



**SLOVENSKI STANDARD**  
**SIST EN 60335-2-21:2021**

**01-september-2021**

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**Gospodinjski in podobni električni aparati - Varnost - 2-21. del: Posebne zahteve za akumulacijske grelnike vode**

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 Wassererwärmer (Warmwasserspeicher und Warmwasserboiler)

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

[SIST EN 60335-2-21:2021  
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**Ta slovenski standard je istoveten z: EN 60335-2-21:2021**

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**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

**EN 60335-2-21**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2021

ICS 13.120; 91.140.65

Supersedes EN 60335-2-21:2003 and all of its  
amendments and corrigenda (if any)

English Version

Household and similar electrical appliances - Safety - Part 2-21:  
Particular requirements for storage water heaters  
(IEC 60335-2-21:2012 , modified + COR1:2013)

Appareils électrodomestiques et analogues - Sécurité -  
Partie 2-21: Règles particulières pour les chauffe-eau à  
accumulation  
(IEC 60335-2-21:2012 , modifiée + COR1:2013)

Sicherheit elektrischer Geräte für den Hausgebrauch und  
ähnliche Zwecke - Teil 2-21: Besondere Anforderungen für  
Wassererwärmer (Warmwasserspeicher und  
Warmwasserboiler)  
(IEC 60335-2-21:2012 , modifiziert + COR1:2013)

This European Standard was approved by CENELEC on 2020-08-10. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN 60335-2-21:2021 (E)****European foreword**

This document (EN 60335-2-21:2021) consists of the text of IEC 60335-2-21:2012 prepared by IEC/TC 61 "Safety of household and similar electrical appliances", together with the common modifications prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-12-18
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024-06-18

This document supersedes EN 60335-2-21:2003, and all of its amendments and corrigenda (if any).

This document is read in conjunction with EN 60335-1:2012+A11:2014+ A13:2017+A1:2019+ A14:2019+A2:2019.

The numbering system for European sub-clauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive see informative Annex ZZA, which is an integral part of this document.

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**Endorsement notice**

The text of the International Standard IEC 60335-2-21:2012 was approved by CENELEC as a European Standard with agreed common modifications.

## 1 Modification to the Scope

*Delete the note to the fourth paragraph*

*Replace the fifth paragraph except for notes 101 and 102 by the following:*

This document deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons.

However, in general, it does not take into account:

- **children** playing with the appliance;
- the use of the appliance by **very young children**;

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this document.

## 2 Modification to Clause 7 "Marking and instructions"

### 7.12 Modification:

*Replace in the first sentence of the fourth paragraph of Part 1 the words "8 years" by "3 years".*

*Add a new second sentence fourth paragraph of Part 1 the following:*

Children aged from 3 to 8 years are only allowed to operate the tap connected to the water heater.

## 3 Modification to Clause 19 "Abnormal operation"

### 19.2 Addition:

*Add the following sentence to Note 101:*

If there are separate thermostats in the phases of a three-phase water heater with star connection (without neutral), all thermostats are short-circuited simultaneously.

## 4 Modification to the annexes

*Modify the annexes as follows:*

## EN 60335-2-21:2021 (E)

**Annex ZA**  
(normative)

**Special national conditions**

*Addition:*

Clause      Special national condition

22.101      **Denmark, Finland, Norway and Sweden**

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

22.102      **Denmark** (Instruction AT 2.1.2-4, 1994 and AT Instruction B.4.8)

Cold water inlets on the heated storage water heater, the safety valve and the blow out piping shall have a clear flow diameter of at least Ø 20 mm.

**Annex ZB**  
(informative)  
**A-deviations**

*Addition:*

Clause      Deviation

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

An unvented water heater shall be fitted with two independent safety devices, in addition to the thermostat used for normal temperature control. These can be a non-self-resetting thermal cut-out and a temperature relief valve according to BS 6283 Part 2 or a combined temperature and pressure relief valve according to BS EN 1490.

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

The water temperature of the stored water shall at no time exceed 100 °C.

Replace Annex ZZA in the part 1 by the following:

## Annex ZZA (informative)

### Relationship between this European Standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Compliance with this Part 2 when used together with the Part 1 provides one means of conformity with the safety objectives.

**Table ZZA.1 – Correspondence between this European Standard and Annex I of Directive 2014/35/EU [2014 OJ L96]**

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks/ Notes
1 a)	Clauses 4, 7	None
1 b)	Clauses 4, 7	None
1 c)	Clauses 4, 7	None
2 a)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
2 b)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
2 c)	Clauses 6, 7, 11, 15, 17, 19, 20, 21, 22, 24, 25, 30, 32	None
2 d)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
3 a)	Clauses 6, 7, 11, 17, 19, 20, 21, 22	None
3 b)	Clauses 7, 11, 15, 19, 22, 25, 32	None
3 c)	Clauses 6, 7, 9, 10, 11, 14, 17, 19, 21, 22	None

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

EN 60335-2-21:2021 (E)

**Annex ZZB**  
(informative)

**Relationship between this European standard and the essential requirements of Directive 2006/42/EC aimed to be covered**

*Annex ZZB is not applicable*

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## 5 Modification to the Bibliography

*Add the following notes to the relevant references in the addition:*

IEC 60335-2-15	NOTE	Harmonized as EN 60335-2-15.
IEC 60335-2-35	NOTE	Harmonized as EN 60335-2-35.
IEC 60335-2-75	NOTE	Harmonized as EN 60335-2-75.

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Edition 6.0 2012-11

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

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ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
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