



SLOVENSKI STANDARD

SIST EN 60335-2-21:2000

01-april-2000

Nadomešča:

SIST EN 60335-2-21:1995

SIST EN 60335-2-21:1995/A3:1997

Varnost gospodinjskih in podobnih električnih aparatov - 2-21. del: Posebne zahteve za akumulacijske grelnike vode (IEC 60335-2-21:1997 + popravek apr. 1998; spremenjen)

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

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

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

Ta slovenski standard je istoveten z: EN 60335-2-21:1999

ICS:

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

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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60335-2-21

June 1999

ICS 91.140.65; 13.120

Supersedes EN 60335-2-21:1992 and its amendment

English version

Safety of household and similar electrical appliances
Part 2: Particular requirements for storage water heaters
(IEC 60335-2-21:1997 + corrigendum 1998, modified)

Sécurité des appareils
électrodomestiques et analogues
Partie 2: Règles particulières pour
les chauffe-eau à accumulation
(CEI 60335-2-21:1997 +
corrigendum 1998, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2: Besondere Anforderungen für
Wassererwärmer (Warmwasserspeicher
und Warmwasserboiler)
(IEC 60335-2-21:1997 +
Corrigendum 1998, modifiziert)

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[4d3d31afce5d/sist-en-60335-2-21-2000](https://standards.iteh.ai/catalog/standards/sist/b3bf3346-5025-427e-8828-4d3d31afce5d/sist-en-60335-2-21-2000)
This European Standard was approved by CENELEC on 1999-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 61/1101/FDIS, future fourth edition of IEC 60335-2-21 prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote in February 1997. The results of the vote were discussed during the Fehrltorf meeting in October 1997 when it was decided to submit a draft for EN 60335-2-21 to the formal vote.

This draft was circulated in August 1998 and was approved by CENELEC as EN 60335-2-21 on 1999-04-01.

This European Standard replaces EN 60335-2-21:1992 and its amendment A3:1995.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-01-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2006-04-01

This standard has to be used in conjunction with EN 60335-1, Safety of household and similar electrical appliances, Part 1: General requirements. It was established on the basis of the 1994 edition of that standard. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for storage water heaters.

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 of part 1 is to be adapted accordingly.

Subclauses and figures which are additional to those in part 1 are numbered starting with 101.

Special national conditions causing a deviation from this European Standard are listed in annex ZA and are in addition to those in EN 60335-1.

National deviations from this European Standard are listed in annex ZB and are in addition to those in EN 60335-1.

NOTE - 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 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

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

Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-21:1997, including its corrigendum April 1998, was approved by CENELEC as a European Standard with common modifications as given below.

COMMON MODIFICATIONS

22 Construction

p 22.102 Replace the fourth dashed item by:

- 1,5 times the internal calculated operating pressure for **cistern-type water heaters**.

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Annexes

p Add:

Annex ZA
(normative)**Special national conditions***Addition:*Clause Special national condition22.101 **Denmark, Finland, Norway and Sweden**

For closed water heaters, the minimum rated pressure is 1,0 MPa.

Annex ZB
(informative)**A-deviations***Addition:*Clause Deviation1 **Sweden** (Government Authority Regulation AFS 1994:39; pressure vessels)

Additional requirements are specified by the national authority responsible for the safety of pressure vessels.

24.101 **United Kingdom** (Building Regulation Part G3)

In addition to a non-self-resetting thermal cut-out, any closed water heater having a storage capacity in excess of 15 l shall be fitted with a temperature relief valve according to BS 6283 Part 2 or a combined temperature and pressure relief valve according to BS 6283 Part 3.

24.102 **United Kingdom** (Building Regulation Part G3)

The water temperature of the stored water shall not at any time exceed 99 °C in closed water heaters having a storage capacity in excess of 15 l.



Corrigendum to EN 60335-2-21:1999

English version

Annex ZB, A-deviations

Add:

24.102 Italy (Regio Decreto 1927)

The water temperature limit of the stored water shall be in accordance with the Regio Decreto 824 - 12/5/1927.

July 1999

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NORME
INTERNATIONALE

CEI
IEC

INTERNATIONAL
STANDARD

60335-2-21

Quatrième édition
Fourth edition
1997-08

Sécurité des appareils électrodomestiques
et analogues –

Partie 2:
Règles particulières pour les chauffe-eau
à accumulation

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Part 2:
Particular requirements for storage
water heaters

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF HOUSEHOLD AND SIMILAR
ELECTRICAL APPLIANCES –Part 2: Particular requirements for storage
water heaters

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.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

It forms the fourth edition of IEC 60335-2-21 and replaces the third edition published in 1989 and its amendments.

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

FDIS	Report on voting
61/1101/FDIS	61/1278/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 third edition (1991) of that standard.

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 electric storage water heaters.