

# Elektriske apparater til husholdningsbrug o.l. – Sikkerhed – Del 1: Generelle krav

Household and similar electrical appliances –  
Safety – Part 1: General requirements

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**Denne publikations overensstemmelse er:**

**IDT med: IEC 60335-1:2010/AMD2:2016**

**IDT med: EN 60335-1:2012/A2:2019**

**DS-publikationen er på engelsk.**

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## EUROPÄISCHE NORM

August 2019

ICS 13.120; 97.030

English Version

Household and similar electrical appliances - Safety - Part 1:  
General requirements  
(IEC 60335-1:2010/A2:2016 + COR1:2016)

Appareils électrodomestiques et analogues - Sécurité -  
Partie 1: Exigences générales  
(IEC 60335-1:2010/A2:2016 + COR1:2016)

Sicherheit elektrischer Geräte für den Hausgebrauch und  
ähnliche Zwecke - Teil 1: Allgemeine Anforderungen  
(IEC 60335-1:2010/A2:2016 + COR1:2016)

This amendment A2 modifies the European Standard EN 60335-1:2012; it was approved by CENELEC on 2018-07-30. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN 60335-1:2012/A2:2019) consists of the text of IEC 60335-1:2010/A2:2016 + COR:2016 prepared by IEC/TC 61 "Safety of household and similar electrical appliances", together with the common modifications prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2020-02-09 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2021-07-30 conflicting with this document have to be withdrawn

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 and its amendments A11:2014, A13:2017, A1:2018 and A14:2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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 Annexes ZZ.

### Endorsement notice

The text of the International Standard IEC 60335-1:2010/A2:2016 + COR:2016 was approved by CENELEC as a European Standard with agreed common modifications.

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## COMMON MODIFICATIONS

### 1 Scope

*Delete the replacement, as this sentence is already in the scope of the EN text.*

### 7 Marking and instructions

**7.10<sup>1</sup>** *Delete the paragraphs starting with “Devices used to start/stop....” until the end of the requirement “.....by vulnerable persons.”. This includes Notes Z1 and Z2.*

**7.12.Z1<sup>2</sup>** *Delete the sub clause.*

**7.14.** *Delete Note Z1.*

### 22 Construction

**22.12** *Delete Note Z1*

### 24 Components

**24.Z1** *Replacement*

Type S2 and S3 capacitors according to EN 60252-1 are not required to undergo the testing as required by 30.2.2 and 30.2.3.1.

### 25 Supply connection and external flexible cords

**25.7<sup>3</sup>** *Delete the existing text starting “Halogen free thermoplastic.....” until “.....designation H07ZZ-F). “*

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<sup>1</sup> The text in the CM to 7.10 is now contained in sub-clause 22.55.

<sup>2</sup> The text of EN 60335-1:2012 + A11:2014 in 7.12.Z1, is now contained in the new sub-clause 7.12.9.

<sup>3</sup> The text of A2 replaces the previous common modification.

**Annex ZC**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

*Replace the reference to IEC 60252-1 with the following:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60252-1	-	AC motor capacitors - Part 1: General - Performance, testing and rating - Safety requirements - Guidance for installation and operation	EN 60252-1	2011

*Add the following references:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60445	2010	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals, conductor terminations and conductors	EN 60445	2010
IEC 62821-1	2015 <sup>1</sup>	Electric cables - Halogen-free, low smoke, - thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V - Part 1: General requirements	-	-
ISO 178	2010	Plastics - Determination of flexural properties	EN ISO 178	2010
+ A1	2013		+ A1	2013
ISO 179-1	2010	Plastics - Determination of Charpy impact properties - Part 1: Non-instrumented impact test	EN ISO 179-1	2010
ISO 180	2000	Plastics - Determination of Izod impact strength	EN ISO 180	2000
+ A1	2006		+ A1	2006
+ A2	2013		+ A2	2013

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 527	series	Plastics - Determination of tensile properties	EN ISO 527-1	2012
			EN ISO 527-2	2012
			EN ISO 527-3	1995
			+AC	2002
			EN ISO 527-4	1997
			EN ISO 527-5	2009
ISO 4892-1	2016	Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance	EN ISO 4892-1	2016
ISO 4892-2	2013	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	2013
ISO 8256	2004	Plastics - Determination of tensile-impact strength	EN ISO 8256	2004

### Annex ZD (normative), IEC and CENELEC code designations for flexible cords

Add an additional row in the Table ZD.1 of Annex ZD.

Type of flexible cord	Code designations	
	IEC	CENELEC
<b>Halogen free low smoke cords</b>	62821 IEC 101f	H03Z1Z1H2-F
Light duty	62821 IEC 101	H03Z1Z1-F
Ordinary duty	62821 IEC 102f	H05Z1Z1H2-F
	62821 IEC 102	H05Z1Z1-F

### Bibliography

Delete the following note:

IEC 82079-1 NOTE Harmonized as EN 82079-1.

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 2  
AMENDEMENT 2

**Household and similar electrical appliances – Safety –  
Part 1: General requirements**

**Appareils électrodomestiques et analogues – Sécurité –  
Partie 1: Exigences générales**



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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 2  
AMENDEMENT 2

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**Household and similar electrical appliances – Safety –  
Part 1: General requirements**

**Appareils électrodomestiques et analogues – Sécurité –  
Partie 1: Exigences générales**

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## FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/5116A/FDIS	61/5166/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site 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.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

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## FOREWORD

*Add the following to the list of differences existing in some countries:*

- 7.12.8: The maximum inlet water pressure shall be at least 1,0 MPa (Denmark, Norway, Sweden).

## INTRODUCTION

*Replace the seventh paragraph by the following:*

Individual countries may wish to consider the application of the standard, as far as is reasonable, to appliances not mentioned in a part 2, and to appliances designed on new principles. In this case consideration should be given to defining normal operation, specifying the classification of the appliance according to Clause 6 and specifying whether the appliance is operated attended or unattended. Consideration should also be given to particular categories of likely users and to related specific risks such as access to live parts, hot surfaces or hazardous moving parts.

This is a preview of DS/EN 60335-1:2012/A2:2019. [Click here to purchase the full version from the ANSI store.](#)

## 1 Scope

*Replace the first sentence of the third paragraph by the following:*

This standard deals with the reasonably foreseeable hazards presented by appliances that are encountered by all persons.

## 2 Normative references

*Replace the reference to IEC 60252-1 by the following:*

IEC 60252-1, *AC motor capacitors – Part 1: General – Performance, testing and rating – Safety requirements – Guide for installation and operation*

*Add the following new references:*

IEC 60445:2010, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors*

IEC 62821-1, *Electric cables – Halogen-free, low smoke, thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

ISO 178:2010, *Plastics – Determination of flexural properties*  
ISO 178:2010/AMD 1:2013

ISO 179-1:2010, *Plastics – Determination of Charpy impact properties – Part 1: Non-instrumented impact test*

ISO 180:2000, *Plastics – Determination of Izod impact strength*  
ISO 180:2000/AMD 1:2006  
ISO 180:2000/AMD 2:2013

ISO 527 (all parts), *Plastics – Determination of tensile properties*

ISO 4892-1:1999, *Plastics – Methods of exposure to laboratory light sources – Part 1: General guidance*

ISO 4892-2: 2013, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps*

ISO 8256:2004, *Plastics – Determination of tensile-impact strength*