SLOVENSKI STANDARD
SIST EN IEC 60335-1:2024

01-marec-2024

Nadomešča:
SIST EN 60335-1:2012/A12:2017

Gospodinjski in podobni električni aparati - Varnost - 1. del: Splošne zahteve (IEC 60335-1:2020 + COR1:2021)

Household and similar electrical appliances - Safety - Part 1: General requirements (IEC 60335-1:2020 + COR1:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 1: Allgemeine Anforderungen (IEC 60335-1:2020 + COR1:2021)

Appareils électrodomestiques et analogues - Sécurité - Partie 1: Exigences générales (IEC 60335-1:2020 + COR1:2021)

Ta slovenski standard je istoveten z: **EN IEC 60335-1:2023**

ICS:

13.120	Varnost na domu	Domestic safety
97.030	Električni aparati za dom na splošno	Domestic electrical appliances in general

SIST EN IEC 60335-1:2024 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60335-1

December 2023

ICS 13.120; 97.030

Supersedes EN 60335-1:2012; EN 60335-1:2012/A11:2014; EN 60335-1:2012/AC:2014; EN 60335-1:2012/A13:2017; EN 60335-1:2012/A1:2019; EN 60335-1:2012/A14:2019; EN 60335-1:2012/A2:2019; EN 60335-1:2012/A15:2021; EN 60335-1:2012/A16:2023

English Version

Household and similar electrical appliances - Safety - Part 1: General requirements (IEC 60335-1:2020 + COR1:2021)

Appareils électrodomestiques et analogues - Sécurité - Partie 1: Exigences générales (IEC 60335-1:2020 + COR1:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 1: Allgemeine Anforderungen (IEC 60335-1:2020 + COR1:2021)

This European Standard was approved by CENELEC on 2023-11-22. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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

Ref. No. EN IEC 60335-1:2023 E

European foreword

This document (EN IEC 60335-1:2023) consists of the text of IEC 60335-1:2020 + COR1:2021 prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2024-11-22
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	—*

**Justification for no dow:*

This European Standard supersedes EN 60335-1:2012 and its amendments. However, EN 60335-1:2012 and its amendments remains valid until all the Parts 2 which are used in conjunction with it have been withdrawn. No date of withdrawal (DOW) has been given pending the updating of all Parts 2 to align with this EN IEC 60335-1:2023/A11:2023. The applicable date of withdrawal is given in each Part 2. It is intended the DOW for this Part 1 will be fixed once all the Parts 2 have been updated.

This document supersedes EN 60335-1:2012 and all of its amendments and corrigenda (if any).

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 is read in conjunction with EN IEC 60335-1:2023/A11:2023.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60335-1:2020 + COR1:2021 was approved by CENELEC as a European Standard without any modification.

IEC 60335-1

Edition 6.0 2020-09

INTERNATIONAL STANDARD

colour inside

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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 13.120; 97.030

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 60335-1
Edition 6.0 2020-09

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 1: General requirements

INTERPRETATION SHEET 1

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

The text of this Interpretation Sheet is based on the following documents:

Draft	Report on voting
61/5999/DISH	61/6009/RVDISH

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

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INTRODUCTION

Edition 6 of IEC 60335-1:2020 defines and introduces requirements for a detachable power supply part of an appliance. In the document, 24.2 prohibits the use of a power supply in a flexible cord.

QUESTION:

Does Subclause 24.2 prohibit the use of a detachable power supply part?

ANSWER

No, a "detachable power supply part" is a defined term and is not captured by the term "power supply" as used in Subclause 24.2.

NOTE A detachable power supply part is captured by the defined term when the output of the power supply part is detachable from the class III construction part of the appliance at:

– the power supply part, or

– the class III construction part of the appliance.

However, the supply cord (if any) does not have to be detachable from the detachable power supply part.

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IEC 60335-1:2020-09/ISH1:2021-11(en)

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 1: General requirements

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60335-1 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This sixth edition cancels and replaces the fifth edition published in 2010, Amendment 1:2013 and Amendment 2:2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition (minor changes are not listed):

a) updated the text of this standard to align with the most recent editions of the dated normative references;
b) deleted some notes and converted many other notes, in whole or in part, to normative text;
c) changed some Annex designations from normative to informative;
d) introduced information on Guidance documents concerning the application of the safety requirements covered by IEC 60335 series and on how to retrieve them;

e) clarified requirements for PELV circuits;

f) clarification of requirements on measurement of power input and rated current when they vary throughout the operating cycle;

g) replaced normative Annex S with the informative Annex S "Guidance for the application of this standard on measurement of power input and current based on the requirements of 10.1 and 10.2 concerning the representative period";

h) introduced and clarified mechanical strength requirements for appliances with integral pins for insertion into socket-outlets;

i) revised requirements for battery-operated appliances;

j) introduced requirements for metal-ion batteries including a new Clause 12 Charging of metal-ion batteries;

k) introduced the application of test probe 18;

l) introduced requirements for appliances incorporating appliance outlets and socket-outlets accessible to the user;

m) revised and clarified requirements for appliances incorporating a functional earth;

n) introduced moisture resistance test requirements for appliances that incorporate an automatic cord reel and that have a second numeral IP rating;

o) clarified the appliance test criteria for the moisture resistance for appliances and parts of appliances with integral pins for insertion into socket-outlets;

p) introduced limits on the output voltage of an accessible safety extra-low voltage outlet or connector or Universal Serial Bus (USB) under abnormal operation conditions;

q) introduced requirements to cover optical radiation hazards;

r) introduced external communication software management items into normative Annex R;

s) revised external communication requirements in Table R.1 and Table R.2;

t) introduced in new normative Annex U cyber security requirements to avoid unauthorized access and the effects of transmission failures via remote communication through public networks.

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

FDIS	Report on voting
61/6012/FDIS	61/6089/RVD

Full information on the voting for the approval of this International Standard 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 has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 60335 series, published under the general title *Household and similar electrical appliances – Safety*, can be found on the IEC website.

This part is to be used in conjunction with the appropriate part 2 of IEC 60335. The parts 2 contain clauses to supplement or modify the corresponding clauses in this part to provide the relevant requirements for each type of appliance.

This sixth edition of IEC 60335-1 is only to be used in conjunction with parts 2 that have been established on the basis of this edition.

The following print types are used:

– requirements: in roman type;
– test specifications: in *italic* type;
– notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document 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.

The following differences exist in the countries indicated below.

– Introduction: The Part 1 standard (UL60335-1) is only used in combination with a part 2 (UL60335-2-x). National differences are specified in these standards (USA).
– 5.7: The ambient temperature is 25 °C ± 10 °C (Japan).
– 5.7: The ambient temperature is 27 °C ± 5 °C (India).
– 6.1: Class 0 appliances and class 0I appliances are not allowed (Australia, European Union, India, Israel, New Zealand, Norway, Singapore, Switzerland, United Kingdom).
– 7.12.2: The requirements for full disconnection do not apply (Japan).
– 7.12.8: The maximum inlet water pressure shall be at least 1,0 MPa (Denmark, Norway, Sweden and Finland).
– 13.2: The test circuit and some leakage current limits are different (India).
– 19.5: The test is also applicable to appliances intended to be permanently connected to fixed wiring (Norway).
– 22.2: The second paragraph of this subclause dealing with single-phase class I appliances with heating elements cannot be complied with because of the supply system (France).
– 22.2: The second paragraph of this subclause, that deals with single-phase, permanently connected class I appliances having heating elements, is not applicable due to the supply system (Norway).
– 22.2: Double-pole switches or protective devices are required (Norway).
– 25.3: A set of supply leads is not permitted (Norway, Denmark, Finland, Netherlands).
– 25.8: 0,5 mm^2 supply cords are not allowed for class I appliances (Australia and New Zealand).

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

The contents of the Interpretation Sheet 1 (2021-11) and the corrigendum 1 (2021-12) have been included in this copy.