

Specification for

**Safety of household and
similar electrical
appliances**

Part 2. Particular requirements

**Section 2.6 Cooking ranges, cooking
tables, ovens and similar appliances for
household use**

Corrected and reprinted, June 1998

Correction

On page 2c, in the foreword to Amendment A54, the
date of withdrawal has been corrected from '1997-04-01'
to '1999-04-01'

The European Standard EN 60335-2-6 : 1990 has the status of a
British Standard

ICS 97.040.20

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the National Committees of the following countries.

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

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7677	July 1993	Indicated by a double sideline in the margin
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9921	April 1998	Indicated by a double sideline in the margin

Summary of pages

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National foreword

|| This British Standard has been prepared under the direction of the Light Electrical Engineering Standards Policy Committee and is the English language version of EN 60335-2-6, 'Safety of household and similar electrical appliances : Part 2 : Particular requirements for cooking ranges, cooking tables, ovens and similar appliances for household use, incorporating Corrigendum June 1991 and Amendments A2, A3, A51, A52, A53 and A54', published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived by that organization from IEC Publication 335-2-6 (1986) edition 3, including Amendment Nos. 1, 2 and 3, which has the same title as the European Standard.

The CENELEC Common Modifications have been implemented at the appropriate places in the text of IEC Publication 335-2-6 (1986) edition 3, into which Amendment No. 1 (1988) has been incorporated, and are indicated by a single sideline in the margin.

The foreword and preface of IEC Publication 335-2-6 (1986) edition 3, the preface of Amendment No. 1 (1988) and the deleted parts of the original IEC text which do not form part of the text of EN 60335-2-6 have been quoted in national appendix NA.

Annexes designated 'normative' are part of the body of the standard. Annexes designated 'informative' are given for information only. National appendices are designated 'informative'.

This British Standard is to be read in conjunction with BS 3456 : Part 201 : 1990 'General requirements'. The many references to Part 1 should be read as references to BS 3456 : Part 201, and its amendments, which is the English language version of EN 60335-1.

This British Standard supersedes BS 3456 : Part 102 : Section 102.6 : 1989 which will be withdrawn on 31 December 1991 in accordance with the CENELEC Internal Regulations.

The relationship between British Standard, IEC and CENELEC publications is as shown in the following table.

The foreword of the EN Amendment A2 makes reference to 'date of withdrawal (dow) of conflicting national standards' as '1995-04-01'. In this case the relevant national standard is BS EN 60335-2-6 but the dow relates only to those parts of the British Standard subject to Amendment No. 2. Certificates and marks will not be awarded after this date with respect to the British Standard not incorporating Amendment No. 2. They will be awarded with respect only to the amended British Standard. However, such certificates and marks already awarded with respect to the British Standard not incorporating Amendment No. 2 may continue to apply for production until 2000-04-01.

The foreword of the EN Amendment A51 makes reference to 'date of withdrawal (dow) of conflicting national standards' as '1995-12-01'. In this case the relevant national standard is BS EN 60335-2-6 but the dow relates only to those parts of the British Standard subject to Amendment No. A51. Certificates and marks will not be awarded after this date with respect to the British Standard not incorporating Amendment No. A51. They will be awarded with respect only to the amended British Standard. However, such certificates and marks already awarded with respect to the British Standard not incorporating Amendment No. A51 may continue to apply for production until 2000-12-01.

The foreword of the EN Amendment A3 makes reference to 'date of withdrawal (dow) of conflicting national standards' as '1996-07-01'. In this case the relevant national standard is BS EN 60335-2-6 but the dow relates only to those parts of the British Standard subject to Amendment No. 4. Certificates and marks will not be awarded after this date with respect to the British Standard not incorporating Amendment No. 4. They will be awarded with respect only to the amended British Standard. However, such certificates and marks already awarded with respect to the British Standard not incorporating Amendment No. 4 may continue to apply for production until 2000-07-01.

Product approval. Attention is drawn to the fact that products conforming to this British Standard may be approved by the British Electrotechnical Approvals Board for the purposes of participation in the CENELEC Certification Agreement and in the CB Scheme of the IECEE. (Details of the BEAB Approval Marks Scheme are given on the inside back cover.)

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Relationship between British Standard, IEC and CENELEC references for IEC Publication 335				
	British Standard	International standard	European Standard	Harmonized Document
<i>Part 1. General requirements</i>				
Standards	BS 3456 : Part 201 : 1990 Technically equivalent to IEC 235-1 Identical to EN 60335-1	IEC 335-1 : 1983, edition 2 (includes Amendment No. 1 : 1977, Amendment No. 2 : 1979, and Amendment No. 3 : 1982 to the 1976 edition (edition 1))	EN 60335-1 : 1988 (includes Amendment A1)	None
Identical amendments	Amendment No. 1 : 1990 AMD 6153	Amendment No. 4 : 1984	Amendment A2 : 1988	None
	Amendment No. 2 : 1990 AMD 6493	Amendment No. 5 : 1986	Amendment A5 : 1989	None
	Amendment No. 3 : 1990 AMD 6494	Amendment No. 6 : 1988	Amendment A6 : 1989	None
<i>Part 2. Cooking ranges, cooking tables, ovens and similar appliances for household use</i>				
Identical standards	BS 3456 : Part 102 : Section 102.6 : 1989	IEC 335-2-6 : 1982, edition 2 including amendment No. 1 : 1984 together with common modifications of HD 275 S1 and national deviations list of HD 275 S1 (September 1986)	No alignment	HD 275 S1 together with the list of national deviations (September 1986)
	No alignment (difference between IEC editions is documented in 61(CO)408, see national appendix NA)	IEC 335-2-6 : 1986, edition 3 together with the common modifications of HD 275 S1 and the national deviations list of HD 275 S1 (September 1986)	No alignment	No alignment (difference between IEC editions is documented in 61(CO)408, see national appendix NA)
Identical amendments	Amendment No. 1 : 1990	Amendment No. 1 : 1988	No alignment	Amendment No. 1 : 1989
	Amendment No. 2 : 1990 (This removes the UK national deviation in clause 6)	No alignment	No alignment	No alignment
Identical standards	BS EN 60335-2-6 (This publication)	IEC 335-2-6 : 1986, edition 3 including Amendment No. 1 : 1988 together with the special national conditions of EN 60335-2-6 : 1990	EN 60335-2-6 : 1990	No alignment
Possible identical amendment	Amendment No. 4 : 1994	Amendment No. 3 : 1994	Amendment A3 : 1994	No alignment

Descriptors: Household electrical appliances, cookers, table cookers, ovens, safety requirements, protection against electric shocks, fire protection, protection against mechanical hazard

English version

Safety of household and similar electrical appliances Part 2: Particular requirements for cooking ranges, cooking tables, ovens and similar appliances for household use

(includes amendments, A2 : 1992, A51 : 1993, A3 : 1993, A52 : 1995, A53 : 1995 and A54 : 1997)
(IEC 335-2-6 : 1986 + Amendment 1 : 1988, modified + Amendment 2 : 1990,
modified + Amendment 3 : 1992)

Sécurité des appareils électrodomestiques et
analogues
Deuxième partie: Règles particulières pour les
cuisinière, les réchauds, les fours et appareils
analogues à usage domestique
(inclut les amendements A2 : 1992, A51 : 1993,
A3 : 1993, A52 : 1995, A53 : 1995 et A54 : 1997)
(CEI 335-2-6 : 1986 + Amendement 1 : 1988,
modifiée + Amendement 2 : 1990, modifié
+ Amendement 3 : 1992)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2: Besondere Anforderungen für Herde,
Tischkochgeräte, Backöfen und ähnliche Geräte
für den Hausgebrauch
(enthält Änderungen, A2 : 1992, A51 : 1993, A3 :
1993, A52 : 1995, A53 : 1995 und A54 : 1997)
(IEC 335-2-6 : 1986 + Änderung 1 : 1988,
modifiziert + Änderung 2 : 1990, modifiziert
+ Änderung 3 : 1992)

This European Standard was approved by CENELEC on 5 December 1989, amendment A2 was approved by CENELEC on 9 December 1992, amendment A51 was approved by CENELEC on 9 March 1993, amendment A3 was approved by CENELEC on 6 July 1993, amendment A52 was approved by CENELEC on 23 March 1995, amendment A53 was approved by CENELEC on 4 July 1995. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Brief history

The proposal to endorse the third edition of IEC Publication 335-2-6, document CENELEC/TC 61 (SEC) 510, was circulated under the enquiry procedure in October 1986.

This proposal was discussed during the Brussels meeting in May 1987 when it was decided to submit a draft for EN 60335-2-6 to the voting procedure. This procedure started in March 1989.

The proposal to endorse amendment 1 to the third edition of IEC Publication 335-2-6, document CLC/TC 61 (SEC) 583, was circulated under the enquiry procedure in August 1987.

This proposal was discussed during the Neusiedl meeting in May 1988 when it was decided to submit a draft for an amendment to EN 60335-2-6 to the voting procedure. This procedure started in May 1989.

The text of both drafts was ratified by the CENELEC Technical Board on the 5 December 1989. The amendment has been incorporated in EN 60335-2-6.

Foreword

This European Standard has been prepared by the secretariat of CENELEC Technical Committee 61.

The following dates are applicable:

- date of announcement (doa) 1990-04-01
- date of latest publication (dop) 1991-01-01
- date of withdrawal of conflicting national standards (dow) 1992-01-01

This European Standard replaces HD 275 S1 : 1986 and its amendment 1 : 1988.

For products which have complied with HD 275 S1 : 1986, including its amendment 1 : 1988, before 1992-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1997-01-01.

This document supplements or modifies the corresponding clauses of IEC 335-2-6 : 1986, including its amendment 1 : 1988, so as to convert that standard into the European Standard EN 60335-2-6.

This standard has to be used in conjunction with EN 60335-1 : 1988, Safety of household and similar electrical appliances, Part 1 : General requirements, including its amendments A2 : 1988, A5 : 1989 and A6 : 1989.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states 'addition', 'modification' or 'replacement', the relevant text of Part 1 is to be adapted accordingly.

Subclauses and figures which are in addition to those in IEC 335-1 are numbered starting with 101. Subclauses which are in addition to those in IEC 335-2-6 are numbered starting with 601.

Special national conditions (snc) causing a deviation from this European Standard are listed in annex ZX and are in addition to those in EN 60335-1.

National deviations from this European Standard are listed in annex ZY and are in addition to those in EN 60335-1.

Other publication quoted in this standard:

EN 30 : Domestic cooking appliances burning gas.

NOTE. Where reference is made to other harmonized standards, the latest edition of that standard is applicable.

The following print types are used:

- | | |
|-------------------------------|-----------------------|
| - requirements: | in roman type |
| - <i>test specifications:</i> | <i>in italic type</i> |
| - explanations | in small roman type. |

Foreword to amendment A2

The proposal to endorse amendment 2 : 1990 to IEC 335-2-6 : 1986, document CLC/TC 61 (SEC) 757, was circulated under the CENELEC enquiry procedure in December 1990.

This proposal was discussed during the Baden meeting in May 1991, when it was decided to submit a draft for an amendment to EN 60335-2-6 : 1990 to the voting procedure. This draft was circulated as prAD in June 1992 and was ratified by CENELEC as amendment A2 on 9 December 1992.

There is no amendment A1 to EN 60335-2-6.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1993-12-01
- latest date of withdrawal of conflicting national standards (dow) 1995-04-01

For products which have complied with EN 60335-2-6 : 1990 before 1994-04-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-04-01.

As a consequence of endorsing amendment 2 of IEC 335-2-6, the common modifications of EN 60335-2-6 concerning subclauses 19.1 (the first paragraph of the explanations) and 21.1 are withdrawn since they are covered by the IEC text.

Since EN 60335-2-6 endorses amendment 1 to IEC 335-2-6 and amendment 2 to IEC 335-2-6 incorporates amendment 1, the following deletions are made to EN 60335-2-6 : 1990 to avoid duplication:

- 7.12 Only the two paragraphs commencing 'If the manufacturer instructs the user . . .';
- 11.1 Only the addition concerning 11.101;
- 11.101;
- 22.102;
- figure 106

NOTE. These deletions refer to the printed version of the EN.

EN 60335-2-6 including this amendment has to be used in conjunction with EN 60335-1 : 1988, including its amendments A2 : 1988, A5 : 1989, A6 : 1989, A51 : 1991, A52 : 1992, A53 : 1992 and A54 : 1992.

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

There are no national deviations from this amendment.

Foreword to amendment A51

The proposal to amend EN 60335-2-6, document CLC/TC 61 (SEC) 779, was discussed during the Baden meeting in May 1991, when it was decided to submit a draft for an amendment to the unique acceptance procedure (UAP).

This draft was circulated as prAE in June 1992 and was ratified by CENELEC as amendment A51 on 9 March 1993.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1993-12-01
- date of withdrawal of conflicting national standards (dow) 1995-12-01

For products which have complied with EN 60335-2-6 : 1990, including its amendment A2 : 1992, before 1995-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-12-01.

This amendment supplements or modifies the corresponding clauses of EN 60335-2-6 : 1990 and its amendment.

Figures which are in addition to those in EN 60335-2-6 are numbered starting with 601.

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

There are no national deviations from this amendment.

NOTE. Amendment numbers concerning A1 refer to the endorsement of IEC amendments, while those commencing A51 originate in CENELEC.

Foreword to amendment A3

The proposal to endorse amendment 3 : 1992 to IEC 335-2-6 : 1986, document CLC/TC 61 (SEC) 830, was circulated under the CENELEC enquiry procedure in February 1992. This proposal was discussed during the Pettenasco meeting in September 1992, when it was decided to submit a draft for an amendment to the voting procedure.

This draft was circulated as prAF in February 1993 and was ratified by CENELEC as amendment A3 on 6 July 1993.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1994-07-01
- date of withdrawal of conflicting national standards (dow) 1996-07-01

For products which have complied with EN 60335-2-6 : 1990 including its amendments A2 : 1992 and A51 : 1993 before 1996-07-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-07-01.

As a consequence of endorsing amendment 3 to IEC 335-2-6, the common modifications in the following subclauses of EN 60335-2-6 are withdrawn:

- 7.1**
- 7.14** – first requirement paragraph and explanation
- 11.3**
- 11.8** – modification to the first table
- addition concerning temperature rises during pyrolytic self-cleaning
- 13.2** – modification
- 19.2** – explanation
- 20.2** – explanation
- 20.101** – explanation
- 22.16** – explanation
- 22.601**
- 24.101**
- 25.2**

Figure 104

This procedure results in replacing these common modifications by similar IEC text.

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

There are no national deviations from this amendment.

Endorsement notice

The text of amendment 3 : 1992 to the International Standard IEC 335-2-6 : 1986 was approved by CENELEC as an amendment to the European Standard without any modification.

Due to the withdrawal of the common modification for subclauses **11.3**, **11.8** and **13.2**, the text of amendment 3 to IEC 335-2-6 has to be modified as follows when preparing the printed version:

- 11.3** Replace 'the first three' by 'the first two'.
- 11.8** In the first line delete 'delete the column for appliances of Type A and'.
- 13.2** Delete the last line.

Foreword to amendment A52

At the request of the Finnish electrotechnical committee, a draft for an amendment to EN 60335-2-6 : 1990 was submitted to the CENELEC members for acceptance in January 1995.

The text of the draft was accepted by CENELEC as amendment A52 to EN 60335-2-6 : 1990 on 1995-03-23.

The following dates were fixed:

- latest date by which the existence of the amendment has to be announced at national level (dop) 1995-06-23
- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dow) 1995-09-23

Text of amendment A52

In annex ZY, **delete** the A-deviation for Finland regarding subclause 11.8.

Foreword to amendment A53

A proposal to amend EN 60335-2-6 : 1990, document CLC/TC 61 (DE) 402, was discussed during the Pettenasco meeting in September 1992, when it was decided to circulate the revised proposal under the CENELEC enquiry procedure which started in December 1992. The results of this procedure were discussed during the Oslo meeting in April 1994 when it was decided to submit a draft for an amendment to the Unique Acceptance Procedure (UAP).

This draft was circulated as prAG in October 1994 and was ratified by CENELEC as amendment A53 on 1995-07-04.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1996-07-01
- date of withdrawal of conflicting national standards (dow) 1997-07-01

For products which have complied with EN 60335-2-6 : 1990 including its amendments A2 : 1992, A3 : 1993, A51 : 1993 and A52 : 1995 before 1997-07-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-07-01.

This amendment supplements or modifies the corresponding clauses of EN 60335-2-6 : 1990 and its amendments.

EN 60335-2-6 : 1990 including this amendment has to be used in conjunction with EN 60335-1 : 1988, including its amendments A2 : 1988, A5 : 1989, A6 : 1989, A51 : 1991, A52 : 1992, A53 : 1992, A54 : 1992, A55 : 1993 and A56 : 1995.

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

There are no national deviations from this amendment.

NOTE. Amendment numbers commencing A1 refer to the endorsement of IEC amendments, while those commencing A51 originate in CENELEC.

Foreword to amendment A54

A proposal to amend EN 60335-2-6 : 1990 was discussed during the Athens meeting in November 1996 when it was decided to submit a draft for an amendment to the formal vote.

This draft was circulated as prAH in April 1997 and was ratified by CENELEC as amendment A54 on 1997-10-01.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-04-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 1999-04-01

For products which have complied with EN 60335-2-6 : 1990 and its amendments A2 : 1992, A3 : 1993, A51 : 1993, A52 : 1995 and A53 : 1995 before 1999-04-01, as shown by the manufacturer or by a certification body, this previous standard is not to be applied for production after this date.

This amendment supplements or modifies the corresponding clauses of EN 60335-2-6 : 1996 and its amendments.

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

There are no national deviations from this amendment.

NOTE. Amendment numbers commencing A1 refer to the endorsement of IEC amendments, while those commencing A51 originate in CENELEC.

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SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

Part 2: Particular requirements for cooking ranges, cooking tables, ovens and similar appliances for household use

1. Scope

This clause of Part 1 is applicable except as follows:

1.1 *Replacement:*

This standard applies to cooking ranges, separate stationery ovens and grills, cooking tables, table cookers, hob assemblies, grills and griddles which form part of cooking ranges, and ovens and grills for building-in, all intended for household use.

Self-cleaning ovens, including those of the pyrolytic type, separate ovens for building-in and cooking tables for building-in are within the scope of this standard.

The electrical part of appliances supplied with energy other than electric is also within the scope of this standard.

This standard does not take into account the special hazards which exist in nurseries and other places where there are young children or aged or infirm persons without supervision; in such cases, additional requirements may be necessary.

This standard does not apply to:

- portable ovens and portable grills, which are covered by a separate Part 2;
- mains-operated electric toys, which are covered by a separate Part 2;
- microwave cooking appliances, which are covered by a separate Part 2.

For appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary.

For appliances intended to be used in tropical countries, special requirements may be necessary.

Attention is drawn to the fact that in many countries additional requirements are specified by the national health authorities and the national authorities responsible for the protection of labour.

For appliances having parts supplied with gas, the relevant safety requirements are specified in EN 30.

Additional requirements for electric ignition devices are under consideration.

2. Definitions

This clause of Part 1 is applicable except as follows:

2.2.4 *Addition:*

If the appliance comprises more than one heating unit, the rated input is the total maximum input of all heating units that can be switched on at the same time under conditions of normal use.

For appliances provided with more than three heating units, a diversity factor is applied to the rated input when determining the rated current from the rated input and the rated voltage in order to establish the size of the terminals and the nominal cross-sectional area of the supply cables or flexible cords; this diversity factor F is calculated from the following formula, where N is the number of heating units:

$$F = 0.35 + \frac{0.65}{\sqrt{N}}$$

For appliances provided with a socket-outlet, the contribution of the latter to the rated current is considered to be equal to the rated current of the fuse or miniature circuit-breaker which protects the socket-outlet and is incorporated in the appliance.

Refer smc.

2.2.29 Replacement:

Conditions of adequate heat discharge denote that the appliance is operated under the following conditions.

- || Hob elements other than induction hob elements are operated with a pan containing initially cold water positioned centrally over the heated area. The pan is of aluminium, of commercial quality, not brightly polished, with a flat bottom. If the hob element has a nominal diameter as shown in the following table, the diameter of the bottom of the pan is approximately equal to the nominal diameter of the hob element, and the quantity of water in the pan is as shown in the table. If the hob element has a diameter other than that shown in the table, the diameter of the bottom of the pan and the quantity of water are those specified for the next larger nominal diameter.

Nominal diameter of hob element mm	Quantity of water l
110	0.6
145	1
180	1.5
220	2
300	3

During the tests, the pan is covered with a lid, and water is added in such a way that the water level is maintained as boiling continues.

In case of doubt, standard test pans of commercial aluminium with the dimensions shown in Figure 101 are used.

Ovens are operated empty with the door closed throughout the period of operation.

- || Induction hob elements are operated with a pan as specified in figure 601 which contains approximately half its capacity of vegetable oil at room temperature and is positioned centrally over the cooking zone. Thermal controls are adjusted to their highest setting until the oil temperature reaches $180^{\circ}\text{C} + 4^{\circ}\text{C}$ and then adjusted so that this temperature is maintained.

Ovens provided with a rotating spit or similar accessory are, in addition, operated with this accessory rotating, taking into account the manufacturer's instructions with regard to:

- the heating element to be operated;
- the setting of the thermal control;
- the position of the door.

In the absence of such instructions, the control is adjusted to its highest setting and the door is open; if a partly open position is provided, the door is placed in that position. Any grill pan is placed in its lowest position.

Grills are operated empty with the grill pan, grid or food support in the most unfavourable position and the door and other accessories, if any, in the position indicated in the manufacturer's instructions. In the absence of such instructions, the door and other accessories are placed in the most unfavourable position in which they may be left.

For grills incorporated in ovens, the thermal control is adjusted to the highest setting specified in the manufacturer's instructions. In the absence of such instructions and for other grills, the thermal control is adjusted to the highest setting for grilling.

Reflectors, if any, intended to be placed above heating elements are in position.

Grills provided with a rotating spit or similar accessory are, in addition, operated with this accessory rotating, taking into account the manufacturer's instructions with regard to:

- the heating element to be operated;
- the setting of the thermal control;
- the position of any grill pan, grid or food support and of the door.

In the absence of such instructions, the thermal control is adjusted to its highest setting for grilling: any grill pan, grid or food support is placed in its lowest position and the door is placed in the most unfavourable position in which it may be left.

Warming drawers and heated cupboards are operated in the closed position.

When pyrolytic self-cleaning ovens are operated under cleaning conditions, no cooking utensils other than those specified in the instruction sheet are placed in the oven, the cleaning conditions being those specified in the instruction sheet.

Additional definitions:

2.2.101 *Heating unit* denotes any part of the appliance which fulfils an independent cooking or heating function, such as a hob element, an oven, a grill or a warming drawer.

If an oven or grill incorporates more than one heating element or group of heating elements, which are so controlled that one element or group of elements cannot be switched on while another element or group of elements is energized, each of the elements or groups of elements is considered as a separate heating unit.

2.2.102 *Hob element* (boiling plate or surface element) denotes a heating unit designed to accommodate one or more vessels on its upper surface.

2.2.103 *Detachable hob element* denotes a hob element provided with pins which engage with contact tubes in the main part of the appliance, so that the hob element can be withdrawn from its normal position of use and replaced in this position without the aid of a tool.

2.2.104 *Hob* denotes the horizontal part of the appliance which carries or contains the hob element(s).

2.2.105 *Cooking range* (cooker) denotes an appliance having one or more hob elements and one or more ovens; it may also incorporate a grill or a griddle.

2.2.106 *Hob assembly* (counter insert) denotes an appliance for building-in comprising a hob with one or more hob elements, but no oven or grill.

2.2.107 *Table cooker* (table stove) denotes a cooking range intended to stand on a table or similar working surface.

2.2.108 *Cooking table* denotes an appliance intended to stand on a table or similar working surface and having one or more hob elements, but no oven or grill.

2.2.109 *Griddle* denotes a heating unit having a flat surface on which the food to be cooked is placed directly.

2.2.110 *Grill* denotes a heating unit so designed that the food, supported on a grid, mesh or spit, is cooked by radiant heat.

The cooking operation in a grill is known as grilling in some parts of the world and as broiling in other parts.

2.2.111 *Pyrolytic self-cleaning oven* denotes an oven having provision for removing normal cooking deposits or soiling from the interior of the oven by raising the temperature in the oven to a value exceeding 350 °C.

2.2.112 *temperature sensing probe*: Device which is inserted into the food to measure temperature and which is the detachable component of a control incorporated in an oven.

2.2.113 *touch control*: Control actuated by finger contact applied without appreciable force which results in little or no movement of the contact surface.

2.2.601 *induction hob element* denotes a hob element on which the vessel is heated by means of eddy currents.

The eddy currents are induced in the bottom of the pan by the electromagnetic field of a coil.

2.2.602 *Induction hob* denotes a hob containing at least one induction hob element.

2.2.603 *Cooking zone* denotes the area marked on a hob surface where the vessel is intended to be placed for cooking food.

3. General requirement

This clause of Part 1 is applicable.

4. General notes on tests

This clause of Part 1 is applicable except as follows:

4.101 *Class III temperature sensing probes are not subjected to the tests, except those of clause 19.*

4.2 Addition:

Hob elements which are submitted separately are tested when installed in an appropriate appliance.

Addition:

For the tests of Sub-clauses 19.2 to 19.5, an additional sample may be necessary.

4.3 Replacement:

The tests are carried out in the order of the clauses of Part 1, except that, for pyrolytic self-cleaning ovens, the tests of Sub-clauses 22.109 and 22.112 to 22.114 inclusive are made immediately before the tests of Clause 19.

Before testing is started, the appliance is operated at rated voltage to verify that it is in working order.

4.4 *Addition:*

When testing the electrical part of appliances supplied with energy other than electric, the influence of the non-electrical part of the appliance has to be taken into account.

The operating conditions of the part of the appliance supplied with energy other than electric are under consideration.

4.601 *For measuring the temperature in the centre of the useful oven space during the tests of clauses 11 and 19, thermocouples as specified in Sub-clause 11.3 of Part 1 are used.*

5. **Rating**

This clause of Part 1 is applicable.

6. **Classification**

This clause of Part 1 is applicable except as follows:

6.1 *Addition:*

3. According to degree of protection against risk of fire, for appliances other than ovens and grills for building-in, stationary grills and appliances specifically designed to stand away from walls:

– for appliances intended to stand on the floor, hob assemblies and cooking ranges for building-in:

- appliances of type X;
- appliances of type Y.

Refer *smc*.

Addition:

Ovens and grills for building-in and stationary grills are not classified according to degree of protection against risk of fire.

7. **Marking**

This clause of Part 1 is applicable except as follows:

7.1 *Addition:*

If a cooking range incorporates a socket-outlet protected by means of fuses other than D-type fuses, the cooking range shall be marked with the rated current of the relevant fuse. When a miniature fuse-link is provided, this marking shall indicate that the fuse-link is to have a high breaking capacity.

Pyrolytic self-cleaning ovens shall be marked with the substance of the following warning, unless this warning is given in the instruction sheet.

All oven utensils, other than those specified in the instruction sheet, and excess spillage must be removed before starting the cleaning process.

The total rated input of the induction hob elements shall also be marked.

7.12 *Addition:*

The instruction sheet shall state whether the appliance is of type X or type Y with regard to protection against overheating of surrounding surfaces and shall indicate the usage allowed. If a cooking range is not delivered with a power supply cord, the instruction sheet shall include the necessary information with regard to the type of power supply cord to be connected, taking into account the temperature rise attained in normal use by the rear surface of the cooking range.

If a cooking range incorporates a socket-outlet protected by means of D-type fuses or miniature circuit-breakers intended to be screwed into E 27 fuse-bases, the instruction sheet shall state that the fuse or circuit-breaker may be replaced by the user.

If the appliance is provided with hob elements or hobs having surfaces of glass, ceramic or similar brittle material in or on which a heating element is mounted, or which are essential parts of the enclosure of live parts, the instruction sheet shall include the substance of the following warning:

CAUTION — As soon as any crack in the surface becomes visible, disconnect the appliance immediately from the supply.

If the appliance incorporates a lamp intended for illumination purposes and is not provided with a switch for disconnection from the supply having a contact separation of at least 3 mm in all poles, the instruction sheet shall include the substance of the following warning:

CAUTION — Disconnect the appliance from the supply before replacing the lamp.

If the manufacturer instructs the user to use the oven as a grill with the door open, then the instruction sheet shall contain the substance of the following:

CAUTION — Accessible parts may become hot when the grill is in use. Children should be kept away.

If the manufacturer instructs the user to set the controls for cleaning to a position higher than for normal cooking purposes, then the instruction sheet shall contain a statement that under such conditions the surfaces may get hotter than usual and children should be kept away.

The instruction sheet for appliances with hobs having surfaces of glass, ceramic or similar brittle material shall state that aluminium foil and plastic vessels are not to be placed on hot surfaces. It shall also state that these surfaces are not to be used for storage.

When the appliance does not comply with the test of 11.102 as delivered, the instruction sheet shall contain the substance of the following:

An additional protective means to avoid contact with the oven door is available. This part should be fitted when young children are likely to be present.

The reference number of the part and information on how to obtain it shall be given.

The instruction sheet for ovens provided with a facility to use a temperature sensing probe shall include the substance of the following:

Only use the temperature sensing probe recommended for this oven.

The instruction sheet for appliances for building-in having separate control panels shall state that the control panel is only to be connected to heating units recommended by the manufacturer, otherwise a hazard could occur.

If the appliance contains an induction hob, the instruction sheet shall contain the substance of the following:

Metallic objects such as knives, forks, spoons and lids should not be placed on the hob surface since they could get hot.

For ovens incorporating a fan with a guard that can be removed for cleaning, the instruction sheet shall state that the oven must be switched off before removing the guard and that after cleaning the guard must be replaced in accordance with the manufacturer's instructions.

For hobs having a lid, the instruction sheet shall state that spillage should be removed from the surface of the lid before opening. It shall state that the heated surface should be allowed to cool before closing the lid.

If the hob incorporates halogen lamps as heating units, the instruction sheet shall warn the user not to stare at the halogen lamps of hob elements.

7.14 *Addition:*

When it is not practical to place the marking of fixed appliances so that it is clearly discernible from the outside after the appliance has been fixed as in normal use, the relevant information shall in addition be included in the instruction sheet or on a label which can be fixed near the appliance after installation.

NOTE – An example of such an appliance is a built-in hob assembly.

The marking for the rated current of the fuse which protects the socket-outlet shall be placed on or near the socket-outlet.

Addition :

If pyrolytic self-cleaning ovens are marked with the warning specified in Sub-clause 7.1, this warning shall be visible when the appliance is installed as in normal use, without removing covers other than those which have to be removed before starting the cleaning process.

Addition:

The latter requirement is considered to be met, if the marking is visible when the oven door is open.

For hobs of glass, ceramic or similar brittle material, the area above the heating element shall be clearly identified and durably marked unless this is obvious from the construction.

8. Protection against electric shock

This clause of Part 1 is applicable except as follows:

8.1 *Addition:*

Cooking ranges and cooking tables intended to accommodate detachable hob elements shall be so designed that, during insertion or removal of the hob elements, there is adequate protection against accidental contact with live parts.

Addition:

For heating elements situated at the top of an oven or grilling compartment and which glow visibly in normal use, it shall not be possible to touch live parts with the standard test finger shown in Figure 1, Part 1, if such elements are controlled by single-pole thermostats or by timers incorporating a single-pole switch or by single-pole switches.

Additional sub-clause:

8.101 Heating elements which are liable to be touched accidentally by a fork or similar pointed object in normal use, shall be so protected that it is not possible to touch their live parts with such an object.

Compliance is checked by a test similar to that of Sub-clause 8.1, the test being made with the long test pin shown in Figure 102, the pin being applied without appreciable force.

Heating elements situated at the top of an oven or grilling compartment are not considered as liable to be touched by a fork or similar pointed object.

9. Starting of motor-operated appliances

This clause of Part 1 is applicable except as follows:

9.1 Addition:

When testing a motor for a rotating spit or similar accessory, a weight, as shown in Figure 103, having a mass of approximately 4.5 kg, is attached to the rotating part.

| 9.2 Not applicable.**10. Input and current**

This clause of Part 1 is applicable except as follows:

10.1

| For appliances incorporating more than one heating unit, other than those provided with means to limit the total input, the total input may be determined by measuring the input of each heating unit separately.

|| *The input of induction hob elements is measured separately and tolerances for motor operated appliances apply.*