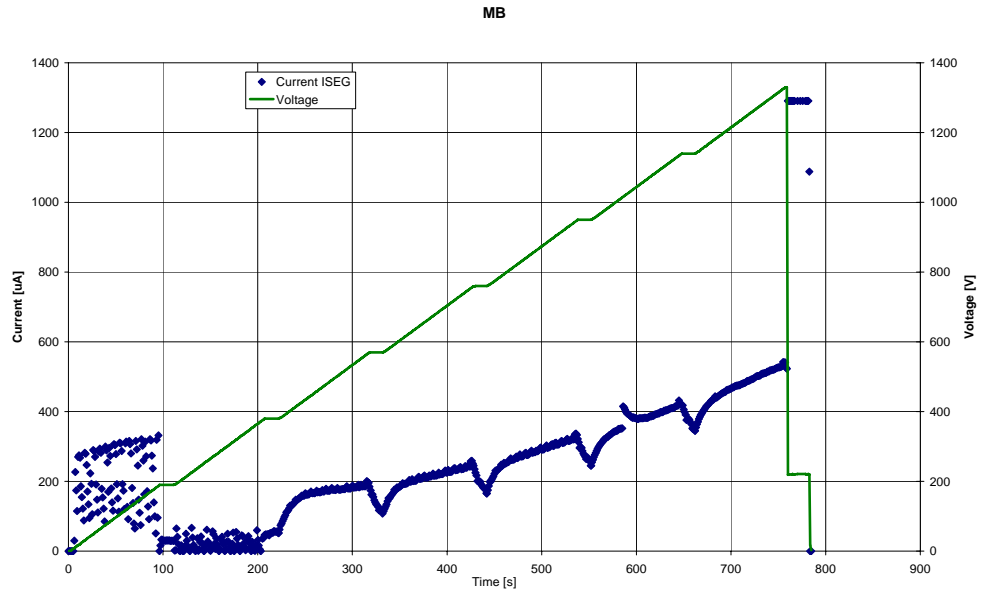


Friday
December 8th

Short to ground identified on MB circuit of sector 78 during the EIQA-TP4B high voltage test at 1300 Vdc with 6 bar of Helium in the cold mass and 2.1 bar in the DFB helium enclosure



Tuesday
December 12th

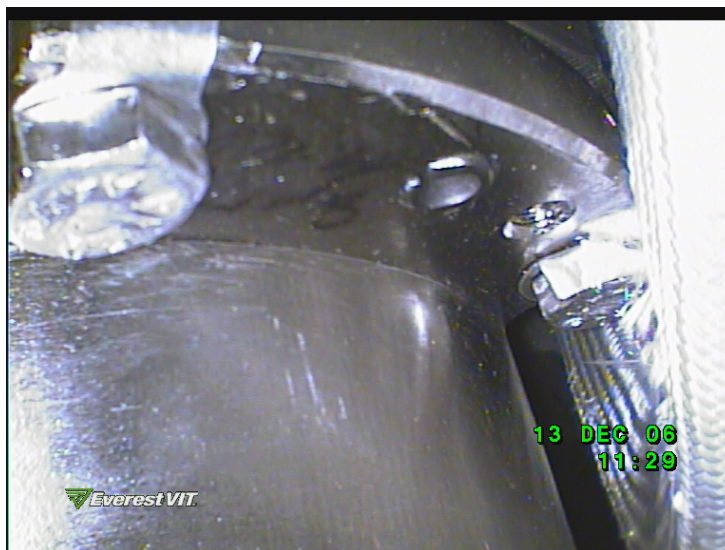
The short was localized in QBBI.A21R7. The fault disappeared when a small current was injected through it to better localize it.

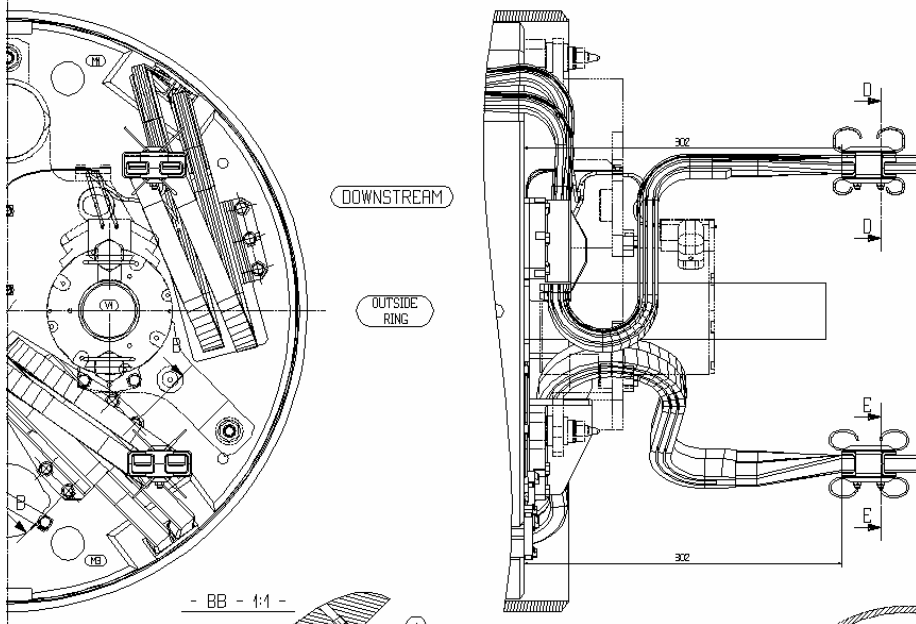
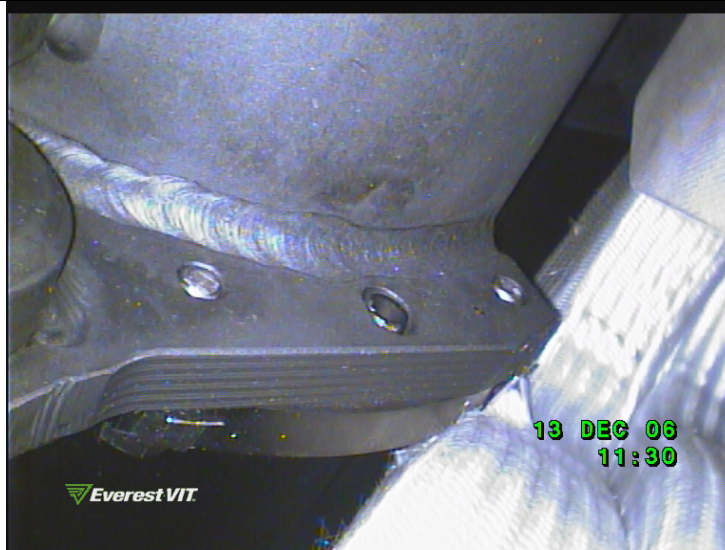
Wednesday morning
December 13th

The EIQA-TP4B high voltage test was repeated and the fault appeared again at 70V and stayed. It was then localized to be in MB 3014 on the lyra side.

Wednesday afternoon
December 13th

Following the inspection with an endoscope, the short was confirmed to be the MB lyra which was compressed against the support of the MCS of the external beam





Friday December 15 th	M3 tube holding the bellows was cut, the spider removed and the short was confirmed by manipulation after de-brazing of the dipole bus-bars in the interconnect
Monday December 18 th	The repair strategy was finalized: 1 the displacement of the lyra away from the support of the MCS of the external beam by the shortening the bus-bars 2 the placement of a sleeve to cover the damaged part of the bus-bar insulation. The M3 and the beam screen lines were closed at 10 pm
Tuesday December 19 th	Leak and pressure test and electrical tests (600V) which started at 9am confirmed that the helium vessel was tight and the electrical fault had been cured.