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*Index Terms*—About four key words or phrases in alphabetical order, separated by commas.

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*Kata Kunci*—Sekitar empat kata kunci atau frasa dalam urutan abjad yang terpisah oleh koma.

# Introduction

T

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# 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.).” An exception is when English units are used as identifiers in trade, such as “3½ in disk drive.” Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

# Figures and Tables

Table 1. Units for Magnetic Properties

|  |  |  |
| --- | --- | --- |
| Symbol | Quantity | Conversion from Gaussian and  CGS EMU to SI a |
| Φ | magnetic flux | 1 Mx → 10−8 Wb = 10−8 V·s |
| *B* | magnetic flux density,  magnetic induction | 1 G → 10−4 T = 10−4 Wb/m2 |
| *H* | magnetic field strength | 1 Oe → 103/(4π) A/m |
| *m* | magnetic moment | 1 erg/G = 1 emu  → 10−3 A·m2 = 10−3 J/T |
| *M* | magnetization | 1 erg/(G·cm3) = 1 emu/cm3  → 103 A/m |
| 4π*M* | magnetization | 1 G → 103/(4π) A/m |
| σ | specific magnetization | 1 erg/(G·g) = 1 emu/g → 1 A·m2/kg |
| *j* | magnetic dipole  moment | 1 erg/G = 1 emu  → 4π × 10−10 Wb·m |
| *J* | magnetic polarization | 1 erg/(G·cm3) = 1 emu/cm3  → 4π × 10−4 T |
| χ*,* κ | susceptibility | 1 → 4π |
| χρ | mass susceptibility | 1 cm3/g → 4π × 10−3 m3/kg |
| μ | permeability | 1 → 4π × 10−7 H/m  = 4π × 10−7 Wb/(A·m) |
| μr | relative permeability | μ → μr |
| *w, W* | energy density | 1 erg/cm3 → 10−1 J/m3 |
| *N, D* | demagnetizing factor | 1 → 1/(4π) |

No vertical lines in table. Statements that serve as captions for the entire table do not need footnote letters.

aGaussian units are the same as cgs emu for magnetostatics; Mx = maxwell, G = gauss, Oe = oersted; Wb = weber, V = volt, s = second, T = tesla, m = meter, A = ampere, J = joule, kg = kilogram, H = henry.

Large figures and tables may span both columns. Place figure captions below the figures; place table titles 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.



Fig. 1. SRM geometry with FEM mesh: 6/6 stator/rotor

For paper in English, use the abbreviation "Fig." even at the beginning of a sentence. Do not abbreviate "Table.". If paper is writen in Bahasa Indonesia, use "Gambar. " and "Tabel" as usual.

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Fig. 2. Torque characteristics versus rotor position and different current density of exciting current: 6/6 stator/rotor

Tables and figures should be centered. Place table captions above the tables (Table I) and figure captions below the figures (Figures 1 and 2). Use *Table Title Style* for table caption and use *Figure Captions Style* for figure. Figures and tables may span across both columns (Fig.1). Tables are numbered with Roman numerals (*Table Title style*,8 pt, centered).

# Math And Units

## Math

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). If you are using *Word,* use either the Microsoft Equation Editor or the *MathType* add-on (http://www.mathtype.com) for equations in your paper (Insert | Object | Create New | Microsoft Equation *or* MathType Equation). “Float over text” should *not* be selected.

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U = R I (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)

(3)

## Units

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses). **This applies to papers in data storage.** For example, write “15 Gb/cm2 (100 Gb/in2).” An exception is when English units are used as identifiers in trade, such as “3½ in disk drive.” Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

The SI unit for magnetic field strength *H* is A/m. However, if you wish to use units of T, either refer to magnetic flux density *B* or magnetic field strength symbolized as µ0*H*. Use the center dot to separate compound units, e.g., “A·m2.”

# Refrence and Citation

Number citations consecutively in square brackets [1]. The sentence punctuation follows the brackets [2]. Multiple references [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 [3]. Do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] shows ...."

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