



# SLOVENSKI STANDARD SIST EN 60335-2-15:1995

01-marec-1995

---

## Safety of household and similar electrical appliances - Part 2: Particular requirements for appliances for heating liquids

Safety of household and similar electrical appliances -- Part 2: Particular requirements for appliances for heating liquids

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2: Besondere Anforderungen für Geräte zur Flüssigkeitserhitzung

Sécurité des appareils électrodomestiques et analogues -- Partie 2: Règles particulières pour les appareils de chauffage des liquides

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

Ta slovenski standard je istoveten z: EN 60335-2-15:1990/A52:1992

---

### ICS:

13.120	Varnost na domu	Domestic safety
97.040.50	Majhni gospodinjski aparati	Small kitchen appliances

**SIST EN 60335-2-15:1995**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 60335-2-15:1995](#)

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

EUROPEAN STANDARD  
NORME EUROPEENNE  
EUROPÄISCHE NORM

EN 60335-2-15

December 1990

UDC 64.06-83:641.524:620.1:614.8

-03- 1995

Supersedes HD 264 S2:1984

Descriptors: Household electrical appliances, liquids, kettles, safety requirements, protection against electric shocks, fire protection, protection against mechanical hazard

English version

**SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES**  
**PART 2: PARTICULAR REQUIREMENTS FOR APPLIANCES FOR**  
**HEATING LIQUIDS**  
(IEC 335-2-15:1986, modified)

Sécurité des appareils  
électrodomestiques  
et analogues  
Deuxième partie:  
Règles particulières pour  
les appareils de chauffage  
des liquides  
(CEI 335-2-15:1986, modifiée)

Sicherheit elektrischer  
Geräte für den Hausgebrauch  
und ähnliche Zwecke  
Teil 2:  
Besondere Anforderungen für  
Geräte zur Flüssigkeits-  
erhitzung  
(IEC 335-2-15:1986, modifiziert)

ITeH STANDARD PREVIEW  
(standards.iteh.ai)

This European Standard was approved by CENELEC on 5 March 1990. 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, 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

### BRIEF HISTORY

The proposal to endorse the third edition of IEC Publication 335-2-15, document CENELEC/TC 61 (SEC) 527, was circulated under the enquiry procedure in February 1987.

This proposal was discussed during the Brighton meeting in October 1987 and the Brussels meeting in December 1987 when it was decided to submit a draft for EN 60335-2-15 to the voting procedure. This procedure started in September 1989.

The text of this draft was ratified by the CENELEC Technical Board on the 5th of March 1990.

---

## **iTeh STANDARD PREVIEW** **(standards.iteh.ai)**

SIST EN 60335-2-15:1995

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

FOREWORD

R This European Standard has been prepared by the secretariat of CENELEC Technical Committee 61.

The following dates are applicable:

- date of announcement (doa) 1990-06-01
- date of latest publication (dop) 1991-01-01
- date of withdrawal of conflicting national standards (dow) 1994-01-01

This European Standard replaces HD 264 S2:1984.

For products which have complied with HD 264 S2:1984 before 1994-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-01-01.

This document supplements or modifies the corresponding clauses of IEC 335-2-15:1986, so as to convert that standard into the European Standard EN 60335-2-15.

This standard has to be used in conjunction with EN 60335-1:1988, Safety of household and similar electrical appliances, Part 1: General requirements, including its amendments A2:1988, A5:1989 and A6:1989.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses which are in addition to those in IEC 335-1 are numbered starting with 101. Subclauses which are in addition to those in IEC 335-2-15 are numbered starting with 601.

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

There are no national deviations from this European Standard, other than those listed in annex ZY of EN 60335-1.

Note. Where reference is made to other harmonized standards, the latest edition of that standard is applicable.

- r The following print types are used:
- R - requirements: in roman type (indicated in this document in the margin by R);
  - i - test specifications: in italic type (indicated in this document in the margin by i);
  - r - explanations: in small roman type (indicated in this document in the margin by r).

Instructions for modification of the reference document are in italic type and are indicated in this document in the margin by i.

-----

ENDORSEMENT NOTICE

R IEC 335-2-15:1986 applies, taking into account the following common modifications.

## COMMON MODIFICATIONS

- i Foreword Delete.  
Preface Delete.
1. SCOPE
- i 1.1 Add:  
r In some countries, additional requirements are applicable for pressure vessels.
7. MARKING
- i 7.1 Add: **TeH STANDARD PREVIEW**  
(standards.iteh.ai)  
Wash boilers, livestock feed boilers, sterilizers and glue pots have to be marked with the symbol for splash-proof construction. [SIST EN 60335-2-15:1995](https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-60335-2-15:1995)  
<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-60335-2-15:1995>
- i 7.12 In the second paragraph, replace dash item by:  
R WARNING - If this kettle is overfilled, boiling water may be ejected.
11. HEATING
- i 11.8 Replace "IEC Publication 320" by "EN 60320" (in two places).  
Add:  
11.10 Modification:  
For motors, p = 2000.
19. ABNORMAL OPERATION
- i Add:  
19.11 Addition:  
If the enclosure of a coffee maker is used as supplementary insulation or reinforced insulation, its temperature rise is not limited.

## COMMON MODIFICATIONS

- i 19.101 In the first line, replace "Kettles" by "Kettles having a body or lid of plastic material".
22. CONSTRUCTION
- i Add:
- r 22.1 Refer snc.
- i 22.2 Replacement:  
R Wash boilers, livestock feed boilers, sterilizers and glue pots shall be splash-proof.
- i 22.11 Replace "20 mm" by "20 mm<sup>2</sup>".
24. COMPONENTS
- i 24.1 Replace "IEC Publication 320" by "EN 60320".
- Add:
- r 24.11 Addition: (standards.iteh.ai)  
Appliances intended to maintain liquid at a particular temperature are considered as appliances intended for use unattended. <https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-0c5314b6c551/en-60335-2-15-1995>
- R 24.601 For coffee makers and other appliances with a heating element intended to keep the liquid warm, at least one of the thermal cut-outs shall be of the non-self-resetting type.
- i Compliance is checked during the tests of clause 19.
25. SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CABLES AND CORDS
- i 25.2 Replace "IEC Publication 320" by "EN 60320".
- 25.6 Replace the addition by:
- R Power supply cords shall be not lighter than:  
- for coffee makers having a rated capacity not exceeding 1.5 l and other appliances having a similar limited mass:  
. if rubber insulated, braided flexible cord (code designation H03 RT-F),  
. if polyvinyl chloride insulated, light polyvinyl chloride sheathed flexible cord (code designation H03 VV-F or H03 VVH2-F);

## COMMON MODIFICATIONS

- R
- for wash boilers:
    - . if rubber insulated, ordinary polychloroprene sheathed flexible cord (code designation H05 RN-F),
    - . if polyvinyl chloride insulated, ordinary polyvinyl chloride sheathed flexible cord (code designation H05 VV-F or H05 VVH2-F);
  - for livestock feed boilers, ordinary polychloroprene sheathed flexible cord (code designation H05 RN-F);
  - for other appliances:
    - . if rubber insulated, ordinary tough rubber sheathed flexible cord (code designation H05 RR-F),
    - . if polyvinyl chloride insulated, ordinary polyvinyl chloride sheathed flexible cord (code designation H05 VV-F or H05 VVH2-F).

Wash boilers shall be provided with a polychloroprene sheathed power supply cord, if the cord is rubber insulated.  
Livestock feed boilers shall be provided with a polychloroprene sheathed power supply cord.

## 30. RESISTANCE TO HEAT, FIRE AND TRACKING

i Replace the text by:

R This clause of Part 1 is applicable except as follows:

i 30.1 **Addition:** [s.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-0a5555555555/sist-en-60335-2-15-1995](https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-0a5555555555/sist-en-60335-2-15-1995)  
For coffee makers, the temperature rises occurring during the tests of clause 19 are not taken into account.

r 30.4 **Addition:**  
Appliances intended to maintain liquid at a particular temperature are considered to be appliances liable to be operated while unattended.

-----



**ANNEX ZX (normative)****SPECIAL NATIONAL CONDITIONS**

R The following special national conditions, which are in addition to those in EN 60335-1, exist in the countries mentioned.

**22.1 DENMARK**

Class 0 appliances for heating liquids are not allowed.

**FINLAND AND SWEDEN**

Class 0 and class 0I appliances for heating liquids are not allowed.

-----

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 60335-2-15:1995

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 60335-2-15:1995](#)

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

EUROPEAN STANDARD  
NORME EUROPEENNE  
EUROPAISCHE NORM

EN 60335-2-15/A1

December 1991

UDC 64.06-83:641.524:620.1:614.8

Descriptors: Household electrical appliances, liquids, kettles, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

Amendment A1 to the English version of EN 60335-2-15

**SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES  
PART 2: PARTICULAR REQUIREMENTS FOR APPLIANCES FOR  
HEATING LIQUIDS**

(Amendment 1:1988 to IEC 335-2-15:1986, modified)

Sécurité des appareils  
électrodomestiques  
et analogues  
Deuxième partie:  
Règles particulières pour  
les appareils de chauffage  
des liquides

(Modification 1:1988 à la  
CEI 335-2-15:1986, modifiée)

Sicherheit elektrischer  
Geräte für den Hausgebrauch  
und ähnliche Zwecke

Teil 2:  
Besondere Anforderungen für  
Geräte zur Flüssigkeits-  
erhitzung

(Änderung 1:1988 zu  
IEC 335-2-15:1986, modifiziert)

(standards.iteh.ai)

This amendment A1 modifies the European Standard EN 60335-2-15:1990. It was approved by CENELEC on 15 March 1991. 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, 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

Page 2

EN 60335-2-15:1990/A1:1991

FOREWORD

- R The proposal to endorse amendment 1 to IEC Publication IEC 335-2-15, documents CLC/TC (SEC) 603 and 604, was circulated under the enquiry procedure in October 1987.

This proposal was discussed during the Neusiedl meeting in May 1988 when it was decided to submit a draft for an amendment to EN 60335-2-15 to the unique acceptance procedure (UAP). This procedure started in April 1990.

The text of this draft was ratified by CENELEC as amendment A1 on the 10th of December 1990.

A proposal to amend EN 60335-2-15, document CLC/TC 61 (SEC) 695, was circulated under the enquiry procedure in July 1989.

This proposal was discussed during the Stockholm meeting in November 1989 when it was decided to submit a draft for an amendment to EN 60335-2-15 to the unique acceptance procedure (UAP). This procedure started in June 1990.

The text of this draft was ratified by CENELEC as amendment A51 on the 15th of March 1991. It has been incorporated in EN 60335-2-15/A1.

This amendment has been prepared by the secretariat of CENELEC technical committee TC 61.

The following dates are applicable:

- latest date of publication  
of an identical national standard (dop) 1992-09-01
- date of withdrawal of  
conflicting national standards (dow) 1994-09-01

For products which have complied with EN 60335-2-15:1990 before 1994-09-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-09-01.

- p This document supplements or modifies the corresponding clauses of amendment 1:1988 to IEC 335-2-15:1986, so as to convert it into amendment A1 to EN 60335-2-15:1990.

R As a consequence of endorsing amendment 1 of IEC 335-2-15, the common modification of EN 60335-2-15 concerning subclause 1.1 is withdrawn since it is covered by the IEC text.

EN 60335-2-15, including this amendment, has to be used in conjunction with EN 60335-1:1988, including its amendments A2:1988, A5:1989 and A6:1989.

Annexes which are in addition to those in IEC 335-2-15 are lettered ZAA, ZBB, etc.

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

There are no national deviations from this amendment.

-----

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 60335-2-15:1995](https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995)

<https://standards.iteh.ai/catalog/standards/sist/4ca5c22c-ee78-4df2-80c9-c0e535cbc6a5/sist-en-60335-2-15-1995>

ENDORSEMENT NOTICE

R The text of amendment 1:1988 to the International Standard IEC 335-2-15:1986 was approved by CENELEC as an amendment to the European Standard with agreed common modifications as given below.

## COMMON MODIFICATIONS

p Prefaces Delete.

## 1. SCOPE

p 1.1 Replace "IEC Publication 65" by "HD 195".

Add to the second explanation:

r Refer annex ZAA.

## 2. DEFINITIONS

p Add:

R 2.2.601 Cordless kettle denotes a kettle incorporating its heating element which is connected to the supply only when placed on its associated stand.

## 7. MARKING

p 7.1 Add:

R The associated stands delivered with cordless kettles shall be marked with:

- manufacturer's name or trade mark;
- manufacturer's model or type reference.

p 7.12 Add:

R The instruction sheet shall state that the cordless kettle is only to be used with the stand provided and is not to be filled when placed on the stand.

When the construction of the cordless kettle is such that the complete appliance can be lifted by gripping only the handle of the kettle, the instruction sheet shall include the substance of the following:

Important: Ensure that the kettle has switched OFF automatically or is switched OFF manually before attempting to remove it from its stand.

P Add:

8. **PROTECTION AGAINST ELECTRIC SHOCK**

i Replace the text by:

R This clause of Part 1 is applicable except as follows:

i 8.1 Addition:

R Access to live parts in the stand of cordless kettles through the socket apertures shall not be possible by a single action with the test pin of figure 2 applied with a force of 5 N.

P Add:

15. **MOISTURE RESISTANCE**

i 15.3 Add:

The test with the cordless kettle on the horizontal plane is carried out with the kettle both on and off its stand. The additional test for spout filling kettles is carried out only with the kettle off its stand.

Add the following new subclause:

15.601 The stands of cordless kettles are additionally tested without the kettle as follows:

30 ml of water containing approximately 1 % Na Cl is poured over a period of 10 s from a height of 200 mm through a tube with an inner diameter of 8 mm onto the enclosure of the contacts. Immediately afterwards, the electric strength test is made with a voltage of 2 500 V.

P Add:

18. **ENDURANCE**

i Add the following new subclause:

18.601 Cordless kettles shall be subjected to the following test with the contact pins at room temperature.

The two live contacts of the kettle are connected internally to one another and an external electrical load is connected in series with the supply which is maintained throughout the test. The external load is of such a value that the current is 1,1 times the maximum rated current at a voltage of 1,06 times the maximum rated voltage and it is positioned so as not to affect the ambient temperature of the test enclosure. The kettle is inserted into and withdrawn from the stand 10 000 times (20 000 strokes), the same direction of insertion and withdrawal being maintained throughout the test.