



BSI Standards Publication

## Household and similar electrical appliances — Safety

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Part 2-52: Particular requirements for oral hygiene appliances

## National foreword

This British Standard is the UK implementation of EN 60335-2-52:2003+A13:2023. It is derived from IEC 60335-2-52:2002, incorporating amendment 1:2008 and amendment 2:2017. It supersedes BS EN 60335-2-52:2003+A12:2019, which will be withdrawn on 1 March 2026.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

Tags indicating changes by CENELEC carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A11 is indicated by A11 A11.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/1, Motorised appliance group.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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30 November 2008	Implementation of IEC amendment 1:2008 with CENELEC endorsement A1:2008
30 November 2010	Implementation of CENELEC amendment A11:2010
30 November 2010	Implementation of CENELEC corrigendum June 2012: Clause 7.12.Z101 amended
31 December 2019	Implementation of CENELEC amendment A12:2019
31 December 2023	Implementation of IEC amendment 2:2017 with CENELEC endorsement A2:2023
31 December 2023	Implementation of CENELEC amendment A13:2023

EUROPEAN STANDARD

**EN 60335-2-52:2003+A13**

NORME EUROPÉENNE

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English version

**Household and similar electrical appliances –  
Safety**  
**Part 2-52: Particular requirements for oral hygiene appliances**  
(IEC 60335-2-52:2002)

Appareils électrodomestiques et  
analogues –  
Sécurité  
Partie 2-52: Règles particulières pour  
les appareils d'hygiène buccale  
(CEI 60335-2-52:2002)

Sicherheit elektrischer Geräte für den  
Hausgebrauch und ähnliche Zwecke  
Teil 2-52: Besondere Anforderungen für  
Mundpflegegeräte  
(IEC 60335-2-52:2002)

This European Standard was approved by CENELEC on 2003-05-01. 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.

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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**

## EN 60335-2-52:2003+A13:2023 (E)

### European foreword

The text of the International Standard IEC 60335-2-52:2002 (61/2221/FDIS), prepared by the IEC Technical Committee 61, Safety of household and similar electrical appliances, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60335-2-52 on 2003-05-01.

This European Standard replaces EN 60335-2-52:1996.

The following dates are applicable:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2004-05-01
- date on which national standards  
conflicting with the EN have to be withdrawn (dow) 2006-05-01

This part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for electric oral hygiene appliances.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 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.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

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**EN 60335-2-52:2003+A13:2023 (E)**

 *Text deleted* 

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**Endorsement notice**

The text of the International Standard IEC 60335-2-52:2002 was approved by CENELEC as a European Standard without any modification.

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**Foreword to amendment A1**

The text of document 61/3546/FDIS, future amendment 1 to IEC 60335-2-52:2002, prepared by IEC Technical Committee 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60335-2-52:2003 on 2008-05-01.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-02-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2013-05-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-52:2003.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

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**Endorsement notice**

The text of amendment 1:2008 to the International Standard IEC 60335-2-52:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

 *Text deleted* 

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## EN 60335-2-52:2003+A13:2023 (E)

### Foreword to amendment A11

A proposal to amend EN 60335-2-52:2003, document CLC/TC 61(SEC)1688, was discussed during the Brussels meeting of CENELEC TC 61 in June 2009, when it was decided to submit a draft for an amendment to the Unique Acceptance Procedure.

The draft was circulated in June 2009 and was approved by CENELEC as amendment A11 to EN 60335-2-52:2003 on 2010-04-14.

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

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-05-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2013-04-14

This amendment supplements or modifies the corresponding clauses of EN 60335-2-52:2003.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

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### Foreword to amendment A12

This document (EN 60335-2-52:2003/A12:2019) has been 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 implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-05-08
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-11-08

This amendment supplements or modifies the corresponding clauses of the standards below:

- EN 60335 1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 (Part 1)
- EN 60335-2-52:2003+A1:2008+A11:2010 (Part 2)

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.

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

**EN 60335-2-52:2003+A13:2023 (E)****European foreword to amendment A2**

This document (EN 60335-2-52:2003/A2:2023) consists of the text of IEC 60335-2-52:2002/A2:2017 prepared by IEC/TC61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-12-02 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-06-02 conflicting with this document have to be withdrawn

This document is read in conjunction with EN 60335-2-52:2003/A13:2023.

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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 60335-2-52:2002/A2:2017 was approved by CENELEC as a European Standard without any modifications.

**European foreword to amendment A13**

This document (EN 60335-2-52:2003/A13:2023) has been prepared by CLC/TC61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-12-02 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-06-02 conflicting with this document have to be withdrawn

This document is read in conjunction with EN 60335-2-52:2003/A2:2023.

The numbering system for European clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter "Z".

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

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



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IEC 60335-2-52:2002+A2:2017

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## INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. <sup>A1</sup> It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances. <sup>A1</sup>

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another Part 2 of IEC 60335, the relevant Part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

<sup>A1</sup> When a Part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the Part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or Part 2 standards. <sup>A1</sup>

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

<sup>A13</sup> This amendment supplements or modifies the corresponding clauses of the standards below:

- EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 (Part 1)
- EN 60335-2-52:2003+A1:2008+A11:2010+AC:2012+A12:2019+A2:2023(Part 2) <sup>A13</sup>

## HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

### Part 2-52: Particular requirements for oral hygiene appliances

#### 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric oral hygiene appliances for household and similar purposes, their **rated voltage** being not more than 250 V.

NOTE 101 Examples of appliances covered by this standard are

- oral irrigators;
- toothbrushes.

**A12** This standard deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons. **A12**

**A11** However, in general, it does not take into account:

- **children** playing with the appliance,

**A12** – the use of oral irrigators by **very young children** and **young children**, **A12**

- user maintenance by **children**, including cleaning the appliance.

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this standard. **A11**

NOTE 102 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 103 This standard does not apply to appliances for medical purposes (IEC 60601).

#### 2 Normative references

**A2** This clause of Part 1 is applicable except as follows.

*Addition:*

IEC 60584-1, *Thermocouples – Part 1: EMF specifications and tolerances* **A2**

**A11** EN ISO 20127, Dentistry -Powered toothbrushes - General requirements and test methods **A11**

#### 3 **A12** Terms and definitions **A12**

This clause of Part 1 is applicable except as follows.

##### 3.1.9 *Replacement:*

##### **normal operation**

**A13** operation of the appliance under the following conditions when it is connected to the supply mains: **A13**

Oral irrigators are operated with the reservoir filled with water having a temperature of approximately 45 °C, to the level specified in the instructions. In the absence of such instructions, the reservoir is filled to the maximum level.

Other appliances are operated without load.

**A12** *Text deleted* **A12**

#### 4 General requirement

This clause of Part 1 is applicable.