



SLOVENSKI STANDARD
SIST EN 60335-2-21:2003/A2:2009
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Household and similar electrical appliances - Safety -- Part 2-21: Particular requirements for storage water heaters

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-21: Besondere Anforderungen für Wasserewärmer (Warmwasserspeicher und Warmwasserboiler)

(standards.iteh.ai)

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

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Ta slovenski standard je istoveten z: EN 60335-2-21:2003/A2:2008

ICS:

13.120	Varnost na domu	Domestic safety
91.140.65	Oprema za ogrevanje vode	Water heating equipment

SIST EN 60335-2-21:2003/A2:2009 **en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60335-2-21/A2

November 2008

ICS 91.140.65; 13.120

English version

**Household and similar electrical appliances -
Safety -
Part 2-21: Particular requirements for storage water heaters
(IEC 60335-2-21:2002/A2:2008)**

Appareils électrodomestiques
et analogues -
Sécurité -
Partie 2-21: Règles particulières
pour les chauffe-eau à accumulation
(CEI 60335-2-21:2002/A2:2008)

Sicherheit elektrischer Geräte
für den Hausgebrauch
und ähnliche Zwecke -
Teil 2-21: Besondere Anforderungen
für Wassererwärmer
(Warmwasserspeicher
und Warmwasserboiler)
(IEC 60335-2-21:2002/A2:2008)

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[16ce34416f5e/sist-en-60335-2-21-2003-a2-2009](https://standards.iteh.ai/catalog/standards/sist/54670804-2907-4a90-8f25-16ce34416f5e/sist-en-60335-2-21-2003-a2-2009)

This amendment A2 modifies the European Standard EN 60335-2-21:2003; it was approved by CENELEC on 2008-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 61/3678/FDIS, future amendment 2 to IEC 60335-2-21:2002, prepared by IEC Technical Committee 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60335-2-21:2003 on 2008-10-01.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-07-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2013-10-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-21:2003.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

- p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

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Endorsement notice

<https://standards.itech.ai/catalog/standards/sist/54670804-2907-4a90-8f25-16c694476e5c/sist-en-60335-2-21-2003-a2-2009>

The text of amendment 2:2008 to the International Standard IEC 60335-2-21:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

- p In the Bibliography, add the following note to the standard mentioned:

ISO 13732-1 NOTE Harmonized as EN ISO 13732-1:2008 (not modified).



IEC 60335-2-21

Edition 5.0 2008-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 2
AMENDEMENT 2

Household and similar electrical appliances – Safety –
Part 2-21: Particular requirements for storage water heaters
(standards.iteh.ai)

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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

D

ICS 91.140.65; 13.120

ISBN 2-8318-1000-8

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*

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