

# INTERNATIONAL STANDARD



HORIZONTAL PUBLICATION

**Graphical symbols for use on equipment – Guidelines for the inclusion of graphical symbols in iec publications**



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**Graphical symbols for use on equipment – Guidelines for the inclusion of graphical symbols in iec publications**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 Basic requirement for graphical symbols for use on equipment to be included in IEC publications .....	9
5 Principal guidelines .....	10
5.1 General.....	10
5.2 Coherency of graphical symbols for use on equipment.....	10
6 Responsibilities of product committees using horizontal publication IEC 60417 .....	10
6.1 General.....	10
6.2 Application of horizontal publication IEC 60417.....	10
6.3 New change requests to SDB owner committee for IEC 60417 (SC 3C) .....	10
Annex A (normative) Hard and soft procedures .....	12
A.1 General.....	12
A.2 Hard procedures .....	12
A.3 Soft procedures .....	13
A.3.1 General .....	13
A.3.2 Soft procedures for designing new graphical symbols.....	13
A.3.3 Soft procedures for using existing graphical symbols.....	13
Annex B (normative) Requirements and examples of applications of graphical symbols for use on equipment .....	14
B.1 General.....	14
B.2 Examples.....	14
B.2.1 Examples of graphical symbols for use on equipment and safety signs.....	14
B.2.2 Examples of safety related graphical symbols for use on equipment and safety signs .....	16
B.2.3 Requirements and examples of negation of graphical symbols for use on equipment.....	16
Annex C (normative) CR and symbol proposal form for a new graphical symbol.....	18
C.1 Proposal form for change request (CR form).....	18
C.2 Proposal form for new graphical symbol.....	18
Bibliography.....	20
Figure C.1 – Proposal form and illustration of new graphical symbol.....	19
Table A.1 – Step-by-step approach to the hard procedures.....	12
Table B.1 – Examples of graphical symbols for use on equipment as safety symbols to form safety signs .....	14
Table B.2 – Examples of safety related graphical symbols for use on equipment and safety signs .....	16
Table B.3 – Examples of negation of the meaning of graphical symbols for use on equipment.....	17
Table C.1 – Visual appearance of the CR form .....	18

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**GRAPHICAL SYMBOLS FOR USE ON EQUIPMENT –  
GUIDELINES FOR THE INCLUSION OF GRAPHICAL  
SYMBOLS IN IEC PUBLICATIONS**

## FOREWORD

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IEC 62648 has been prepared by subcommittee 3C: Graphical symbols for use on equipment, of IEC technical committee 3: Documentation, graphical symbols and representations of technical information. It is an International Standard.

This second edition cancels and replaces the first edition published in 2012 and Amendment 1:2015. This edition constitutes a technical revision.

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

- a) new terms and definitions in IEC Guide 108 have been incorporated;
- b) the designation "IEC 60417 SDB" has been introduced following the publication of IEC Supplement:2022, Annex SK;
- c) Subclause 6.3 has been adapted in line with IEC Guide 108:2019, Clause 8.

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

Draft	Report on voting
3C/2497/CDV	3C/2525/RVC

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

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

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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- amended.

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## 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 graphical symbols when they are reduced to small dimensions for application. Thus, there is a need for those involved in technical works to collaborate with experts in subcommittee 3C: Graphical symbols for use on equipment, of IEC technical committee 3: Documentation, graphical symbols and representations of technical information (SC 3C) responsible for developing and maintaining graphical symbols for use on equipment to be standardized in the horizontal publication IEC 60417.

This document is intended for IEC committees working on graphical symbols for use on equipment to be included in their product publications. It provides them with guidelines and requirements on how to create their own graphical symbols for use on equipment as well as on how to consult SC 3C so that these symbols are also included in advance or in parallel in IEC 60417.

This document provides commonly agreeable procedures in SC 3C and in other committees developing product publications, including graphical symbols for use on equipment in accordance with IEC Guide 108.

# GRAPHICAL SYMBOLS FOR USE ON EQUIPMENT – GUIDELINES FOR THE INCLUSION OF GRAPHICAL SYMBOLS IN IEC PUBLICATIONS

## 1 Scope

This document provides guidelines to help ensure that the requirement in ISO/IEC Directives, Part 2:2021, 28.6.2 is met, such that graphical symbols for use on equipment in IEC product publications are consistent with the requirements of horizontal publications IEC 60417 and ISO 7000. This document is intended to be used by any IEC and ISO committees to develop graphical symbols for use on equipment for inclusion in their product publications.

This document is based on and develops upon IEC Guide 108:2019, Clause 8.

For the creation of new graphical symbols for use on equipment, IEC 80416-1 and ISO 80416-2 are applied. For the application of standardized graphical symbols for use on equipment, IEC 80416-3 and ISO 80416-4 are applied.

This horizontal publication is primarily intended for use by committees in the preparation of publications in accordance with the principles laid down in IEC Guide 108.

One of the responsibilities of a committee is, wherever applicable, to make use of horizontal publications in the preparation of its publications. The contents of this horizontal publication will not apply unless specifically referred to or included in the relevant publications.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60417, *Graphical symbols for use on equipment*, available at <http://www.graphical-symbols.info/equipment>

IEC 80416-1:2008, *Basic principles for graphical symbols for use on equipment – Part 1: Creation of graphical symbols for registration*

IEC 80416-3, *Basic principles for graphical symbols for use on equipment – Part 3: Guidelines for the application of graphical symbols*

IEC Guide 108:2019, *Guidelines for ensuring the coherence of IEC publications – Horizontal publications, horizontal publications and their application*

ISO/IEC Directives Part 1:2022, *Procedures for the technical work*

ISO/IEC Directives Part 2:2021, *Principles and rules for the structure and drafting of ISO and IEC documents*

ISO/IEC Directives, Supplement:2022, *Procedures specific to IEC*