

Household and similar electrical appliances — Safety —

Part 2-15: Particular requirements for appliances for heating liquids

ICS 97.040.50

National foreword

This British Standard is the UK implementation of EN 60335-2-15:2002+A11:2012, incorporating corrigenda July 2005, December 2006 and August 2013. It is identical to IEC 60335-2-15:2002, including corrigendum November 2003 and amendments 1:2005 and 2:2008. It supersedes BS EN 60335-2-15:2002+A2:2008, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. 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**.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CENELEC text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A11 is indicated by **A11** **A11**.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CENELEC corrigendum August 2013 is indicated in the text by **AC1** **AC1**.

The UK participation in its preparation was entrusted by Technical Committee CPL/61, Safety of household and similar electrical appliances, to Subcommittee CPL/61/7, Safety of electrical appliances — Heated appliance group.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

The publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Amendments/corrigenda issued since publication

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**Household and similar electrical appliances –
Safety**
Part 2-15: Particular requirements for appliances for heating liquids
(IEC 60335-2-15:2002)

Appareils électrodomestiques et
analogues – Sécurité
Partie 2-15: Règles particulières
pour les appareils de chauffage
des liquides
(CEI 60335-2-15:2002)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-15: Besondere Anforderungen
für Geräte zur Flüssigkeitserhitzung
(IEC 60335-2-15:2002)

This European Standard was approved by CENELEC on 2002-09-24. 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.

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

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 document 61/2134/FDIS, future fifth edition of IEC 60335-2-15, prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-15 on 2002-09-24.

This European Standard replaces EN 60335-2-15:1996 + A1:1999 + A2:2000.

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) 2003-07-01
- date on which national standards
conflicting with the EN have to be withdrawn (dow) 2007-07-01

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 electrical appliances for heating liquids.

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:

- NOTE 1 - subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- NOTE 2 - 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;
- NOTE 3 - additional annexes are lettered AA, BB, etc.;
- NOTE 4 - 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:

- NOTE 5 - requirements: in roman type;
- NOTE 6 - *test specifications: in italic type;*
- NOTE 7 - notes: in small roman type.
- NOTE 8 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.

Annex ZA has been added by CENELEC.

Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-15:2002 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 61/2887/FDIS, future amendment 1 to IEC 60335-2-15:2002, prepared by the 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 60335-2-15:2002 on 2005-09-01.

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) 2006-06-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2008-09-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-15:2002.

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

There are no national deviations from this amendment.

Endorsement notice

The text of amendment 1:2005 to the International Standard IEC 60335-2-15:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

Foreword to amendment A2

The text of document 61/3640/FDIS, future amendment 2 to IEC 60335-2-15:2002, prepared by IEC TC 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60335-2-15:2002 on 2008-08-01.

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) 2009-05-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2013-08-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-15:2002.

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

There are no national deviations from this amendment.

Endorsement notice

The text of amendment 2:2008 to the International Standard IEC 60335-2-15:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

Foreword to amendment A11

This document (EN 60335-2-15:2002/A11:2012) 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) 2013-01-23
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-01-23

Clauses, subclauses, notes, tables and figures which are additional to those in IEC 60335-2-15:2002 are prefixed "Z".

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 and EN 60335-2-15:2002.

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

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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. 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.

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.

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.

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.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-15: Particular requirements for appliances for heating liquids

1 Scope

Replacement

This clause of Part 1 is replaced by the following.

This European Standard deals with the safety of electrical appliances for heating liquids for household and similar purposes, their **rated voltage** being not more than 250 V.

NOTE Z101 Some appliances may be used for heating food.

NOTE Z102 Examples of appliances that are within the scope of this standard are:

- coffee-makers;
- cooking pans;
- egg boilers;
- **feeding-bottle heaters**;
- kettles and other appliances for boiling water, having a **rated capacity** not exceeding 10 l;
- milk heaters;
- pressure cookers having a **rated cooking pressure** not exceeding 140 kPa and a **rated capacity** not exceeding 10 l;
- **rice cookers**;
- slow cookers;
- **steam cookers**;
- wash boilers;
- yoghurt makers.

Appliances intended to be used by laymen in shops and other premises for normal housekeeping purposes, are within the scope of this standard.

NOTE Z103 Examples of appliance for household environment are appliances for typical housekeeping functions used in the household environment that may also be used by non expert users for typical housekeeping functions:

- in shops and other similar working environments;
- in farm houses;
- by clients in hotels, motels and other residential type environments;
- in bed and breakfast type environments.

NOTE Z104 Household environments include the dwelling and its associated buildings, the garden, etc. 

A11 As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in household and similar environments.

However, in general, it does not take into account **children** playing with appliances and their **use** by **very young children**.

It does not take into account the **use** of the following appliances by **children**:

- pressure cookers;
- glue pots with a water jacket;
- livestock feed boilers;
- sterilizers;
- wash boilers.

It does not take into account the **use** of the following appliances by **young children** without supervision:

- cooking pans;
- slow cookers;
- **steam cookers**;
- **rice cookers**;
- coffee makers;
- kettles;
- egg boilers;
- milk heaters.

NOTE Z105 **Feeding bottle heaters** and yoghurt makers may be used by **young children**.

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

NOTE Z106 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, the national water supply authorities and similar authorities.

NOTE Z107 This standard does not apply to

- frying pans and deep fat fryers (EN 60335-2-13);
- storage water heaters (EN 60335-2-21);
- instantaneous water heaters (EN 60335-2-35);
- surface-cleaning appliances employing liquids or steam (EN 60335-2-54);
- portable immersion heaters (EN 60335-2-74); **A11**