
Gospodinjiski 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

iTeh STANDARD PREVIEW

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: prEN 60335-2-21

ICS:

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

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 60335-2-21

January 2016

ICS 13.120; 91.140.65

Will supersede EN 60335-2-21:2003

English Version

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

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

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)

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2016-04-08.

The text of this draft consists of the text of IEC 60335-2-21:2012.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

- 1 **European foreword**
- 2 This document (prEN 60335-2-21:2016) consists of the text of IEC 60335-2-21:2012 prepared by
3 IEC/TC 61 "Safety of household and similar electrical appliances", together with the common
4 modifications prepared by CLC/TC 61 "Safety of household and similar electrical appliances".
5
- 6 This document is currently submitted to the Enquiry.
7
- 8 The following dates are proposed:
- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
 - latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
 - latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)
- 9 This document will supersede EN 60335-2-21:2003.
- 10 This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed
11 for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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12 1 Scope

13 This clause of Part 1 is replaced by the following.

14 This European Standard deals with the safety of electric **storage water heaters** for household and similar
15 purposes and intended for heating water below boiling temperature, their **rated voltage** being not more
16 than 250 V for single-phase appliances and 480 V for other appliances.

17 Appliances not intended for normal household use but which nevertheless may be a source of danger to
18 the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are
19 within the scope of this standard.

20 This standard is also applicable to **immersion heater units** intended to be retrofitted in a **heat exchange**
21 **closed water heater** having provision for retrofitting. Such a unit shall comply with the requirements in
22 Annex AA.

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

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

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

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

- 30 NOTE 101 Attention is drawn to the fact that
31 - for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be
32 necessary;
33 - in many countries additional requirements are specified by the national health authorities, the national authorities
34 responsible for the protection of labour and similar authorities;
35 - in many countries regulations exist for the installation of equipment connected to the water mains.

- 36 NOTE 102 This standard does not apply to
37 - appliances for boiling water (EN 60335-2-15);
38 - instantaneous water heaters (EN 60335-2-35);
39 - commercial dispensing appliances and vending machines (EN 60335-2-75);
40 - appliances intended exclusively for industrial purposes;
41 - appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive
42 or explosive atmosphere (dust, vapour or gas).
43

44 **7 Marking and instructions**

45 **7.10**

46 Delete the text in EN 60335-1 beginning with "Devices used to... " until "... to be reached by
47 vulnerable persons."

48 **7.12 Modification:**

49 *Replace in the first sentence of the fourth paragraph of EN 60335-1:2012 the words "8 years" by*
50 *"3 years".*

51 *Add after the sentence the following:*

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

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53 NOTE Unless National Committees re-confirm the text in Annex ZA and Annex ZB they will be removed.

54 **Annex ZA**
55 (normative)

56 **Special national conditions**

57 *Addition:*

58 Clause Special national condition

59 **22.101** **Denmark, Finland, Norway and Sweden**

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

61 **22.102** **Denmark** (Instruction AT 2.1.2-4, 1994 and AT Instruction B.4.8)

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

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64		Annex ZB
65		(informative)
66		
67		A-deviations
68	<i>Addition:</i>	
69	<u>Clause</u>	<u>Deviation</u>
70	24.101	United Kingdom (Building Regulation Part G3)
71		In addition to a non-self-resetting thermal cut-out, any closed water heater having a
72		storage capacity in excess of 15 l shall be fitted with a temperature relief valve according
73		to BS 6283 Part 2 or a combined temperature and pressure relief valve according to BS 6283
74		Part 3.
75	24.102	United Kingdom (Building Regulation Part G3)
76		The water temperature of the stored water shall not at any time exceed 99 °C in closed water
77		heaters having a storage capacity in excess of 15 l.
78	1	Netherlands
79		Netherlands does not allow immersion heater units intended to be retrofitted in a heat
80		exchange closed water heater unless:
81		- the immersion heater unit has been tested with the tank models and brands listed in the
82		instructions of the immersion heater unit;
83		- the tank models and brands list the models of the immersion heater units that can be
84		retrofitted.



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-21: Particular requirements for storage water heaters**

FOREWORD

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

This sixth edition cancels and replaces the fifth edition published in 2002 including its Amendment 1 (2004) and its Amendment 2 (2008). It constitutes a technical revision.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-21 are as follows (minor changes are not listed):

- added requirements for immersion heater units (fixed immersion heaters);
- removed reference to ISO 13732-1 from Bibliography.