

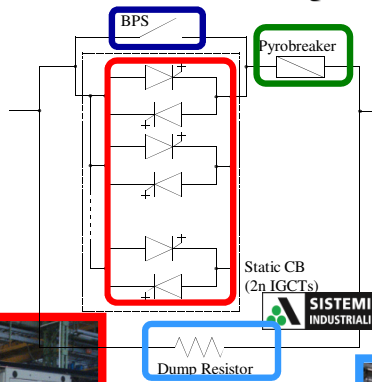


The research on the interruption of large dc current is important for fusion machines
Fusion community has given a very significant contribution to this research field
A novel mechanical-static dc circuit breaker was developed and endorsed for JT-60SA
Feasibility and reliability proved by previous R&D and deep qualification of prototype



Bypass switches

PF Bidirectional QPC



Pyrobreakers



September 2014 - Delivery at Naka Site



Static circuit breakers



Resistors

2011

2014

R&D
feasibility studies

Design, manuf. of full scale prototype 20 kA–5 kV
Prototype qualification
Manufacturing and routine tests of 13 units

Future studies for DEMO:
- operation in JT-60SA
- I-V range widening
- RAMI