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INTERNATIONAL STANDARD

AMENDMENT 1

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/5631/FDIS	61/5690/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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- withdrawn,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 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 bilingual version of this publication may be issued at a later date.

3 Terms and definitions

3.1.6 *In the addition, replace the Note 101 to entry by the following:*

Note 101 to entry: For appliances having more than three **heating units** per phase, other than those that are controlled by programmable **electronic circuits** that limit the input of heating elements and/or motors from being energized at the same time, 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:

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

3.1.9.101 *Add the following text after the existing third paragraph:*

Induction hob elements in a **flexible induction cooking zone** are operated with:

a) the maximum number of vessels which can be separately controlled at the same time, arranged to cover the **flexible induction cooking zone** as far as possible. Any combination of vessels giving the most unfavourable results shall be used for the test. Several vessels with the same diameter may be used;

b) the vessel which provides the highest power density (W/cm^2);

c) the smallest vessel that allows an **induction hob element** to operate.

Note 1 to entry: Vessels according to Figure 102 should be used for the tests. The vessel diameters specified in Figure 101 should be considered for the tests.

Operation as specified in a), b) or c), that results in the most unfavourable condition for the tests specified in the relevant subclauses is applied.

In the existing seventh paragraph, add before "**induction wok elements**" *the words* "those in a **flexible induction cooking zone** and".

Add the following new term and definition:

3.124
flexible induction cooking zone
area on a **cooking zone** with **induction hob elements** that is not marked to indicate where vessels are to be placed for heating food

7 Marking and instructions

Add the following new subclause:

7.9 *Addition:*

Flexible induction cooking zone switches, **touch controls**, displays and the like shall be marked or placed so as to indicate clearly as to which vessel is assigned to which switch, **touch control**, display or the like.

11 Heating

11.7.102 *Delete the second sentence of the first paragraph and add a new paragraph stating* "***Ovens*** *provided with a rotating spit are also operated with the spit rotating for 60 min".*

11.101 *Add "except for the temperature setting" at the end of the first paragraph.*

15 Moisture resistance

15.2 *Replace the existing text by the following:*

Cooking ranges *and* ***hobs*** *are positioned so that the* ***hob surface*** *is horizontal. A vessel having the largest diameter shown in Figure 101,that does not exceed the diameter of the* ***cooking zone****, is completely filled with the spillage solution and positioned centrally over the* ***cooking zone****. A further quantity of 0,5 l of the spillage solution is poured steadily into the vessel over a period of 15 s. The test is carried out on each* ***cooking zone*** *in turn, after removing any residual spillage solution from the appliance.*

For ***hob elements*** *incorporating a switch or a thermal control, 0,02 l of the spillage solution is poured over the* ***hob element*** *so that it flows over the switch or control. A vessel is then placed on the* ***hob element*** *to depress any movable part. If controls are mounted in the hob surface, 0,5 l of the spillage solution is poured over them in a period of 15 s.*

*For **hobs** having ventilating openings in the **hob surface**, 0,2 l of the spillage solution is poured steadily through a funnel onto the ventilating openings. The funnel has an outlet diameter of 8 mm and is positioned vertically with the outlet 200 mm above the **hob surface**. The funnel is positioned above the ventilating openings so that the spillage solution enters the appliance in the most unfavourable way.*

*If the opening is protected, the funnel is positioned so that the spillage solution falls onto the **hob surface** as close as possible to the opening.*

Care is to be taken to ensure that the spillage solution is not poured over controls located close to ventilating openings.

*For **ovens** and **grills**, 0,5 l of the spillage solution is poured over the floor of the **oven** or grilling compartment.*

*For appliances having a drip tray or similar receptacle, the receptacle is filled with the spillage solution. A further quantity of the spillage solution, equal to 0,01 l per 100 cm^2 of the area of the top surface of the receptacle, is poured onto the receptacle through openings in the **hob surface**. However, the total quantity of spillage solution shall not exceed 3 l.*

*For **hobs** having a lid, 0,5 l of the spillage solution is poured uniformly over the closed lid. When the spillage solution has run off, the surface is dried and a further 0,125 l of the spillage solution is poured steadily from a height of approximately 50 mm onto the centre of the lid over a period of 15 s. The lid is then opened as in normal use.*

***Hobs** with controls mounted below the **hob surface** and **built-in ovens** that are intended for use installed under work surfaces shall be subjected to a spillage test with 0,5 l of the spillage solution. They shall be installed according to the manufacturer's instructions except that the front surface of the **oven** (excluding control knobs, handles) shall align with front edge of a 30 mm thick wooden work surface with a square front edge, see Figure 105. The spillage solution shall be poured on the work surface at the area which gives the most unfavourable conditions representing the pouring likely to occur, so that the spillage solution flows down the front surface of the **oven** over controls, joints, vents and similar openings. If necessary, the test is repeated until all different controls or gaps are covered by the spillage test. The appliance is dried between each test.*

The test is performed as follows:

A bottle with a shape similar to the one in Figure 107 and a cap is filled with 0,5 l of the spillage solution.

The cap of the bottle shall have a hole of 8 mm diameter, placed off-centre according to Figure 106. The bottle shall also have a hole of 8 mm diameter near the bottle base (see Figure 107) to equalize the liquid pressure.

Other suitable containers may be used provided the spillage solution amount is poured over the appliance under test in the same manner.

*The hole in the cap of the bottle is put on the horizontal work surface at approximately 80 mm horizontal distance with respect to the front of the **oven**. The inclination of the bottle shall be higher than 30° and lower than 45°. The lower part of the bottle hole in the cap shall be in contact with the work surface, with the hole in the cap placed down closest to the surface. See Figure 108.*

NOTE 101 The intention of the inclination and distance is avoiding the spillage "jumping" over the front of the **oven**.

NOTE 102 When using holes of 8 mm diameter, the specified solution amount is spilled in about 15 s.

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