

**ELEKTRILISATARVIKUTE KARBID JA ÜMBRISED
MAJAPIDAMIS- JA MUUDES TAOLISTES KOHTKINDLATES
ELEKTRIPAIGALDISTES. OSA 1: ÜLDNÕUDED**

**Boxes and enclosures for electrical accessories for
household and similar fixed electrical installations -
Part 1: General requirements (IEC 60670-1:2015)**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN IEC 60670-1:2021+A11:2021 sisaldab Euroopa standardi EN IEC 60670-1:2021 ja selle muudatuse A11:2021 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60670-1:2021+A11:2021 consists of the English text of the European standard EN IEC 60670-1:2021 and its amendment A11:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.04.2021, muudatus A11 16.04.2021.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 16.04.2021, for A1 16.04.2021.
Muudatusega A11 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega A11 A11 . Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A11 is indicated in the text by tags A11 A11 . The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 29.120.10

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English Version

**Boxes and enclosures for electrical accessories for household
and similar fixed electrical installations - Part 1: General
requirements
(IEC 60670-1:2015)**

Boîtes et enveloppes pour appareillage électrique pour
installations électriques fixes pour usages domestiques et
analogues - Partie 1: Exigences générales
(IEC 60670-1:2015)

Dosen und Gehäuse für Installationsgeräte für Haushalt
und ähnliche ortsfeste elektrische Installationen - Teil 1:
Allgemeine Anforderungen
(IEC 60670-1:2015)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN IEC 60670-1:2021) consists of the text of IEC 60670-1:2015 prepared by SC 23B "Plugs, socket-outlets and switches" of IEC/TC 23 "Electrical accessories".

The following dates are fixed:

- latest date by which the document has to be implemented (dop) 2021-10-16
at national level by publication of an identical national
standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2023-04-09
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60670 (series)	NOTE	Harmonized as EN 60670 (series)
IEC 60670-21	NOTE	Harmonized as EN 60670-21
IEC 60670-22	NOTE	Harmonized as EN 60670-22
IEC 60670-23	NOTE	Harmonized as EN 60670-23
IEC 60670-24	NOTE	Harmonized as EN 60670-24
IEC 62444	NOTE	Harmonized as EN 62444
ISO 1456	NOTE	Harmonized as EN ISO 1456
ISO 2081	NOTE	Harmonized as EN ISO 2081

A11 Amendment A11 European foreword

This document (EN IEC 60670-1:2021/A11:2021) has been prepared by CLC/TC 23BX "Switches, boxes and enclosures for household and similar purposes, plugs and socket outlet for D.C."

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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 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**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.120.10

ISBN 978-2-8322-2337-6

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

This second edition cancels and replaces the first edition published in 2002 and its Amendment 1:2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: Review of classification Table 1.

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

FDIS	Report on voting
23B/1176/FDIS	23B/1184/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.

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

In this publication, the following print types are used:

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: 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 electrical installations* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

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 a.c. and 1 500 V d.c. intended for household or similar fixed electrical installations, either indoors or outdoors.

Boxes and enclosures complying with this standard 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.

During the installation the temperature may be outside the above temperature range according to the classification of the boxes and the enclosures.

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

This standard may be used as a reference document for other IEC technical committees and subcommittees.

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 standard does not apply to

- ceiling roses;
- luminaire supporting 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-75:1997¹, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:2003, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

¹ First edition. This edition has been replaced in 2014 by IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60423:2007, *Conduit systems for cable management – Outside diameters of conduits for electrical installations and threads for conduits and fittings*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60529:1989/AMD1:1999/AMD2:2013, *Degrees of protection provided by enclosures (IP Code)*

IEC 60695-2-11:2000², *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products*

IEC 60695-10-2:2003³, *Fire hazard testing – Part 10-2: Abnormal heat – Ball pressure test*

IEC 60981:2004, *Extra-heavy duty rigid steel conduits*

IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*

IEC 61140:2001, *Protection against electric shock – Common aspects for installation and equipment*

IEC 61140:2001/AMD1:2004, *Protection against electric shock – Common aspects for installation and equipment*

ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

enclosure

combination of parts, such as boxes, covers, cover-plates, lids, box extensions, accessories, etc., providing after assembly and installation as in normal use, an appropriate protection against external influences, and a defined protection against contact with enclosed live parts from any accessible direction

Note 1 to entry: See Annex A.

3.2

box

part of an enclosure provided with means for fixing a cover, cover-plate, accessory, etc., and intended to receive accessories (such as socket-outlets, switches, etc.)

3.3

box extension

part of an enclosure which is intended to extend a box for the purpose of either increasing the internal volume of the box or enclosure or to adjust for mounting the box flush or semi-flush with the finished surface of a wall or the like

² First edition. This edition has been replaced in 2014 by IEC 60695-2-11:2014, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products (GWEPT)*

³ Second edition. This edition has been replaced in 2014 by IEC 60695-10-2:2014, *Fire hazard testing – Part 10-2: Abnormal heat – Ball pressure test method*