



**MT 26**  
**International Conference**  
**on Magnet Technology**  
*Vancouver, Canada | 2019*

Contribution ID: **1091**

Type: **Poster Presentation**

## **Wed-Mo-Po3.09-03 [65]: Design and Test of 6 kV / 140 A Conduction Cooled Flux Coupling Type Superconducting Fault Current Limiter**

*Wednesday, 25 September 2019 09:30 (1h 45m)*

The paper presents the design and test results of a conduction cooled flux coupling type superconducting fault current limiter. The 6 kV / 140 A SFCL was tested with a 2500 MVA short-circuit generator at a high power test facility. The design of the limiter consists of two parallelly connected and magnetically coupled windings cooled by single stage cryocooler. Magnetically compensated windings made of REBCO tape gives a very low voltage on the limiter at a nominal current. Windings were connected to cooper current leads and cooled down to 72 K. This paper summarizes the design and the experimental results of SFCL short circuit tests.

**Primary authors:** Prof. KOZAK, Janusz (Electrotechnical Institute); Dr MAJKA, Michal (Lublin University of Technology)

**Presenter:** Dr MAJKA, Michal (Lublin University of Technology)

**Session Classification:** Wed-Mo-Po3.09 - Current Limiters II