

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Boxes and enclosures for electrical accessories for household and similar fixed electrical installations –  
Part 1: General requirements**

**Boîtes et enveloppes pour appareillage électrique pour installations électriques fixes pour usages domestiques et analogues –  
Partie 1: Exigences générales**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ICS 29.120.10

ISBN 978-2-8327-0076-1

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**BOXES AND ENCLOSURES FOR ELECTRICAL ACCESSORIES FOR  
HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –****Part 1: General requirements**

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IEC 60670-1 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This third edition cancels and replaces the second edition published in 2015. This edition constitutes a technical revision.

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

- a) the classifications, markings and tests of boxes and enclosures for use and installation in ambient temperature below normal use are modified;
- b) the test for the durability of markings is modified;
- c) a test is added for fixing screws protected by caps;

- d) a normative annex is added to specify the tests applied to boxes and enclosures declared with an IK code;
- e) requirements for the resistance to abnormal heat and fire of internal parts not necessary to retain current carrying parts are specified.

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

Draft	Report on voting
23B/1533/FDIS	23B/1551/RVD

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

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).

In this publication the following print types are used:

- requirements proper: in roman type.
- *test specifications: in italic type.*
- notes: in smaller roman type.

A list of all parts in the IEC 60670 series, published under the general title *Boxes and enclosures for electrical accessories for household and similar fixed installations*, can be found on the IEC website.

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

- reconfirmed,
- withdrawn, or
- revised.

# BOXES AND ENCLOSURES FOR ELECTRICAL ACCESSORIES FOR HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –

## Part 1: General requirements

### 1 Scope

This part of IEC 60670 applies to boxes, enclosures and parts of enclosures (hereafter called "boxes" and "enclosures") for electrical accessories with a rated voltage not exceeding 1 000 V AC and 1 500 V DC intended for household or similar fixed electrical installations, either indoors or outdoors.

Boxes and enclosures complying with this document are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average over a period of 24 h does not exceed +35 °C, with a lower limit of the ambient air temperature of –5 °C.

Other temperatures outside the above range can apply according to the classification of the boxes and the enclosures.

This document is intended to apply to boxes and enclosures for electrical accessories within the scope of IEC technical committee 23.

A box or an enclosure which is an integral part of an electrical accessory and provides protection for that accessory against external influences (for example mechanical impact, ingress of solid objects or water, etc.) is covered by the relevant standard for such an accessory.

This document gives test requirements for boxes and enclosures declared with IK code, see Annex B (normative).

This document also applies to types of boxes and enclosures as modified in IEC 60670-21, IEC 60670-22, IEC 60670-23, and IEC 60670-24.

This document does not apply to:

- ceiling roses;
- luminaire support and couplers;
- boxes, enclosures and parts of enclosures specifically designed to be used for cable trunking and ducting systems complying with IEC 61084 and which are not intended to be installed outside of these systems.

### 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 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:2020, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*