

Osnovna načela grafičnih simbolov za rabo na opremi - 1. del: Oblikovanje grafičnih simbolov (IEC 80416-1:2001)

Basic principles for graphical symbols for use on equipment - Part 1: Creation of symbol originals (IEC 80416-1:2001)

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EUROPEAN STANDARD

EN 80416-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2001

ICS 01.080.020

Supersedes HD 571 S1:1990

English version

Basic principles for graphical symbols for use on equipment
Part 1: Creation of symbol originals
(IEC 80416-1:2001)

Principes de base pour les symboles
graphiques utilisables sur le matériel
Partie 1: Création des dessins originaux
de symboles
(CEI 80416-1:2001)

Allgemeine Grundlagen für Graphische
Symbole auf Einrichtungen
Teil 1: Gestaltung Graphischer Symbole
(IEC 80416-1:2001)

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This European Standard was approved by CENELEC on 2001-07-03. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 3C/600/FDIS, future edition 1 of IEC 80416-1, prepared by SC 3C, Graphical symbols for use on equipment, of IEC TC 3, Documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 80416-1 on 2001-07-03.

This European Standard supersedes HD 571 S1:1990.

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) 2002-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-07-01

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative. Annex ZA has been added by CENELEC.

Endorsement notice

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The text of the International Standard IEC 80416-1:2001 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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>
ISO 80416-2	2001	Basic principles for graphical symbols for use on equipment Part 2: Form and use of arrows	EN 80416-2	2001
ISO 7000	1)	Graphical symbols for use on equipment - Index and synopsis	-	-
IEC 60417-1	1)	Graphical symbols for use on equipment Part 1: Overview and application	EN 60417-1	1999 ²⁾
IEC 60417-2	1)	Part 2: Symbol originals	EN 60417-2	1999 ²⁾
ISO 3864		Safety colours and safety signs	-	-

1) undated reference.

2) valid edition at date of issue.

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NORME
INTERNATIONALE
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STANDARD

CEI
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80416-1

Première édition
First edition
2001-06

**Principes de base pour les symboles graphiques
utilisables sur le matériel –**

**Partie 1:
Création des dessins originaux de symboles**

iTeh STANDARD PREVIEW

(standard iTeh)
**Basic principles for graphical symbols
for use on equipment –**

SIST EN 80416-1:2004

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**Part 1:
Creation of symbol originals**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

BASIC PRINCIPLES FOR GRAPHICAL SYMBOLS FOR USE ON EQUIPMENT –

Part 1: Creation of symbol originals

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this international standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

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.

This standard replaces ISO 3461-1 (1988) and IEC 60416 (1988).

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

FDIS	Report on voting
3C/600/FDIS	3C/654/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 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 Committee of Action 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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

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

- | | |
|---------------|--|
| Part 1: 2001, | Creation of symbol originals (<i>published by IEC</i>) |
| Part 2: 2001, | Form and use of arrows (<i>published by ISO</i>) |
| Part 3, | Guidelines for the application of graphical symbols (<i>being prepared, and to be published by IEC</i>) |
| Part 4, | Supplementary guidelines for the adaptation of graphical symbols for use on screen and displays (icons) (<i>under consideration</i>) |

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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

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Introduction

A graphical symbol is a visually perceptible figure used to transmit information independently of language. Graphical symbols are used on equipment for a wide range of purposes. For such symbols, consistency in the design of families of symbols used in one location or on similar equipment is an important issue, as is legibility when these symbols are reduced to small dimensions. 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.

This multi-part standard addresses the basic rules used to create graphical symbols for use on equipment, including line widths, form and use of arrows, negation elements, and use of the basic pattern which serves as a guideline for drawing equipment symbols. These design principles are required to be used for all graphical symbols for use on equipment: the standardized graphical symbols of which are found in ISO 7000 and IEC 60417.

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