

TRANSFORMERS MAGAZINE

ISSN 1849-3319 (Print) ISSN 1849-7268 (Digital)

EDITORIAL BOARD

Editor-in-Chief:

Mladen Banović, PhD, Merit Services Int., Croatia
mladen.banovic@transformers-magazine.com

EXECUTIVE EDITORS

Michel Duval, PhD, Hydro Quebec, Canada
Jean Sanchez, PhD, EDF, France
Michael Krüger, PhD, OMICRON electronics, Austria
Jin Sim, Jin Sim & Associates, Inc., USA
Juliano Montanha, SIEMENS, Brazil
Craig Adams, TRAFIX, Australia
Arne Petersen, Consulting engineer, Australia
Zhao Yongzhi, Shandong Electrical Engineering & Equipment Group Co., Ltd, China
Barry M. Mirzaei, LargePowerTransformers Inc., Canada
Bhaba P. Das, PhD, Hitachi Energy, Singapore

EDITORS

Daosheng Liu, Jiangxi University of Science and Technology, China
Mislav Trbusic, University of Maribor, Slovenia
Dr. Mohammad Yazdani-Asrami, University of Strathclyde, United Kingdom
Dr. Shuhong Wang, Xi'an Jiaotong University, China

ASSISTANT EDITOR

Pedro Henrique Aquino Barra, MSc,
EESC/USP - University of São Paulo, Brazil

GUEST EDITORS

See page 7
Art Director: Momir Blazek
Photo: Shutterstock.com
Language Editor: Lidija Kasik

ADVERTISING AND SUBSCRIPTION

Ante Prlic
+44 20 373 474 69
ante.prlic@merit-media.com

SUBSCRIPTION RATES:

Print edition: \$115 (1 year, 4 issues)
Digital edition: \$54 (1 year, 4 issues)
Online edition - full access: \$19 (1 year, 4 issues)
Online edition - free access: free of charge for registered users
www.transformers-magazine.com

TRANSFORMERS MAGAZINE

Transformers Magazine is published quarterly by Merit Media Int. d.o.o., Setaliste 150. brigade 10, 10 090 Zagreb, Croatia. Published articles do not represent official position of Merit Media Int. d.o.o. Merit Media Int. d.o.o. is not responsible for the content. The responsibility for articles rests upon the authors, and the responsibility for ads rests upon advertisers. Manuscripts, photos and other submitted documents are not returned.

REPRINT

Libraries are permitted to photocopy for the private use of patrons. Abstracting is permitted with credit to the source. A per-copy fee must be paid to the Publisher, contact Subscription. For other copying or republication permissions, contact Subscription. All rights reserved.
Publisher: Merit Media Int. d.o.o.
Setaliste 150. brigade 10,
10 090 Zagreb, Croatia
Contact: +385 1 7899 507
Contact: +44 20 373 474 69 UK
VAT number: HR09122628912
www.transformers-magazine.com
Bank name: Zagrebacka banka
Bank identifier code: ZABAH2X
Bank IBAN: HR8023600001102375121
Director: Mladen Banovic, PhD

Forewords to the Special Edition



Dear readers,

The expansion of renewable power generation capacity will drive the growth prospects for the global dry-type transformers in the forthcoming years. Some of the major contributing factors for the increasing adoption of renewable sources of energy like wind and solar energy are stringent carbon emission goals and the need to reduce the dependency on depleting fossil resources.

Discussions on transformer digitalization often focus on advantages delivered while a system is up and running. But digitalization and artificial intelligence can be applied long before equipment becomes operational: in specification, design, manufacture and configuration.

Transformer digitalization combined with artificial intelligence supports the creation of simulation models and the identification of trends. The results of simulation are no longer stranded in closed environments but can easily be shared for other uses throughout the device's lifecycle.

I trust this special edition will provide fresh insights into the rapidly evolving world of dry-type transformers.

Enjoy your reading,

Yash Thaker



Dry-type transformers are environmentally friendly, robust, and highly efficient. This type of transformer is mostly used where electricity needs to be transformed from the medium-voltage level down to low-voltage, or to another grid voltage. Transformers intended for this function are generally installed close to electrical loads and therefore almost invariably in close proximity to residential areas. Therefore, they must be particularly safe and highly reliable in operation.

Dry-type transformers show excellent electrical, mechanical, and thermal characteristics, and with epoxy resin insulation, they are especially eco-friendly and fire-resistant.

Some of the advantages of dry-type transformers are:

- easy installation
- pollution-free
- almost maintenance-free
- safe for property and people
- high resistance to short circuit

Forecasts indicate that dry-type transformers market will be increasing exponentially in the following years.

I hope that you will enjoy reading this special edition.

Humberto Moreno Páramo

