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OHUTUS. OSA 2-6: ERINÕUDED KOHTKINDLATELE  
PLIITIDELE, PLIIDIPLAATIDELE, AHJUDELE JA  
MUUDELE TAOLISTELE SEADMETELE

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 60335-2-6:2015 sisaldab Euroopa standardi EN 60335-2-6:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 60335-2-6:2015 consists of the English text of the European standard EN 60335-2-6:2015.
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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  
orts feste Herde, Kochmulden, Backöfen und ähnliche  
Geräte  
(IEC 60335-2-6:2014 , modifiziert)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## 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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-02-09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.

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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 2-6: 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 and around the home. However, in general, it does not take into account

- persons (including children) whose
  - physical, sensory or mental capabilities; or
  - lack of experience and knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

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);

- grills, toasters and similar portable cooking appliances (IEC 60335-2-9);
- microwave ovens (IEC 60335-2-25).

## 2 Normative references

This clause of Part 1 is applicable except as follows.

*Addition:*

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

IEC 60068-2-6:2007, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-52:1996, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*

## 3 Terms and definitions

This clause of Part 1 is applicable except as follows.

### 3.1.6 Addition:

Note 101 to entry: For appliances having more than three **heating units** per phase, a diversity factor is applied to the **rated current** or **rated power input** when determining the current used to establish the size of the terminals and the nominal cross-sectional area of the **supply cord**. The diversity factor  $F$  is calculated from the following formula, where  $N$  is the number of **heating units** per phase that can be energized together:

$$F = 0,35 + \frac{0,65}{\sqrt{N}}$$

### 3.1.9 Replacement:

#### normal operation

operation of the appliance as specified in 3.1.9.101 to 3.1.9.107

**3.1.9.101 Hob elements**, other than **induction hob elements** and **induction wok elements**, are operated with vessels containing cold water. The vessel is made of unpolished commercial quality aluminium, has a flat bottom and is covered with a lid that is positioned so that steam does not affect the tests. Thermal controls are adjusted to their highest setting until the water boils and then adjusted so that the water boils gently. Water is added to maintain the level during boiling.

In case of doubt, vessels as specified in Figure 101 are used.

**Induction hob elements** are operated with vessels as specified in Figure 102 that contain cooking oil at room temperature. Thermal controls are adjusted to their highest setting until the oil temperature reaches  $180\text{ °C} \pm 4\text{ °C}$  and then adjusted so that this temperature is maintained. The oil temperature is measured 10 mm above the centre of the bottom of the vessel.

**Induction wok elements** are operated with a wok having an equivalent sphere diameter that does not differ from the equivalent sphere diameter of the **induction wok element** cavity by more than  $\begin{matrix} 0 \\ -1 \end{matrix}$  %. This wok may be supplied by the manufacturer.