

**SLOVENSKI STANDARD**  
**SIST EN 60335-2-9:2003/A13:2011**  
**01-januar-2011**

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**Gospodinjiski in podobni električni aparati - Varnost - 2-9. del: Posebne zahteve za žare, opekače in podobne prenosne aparate za pripravo hrane - Dopnilo A13**

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

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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/A13:2010**

**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 60335-2-9:2003/A13:2011**      **en,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60335-2-9/A13**

November 2010

ICS 13.120; 97.040.50

English version

**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, grille-pain et appareils de cuisson  
mobiles analogues

Sicherheit elektrischer Geräte für den  
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This amendment A13 modifies the European Standard EN 60335-2-9:2003: it was approved by CENELEC on 2010-10-01. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

This amendment to the European Standard EN 60335-2-9:2003 was prepared by the Technical Committee CENELEC TC 61, Safety of household and similar electrical appliances.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A13 to EN 60335-2-9:2003 on 2010-10-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-10-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2013-10-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-9:2003 and its amendments A1:2004, A2:2006 and A12:2007.

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

There are no national deviations from this amendment.

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## 1 Scope

Replace the 3<sup>rd</sup> paragraph by the following:

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in household and similar environments.

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

- **children** playing with the appliance;
- the **use of the appliance** by **very young children**;
- the **use of the appliance** by **young children** without supervision.

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this European Standard.

## 3 Definitions

3.1.9.104 Replace by:

**Ovens** are operated with the door closed. **Ovens** having a **thermostat** are adjusted to its highest setting. Other **ovens** are operated so that the temperature in the centre of the cavity is maintained at  $(240 \pm 15) ^\circ\text{C}$  by switching the supply on and off.

### 3.6.3

#### accessible part

Modification:

Insert "and probe 18" after "test probe B".

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Add the following new definitions:

#### 3.Z101

##### children

young persons comprising **very young children**, **young children** and **older children**

NOTE **Children** are not expected to perform cleaning or **user maintenance** of the appliance.

#### 3.Z102

##### very young children

young persons aged from 0 up to and including 36 months

NOTE **Very young children** are not expected to use appliances.

#### 3.Z103

##### young children

young persons older than 36 months and younger than 8 years

NOTE **Young children** are not expected to use appliances safely unless continuous supervision is given.

#### 3.Z104

##### older children

young persons aged from 8 years up to and including 14 years

NOTE **Older children** can use appliances safely after they have been given appropriate supervision or instruction concerning use of the appliance.

#### 3.Z105

##### vulnerable people

persons having reduced physical, sensory or mental capabilities (e.g. partially disabled, elderly having some reduction in their physical and mental capabilities), or lack of experience and knowledge (e.g. **older children**)

NOTE **Vulnerable people** can use appliances safely after they have been given appropriate supervision or instruction concerning use of the appliance.

**3.Z106****very vulnerable people**

persons having very extensive and complex disabilities

NOTE **Very vulnerable people** are not expected to use appliances safely unless continuous supervision is given or appliances are adapted accordingly with arrangements beyond the scope of this standard.

**3.Z107****use of the appliance**

all actions required to have the appliance perform its intended function, such as plugging in, switching on, using, regulating, cleaning the appliance or performing **user maintenance**

**3.Z108****sandwich maker**

appliance having two heated surfaces between which the sandwiches are placed.

NOTE A contact grill with two heated surfaces is also considered as a sandwich maker.

**7 Marking and instructions**

This clause of Part 1 is applicable except as follows.

**7.1** Delete the paragraphs “cookers, portable ovens ... CAUTION: hot surface”.

*Addition:*

When the provisions of footnote <sup>b</sup> to Table Z101 apply, the appliance shall be marked with:

- Symbol IEC 60417-5041;
- or with the substance of the following “CAUTION: Hot surface.”.

The symbol or the warning shall be put on the surface of the appliance having the highest temperature and shall be visible during normal operation.

**7.10** *Addition:*

Devices used to start/stop operational functions of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position, etc. A tactile or an audible and visual feedback shall give an indication that the device has been operated.

NOTE The sound of a motor or actuator switching ON/OFF is regarded as audible feedback if it covers also the switching ON/OFF of the appliance.

**7.12** Delete the following paragraph:

*“The instructions for appliances having accessible metal surface ... the instruction shall state that the surfaces are liable to get hot during use.”*

*Addition:*

The instructions shall include the substance of the following:

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised.

Keep the appliance and its cord out of reach of children less than 8 years.

*Add the following new subclause before 7.12.1:*

**7.12.Z101** The specific instructions related to the safe operation of this appliance (as given in 7.12 of this standard) shall be collated together in the front section of the user instructions. The height of the characters, measured on the capital letters, shall be at least 4 mm.

NOTE Z101 For the evaluation of legibility and clarity of safety warnings guidance can be found in EN 62079.

These instructions shall also be available in an alternative format, e.g. on a website.

#### **7.14 Replacement of A12:**

The height of symbol IEC 60417-5041 shall be at least 12 mm.

## **8 Protection against access to live parts**

This clause of Part 1 is applicable except as follows:

### **8.1.1 Replace the 3<sup>rd</sup> paragraph by the following:**

Test probe B and probe 18 of EN 61032 are applied without appreciable force, the appliance being in every possible position. Through openings, the test probe is applied to any depth that the probe will permit and is rotated or angled before, during and after insertion to any position. If the opening does not allow the entry of the probe, the force on the probe in the straight position is increased to 20 N when probe B is used or 10 N when probe 18 is used. If the probe then enters the opening, the test is repeated with the probe in the angled position. However when using test probe 18 the appliance shall be fully assembled as in normal operation without any parts removed; parts that are intended to be removed for user maintenance shall not be removed.

### **8.2 Modification**

Replace "test probe B of EN 61032" by "test probes of EN 61032".

## **11 Heating**

This clause of Part 1 is applicable except as follows:

### **11.1 Delete the paragraphs "compliance of toasters ... 11.Z101".**

Replace the Addition in A12 by:

For **ovens, rotary grills, rotisseries** and **cookers**, compliance is also checked by the test of 11.Z101.

For **contact grills, waffle irons, sandwich makers, radiant grills, raclette grills, griddles, barbecues**, hot plates, candy floss, **pop corn makers**, compliance is also checked by the test of 11.Z102.

For **breadmakers** and **food dehydrators**, compliance is also checked by the test of 11.Z103.

For **toasters**, compliance is also checked by test of 11.Z104.

For **roasters**, compliance is also checked by test of 11.Z105.

For all other types of appliances, compliance is checked by submitting the appliance to the tests of the nearest mentioned relevant type of appliance.

### **11.8 Delete the Addition in A12.**

**11.Z101 Ovens, rotary grills, rotisseries** and **cookers** are supplied at rated power and operated under **normal operation**.

All **heating units** that can be connected to the supply mains at the same time during normal use are switched on.

**Ovens** are operated without accessories.

Temperature rises are not measured on the following surfaces (see Figure Z102):

- surfaces on the **oven** door within 10 mm from the edge of the door (Zone 1);
- surfaces around the **oven** door within 10 mm from the left right or lower edge of the door, or 25 mm from the upper edge of the door (Zone 2);
- surfaces within 25 mm of vents (Zone 3);
- underside surfaces that are not accessible with test probe 41 of EN 61032;
- The rear surface of appliances which, according to the instructions, shall be placed against a wall; and are not accessible with test probe 41 of EN 61032.
- Surfaces within 25 mm from the level of the top surface of **cookers** when the **hotplate** is in operation.

During the test, the temperature rise of surfaces shall not exceed the values specified in Table Z101.

**Table Z101 — Temperature rise limits for touchable surfaces**

Surface <sup>d</sup>	Temperature rise K
	Surfaces of appliances likely to be touched <sup>a b</sup>
Bare metal	45
Coated metal <sup>e</sup>	55
Glass and ceramic	60
Plastic and plastic coating > 0,3 mm <sup>c</sup>	65

<sup>a</sup> In addition to surfaces described in 11.Z101 to 11.Z105 the following surfaces or elements shall not be taken into consideration:

- hot functional surface: surface which is intentionally heated by an internal heat source and which has to be hot to carry out the function for which the equipment is intended to be used;
- handles or control knobs including keypads, keyboards and the like are covered by 11.8 of Part 1;
- surfaces of heated cavities or surfaces adjacent to the functional areas and which have the same thermal properties.

<sup>b</sup> When, due to the construction or dimensional limitations of the appliance, the required values cannot be met, the maximum temperature rise shall not be higher than twice the values indicated. In such cases, a warning shall be marked on the relevant surface of the appliance.

<sup>c</sup> The temperature rise limit applies also for plastic material having a metal finish of thickness less than 0,1 mm.

<sup>d</sup> When the thickness of the plastic coating does not exceed 0,3 mm, the temperature rise limits of the coated metal or of glass and ceramic material apply.

<sup>e</sup> Metal is considered coated when a coating having a minimum thickness of 80 µm made by enamel or non substantially plastic coating is used.

**11.Z102** For **contact grills, waffle irons, sandwich makers, radiant grills, raclette grills and griddles, barbecues, hot plates, candy floss, pop corn makers**, the temperature rise limits in Table Z101 apply. The appliance is supplied at rated power and operated under normal operation.

Temperature rises are not measured on:

- surfaces within 25 mm in all direction of the hot functional surface;
- surfaces within 25 mm from the ventilation openings;
- underside surfaces that are not accessible with test probe 41 of EN 61032.

The probe is applied without appreciable force.

**11.Z103** For **breadmakers and food dehydrators**, the temperature rise limits in Table Z101 apply.

The appliance is supplied at **rated power** and operated under **normal operation**.

Temperature rises are not measured on:

- surfaces within 25 mm from the edge of the lid;

- surfaces within 25 mm from the ventilation openings;
- underside surfaces that are not accessible with test probe 41 of EN 61032.

The probe is applied without appreciable force.

**11.Z104** For **toasters**, the temperature rise limits in Table Z101 apply.

The appliance is operated for three cycles at rated power and operated under normal operation.

Temperature rises are not measured on:

- the top side of top loaded appliances and surfaces within 25 mm below the top surface;
- surfaces within 25 mm in all direction of the hot functional surface;
- surfaces within 25 mm from the ventilation openings;
- underside surfaces that are not accessible with test probe 41 of EN 61032.

The probe is applied without appreciable force.

**11.Z105** For **roasters**, the temperature rise limits in Table Z101 apply.

The appliance is supplied at rated power and operated under normal operation.

Temperature rises are not measured on:

- the lids;
- surfaces within 25 mm from the edge of the lid;
- surfaces within 25 mm from the ventilation openings;
- underside surfaces that are not accessible with probe 41 of EN 61032.

The probe is applied without appreciable force.

## 20 Stability and mechanical hazards

This clause of Part 1 is applicable except as follows.

*Add:*

**20.2** *Add the following requirement:*

Appliances are fully assembled as in normal operation without any parts removed.

*Replace the 1<sup>st</sup> paragraph of compliance by:*

*Compliance is checked by inspection, by the tests of 21.1 and by means of:*

- *a test probe that is similar to test probe B of EN 61032 but having a circular stop face with a diameter of 50 mm, instead of the non circular face, applied with a force of 5 N; and*
- *test probe 18 of EN 61032, applied with a force of 2,5 N.*

## 22 Construction

This clause of Part 1 is applicable except as follows:

*Add:*

**22.12** *Add at the end of the first sentence of the first paragraph “including an ingestion or a choking hazard for **vulnerable people**”.*