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Household and similar electrical appliances – Safety –

Part 2-6: Particular requirement for 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 appareils fixes analogues*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-6: Particular requirements for stationary cooking ranges,
hobs, ovens and similar appliances**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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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 fifth edition cancels and replaces the fourth edition published in 1997 and its amendment 1 (2000). It constitutes a technical revision.

The text of this part of IEC 60335 is based on the following documents:

FDIS	Report on voting
61/2137/FDIS	61/2162/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 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 committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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).
- 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).

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.

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.

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.

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;**
- **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

- the use of appliances by young children or infirm persons without supervision;
- playing with the appliance by young children.

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 is applicable except as follows.

Addition:

IEC 60584-1, *Thermocouples – Part 1: Reference tables*