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COMPLEX IMPROVEMENT OF POWER QUALITY AND ENSURE ELECTRICAL SAFETY IN LOCAL POWER SUPPLY SYSTEMS WHEN USING HYBRID FILTER COMPENSATING CONVERTERS

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Abstract

The main aspects of the application for the complex improvement of the electrical power quality

and the ensure electrical safety in the local power supply systems of the developed hybrid filter compensating converters (GFCC), which are based on a regulated filtering device, "distributive" static synchronous reactive power compensator or a multifunctional reactive power compensator are considered. GFCC are designed to compensate the load currents in the neutral conductor of a three-phase low-voltage network, symmetrical regulation (stabilization) voltage of the load and filtering the currents of higher harmonics in the network. References 14, figures 6, table 1.

Key words: local power supply system, voltage quality, electrical safety, hybrid filter compensating converter, transistor AC switch.

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