DOI: https://doi.org/10.15407/techned2018.06 . 038

ESTIMATION OF PARAMETERS AND CHARACTERISTICS OF POWER FACTOR CORRECTOR BASED ON PULSED AND QUASI-RESONANT CONVERTERS

Journal	Tekhnichna elektrodynamika
Publisher	Institute of Electrodynamics National Academy of Science of Ukraine
ISSN	1607-7970 (print), 2218-1903 (online)
Issue	No 6, 2018 (November/December)
Pages	38 – 41

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Abstract

Models of pulse converters (PC) with pulse-width modulation (PWM) and zero-current-switch quasi-resonant pulse converter (QRPC-ZCS) with pulse-frequency modulation (PFM), which operate as part of a power factor corrector (PFC), are proposed. Simulation allowed to get the

output characteristics and the dependences of the pulsation coefficients on the load variation of these converters. Also in this work comparative estimation of energy losses in PFC, transistor switches and the spectrums of consumption currents was made. References 9, figures 4, table 1.

Key words: power factor corrector, resonant circuit, quasi-resonant pulse converter, transistor switch.

Received: 05.03.2018
Accepted: 21.05.2018
Published: 23.10.2018

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