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**Elektriske apparater til husholdningsbrug
o.l. – Sikkerhed – Del 2-15: Særlige krav til
apparater til opvarmning af væsker**

Household and similar electrical appliances – Safety – Part 2-15:
Particular requirements for appliances for heating liquids

DANSK STANDARD
Danish Standards Association

Göteborg Plads 1
DK-2150 Nordhavn
Tel: +45 39 96 61 01
dansk.standard@ds.dk
www.ds.dk

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English Version

Household and similar electrical appliances - Safety - Part 2-15:
Particular requirements for appliances for heating liquids
(IEC 60335-2-15:2012/A1:2016)

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-15: Exigences particulières pour les appareils de
chauffage des liquides
(IEC 60335-2-15:2012/A1:2016)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-15: Besondere Anforderungen für
Geräte zur Flüssigkeitserhitzung
(IEC 60335-2-15:2012/A1:2016)

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

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European foreword

This document (*EN 60335-2-15:2016/A1:2021*) consists of the text of IEC 60335-2-15:2012/A2:2016 prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-04-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-10-01

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AMENDMENT 1 AMENDEMENT 1

**Household and similar electrical appliances – Safety –
Part 2-15: Particular requirements for appliances for heating liquids**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-15: Exigences particulières pour les appareils de chauffage des liquides**





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IEC Central Office
 3, rue de Varembe
 CH-1211 Geneva 20
 Switzerland

Tel.: +41 22 919 02 11
 Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

<http://www.china-gauges.com/>

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AMENDMENT 1
AMENDEMENT 1

**Household and similar electrical appliances – Safety –
Part 2-15: Particular requirements for appliances for heating liquids**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-15: Exigences particulières pour les appareils de chauffage des liquides**

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FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/5109/FDIS	61/513/AMD

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 stability date indicated on the IEC website 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.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

1 Scope

Add at the end of Note 102:

Appliances can have more than one function.

3 Terms and definitions

3.1.9.101 *Delete “coffee-makers” from the first paragraph.*

Add the following as a new second paragraph:

Coffee makers are operated in accordance with their instructions with the water container filled to its **rated capacity** and bean container, if any, filled with coffee beans. The warming plate and all other energy consuming functions, if any, are switched on.

Add the following new definition:

3.114**decorative door**

part of appliance having the same function as a cabinet door

7 Marking and instructions**7.12** *Add the following to the addition:*

The instructions for coffee-makers other than **built-in coffee-makers** or those tested in a cabinet, shall state that the coffee-maker shall not be placed in a cabinet when in use.

For coffee-makers having an additional **decorative door**, and for coffee-makers intended to be used in a cabinet, the instructions shall state that the coffee-maker must be operated with the **decorative door** open or the cabinet door open.

The instructions for coffee-makers having surfaces of glass, ceramic or similar material that forms part of the enclosure of **live parts** shall include the substance of the following:

WARNING: Do not use the appliance if the surface is cracked.

The instructions for coffee-makers shall state that cleaning and **user maintenance** shall not be made by children without supervision.

Add the following new subclause:

7.12.4 *Addition:*

For coffee-makers suitable for operation when placed in a cabinet, the minimum dimensions of the cabinet shall be given.

10 Power input and current

Replace the text as follows:

This clause of Part 1 is applicable except as follows.

10.1 *Addition:*

The power input of automatic coffee-makers is measured during one operating cycle that is selectable by the user, such as cleaning, descaling, or selecting a beverage. The measurement starts with the appliance at room ambient temperature.

The operating cycle starts with the activation by the user and ends when the appliance stops the cycle automatically and the next operating cycle can be started by the user.

10.2 *Addition:*

The input current of automatic coffee-makers is measured during one operating cycle that is selectable by the user, such as cleaning, descaling, or selecting a beverage. The measurement starts with the appliance at room ambient temperature.

The operating cycle starts with the activation by the user and ends when the appliance stops the cycle automatically and the next operating cycle can be started by the user.

11 Heating

11.2 Add the following text:

Coffee-makers with a **decorative door** or intended to be used in a cabinet shall be tested with the door open.

11.4 Add the following text:

Appliances with electronic power controls are operated as **combined appliances**.

11.7.104 Replace the first paragraph by the following:

For **espresso coffee-makers**, the brewing period is followed by a rest period of 1 min or the period stated in the instructions, if this is longer. The water container is refilled during the rest periods.

Add to the 4th paragraph the following dashed item:

- for **espresso coffee-makers** having an outlet for supplying steam and an outlet for supplying hot water, 1 min period supplying steam is followed by time necessary to produce 100 ml of water.

15 Moisture resistance

15.2 Add the following text to the addition:

Coffee-makers dispensing liquid into a serving container, such as a cup or jug, are tested by steadily pouring 0,5 l of the solution over the surface where the container is filled or the container is transported and removed by the user. If a drop container is placed beneath this surface, the drop container is completely filled before the test is carried out.

Coffee-makers having external surfaces on which it is possible to place a vessel, such as a cup or jug, are tested by pouring 0,2 l of the solution over the complete depositing area in approximately 5 s.

For coffee makers, after each overfilling test or application of liquid, all residues are then removed and the appliance is dried.

19 Abnormal operation

19.1 Add the following to the addition:

For appliances with an external surface providing a keep warm function, the test of 19.106 applies.

For coffee-makers having a **decorative door**, the test of 19.107 applies.

For automatic coffee-makers of the coffee bean type, the tests of 19.108 applies.

19.102 Add the following sentence to the start of the first paragraph:

Kettles are placed on a plywood board having a thickness of approximately 20 mm.

Add the following new subclauses:

19.106 The appliance is operated at **rated power input** with the heated surface completely covered with two layers of textile material of pre-washed double-hemmed cotton sheets until steady conditions are established.

The textile material consists of pre-washed double-hemmed cotton sheet having dimensions approximately 700 mm × 700 mm and specific mass between 140 g/m² and 170 g/m² in the dry condition.

If a **thermostat** operates, the test is repeated with the one-third of the heated surface furthest from the temperature-sensing element covered.

The textile material shall not ignite.

19.107 Coffee-makers with a **decorative door** or intended to be used in a cabinet are operated under the conditions specified in Clause 11 but with the **decorative door** or cabinet door closed.

19.108 Automatic coffee-makers of the coffee bean type, other than automatic **espresso coffee-makers** of the coffee bean type, are supplied at **rated voltage** and operated under **normal operation** five times with rest periods.

Automatic **espresso coffee-makers** of the coffee bean type are supplied at **rated voltage** and are set to maximum quantity of coffee powder, with smallest amount of coffee in the cup according to the instructions without rest periods.

The duration of the operating period is

- for appliances incorporating a timer, the longest period allowed by the timer;
- for other appliances, as follows:
 - for automatic coffee-makers incorporating coffee mills of the grinding type, 30 s longer than the time needed to fill the collecting container or the time required to empty the hopper, whichever is shorter;
 - for automatic coffee-makers incorporating other coffee mills, 1 min.

The duration of the rest period for is

- 10 s, for appliances provided with a collecting container;
- 60 s, for other appliances.

The temperature of the windings shall not exceed the values shown in Table 8.

22 Construction

22.7 In the first sentence of the first paragraph of the addition, replace “any valve for the supply of steam” by “outlet”.

Replace fourth paragraph of the addition by the following:

The appliance shall not rupture and there shall be no leakage other than through a self-resetting **pressure-relief device** or **intentionally weak part**. If a self-resetting **pressure relief device** operates, the appliance shall be suitable for further use.

Replace the 7th and 8th paragraphs by the following:

All pressure regulating devices and all **protective devices** and **intentionally weak parts** are rendered inoperative and the lid is closed.

For pressure cookers, other than **dynamic pressure cookers**, the pressure is gradually increased hydraulically to two times the operating pressure of the **protective device** during the test of 19.4.

For **dynamic pressure cookers**, the pressure is gradually increased hydraulically to 30 kPa in excess of the operating pressure of the **protective device** or **intentionally weak part** during the test of 19.4.

Add the following new subclause:

22.115 Coffee-makers shall be constructed so that it is not possible to rotate the frothing nozzle or hot water nozzle through an angle of more than 45° upwards from the downwards facing vertical position.

Compliance is checked by inspection and by manual test.

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

3, rue de Varembé
PO Box 131
CH-1211 Geneva 20
Switzerland

Tel: + 41 22 919 02 11
Fax: + 41 22 919 03 00
info@iec.ch
www.iec.ch