

Australian Standard™

**Graphical symbols for use on
equipment**

Part 2.7: Safety aspects

This Australian Standard was prepared by Committee TE-013, Symbols, Units and Quantities for Electrotechnology. It was approved on behalf of the Council of Standards Australia on 18 March 2004.
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Originated as part of AS 1104S—1978.
Revised and redesignated in part as AS 60417.2.7—2004.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-013, Symbols, Units and Quantities for Electrotechnology, to supersede, in part, AS 1104—1978, *Informative symbols for use on electrical and electronic equipment*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard is identical with and partially reproduced from IEC 60417-2:1998, *Graphical symbols for use on equipment*, Part 2 *Symbol originals*, and Amendment No. 1 (2000) and Amendment No. 2 (2002).

The objective of this Standard is to provide designers, manufacturers and users of electrotechnical equipment with uniform symbols for informative purposes to enable the operation and proper functioning of machinery, appliances and equipment.

This Standard is part of a series, the designations and Part titles being as follows:

AS/IEC

- 60417.1 Part 1: Overview and application
- 60417.2 Part 2: Symbol originals
 - 60417.2.1 Part 2.1: General application
 - 60417.2.2 Part 2.2: Audiovisual equipment
 - 60417.2.3 Part 2.3: Telephone and communications
 - 60417.2.4 Part 2.4: Maritime navigation
 - 60417.2.5 Part 2.5: Home electric devices
 - 60417.2.6 Part 2.6: Medical equipment
 - 60417.2.7 Part 2.7: Safety aspects (this Standard)

The symbol originals have been presented in Parts so that users can purchase those Parts of interest.

Part 1 contains the description and purpose of the symbols as well as the full index to the symbols.

Symbols for use on equipment are not intended to be used to represent electrical components in circuit diagrams or the like; symbols for this purpose are the subject of AS/NZS 1102, *Graphical symbols for electrotechnology* (series).

The frame size for the symbols is 75 mm square. Up to three symbols are presented on each page.

As this Standard is reproduced from an international Standard, the following applies:

- (a) The French text has been retained.
- (b) Its number appears on the cover and title page while the international Standard number appears only on the cover.
- (c) In the source text, 'this International Standard' should read 'this Australian Standard'.
- (d) A full point substitutes for a comma when referring to a decimal marker.

The following amendments apply to the text of the Scope:

- 1 *Add* the following at the end of the first paragraph:
This Standard provides symbols for use in safety aspects.
- 2 *Add* the following before the words ‘the space’ in Note 1:
or symbols that are not relevant to this Part,
- 3 *Delete* Note 2.
- 4 *Delete* the second last paragraph.

The amendments are indicated with a bar line set against the amended text.

INTRODUCTION

This part of IEC 60417 contains graphical symbols for use on equipment created following the basic principles of International Standard 80416, jointly developed with ISO, which consists of the following parts under the general title *Basic principles for graphical symbols for use on equipment*:

- Part 1: Creation of symbol originals (2001, *published by IEC*);
- Part 2: Form and use of arrows (2001, *published by ISO*);
- Part 3: Guidelines for the application of graphical symbols (*in preparation, will be published by IEC*);
- Part 4: Supplementary guidelines for the adaptation of graphical symbols for use on screens and display (icons) (*in preparation, will be published by IEC*).

IEC 60417 is divided into two parts:

IEC 60417-1 contains a presentation of the graphical symbols with the corresponding descriptions in numerical order. It is complemented by an alphabetical index and a graphical survey of the symbols. Additional information is provided to the user by the classifications according to form and function, and the examples of application.

IEC 60417-2 contains a presentation of the full size symbol originals for reproduction purposes in numerical order. The position and size of the graphical symbols within the basic pattern, according to the rules of IEC 80416-1:2001, can be determined with the help of the transparent sheet of the basic pattern. The symbols are normally drawn to a minimum accuracy of ± 1 mm.

Reference should be made to IEC 80416-1:2001 for rules for the application and modification of the graphical symbols.

In some cases there are two alternative graphical representations for one function, for example symbol 5107A and symbol 5107B. In these cases, a reference will be found in the appropriate place to the alternative graphical representations which appear on an additional sheet.

A similar problem occurs when there are combinations of figures with different qualifying elements, for example symbol 5277. In these cases additional sheets are added and the symbols numbered 5277-1, 5277-2, etc.

During the revision of IEC 60417 editorial changes have been made to some graphical representations to correct previous errors, to correct the line thickness to 2 mm, to fit the drawings to the basic pattern and to ensure consistency between symbols in a group.

The user is informed that this standard is updated frequently in order to incorporate new symbols.

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Graphical symbols for use on equipment**Part 2.7:
Safety aspects****1 Scope**

This part of IEC 60417 contains graphical symbols included in IEC 60417-1 for reproduction purposes.

NOTE 1 Generally, three of the original drawings are shown on each page. If there are unused symbol numbers, the space is left free.

NOTE 2 The original date of issue of each symbol is shown in table 1.

For rules for the application and modification of the graphical symbols, and for supplementary information including references, refer to IEC 80416-1: Basic principles for graphical symbols for use on equipment – Part 1: Creation of symbols originals.

To show the arrangement of the graphical symbol in the basic pattern, as standardized in IEC 80416-1:2001, the basic pattern is included as a transparent sheet.

For each symbol the real dimensions of the width x and the height y are given in multiples of the nominal dimension $a = 50$ mm.