

عنوان مقاله:

Repetitive Control Scheme for a Dynamic Voltage Restorer DVR for Power Quality Improvement Using SVM

محل انتشار:

بیست و یکمین کنفرانس مهندسی برق ایران (سال: 1392)

تعداد صفحات اصل مقاله: 5

نویسندگان:

M. Karimian - *Electrical Engineering Department, Iran University of Science and Technology, Tehran, Iran*

A. Jalilian - *Electrical Engineering Department, Iran University of Science and Technology, Tehran, Iran*

H Hosseini - *Electrical Engineering Department, Iran University of Science and Technology, Tehran, Iran*

خلاصه مقاله:

This paper discusses a controller based on a repetitive control for a dynamic voltage restorer (DVR). It contains a feedforward term to improve transient response and a feedback term of repetitive control to achieve zero steady-state error of tracking sinusoidal signal. This controller can compensate power quality disturbances, such as voltage sag, harmonic voltages, and voltage imbalance, simultaneously. The control scheme is implemented in a test system with MATLAB/SIMULINK software. Simulation results show that the output voltage of controller can track the reference signal accurately and therefore compensate disturbances.

کلمات کلیدی:

Dynamic Voltage Restorer (DVR), Harmonic Distortion, Repetitive Control, Voltage Sag

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