

Kilbid ja ümbrised majapidamismasinatele ja nendega sarnaste fikseeritud elektriseadmete lisavarustusele. Osa 1: Üldnõuded

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

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

<p>Käesolev Eesti standard EVS-EN 60670-1:2005 sisaldab Euroopa standardi EN 60670-1:2005+AC:2007 ingliskeelset teksti.</p>	<p>This Estonian standard EVS-EN 60670-1:2005 consists of the English text of the European standard EN 60670-1:2005+AC:2007.</p>
<p>Standard on kinnitatud Eesti Standardikeskuse 13.06.2005 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p>	<p>This standard is ratified with the order of Estonian Centre for Standardisation dated 13.06.2005 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p>
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<p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>The standard is available from Estonian standardisation organisation.</p>

ICS 29.120.10

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EUROPEAN STANDARD

EN 60670-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2005

ICS 29.120.10

Incorporates Corrigendum November 2007

English version

**Boxes and enclosures for electrical accessories
for household and similar fixed electrical installations**

Part 1: General requirements

(IEC 60670-1:2002 + corrigendum 2003, modified)

Boîtes et enveloppes pour appareillage
électrique pour installations électriques
fixes pour usages domestiques et
analogues
Partie 1: Règles générales
(CEI 60670-1:2002 + corrigendum 2003,
modifiée)

Dosen und Gehäuse
für Installationsgeräte für Haushalt
und ähnliche ortsfeste elektrische
Installationen
Teil 1: Allgemeine Anforderungen
(IEC 60670-1:2002 + Corrigendum 2003,
modifiziert)

This European Standard was approved by CENELEC on 2004-09-22. 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.

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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 the International Standard IEC 60670-1:2002, prepared by SC 23B, Plugs, socket-outlets and switches, of IEC TC 23, Electrical accessories, together with the common modifications prepared by the Technical Committee CENELEC TC 23B, Switches for household and similar fixed electrical installations, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60670-1 on 2004-09-22.

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) 2005-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-07-01

In this standard, the following print types are used:

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

Figures and annexes which are additional to those in IEC 60670-1 are prefixed "Z".

The contents of the corrigendum of November 2007 have been included in this copy.

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Endorsement notice

The text of the International Standard IEC 60670-1:2002 + corrigendum February 2003 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

2 Normative references

Delete the reference to IEC 60981:1989.

7 Classification

Delete from Table 1 classifications 7.7.1, 7.7.2, 7.7.2.1 and 7.7.2.2.

Add to Table 1 the following:

7.8 The provision for fixing accessories to boxes	7.8.1 Boxes supplied with screws	
	7.8.2 Boxes intended to receive screws	
	7.8.3 Boxes intended to receive claws	
	7.8.4 Boxes intended to receive other means	

8 Marking

8.1 **Move** e) after the third paragraph.

Replace i) by:

i) void

Replace j) by:

j) the letter H or information for boxes and enclosures classified according to 7.2.1.3

8.2 **Delete** in NOTE 1 the word "impression".

11 Provision for earthing

11.2 **Delete** this subclause

12 Construction

12.2 **Replace** in the NOTE the words "at least 5 mm" by "at least 2 mm";

12.5 **Replace** the first dash of the first paragraph by:

- a conduit or suitable fitting connecting it to the box or enclosure, and/or

Delete in the second paragraph the words " and/or IEC 60981".

Delete NL in NOTE 2.

12.9 **Delete** the NOTE.

Replace the second paragraph by:

Thread-forming and thread-cutting screws intended only for mechanical assembly may be used provided they are supplied together with one of the pieces with which they are intended to be assembled.

12.10 **Replace** the text of this subclause by:

Flush type boxes and enclosures other than for hollow walls, shall be provided with obvious fixing means for their suitable attachment to the wall.

Screws, additional mechanical supports and obvious design features, which prevent the displacement of the box or the enclosure, are considered to be adequate fixing means.

Compliance is checked by inspection taking into account the normal conditions of the intended use.

Boxes and enclosures not fulfilling at least one of the above requirements shall be tested as follows.

For boxes and enclosures having an internal volume less than $0,4 \text{ dm}^3$, compliance is checked by the following test.

For boxes and parts of enclosures to be embedded in masonry the specimen is mounted into the mounting block shown in Figure Z1. The gap between the main external profile of the specimen and the internal profile of the receptacle shall be at least 20 mm and for parts that project from the main profile never less than 10 mm. The block is filled by the material specified in the manufactures instructions, or by plaster where the manufacturers instructions do not specify the material.

The assembly is kept at ambient temperature for $(10 + 1/0)$ days.

The auxiliary device described in Figure Z2 is mounted on the specimen and the screws are tightened with a torque equal to two thirds of the applicable torque given in Table 4.

The assembly is then fixed to the mounting plate (A) of an apparatus shown in Figure Z3, so that the axes of the screws are normal to the mounting plane.

The total weight of the device including the principal weight (PW) shall be $(72 \pm 0,1) \text{ N}$, and the supplementary weight (SW) shall be $(8 \pm 0,1) \text{ N}$.

The supplementary weight (SW) and the principal weight (PW) are introduced on the axis of the device and fixed by the carrier (C) (see Figure Z3).

The supplementary weight shall fall from a height of 50 mm onto the principal weight 10 times.

After the test the specimen shall not have been displaced by more than 0,5 mm from the mounting block.

12.11 **Replace** the title and the first paragraph by:

Boxes and enclosures classified according to 7.2.1.3

Boxes and enclosures for hollow walls classified according to 7.2.1.3 shall provide suitable means for fixing the box or the enclosure to hollow walls.

12.12 **Delete** this subclause.

12.13 **Replace** Table 5 by:

Table 5 – Torque test values for cable glands

Diameter of test rod mm	Torque Nm	
	Metal glands	Glands of insulating material
Up to and including 8	4,0	2,5
Over 8 up to and including 14	6,3	3,8
Over 14 up to and including 20	7,5	5,0
Over 20	10,0	7,5

12.14 **Add** after the first paragraph the following paragraph:

Boxes and enclosures classified according to 7.4.3 shall withstand the tests of 12.14.1 and 12.14.2.

Delete in the second paragraph the words "*or IEC 60981*".

15 Mechanical strength

15.1 **Replace** the third paragraph by:

The specimen shall be subjected to an impact test with a vertical hammer test apparatus (see Figure 8).

15.2 **Delete** the reference 15.2.1.

Delete 15.2.2.

16 Resistance to heat

16.3 **Delete** this subclause.

Figures

Delete Figures 2, 3, 4, 19, 20 and **replace** the relevant titles by "void".

Replace the title of Figure 7 by:

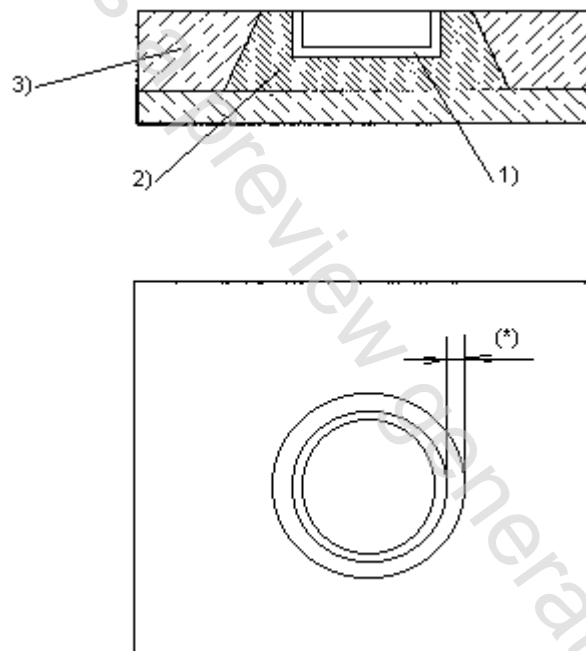
Mounting block for flush type boxes and enclosures in order to apply blows on the rear surface

Replace in the key to Figure 8 "(100 ± 1) g" by "(1 000 ± 1) g".

Replace the title of Figure 18 by:

Verification of fixing means for boxes and enclosures classified according to 7.2.1.3 (see 12.11)

Add the following new figures:

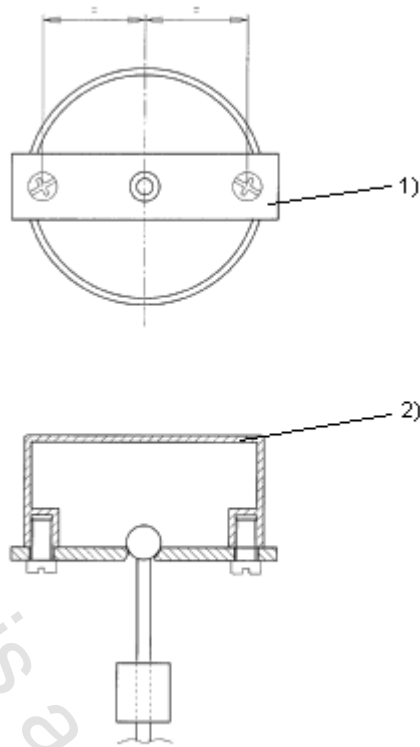


Key

- 1) Specimen
- 2) Plaster
- 3) Block of wood

(*) The gap between the main external profile of the box and the internal profile of the receptacle shall be at least 20 mm, and for parts which project from the main profile never less than 10 mm.

**Figure Z1 – Example of mounting block for boxes to be embedded in masonry
(flush type and semi-flush type)**

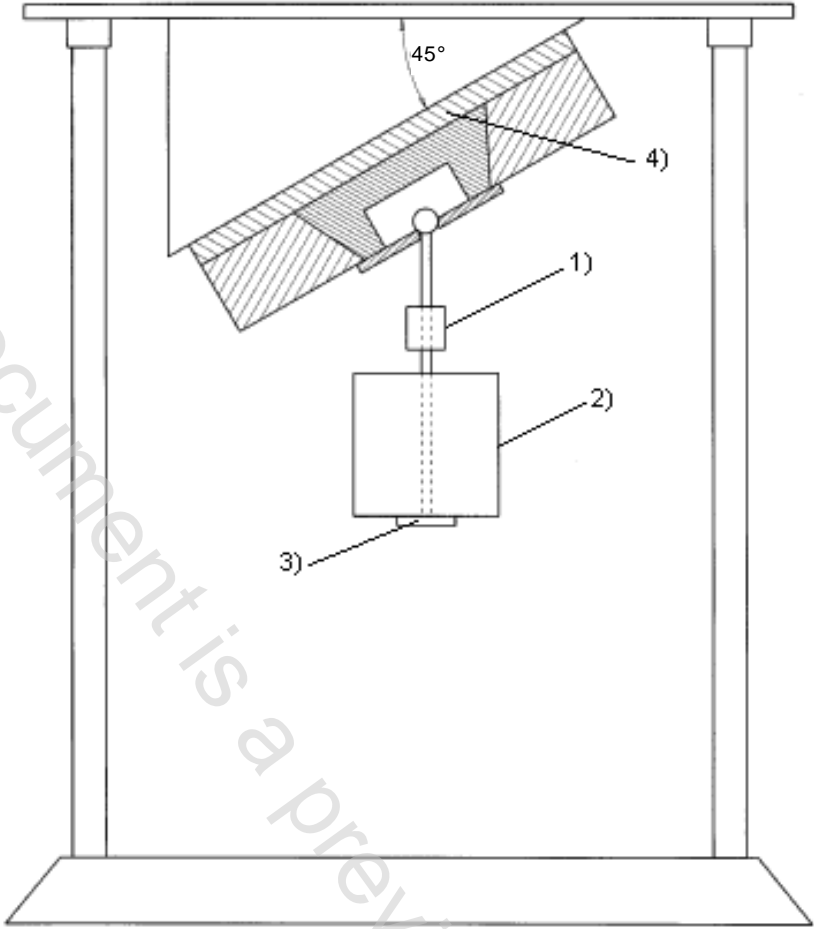


Key

- 1) Auxiliary device
- 2) Specimen

Figure Z2 – Example of the fixing of the auxiliary device mounted on a specimen

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Key

- 1) Supplementary weight (SW)
- 2) Principal weight (PW)
- 3) Carrier (C)
- 4) Mounting plate (A)

Figure Z3 – Example of test apparatus for the test according to 12.10

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

NOTE Where 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>
IEC 60068-2-75	1997	Environmental testing Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980 ¹⁾
IEC 60423 (mod)	1993	Conduits for electrical purposes - Outside diameters of conduits for electrical installations and threads for conduits and fittings	EN 60423	1994
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60695-2-11	2000	Fire hazard testing Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001
IEC 60695-10-2	1995 ²⁾	Part 10-2: Guidance and test methods for the minimization of the effects of abnormal heat on electrotechnical products involved in fires - Method for testing products made from non-metallic materials for resistance to heat using the ball pressure test	-	-
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
IEC 61084	Series	Cable trunking and ducting systems for electrical installations	-	-
IEC 61140	2001	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2002

¹⁾ HD 214 S2 is superseded by EN 60112:2003, which is based on IEC 60112:2003.

²⁾ IEC 60695-10-2:2003 was endorsed as EN 60695-10-2:2003.

Annex ZB (normative)

Special national conditions

Special national condition: National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions.

NOTE If it affects harmonization, it forms part of the European Standard / Harmonization Document.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

<u>Clause</u>	<u>Special national condition</u>
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9	Spain
---	--------------

Boxes shall comply with the standard sheets specified in the Spanish Standard UNE 20451. Screws are included in some of these standard sheets because screws are considered as a dimensional requirement.

11.1	Denmark
------	----------------

Due to the lack of an earthing conductor in many existing old buildings, boxes and enclosures requiring earth connection cannot normally be used.

12.5	Czech Republic, Netherlands, United Kingdom
------	--

Inlets according to 7.3.3 in boxes intended to receive switches or socket-outlets shall have spout(s) with adequate inlet stops.

12.9	Czech Republic, Netherlands
------	------------------------------------

Flush-type boxes shall have metal inserts and be provided with metal screws having ISO metric thread.

United Kingdom

Boxes shall be provided with metal threads so as to ensure safety. Thread-forming or thread-cutting screws shall not be permitted.

Annex ZC (informative)

A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CENELEC national member.

This European Standard falls under Directive 73/23/EEC.

NOTE (from CEN/CENELEC IR Part 2:2002 , 2.17) Where standards fall under EC Directives, it is the view of the Commission of the European Communities (OJ No C 59, 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

A-deviations in an EFTA-country are valid instead of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Deviation</u>
---------------	------------------

9	Malta (Electrical Accessories Regulations, 2004)
---	---

	United Kingdom (UK Plug and Socket Safety Regulations, 1994)
--	---

Boxes intended to accommodate socket-outlets or connection units to BS 1363 shall have provision for two M3.5 fixing screws at the following fixing centres, in accordance with BS 4662:

- at centres of 60,3 mm \pm 0,2 mm on the horizontal or vertical centrelines for boxes intended to accommodate 1-gang socket-outlets or connection units
- at centres of 120,6 mm \pm 0,3 mm on the horizontal or vertical centrelines for boxes intended to accommodate 2-gang socket-outlets or connection units
- at centres of 180,9 mm \pm 0,4 mm on the horizontal or vertical centrelines for boxes intended to accommodate 3-gang socket-outlets or connection units.

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2002-12

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domestiques et analogues –**

**Partie 1:
Règles générales**

**Boxes and enclosures for electrical accessories
for household and similar fixed electrical
installations –**

**Part 1:
General requirements**



Numéro de référence
Reference number
CEI/IEC 60670-1:2002

Numérotation des publications

Depuis le 1er janvier 1997, les publications de la CEI sont numérotées à partir de 60000. Ainsi, la CEI 34-1 devient la CEI 60034-1.

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

BOÎTES ET ENVELOPPES POUR APPAREILLAGE ÉLECTRIQUE POUR INSTALLATIONS ÉLECTRIQUES FIXES POUR USAGES DOMESTIQUES ET ANALOGUES –

Partie 1: Règles générales

AVANT-PROPOS

- 1) La CEI (Commission Electrotechnique Internationale) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de la CEI). La CEI a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, la CEI, entre autres activités, publie des Normes internationales. Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec la CEI, participent également aux travaux. La CEI collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
- 2) Les décisions ou accords officiels de la CEI concernant les questions techniques représentent, dans la mesure du possible, un accord international sur les sujets étudiés, étant donné que les Comités nationaux intéressés sont représentés dans chaque comité d'études.
- 3) Les documents produits se présentent sous la forme de recommandations internationales. Ils sont publiés comme normes, spécifications techniques, rapports techniques ou guides, et agréés comme tels par les Comités nationaux.
- 4) Dans le but d'encourager l'unification internationale, les Comités nationaux de la CEI s'engagent à appliquer de façon transparente, dans toute la mesure possible, les Normes internationales de la CEI dans leurs normes nationales et régionales. Toute divergence entre la norme de la CEI et la norme nationale ou régionale correspondante doit être indiquée en termes clairs dans cette dernière.
- 5) La CEI n'a fixé aucune procédure concernant le marquage comme indication d'approbation et sa responsabilité n'est pas engagée quand un matériel est déclaré conforme à l'une de ses normes.
- 6) L'attention est attirée sur le fait que certains des éléments de la présente Norme internationale peuvent faire l'objet de droits de propriété intellectuelle ou de droits analogues. La CEI ne saurait être tenue pour responsable de ne pas avoir identifié de tels droits de propriété et de ne pas avoir signalé leur existence.

La Norme internationale CEI 60670-1 a été établie par le sous-comité 23B: Prises de courant et interrupteurs, du comité d'études 23 de la CEI: Petit appareillage.

Cette édition annule et remplace la deuxième édition de la CEI 60670 parue en 1989 ainsi que son amendement 1 (1994). Cette édition constitue une révision technique.

Le texte de cette norme est issu de la deuxième édition de la CEI 60670, son amendement 1 et des documents suivants:

FDIS	Rapport de vote
23B/681/FDIS	23B/693/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

Cette publication a été rédigée selon les Directives ISO/CEI, Partie 2.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 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 60670-1 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories.

This edition cancels and replaces the second edition of IEC 60670 published in 1989 and its amendment 1 (1994). This edition constitutes a technical revision.

The text of this standard is based on the second edition of IEC 60670, its amendment 1 and on the following documents:

FDIS	Report on voting
23B/681/FDIS	23B/693/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.

Le comité a décidé que le contenu de cette publication ne sera pas modifié avant 2005. A cette date, la publication sera

- reconduite;
- supprimée;
- remplacée par une édition révisée, ou
- amendée.

Dans la présente norme, les caractères d'imprimerie suivants sont employés:

- prescriptions proprement dites: caractères romains
- *modalités d'essais: caractères italiques*
- notes: petits caractères romains.

Le contenu du corrigendum de février 2003 a été pris en considération dans cet exemplaire.

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The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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

In this publication, the following print types are used:

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

The contents of the corrigendum of February 2003 have been included in this copy.

This document is a preview generated by EVS

BOÎTES ET ENVELOPPES POUR APPAREILLAGE ÉLECTRIQUE POUR INSTALLATIONS ÉLECTRIQUES FIXES POUR USAGES DOMESTIQUES ET ANALOGUES –

Partie 1: Règles générales

1 Domaine d'application

La présente partie de la CEI 60670 s'applique aux boîtes, parties d'enveloppes et enveloppes (ci-après désignées par les termes «boîtes» et «enveloppes») destinées à des appareillages électriques ayant une tension assignée ne dépassant pas 1 000 V alternatifs et 1 500 V continus prévus pour des installations électriques fixes à usages domestiques ou analogues, pour l'intérieur ou l'extérieur.

NOTE 1 Les règles concernant des types de boîtes et d'enveloppes particuliers sont spécifiées dans la Partie 2 applicable de la CEI 60670.

Les boîtes et enveloppes conformes à la présente norme sont utilisables à des températures ambiantes ne dépassant pas habituellement 25 °C, mais pouvant atteindre occasionnellement 35 °C.

La présente Norme internationale est prévue pour s'appliquer aux boîtes et enveloppes pour appareillages électriques du domaine du comité d'étude 23 de la CEI.

NOTE 2 La présente norme peut aussi être utilisée comme document de référence pour d'autres comités et sous-comités d'études de la CEI.

Les boîtes et enveloppes qui constituent une partie intégrante d'un appareillage électrique dont elles assurent la protection contre des influences externes (par exemple chocs mécaniques, pénétration de corps solides ou de l'eau, etc.) sont couvertes par la norme applicable à cet appareillage.

Cette norme ne s'applique pas aux

- rosaces de plafond;
- connecteurs supports de luminaires;
- boîtes, enveloppes et parties d'enveloppes spécifiquement conçues pour être utilisées dans les systèmes de goulottes et de conduits profilés conformes à la CEI 61084 et qui ne sont pas prévues pour être installées en dehors de ces systèmes.

2 Références normatives

Les documents de référence suivants sont indispensables pour l'application du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

CEI 60068-2-75:1997, *Essais d'environnement – Partie 2-75: Essais – Essai Eh: Essais aux marteaux*

CEI 60112:1979, *Méthode pour déterminer les indices de résistance et de tenue au cheminement des matériaux isolants solides dans des conditions humides*

CEI 60423:1993, *Conduits de protection des conducteurs – Diamètres extérieurs des conduits pour installations électriques et filetages pour conduits et accessoires*

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.

NOTE Requirements for particular types of boxes and enclosures are given in the relevant parts 2 of IEC 60670.

Boxes and enclosures complying with this standard are suitable for use at ambient temperature not normally exceeding 25 °C but occasionally reaching 35 °C.

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

NOTE This standard may also 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 referenced documents are indispensable for the application 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 60068-2-75:1997, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:1979, *Method for determining the comparative and the proof-tracking indices of solid insulating materials under moist conditions*

IEC 60423:1993, *Conduits for electrical purposes – Outside diameters of conduits for electrical installations and threads for conduits and fittings*

CEI 60529:1989, *Degrés de protection procurés par les enveloppes (Code IP)*

CEI 60695-2-11:2000, *Essais relatifs aux risques du feu – Partie 2-11: Essais au fil incandescent/chauffant – Méthode d'essai d'inflammabilité pour produits finis*

CEI 60695-10-2:1995, *Essais relatifs aux risques du feu – Partie 10-2: Guide et méthodes d'essai pour la minimalisation des effets de chaleurs anormales sur des produits électrotechniques impliqués dans des feux – Méthode pour vérifier la résistance à la chaleur des produits en matériaux non métalliques au moyen de l'essai à la bille*

CEI 60981:1989, *Conduits très lourds rigides en acier pour installations électriques*

CEI 61032:1997, *Protection des personnes et des matériels par les enveloppes – Calibres d'essai pour la vérification*

CEI 61084 (toutes les parties), *Systèmes de goulottes et de conduits profilés pour installations électriques*

CEI 61140: 2001, *Protection contre les chocs électriques – Aspects communs aux installations et aux matériels*

3 Définitions

Pour les besoins de la présente partie de la CEI 60670, les définitions suivantes s'appliquent.

3.1

enveloppe

combinaison de parties, telles que boîtes, capots, plaques de recouvrement, couvercles, extensions de boîtes, appareillages, etc., assurant, après assemblage et montage comme en usage normal, un degré approprié de protection contre les influences externes et un degré déterminé de protection contre les contacts avec les parties actives enfermées, dans toutes les directions accessibles (voir l'Annexe A)

3.2

boîte

partie d'une enveloppe pourvue de moyens pour fixer un capot, une plaque de recouvrement, un appareillage, etc., et qui est prévue pour recevoir des appareillages (tels que socles de prises, interrupteurs, etc.)

3.3

extension de boîte

partie d'une enveloppe destinée à l'extension d'une boîte dans le but soit d'accroître son volume interne soit de l'ajuster lors du montage encastré ou semi-encastré avec la surface finie du mur ou élément similaire

3.4

couvercle, capot ou plaque de recouvrement

partie d'une enveloppe ne faisant pas partie intégrante ou partie de l'appareillage, qui peut soit maintenir un appareillage dans sa position soit l'enfermer

3.5

couvercle de rehausse

couvercle destiné à être monté directement sur la boîte pour permettre la fixation d'appareillages et pour augmenter le volume interne de l'enveloppe

NOTE La partie centrale du couvercle est rehaussée afin de s'ajuster à l'épaisseur du mur ou du plafond et pour permettre le montage d'un appareillage au ras de la surface du mur ou du plafond.

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

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products*

IEC 60695-10-2:1995, *Fire hazard testing – Part 10-2: Guidance and test methods for the minimization of the effects of abnormal heat on electrotechnical products involved in fires – Method for testing products made from non-metallic materials for resistance to heat using the ball pressure test*

IEC 60981:1989, *Extra-heavy duty rigid steel conduits for electrical installations*

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

IEC 61084 (all parts), *Cable trunking and ducting systems for electrical installations*

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

3 Definitions

For the purposes of this part of IEC 60670, the following 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 (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

3.4

lid, cover or cover-plate

part of an enclosure, not integral with or part of an accessory, which may either retain an accessory in position or enclose it

3.5

raised cover

cover intended for mounting directly onto a box to provide for the attachment of accessories and to increase the internal volume of the enclosure

NOTE The centre portion of the cover is raised to accommodate a specific wall or ceiling thickness and to permit the mounting of the accessory on it, flush with the surface of the wall or ceiling.