

FULL PAPER PREPARATION FOR ELECTRIMACS 2014, VALENCIA, SPAIN, 19TH-22ND OF MAY, 2014

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Abstract - The abstract should summarize the content of the paper, indicating its aim, starting point, original contribution and conclusions (up to 200 words).

Keyword - The work should be summarized here with a maximum of six keywords.

1 INTRODUCTION

Participants wishing to submit a paper are kindly invited to upload a six pages full papers using the website: <http://www.electrimacs2014.upv.es> . Full papers should be prepared using Microsoft Word 1997-2010, OpenOffice/LibreOffice or this L^AT_EX template. Papers should always be uploaded in .pdf format.

2 GENERAL FORMS

2.1 FONTS

The text should have justified right and left margins, in font type Times New Roman, size 10 and are single spaced with no indentations.

Please do NOT number the pages.

The following styles and sizes are to be used (Table I):

I. Document styles

Style	Characteristics
Paper Title (Heading)	14 pt, bold, centred, small caps, spacing 12pt before and after
Authors' names	12 pt, bold, centred.
Affiliation and e-mail	10 pt, centred.
Titles of each Section (Title 1)	Hierarchical numbered, 10 pt, centred, bold.
Titles of each Subsection (Title 2)	Hierarchical numbered, 10 pt, centred, italic.
Main body text (Normal)	10 pt, right and left justified.
Figure and table captions	10 pt, centred.
Table Title	10 pt, bold.
Table text	10 pt, right and left justified.

II. Columns

Width of column	75 mm
Space between columns	10 mm

III. Margins

Margins	
Left	25 mm
Right	25 mm
Upper	25 mm
Lower	25 mm

2.2 UNITS

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) The SI unit for magnetic field strength H is A/m.

2.3 FIGURES AND TABLES

Large figures, tables and equations should be avoided but may span both columns. In this case, they have to be placed at the end of the document (fig. 3 and (2)). Place figure captions below the figures and table captions above the tables. Please do not include captions as part of the figures. Do not put captions in "text boxes" linked to the figures. Do not put borders around the outside of your figures.

Tables are numbered with Roman numerals

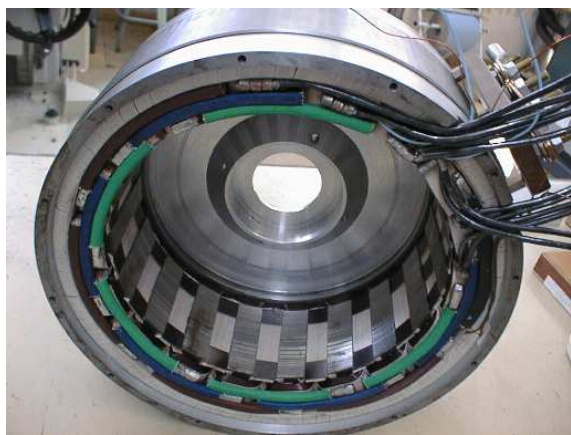


Fig. 1. Hybrid excitation synchronous machine stator.

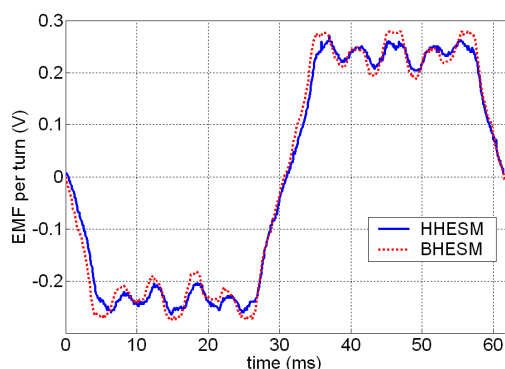


Fig. 2. EMF against time.

IV. Units for Magnetic Properties

Symbol	Quantity
B	magnetic flux density
H	magnetic field strength
μ	permeability

2.4 EQUATIONS

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1).

Expressions and equations must be centred. They need to be numbered as follows:

$$\Gamma = \frac{1}{2} i_{\alpha\beta}^T T_{32}^T \frac{dL}{d\theta} T_{32} i_{\alpha\beta} + \frac{d\Phi_{\alpha\beta\gamma}^T}{d\theta} i_{\alpha\beta} \quad (1)$$

References within the text will have the number of the equation within curved parenthesis, as in the case of (1). Variables will be in *Italics*, constants in *Normal*,

and matrices in **Bold**.

2.5 REFERENCES

Citations have to be numbered consecutively in square brackets [1]. The sentence punctuation follows the brackets. Multiple references as [2], [3] are each numbered with separate brackets [1]-[3]. When citing a section in a book, please give the relevant page numbers [2].

In sentences, refer simply to the reference number, as in [1]. Use only the abbreviation "Ref.". Do not use "Ref. [1]" except at the beginning of a sentence: "Ref. [1] shows ..."

The Reference list must appear numbered in square brackets in the references section and should have the following structure:

- Author(s),
- Title of the work or paper,
- Journal, conference, book or thesis,
- Publisher, in the case of books,
- Place in the case of conferences and theses.
- Volume and page numbers if necessary (example: pp. 32-36),
- Date of publication (with books and theses, the year of publication is sufficient).

Previous Electrimacs conferences or EIC journal citations are welcome.

ACKNOWLEDGEMENTS

The authors acknowledge...

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- [1] L. Charaabi, A.A. Naassani, E. Monmasson, I. Slama-Belkhdja and M-H Belmimoun, Choosing FPGA or DSP for control algorithms. The case of the DTC, Electrimacs, Hammamet, Tunisia, 17-20 April 2005.
- [2] N. Patin, L. Vido, E. Monmasson, J.P. Louis, M. Gabsi, and M. Lecrivain, Control of a Hybrid Excitation Synchronous Generator for Aircraft Applications, IEEE Trans. Industrial Electronics, vol. 55, no. 10, pp. 3772-3783, Oct. 2008.
- [3] L. Idkhajine, E. Monmasson, A. Maalouf, FPGA-Based Sensorless Controller for Synchronous Machine using an Extended Kalman Filter, EPE'09 Conference, Barcelona, Spain, 8-10 September 2009.

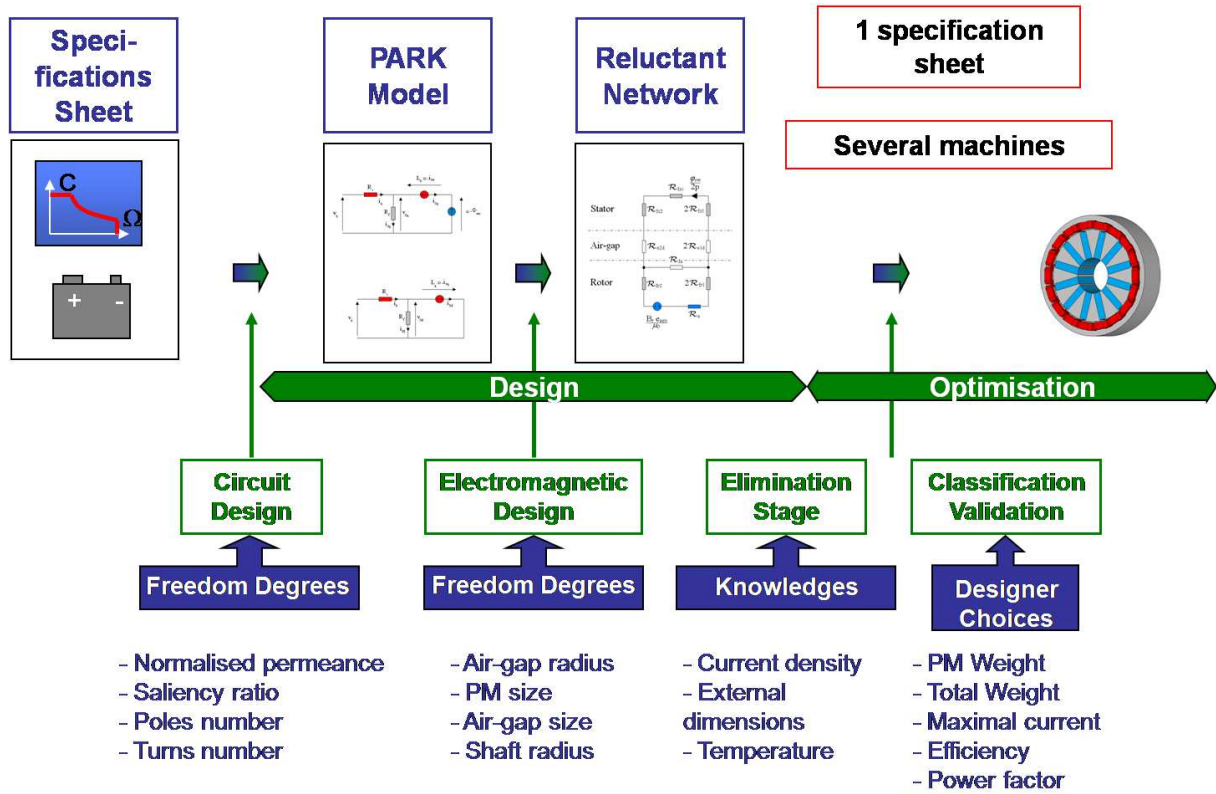


Fig. 3. Large figure example.

Large equation example:

$$A^{(I_3)}(x, y, t) = \sum_{\nu_1} \left(E_{0\nu_1}^{(3)} + \sum_{\nu_3 \geq 1} E_{0\nu_1, \nu_3}^{(3)} \cosh(\nu_3 a_s (y - h_a - e - h_e)) \cdot \cos(\nu_3 a_s (x - 2(w_e + w_d))) \right) e^{j\nu_1 \omega_0} \quad (2)$$