

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

**Appareils électrodomestiques et analogues – Sécurité –  
Partie 2-6: Règles particulières pour les cuisinières, les tables de cuisson,  
les fours et les appareils fixes analogues**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland  
Email: [inmail@iec.ch](mailto:inmail@iec.ch)  
Web: [www.iec.ch](http://www.iec.ch)

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Email: [csc@iec.ch](mailto:csc@iec.ch)  
Tél.: +41 22 919 02 11  
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## CONTENTS

FOREWORD.....	3
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	8
3 Definitions .....	8
4 General requirement.....	12
5 General conditions for the tests .....	12
6 Classification.....	12
7 Marking and instructions.....	12
8 Protection against access to live parts.....	15
9 Starting of motor-operated appliances .....	16
10 Power input and current .....	16
11 Heating .....	16
12 Void.....	20
13 Leakage current and electric strength at operating temperature.....	20
14 Transient overvoltages .....	21
15 Moisture resistance .....	21
16 Leakage current and electric strength.....	22
17 Overload protection of transformers and associated circuits .....	23
18 Endurance.....	23
19 Abnormal operation .....	23
20 Stability and mechanical hazards .....	25
21 Mechanical strength .....	26
22 Construction.....	28
23 Internal wiring.....	32
24 Components .....	32
25 Supply connection and external flexible cords .....	33
26 Terminals for external conductors.....	34
27 Provision for earthing .....	34
28 Screws and connections .....	34
29 Clearances, creepage distances and solid insulation .....	34
30 Resistance to heat and fire .....	34
31 Resistance to rusting .....	34
32 Radiation, toxicity and similar hazards.....	34
Figure 101 – Vessel for testing hob elements.....	36
Figure 102 – Vessel for testing induction hob elements.....	36
Figure 103 – Load for testing rotating spits .....	37
Figure 104 – Probe for measuring surface temperatures .....	38

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

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

#### FOREWORD

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

This consolidated version of IEC 60335-2-6 consists of the fifth edition (2002) [documents 61/2137/FDIS and 61/2162/RVD], its amendment 1 (2004) [documents 61/2741/FDIS and 61/2794/RVD] and its amendment 2 (2008) [documents 61/3410/FDIS and 61/3423/RVD].

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 5.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

The French version of this standard has not been voted upon.

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 fourth edition (2001) 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 following differences exist in the countries indicated below.

- 3.1.6: The diversity factor is not used (USA).
- 3.1.9: Other test conditions are used (USA).
- 6.1: Class 0I appliances are allowed (Japan).
- 7.1: Instructions for pyrolytic self-cleaning ovens are to be marked on the outside of the oven (USA).
- 7.1: Miniature fuse links are not to be used to protect socket-outlets (USA).
- 7.12: The minimum indicated water pressure is 1 MPa (Norway).
- 7.12.4: The instructions shall state the name of the manufacturer and model number of the control panel to be used with built-in appliances (USA).
- 11.7: The duration of the test is different (Canada and USA).
- 11.8: 65 K applies for all wooden surfaces (Norway, Sweden and USA).
- 11.8: Lower temperature limits apply to handles, knobs and other surfaces accessible during the self-cleaning operation (USA).
- 11.101: The test is different (Australia, Canada and USA).
- 13.2: Leakage current measurements are not carried out (USA).
- 13.3: The electric strength test is not carried out (USA).
- 15.2: Tests are only carried out on controls mounted in the hob surface (USA).
- 16.2: Leakage current measurements are not carried out (USA).
- 19.4: The temperature limit is 315 °C (USA).
- 19.101: Different disc sizes are used (USA).
- 20.101: Heavier loads are used (USA);
- 20.102: Heavier loads are used (USA).

- 21.101: Additional requirements for oven shelves are specified (Australia, New Zealand and USA).
- 21.102: Different test loads and test methods are used (USA).
- Clause 22: Ovens installed at a height below 80 cm above the floor shall be constructed so that the oven door cannot be opened by a simple operation (Sweden).
- Clause 22: Hob elements are required to be inaccessible to children (Sweden).
- 22.2: For appliances with more than one heating unit, each unit shall be provided with all-pole disconnection (Norway).
- 22.107: The requirement does not apply (USA).
- 22.108: The test is different (USA).
- 22.109: A centre oven temperature of 315 °C is specified (USA).
- 22.110: Larger quantities of different soils are used (USA).
- 22.111: Larger quantities of different soils are used (USA).
- 22.113: The test is not carried out (USA).
- 22.115: The test is not carried out (USA).
- 24.1.4: The number of cycles of operation is different (USA).
- 24.101: Socket-outlets have to be provided with residual current devices which may be combined with the overcurrent protective device (Australia).
- 24.102: The current limitation is different and socket-outlets are required to be de-energized when the cooking elements are in use (USA).
- 25.3: Ranges that are not built-in shall not be permanently connected to the fixed wiring (New Zealand and Norway).
- Clause 27: Earthing terminals are permitted to be connected to the neutral (USA).

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result 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.

2 | 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 the amendment 2 be adopted for implementation nationally not earlier than 12 months from the date of its publication.

## 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.

- 2] 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.

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

- **griddles;**
- **grills;**
- **induction hobs;**
- 2 | – **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

- 2 | – 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).