

---

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

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

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2: Besondere Anforderungen für Herde, Tischkochgeräte, Backöfen und ähnliche Geräte für den Hausgebrauch

SÉCURITÉ DES APPAREILS ÉLECTRODOMESTIQUES ET ANALOGUES -- Partie 2: Règles particulières pour les cuisinières, les réchauds, les fours et appareils analogues à usage domestique

**Ta slovenski standard je istoveten z: EN 60335-2-6:1990/A51:1993**

---

**ICS:**

13.120	Varnost na domu	Domestic safety
97.040.20	Štedilniki, delovni pultji, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances

**SIST EN 60335-2-6:1995****en**

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

SIST EN 60335-2-6:1995

<https://standards.iteh.ai/catalog/standards/sist/0f1c9c0d-29e5-4f9f-af05-328d936fc77f/sist-en-60335-2-6-1995>

EUROPEAN STANDARD  
NORME EUROPEENNE  
EUROPAISCHE NORM

EN 60335-2-6

November 1990

UDC 64.06-83:641.53:614.8

Supersedes HD 275 S1:1986  
and its amendment 1:1988

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**  
(IEC 335-2-6:1986 + Amendment 1:1988, modified)

Sécurité des appareils électrodomestiques et analogues	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke
Deuxième partie:	Teil 2:
Règles particulières pour les cuisinières, les réchauds, les fours et appareils analogues à usage domestique	Besondere Anforderungen für Herde, Tischkochgeräte, Backöfen und ähnliche Geräte für den Hausgebrauch
(CEI 335-2-6:1986 + Modification 1:1988, modifiées)	(IEC 335-2-6:1986 + Änderung 1:1988, modifiziert)

SIST EN 60335-2-6:1995

<https://standards.iteh.ai/catalog/standards/sist/0f1c9c0d-29e5-4f9f-af05-332007777777/sist/60335-2-6:1995>

This European Standard was approved by CENELEC on 5 December 1989. 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 5th of December 1989. The amendment has been incorporated in EN 60335-2-6.

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

SIST EN 60335-2-6:1995

<https://standards.iteh.ai/catalog/standards/sist/0f1c9c0d-29e5-4f9f-af05-328d936fc77f/sist-en-60335-2-6-1995>

FOREWORD

R 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 1997-09-01.

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.

- r The following print types are used:
- R - requirements: in roman type (indicated in this document in the margin by R);
  - i - test specifications: in italic type (indicated in this document in the margin by i);
  - r - explanations: in small roman type (indicated in this document in the margin by r).

Instructions for modification of the reference document are in italic type and are indicated in this document in the margin by i.

-----

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

SIST EN 60335-2-6:1995

<https://standards.iteh.ai/catalog/standards/sist/0f1c9c0d-29e5-4f9f-af05-328d936fc77f/sist-en-60335-2-6-1995>

ENDORSEMENT NOTICE

- R IEC 335-2-6:1986, including its amendment 1:1988, applies, taking into account the following common modifications.

## COMMON MODIFICATIONS

i Foreword Delete.

Prefaces Delete.

1. SCOPE

i 1.1 Add the following explanations:

r 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

i 2.2.4 Add:

r 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 snc.

i 2.2.105 Replace "a grill" by "a grill or a griddle".

4. GENERAL NOTES ON TESTS

i 4.4 Add the following explanation:

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

i Add:

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 subclause 11.3 of Part 1 are used.

## COMMON MODIFICATIONS

6.           **CLASSIFICATION**
- i   6.1       Delete the line referring to appliances of type A.
- Add:
- r           Refer snc.
7.           **MARKING**
- i   7.1       Replace the first paragraph by:
- R           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.
- i   7.12      Replace the first paragraph by:
- R           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.
- i   7.14      Add before the first addition:
- R           When it is not practical to place the marking so that it is clearly discernable from the outside after the appliance has been fixed as in normal use, the relevant information shall be included in the instruction sheet.
- r           An example of such an appliance is a built-in hob.
- R           The marking for the rated current of the fuse which protects the socket-outlet shall be placed on or near the socket-outlet.



## COMMON MODIFICATIONS

## 8. PROTECTION AGAINST ELECTRIC SHOCK

- i 8.1 Add at the end of the second addition the words "or by single-pole switches".
- 8.9 Delete this line.

## 9. STARTING OF MOTOR-OPERATED APPLIANCES

- i Add:
- R 9.2 Not applicable.

## 10. INPUT AND CURRENT

- i 10.1 Replace the addition by:
- r 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.

(standards.iteh.ai)

## 11. HEATING

- i 11.2 Delete "type A and" SIST EN 60335-2-6:1995  
https://standards.iteh.ai/catalog/standards/sist/0f1c9c0d-29e5-449f-af05-328d936fc77f/sist-en-60335-2-6-1995
- Replace the second sentence of the last paragraph of the test specification by:
- Hinged lids which can be removed without the aid of a tool are removed.
- 11.3 Delete the first paragraph.
- Replace in the second paragraph "walls" by "wall".
- 11.6 Replace the addition by:
- Appliances provided with a motor are operated at 1.15 times the maximum rated input.
- 11.7 Add after the first sentence of the fourth paragraph:
- However, for ovens with forced air circulation, the temperature is 220 °C instead of 240 °C.

## COMMON MODIFICATIONS

- i On page 27, replace the last two lines of the first paragraph and the second paragraph by:

oven is operated under cleaning conditions for the maximum period that can be provided by the circuit controlling the cleaning operation. Any other heating unit which is not interlocked is operated for a period of 1 h in accordance with its conditions of adequate heat discharge, the sequence of operation within the cleaning period being chosen so that the most severe conditions are imposed.

Replace the second sentence of the last paragraph by:

If a cooking range incorporates a warming drawer, a heated cupboard, a grill or a griddle, these heating units are operated during the last 30 minutes of the test.

- 11.8 In the table, delete the column for appliances of type A.

Add after the addition:

During the additional test for pyrolytic self-cleaning ovens, the temperature rise of knobs, handles and levers shall not exceed:

- (standardsitehai)
- if held continuously in normal use:
    - . if of metal ..... 50 K
    - . if of porcelain or vitreous material ..... 60 K
    - . if of moulded material, rubber or wood ..... 70 K
  - if held for short periods only in normal use:
    - . if of metal ..... 55 K
    - . if of porcelain or vitreous material ..... 65 K
    - . if of moulded material, rubber or wood ..... 80 K

The temperature rise of knobs, handles and levers associated with functions which cannot be performed during the cleaning operation is not determined.

For determining the temperature rise of a socket-outlet incorporated in the appliance and of the corresponding plug, an appropriate 10/16 A 250 V plug complying with CEE Publication 7 is engaged in the socket-outlet, the appliance being operated under the most unfavourable conditions occurring in normal use. The plug is connected to a resistive load by means of a light polyvinyl chloride sheathed flexible cord (code designation H03 VVH2-F), so that the current is 1.25 times the rated current of the fuse or miniature circuit-breaker protecting the socket-outlet, or 10 A, whichever is the lower. The cord has a nominal cross-sectional area of:

- 0.75 mm<sup>2</sup> if the maximum current allowed for the socket-outlet does not exceed 6 A,
- 1 mm<sup>2</sup> in other cases.

## COMMON MODIFICATIONS

i The temperature rise shall not exceed the values shown in the following table.

Part	Temperature rise K
Ambient of the socket-outlet <sup>1)</sup> : - without T-marking - with T-marking	45 T - 25
Centre of the engagement face of the plug, at a distance of 2 mm below the surface	45
1) The ambient of the socket-outlet is the temperature of the air measured at the hottest point at a distance of 5 mm from the surface of the socket-outlet concerned.	

i 11.101 Add to the explanation:

r For the time being, the values specified in national standards apply.

iTeh STANDARD PREVIEW

13. **ELECTRICAL (INSULATION AND LEAKAGE) CURRENT AT OPERATING TEMPERATURE**

i 13.1 Add to the first paragraph of the test specification:

All control devices are then adjusted to their highest setting and the measurements are made immediately.

13.2 Delete in the modification the word "stationary" (in three places).

Add to the explanation:

r which implies that in this case only 75% of the leakage current measured is taken into account.

i Add:

r The value specified in Part 1 for portable Class I appliances does not apply.

16. **INSULATION RESISTANCE AND ELECTRIC STRENGTH**

i 16.2 Add to the last explanation:

r which implies that in this case only 75% of the leakage current measured is taken into account.

## COMMON MODIFICATIONS

19. **ABNORMAL OPERATION**
- i 19.1 Replace the first two lines of the test specification by:
- For ovens for building-in, for appliances incorporating heating units provided with a thermal control which limits the temperature during the test of Clause 11 and which are:
- Delete the second paragraph of the test specification, which refers to appliances and heating units for short-time operation.
- Replace the fourth and fifth paragraphs of the test specification, which deal with motors, by:
- For motors, compliance is checked by the tests of subclauses 19.6 and 19.8 and, if applicable, by the test of subclause 19.10.
- Add after the test specification:
- Subclause 19.11 applies to all appliances.
- Add:
- (standards.iteh.ai)
- r An intentionally weak part is a part designed to fail under conditions of abnormal operation so as to prevent the occurrence of a condition which is unsafe within the meaning of this standard. Such a part may be a replaceable component, such as a resistor, a capacitor or a thermal fuse, or a part of a component to be replaced, such as an inaccessible and non-resettable thermal cut-out incorporated in a motor. Fuses, thermal cut-outs, overcurrent releases or the like, incorporated in the appliance, may be used to provide the necessary protection.
- If more than one of the tests are applicable for the same appliance, the tests are carried out successively.
- i 19.2 Replace in the last line of the modification "a heating unit" by "the heating unit".
- Add after the modification:
- r A lamp used for illuminating the oven and which is automatically switched on together with the oven, is considered to be an indicator lamp.
- i 19.6 Delete the explanation referring to Appendix D.
- 19.11 Replace the third line of the modification by:
- for building-in<sup>1)</sup> ..... 150
- Delete the first paragraph of note <sup>1)</sup>.

## COMMON MODIFICATIONS

20. **STABILITY AND MECHANICAL HAZARDS**
- i Add:
- 20.2 Addition:  
r Grilling shafts and similar devices rotating in an oven are not considered to be dangerous moving parts.
- i 20.101 On page 43, after the last paragraph, add:
- If, for ovens, the part carrying the load can be displaced, this part is placed in the most unfavourable position after the oven has been installed in accordance with the manufacturer's instructions.
21. **MECHANICAL STRENGTH**
- i 21.1 Add:
- The blows are applied to every point that is likely to be weak. However, blows having an impact energy of 0.75 Nm are not applied to places within a distance of 20 mm from the rim of knobs situated at the horizontal surface of the hob; such parts are subjected to the test specified in Part 1.
22. **CONSTRUCTION** SIST EN 60335-2-6:1995  
<https://standards.kenai/catalog/standards/sist/01c9c0d-29e5-4f9f-af05-328d936fe77f/sist-en-60335-2-6-1995>
- i Add:
- r Refer snc.
- i 22.1 Delete the addition.
- Add:
- 22.16 Addition:  
r Magnesium oxide, mineral ceramic fibres and similar materials used for the electrical insulation of heating elements are not considered to be a hygroscopic material within the meaning of the requirement.
- i 22.112 Replace the first line by:
- R Pyrolytic self-cleaning ovens shall be provided with an interlock so that access to the interior of the
- i 22.113 Add:
- r The gravy used for the test consists of two thirds, by mass, of beef extract and one third of water.

## COMMON MODIFICATIONS

- i Add:
- R 22.601 If the manufacturer instructs the user to open the door of the grilling compartment partly or completely during the grilling operation, this operation shall not be possible while the plug of a power supply cord is engaged in a socket-outlet located directly above the door of the grilling compartment.
- i Compliance is checked by inspection and by manual test.
- r Disconnection of the grill in one of the poles is considered to be sufficient.

## 24. COMPONENTS

- i Replace the text of the addition by:

- R 24.1 Addition:  
Switches controlling hob elements shall be switches for frequent operation.

- i Add:

- R 24.11 Addition:  
Appliances subjected to the test of subclause 19.4 are considered to be intended for use unattended.

- i 24.101 Replace the requirement by:

- R Socket-outlets incorporated in cooking ranges shall be of the single-phase type provided with an earthing contact and having a rated current not exceeding 16 A.  
Both poles of such socket-outlets shall be protected by means of fuses or miniature circuit-breakers having a rated current not exceeding 10 A, which are incorporated in the cooking range and placed behind a non-detachable cover.  
For cooking ranges intended to be permanently connected to fixed wiring only, the pole intended to be connected to the neutral conductor shall not be protected.

- i Add:

- r Refer snc.

## COMMON MODIFICATIONS

25. **SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CABLES AND CORDS**
- i 25.2 Add after the first addition:
- R The requirement that the appliance shall allow the connection of the supply wires after it has been fixed to its support, does not apply to hob assemblies or to ranges and ovens for building-in.
30. **RESISTANCE TO HEAT, FIRE AND TRACKING**
- i Replace the text by:
- R This clause of Part 1 is applicable except as follows:
- i 30.4 Addition:  
r Appliances subjected to the test of subclause 19.4 are regarded as appliances liable to be operated while unattended.
- i 30.5 Addition:  
r Parts of insulating material are considered to be used under severe duty conditions.
- i Figure 104 Delete the sketches referring to appliances of type A.

SIST EN 60335-2-6:1995

<https://standards.iteh.ai/catalog/standards/sist/011c9c0d-29e5-4f9f-af05-328d936fe77f/sist-en-60335-2-6-1995>