

Active Power Filter Design by a Simple Heuristic Search

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Abstract. This article proposes a new design method based on a simple heuristic technique to eliminate harmonic in power systems. It is called modified least compensation current control (MLC) method. The effectiveness of the method is verified by comparison studies among the d-q axis, the synchronous-detection, and the sliding-window Fourier analysis methods, respectively. All are regarded as group-harmonic identification methods. The results confirm the effectiveness of our proposed MLC method.