DOI: https://doi.org/10.15407/techned2016.06.020

CALCULATING THE PARAMETERS OF SYMMETRY-COMPENSATING DEVICE FOR THREE-PHASE ELECTRICAL POWER SYSTEM BASED ON THE SYSTEM DECOMPOSITION

Journal	Tekhnichna elektrodynamika
Publisher	Institute of Electrodynamics National Academy of Science of Ukraine
ISSN	1607-7970 (print), 2218-1903 (online)
Issue	№ 6, 2016 (November/December)
Pages	20 – 26

Authors
V.G. Yagup[1], K.V. Yagup[2]
[1] – Kharkiv National University of Municipal Economy,
Revolution str., 12, Kharkov, 61002, Ukraine,
e-mail: yagup_walery@mail.ru
[2] – Ukrainian State University of Railway Transport,
Feyerbakh sq. 7, Kharkov, 61050, Ukraine,
e-mail: kate.yag@rambler.ru

Abstract

The method of calculating parameters of symmetry-compensating device for three-phase power supply system based on the decomposition of the system is proposed. The system is divided into three parts, representing the power source, load and symmetry-compensating device. Processes in each part are considered separately, which significantly simplifies the analysis .Operation full compensation is determined by the active power balance conditions. Parametric

synthesis of symmetry-compensating device is carried through by means of optimization methods that are easily implemented in packages of computer mathematics. Application of the method is illustrated by the examples of three-wire and four-wire power supply systems. Refere nces 7, figures 5.

Key words: three-phase system, reactive power, compensating device, system decomposition, search engine optimization.

Received: 01.03.2016
Accepted: 31.08.2016
Published: 27.10.2016

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