

→ ELQA-TP4-D (@ cold) :

- Each MB line will be tested at 1.9 kV versus ground and all other circuits
- All external instrumentation and electronics must be connected

→ Cryogenic cables routing TT sensors of the 13 kA current leads must be qualified for the 1.9 kV high voltage test

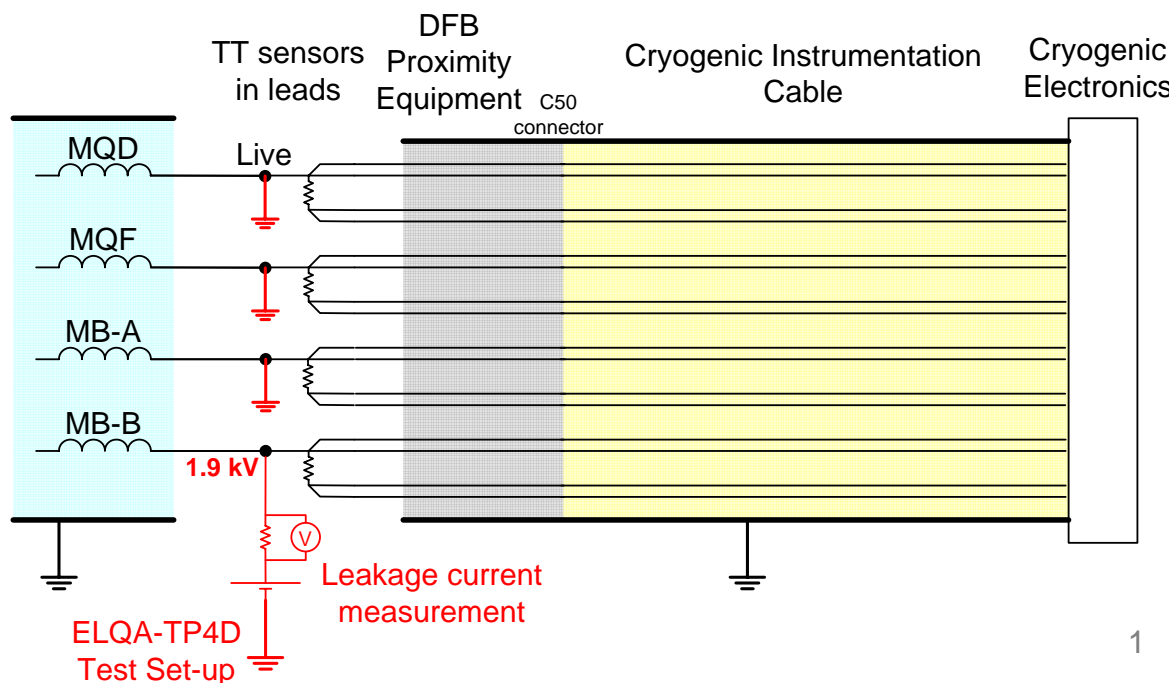
- Insulation between wires and ground must withstand 1.9 kV
- Insulation between wires must withstand 1.9 kV: **NOT tested for cables in 7-8**

→ In case of a short, the diagnostic will be time consuming;

The HV test of one MB line is already very long (ramp-up and discharge of the circuit)

→ ELQA-TP4-D checks the insulation vs. ground of the quench heaters:

**Green light** for QPS team to proceed





# ELQA activities planning for Week 22



Circuits	Type	DFB	ICC ORC IRC	TFM TFM/GN D	HVQ @cold	Release	Comments	Week 22				
								28	29	30	31	1
MB.A78.A	MB	DFBAO.7L8	Done				1.9 kV on instrumentation cables (TT)					
MB.A78.B	MB	DFBAO.7L8	Done				1.9 kV on instrumentation cables (TT)					
RQF.A78	MQ	DFBAO.7L8	Done									
RQD.A78	MQ	DFBAO.7L8	Done									
RQT12.L8B1	MQT	DFBAO.7L8	Done									
RQTD.A78B1	MQT	DFBAO.7L8	Done									
RQTD.A78B2	MQT	DFBAO.7L8	Done									
RQTF.A78B1	MQT	DFBAO.7L8	Done									
RQTF.A78B2	MQT	DFBAO.7L8	Done									
RSD1.A78B1	MS	DFBAO.7L8	Done									
RSD1.A78B2	MS	DFBAO.7L8	Done									
RQS.L8B1	MQS	DFBAO.7L8	Done									
RSD2.A78B1	MS	DFBAO.7L8	Done									
RSD2.A78B2	MS	DFBAO.7L8	Done									
RSF1.A78B1	MS	DFBAO.7L8	Done									
RSF1.A78B2	MS	DFBAO.7L8	Done									
RSF2.A78B1	MS	DFBAO.7L8	Done									
RSF2.A78B2	MS	DFBAO.7L8	Done									
RCO.A78B1	MCO	DFBAO.7L8	Done									
RCS.A78B1	MCS	DFBAO.7L8	Done		846308		short on the cryo electronics, P.Gomes					
RCS.A78B2	MCS	DFBAO.7L8	Done									
RQS.A78B2	MQS	DFBAN.7R7										
RQS.R7B1	MQS	DFBAN.7R7										
RQTL10.R7B1	MQTLI	DFBAN.7R7										
RQ6.R7B1	MQTLH	DFBMH.6R7	Done	Repeat	Done							
RQ6.R7B2	MQTLH	DFBMH.6R7	Done	Repeat	Done							

HWC Meeting, CCC, Friday 25th May, D. Bozzini, V. Chareyre CERN

## → QN-ELQA-TP4D-HVQ-MCS.A78B1-001

EDMS Id 846308

- The HV qualification at cold of the circuit MCS.A78B1 has revealed a short to ground. The test has been repeated on the cold circuit with the proximity equipment connected BUT WITHOUT the instrumentation cable C50 connected (going to the electronics monitoring the temperature sensors). The 2nd test passed thus the short is on the "cryo electronics side".
- A very similar problem occurred during ELQA at 80K on the circuit MSD2.A78B2 (see NC, EDMS 832564).  
At this time cryogenic instrumentation team found two instrumentation cables (C50) cross-connected on the electronics side (see Paulo Gomez's e-mail). These cables route temperature signals of the two concerned circuits MCS.A78B1 and MSD2.A78B2. As the problem disappeared on the circuit MSD2.A78B2 afterwards, the issue may have been only MOVED from one circuit to another when swapping cables but NOT fixed.