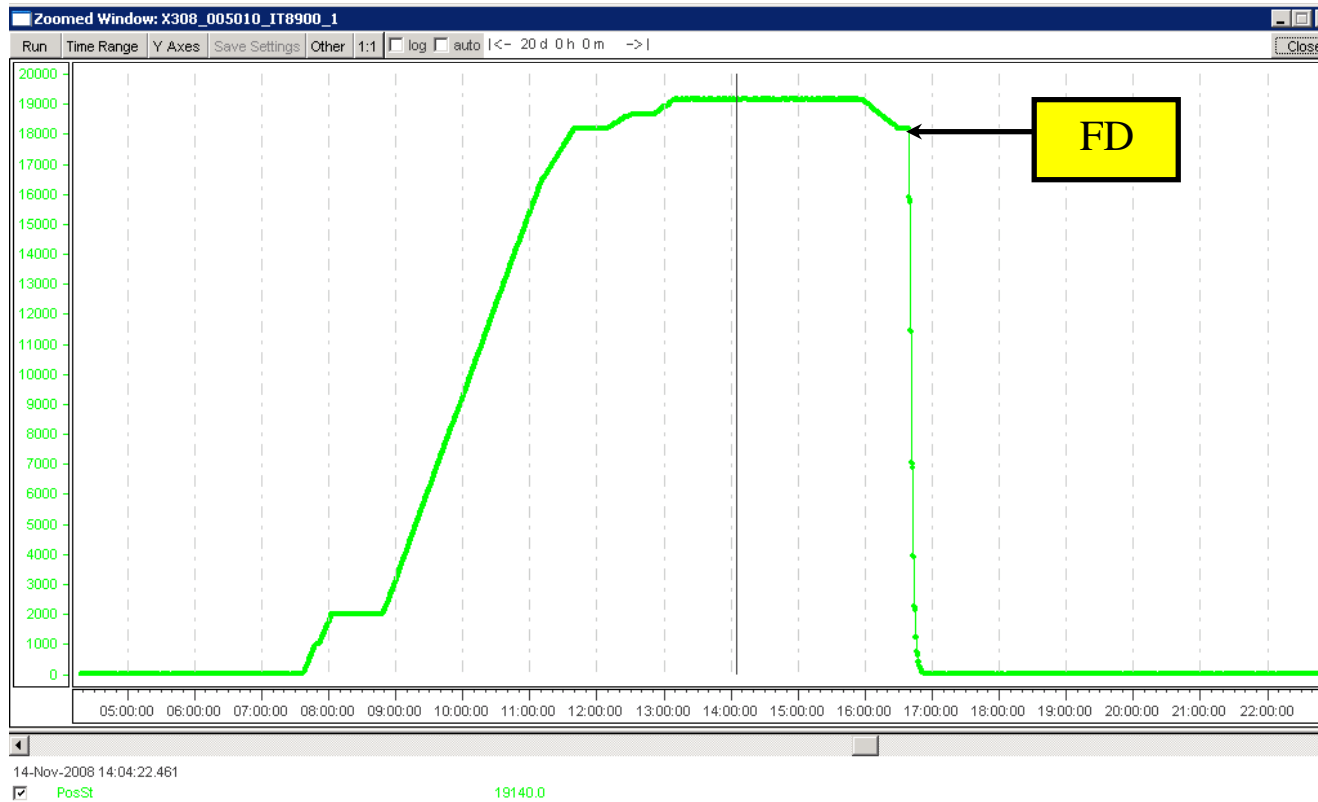
CMS MCS Test Report

- Test until 3,8T with SD -> SDA. SDA at ~4,5kA with Vext.



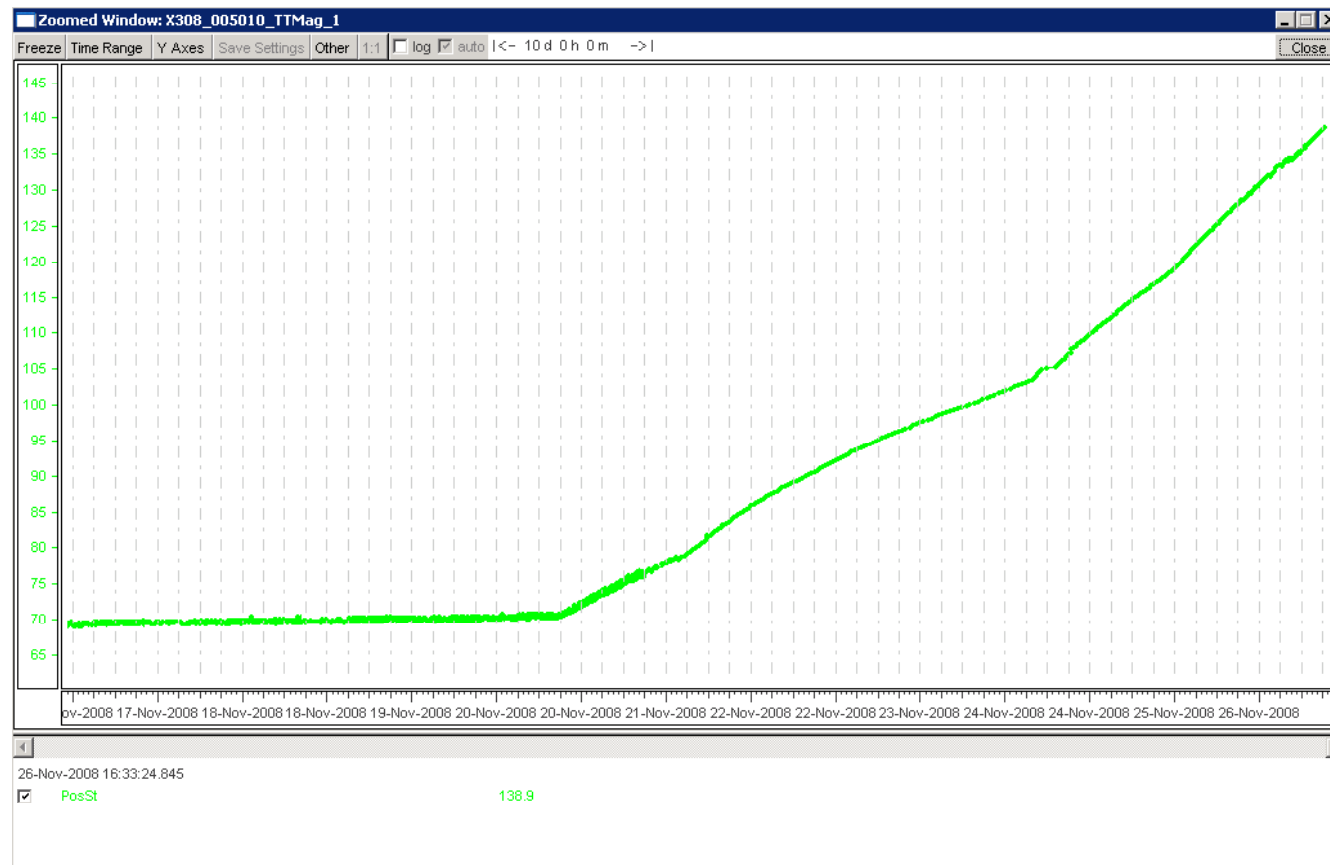
CMS MCS Test Report

- Test until 4T with FD. 19140A during 4 hours without problem.
Ramp down at 3,8T -> FD.

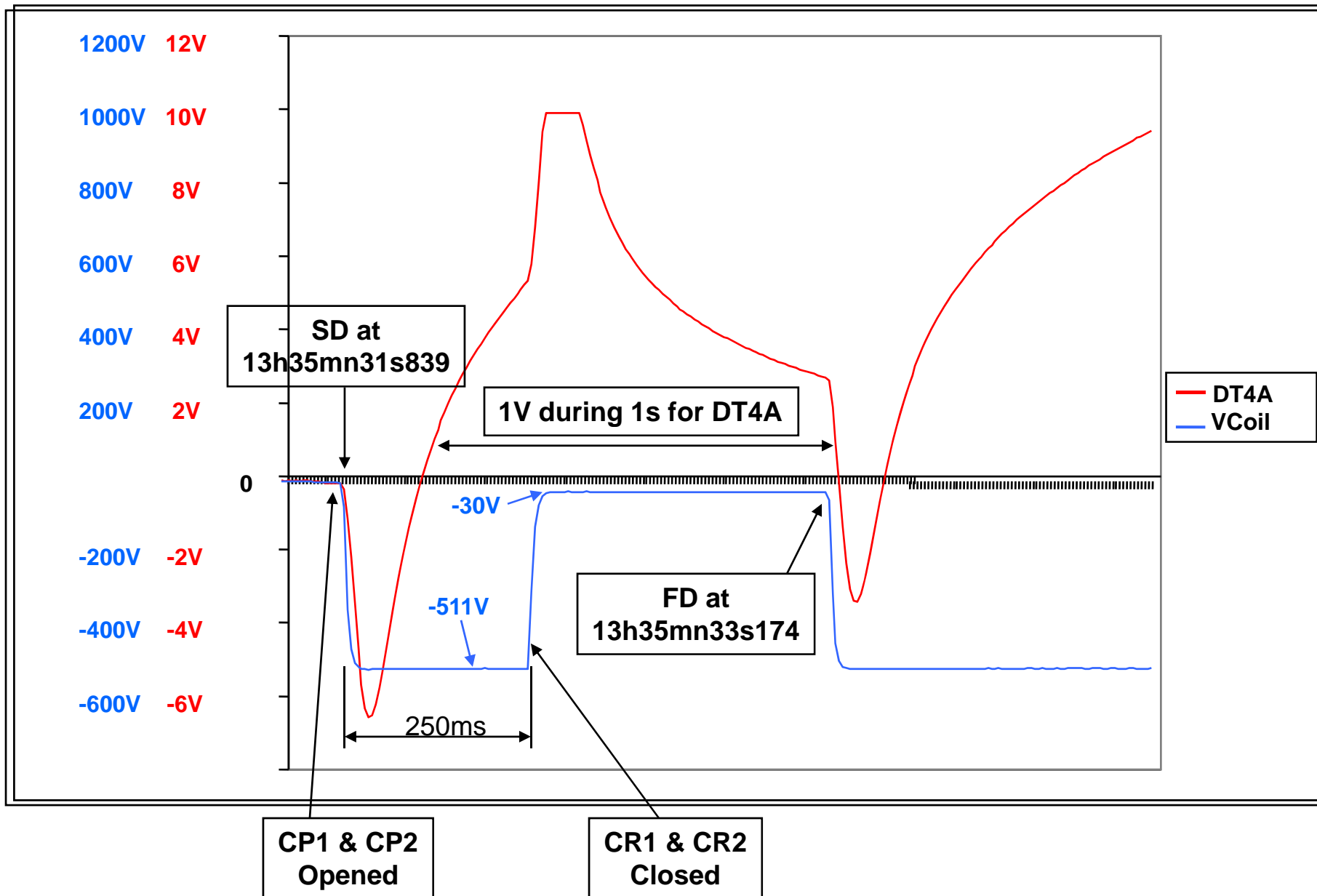


CMS MCS Test Report

- Warm Up with $\sim 200A$ in the coil. $\sim 140K$ yesterday.



Fast Acquisition Analyzing (MDS File)



Conclusion

- All systems has been installed & successfully tested during 2009 in underground at nominal Field for each LHC Experiment
- To be done
 - Installation of PVSS supervisor in CCC
 - PVSS supervisor for Warm Magnet has been tested during 2009 from CCC