

# Preparation of manuscript for Archives of Electrical Engineering (AEE)

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**Abstract:** This instruction provides guidance on the preparation of manuscripts for the AEE journal. Use this document as a template and an instruction set for your article. The electronic file containing your manuscript will be further formatted by the Technical Editor of AEE. Manuscript titles should include uppercase and lowercase characters. Avoid writing long formulas with subscripts in the title; short formulas that identify the elements are fine (e.g., "Nd-Fe-B"). Define all symbols used in the abstract. Do not cite references in the abstract. The abstract should be complete in itself and not exceed 250 words.

**Key words:** a list of 3-6 key words placed in an alphabetical order and separated by commas has to be added immediately after the abstract

## 1. Introduction

This instruction contains guidelines for preparing manuscripts for the AEE journal – Open Access publication. The document serves as a template for *Microsoft Word*. If you use the LaTeX format, please transfer your document to Microsoft Word and then use this Template.

Before you begin to format your paper, write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

AEE is published in Open Access, which means that all articles are available on the internet to all users immediately upon publication free of charge for the readers. Authors are invited so a declaration that they are ready to cover the costs of printing their article.

## 2. Guidelines for AEE manuscript preparation

The manuscripts submitted for publication should not exceed 21 000 characters (ca. 12 pages of a manuscript written on an A4 sheet in Times New Roman, 10pt font size, single line spacing and 3.8 cm margins). The manuscripts, written in UK English, should be typed using a standard word processor according to the following instructions and should

include: a title page with the title of a manuscript, a short title; abstract; key words, text; list of references. A DOI number as well as received and revised data will be completed by Editor. When you open Template.doc, select “Print Layout” from the “View” menu in the menu bar (View > Print Layout). Then type over sections of Template.doc or cut and paste from another document and then use markup styles (Home > Styles). For example, the style at this point in the document is “main text”).

All papers submitted for publication are assessed on the basis of the mutual anonymity rule as to the names of reviewers and authors. Authors’ names and affiliations should not appear in the attached text/tables/figures.

If English is not your first language, ask an English-speaking colleague to proofread your manuscript. The manuscripts that fail to meet basic standards of literacy are likely to be immediately declined or after the language assessment, sent to the authors for linguistic improvement

The manuscripts are published on average within 3 months after their acceptance.

**Do not change the font sizes or line spacing to squeeze more text into a limited number of pages. Leave some open space around your figures.**

### 3. Math

Please use the Microsoft Equation 3.0 editor (comes with Microsoft Office 2007 and later versions) to build an equation in your manuscript.

To insert an equation in Word, choose **Insert**, then **Object**. This will bring up a dropdown menu, where the **Object** option should be chosen again. Pressing it opens a popup window, where the Create New option has to be clicked. Scrolling down the window allows to find Microsoft Equation 3.0.

Please note that the *MathML* editor as well as *MathType* editor is not recommended for typing equations.

#### 3.1. Equations

Equations should be typed within the text, centered, and should be numbered consecutively throughout the text. Their numbers should be typed in parentheses, flush right. Equations should be referred to in text, e.g. (1), except at the beginning of a sentence: “Equation (1) is ...”. All symbols appearing in equations have to be defined in the text, before or just after the equation. Please keep the same font in the formulas and text.

If the symbols are written in Times New Roman use italic fonts. Symbols of **vectors** and **matrices** should be written in bold fonts. Do not italicize Capital Greek fonts and mathematical symbols like e.g.: the derivative symbol  $d$ , max, min, etc. The indices of symbols that are indices themselves should be written in a clear manner.

Use a long dash (“−”) rather than a hyphen for a minus sign.

$$\frac{d}{dt} \left( \frac{\partial E_m(\mathbf{i}, \alpha)}{\partial i_n} \right) + R_n i_n = u_n, \quad n \in \{1, 2, \dots, N\}, \quad (1)$$

where:  $E_m$  is co-energy,  $\mathbf{i}$  is the current vector,  $\alpha$  is the angle describing the rotor position,  $R_n$  is the resistance, (NOT  $R_n$  - resistance),  $u_n$  is the total voltage of the  $n$ -th winding, etc. Note that the equation is centered using a center tab stop.

$$B_\Theta(\theta, r) = \lambda_0 \cdot \sum_{a=1}^3 \Theta_a(\theta, r), \quad (2)$$

where:  $\lambda_0$  is the unit permeance and  $\Theta_a(\theta, r)$  is the function of the MMF of winding “ $a$ ”.

#### 4. Unit symbols, abbreviations

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

SI units are recommended for use in formulas, drawings and tables., for example the SI unit for magnetic field strength  $H$  is A/m. Apply the center dot to separate compound units, e.g., “N·m.”

Do not mix complete spellings and abbreviations of units: “Wb/m<sup>2</sup>” or “webers per square meter,” not “webers/m<sup>2</sup>.” Spell units when they appear in text: “...a few henries...”, not “...a few H...”.

Use a zero before decimal points: “0.25,” not “.25.” Use “cm<sup>3</sup>,” not “cc.”

**Unit symbols, SI prefixes as well as abbreviations should be writing in accordance with the IEEE standard** – <http://www.ewh.ieee.org/soc/ias/pub-dept/abbreviation.pdf>

#### 5. Guidelines for graphics preparation and submission

The illustrations (line diagrams and photographs) should be suitable for direct reproduction. The lettering as well as the details should have proportional dimensions to maintain their legibility after the usual reduction. All illustrations should be numbered consecutively (Fig. X.).

All figures, figure captions, and tables in the text must be inserted into the correct places.

Figures should be referred to in text. Do not mix complete spellings: “Fig. 1.” or “Figures 1.” Use the abbreviation “Fig. 1,” even at the beginning of a sentence.

Figures, photos, tables or other parts of a manuscript that have previously appeared in another publication or are not the property of the authors must be properly acknowledged in the manuscript. Permission to republish these items must be obtained by the corresponding author from a person or institution holding the copyright, usually the publisher.

Authors are requested to send figures (diagrams, line drawings and photographic images) in separate computer files. JPG, PNG or TIF are the recommended file formats. Photographs, colour and greyscale figures should be at least at a resolution of 400dpi. Linear, including tables should be at a minimum of 600dpi.

All colour figures should be generated in the RGB or CMYK colour space, while greyscale images in the greyscale colour space.

The AEE journal allows an author to publish colour figures in an e-version at no charge, and automatically converts them to greyscale for printed versions. Authors wishing to use the facility of colour printing should consult the editors.

When preparing your figures/graphics etc., we suggest the use of the Arial 8 point font for axis numbers and Arial 9 point font for axis names. Figures/graphics etc. can be prepared in one of two proposed ways.

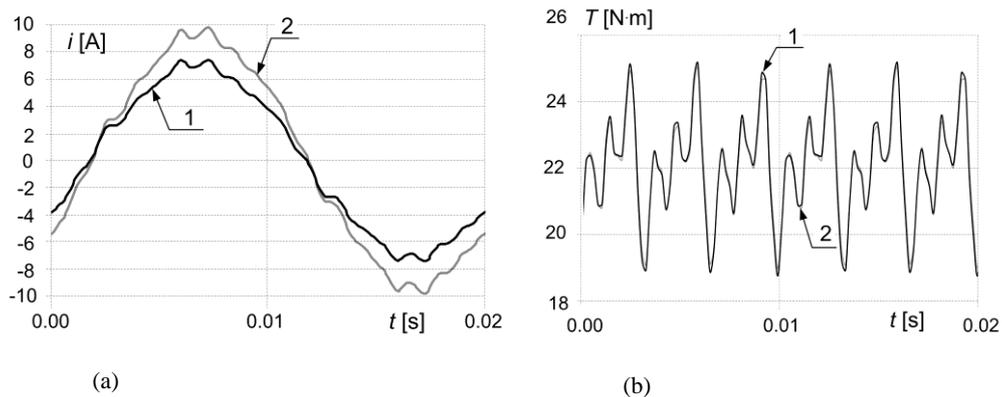


Fig. 1. Results of current and torque calculation for methods 1 and 2: current  $i$  versus time (a), torque  $T$  versus time (b)

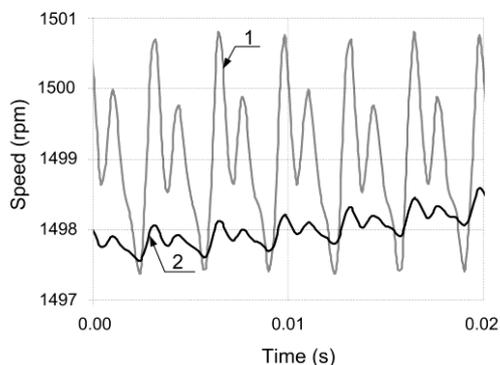


Fig. 2. Rotor speed as a function of time for motors 1 and 2

Tables are numbered with Arabic numerals. Use 9 point Times New Roman for the title of the table and 9 point Times New Roman for the filling of the table (9 in the case of symbols with subscripts).

Table 1. Title of table

Parameter name	Symbol	Value	Unit
Inductance 1	$L_1$	1.125	mH
Resistance 1	$R_1$	100	m $\Omega$
Inductance 2	$L_2$	1.125	mH
Resistance 2	$R_2$	100	m $\Omega$

## 6. Conclusions

A conclusion might elaborate on the importance of the work or suggest applications and extensions. Although a conclusion may review the main points of the manuscript, do not replicate the abstract as the conclusion.

### Appendix

Appendixes, if needed, appear before the acknowledgment.

### Acknowledgements

Use the singular heading even if you have many acknowledgments.

### References

References in text must be numbered consecutively by Arabic numerals placed in square brackets. Please make sure that you use full names of journals i.e. *Archives of Electrical Engineering*. Please ensure that all references in the Reference list are cited in the text and vice versa.

Please provide name(s) and initials of author(s), the title of the manuscript, editors (if any), the title of the journal or book, a volume number, the page range, and finally the year of publication in brackets.

You can use the rules presented on the site:

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Examples of the ways in which references should be cited are given below.

### Journal manuscript

- [1] Author1 A., Author2 A., *Title of paper*, Title of periodical, vol. x, no. x, pp. xxx-xxx (YEAR).  
*example*
- [2] Steentjes S., von Pfingsten G., Hombitzer M., Hameyer K., *Iron-loss model with consideration of minor loops applied to FE-simulations of electrical machines*, IEEE Transactions on Magnetics, vol. 49, no. 7, pp. 3945-3948 (2013).
- [3] Idziak P., *Computer Investigation of Diagnostic Signals in Dynamic Torque of Damaged Induction Motor*, Electrical Review (in Polish), to be published.
- [4] Cardwell W., *Finite element analysis of transient electromagnetic-thermal phenomena in a squirrel cage motor*, submitted for publication in IEEE Transactions on Magnetics.

### Conference manuscript

- [5] Author A., *Title of conference paper*, Unabbreviated Name of Conf., City of Conf., Country of Conf., pp. xxx-xxx (YEAR).  
*example*
- [6] Popescu M., Staton D.A., *Thermal aspects in power traction motors with permanent magnets*, Proceedings of XXIII Symposium Electromagnetic Phenomena in Nonlinear Circuits, Pilsen, Czech Republic, pp. 35-36 (2016).

### Book, book chapter and manual

- [7] Author1 A., Author2 A.B., *Title of book*, Name of the publisher (YEAR).  
*example*
- [8] Zienkiewicz O., Taylor R.L., *Finite Element method*, McGraw-Hill Book Company (2000).

### Patent

- [9] Author1 A., Author2 A., *Title of patent*, European Patent, EP xxx xxx (YEAR).  
*example*
- [10] Piech Z., Szlag W., *Elevator brake with magneto-rheological fluid*, European Patent, EP 2 197 774 B1 (2011).

### Thesis

- [11] Author A., *Title of thesis*, PhD Thesis, Department, University, City of Univ. (YEAR).  
*example*
- [12] Driesen J., *Coupled electromagnetic-thermal problems in electrical energy transducers*, PhD Thesis, Faculty of Applied Science, K.U. Leuven, Leuven (2000).

**For on electronic forms**

- [13] Author A., *Title of article*, in [Title of Conference, record as it appears on the copyright page], [copyright year] © [applicable copyright holder of the Conference Record]. doi: [DOI number].  
*example*
- [14] Kubo M., Yamamoto Y., Kondo T., Rajashekara K., Zhu B., *Zero-sequence current suppression for open-end winding induction motor drive with resonant controller*, in IEEE Applied Power Electronics Conference and Exposition (APEC), © APEC, 2016, doi: 10.1109/APEC.2016.7468259

**Website**

- [15] <http://www.aee.put.poznan.pl>, accessed April 2010.

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1. Submission of a manuscript to the *Archives of Electrical Engineering* journal is understood to imply that the manuscript is original, unpublished and is not being considered for publication elsewhere.
2. All manuscripts will be reviewed.
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  - b) if it is judged suitable two reviewers are selected and a double blind peer review process takes place,
  - c) based on the recommendations of the reviewers, the editor then decides whether the manuscript should be accepted in its present form, revised or rejected,
  - d) the author(s) is(are) informed by e-mail on the results of the reviewing procedure.
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