

SLOVENSKI STANDARD

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SIST EN 60335-2-9:1997/A1:1998

SIST EN 60335-2-9:1997/A11:2001

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Gospodinjski in podobni električni aparati - Varnost - 2-9. del: Posebne zahteve za žare, opekače in podobne prenosne aparate za pripravo hrane (IEC 60335-2-9:2002; spremenjen)

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

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

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

Ta slovenski standard je istoveten z: EN 60335-2-9:2003

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

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en

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EUROPEAN STANDARD

EN 60335-2-9

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2003

ICS 13.120; 97.040.50

Supersedes EN 60335-2-9:1995 + A1:1998 + A2:2000 + A11:2000 + A12:2002 + A13:2002

English version

**Household and similar electrical appliances –
Safety
Part 2-9: Particular requirements for grills, toasters
and similar portable cooking appliances
(IEC 60335-2-9:2002, modified)**

Appareils électrodomestiques et
analogues –
Sécurité
Partie 2-9: Règles particulières
pour les grils, grille-pain et
appareils de cuisson mobiles analogues
(CEI 60335-2-9:2002, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-9: Besondere Anforderungen
für Grillgeräte, Brotröster und
ähnliche ortsveränderliche Kochgeräte
(IEC 60335-2-9:2002, modifiziert)

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This European Standard was approved by CENELEC on 2003-03-01. 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, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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 61/2100/FDIS, future fifth edition of IEC 60335-2-9, prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote.

A proposal for an amendment, document CLC/TC 61(SEC)1371, was discussed during the Kista meeting of CENELEC TC 61 in May 2002, when it was decided to submit a draft amendment prA11 to the formal vote. As a result of the Kista meeting, a draft amendment prAA containing the relevant existing common modifications was also submitted to the formal vote.

The texts of the FDIS, prA11 and prAA were approved by CENELEC as a new edition of EN 60335-2-9 on 2003-03-01.

This European Standard replaces EN 60335-2-9:1995 + A1:1998 + A2:2000 + A11:2000 + A12:2002 + A13:2002.

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) 2004-03-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2006-03-01

This part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 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 grills, toasters and similar portable cooking appliances.

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.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 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 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

Introduction

p Add:

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. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, 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 60335-2-9:2002 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

7 Marking and instructions

p 7.1 Add:

Cookers, portable ovens and rotary grills shall be marked with symbol 5041 of IEC 60417-1 or with the substance of the following:

CAUTION: Hot surface.

[SIST EN 60335-2-9:2003](https://standards.iteh.ai/catalog/standards/sist/cf29d2c9-20ac-4a6e-aa71-152677700000/iec-60335-2-9-2002)

<https://standards.iteh.ai/catalog/standards/sist/cf29d2c9-20ac-4a6e-aa71-152677700000/iec-60335-2-9-2002>

NOTE Z101 Symbol 5041 of IEC 60417-1 is a warning sign and the rules of ISO 3864 apply. However the colours may vary to ensure legibility.

p Add:

7.6 *Addition:*



[symbol 5041 of IEC 60417-1]

Caution, hot surface

p 7.12 Replace the third paragraph by the following:

The instructions for appliances having **accessible metal surfaces**, other than working surfaces, that have a temperature rise exceeding 90 K during the test of Clause 11 shall include the substance of the following:

The temperature of accessible surfaces may be high when the appliance is operating.

p Add:

The instructions 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.

If symbol 5041 of IEC 60417-1 is marked on the appliance, the instructions shall state that the surfaces are liable to get hot during use.

p Add:

7.14 Addition:

The height of the triangle used with symbol 5041 of IEC 60417-1 shall be at least 12 mm.

11 Heating

p Add:

11.1 Addition:

Compliance for **toasters** is also checked by the test of 11.Z101.

p Add:

11.Z101 Toasters in which the bread is inserted through the top are operated at **rated power input**. They are operated for three cycles under **normal operation**.

The temperature rise of **accessible surfaces** of metallic sides that are at a height lower than 25 mm below the top surface shall not exceed 90 K.

NOTE There are no temperature rise limits specified for other surfaces.

19 Abnormal operation

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p Add:

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19.11.2 Addition: <https://standards.iteh.ai/catalog/standards/sist/en-60335-2-9-2003>

For appliances having electronic controls, the fault conditions a) to f) are also simulated with the appliance supplied at **rated voltage** but with the controls switched off. Heating elements shall not become energized.

INTERNATIONAL STANDARD

IEC 60335-2-9

Fifth edition
2002-03

Household and similar electrical appliances – Safety –

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

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Sécurité –* [SIST EN 60335-2-9:2003](https://standards.iteh.ai/catalog/standards/sist/cf29d2c9-20ac-4a6e-aa71-1583fe8db5a7/sist-en-60335-2-9-2003)

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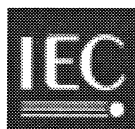
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*Règles particulières pour les grils, les grille-pain
et appareils de cuisson mobiles analogues*

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-9: Particular requirements for grills, toasters and
similar portable cooking 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 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 specifications, 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.
- 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.

This fifth edition cancels and replaces the fourth edition published in 1993 and its amendment 1 (1998) and amendment 2 (1999). It constitutes a technical revision.

The text of this part of IEC 60335 is based on the following documents:

FDIS	Report on voting
61/2100/FDIS	61/2131/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 fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

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 grills, toasters and similar portable cooking appliances.

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 in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

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- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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The following differences exist in the countries indicated below.

- 3.1.9: Different loads and test methods are used (Canada and USA).
- 5.101: If the appliance incorporates a motor, the motor is tested at rated voltage (USA).
- 7.12: Identification of the connector is to be marked 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).
- 11.8: A temperature rise of 100 K is allowed for the wall of the test corner (USA).
- 15.2: A different solution is used and the test is not carried out on ovens, hotplates or cookers (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).
- 19.2: The test is different. Additional tests are carried out on hotplates and cookers (USA):
- 19.101: A combustible cloth is placed above the toaster and the residual bread is left in place (Canada and USA).
- 19.102: Disks having different sizes are used (USA).
- 20.101: The test is not carried out (USA).
- 21.101: The test is different (USA).
- 22.106: The requirement is not applicable (USA).
- 22.107: Different test methods and numbers of cycles are used (Canada and USA).
- 22.110: The test is not carried out (USA).
- 22.111: The test is not carried out (USA).
- 22.112: The test is not carried out (USA).
- 24.1.3: The test is not carried out (USA).
- 24.101: The test is not carried out (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).

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.