

PD CLC/TR 50417:2016



BSI Standards Publication

**Safety of household and similar electrical appliances — Interpretations related to European Standards in the EN 60335 series**

### **National foreword**

This Published Document is the UK implementation of CLC/TR 50417:2016. It supersedes PD CLC/TR 50417:2014 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CPL/61, Safety of household and similar electrical appliances.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**CLC/TR 50417**

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September 2016

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Safety of household and similar electrical appliances -  
Interpretations related to European Standards in the EN 60335  
series

Sécurité des appareils électrodomestiques et analogues -  
Interprétations relatives aux Normes Européennes de la  
série EN 60335

Sicherheit elektrischer Geräte für den Hausgebrauch und  
ähnliche Zwecke - Auslegungen zu Europäischen Normen  
der Reihe EN 60335

This Technical Report was approved by CENELEC on 2016-07-04.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

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## **European foreword**

This document (CLC/TR 50417:2016) has been prepared by Technical Committee CLC/TC 61, "Safety of household and similar appliances".

This document is currently submitted to voting in accordance with the Internal Regulations, Part 2, Subclause 11.4.3.3 (simple majority) for acceptance as a CENELEC Technical Report.

This document supersedes CLC/TR 50417:2014.

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

## 1 Scope

This Technical Report includes all the interpretations agreed up to the CLC/TC 61 meeting in December 2015.

It includes all Interpretations currently in force made by CENELEC TC 61 on EN 60335 series of standards. It also includes all decision sheets in force made by OSM/HA. Both types of interpretations are clearly identified. Interpretations relating to a particular standard are listed together, the Parts 2 of EN 60335 being associated with the appropriate edition of Part 1. For each standard, the interpretations are listed in the order of clauses and subclauses.

Each **CENELEC TC 61** interpretation is identified by:

- the place and date of the meeting when it was agreed;
- the document number of the minutes of the meeting;
- the number of the reference document, when applicable;
- a code with the format YYYY/XX, where

    YYYY is the year when the interpretation was decided,

    XX is the number of the interpretation, restarted every year.

Each **OSM/HA** decision sheet is identified through the following template:

DECISION SHEET				Date YYYY-MM-DD
Standard EN 60335-X				OSM/HA
(Sub)clause	Meeting	Agenda item	Document	Exp. date
...	...	...	...	

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.

## 2 EN 60335-1:1994, General requirements

### 1995/01 – General

Dublin, May 1995, CLC/TC 61(SEC)1027  
CLC/TC 61(FR)292

In class II constructions of appliances it is not allowed to reverse the basic and the supplementary insulation.

### 1996/01 - General

Copenhagen, May 1996, CLC/TC 61(SEC)1075  
CLC/TC 61(SEC)1000

For testing motor capacitors in appliances under the scope of EN 60335, document IEC 61/1055/CD should be used.

### 1996/02 – General

Athens, November 1996, CLC/TC 61(SEC)1098  
CLC/TC 61(SEC)1087

The mass of the appliance is to be considered with the empty appliance, if nothing is said in the particular standard or for a particular clause.

### 1998/01 - General

Brussels, May 1998, CLC/TC61(SEC)1185

Controls are considered to comply with EN 60730 if they complied with the previous relevant standard before the date specified in EN 60730, and may be used in an appliance until the end of the certification period.

NOTE 1 Controls will also have to comply with the applicable requirements of EN 60335 series standards.

### 2000/01 - General

Kristiansand, June 2000, CLC/TC 61(SEC)1287

The word “similar” in the title “Toxicity and similar hazards” means other hazards, which may be applicable but not covered by the standard.

### 2000/02 - General

Brussels, October 2000, CLC/TC 61(SEC)1302

Concerning the use of socket-outlets on appliances, those should be of the appropriate type as specified in IEC/TR 60083:1997 for the relevant countries.

### 1998/02 - Clause 1

Naples, November 1998, CLC/TC61(SEC)1218

The scope of EN 60335-1:1994 is meant to include the safety of operators which are instructed to operate the machine, but which are non electrical experts.

### 1996/03 - Subclause 15.1.2

Copenhagen, May 1996, CLC/TC 61(SEC)1075  
CLC/TC 61(SE)351

Parts which are to be removed in accordance with the instructions for use and which can be removed only with the aid of a tool, shall not be removed, only for the purpose of the test of 15.1.2.

### 2002/01 - Subclause 19.13

Brussels, November 2002, CLC/TC 61(SEC)1403  
CLC/TC 61(IT)258

In general, creepage distances and clearances are not measured during and after the tests of Clause 19.



**1997/01 - Subclause 22.33**

**Edinburgh, May 1997, CLC/TC 61(SEC)1127  
CLC/TC 61(SE)393**

Add the following note:

NOTE 2 An air layer is not considered sufficient as one of the layers of double insulation, if it is likely that the air layer could be bridged by leaking liquid".

**1996/04 - Subclause 22.42**

**Athens, November 1996, CLC/TC 61(SEC)1098  
CLC/TC 61(AT)260**

Concerning Y2 capacitors used as protective impedance, the following applies for bridging insulations:

- a) Two Y2 capacitors (voltage proof 1 500 V, peak impulse 5 kV); combination Y2 (basic insulation) + Y2 (supplementary insulation) Not accepted. Acceptance for two Y2 capacitors with voltage proof 2 500 V only
- b) Combination Y1 (basic insulation) + Y2 (supplementary insulation) Accepted for Y2 capacitors with voltage proof 2 500 V only
- c) Combination Y2 (basic insulation) + Y1 (supplementary insulation) Accepted (idem b)
- d) Combination of three Y2 capacitors in series Not accepted

**1995/02 - Subclause 24.1.1**

**Dublin, May 1995, CLC/TC 61(SEC)1027  
CLC/TC 61(SEC)995**

Miniature fuses with other ratings or dimensions than those in the EN 60127 series can be accepted under the following conditions:

- It shall not be possible to change the fuse without removing a cover with the use of a tool.
- The fuse and the fuseholder shall be marked to ensure correct replacement.
- The fuse shall be checked in the appliance; 10 samples shall break reliably under fault conditions.

**1994/01 - Subclause 24.1.2, note 2**

**Oslo, April 1994, CLC/TC 61(SEC)972**

The switching part of an automatic control (or programmer) with an off position is considered as a switch. An endurance test is only necessary if such a switch is required by the standard.

**2001/01 - Subclause 25.7**

**Delft, May 2001, CLC/TC 61(SEC)1330**

The words « shall not be lighter than » means that any heavier standardized cord can be used.

**2001/02 - Subclause 25.22**

**Paris, November 2001, CLC/TC 61(SEC)1349  
CLC/TC 61(SEC)1334**

Replace the second dashed item by:

- be located so that the connector can be inserted into the correct engagement position without difficulty and that improper engagement is not readily possible;

**1999/01 - Subclause 26.10**

**Pamplona, June 1999, CLC/TC 61(SEC)1244  
CLC/TC 61(DK)123**

This subclause does not apply to earth terminals.

**1992/01 - Subclause 30.2**

**Pettenasco, September 1992, CLC/TC 61(SEC)869**

"not likely to be ignited" belongs to decorative trims, knobs and other parts.

**2000/03 - Annex ZD**

**Kristiansand, June 2000, CLC/TC 61(SEC)1287**

**CLC/TC 61(SEC)1257**

Clause 29 has to be mentioned instead of 29.1 with regard to distances, because 29.2 (distance through insulation) is also involved.

### 3 EN 60335-1:2002, General requirements

**2013/06 - Subclause 7.10**      **Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC comments**

Audible feedback is any audible response got immediately after the operation of the switch.

**2004/01 - Subclause 15.1.2**      **Milan, November 2004, CLC/TC 61(SEC)1519**

*Addition:*

*Appliances with an automatic cord reel are tested with the cord in the most unfavourable position in such a way that the reeling of the wet cord may affect electrical insulation during operation. The cord shall not be dried before reeling.*

**2006/01 - Subclause 20.2**      **Málaga, June 2006, CLC/TC 61(SEC)1567**

*Replace note 1 by the following normative text:*

For appliances having dangerous movable parts, due to their main function, e.g. the needle of a sewing machine, tools of kitchen machines or the blade of an electrical knife, a full protection is not suitable for intended use.

**2013/07 - Subclause 21.1**      **Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC comments**

Sub-clause 21.1 is applicable to any parts of the enclosure irrespective of the material they are made of.

Damage to the finish, ragged or sharp surfaces, small dents are not examined according to sub-clause 22.14, as this sub-clause is only dealing to the state of the appliance in normal use.

**2002/05 - Clause 24**      **Kista, May 2002, CLC/TC 61(SEC)1377**

**CLC/TC 61(FR)1351**

Add the following paragraph:

Plugs and socket-outlets and other connecting devices of interconnection cords shall not be interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1, if direct supply to these parts from the supply mains could give rise to a hazard.

**2005/01 - Subclause 24.1**      **Brussels, November 2005, CLC/TC 61(SEC)1544**

Plugs and connectors specified in IEC 60083, IEC 60320, IEC 60309 or IEC 60884-1 are not Subjected to the tests of EN 60335-1.

**2010/01 - Subclause 24.1**      **Brussels, June 2010, CLC/TC 61(DE)0615/INF**

For motor-run capacitors (IEC 60252 type P2) with a metal housing having an overpressure fuse the flame testing of internal plastic parts as required in 30.2.2 and 30.2.3.1 is not necessary.

**2004/02 - Subclause 24.1.3**      **Milan, November 2004, CLC/TC 61(SEC)1519**

For the purpose of this test a thermostat or timer that is operating the relay or contactor is considered to be a switch.

**2011/12 – Subclause 25.7**      **Malta, December 2011, CLC/TC 61(IT)0278/DC**

Cable 03RNH2-F, not harmonized at CENELEC level but covered by a testing schedule developed by EU certification bodies, or a harmonized cable with similar characteristics, can be used for appliances for which 05RNH2-F is allowed.

**2005/03 - Clause 32**      **Brussels, November 2005, CLC/TC 61(SEC)1544**

**Málaga, June 2006, CLC/TC 61(SEC)1567**

For appliances incorporating UVC emitters no exposure to UVA, UVB or UVC is allowed during operation.

NOTE      Examples of appliances that may incorporate UVC emitters are range hoods, water pumps, air cleaners.

The manufacturer declaration is considered as sufficient proof that the plastic material exposed to the radiation is UV resistant.

The instructions shall include the substance of the following:

WARNING This appliance contains a UV emitter. Do not stare at the light source.

During maintenance and service the UVC emitters shall be switched off completely by a plug or switch. If this does not switch off completely the UVC emitters, an interlock is needed. It shall not be possible to operate the interlock switch with the test finger.

**2007/01 – Annex I, Subclause 19.101**

**Berlin, November 2007, CLC/TC 61(SEC)1613**

The appliance is operated under normal operation.

When any of the fault conditions are simulated, the duration of the test is as specified in Subclause 19.7.

DECISION SHEET				Date 1998-02-11
Standard EN 60335-1:2002				OSM/HA 9
(Sub)clause	Meeting	Agenda item	Document	Exp. date
7.10	8	11.1		
7.10	20	6.3	(SE)01/06	
7.10	23	6.4.2	(SEC)05/09	

Subject

Marking

Problem

Marking of push-push mains switch

Decision

A push-push mains switch for stationary appliances needs a visual means e.g. according to IEC 60417 "Graphical symbols for use on equipment" or a lamp to indicate clearly whether the switch is in the on/off position. The marking should be on or near the switch.

When the visual mean according IEC 60417 is used, it shall be distinguished clearly the different switch positions using a lamp or a similar means.

Comment

CLC/TC 61 decision of April 1994.

This decision has been updated after the 20<sup>th</sup> and 23<sup>rd</sup> OSM/HA meetings.

<b>NOTE This will be withdrawn at the dow of EN 60335-1:2012, i.e. 2014-11-21</b>
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DECISION SHEET				Date 1998-02-24
Standard EN 60335-1:2002				OSM/HA 192
(Sub)clause	Meeting	Agenda item	Document	Exp. date
8	11	9.2	(NO)1/97	
20	11	9.2	(NO)1/97	
8 & 20	23	6.4.2	(SEC)05/09	

Subject

Protection against electric shock

Problem

Should the tests on for instance a portable fan heater with an enclosure of plastic material be carried out in cold condition or in steady state condition ?

Decision

Normal use means room temperature, not steady state condition.

Comment

CLC/TC 61 confirmed (May 1998).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2000-08-31
Standard EN 60335-1:2002				OSM/HA 249
(Sub)clause	Meeting	Agenda item	Document	Exp. date
8 & 20	14	9.2	(SI)1/00	
8 & 20	15	6.3	(Chair)1/01	
8 & 20	23	6.4.2	(SEC)05/09	

**SECRETARY's NOTE: CLC TC 61 agreed that the following OSM/HA decision 249 also applies to clause 22.**

Subject

Interlock switches

Problem

For removing or opening a cover, a door, etc., mechanically operated interlock switches can be used for protection against electric shock and accessibility of moving parts.

Which are the requirements for interlock switches regarding distances contact gaps and reliability of cycling operations of switches for fixed appliances and appliances provided with plug which provide:

- 1) protection against electric shock and energy hazards, or
- 2) protection against dangerous moving parts ?

Decision

- 1) It is not acceptable to get access to live parts after operation of an interlock switch without a tool even if is at least 3 mm between the contact gaps and with all poles disconnection. In that situation it is still considered to be live. Only for certain Parts 2 (e.g. air cleaners and insect killers) this is allowed.
- 2) At least a micro switch (< 3 mm) and minimum one pole disconnection to obtain the protection against mechanical hazards.

The interlock switches are tested according to 24.1.3:

switched under load for 10 000 cycles, switched without load for 100 cycles.

Comment

CLC/TC 61 confirmed in May 2001.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2015-04-23
Standard EN 60335-1:2012 + Amd.				
(Sub)clause	Meeting	Agenda item	Document	Exp. date
24.1.4	29 <sup>th</sup> OSMHA Sweden	5.1.5.	OSM HA BE01/2015	

Question

24.1.4 The relevant standard for automatic controls is IEC 60730-1 together with the relevant part 2.

The number of cycles of operation for automatic controls that operate during the test of Clause 11 need not be declared for 6.10 and 6.11 of IEC 60730-1, if the appliance meets the requirements of this standard when they are short-circuited. Does this mean that a appliance which meets the requirement of 19.4 (short-circuit of the automatic control) the automatic control needs not to be verified according §24.1.4? What about a electronic circuit with a relay for the switching action? If complies with 19.14, does it then need to be retested acc. 24.1.4? We have an electronic circuit as thermal regulation for §11. We have performed 19.4 and 19.14, which short-circuits the automatic control (required in the standard). Does the above mean we do not have to check 24.1.4? Is 24.1.4 only applicable for appliance where §19.4 is not applicable?

OSM/HA Decision

Cycles in §24.1.4 in general are not applicable for electronic circuits (except to the relays incorporated).

When applicable, the number of cycles of operation for automatic controls that operate during the test of Clause 11 need not be tested as requested for 6.10 and 6.11 of IEC 60730-1, if the appliance meets the requirements of this standard when they are short-circuited.

“The requirements of this standard” written in the above means complete standard (incl. §11). If the appliance pass §11 and the other standard clauses with the control short-circuited, no requirements for cycles are applicable.

Decision

Cycles in §24.1.4 in general are not applicable for electronic circuits (except to the relays incorporated).

When applicable, the number of cycles of operation for automatic controls that operate during the test of Clause 11 need not be tested as requested for 6.10 and 6.11 of IEC 60730-1, if the appliance meets the requirements of this standard when they are short-circuited.

“The requirements of this standard” written in the above means complete standard (incl. §11). If the appliance pass §11 and the other standard clauses with the control short-circuited, no requirements for cycles are applicable.

Comment

CLC/TC 61 confirmed in December 2015.

DECISION SHEET				Date 2002-07-10
Standard EN 60335-1:2002				OSM/HA 304
(Sub)clause	Meeting	Agenda item	Document	Exp. date
26.5	15	9.15	(SI)01/01	
26.5	23	6.4.2	(SEC)05/09	

Subject

Terminals

Problem

Which of the two figures shows the correct way to carry out the test of stranded conductor ?

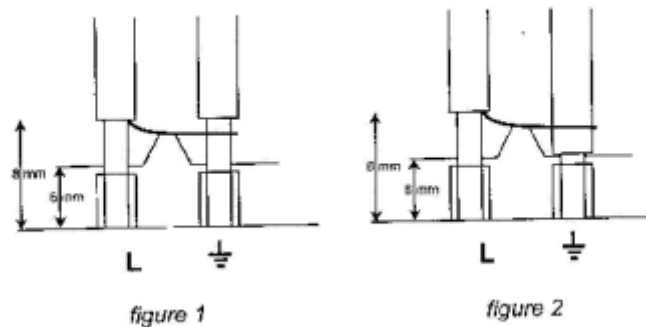
Decision

Figure 2 shows the correct way to carry out the test.

Comment

CLC/TC 61 confirmed (November 2001).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.



DECISION SHEET				Date 2002-07-11
Standard EN 60335-1:2002				OSM/HA 305
(Sub)clause	Meeting	Agenda item	Document	Exp. date
29.1	15	9.19	(CH)04/01	
29.1	23	6.4.2	(SEC)05/09	

**SECRETARY's NOTE: CLC TC 61 agreed that the following OSM/HA decision 305 can be deleted.**

Subject

Creepage/clearance

Problem

What is the minimum value for creepage distances and clearances on the printed circuit between the printed conductor for live part and the printed conductor for SELV, considering that a printed earthing conductor there is between the two printed conductors ?

#### Decision

The value prescribed for basic insulation is required, depending on the protection against deposition of dirt,

The printed earthing conductor shall fulfil the requirements of 27.6.

#### Comment

CLC/TC 61 confirmed (November 2001).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2005-07-27
Standard EN 60335-1:2002				OSM/HA 353
(Sub)clause	Meeting	Agenda item	Document	Exp. date
11	18	5.6	(NL)02/04	
11	19	4.3	CLCTC61(SEC)1519	
11	23	6.4.2	(SEC)05/09	

#### Subject

#### Heating

#### Problem

How to deal with appliances which may be used in accordance to the instructions at high temperatures (45 °C) ?

#### Decision

If a manufacturer declares an ambient temperature exceeding 25 °C, all the heating tests shall be done at an ambient temperature of (23 ± 2) °C but the limit should be reduced as the difference between the declared temperature and 25 °C. This decision is based on Note 2 of Table 3 of Clause 11 of Part 1.

#### Comment

CLC/TC 61 confirmed (November 2004).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2005-07-27
Standard EN 60335-1:2002				OSM/HA 354
(Sub)clause	Meeting	Agenda item	Document	Exp. date
15.1.2	18	5.11	(SI)04/04	
15.1.2	19	4.3	CLCTC61(SEC)1519	
15.1.2	23	6.4.2	(SEC)05/09	

#### Subject

#### Moisture resistance

#### Problem



The testing of appliances with (automatic) cord reels is performed in the most unfavourable positions of the cord reel, in position of an appliance as defined in 15.1.2.

As the standard does not taking into account influence of water entrance during the reeling of wet cord, shall the cable be dried during the high voltage test ?

Decision

The cable shall not be dried during the test.

Comment

CLC/TC 61 confirmed (November 2004).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2006-07-07
Standard EN 60335-1:2002				OSM/HA 376
(Sub)clause	Meeting	Agenda item	Document	Exp. date
29.3	20	5.3	(GB)01/05	
29.3	23	6.4.2	(SEC)05/09	

**SECRETARY's NOTE: CLC TC 61 agreed that the following OSM/HA decision 376 can be deleted.**

Subject

Distance

Problem

Subclause 29.3 states the requirements for the thickness of solid insulation do not apply to inaccessible insulation providing the other requirements stated within the subclause are met.

The question is about a product where a thin insulation sheet used within the product met the requirements of the standard for inaccessible insulation once the product had been installed. However, during installation the inaccessible insulation is accessible and, although electrically the insulation meets the requirements, mechanically we found it could be easily damaged.

The product is an instantaneous water heater that is permanently plumbed into the water supply and electrically connected to fixed wiring. A professional competent person normally installs the product.

The question is if this insulation is adequate even if it can easily be accidentally damaged but meets the requirements of the standard if it is not considered an accessible part.

Decision

Taking into account the definition of accessible part (3.6.3) and the test of 21.2, if there is a risk of insulation damage, the scratch test shall be performed on the insulation which is accessible during installation.

Comment

CLC/TC 61 confirmed in November 2005.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2006-07-07
Standard EN 60335-1:2002				OSM/HA 378
(Sub)clause	Meeting	Agenda item	Document	Exp. date
30.2	20	5.3	(ES)05/05	
30.2	23	6.4.2	(SEC)05/09	

#### Subject

Glow-wire

#### Problem

Considering 30.2 of Part 1, including A2, how shall the glow wire test on motor capacitors and in which parts be performed ?

The photo 1 shows a resin embedded motor capacitors where the internal connection between the wire and the plate is a soldered one.

The photos 2 and 3 show the points of connection on the upper and lower part.

In all the figures the connections are within 3 mm form the external plastic case of the capacitor.

#### Decision

The glow wire test has to be performed over the shielding and shielded materials joint together, where the connection is made, at 750 °C, from the inside to outside as normal testing, allowing the tip to penetrate in the shielded material. In this case, the shielded material is the external plastic case because is within 3 mm from the connection (as in the figures).

#### Comment

CLC/TC 61 confirmed in November 2005 and June 2006.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

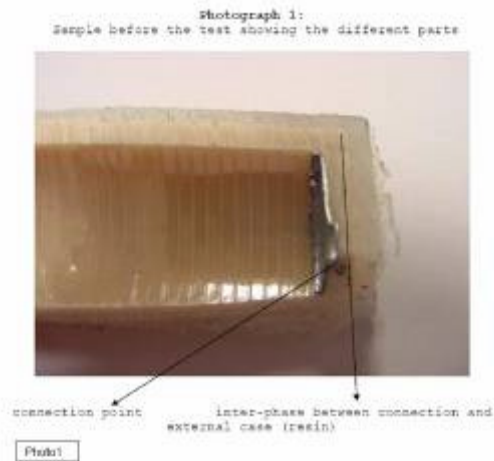


Photo 2: connection on the upper part of the capacitor



Photo 3: connection on the lower part of the capacitor

DECISION SHEET				Date
				2007-08-03
Standard EN 60335-1:2002				OSM/HA 398
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19 & 29	20	10.2	(DE)01/06	
19 & 29	21	7	(SEC)02/07	
19 & 29	23	6.4.2	(SEC)05/09	

**SECRETARY's NOTE: CLC TC 61 agreed that the following OSM/HA decision 398 can be deleted.**

Subject

Abnormal operation

Problem

During the CLC/TC 61 meeting in Milan in November 2005 the situation for the motor protectors was discussed and it was agreed that the requirements in accordance to Clause 29 will not be applied because the contacts are only opened during the tests of Clause 19. It was discussed to apply only a high voltage test with the double of the working voltage across the functional insulation.

But in the opinion of the OSM/HA delegates, the component standard distances for functional insulation applies only to the protector itself and Clause 29 of EN 60335 should apply to connections, or tracks, or other parts of the protection circuits.

Decision

The requirements of EN 60730 apply to the motor protector itself, for all other parts of the protection circuit the requirements of EN 60335 apply.

Comment

CLC/TC 61 agreed (November 2006).

This opinion was already confirmed by IEC/TC61 as indicated in Item 33a of the Jeju meeting minutes (document 61/3211/RM) concerning inquiry USA1 and is also in line with IEC/TC 61/MT 23 opinion.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date
Standard EN 60335-1:2002				2007-08-03
				OSM/HA 399
(Sub)clause	Meeting	Agenda item	Document	Exp. date
25.15	20	10.4	(DE)02/06	
25.15	21	6	(SEC)02/07	
25.15	22	5.2.1	(SEC)04/08	
25.15	23	6.4.2	(SEC)05/09	

Subject

Detachable supply cords

Problem

How shall the test of 25.15 be performed in case of fixed appliances intended to be permanently connected to fixed wiring having a mass between 1 and 4 kg?

Decision

Fixed appliances have to be tested like appliances > 4 kg, according to 25.15 (100 N and 0,35 Nm), independently of the weight of the appliance, and supply cables insulation (according to 25.8) shall correspond to the weight of the appliance.

This decision is not applicable if the cable is not accessible in normal use (e.g. the supply cable to motor drives in the scope of EN 60335-2-95, 2-97 and 2-103).

Comment

CLC/TC 61 agreed (November 2006 and June 2007).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting

DECISION SHEET				Date 2007-08-03
Standard EN 60335-1:2002				OSM/HA 402
(Sub)clause	Meeting	Agenda item	Document	Exp. date
3.8.2	21	6.4	(ES)02/07	
3.8.2	22	5.2.1	(SEC)04/08	
3.8.2	23	6.4.2	(SEC)05/09	

Subject

Definitions

Problem

Based on the definition in 3.8.2 and taking into account that there is not always a stand-by position marked or identified in the appliance operation and there is a need to differentiate the "off" and "stand-by" circuits, at least in the test of 19.11.2 and 22.46 in the appliance in which 19.11.2 is applicable in stand-by mode according to the relevant Parts 2.

We would like to know if the stand-by circuit include those parts that are energized when the appliance is in "0" position.

Decision

In stand-by, only electronic components that are energized in any of their terminals are susceptible to be short circuited according to a) to g) in 19.11.2.

It was agreed that in terms of clause 19 the meaning of "off" correspond to circuits or components that are not energized in any of their terminals.

Comment

CLC/TC 61, MT 23 and IEC/TC 61 confirmed that for Part 1 at this time 19.11.2 does not apply to stand-by circuits.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2008-07-10
Standard EN 60335-1:2002				OSM/HA 419
(Sub)clause	Meeting	Agenda item	Document	Exp. date
27.1	21	8.6	(IT)06/07	
27.1	22	5.3	CLCTC61(SEC)1625	
27.1	23	6.4.2	(SEC)05/09	

Subject

Earthing

Problem

We would like to raise the matter in order to have a common decision if a wire for earthing contact as shown by the photos is acceptable or not considering the present standard that does not give any supplementary requirement in 27.1 for special prepared conductors.

Decision

The crimping system for the protective conductor as shown in the photo can be accepted, since the insulation is not required to be always present on the protective earthing conductor.

Comment

Confirmed by CLC/TC 61 (November 2007)

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.



DECISION SHEET				Date
Standard EN 60335-2-1:2002				1998-02-24
				OSM/HA 215
(Sub)clause	Meeting	Agenda item	Document	Exp. date
8.2	12	6.1.4	(IT)7/98	
8.2	13	4	(Chair/Ljubl)2/99	
8.2	23	6.4.2	(SEC)05/09	

Subject

Protection against electric shock

Problem

Interpretation of 8.2 on fluorescent lamps located behind detachable cover.

Decision

- 1) The Standard has to be met. In class II construction it is not allowed to touch basic insulation.
- 2) If a tool is needed to removed the cover (it is considered detachable if there is an instruction according to 2.7.2) the basic insulation may be accessible after removal of the cover.

Comment

- 1) CLC/TC 61 confirmed the decision (June 1999).
- 2) After discussion in 13<sup>th</sup> OSM/HA meeting

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## 4 EN 60335-1:2012, General requirements

### 2013/02 - Subclause 7.10

Dublin, June 2013, TC61\_\*(SE)0005/Q

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.

According to our understanding, a push-push button switch used for start and stop the operation cannot be used to also change the motor speed.

### 2013/03 - Subclause 7.10

Dublin, June 2013, TC61\_\*(NO)0001\_2013/Q

The click of the switch (considering e.g. the situation on thermostats for irons) can be accepted provided that it is originated inside the switch that is operated and can be distinguished at a distance of 77 cm (as in Guide 29, Figure 2, arms reach for adults) from the switch.

### 2013/04 - Subclause 7.10

Dublin, June 2013, TC61\_FR\_0002\_2013\_Q

Constructions with switches that have two different stable positions (meaning that it can be seen or felt when they have been pressed or rotated).are in compliance with the requirement in 7.10 relating to tactile feedback.

### 2013/06 - Subclause 7.10

Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC  
comments

Audible feedback is any audible response got immediately after the operation of the switch.

### 2015/01, Subclause 7.10

Brussels, June/July 2015, TC61/NL/00002/NCP (12b agenda  
item)

A push-push button switch used for start and stop the operation shall not be used for other functions such as changing the motor speed.

For hand held appliances with rated input 50 W or lower it is acceptable to have a push-push button for different functions including on / off if there is an immediate feedback to the user e.g. by motion/vibration or visual plus audible.

### 2015/02, Subclause 7.10

Brussels, June/July 2015, CLC/TC 61 (SEC)2150 (12a agenda item)

The click of a switch can be accepted as an audible feedback provided that it is originated inside the switch that is operated and can be heard at a distance of 77 cm from the switch.

### 2014/01 - Subclause 7.12. Z1

Stresa, June 2014, WG 4 Convenor Report

Also see Item 14 Dublin 2013 minutes

It is acceptable to provide the specific instructions related to safe operation in a separate Safety Booklet. On the first page of the Instruction Booklet, it shall state that the Safety instructions shall be read before using the appliance. It is also acceptable to have separate booklets for maintenance, scrapping, etc.

In case the instructions are in different sections (e.g. for installation, first use, use, maintenance, treatment at end of life, etc), it is also acceptable that the safety instructions specific for each section are indicated at the start of the relevant section. Such instructions shall be fully in compliance with 7.12.Z1 (e.g. the height of the characters, measured on the capital letters, shall be at least 3 mm).

### 2014/02 - Subclause 7.12

Stresa, June 2014, WG 4 Convenor Report

*(As given in 7.12 of this standard) includes 7.12.1, 7.12.2, etc...*

When the instructions relevant to 7.12.4 and 7.12.7 may imply the use of sketches or figures, these can be placed in another specific section of the manual. It is considered that the dimensions in sketches can be indicated with the font dimensions more suitable for the proportion of the sketch.

### 2013/07 - Subclause 21.1

Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC comments

Sub-clause 21.1 is applicable to any parts of the enclosure irrespective of the material they are made of.

Damage to the finish, ragged or sharp surfaces, small dents are not examined according to sub-clause 22.14, as this sub-clause is only dealing to the state of the appliance in normal use.

**2014/03 - Subclause 22.17**

**Stresa, June 2014, CLC/TC 61(SEC)2083**

Spacers intended to prevent the appliance from overheating walls shall be fixed so that it is not possible to remove them from the outside of the appliance by hand or by means of a screwdriver or a spanner.

Built-in appliances are not evaluated for this clause, since the installation is covered by 7.12.4.

**2006/02 - Subclause 22.44**

**Milano, November 2006, CLC/TC 61(SEC)1586+A**

**Brussels, June 2010, CLC/TC 61(SEC)1797**

The wording “not ...decorated like a toy” does not mean to put on a normal enclosure stickers or having enclosures marked to represent animals or flowers or representing cars, or trains, or ball.

The meaning is that household appliances can be decorated to make them more attractive when the buying is decided but not to have them considered as toys to play with.

NOTE See also the LVD/ADCO recommendation “LVD ADCO Recommendation regarding Child-Appealing Household Appliances - November 2008”, available under the link [http://ec.europa.eu/enterprise/sectors/electrical/files/adcorecommendations\\_childapp\\_en.pdf](http://ec.europa.eu/enterprise/sectors/electrical/files/adcorecommendations_childapp_en.pdf).

**2014/04 – Subclauses 24.2, 25.1**

**Stresa, June 2014, CLC/TC 61(SEC)2083**

The plug connector as defined in 3.101 of EN 60320-2-3 shown in the picture is not acceptable according to subclauses 25.1 and 25.3, since it is not to be considered an appliance inlet. The definition of appliance inlet is given in 3.2.3 of EN 60320-1.



**2011/12 – Subclause 25.7**

**Malta, December 2011, CLC/TC 61(IT)0278/DC**

Cable 03RNH2-F, not harmonized at CENELEC level but covered by a testing schedule developed by EU certification bodies, or a harmonized cable with similar characteristics, can be used for appliances for which 05RNH2-F is allowed.

**2013/01 – Subclause 22.12**

**Dublin, June 2013, TC 61/DE0623/INF**

Other parts that are intended to be detached during use, maintenance and cleaning (examples are batteries, battery covers, lids, attachments, steam nozzles) are not considered to be “similar parts”.



## 5 EN 60335-2-3:2002/A11:2010, Electric irons

### 2011/02 – Table Z101 Brussels, June 2011, Requests of interpretation from FR NC

The meaning of the sentence “However, as it is adjacent to the functional surface and may become hot through conduction, its temperature will be in the range between the functional and a touchable surface” in the second dotted item of footnote a) is that, for footnote a) also the following surface “any part of the surface surrounding the adjacent surface plus 25 mm or, where no adjacent surface exists, the soleplate of an iron plus 25 mm” shall not be taken into account.

### 2011/03 – Table Z101 Brussels, June 2011, Requests of interpretation from FR NC

The precision metallic tip of an electric iron is considered as a functional surface. See photographs below for more information.

Functional ironing tip



Precision metallic tip for best ironing patch pockets and collar of shirts



### 2014/08, Subclause 22.Z101 Brussels, November 2014, Requests of interpretation from GB NC of EN 60335-2-3: 2002+A11:2010 alignment with subclause 25.101 of EN 60335-2-15

The length of the supply cord is measured between the entry into the plug and the point where the cord enters the appliance. Cord guards are considered to be part of the supply cord.

## 6 EN 60335-2-5:2003, Dishwashers

DECISION SHEET				Date 1998-02-19
Standard EN 60335-2-5:2003				OSM/HA 99
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.101	7	4.5.3.5	(SEC)22/92	
19.101	23	6.4.2	(SEC)05/09	

Subject

Abnormal operation

Problem

When should defects be applied ?

Decision

At the most unfavourable time. Defects may be introduced at any time during the cycle.

Comment

CLC/TC 61 decision of February 1993.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 1998-02-19
Standard EN 60335-2-5:2003				OSM/HA 103
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19	7	4.5.3.7	(SEC)24/92	
19	23	6.4.2	(SEC)05/09	

Subject

Abnormal operation

Problem

Are door interlock switches short-circuited ?

Decision

Door interlock switches are not short-circuited.

Comment

Opening and short-circuiting of components applies to all controls in all circuits, but does not apply to door interlock switches.

CLC/TC 61 decision of February 1993.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## 7 EN 60335-2-6:2003, Cooking ranges, hobs and ovens

2002/06 - Subclause 11.101

Brussels, November 2002, CLC/TC 61(SEC)1403

CLC/TC 61(SEC)1380

When operating the grill in the oven, the grill is operated under normal operation.

2007/02 - Subclause 19.102

Berlin, November 2007, CLC/TC 61(SEC)1613

If the thermal control is a microprocessor controlled system using an NTC sensor, an additional test is carried out with the NTC replaced by a resistor with a value equal to the middle of the range of operation of the NTC in this circuit.

NOTE This additional test satisfies Note 5 of 19.1 of EN 60335-1.

2008/01 - Subclause 20.101

Kista, June 2008, CLC/TC 61(DE)609

The stability test has to be carried out with the oven placed in its intended position.

2008/02 - Clause 21

Kista, June 2008, CLC/TC 61(DE)609

Referring to Note 101, hobs having a complete surface in one piece are tested according to 21.102 and Part 1.

2010/02 - Subclause 21.1

CLC/TC 61(ES)0088+GB NC comments

Compliance is checked measuring the inclination of the shelf fully inserted inside the oven and without a mass, and then measuring the inclination of the shelf placed in its rest position and the defined mass applied to the shelf. The inclination difference shall not exceed 6°.

2007/03 - Subclause 29.2

Málaga, June 2007, CLC/TC 61(SEC)1614+A

- 1) The macroenvironment in a domestic kitchen is pollution degree 2.
- 2) The microenvironment inside the appliance with respect to the positioning of the insulation may be pollution degree 2 or 3 depending on the design and the pollution produced by operation of the appliance itself.

NOTE Z1 Item 2 does not exclude the possibility to accept pollution degree 1, where precautions have been taken to protect the insulation.

DECISION SHEET				Date
				2007-08-03
Standard EN 60335-2-6:2003				OSM/HA 397
(Sub)clause	Meeting	Agenda item	Document	Exp. date
3.1.9.101	20	7.2	(ES)03/06	
3.1.9.101	21	5.3	(SEC)02/07	
3.1.9.101	22	5.2.1	(SEC)04/08	
3.1.9.101	23	6.4.2	(SEC)05/09	

Subject

Definitions

Problem

In Note 3 of 3.1.9.101 it is specified the use of a non-circular vessel, for non-circular cooking areas. In fact, only the characteristics of circular vessels are specified in the standard. Furthermore, the last part of the text in Note 3 requires the use of information regarding circular vessels (amount of liquid depending on smallest diameter of the cooking area).

- 1) Should Note 3 say "the smallest circular vessel" instead "the smallest non circular vessels" ?
- 2) If the answer to 1 is no. What characteristics should have the non-circular vessels to be used in this test ?
- 3) When the shape of the cooking zone is elongated. It is possible to use more than one circular vessel for the same cooking zone, if this condition is closer to cover the shape of the cooking zone than using only one big vessel ?

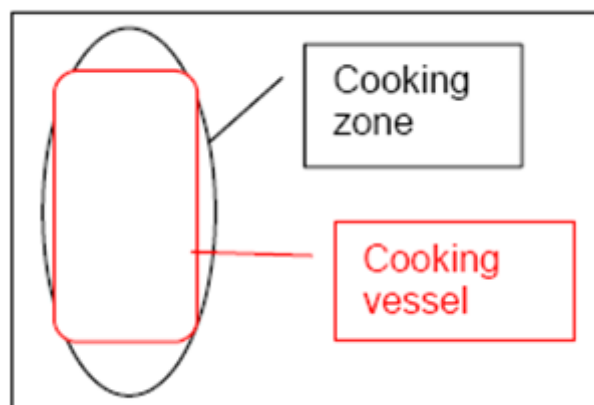
Decision

- 1) Note 3 has to be applied. To help in the common understanding the above sketch can be referred. In case of need the manufacturer can be asked to supply the suitable vessel.
- 2) The material has to be the one indicated in Figure 102 for induction and aluminium for the others.
- 3) No, it is not possible to use more than one circular vessel for the same cooking zone.

Comment

CLC/TC 61 agreed (November 2006).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.



DECISION SHEET				Date
				2008-07-10
Standard EN 60335-2-6:2003				OSM/HA 418
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.102	21	8.1	(ES)07/07	
19.102	22	5.3	CLCTC61(SEC)1625	
19.102	23	6.4.2	(SEC)05/09	
19.102	23	4.1.2	(DE-VDE)02/08	

Subject

Abnormal operation

Problem

In 19.102 it is required to short-circuit the thermal control for the test. Note 5 of 19.1 of EN 60335-1 explains that short-circuit of controls may be render them inoperative instead.

In induction hobs, the thermal control of hob elements is normally a NTC controlled by the microcontroller. Short-circuit or open circuit of the NTC is easily detected by the micro, but fixing the NTC in an intermediate value may not be detected.

EN 60730-1 Annex J has the requirements to comply with by thermistors. Among them there is a test for the drift of the R/T characteristic when the control is classified as Type 2.

Question: Whether fixing the NTC in a specific value may be considered as rendering the thermal control inoperative and consequently it is a condition to be checked in 19.102 ?

Decision

The NTC can be fixed to a specific value, but this value has to be found in the middle of the range of operation of the NTC, to avoid hysteresis problems may be happen towards the end of the range.

Comment

Decision confirmed by CLC/TC 61 (November 2007).

According to the decision taken by CLC/TC 61 of Brussels meeting in June 2009, the interpretation of NTC may be extended to other sensors or controls that are working in Clause 11 even these are not having a direct action of controlled parts.

This may be applied to other Parts 2 in other abnormal operation clauses (i.e. 19.104 of Part 2-9).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## 8 EN 60335-2-6:2003/A11:2010, Cooking ranges, hobs and ovens

2011/01 - Subclause 7.10

Brussels, June 2011, CLC/TC 61(SEC)1858

CLC/TC 61(SEC)1869

Brussels, October 2012, CLC/TC 61(SEC)1981 (specially annexes VII and VIII)

Devices used to stop operational functions mean devices that are operated by the user to stop the intended function of the appliance.

- A separate device for stopping operational functions is not necessary.
- A selector switch with an off-position clearly identifiable is allowed.
- An ON/OFF switch, if any, is considered a suitable device to stop operational functions.
- A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

2011/10 - Subclause 7.10

Malta, December 2011, CLC/TC 61(SEC)1888

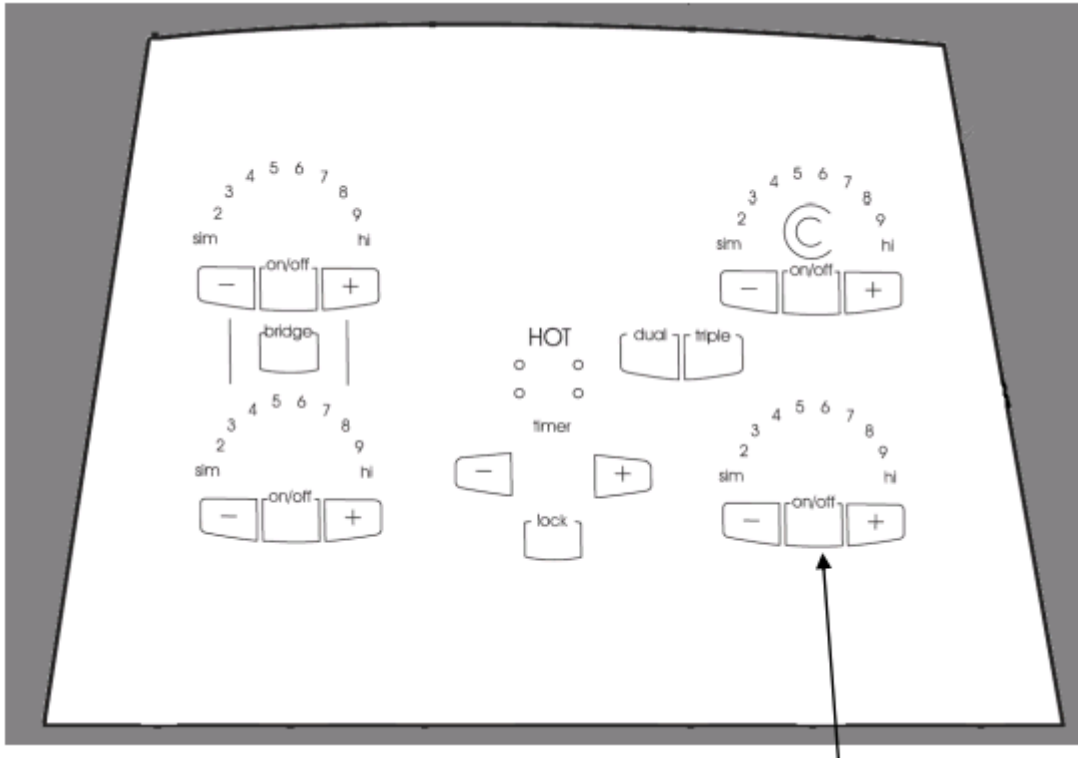
For hobs, the “0 power” position of every hob element or griddle can be considered as a “stop operational function”, and also the “0 position” controlling all hob elements or griddles of the appliance at once can be considered the “stop operational function of the appliance”.

For hobs with a switch to select the hob element and with hob element power regulators, in case the power regulator gives an acoustic feedback every time the energy is increased or reduced, the acoustic signal of the start /stop switch shall have a different sound from that used for the power regulator.

The requirements of subclause 7.10 are not intended to provide a solution to all the needs for very vulnerable persons, see Note Z2 in clause 3 of EN 60335-1:2012.

Pictures below show the general stop key





## **9 EN 60335-2-6:2003/A13:2013, Cooking ranges, hobs and ovens**

**2013/09 - Clause 21.102      Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC  
comments**

The text in Clause 21 of A13 is a duplication of that issued as a IEC Corrigendum to the amendment A2.



## 10 EN 60335-2-7:2003, Washing machines

2011/01 Subclause 7.10

Brussels, June 2011, CLC/TC 61(SEC)1858  
 CLC/TC 61(SEC)1869

**NOTE** As this text is modified by EN 60335-2-7:2010/prAC, that will be published soon, this IS will be removed after the dow of EN 60335-2-7:2010 is reached (i.e. 2014-11-01). For the moment it shall remain, as it refers to EN 60335-2-7:2003, still valid.

Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

DECISION SHEET				Date 1998-02-20
Standard EN 60335-2-7:2003				OSM/HA 114
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.101	7	4.5.3.5	(SEC)22/92	
19.101	23	6.4.2	(SEC)05/09	

Subject

Abnormal operation

Problem

When should defects be applied ?

Decision

At the most unfavourable time. Defects may be introduced at any time during the cycle.

Comment

CLC/TC 61 decision of February 1993.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 1998-02-20
Standard EN 60335-2-7:2003				OSM/HA 116
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19	7	4.5.3.7	(SEC)24/92	
19	23	6.4.2	(SEC)05/09	

Subject

Abnormal operation

Problem

Should the door interlock switches be short-circuited ?

Decision

Door interlock switches are not short-circuited.

Comment

Opening and short-circuiting of components applies to all controls in all circuits, but does not apply to door interlock switches.

CLC/TC 61 decision of February 1993.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## **11 EN 60335-2-8:2003, Shavers, hair clippers, etc.**

**2003/02 - Subclause 3.1.9**

**Copenhagen, May 2003, CLC/TC 61(SEC)1438**

**CLC/TC 61(DE)496**

Add the following note:

NOTE If the necessary adjustment of the blades on adjustable shearing or clipping heads is not possible or the heating up of the blades becomes so high that they will be destroyed in case of annealing, the appliance is tested on a dynamometrical brake with a power input of 0,8 times the rated power input.

For measuring the temperature rise of parts which are in contact with skin or hair the appliance is operated with 1,2 times the power input obtained when the detachable shearing or clipping head has been removed or with the shearing or clipping head adjusted according to the instructions for use, whichever is the more unfavourable.

**2013/02 - Subclause 7.10**

**Dublin, June 2013, TC61\_\*(SE)0005/Q**

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.

According to our understanding, a push-push button switch used for start and stop the operation cannot be used to also change the motor speed.

**2014/05 - Subclause 7.10**

**Stresa, June 2014, \*(DE)0625/NP+\* BE NC comments**

The removal of the plug can be considered as a suitable means to stop operational functions with these appliances.

**2013/08 - Clause 25**

**Brussels, November 2013, CLC/TC 61(SEC)2024 + CH NC comments**

The cable between a detachable supply unit and the appliance is considered an interconnection cable for which sub-clause 25.23 and table 11 applies, even if the appliance is of class III construction.

According to table 11 in 60335-1 a minimum of 0,5 mm<sup>2</sup> or tinsel cord is required.

## 12 EN 60335-2-9:2003, Toasters, grills, etc.

**2005/05 – Subclause 11.7**

**Brussels, November 2005, CLC/TC 61(SEC)1544**

*Pop-corn makers are operated until steady conditions are established. If popping of more than one container load of corn seed is required to reach steady conditions, the container is refilled as quickly as possible and the test is then continued without a rest period.*

**2013/03 – Subclause 11.Z104**

**Dublin, June 2013. (SI)0005/NP# +ES NC comments**

*When the top surface is not horizontal, the line made by following the perimeter of slots on creepage plus 25mm shall be considered as top surface.*

**2005/06 – Clause 19**

**Brussels, November 2005, CLC/TC 61(SEC)1544**

*Pop-corn makers are operated under conditions of Clause 11 for a period of five minutes but with the por-corn outlet blocked.*

**2005/07 - Subclause 19.1**

**Brughes, June 2005, CLC/TC61(SEC)1528**

*Where the manufacturer indicates explicitly in the instructions that the wok is not a deep fat fryer, then the tests of 19.4 and 19.5 shall not be performed. Otherwise, the wok is considered to be a deep fat fryer and these tests shall be carried out.*

**2007/04 – Subclause 22.106**

**Malaga, June 2007, CLC/TC 61(SEC)1614**

**CLC/TC 61(DE)603**

*Compliance is checked by inspection and, in case of doubt, by the following tests:*

— *application of test probe B of IEC 61032;*

*or*

— *removing the heating element from the appliance and placing it on a flat wooden surface in all possible positions as well as against the edge of the wooden surface. The corner of the wooden surface shall have no radius.*

**2009/02 – Subclause 22.111**

**Sofia, November 2009, CLC/TC 61(SEC)1730A**

In breadmakers, if due to the location of the heating elements after an initial inspection there are doubts concerning the possible exposure to overflowing dough, the ingredients shall be increased keeping the correct proportions of the initial recipe. In the case where it is not possible to cause overflowing due to the characteristics of the appliance, then the dough is prepared separately in a sufficient amount and then put into the breadmaker vessel in a quantity sufficient to cause an overflow.

CIG OPERATIONAL STAFF MEETING HOUSEHOLD APPLIANCES				Page 274 of 275
DECISION SHEET				Date 2010/07/19
Standard EN 60335-2-9:2003				OSM/HA 460
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.104	24	6.2	(SEC)05/10	
19.104	23	6.4.2	(SEC)05/09	

### **Problem :**

In 19.104 it is required to short-circuit the thermal control for the test. Note 5 of 19.1 of EN 60335-1:2012 explains that short-circuit of controls may be render them inoperative instead.

In induction hobs, the thermal control of hob elements is normally a NTC controlled by the microcontroller. Short-circuit or open circuit of the NTC is easily detected by the micro, but fixing the NTC in an intermediate value may not be detected.

EN 60730-1 Annex J has the requirements to comply for thermistors. There is a test for the drift of the R/T characteristic when the control is classified as Type 2.

Should the NTC be fixed at a specific value in order to render the thermal control inoperative?

What is the required condition to be checked by clause 19.104?

**Decision :**

The NTC can be fixed to a specific value. This value shall be in the middle of the operating range of the NTC, in order to avoid hysteresis problems may be happen towards the end of the range Decision confirmed by CLC/TC61 (June 2009).

The intent is to set up the electronics so that the appliance continues to operate without the Clause 11 controls operating. Inspection of the circuit diagram may show that it is also possible to bypass the micro-controller to achieve the intent.

The interpretation of NTC may be extended to other sensors or controls that are working in Clause 11 even though these are not having a direct action on controlled parts.

This decision has been issued after the 24th OSM/HA meeting based on the updating of the OSM/HA dec. 418.

DECISION SHEET				Date 2015-04-23
Standard EN 60335-2-9.				
(Sub)clause	Meeting	Agenda item	Document	Exp. date
8.2	29th OSMHA Sweden	5.12.1.	FR/01/2015	

Question:

Addition in cl 8.2 of Part 2-30 states:

During user maintenance and after the removal of detachable parts during replacement of heat lamps, the basic insulation of internal wiring may be touched provided it is electrically equivalent to the insulation of cords complying with IEC 60227 or IEC 60245.

We have had two different readings of the wording “and” in the sentence “During user maintenance and after the removal of detachable parts during replacement of heat lamps, etc ...”:

1st reading: It is allowed to touch basic insulation only during user maintenance and after the removal of detachable parts during replacement of heat lamps

2nd reading: It is allowed to touch basic insulation during user maintenance and it is allowed to touch basic insulation after the removal of detachable parts during replacement of heat lamps. Which one is the correct reading?

Decision

First reading is correct.

Basic insulation can only be touched *after the removal of detachable parts during replacement of heat lamps but not after removal of detachable parts during maintenance.*

Comment by CLC TC 61 on December 2015

OSM decision is agreed, it is in line with the reading of the text and with the spirit of EN 60335 series, basic insulation shall not be accessible after removing detachable parts.

DECISION SHEET				Date 2015-04-23
Standard EN 60335-2-9.				
(Sub)clause	Meeting	Agenda item	Document	Exp. date
11.2	29th OSMHA Sweden	5.2.2.	TUVSUDPS 04/2015	

Question:

- 1) What is the correct position of the sample in the test corner?
  - A.) As shown on the photograph
  - B.) In the corner as close as possible to the walls
- 2) Are separate delivered distance spacers to be mounted by the user acceptable if wall temperatures would exceed the limits without these spacers?

Decision

- 1) It is considered as radiant grills; §11.2 of 60335-2-9 : backs as near as possible near a wall of the test corner and away from the other wall.
- 2) The spacers can be mounted by the user (§5.10). After mounting, it shall not be possible to remove them according §22.17.

Explanatory:

22.17. Spacers intended to prevent the appliance from overheating walls shall be fixed so that it is not possible to remove them from the outside of the appliance by hand or by means of a screwdriver or a spanner.

Comment by CLC TC 61 on December 2015.

OSM decision was agreed. It is considered that the construction is in compliance with the standards, based on 5.10 and considering that the spacers cannot be removed after being mounted.

### **13 EN 60335-2-9:2003/A13:2010, Grills, toasters and similar portable cooking appliances**

**2011/01 Subclause 7.10**

**Brussels, June 2011, CLC/TC 61(SEC)1858**

**CLC/TC 61(SEC)1869**

Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

## 14 EN 60335-2-13:2003+ A1:2004, Deep fat fryers, frying pans and similar appliances

2008/03 - Clause 15

Kista, June 2008, CLC/TC61(DE)0608

*Addition:*

15.102 The connecting device for connection of the heating element in detachable heating elements for deep fat fryers shall not be affected by water.

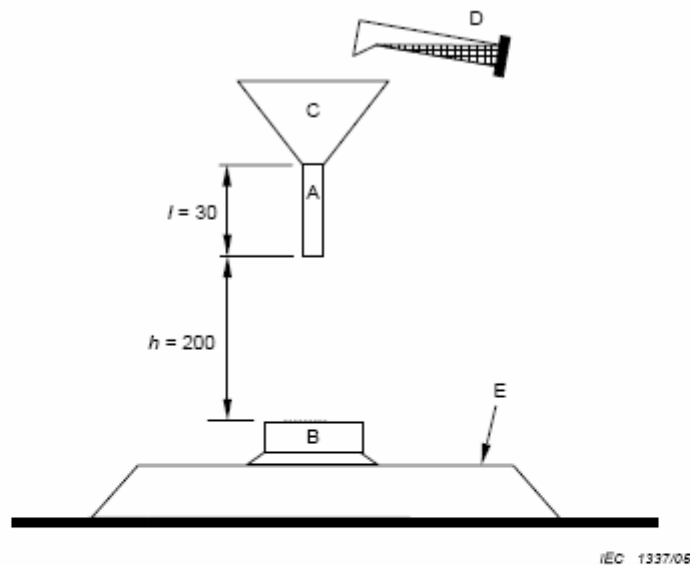
Compliance is checked by the following test:

The deep fat fryer is placed on a horizontal surface and 30 ml of water containing approximately 1 % NaCl and 0,6 % rinsing agent is poured onto the connecting device. The solution is poured steadily through a tube having an inner diameter of 8 mm over a period of 2 s, the lower end of the tube being 200 mm above the connecting device.

NOTE 1 Any commercially available rinsing agent may be used.

NOTE 2 A schematic representation of the test arrangement is shown in Figure 101.

The connecting device shall then withstand the electric strength test of 16.3, the test voltage for reinforced insulation being 2 500 V.



*Dimensions in millimetres*

**Key**

- A Funnel tube with inner diameter of 8 mm
- B Item under test
- C Funnel
- D Container with 30 ml of saline solution
- E Horizontal surface

**Figure 101 – Schematic representation of the 30 ml spillage test**

2005/07 - Subclause 19.1

Brughes, June 2005, CLC/TC61(SEC)1528

Where the manufacturer indicates explicitly in the instructions that the wok is not a deep fat fryer, then the tests of 19.4 and 19.5 shall not be performed. Otherwise, the wok is considered to be a deep fat fryer and these tests shall be carried out.



## 15 EN 60335-2-14:2006, Electric kitchen machines

2010/03 – Clause 8 Ljubljana, November 2010, CLC/TC 61(SEC)1812

Constructions that could allow the contact of live parts and internal wiring when inserting a knife in an unintended way are not permitted because they are considered to fail Clause 8 due to the general requirements of Clause 4 and subclause 5.5.

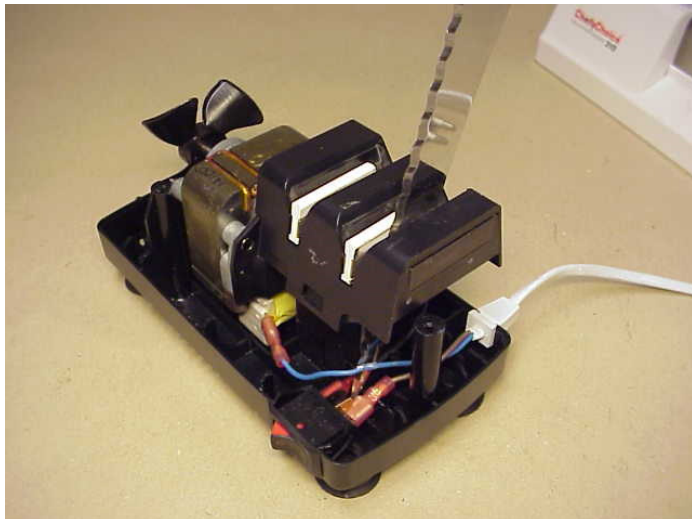
An example is shown below.



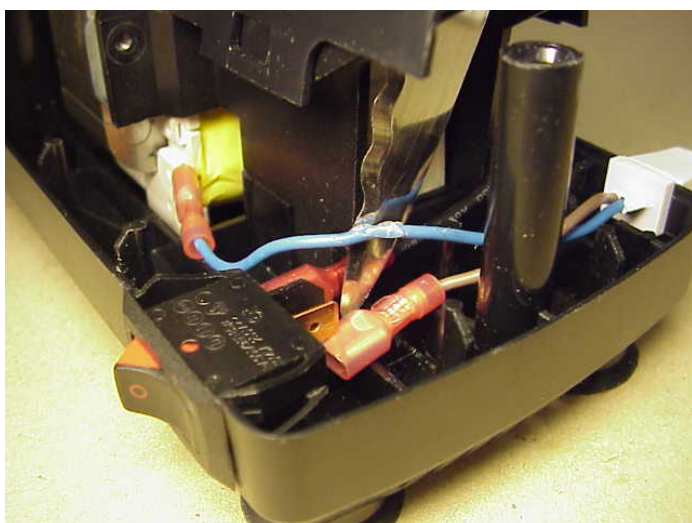
Intended use



Unintended use



Live parts and wiring contact



Detail of contact

**2010/04 – Clauses 3.1.9, 9.3 and 11.7**

**Ljubljana, November 2010, CLC/TC 61(SEC)1812**

For combined appliances with multiple functions and multiple times of functional operations (example: appliances with juicer and chopper functions), the heating test has to be performed at the rated power input of the appliance. If the appliance does not comply with the test, it has to be repeated with the appliance loaded with the recipe stated in the instructions for the specific function as indicated in sub-clauses 3.1.9, 9.3 and 11.7. It is important for the tests that the time for the specific function is stated in the instructions for use.

**2009/01 – Subclause 11.7**

**Brussels, July 2009, CLC/TC 61(DE)0612/INF**

The maximum period stated in the instructions plus one minute” is to be understood as performing the test with the load defined in the recipe for a period of one minute more than the time specified for the recipe.

It is not the time stated in the recipe with load plus one minute without a load.

**2009/03 – Subclause 11.7.111**

**Sofia, November 2009, CLC/TC 61(SEC)1730A**

Where no instructions for mixing yeast dough are provided, the operation is carried out three times with a rest period of 2 min between each operation.

**2009/04 – Subclause 20.2**

**Sofia, November 2009, CLC/TC 61(SEC)1730A**

A cheese grater is not considered to be a grinder and is not exempted from the application of the test probe.

DECISION SHEET				Date 2000-09-01
Standard EN 60335-2-14:2006				OSM/HA 257
(Sub)clause	Meeting	Agenda item	Document	Exp. date
20.103	14	4.1	(Hels/Chair)1/00	
20.104	14	4.1	(Hels/Chair)1/00	
20.109	14	4.1	(Hels/Chair)1/00	
20.115	14	4.1	(Hels/Chair)1/00	
20.103, 109 & 115	104, 23	6.4.2	(SEC)05/09	

**In the Stresa meeting CLC TC 61 agreed that the following OSM/HA decision 257 can be deleted.**

Subject

Mechanical hazards

Problem

Application of the cylindrical test rod having a diameter of 40 mm and a hemispherical end.

Decision

It is applied perpendicularly to the surface of the actuating member of the switch and there is no limit to the force on the test rod until it reaches the edge surrounding the recess. After that no force is applied.

Comment

CLC/TC 61 confirmed (June 2000).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2002-07-14
Standard EN 60335-2-14:2006				OSM/HA 315
(Sub)clause	Meeting	Agenda item	Document	Exp. date
20.2	16	11.4	(FI)02/02	
20.2	23	6.4.2	(SEC)05/09	

**In the Stresa meeting CLC TC 61 agreed that the following OSM/HA decision 315 can be deleted.**

Subject

Mechanical hazards

Problem

In 20.2 of EN 60335-2-14 tests for moving parts have been given and in EN 60335-2-14:2006/A1 the requirements for table type blenders are replaced by the test with a special test finger.

In which of these two different positions the special test finger shall be applied ?

- 1) The test finger is applied vertically downward and with the circular stop plate in horizontal position, or
- 2) The test finger is applied vertically downward with the circular stop plate bent sideways.

Decision

The position N. 1 is the correct way to apply the special test finger.

Comment

CLC/TC 61 confirmed (May 2002).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2005-07-27
Standard EN 60335-2-14:2006				OSM/HA 360
(Sub)clause	Meeting	Agenda item	Document	Exp. date
20.106	18	8.4	(NO)02/04	
20.106	19	4.3	CLCTC61(SEC)1519	
20.106	23	6.4.2	(SEC)05/09	

Subject

Mechanical hazards

Problem

In case of a kitchen machine with pasta making attachment provided with a hopper and a feed pusher as showed in the photo of 20.106 is applicable.

In the last paragraph of the mentioned subclause it is stated: "A feed pusher that fills the throat of the hopper shall be provided".

For e.g. mincing meat a pusher that fills the throat of the hopper is useable. But, by using such pusher for the pasta equipment the pasta will become consolidated within the tube because pasta has a different consistency than other food stuff. The pasta will block the feed tube and thus the attachment is not usable. This may result that customers will find alternative pushers, which will be unsuitable and possible, unsafe.

The pusher shown on the photos has been on the market for some years and also several other pushers for pasta equipment, which not exactly fulfils the letter of 20.106, are now in the market.

Are these constructions acceptable?

Decision

The condition for the pusher to fill completely the throat is not necessary if the screw is not accessible by the test finger with the pusher in position.

Comment

CLC/TC 61 confirmed (November 2004).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.



## 16 EN 60335-2-15:2002, Appliances for heating liquids

DECISION SHEET				Date 1999-11-16
Standard EN 60335-2-15:2002				OSM/HA 239
(Sub)clause	Meeting	Agenda item	Document	Exp. date
25.8	13	10.7	(FR)5/99	
25.8	23	6.4.2	(SEC)05/09	

### Subject

Detachable supply cords

### Problem

Is the requirement of 25.8 applicable also for detachable supply cord or only for supply cord as they are defined in 3.2.3 of Part 1 ?

### Decision

Yes, 25.8 is applicable also for detachable supply cord.

### Comment

CLC/TC 61 confirmed (meeting of November 1999).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2006-11-30
Standard EN 60335-2-15:2002				OSM/HA 390
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.13 & 19.11.4	20	6.7	(CH)05/06	
19.13 & 19.11.4	23	6.4.2	(SEC)05/09	

### Subject

Abnormal operation

### Problem

We would like to clarify the question regarding 19.13 for coffee makers. To be accurate, it should cover household appliances producing coffee, hot water and steam for cappuccino. Additionally, these coffee makers have electronics to control the brewing process.

If one of such coffee makers should start the operation (either coffee, or water, or steam) during test according 19.11.4, shall be it considered you classify as non dangerous situation?

### Decision

The majority is in favour to consider that this condition is not a dangerous situation.

### Comment

CLC/TC 61 confirmed in November 2006.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

**2014/09 Clause 7.10**

**Brussels, November 2014, Item 31 c**

Heating up function is considered to be an operational function.

**2015/03 Clause 7.10 (see also 2014/09)**

**Brussels, June/July 2015, TC61/CH/0003/Q (40a  
agenda item)**

When the operational function(s) of the product include several steps in a cycle (e.g. for coffee: grinding, heating-up, brewing) the device intended to stop the operational function shall be able to stop at any part of cycle or at the end of the cycle, but a new cycle shall not be restarted.

**17 EN 60335-2-17:2002 Blankets, pads and similar flexible heating appliances**

2004/08 - Subclause 19.105

Milan, November 2004, CLC/TC 61(SEC)1519

The folding, as shown in the following figures, is acceptable for this test.





## 18 EN 60335-2-21:2003 Storage water heaters

DECISION SHEET				Date 1998-02-24
Standard EN 60335-2-21:2003				OSM/HA 203
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.2/19.3	11	10.10.1	(BE)3/97	
19.2/19.3	11	6.4.2	(SEC)05/09	
19.2/19.3	23	4.3	(SEC)05/09	

### Subject

Abnormal operation

### Problem

To which extent is the water heater emptied for the purpose of the tests of 19.2 and 19.3.

### Decision

The water heater is emptied in the normal way, so by opening the water inlet.

### Comment

As it may happen that the water heater is switched on without water after first installation or after maintenance, CLC/TC 61 confirmed that completely empty does not mean dry (May 1998).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 1998-02-24
Standard EN 60335-2-21:2003				OSM/HA 204
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.2/19.3	11	10.10.2	(BE)4/97	
19.2/19.3	23	6.4.2	(SEC)05/09	
19.2/19.3	23	4.3	(SEC)05/09	

### Subject

Abnormal operation

### Problem

Are the thermostats in each phase of a three-phase water heater with star connection (without neutral) short-circuited in turn ?

### Decision

The three thermostats are short-circuited simultaneously.

### Comment

Short-circuiting in turn would result in operation as thermal cut-outs of the remaining two thermostats.

CLC/TC 61 confirmed (May 1998).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

DECISION SHEET				Date 2007-08-03
Standard EN 60335-2-21:2003				OSM/HA 412
(Sub)clause	Meeting	Agenda item	Document	Exp. date
24.102.2	21	7.5	(SI)02/07	
24.102.2	22	5.2.1	(SEC)04/08	
24.102.2	23	6.4.2	(SEC)05/09	

Subject

Components

Problem

In IEC 60335-2-21:2003: Last sentence said:

The temperature shall not exceed 130 °C.

In EN 60335-2-21:2003: Third paragraph said:

The thermal cut-out shall operate before its temperature exceeds 110 °C.

In IEC 60335-2-21:2003/A1:2004: Last paragraph said:

The thermal cut-out shall operate before its temperature exceeds 110 °C. The water temperature shall not exceed 20 K of the maximum permitted operating temperature of the thermal cut-out.

In EN 60335-2-21:2003/A1:2005 there is no modification or clarification of this requirement.

We would like to hear the interpretation of the OSM/HA group about the maximum allowed temperature of the water during test according to EN 60335-2-21:2003/A1:2005, 24.102.2.

Our interpretation is that maximum allowed temperature of the water during this test is the maximum measured operating temperature of the thermal cut-out during test + 20 K.

Decision

The correct interpretation is 130 °C.

Comment

This decision agreed with the position of IEC/TC 61 in Tokyo (May 2008) and CLC/TC 61 in Stockholm (June 2008).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## 19 EN 60335-2-23:2003, Appliances for skin or hair care

2011/04 – Subclause 11.8, Table 3

Brussels, June 2011, CLC/TC 61(DE)0618/NCP

To define the area to be measured for the temperatures of knobs and handles, a marking on the enclosure or an instruction to define the area of the handle are not sufficient. A specific design of the product with a clear area to be gripped and/or a stop protuberance to avoid the hand slips over the part with heating elements or with grips that are made by specific material or texture, can be acceptable.

DECISION SHEET				Date 2001-07-02
Standard EN 60335-2-23:2003				OSM/HA 270
(Sub)clause	Meeting	Agenda item	Document	Exp. date
30.101	20	4	(SEC)02/06	
30.101	14	4.1	(BE)2/99	
30.101	14	4.1	(DE)5/99	
30.101	14	4.1	(Hels/Chair)1/00	
30.101	23	6.4.2	(SEC)05/09	

### Subject

Needle flame test

### Problem

- 1) Is the needle flame test also applicable for non metallic enclosure materials placed in the foot of the helmet type hairdryers ?
- 2) If the heating element is enclosed by internal protection (for example sheet of mica), does the non metallic external enclosure also have to fulfil the needle flame test ?

### Decision

- 1) The needle flame test has to be applied for non metallic parts of the enclosure of the helmet only.
- 2) Yes.

### Comment

CLC/TC 61 confirmed (June 2000).

See also Interpretation Sheet CLC/TC 61 Nr. 153/48/06.

During the 20<sup>th</sup> OSM/HA meeting has been clarified as follows:

According to the standards, the enclosure not containing electrical parts are not tested with needle flame test, but the non metallic parts inside it shall be tested. Parts in contact with the air upstream have to be tested with the needle flame in any case.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## **20 EN 60335-2-23:2003/A11:2010 Appliances for skin or hair care**

**2011/01 Subclause 7.10**

**Brussels, June 2011, CLC/TC 61(SEC)1858**

**CLC/TC 61(SEC)1869**

Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

**2013/10 - Clause 22.Z101**

**Brussels, November 2013, (NO)0002\_2013/Q**

**+\*ES NC comment**

The grid can be detachable and, as stated in the standard, after removal of the grid the appliance shall be in compliance with Clause 8 and Clause 20.

NOTE Manufacturers has traditionally put an additional detachable guard at the air inlet to prevent the injection of hair.

(Since there is no satisfactory test for the grid, CLC TC 61 agreed to delete 22.Z101 through A12 publication, under development).

**2012/01, Table Z101**

**Varna June 2012**

Accessories that are attached to the hot air outlet of a hair dryer are considered as a hot functional surface (see the definition of the first bullet of note a in Table Z101).

## 21 EN 60335-2-25:2002/A11:2010, Microwave ovens, including combination microwave ovens

2011/01 Subclause 7.10

Brussels, June 2011, CLC/TC 61(SEC)1858

CLC/TC 61(SEC)1869

Brussels, October 2012, CLC/TC 61(SEC)1981 (specially annexes VII and VIII)

Devices used to stop operational functions mean devices that are operated by the user to stop the intended function of the appliance.

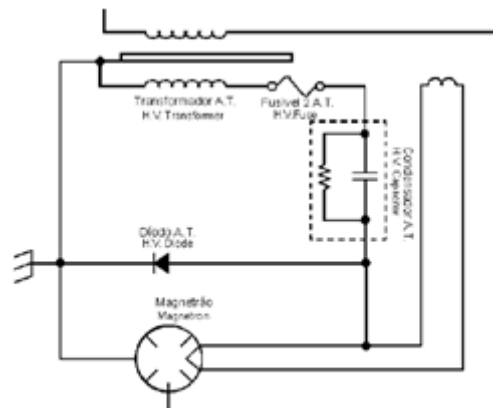
- A separate device for stopping operational functions is not necessary.
- A selector switch with an off-position clearly identifiable is allowed.
- An ON/OFF switch, if any, is considered a suitable device to stop operational functions.
- A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

2014/06 –  
Subclauses 29.2

Stressa, June 2014, CLC/TC 61(SEC)2083

As the MW ovens capacitors are covered by a specific standard EN 61270-1 for MW capacitors and considering that the connection of the MW capacitor is on an internal grounded part, the solution shown can be accepted since it can be considered as functional insulation.

A decision relating to a similar question was accepted at IEC SC 61B in their Kista meeting in June 2014.



## **22 EN 60335-2-27:2003, UV appliances**

**2006/05 - Subclause 30.2**

**Málaga, June 2006, CLC/TC 61(SEC)1567**

The combination of a lampholder and a fluorescent lamp used for skin exposure to ultraviolet and infrared radiation is not considered to be a luminaire. Therefore, the glow-wire test in 30.2 of EN 60335-2-27 has to be carried out on such combinations. EN 60598-1 is not the standard to be used in this case.

### 23 EN 60335-2-29:2004, Battery chargers

DECISION SHEET				Date 2001-08-03
Standard EN 60335-2-29:2004				OSM/HA 296
(Sub)clause	Meeting	Agenda item	Document	Exp. date
24.201	15	10.9	(IT)01/01	
24.201	23	6.4.2	(SEC)05/09	
24.201	23	7.8	(SE)02/09	

Subject

Transformer

Problem

Is it possible to accept a switching transformer complying with EN 61558-2-16 to provide SELV for a battery charger for use by children, considering that 24.201 (Annex AA) of EN 60335-2-29:2004 requires only the complying with 7.2, 15, 20.5.1 and 20.101 of IEC 61558-2-16.

Decision

No, only safety isolating transformer according to EN 61558-2-16 is acceptable for battery chargers for children toys.

Comment

CLC/TC 61 confirmed (November 2001).

No decision by CLC/TC 61 regard whirlpool baths (EN 60335-2-60).

For other Parts 2, excluding EN 60335-2-60, a transformer complying EN 61558-2-16 can be used to provide SELV.

See also dec. 432.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

In addition to the OSM/HA/296 should be applied also the OS/HA(IT) 01/2010, to apply at least for whirlpool baths the switching equivalent SELV.

**2015/04 - Clause 32.102. Brussels, December 2015, TC61/IE/00200/DS (Item 35a in the Agenda)**

Goggles in compliance with EN 170 are only acceptable for use with EN 60335-2-27 appliances when they are additionally confirmed to be in accordance with EN 60335-2-27.

## **24 EN 60335-2-30:2009/A11:2012, Room heaters**

**2013/11 - Clause 22.Z101**

**Brussels, November 2013, \*(IT)0280/DC+\*ES NC comments**

The measurement of the dimension of 5.5 shall be carried out with the appliance fully assembled (including filters, if any).



## **25 EN 60335-2-30:2009, Room heaters**

### **2009/06 – Subclause 7.10**

**Sofia, November 2009, CLC/TC 61(SEC)1730A**

The different positions of switches and controls on room heaters shall be indicated by figures, letters or other visual means. This requirement also applies to switches that are part of a control. The **ON** position shall be clearly visible to the user when the heater is in its intended position of use.

### **2009/05 – Subclause 8.1.1**

**Sofia, November 2009, CLC/TC 61(SEC)1730A**

The test in Subclause 8.1.1 has to be carried out as follows:

The appliance is operated under normal operating conditions until steady conditions are reached, after that, the appliance is switched off, and 5 s later the test is carried out.

## 26 EN 60335-2-31:2003, Range hoods

2006/07 - Subclause 19.101

Milan, November 2006, CLC/TC 61(SEC)1586+A

Addition:

*After the test, parts operating at a voltage not exceeding safety extra low voltage shall not be damaged to such an extent that they give access to live parts.*

2003/05 - Subclause 20.2

Copenhagen, May 2003, CLC/TC 61(SEC)1438

CLC/TC 61(SEC)1412

The intention of the standard is that it is permitted to take out filters for cleaning, without taking into consideration the fact of having access to fan blades.

2006/09 - Subclause 30.101

Malaga, June 2006, CLC/TC 61(IT)269

CLC/61(SEC)1349

Addition:

NOTE Z101 If the range hood is intended to be placed above a gas hob following manufacturer's instructions, all the parts placed at a distance from the gas hob lower than 65 cm shall withstand the Needle Flame Test (Annex E in EN 60335-1:2012) carried out with the flame in contact for 2 min. Prior to testing each part has to be pre-conditioned in the following way:

- dipping the part into corn oil having a viscosity of  $80 \text{ cSt} \pm 5 \text{ cSt}$  at  $20 \text{ }^\circ\text{C}$  for 1 h;
- letting the part dry up in free air for at least 30 min.

DECISION SHEET				Date 1998-02-23
Standard EN 60335-2-31:2003				OSM/HA 170
(Sub)clause	Meeting	Agenda item	Document	Exp. date
19.101	8	11.6		
19.101	23	6.4.2	(SEC)05/09	

Subject

Abnormal operation

Problem

Adjustment of supply voltage.

Decision

The supply voltage is adjusted only once during the test of 19.101 namely when the heating elements are adjusted to have reached steady state.

The text of 19.101 should read:

The supply voltage, determined prior to the test, is that required to provide the relevant power input under normal operation when the power input has stabilized. This voltage is maintained throughout the test.

Comment

CLC/TC 61 decision of April 1994.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

## 27 EN 60335-2-31:2003 + A1:2006 + A2:2009, Range hoods

2011/13 - Subclause 7.12

Malta, December 2011, CLC/TC 61(IT)0279/DC

Due to many different lamps types the instructions shall include details of the type of lamps that can be used indicating, in according to standard IEC 61231, the ILCOS D code (standard version code) following by indication regarding the information of the same code, or rather:

- Indication of the category and general classification of the lamps.
- Indication of the max wattage of the lamp.
- Indication of the lamp voltage range or, only for fluorescent lamp when is previewed, indication of the starting details.
- Indication of the type of the lamp cap.
- Indication of the dimensions.

Abbreviated ILCOS D code is not admitted. Only self ballasted fluorescent lamps with double envelope shall be used.

One example for tungsten filament lamps and incandescent lamps is:

*Use type lamp (or use in alternative type lamp) IAA/C-40-220/230-E27-60 (ILCOS D code in according to standard IEC 61231).*

*Tungsten filament lamp - Clear pear-shaped lamp.*

*Max wattage: 40W*

*Voltage range: 220-230V.*

*Type of cap: E27*

*Dimensions: Nominal diameter 60mm*

*One example for fluorescent lamps is:*

*Use type lamp (or use in alternative type lamp) FBRI-23-230/240-E14-82/127 (ILCOS D code in according to standard IEC 61231).*

*Self-ballasted fluorescent reflector lamp – Integral induction type ballast.*

*Max wattage: 23W*

*Voltage range: 230-240V.*

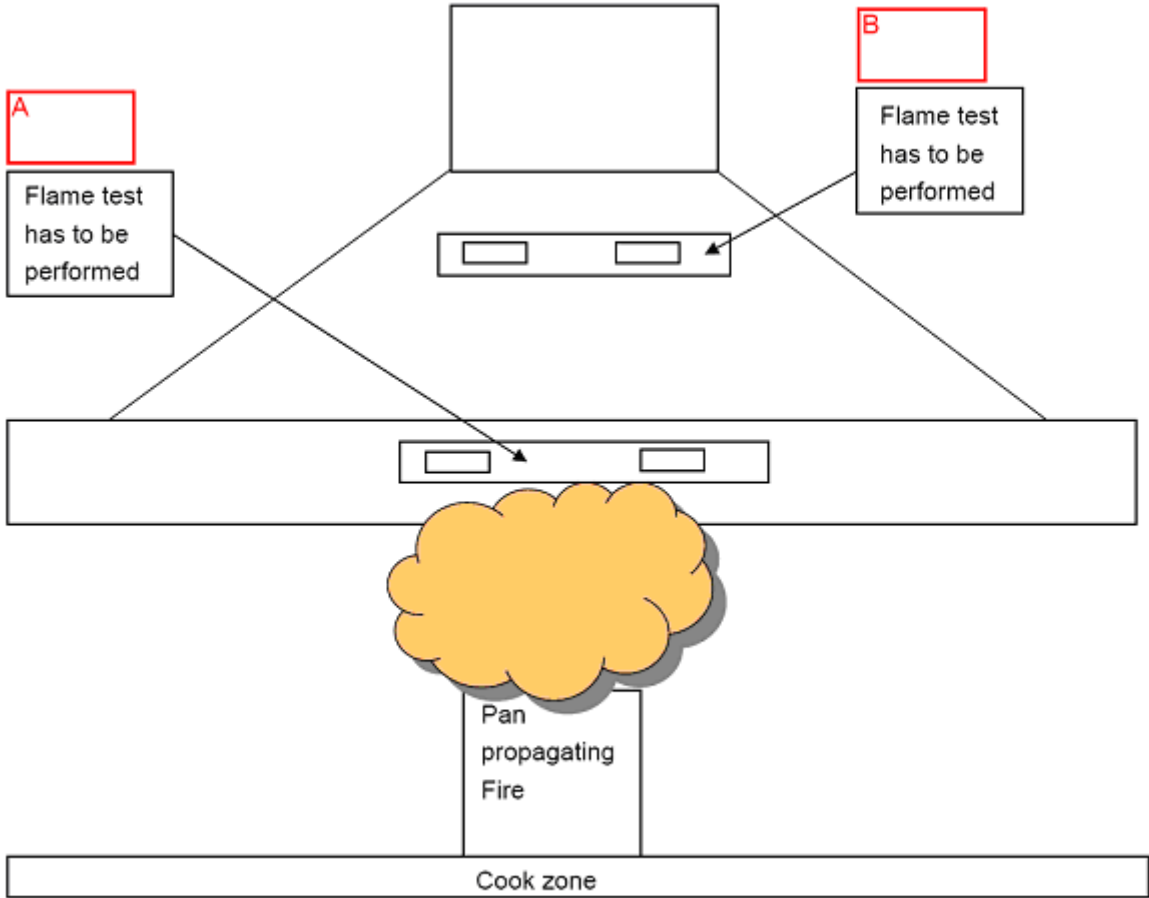
*Type of cap: E14*

*Dimensions: diameter 82mm/length 127mm.*

2011/11 - Subclauses 30.101

Malta, December 2011, CLC/TC 61(SEC)1888

Constructions A and B in the figure below shall be tested according to Annex E, as indicated in subclause 30.101.



## **28 EN 60335-2-34:2002 , Motor-compressors**

**2004/09 - Subclause 19.104**

**Balsthal, June 2004, CLC/TC 61(SEC)1490**

**CLC/TC 61(SEC)1477**

**2007/11 - Subclause 19.104**

**Berlin, November 2007, CLC/TC 61(SEC)1613**

During the tests and at the conclusion of the tests of 19.102 the motor-compressor protection system is allowed to fail, provided that the motor-compressor is de-energized.

If the motor-compressor protection system fails, the tests of 19.102 shall be repeated on a separate sample and give the same result.

## **29 EN 60335-2-43:2003, Clothes dryers and towel rails**

**2005/09 - Subclause 7.12.1**

**Brussels, November 2005, CLC/TC 61(SEC)1544**

In the warning, the 'lowest heated rail' has to be understood as 'the top of the lowest rail that children can grip'.

### **30 EN 60335-2-52:2003, Oral hygiene appliances**

**2003/06 - Annex C**

**Copenhagen, May 2003, CLC/TC 61(SEC)1438**

**CLC/TC 61(SEC)1414**

For the ageing test of motors, the factor  $p = 500$  (instead of 8 000 in Part 1).

### **31 EN 60335-2-60:2003, Whirlpools**

**2004/10 - General**

**Balsthal, June 2004, CLC/TC61(SEC)1490**

Lamps under water supplied at safety extra-low voltage not exceeding 30 V d.c. are not considered equivalent to live parts supplied at safety extra-low voltage not exceeding 12 V a.c. The maximum applicable voltage is 12 V a.c. (approximately 17 V d.c.)



## **32 EN 60335-2-65:2003+A1:2008, Air-cleaning appliances**

**2011/05 – Clause 19**

**Brussels, June 2011, CLC/TC 61(DE)0619/NCP**

Subclause 19.13 specifies that there shall be no emission of poisonous gases when testing the appliance according to Clause 19. For ozone producing air cleaning appliances, the ozone concentration shall be measured both in normal use and in abnormal operation, so as to verify that the limit of poisonous gases established in Clause 32 is not exceeded.

### 33 EN 60335-2-71:2003+A1:2008, heating appliances for breeding and rearing animals

DECISION SHEET				Date 1998-02-24
Standard EN 60335-2-71:2003				OSM/HA 213
(Sub)clause	Meeting	Agenda item	Document	Exp. date
11	11	10.21	(NO)3/97	
11	23	6.4.2	(SEC)05/09	

#### Subject

Heating

#### Problem

Should the heating test of IR lamps for breeding and rearing of animals be carried out at 1,15-times rated input, although that results in extreme over-voltage ?

#### Decision

For the time being that should be done.

#### Comment

CLC/TC 61 confirmed the decision (May 1998).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

### **34 EN 60335-2-75:2004, Commercial dispensing appliances and vending machines**

**2010/05 – Subclause 24.103**

**Ljubljana, November 2010, CLC/TC 61(SEC)1812**

For vending machines with incorporated heating elements, compressors, ventilating fans, lights, etc.:

- Thermal cut-outs that disconnect heating elements shall be of non self-resetting type, even if the construction of the appliance is such that no hazard is possible, as there is a risk of unintentionally starting of motors with dangerous moving parts in the maintenance area.
- It is allowed that compressors are equipped with a thermal cut-out of self-resetting type if there is no possible hazard during normal use or maintenance.
- Ventilating fans should only be equipped with thermal cut-outs of self-resetting type, if there is no possible hazard during normal use, servicing or maintenance.

### **35 EN 60335-2-76:2005/A12:2010, Fence energizers**

**2011/06 – Subclause 22.108 in Annex ZAA**

**Brussels, June 2011, CLC/TC 61(SE)0001**

5<sup>th</sup> and 6<sup>th</sup> dotted items of Subclause 22.108 in Annex ZAA mean that the steady state limits of Table ZAA.1 allow up to 15 J to be put on to the fence, if the load has been less than 500  $\Omega$  (e.g. 0-499  $\Omega$  ) after the time delay. If the load has been 500  $\Omega$ , then the limit is 5 J. 5<sup>th</sup> and 6<sup>th</sup> dotted items allow the energizer to output higher levels of energy (up to 15 J) only if the load is a stable and substantial load (0-499  $\Omega$ ), such as vegetation contacting the fence after the time delay. A human contacting the fence will result in a change in the load, but this is covered by the 7<sup>th</sup> dotted item.

**2011/07 – Subclause 22.108 in Annex ZAA**

**Brussels, June 2011, CLC/TC 61(SE)0001**

As established under 7<sup>th</sup> dotted item of Subclause 22.108 in Annex ZAA, an energizer with increased energy level, due to low impedance in the fence circuit, shall not give an impulse of more than 5 J into an additional load H in parallel (body contact), but only during the entire delay time. For this class of energizer with a high output (up to 15 J), it is required to detect a human contacting the fence and reduce its output (if required) such that the human would not receive more than 5 J of energy. However, it is possible that the energizer could output less than 5J for all load conditions and comply with this requirement without any detection means.

**2011/08 – Subclause 22.ZAA.1**

**Brussels, June 2011, CLC/TC 61(SE)0001**

**2011/14 - Subclause 22.ZAA.1**

**Malta, December 2011, CLC/TC 61(SE)0002**

The meaning of “normal operation” is with no load connected to the output (that is, no energy to measure). Therefore, the text “normal operating conditions” means “test conditions according to subclause 22.108”

### 36 EN 60335-2-82:2003, amusement machines and personal service machines

DECISION SHEET				Date 2003-08-01
Standard EN 60335-2-82:2003				OSM/HA 324
(Sub)clause	Meeting	Agenda item	Document	Exp. date
1	17	8.22	(ES)02/03	
1	18	4.4	(ES)02/03	
1	23	6.4.2	(SEC)05/09	

Subject

Scope

Problem

In Note 102 it is said: If an appliance incorporates a part which is within the scope of IEC(EN) 60065 or IEC(EN) 60950, the part has to comply with the relevant standard.

- 1) As this requirement is applicable, for example, to a Monitor (CRT), is it equally applicable to a power supply source of the type used in a computer ?
- 2) In case a power supply is certified according to EN 60950, could it be taken into account so as not to repeat tests common to both EN 60335 and EN 60950 ?
- 3) May this condition be extensible to other Parts 2 (i.e. whirlpool baths) ?

Decision

- 1) If power supply is dedicated only to supply a part which is under the scope of IEC(EN) 60065 or IEC(EN) 60950, it is acceptable to test the power supply according these standards.
- 2) If power supply is used to supply a circuit not covered by the mentioned standards, then the power supply has to be tested according to EN 60335-1.
- 3) Yes, following the philosophy of the components, but EN 60335 should additionally be considered according to Note 1 of 24.1.

Comment

Item 3 has been confirmed by CLC/TC 61 (November 2003).

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

### 37 EN 60335-2-89:2002, Commercial refrigerating appliances

2004/11 - Subclause 15.103

Milan, November 2004, CLC/TC 61(SEC)1519

The pouring test is applicable, even if the surface has holes, and for surfaces with an inclination of 2° or more that are substantially flat and horizontal.

2004/12 - Subclause 22.104

Balsthal, June 2004, CLC/TC 61(SEC)1490

CLC/TC 61(GR)001

In refrigerators with swing glass door(s) constructed from a two-pane or three-pane glass, the inside pane (the one at the side of the refrigerated space) is considered as "accessible glass panel".

In refrigerators with sliding glass doors that are superposed on each other when opened, the inside pane (the one at the side of the refrigerated space) is not considered as "accessible glass panel".

In refrigerators with glass door(s) made from a three pane glass, the middle pane is not considered as "accessible glass panel".

DECISION SHEET				Date 2005-07-27
Standard EN 60335-2-89:2002				OSM/HA 361
(Sub)clause	Meeting	Agenda item	Document	Exp. date
15.103	18	8.10	(HU)01/04	
15.103	19	4.3	CLCTC61(SEC)1519	
15.103	23	6.4.2	(SEC)05/09	

Subject

Moisture resistance

Problem

If small volume refrigerators having perforated top do not fulfil the test of 15.103, is it acceptable that manufacturer modifies the design, constructing a top surface with 3° inclination to the horizontal ?

Decision

Yes, according to Part 2-89 an inclination of at least 4° in the top surface implies that the test of 15.103 shall not be performed, but the majority of the delegates consider this construction not acceptable because is not in line with other Part 2 requirements (2-24, 2-40, etc.).

Comment

CLC/TC 61 confirmed (November 2004) that this construction is not acceptable. The pouring test is applicable, even if the surface has holes for inclination 2° or higher if the surface is substantially flat and horizontal, independently if Part 2-24 or 2-89 is applied.

CLC/TC 61 will request to IEC/SC 61C a modification of Part 2-89 in this sense.

This decision has been updated after the 23<sup>rd</sup> OSM/HA meeting.

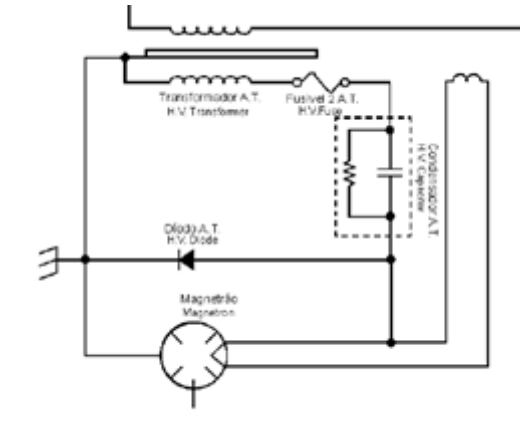
### 38 EN 60335-2-90:2002, Commercial microwave ovens

2014/07 – Subclauses 29.2

Stresa, June 2014, CLC/TC 61(SEC)2083

As the MW ovens capacitors are covered by a specific standard EN 61270-1 for MW capacitors and considering that the connection of the MW capacitor is on an internal grounded part, the solution shown can be accepted since it can be considered as functional insulation.

A decision relating to a similar question was accepted at IEC SC 61B in their Kista meeting in June 2014.



## Annex A (informative)

### Collection of interpretations of the requirement for vulnerable people in 7.10 of EN 60335-1:2012 and different Parts 2

The following is a list of all agreed interpretations and a non-exhaustive list of cases of application of the following requirement in 7.10 of EN 60335-1:2012 and different Parts 2, mentioned below:

“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.

An indication that the device has been operated shall be given by:

- A tactile feedback or
- An audible and visual feedback.

NOTE Z1 The sound of the motor or sound of an actuator switching ON/OFF is regarded as audible feedback. The stopping of the typical function (e.g. stopping of the vibration on the body of the appliance or of a part of it) is regarded as tactile means.

NOTE Z2 Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons”.

General interpretation for:

EN 60335-2-2:2003/A11, Vacuum cleaners and water-suction cleaning appliances;

EN 60335-2-3:2002/A11:2010, Electric irons;

EN 60335-2-7:2003/A11:2010, Washing machines;

EN 60335-2-9:2003/A13:2010, Grills, toasters and similar portable cooking appliances;

EN 60335-2-23:2003/A11:2010, Appliances for skin or hair care;

EN 60335-2-52:2003/A11:2010, Oral hygiene appliances;

Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

General interpretation for:

EN 60335-2-6:2003/A11:2010, Cooking ranges, hobs and ovens;

EN 60335-2-25:2002/A11:2010, Microwave ovens, including combination microwave ovens;

Devices used to stop operational functions mean devices that are operated by the user to stop the intended function of the appliance.

- A separate device for stopping operational functions is not necessary.



- A selector switch with an off-position clearly identifiable is allowed.
- An ON/OFF switch, if any, is considered a suitable device to stop operational functions.
- A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons.

Particular interpretations:

EN 60335-2-2:2003/A11:2010, Vacuum cleaners and water-suction cleaning appliances:

The following constructions are in compliance with the requirement in 7.10, provided that the switches have two different stable positions (meaning that it can be seen or felt when they have been pressed or rotated).



EN 60335-2-6:2003/A11:2010, Cooking ranges, hobs and ovens:

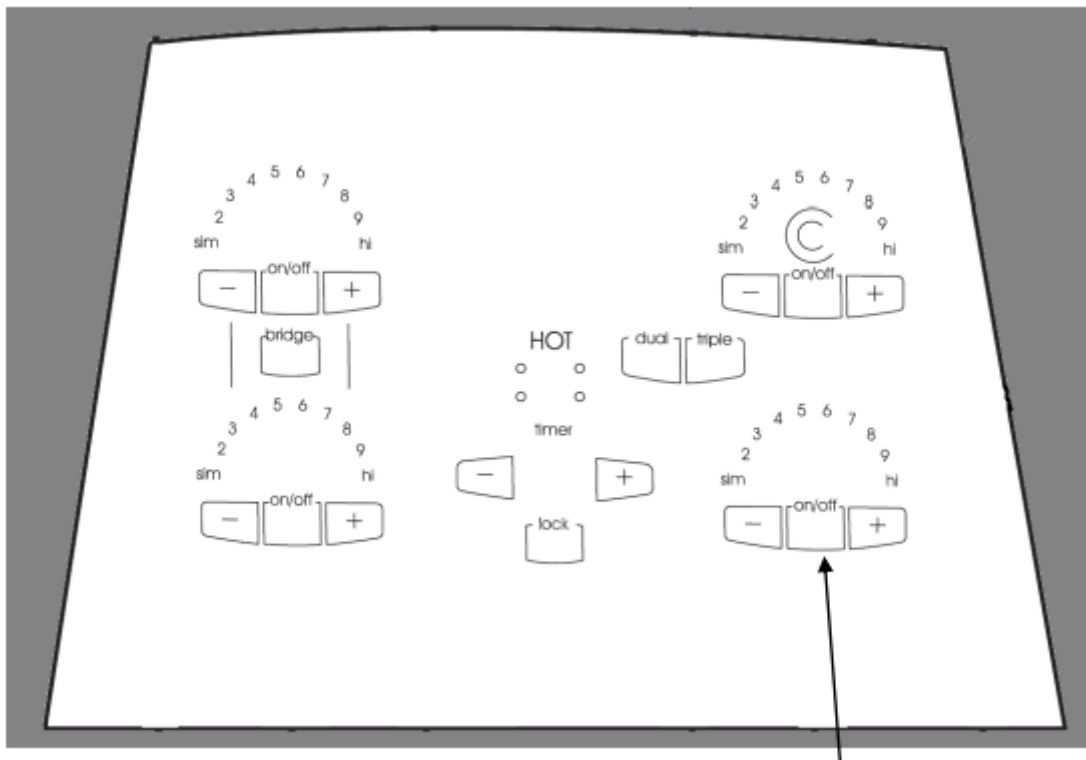
For hobs, the “0 power” position of every hob element or griddle can be considered as a “stop operational function”, and also the “0 position” controlling all hob elements or griddles of the appliance at once can be considered the “stop operational function of the appliance”.

For hobs with a switch to select the hob element and with hob element power regulators, in case the power regulator gives an acoustic feedback every time the energy is increased or reduced, the acoustic signal of the stop switch shall have a different sound from that used for the power regulator.

It is not needed to introduce a general on/off switch if the requirement can be met also by using **individual on/off switches** or energy regulators.

The requirements of 7.10 are not intended to provide a solution to all the needs for very vulnerable persons, see Note Z2 in Clause 3 of EN 60335-1:2012.

Pictures below show the general stop key:



EN 60335-2-30:2009, Room heaters:

For stationary appliances the meaning of 7.10 is that there shall be a clear indication that the appliance is ON. This interpretation is independent from the standby switch and refers to any type of functional switch.

## **Annex B** (informative)

### **Interpretations withdrawn in this edition of CLC/TR 50417**

The list below indicates the references of Interpretations that appeared in CLC/TR 50417:2014 and that have been withdrawn because the standard they applied to has been withdrawn, the text of the interpretation has been included in the standard at CENELEC or IEC level, or the interpretation is not applicable anymore.

When the document is ready for the publication the strike through text will be removed.

<b>European Standard</b>	<b>Clause/Subclause</b>	<b>Number of interpretation</b>
EN 60335-1:2002	29.3	2005/02
EN 60335-2-23:2003	19.101	2007/05
EN 60335-2-31:2003	7.12.1	2006/06
EN 60335-2-31:2003	30.2	2006/08
EN 60335-2-4:2002	15.2	2004/03
EN 60335-2-11:2003	15.2	2004/06
EN 60335-2-11:2003	15.2	2006/03





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