SLOVENSKI STANDARD
oSIST prEN IEC 80000-6:2026

01-september-2026

Veličine in enote - 6. del: Elektromagnetizem

Quantities and units - Part 6: Electromagnetism

Größen und Einheiten - Teil 6: Elektromagnetismus

Grandeurs et unités - Partie 6: Electromagnétisme

Ta slovenski standard je istoveten z: **prEN IEC 80000-6:2026**

ICS:

01.040.29	Elektrotehnika (Slovarji)	Electrical engineering (Vocabularies)
17.220.01	Elektrika. Magnetizem. Splošni vidiki	Electricity. Magnetism. General aspects

oSIST prEN IEC 80000-6:2026 **en**

25/854/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 80000-6 ED3**	
DATE OF CIRCULATION: **2026-07-17**	CLOSING DATE FOR VOTING: **2026-10-09**
SUPERSEDES DOCUMENTS: **25/845/RR**	

IEC TC 25 : QUANTITIES AND UNITS	
SECRETARIAT: Italy	SECRETARY: Ms Daniela Zambelli
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 1,TC 77,TC 85,TC 106,CIS/D,CIS/I	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Electricity transmission and distribution,Electromagnetic Compatibility	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

Attention IEC-CENELEC parallel voting

The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

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Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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TITLE:

Quantities and units - Part 6: Electromagnetism

PROPOSED STABILITY DATE: 2030

NOTE FROM TC/SC OFFICERS:

Link to Committee Draft for Vote (CDV) online document:

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How to access

This link leads you to the Online Standards Development (OSD) platform for National Mirror Committee's (NMC) comments. The project draft may be found further down this document.

Resource materials

We recommend NCs to review the available materials to better understand the member commenting on the OSD platform. This includes the:

- OSD NC roles overview
- How to add and submit comments to the IEC

Contact

Should you require any assistance, please contact the IEC IT Helpdesk.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Quantities and units - Part 6: Electromagnetism

FOREWORD

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IEC 80000-6 has been prepared by IEC technical committee 25: Quantities and units, and their letter symbols in close cooperation with ISO/TC 12, Quantities and units. It is an International Standard.

This third edition of IEC 80000-6 cancels and replaces the second edition published in 2022. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) SI Brochure 9th edition is cited for the definitions of units.
b) Corrections to IEV entries

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English..

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

IEC 80000 consists of the following parts, under the general title *Quantities and units*:

c) *Part 6: Electromagnetism*
d) *Part 13: Information science and technology*
e) *Part 15: Logarithmic and related quantities, and their units*
f) *Part 16: Printing and writing rules*
g) *Part 17: Time dependency*

The following parts are published by ISO:

h) *Part 1: General*
i) *Part 2: Mathematics*
j) *Part 3: Space and time*
k) *Part 4: Mechanics*
l) *Part 5: Thermodynamics*
m) *Part 7: Light*
n) *Part 8: Acoustics*
o) *Part 9: Physical chemistry and molecular physics*
p) *Part 10: Atomic and nuclear physics*
q) *Part 11: Characteristic numbers*
r) *Part 12: Condensed matter physics*

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

INTRODUCTION

0.1 Tables of quantities

The names in English of the most important quantities within the field of this document are given together with their symbols and, in most cases, their definitions. The definitions are given for identification of the quantities in the International System of Quantities (ISQ), listed in Table 1; they are not intended to be complete.

The scalar, vectorial or tensorial character of quantities is pointed out, especially when this is needed for the definitions.

In most cases, only one name and only one symbol for the quantity are given; where two or more names or two or more symbols are given for one quantity and no special distinction is made, they are on an equal footing. When two types of italic letters exist (for example as with ϑ and θ; φ and Φ; a and a ;) only one of these is given. This does not mean that the other is not equally acceptable. It is recommended that such variants should not be given different meanings. A symbol within parenthesis implies that it is an alternative symbol, to be used when, in a particular context, the main symbol is in use with a different meaning.

0.2 Units

0.2.1 General

The names of units for the corresponding quantities are given together with the international symbols and the definitions. These unit names are language-dependent, but the symbols are international and the same in all languages. For further information, see the SI Brochure (9th edition 2019) from BIPM and ISO 80000-1.

The units are arranged in the following way:

a) The base SI units are given first. The SI units have been adopted by the General Conference on Weights and Measures (Conférence Générale des Poids et Mesures, CGPM). The use of base SI units, and their decimal multiples and submultiples formed with the SI prefixes are recommended, although the decimal multiples and submultiples are not explicitly mentioned. The order of the units is s, m, kg, A, K, mol, cd.

b) Some non-SI units are then given, being those accepted by the International Committee for Weights and Measures (Comité International des Poids et Mesures, CIPM), or by the International Organization of Legal Metrology (Organisation Internationale de Métrologie Légale, OIML), or by ISO and IEC, for use with the SI.

c) Non-SI units that are not recommended are given only in annexes in some parts of ISO 80000 and IEC 80000. These annexes are informative, in the first place for the conversion factors, and are not integral parts of the standard. These deprecated units are arranged in two groups:

   1) units in the CGS system with special names, see Annex A;

   2) units based on the foot, pound, and some other related units.

0.2.2 Remark on units for quantities of dimension one, or dimensionless quantities

The coherent unit for any quantity of dimension one, also called a dimensionless quantity, is the number one, symbol 1. When the value of such a quantity is expressed, the unit symbol 1 is generally not written out explicitly.

EXAMPLE 1 Refractive index n = 1,53 × 1 = 1,53

Prefixes shall not be used to form multiples or submultiples of this unit. Instead of prefixes, powers of 10 are recommended.