

FOREWORD

This issue of the quarterly “Elektryka” contains nine papers. The authors work as researchers in the Faculties of Electrical Engineering in the Silesian University of Technology and Bialystok University of Technology.

The first paper by Roman Niestrój, Tadeusz Białoń and Marian Pasko contains analysis of selected dynamic properties of adaptive proportional observer of induction motor state variables. This paper summarizes results of several years' research.

Authors of the subsequent paper are Andrzej Sikora and Barbara Kulesz. They have characterized 12-pulse and 24-pulse systems transforming ac voltage into dc voltage.

The next paper is the result of team work conducted by Tomasz Trawiński, Marcin Szczygieł, Wojciech Kołton, Grzegorz Kłapyta, Marek Hojeński, Jan Morański and Krzysztof Ozdoba. Analysis of active and reactive power and power factor input in selected industrial company with diversified production range and wide activity profile is presented.

Piotr Zientek in his paper presents the causes for emergence of bearing currents in motors supplied directly from the network.

The work by Bogusław Butryna and Agnieszka Choroszucho presents elaborated algorithm of finite-difference frequency-domain method (FDFD).

Two subsequent papers focus on problems of power grid management. The first paper by Dariusz Lamber and Paweł Sowa describes system aiding decision making by the dispatchers responsible for managing operation of distribution network nN. The second paper by Janusz Kurpas and Paweł Sowa presents issues of long-term network asset management in OSD.

Authors Wojciech Barwinek and Arkadiusz Domeracki present issues of using GPS and GSM systems in localizing device.

Piotr Świszcz in the last paper discusses different models of electric arc as well as analytic method of determining electric arc voltage basing on Cassie/hybrid differential equation.

All the papers included in this issue of quarterly “Elektryka” received positive reviews from reviewers working at different universities.

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