

SLOVENSKI STANDARD oSIST prEN IEC 60670-1:2018/oprA11:2018

01-december-2018

Škatle in ohišja za električno opremo za gospodinjstvo in podobne nepremične električne inštalacije - 1. del: Splošne zahteve

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

Dosen und Gehäuse für Installationsgeräte für Haushalt und ähnliche ortsfeste elektrische Installationen-Teil C: Allgemeine Anforderungen TEW

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

https://standards.iteh.ai/catalog/standards/sist/3de61466-3f97-4b72-8a35-

Ta slovenski standard je istoveten z: prEN IEC 60670-1-2020-a11-2020 prEN IEC 60670-1:2018/prA11:2018

ICS:

29.120.99 Druga električna dodatna oprema

Other electrical accessories

oSIST prEN IEC 60670-1:2018/oprA11:2018

en,fr,de

oSIST prEN IEC 60670-1:2018/oprA11:2018

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<u>kSIST FprEN IEC 60670-1:2020/A11:2020</u> https://standards.iteh.ai/catalog/standards/sist/3de61466-3f97-4b72-8a35-0d34355293a3/ksist-fpren-iec-60670-1-2020-a11-2020

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN IEC 60670-1

prA11

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ICS 29.120.10

English Version

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 To be completed

This draft amendment prA11, if approved, will modify the European Standard prEN IEC 60670-1; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2019-01-11.

It has been drawn up by CLC/TC 23BX. STANDARD PREVIEW

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions 197-4b72-8a35-

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (prEN IEC 60670-1:2018/prA11:2018) has been prepared by SC 23B "Plugs, socket-outlets and switches", of IEC/TC 23 "Electrical accessories".

This document is currently submitted to the Enquiry.

The following dates are proposed:

•	latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
•	latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
•	latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 36 months (to be confirmed or modified when voting)

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document. (standards.iteh.ai)

<u>kSIST FprEN IEC 60670-1:2020/A11:2020</u> https://standards.iteh.ai/catalog/standards/sist/3de61466-3f97-4b72-8a35-0d34355293a3/ksist-fpren-iec-60670-1-2020-a11-2020

1 Modification to Clause 7, Classification

Delete from Table 1 classifications 7.2.2.2 and 7.2.2.3.

Modification to Clause 8, Marking 2

Replace f) by:

f) void

Replace j) by:

j) the letter Ha or information for boxes and enclosures classified according to 7.2.2.1

Modification to Clause 11, Provision for earthing 3

- 11.2 Replace by
- 11.2 Void

Delete Figures 3, 4, and replace the relevant titles by "void".

Modification to Clause 12, Construction 4

12.4 Add the following after the 3rd paragraph DARD PREVIEW

In case there is a cavity, the head of the screw can be protected by an additional cap of insulating material. In this case the manufacturers instruction shall give information concerning the cap to be used.

In case there is no cavity the head of the screw shall be protected with a cap of insulating material and in this case, the cap shall be delivered with the boxksist-firen-iec-60670-1-2020-a11-2020

The cap shall stay in position during normal use.

Compliance is checked by the following test.

The caps are fixed to the boxes according to the manufacturer's instructions and subjected to the ageing test of 13.1.

After 1 h, the boxes are then turned to a position with the opening in the direction of the floor. The cap shall not come detached.

- Delete in the second paragraph the words " and/or IEC 60981". 12.6
- 12.13 Replace by
- 12.13 Void

Delete Figure 16 and replace the relevant titles by "void".

- 12.15 Delete in the second paragraph the words "or IEC 60981".
- 16.3 Replace by
- 16.3 Void

Delete Figure 25 and replace the relevant titles by "void".

5 Modification to Clause 18, Resistance of insulating material to abnormal heat and fire

Replace the 2 bullets by:

- By the test made at 850 °C:
 - for parts of insulating material necessary to retain current-carrying parts and/or parts of the earthing circuit in position (with the exception of parts of insulating material needed to retain the earth terminal in position in a box), and
 - for parts of insulating material of boxes and enclosures classified according to 7.2.2.1, with the exception of parts protruding from the wall and additional and/or removable internal parts of enclosure (eg. separator) not necessary to retain current carrying parts in position.
- By the test made at 650 °C:
 - for parts of insulating material not necessary to retain current-carrying parts in position (even though they are in contact with them), and

for parts of insulating material retaining earthing terminal in position;

for parts of insulating material of boxes and enclosures classified according to 7.2.2.1, protruding from the wall and additional and/or removable internal parts of enclosure (eg. separator) not necessary to retain current carrying parts in position.

6 Addition of the following new sub-clause:

iTeh STANDARD PREVIEW Z1 Electromagnetic fields (EMF) requirements

(standards.iteh.ai) Products covered by this standard are, in normal use, passive or the electromagnetic field generated is considered negligible. Therefore, these requirements are deemed to be met without performing any test.

> https://standards.iteh.ai/catalog/standards/sist/3de61466-3f97-4b72-8a35-0d34355293a3/ksist-fpren-iec-60670-1-2020-a11-2020

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.

- Clause Special national condition
- 8.1 United Kingdom

Add after (e):

The marking of the type reference is not used.

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. RD PREVIEW

11.1 Denmark

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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 https://standards.iteh.ai/catalog/standards/sist/3de61466-3f97-4b72-8a35-Czech Republic, Netherlands, United, Kingdom-1-2020-a11-2020

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

12.7 Denmark, Germany

A cable retention is required for boxes and enclosures for hollow walls due to installation practices.

12.9 Czech Republic, Netherlands

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

United Kingdom

With the exception of products within the scope of EN 60670-22 or EN 60670-23, boxes shall be provided with metal threads so as to ensure safety and thread-forming or thread-cutting screws shall not be used.

13.2 Denmark, Germany , Norway

A minimum protection degree of IP30 is required for boxes and enclosures for hollow walls due to installation practices.

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.

Clause Deviation

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

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

6.1.1 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: SIST ForEN IEC 60670-1:2020/A11:2020

6.1.2 – at centres of $60.3 \text{ mm} \pm 0.2 \text{ mm}$ on the horizontal or vertical centrelines for boxes intended to accommodate 1-gang socket-outlets or connection units

6.1.3 – 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

6.1.4 – 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.

Annex ZZ

(informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under a Commission's standardisation request relating to harmonised standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 – Correspondence between this European standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1. General conditions iTeh	General requirement PREVIEW	
(a) the essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, shall be marked on 4 the electrical equipment, or, if this is not possible, on an accompanying document;	Clause 1 to 7 ards.itch.ai) 8 - Marking kSIST FprEN IEC 60670-1:2020/A11:2020 CAmbex ZA (Normative reference)6-3197-4b72-8a35- 355293a3/ksist-fpren-iec-60670-1-2020-a11-2020 Annex ZB (Special National Conditions)	
(b) the electrical equipment, together with its component parts, shall be made in such a way as to ensure that it can be safely and properly assembled and connected;	Clause 1 to 7 8 - Marking 9 - Dimensions 10 - Protection against electrical shock 11 - Provision for earthing 12 – Construction 13 – Resistance to ageing, protection against ingress of solid objects and against harmful ingress of water Annex ZA (Normative reference) Annex ZB (Special National Conditions) Annex ZC (A-Deviations)	

(c) the electrical equipment shall be so designed and	Clause 1 to 7	
manufactured as to ensure that protection against the hazards	10 - Protection against electrical shock	
set out in points 2 and 3 is assured, providing that the	11 - Provision for earthing	
equipment is used in applications for which it was	12 – Construction	
made and is adequately maintained.	14 - Insulation resistance and electrical strength	
	15 - Mechanical strength	
	17 - Creepage distances, clearances and distances through sealing compound	
	Annex ZA (Normative reference)	
	Annex ZB (Special National Conditions)	
2. Protection against hazards arising from the electrical equipment		
Measures of a technical nature	STANDARD PREVIEW	
shall be laid down in accordance with point 1, in order to ensure that:	(standards.iteh.ai)	
(a) persons and domestical animals are adequately protected against the danger of physical injury or other harm	<u>kSIST EprEN IEC 60670-1:2020/A11:2020</u> dSlause at abg/standards/sist/3de61466-3f97-4b72-8a35- 355293a3/ksist-fpren-iec-60670-1-2020-a11-2020 10 - Protection against electrical shock	
which might be caused by direct or indirect contact;	11 - Provision for earthing	
	14 - Insulation resistance and electrical strength	
	15 - Mechanical strength	
	17 - Creepage distances, clearances and distances through sealing compound	
	18 - Resistance of insulating material to abnormal heat and fire	
	19 - Resistance to tracking	
	Annex ZA (Normative reference)	
	Annex ZB (Special National Conditions)	
(b) temperatures, arcs or	Clause 1 to 7	
radiation which would cause a danger, are not produced;	14- Insulation resistance and electrical strength	