## SLOVENSKI STANDARD

## SIST EN 60661:2002/A2:2006

may 2006

Metode za merjenje lastnosti električnih gospodinjskih aparatov za kavo (IEC 60661:1999/A2:2005)

Methods for measuring the performance of electric household coffee makers (IEC 60661:1999/A2:2005)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60661:2002/A2:2006</u> https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-8deef16e8c7c/sist-en-60661-2002-a2-2006

ICS 97.040.50

Referenčna številka SIST EN 60661:2002/A2:2006(en)

© Standard je založil in izdal Slovenski inštitut za standardizacijo. Razmnoževanje ali kopiranje celote ali delov tega dokumenta ni dovoljeno

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60661:2002/A2:2006 https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-8deef16e8c7c/sist-en-60661-2002-a2-2006

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN 60661/A2

December 2005

ICS 97.040.50

English version

### Methods for measuring the performance of electric household coffee makers (IEC 60661:1999/A2:2005)

Méthodes de mesure de l'aptitude à la fonction des cafetières électriques à usage domestique (CEI 60661:1999/A2:2005) Verfahren zur Messung der Gebrauchseigenschaften elektrischer Haushalt-Kaffeebereiter (IEC 60661:1999/A2:2005)

This amendment A2 modifies the European Standard EN 60661:2001; it was approved by CENELEC on 2005-12-01. 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.

https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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

© 2005 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

### Foreword

The text of document 59L/21/FDIS, future amendment 2 to IEC 60661:1999, prepared by SC 59L, Small household appliances, of IEC TC 59, Performance of household electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60661:2001 on 2005-12-01.

The following dates were fixed:

<ul> <li>latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement</li> </ul>	(dop) 2006-09-01
<ul> <li>latest date by which the national standards conflicting with the amendment have to be withdrawn</li> </ul>	(dow) 2008-12-01
Annex ZA has been added by CENELEC.	

**Endorsement notice** 

The text of amendment 2:2005 to the International Standard IEC 60661:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

### (stand<u>ards.it</u>eh.ai)

<u>SIST EN 60661:2002/A2:2006</u> https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-8deef16e8c7c/sist-en-60661-2002-a2-2006

### Annex ZA (normative)

## Normative references to international publications with their corresponding European publications

Add:

Publication	Year	Title	<u>EN/HD</u>	Year
IEC 60584-2	- 1)	Thermocouples Part 2: Tolerances	EN 60584-2	1993 2)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60661:2002/A2:2006</u> https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-8deef16e8c7c/sist-en-60661-2002-a2-2006

<sup>1)</sup> Undated reference.

<sup>&</sup>lt;sup>2)</sup> Valid edition at date of issue.

# NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60661

1999

AMENDEMENT 2 AMENDMENT 2 2005-11

Amendement 2

Méthodes de mesure de l'aptitude à la fonction des cafetières électriques à usage domestique

### iTeh STANDARD PREVIEW Amendment 2 (standards.iteh.ai) Methods for measuring the performance of electric household coffee makers

https://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-8deef16e8c7c/sist-en-60661-2002-a2-2006

© IEC 2005 Droits de reproduction réservés — Copyright - all rights reserved

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия CODE PRIX PRICE CODE

F

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

### FOREWORD

This amendment has been prepared by subcommittee 59L: Small household appliances, of IEC technical committee 59: Performance of household electrical appliances.

The text of this amendment is based on the following documents:

FDIS	Report on voting
59L/21/FDIS	59L/23/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

### iTeh STANDARD PREVIEW (standards.iteh.ai)

Page 3

SIST EN 60661:2002/A2:2006CONTENTShttps://standards.iteh.ai/catalog/standards/sist/ddc16e8a-be0a-4463-94d7-<br/>8deef16e8c7c/sist-en-60661-2002-a2-2006

Add the title of new Clause 27 as follows:

27 Steam function to froth-up milk and to heat-up water

Page 5

#### 2 Normative references

Add to the existing list, the title of the following standard:

IEC 60584-2, Thermocouples – Part 2: Tolerances

Page 7

#### 5 List of measurements and assessment of performance

Add, to the existing list, the following new items:

- Energy consumption (Clause 26)
- Steam function to froth-up milk and to heat-up water (Clause 27).

- 5 -

Page 21

Add, after Clause 26, the following new Clause 27:

### 27 Steam function to froth-up milk and to heat-up water

The test procedure is considered as applicable for reproducible testing.

#### 27.1 Steam function to froth-up milk

A glass container with a thickness of about 2 mm having an inner diameter of 80 mm  $\pm$  2 mm and a height of 75 mm  $\pm$  2 mm is placed perpendicular and centered below the steam tube of the appliance.

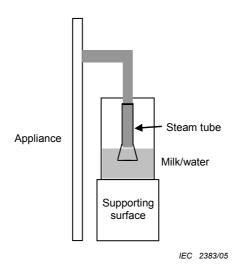
The distance of the outlet of the steam tube to the inner bottom of the container shall be  $10 \text{ mm} \pm 1 \text{ mm}$ .

An amount of  $0,1 \downarrow \pm 0,001 \downarrow$  of water is put into the glass container, and the water level is marked as level 1. An additional amount of  $0,05 \downarrow \pm 0,001 \downarrow$  is then put into the glass container, and the water level is marked as level 2. An extra amount of  $0,05 \downarrow \pm 0,001 \downarrow$  is added on top of level 2 and that level is marked as level 3 (for water levels, see Figure 1). A supporting surface having a thermal isolation may be used (see Figure 2).

NOTE Varying steam tubes with different steam nozzles may cause differences in levels 1, 2 and 3



Figure 1 – Markings for levels 1, 2, 3



## Figure 2 – Test assembly steam function

After that the glass container is emptied and dried.

The water container of the appliance is then filled with the maximum quantity of cold water as assigned by markings, labels or similar instructions of the manufacturer. In case of absence of such instructions, the water container is filled with the maximum quantity of cold water.

In order to avoid residual water in the steam valve, the steam function has to be operated before the test at least three times for about 5 s. 2002/A2:2006 https://standards.iteh.av.catalog/standards/sist/ddc16e8a-be0a-4463-94d7-

The glass container is then filled with  $0,11 \pm 0,0011$  of homogenized milk with a fat content of approximately 3,5 % at a temperature of 8 °C  $\pm$  1 °C.

A watertight thermocouple of class 1 according to IEC 60584-2, accurate to  $\pm$ 1,5 K and having a nominal diameter of 0,25 mm, is placed beside the steam tube and approximately 5 mm away and 10 mm below the marking for level 2 of the glass container.

The mass  $M_{L1}$  of the glass container including the milk shall be determined on a balance having an accuracy of at least 0,1 g and recorded.

The mass  $M_{L1}$  is expressed in grams.

After that the glass container is placed in the same way as described for the marking procedure (see Figure 2).

The appliance is operated with any controls at the positions specified by the manufacturer. In absence of such instructions, the steam function is operated at the max. setting of the steam function.

The steam function of the appliance is then operated until the upper level of the frothed-up milk reaches the marked level 3.

The time  $t_{\rm F}$  to froth-up the milk to level 3 (double volume) shall be determined and noted.

The froth-up time  $t_{\rm F}$  is expressed in seconds and rounded off to the next second.