

A NEW THREE PHASE SINGLE STAGE RECTIFIER

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ABSTRACT

A new three-phase single-stage rectifier is proposed in this paper. The features of the proposed rectifier are that produce input currents that does not have dead time regions and an output current that can be continuous when the converter is operating from maximum load to at least half of the load. In this paper, the operation of the new converter is explained, its features and design are discussed in results, and its operation is confirmed with experimental results obtained from a prototype.

KEYWORDS: AC–DC Power Conversion, Single-Stage Powerfactor Correction (SSPFC), Three-Level Converters, Three-Phase