



SLOVENSKI STANDARD

SIST EN 60446:2007

01-oktober-2007

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SIST EN 60446:2000

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!`XYbh]Z_ UWYUj cXb]_cj `n`VUfj La]`U]`ýhYj]_La]`f197 `* \$(* .&\$ \$+L

Basic and safety principles for man-machine interface, marking and identification -
Identification of conductors by colours or alphanumerics

Grund- und Sicherheitsregeln für die Mensch-Maschine-Schnittstelle - Kennzeichnung
von Leitern durch Farben oder alphanumerische Zeichen

Principes fondamentaux et de sécurité pour les interfaces homme-machines, le
marquage et l'identification - Identification des conducteurs par des couleurs ou par des
reperes numériques

Ta slovenski standard je istoveten z: EN 60446:2007

ICS:

01.070	Barvno kodiranje	Colour coding
29.020	Elektrotehnika na splošno	Electrical engineering in general

SIST EN 60446:2007 en,de

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English version

**Basic and safety principles for man-machine interface,
marking and identification -
Identification of conductors by colours or alphanumerics
(IEC 60446:2007)**

Principes fondamentaux et de sécurité
pour les interfaces homme-machines,
le marquage et l'identification -
Identification des conducteurs par des
couleurs ou par des repères numériques
(CEI 60446:2007)

Grund- und Sicherheitsregeln
für die Mensch-Maschine-Schnittstelle -
Kennzeichnung von Leitern durch Farben
oder alphanumerische Zeichen
(IEC 60446:2007)

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This European Standard was approved by CENELEC on 2007-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in two official versions (English and German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 16/461/FDIS, future edition 4 of IEC 60446, prepared by IEC TC 16, Basic and safety principles for man-machine interface, marking and identification, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60446 on 2007-06-01.

This European Standard supersedes EN 60446:1999.

EN 60446:2007 includes the following significant technical changes with respect to EN 60446:1999:

- addition of Clause 3 – Terms and definitions;
- addition of Clause 4 – Identification of conductors;
- addition of subclauses 5.3.4 to 5.3.6 – Use of bi-colour combinations;
- addition of subclause 6.2 – Identification of certain designated conductors;
- addition of a new Annex A (informative) “Identification of certain designated conductors by means of colour code and alphanumeric”;
- deletion of the old Annex A (informative) “Methods of marking PEN conductors in different countries”.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2008-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2010-03-01

Annex ZA has been added by CENELEC.
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Endorsement notice

The text of the International Standard IEC 60446:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60079-11	NOTE Harmonized as EN 60079-11:2007 (not modified).
IEC 60601	NOTE Harmonized in EN 60601 series (not modified).
IEC 60757	NOTE Harmonized as HD 457 S1:1985 (not modified).

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC Guide 104	- ¹⁾	The preparation of safety publications and the - use of basic safety publications and group safety publications		-
ISO/IEC Guide 51	- ¹⁾	Safety aspects - Guidelines for their inclusion - in standards		-

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¹⁾ Undated reference.

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INTERNATIONAL STANDARD

IEC 60446

Fourth edition
2007-05

BASIC SAFETY PUBLICATION

**Basic and safety principles for man-machine
interface, marking and identification –**

**Identification of conductors by colours
or alphanumerics**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**BASIC AND SAFETY PRINCIPLES FOR MAN-MACHINE INTERFACE,
MARKING AND IDENTIFICATION –****IDENTIFICATION OF CONDUCTORS BY COLOURS OR ALPHANUMERICS**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60446 has been prepared by IEC technical committee 16: Basic and safety principles for man-machine interface, marking and identification.

This fourth edition cancels and replaces the third edition, published in 1999 and constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

- a) addition of Clause 3 – Terms and definitions
- b) addition of Clause 4 – Identification of conductors
- c) addition of subclauses 5.3.4 to 5.3.6 – Use of bi-colour combinations
- d) addition of subclause 6.2 – Identification of certain designated conductors
- e) addition of a new Annex A (informative) "Identification of certain designated conductors by means of colour code and alphanumeric"
- f) deletion of the old Annex A (informative) "Methods of marking PEN conductors in different countries".

It has the status of a basic safety publication in accordance with IEC Guide 104.

The text of this standard is based on the following documents:

FDIS	Report on voting
16/461/FDIS	16/462/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

This International Standard is a basic safety publication is intended for use by technical committees in the preparation of standards in accordance and with the principles laid down in IEC Guide 104 and in ISO/IEC Guide 51.

It should be noted that one of the responsibilities of a technical committee is, wherever possible, to include or refer to requirements of basic safety publications in standards for equipment within its scope. Consequently, the requirements of this basic safety publication apply only if they are included, or are referred to in those standards.

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