

**Majapidamis- ja muud taolised elektriseadmed. Ohutus.  
Osa 2-9: Erinõuded rösteritele, grillidele ja muudele  
taolistele seadmetele**

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 60335-2-9:2003 sisaldab Euroopa standardi EN 60335-2-9:2003 ingliskeelset teksti.	This Estonian standard EVS-EN 60335-2-9:2003 consists of the English text of the European standard EN 60335-2-9:2003.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.08.2003.	Date of Availability of the European standard is 05.08.2003.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 13.120, 97.040.50

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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)

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.

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## 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.

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**

p Add:

**19.11.2** *Addition:*

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.

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# INTERNATIONAL STANDARD

**IEC**  
**60335-2-9**

Fifth edition  
2002-03

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## **Household and similar electrical appliances – Safety –**

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

*Appareils électrodomestiques et analogues –  
Sécurité –*

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



Reference number  
IEC 60335-2-9:2002(E)

## Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

## Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

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- **Catalogue of IEC publications**

The on-line catalogue on the IEC web site ([www.iec.ch/catlg-e.htm](http://www.iec.ch/catlg-e.htm)) enables you to search by a variety of criteria including text searches, technical committees and date of publication. On-line information is also available on recently issued publications, withdrawn and replaced publications, as well as corrigenda.

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# INTERNATIONAL STANDARD

**IEC**  
**60335-2-9**

Fifth edition  
2002-03

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## **Household and similar electrical appliances – Safety –**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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*For price, see current catalogue*

## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	8
3 Definitions .....	8
4 General requirement.....	11
5 General conditions for the tests .....	11
6 Classification.....	12
7 Marking and instructions.....	12
8 Protection against access to live parts.....	12
9 Starting of motor-operated appliances .....	13
10 Power input and current.....	13
11 Heating.....	13
12 Void .....	14
13 Leakage current and electric strength at operating temperature.....	14
14 Transient overvoltages .....	15
15 Moisture resistance .....	15
16 Leakage current and electric strength.....	16
17 Overload protection of transformers and associated circuits .....	16
18 Endurance.....	17
19 Abnormal operation .....	17
20 Stability and mechanical hazards.....	18
21 Mechanical strength .....	19
22 Construction.....	19
23 Internal wiring.....	21
24 Components .....	21
25 Supply connection and external flexible cords .....	22
26 Terminals for external conductors.....	22
27 Provision for earthing .....	22
28 Screws and connections .....	23
29 Clearances, creepage distances and solid insulation .....	23
30 Resistance to heat and fire .....	23
31 Resistance to rusting.....	23
32 Radiation, toxicity and similar hazards.....	23
Annexes .....	27
Bibliography.....	27

Figure 101 – Examples of appliances.....	24
Figure 102 – Load for testing rotating spits .....	25
Figure 103 – Vessel for testing hotplates .....	26
Figure 104 – Vessel for testing induction hotplates .....	26
Table 101 – Quantity of liquid in the vessel.....	9

## 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.
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- 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.
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- 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.

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- *test specification: 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.

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.

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).