

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 2
AMENDEMENT 2

**Household and similar electrical appliances – Safety –
Part 2-7: Particular requirements for washing machines**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-7: Règles particulières pour les machines à laver le linge**

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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
61/5106/FDIS	61/5137/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- withdrawn,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.

2 Normative references

Replace the reference to ISO 1817 by the following:

ISO 1817:2015, *Rubber, vulcanized or thermoplastic – Determination of the effect of liquids*

7 Marking and instructions

7.12 *Add the following:*

The instructions shall include the substance of the following:

This appliance is intended to be used in household and similar applications such as:

- staff kitchen areas in shops, offices and other working environments;
- farm houses;
- by clients in hotels, motels and other residential type environments;
- bed and breakfast type environments;
- areas for communal use in blocks of flats or in launderettes.

If the manufacturer wants to limit the use of the appliance to less than the above, this shall be clearly stated in the instructions.

20 Stability and mechanical hazards

Add the following new subclauses:

20.106 For appliances with a front opening door having an opening dimension exceeding 200 mm, and drum volume exceeding 60 dm³, it shall not be possible to start or recommence the washing cycle until a separate means which controls the movement of the drum is operated manually, even after the door has been opened and closed again.

NOTE The volume of the drum can be calculated by measuring the maximum internal diameter and maximum internal length of the drum.

Compliance is checked by inspection, measurement ignoring any non-metallic seal fitted in the door opening, and by the following test.

*The appliance is supplied at **rated voltage**, and the door is opened and then closed.*

*If compliance relies on the operation of an **electronic circuit**, the test is repeated under the following conditions applied separately:*

- the fault conditions in a) to g) of 19.11.2 are applied one at a time to the **electronic circuit**;*
- the electromagnetic phenomena tests of 19.11.4.2 and 19.11.4.5 are applied to the appliance.*

The washing cycle shall not start or recommence.

20.107 For appliances with a front opening door having an opening dimension exceeding 200 mm, and drum volume exceeding 60 dm³, it shall be possible to open from the inside the closed door, when the appliance is not energized or in a standby mode, with a force not exceeding 70 N.

NOTE 1 The volume of the drum can be calculated by measuring the maximum internal diameter and maximum internal length of the drum.

Compliance is checked by measurement, ignoring any non-metallic seal fitted in the door opening, and by applying a force of 70 N perpendicular to the plane of the closed door at a point furthest from the hinges accessible from the inside of the door. If the appliance is supplied with an additional decorative door, the test is carried out with this door closed.

NOTE 2 The force can be applied to the outside of the door.

22 Construction

22.101 *Replace the text of second paragraph of the test specification prior to the dashed items by the following:*

*If compliance relies on the operation of an **electronic circuit** and the appliance is capable of providing a wash water temperature of 60 °C or higher or is marked as having a wash water temperature of 60 °C or higher, the test is repeated under the following conditions applied separately:*

Annex BB – Ageing test for elastomeric parts

Replace the existing text by the following:

The ageing test on elastomeric parts is carried out by measuring their hardness and mass before and after immersion in solutions of detergent and rinsing agent at elevated temperature.

The test is carried out on at least three samples of each part. The test procedure is as specified in ISO 1817 with the following modifications.

5 Test liquids

Two test liquids are used:

- *one liquid is obtained by dissolving 5 g of the detergent specified in Annex AA per litre of distilled water;*
- *the other liquid is composed of 0,6 ml of rinsing agent as specified in Annex AA per litre of distilled water.*

Care is to be taken to ensure that the total mass of the test pieces immersed does not exceed 100 g for each litre of solution, that the test pieces are completely immersed and that their entire surface is freely exposed to the solution. During the tests, the test pieces are not to be exposed to direct light. Test pieces of different compounds are not to be immersed at the same time in the same solution.

6 Test pieces

6.4 Conditioning

The temperature is $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ and the relative humidity is $(50 \pm 5)\%$.

7 Immersion in the test liquid

7.1 Temperature

The solution is heated within 1 h with the test pieces immersed, to a temperature of $75\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and maintained at this value. The solution is renewed every 24 h and heated in the same way.

NOTE To avoid undue evaporation of the solution, a closed-circuit system or similar method can be used for renewing the solution.

7.2 Duration

The test pieces are immersed for a total period of $48\text{ }^{\pm 1}\text{ }^0\text{ h}$.

The test pieces are then immediately immersed in a fresh solution, which is maintained at ambient temperature. The pieces are immersed for $45\text{ min} \pm 15\text{ min}$.

After having been removed from the solution, the test pieces are rinsed in cold water at $15\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and then dried with blotting paper.