

A Single Loop Repetitive Controller for a Four Legs Matrix Converter Unit

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Abstract : The aim of this paper is to investigate the use of repetitive controller to regulate the output voltage of three phase four leg matrix converter for an Aircraft Ground Power Supply Unit. The proposed controller improve the steady state error and provide good regulation during different loading. Simulation results of 7.5 KW converter are presented to verify the operation of the proposed controller.

Keywords : matrix converter, Power electronics, controller, regulation

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