



# SLOVENSKI STANDARD

## SIST EN 60335-2-9:1997

01-junij-1997

Nadomešča:

SIST EN 60335-2-9:1995

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**Safety of household and similar electrical appliances - Part 2: Particular requirements for toasters, grills, roasters and similar appliances (IEC 335-2-9:1993, modified)**

Safety of household and similar electrical appliances -- Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances

**iTeh STANDARD PREVIEW**

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-9: Besondere Anforderungen für Grillgeräte, Brottröster und ähnliche ortsveränderliche Kochgeräte

[SIST EN 60335-2-9:1997](https://standards.iteh.ai/catalog/standards/sist/666ed712-a20a-40e5-b775-0890e31850/sist-en-60335-2-9-1997)

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Sécurité des appareils électrodomestiques et analogues -- Partie 2-9: Règles particulières pour les grils, grille-pain et appareils de cuisson mobiles analogues

**Ta slovenski standard je istoveten z: EN 60335-2-9:1995**

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**ICS:**

13.120	Varnost na domu	Domestic safety
97.040.20	Štedilniki, delovni pultji, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances

**SIST EN 60335-2-9:1997**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60335-2-9**

August 1995

ICS 97.040.20; 97.040.50

Supersedes EN 60335-2-9:1990 and its amendments

Descriptors: Household electrical appliances, toasters, waffle irons, grills, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

English version

**Safety of household and similar electrical appliances**  
**Part 2: Particular requirements for toasters, grills,**  
**roasters and similar appliances**  
(IEC 335-2-9:1993, modified)

Sécurité des appareils  
électrodomestiques et analogues  
Partie 2: Règles particulières pour  
les grille-pain, les grills, les cocottes  
et appareils analogues  
(CEI 335-2-9:1993, modifiée)

Sicherheit elektrischer Geräte für den  
Hausgebrauch und ähnliche Zwecke  
Teil 2: Besondere Anforderungen für  
Brotröster, Grillgeräte, Bratgeräte  
und ähnliche Geräte  
(IEC 335-2-9:1993, modifiziert)

[SIST EN 60335-2-9:1997](https://standards.iteh.ai/catalog/standards/sist/666ed712-a20a-40e5-b775-a08e9c5c1850/sist-en-60335-2-9-1997)

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This European Standard was approved by CENELEC on 1995-07-04. 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

### Foreword

The proposal to endorse IEC 335-2-9:1993, document CLC/TC 61 (SEC) 915, was circulated under the enquiry procedure in September 1993. This proposal was discussed during the Oslo meeting in April 1994, when it was decided to submit a draft for EN 60335-2-9 to the formal vote.

This draft was circulated in November 1994 and was ratified by CENELEC as EN 60335-2-9 on 1995-07-04.

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

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) 1996-01-01
- latest date by which national standards conflicting with the EN have to be withdrawn (dow) 1998-01-01

For products which have complied with EN 60335-2-9:1990 including its amendments A51:1991 and A2:1992 before 1998-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2003-01-01.

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 electric toasters, grills, roasters and similar appliances.

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 and figures which are additional to those in part 1 are numbered starting from 101. Annexes which are additional to those in part 1 are lettered AA, BB, etc.

There are no special national conditions causing a deviation from this European Standard, other than those listed in annex ZA to 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 In this document p is used in the margin to indicate instructions for preparing the printed version.

**Endorsement notice**

The text of the International Standard IEC 335-2-9:1993 was approved by CENELEC as a European Standard with agreed common modifications as given below.

**COMMON MODIFICATIONS****7 Marking and instructions**

p 7.12 Add:

The instructions for use shall include details on how to clean surfaces in contact with food. For **toasters**, they shall include details on how to remove breadcrumbs, when applicable.

**11 Heating**

p 11.8 In the last paragraph replace "transformers" by "transformers, components of **electronic circuits**".

**15 Moisture resistance**

p 15.101 In the penultimate paragraph, replace "connector" by "connectors".

**19 Abnormal operation**

p 19.101 This subclause has to be printed in italic type.

**20 Stability and mechanical hazards**

p 20.101 The first paragraph has to be printed in roman type.

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**Annex ZB** (informative)

**A-deviations**

*Addition:*

<u>Clause</u>	<u>A-deviation</u>
11.8	<b>Norway</b> (law reference to be provided)  The modification does not apply.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC  
335-2-9

Quatrième édition  
Fourth edition  
1993-06

Sécurité des appareils électrodomestiques  
et analogues

Partie 2:

Règles particulières pour les grille-pain, les grils,  
les cocottes et appareils analogues

(standards.iteh.ai)

Safety of household and similar  
electrical appliances

<https://standards.iteh.ai/catalog/standards/sist-en-60335-2-9-1997>  
a08e9c5c1850/sist-en-60335-2-9-1997

Part 2:

Particular requirements for toasters, grills,  
roasters and similar appliances

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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Pour prix, voir catalogue en vigueur  
For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

Part 2: Particular requirements for toasters, grills, roasters  
and similar appliances

## 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 cooperation 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, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

This part of International Standard IEC 335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

It forms the fourth edition of IEC 335-2-9 and replaces the third edition and its amendments Nos. 1 and 2.

The text of this part 2 is based on the following documents:

DIS	Report on voting
61(CO)756	61(CO)775

Full information on the voting for the approval of this part 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 335-1 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 335-1, so as to convert it into the IEC standard: Safety requirements for electric toasters, grills, roasters and similar appliances.

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 in part 1 is to be adapted accordingly.

## NOTES

1 The following print types are used:

- Requirements: in roman type;
- *Test specification: in italic type;*
- Notes: in small roman type.

Words in **bold** in the text are defined in clause 2.

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

3 Annexes which are additional to those in part 1 are lettered AA, BB, etc.

The following additional differences exist in some countries:

2.2.9: Different loads and test methods are used (Canada and USA).

Clause 3: The d.c. component in the appliance neutral is limited (Australia).

4.101: If the appliance incorporates a motor, the motor is tested at rated voltage (USA).

7.12.1: The appropriate connector must be identified by a marking on the appliance (Canada and USA).

11.2: 9,5 mm thick plywood is used for the test corner (USA).

11.7: The test duration is based on the quantity of food (USA).

11.8: The modification does not apply (Norway).  
The temperature rise of the test wall is limited to 100 K (USA).

15.2: A different solution is used and the test is not conducted on portable ovens (USA).

15.101: Appliances are immersed to the marked level only (USA).

19.2: A 300 mm deep simulated cabinet is located 400 mm above the countertop (Canada and USA).

19.101: A combustible cloth is placed above the toaster and the residual bread is left in place (Canada and USA).

20.101: The test is not carried out (USA).

22.106: The requirement is not applicable (USA).

22.107: Different test methods and numbers of cycles are used (Canada and USA).

25.7: The free length of the supply cord is specified; in some cases, it is 1,8 m to 2,1 m for appliances intended to be connected to fixed socket-outlets, while in others it is 0,6 m to 2,1 m for appliances normally used on a table or similar surface (Canada and USA).

The minimum length for the supply cord is specified (Australia and New Zealand).

29.1: Bare heated elements are tested differently (USA).

## SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

### Part 2: Particular requirements for toasters, grills, roasters and similar appliances

#### 1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of **portable electric appliances** having a cooking function such as baking, roasting and grilling, intended for household purposes, their **rated voltage** being not more than 250 V.

NOTE 1 – Examples of appliances which are within the scope of this standard are:

- **toasters;**
- **waffle irons;**
- **portable ovens;**
- **roasters;**
- **rotary grills;**
- **rotisseries;**
- **radiant grills;**
- **contact grills (griddles);**
- **raclette grills;**
- **barbecues** for indoor use.

Examples are illustrated in annex AA.

So far as is practicable, this standard deals with the common hazards presented by appliances which are encountered by all persons in and around the home.

This standard does not in general take into account:

- the use of appliances by young children or infirm persons without supervision;
- playing with the appliance by young children.

#### NOTES

2 Attention is drawn to the fact that:

- for appliances intended to be used in tropical countries, special requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

3 This standard does not apply to:

- **stationary ovens** and **stationary grills** (IEC 335-2-6);
- appliances for high-frequency heating;
- appliances intended for commercial catering;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- **barbecues** for outdoor use.