

DOI: <https://doi.org/10.15407/techned2020.02.023>

QUALITY CHARACTERISTICS OF SINGLE-PHASE BRIDGE RECTIFIER WITH ACTIVE LOAD AND CAPACITARY FILTER FOR POWER FROM THE CURRENT SOURCE

Journal	Tekhnichna elektrodynamika
Publisher	Institute of Electrodynamics National Academy of Science of Ukraine
ISSN	1607-7970 (print), 2218-1903 (online)
Issue	No 2, 2020 (March/April)
Pages	23 - 27

Authors

V.M. Spirin*, **V.M. Hubarevich****, **Yu.V. Marunia*****, **S.V. Salko**

Institute of Electrodynamics National Academy of Science of Ukraine,
Pr. Peremohy, 56, Kyiv, 03057, Ukraine,

e-mail: sspirin@ied.org.ua

* ORCID ID : <https://orcid.org/0000-0002-8065-1051>

** ORCID ID : <https://orcid.org/0000-0003-2416-9858>

*** ORCID ID : <https://orcid.org/0000-0003-0071-1702>

Abstract

The electromagnetic processes in a single-phase bridge rectifier with active load and a capacitive filter at power supply from a symmetric inductive-capacitive converter (ICC), made according to the scheme T1-LCL, are compared and its qualitative characteristics are compared with the Γ 1-LC scheme of ICC. The T1-LCL scheme has better electromagnetic compatibility ($\cos \Phi=0,95\div 0,99$, THDi