



SLOVENSKI STANDARD
SIST EN 50304:2009/A1:2011
01-januar-2011

**Električni vgradni štedilniki, peči, pečice in žari za uporabo v gospodinjstvu -
Metode merjenja funkcionalnosti - Dopolnilo A1**

Electric cooking ranges, hobs, ovens and grills for household use - Methods for
measuring performance

Elektrische Herde, Kochmulden, Backöfen und Grillgeräte für den Hausgebrauch -
Verfahren zur Messung der Gebrauchseigenschaften

Cuisinières, foyers de cuisson, fours électriques et grils à usage domestique - Méthodes
de mesure de l'aptitude à la fonction

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Ta slovenski standard je istoveten z: EN 50304:2009/A1:2010

ICS:

97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances
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SIST EN 50304:2009/A1:2011

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50304/A1
EN 60350/A11

October 2010

ICS 97.040.20

English version

Electric cooking ranges, hobs, ovens and grills for household use - Methods for measuring performance

Cuisinières, foyers de cuisson, fours
électriques et grils à usage domestique -
Méthodes de mesure de l'aptitude à la
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This amendment A1 modifies the European Standard EN 50304:2009; this amendment A11 modifies the European Standard EN 60350:2009; 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.

[SIST EN 50304:2009/A1:2011](#)

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 double-numbered European Standard EN 50304:2009/EN 60350:2009 was prepared by the Working Group WG 5 'Induction cooking' of the Technical Committee CENELEC TC 59X, Performance of household and similar electrical appliances; this has been worked out in cooperation with members of CEN TC 194/WG 1/SG 2 ad-hoc group 'Cookware', after decision of CLC/TC 59X, submitting the task to establish a measuring method for the cookware detection system which shall be applicable for different sizes of cooking zones and cookware and independent of any particular brand of induction hob and cookware.

It was submitted to the formal vote and was accepted by CENELEC as EN 50304:2009/A1 / EN 60350:2009/A11 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

Clauses, subclauses, notes, tables and figures which are additional to those in IEC 60350:1999 are prefixed "Z".

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Text of A1 to EN 50304:2009
A11 to EN 60350:2009**4 List of measurements****4.2 Hotplates and cooking zones**

After the third dash item, **add** the following new dash item:

- Smallest detected diameter for induction hobs (see 7.Z1).

7 Hotplates and cooking zones

After 7.4.2, **add** the following new subclause:

7.Z1 Smallest detected diameter**7.Z1.1 Test purpose**

Induction hobs may incorporate an electronic cookware detection means which automatically cuts off the power to the **cooking zone** concerned when no cookware or a cookware with a too small diameter is placed on the **cooking zone**, or a detected cookware is removed from the **cooking zone**.

The purpose of the test method is to determine the smallest diameter which is detected on the **cooking zone** under test.

NOTE 1 The detected diameter – measured with a disc – may not be identical to a base diameter of a cookware. This depends from the design and material of cookware.

Secretary's note: A method to determine the suitable cookware for induction cooking zones is included in CEN/TS 12983-3.

NOTE 2 The purpose of this test is not to grant a specific power to this smallest diameter.

7.Z1.2 Test procedure

Discs as defined in Figure Z1 are used, each being at ambient temperature at the beginning of the test. The test is started with a disc with a diameter which definitely will not be detected by the **cooking zone** to be tested.

Place the disc in the centre of the **cooking zone** marked on the appliance. Set the control to the lowest power level. If the disc is not detected by the cookware detection means, the test is to be done with a disc having a 5 mm larger diameter. This procedure is to be repeated until a disc is detected and is working continuously for at least 1 min.

The found detected diameter shall be verified in the hot condition. To do this: Bring up the amount of water according to Table 1 to the boiling point at maximum possible power level simultaneously on all **cooking zones** available on the **hob**. For that test any suitable cookware which covers the size of the **cooking zone** should be used. For cooking zones with a diameter larger than 220 mm use 3,5 l of water. Remove the cookware after the water on one **cooking zone** has started boiling. Check detection with the discs separately on each **cooking zone** over the whole voltage range of 230 V (+ 10 % - 6 %) within 2 min.

If verifying fails the test is to be repeated with the next larger diameter of the disc.

The smallest detected diameter is defined as the smallest diameter of the disc which was detected under all conditions mentioned above.

After Figure 11, **add** the following figure:

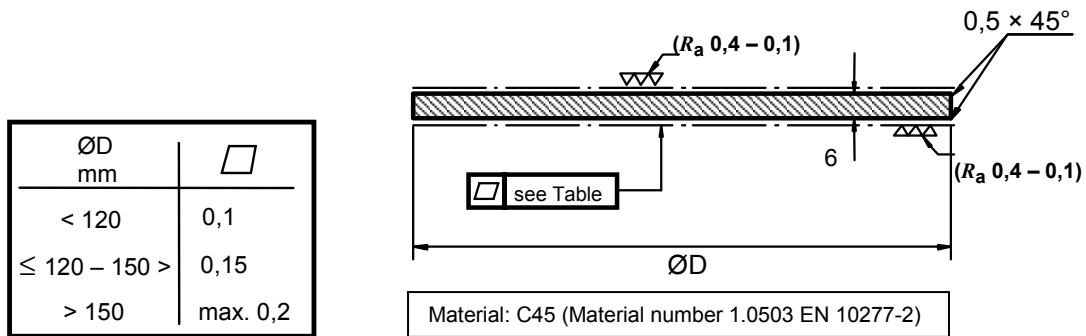


Figure Z1 – Disc to determine the smallest detected diameter

Bibliography

Add the following references:

EN 10277-2, *Bright steel products - Technical delivery conditions - Part 2: Steels for general engineering purposes*

CEN/TS 12983-3, *Cookware - Domestic cookware for use on top of a stove, cooker or hob - Part 3: Cookware for use on induction heating sources*

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