SLOVENSKI STANDARD
SIST EN 80416-1:2009

01-april-2009

Nadomeġļ a:
SIST EN 80416-1:2004

Osnovna naļ ela grafiļ nih simbolov za rabo na opremi - 1. del: Oblikovanje grafiļ nih simbolov za registracijo (IEC 80416-1:2008)

Basic principles for graphical symbols for use on equipment - Part 1: Creation of graphical symbols for registration (IEC 80416-1:2008)

Allgemeine Grundlagen für Graphische Symbole auf Geräten und Einrichtungen - Teil 1: Gestaltung Graphischer Symbole für die Registrierung (IEC 80416-1:2008)

Principes de base pour les symboles graphiques utilisables sur le matériel - Partie 1: Création des symboles graphiques pour enregistrement (CEI 80416-1:2008)

Ta slovenski standard je istoveten z: EN 80416-1:2009

ICS:

01.080.20	Grafiļ ni simboli za posebno opremo	Graphical symbols for use on specific equipment

SIST EN 80416-1:2009 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 80416-1

February 2009

ICS 01.080.01

Supersedes EN 80416-1:2001

English version

Basic principles for graphical symbols for use on equipment - Part 1: Creation of graphical symbols for registration

(IEC 80416-1:2008)

Principes de base
pour les symboles graphiques
utilisables sur le matériel -
Partie 1: Création des symboles
graphiques pour enregistrement
(CEI 80416-1:2008)

Allgemeine Grundlagen
für Graphische Symbole
auf Geräten und Einrichtungen -
Teil 1: Gestaltung Graphischer Symbole
für die Registrierung
(IEC 80416-1:2008)

This European Standard was approved by CENELEC on 2009-02-01. 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 three official versions (English, French, 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: avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 80416-1:2009 E

Foreword

The text of document 3C/1590/FDIS, future edition 2 of IEC 80416-1, prepared by SC 3C, Graphical symbols for use on equipment, of IEC TC 3, Information structures, documentation and graphical symbols, in cooperation with ISO/TC 145/SC 3, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 80416-1 on 2009-02-01.

This European Standard supersedes EN 80416-1:2001.

EN 80416-1:2009 includes the following significant technical changes with respect to EN 80416-1:2001:

– Clause 8 in EN 80416-1:2001 is moved to Clause 4;

– mandatory requirement for the line width in symbol originals is changed to 2 mm or 4 mm (see 6th paragraph of 7.3);

– for negation of a graphical symbol, a single diagonal bar is allowed in addition to two diagonal bars at right angles;

– a new meaning of negation “do not” is allowed;

– some freedom is given for use of the basic pattern such as for symbol originals to be within the 75 mm square instead of the octagon;

– Annex A (normative) is newly introduced for provisions on title, description and notes;

– the nature of notes is changed to be purely informative; and

– Clause 10 in EN 80416-1:2001 is moved to Annex C (informative).

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) 2009-11-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-02-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 80416-1:2008 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 60027	NOTE	Harmonized in EN 60027 series (not modified).
IEC 80416-3	NOTE	Harmonized as EN 80416-3:2002 (not modified).
ISO 31	NOTE	ISO 80000 and IEC 80000 are being harmonized by CEN and CENELEC.
ISO 3098	NOTE	Harmonized in EN ISO 3098 series (not modified).
ISO 81714-1	NOTE	Harmonized as EN ISO 81714-1:1999 (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.

Publication	Year	Title	EN/HD	Year
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
ISO/IEC Guide 71	- [1)]	Guidelines for standards developers to address the needs of older persons and persons with disabilities	-	-
ISO/IEC Guide 74	- [1)]	Graphical symbols - Technical guidelines for the consideration of consumers' needs	-	-
ISO 7000	- [1)]	Graphical symbols for use on equipment - Index and synopsis	-	-
ISO/IEC 80416-2	- [1)]	Basic principles for graphical symbols for use on equipment - Part 2: Form and use of arrows	EN 80416-2	2001 [2)]

[1)] Undated reference.

[2)] Valid edition at date of issue.

IEC 80416-1

Edition 2.0 2008-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Basic principles for graphical symbols for use on equipment – Part 1: Creation of graphical symbols for registration

Principes de base pour les symboles graphiques utilisables sur le matériel – Partie 1: Création des symboles graphiques pour enregistrement

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

BASIC PRINCIPLES FOR GRAPHICAL SYMBOLS FOR USE ON EQUIPMENT –

Part 1: Creation of graphical symbols for registration

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 80416-1 has been prepared by IEC subcommittee 3C: Graphical symbols for use on equipment, of IEC technical committee 3: Information structures, documentation and graphical symbols.

This International Standard has been prepared in co-operation with ISO/TC145/SC 3.

It is published as a double logo standard.

This second edition cancels and replaces the first edition published in 2001. This edition constitutes a technical revision.

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

a) Clause 8 in the previous edition is moved to Clause 4;

b) Mandatory requirement for the line width in symbol originals is changed to 2 mm or 4 mm (see 6th paragraph of 7.3);

c) For negation of a graphical symbol, a single diagonal bar is allowed in addition to two diagonal bars at right angles;

d) A new meaning of negation “do not” is allowed;

e) Some freedom is given for use of the basic pattern such as for symbol originals to be within the 75 mm square instead of the octagon;

f) Annex A (normative) is newly introduced for provisions on title, description and notes;

g) The nature of notes is changed to be purely informative; and

h) Clause 10 in the previous edition is moved to Annex C (informative).

It has the status of a horizontal standard in accordance with IEC Guide 108.

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

FDIS	Report on voting
3C/1590/FDIS	3C/1609/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. In ISO, the standard has been approved by 7 P members out of 7 having cast a vote.

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

In order to collect all requirements concerning relevant basic principles within one single numerical series, ISO technical committee 145: Graphical symbols and IEC technical committee 3 agreed to publish all parts of this International Standard within the 80416 series. The Technical Management Board of ISO and the Standardization Management Board of IEC have decided that, for each part of this series, one organisation shall be chosen responsible. The technical committees involved have agreed not to change any part of International Standard 80416 without mutual agreement.

International Standard 80416 consists of the following parts, published under the general title *Basic principles for graphical symbols for use on equipment*:

Part 1: 2008, Creation of graphical symbols for registration (*published by IEC*)

Part 2: 2001, Form and use of arrows (*published by ISO*)

Part 3: 2002, Guidelines for the application of graphical symbols (*published by IEC*)

Part 4: 2005, Guidelines for the adaptation of graphical symbols for use on screen and displays (icons) (*published by ISO*)

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.

INTRODUCTION

A graphical symbol is defined as a visually perceptible figure with a particular meaning used to transmit information independently of language. Graphical symbols are used on equipment for a wide range of purposes. The understanding of such symbols can be improved by consistent design. This is particularly important where families of symbols are used in one location or on similar equipment. Good design also helps to maintain the legibility of symbols when they are reduced to small dimensions for application. Thus, there is a need to standardize the principles for creating graphical symbols for use on equipment to ensure visual clarity, to maintain consistency and thereby to improve recognition.

International Standard 80416 is a multi-part standard which provides basic principles and guidelines for the creation of graphical symbols for use on equipment (Parts 1 and 2) and also principles and guidelines for adapting registered graphical symbols for use in practice (Parts 3 and 4).

This part of the multi-part standard addresses the basic rules used to create graphical symbols for use on equipment, including line widths, negation elements, and the use of the basic pattern. These design principles should be applied to all graphical symbols for use on equipment. They are required for graphical symbols for registration in IEC 60417 and ISO 7000.

It is recommended that symbol originals intended for specific fields of application are also published in the appropriate technical product standard.