

## Hysteresis, PI and Ramptime Current Control Techniques for APF: An experimental comparison

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### **ABSTRACT**

This paper presents an experimental comparison of three current control techniques, namely Hysteresis, PI and Ramptime Current Control Techniques. The testing platform is a 300 W shunt active power filter with diode rectifier load. Results are analysed both in the time domain and the frequency domain. The pros and cons of each of the above mentioned current control techniques are discussed. It is found that Ramptime Current Control is capable of incorporating the advantages of the two other control techniques with negligible shortcomings.

### **KEYWORDS:**

Active power filter; APF; Current control; Harmonics

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