FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITY OF WEST BOHEMIA

RICE

Experimental measurement of el. arc charakteristics – measurement setup description

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Abstract

This report describes basic hardware setup for the experimental arc characteristics measurement in the hall laboratory of RICE. The setup is designed to test dc-arc on a dc voltage in the range of 0-700V with operational dc-current up to 150 A. In order to emulate the load a different converters using different switching frequencies in the range 500-15000Hz has been used. The Dc circuit has been equipped with additional overvoltage and overcurrent protections.

Keywords

Power electronics converter; Arc characteristics; Testing