

BS EN 60335-2-6:2015



BSI Standards Publication

# Household and similar electrical appliances — Safety

Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

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### National foreword

This British Standard is the UK implementation of EN 60335-2-6:2015. It is derived from IEC 60335-2-6:2014. It supersedes BS EN 60335-2-6:2003+A13:2013 which will be withdrawn on 9 February 2018.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags **[C]** **[C]**.

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.

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

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EUROPEAN STANDARD

**EN 60335-2-6**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2015

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English Version

**Household and similar electrical appliances - Safety - Part 2-6:  
Particular requirements for stationary cooking ranges, hobs,  
ovens and similar appliances  
(IEC 60335-2-6:2014 , modified)**

Appareils électrodomestiques et analogues - Sécurité -  
Partie 2-6: Exigences particulières pour les cuisinières, les  
tables de cuisson, les fours et les appareils fixes analogues  
(IEC 60335-2-6:2014 , modifiée)

Sicherheit elektrischer Geräte für den Hausgebrauch und  
ähnliche Zwecke - Teil 2-6: Besondere Anforderungen für  
ortsfeste Herde, Kochmulden, Backöfen und ähnliche  
Geräte  
(IEC 60335-2-6:2014 , modifiziert)

This European Standard was approved by CENELEC on 2015-02-09. 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.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

This document (EN 60335-2-6:2015) consists of the text of IEC 60335-2-6:2014 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 the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-02-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-02-09

This document supersedes EN 60335-2-6:2003.

EN 60335-2-6:2015 includes the following significant technical changes with respect to EN 60335-2-6:2003:

- introduction of requirements for steam ovens;
- introduction of requirements for ovens intended for use on ships;
- clarified requirements for oven shelve construction and test;
- introduction of optional values for the accessible surface temperatures of ovens;
- introduction of stabilising means including warnings;
- clarified representative periods for various appliances (Clause 10);
- introduction of a spillage test for built-in under-bench ovens.

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.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60335-2-6:2014 are prefixed "Z".

This part 2 is to be used in conjunction with EN 60335-1:2012 and its amendments.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to EN 60335-1.

This part 2 supplements or modifies the corresponding clauses in EN 60335-1, so as to convert that publication into the European standard: Safety requirements for stationary electric cooking ranges, hobs, ovens and similar 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 in Part 1 is to be adapted accordingly.

NOTE 2 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.

NOTE 3 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.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

### **Endorsement notice**

The text of the International Standard IEC 60335-2-6:2014 was approved by CENELEC as a European Standard with agreed common modifications.

The bibliography of EN 60335-1:2012 is applicable with the following additions :

IEC 60335-2-9	NOTE	Harmonised as EN 60335-2-9.
IEC 60335-2-25	NOTE	Harmonised as EN 60335-2-25.

**Annex ZA**  
(normative)  
**Normative references to international publications  
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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**Annex ZA of EN 60335-1:2012 is applicable except as follows:**

**Add:**

IEC 60068-2-6	2007	Environmental testing -- Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-27	2008	Environmental testing -- Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-52	1996	Environmental testing -- Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	1996
IEC 60584-1	-	Thermocouples -- Part 1: EMF specifications and tolerances	EN 60584-1	-

## 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.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

Country	Clause	Special national condition
FI	22.2	Connection to a mains supply and maintenance work of a cooker are allowed to be carried out only by an authorized person. Therefore, the requirement of Subclause 22.2 is also to be considered to be fulfilled if a cooker is protected with fuses or with a miniature circuit breaker in the installation and exclusively intended for the protection of a cooker.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

#### **Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances**

#### 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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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.

This part of International Standard IEC 60335 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 2002 including its Amendment 1 (2004) and its Amendment 2 (2008). It constitutes a technical revision.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-6 are as follows (minor changes are not listed):

- introduction of requirements for steam ovens;
- introduction of requirements for ovens intended for use on ships;
- clarified requirements for oven shelf construction and test;
- introduction of optional values for the accessible surface temperatures of ovens;

- introduction of stabilising means including warnings;
- clarified representative periods for various appliances (Clause 10);
- introduction of a spillage test for built-in under-bench ovens.

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

FDIS	Report on voting
61/4668/FDIS	61/4708/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for stationary electric cooking ranges, hobs, ovens and similar 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 in Part 1 is to be adapted accordingly.

NOTE 2 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.

NOTE 3 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 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 4 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.

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

The following differences exist in the countries indicated below.

- 6.1: **Class 0I appliances** are allowed (Japan).
- 7.12: The minimum indicated water pressure is 1 MPa (Norway).
- 24.101: Socket-outlets have to be provided with residual current devices which may be combined with the overcurrent protective device (Australia).
- 25.3: **Cooking ranges** that are not built-in shall not be permanently connected to the fixed wiring (New Zealand).

## 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 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

#### 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of **stationary electric cooking ranges, hobs, ovens** and similar appliances for household use, their **rated voltage** being not more than 250 V for single-phase appliances connected between one phase and neutral, and 480 V for other appliances.

This International Standard also includes some requirements for **ovens** that are intended to be used on board ships.

NOTE 101 Examples of appliances that are within the scope of this standard are

- **griddles;**
- **grills;**
- **induction hobs;**
- **induction wok elements;**
- **pyrolytic self-cleaning ovens;**
- **steam ovens.**

Ⓒ 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 the appliance,
- the use of the appliance by **very young children**
- the use of the appliance by **young children** without supervision,

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

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, the national water supply authorities and similar authorities.

NOTE 103 This standard does not apply to

- appliances intended for commercial catering;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);