

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

AMENDMENT 2

AMENDEMENT 2

Household and similar electrical appliances – Safety –  
Part 2-21: Particular requirements for storage water heaters

Appareils électrodomestiques et analogues – Sécurité –  
Partie 2-21: Règles particulières pour les chauffe-eau à accumulation

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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
61/3678/FDIS	61/3698/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 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- withdrawn,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.

**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.

## FOREWORD

*Add the following to the differences existing in the countries:*

- 13.2: an additional leakage current test is required (China).

## INTRODUCTION

*Replace the fifth paragraph by the following:*

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.

## 1 Scope

*Replace the two dashed items in the fourth paragraph by the following:*

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

## 22 Construction

*Add the following subclause:*

### 22.47 Replacement:

Appliances shall withstand the water pressure occurring in normal use.

*Compliance is checked by subjecting the appliance to a water pressure of*

- twice the **rated pressure**, for **closed water heaters**. If the water heater is supplied through a pressure reducing valve, the container is subjected to twice the working pressure instead;

*NOTE 1 The pressure reducing valve may be incorporated in the water-inlet pipe.*

*NOTE 2 The working pressure is the maximum pressure in the container measured during the test of Clause 11.*

- 1,5 times **rated pressure**, for **cistern-fed water heaters and low-pressure water heaters**;
- 0,15 MPa, for **open-outlet water heaters**;
- 0,03 MPa, for **cistern-type water heaters**.

*Pressure relief devices are rendered inoperative. The pressure is raised at a rate of 0,13 MPa/s to the specified value and is maintained at that value for 15 min.*

*Water shall not leak from the appliance and there shall be no permanent deformation to such an extent that compliance with this standard is impaired.*

*NOTE 3 Heat exchangers incorporated in an appliance are subjected to a pressure test based on their working pressure.*

*NOTE 4 Damage to a protective coating on the inside of containers is not considered to be a hazard.*

### 22.102 Replace the text by “Void”.

## Bibliography

Add the following new reference:

ISO 13732-1, *Ergonomics of the thermal environment – Methods for the assessment of human responses to contact with surfaces – Part 1: Hot surfaces*

