
Safety of household and similar electrical appliances - Part 2: Particular requirements for commercial electric steam cookers (IEC 335-2-46:1986, modified)

Safety of household and similar electrical appliances -- Part 2: Particular requirements for commercial electric steam cookers

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2: Besondere Anforderungen für elektrische Dampfkocher für den gewerblichen Gebrauch

Sécurité des appareils électrodomestiques et analogues -- Partie 2: Règles particulières pour les cuiseurs à vapeur électriques à usage collectif

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Ta slovenski standard je istoveten z: EN 60335-2-46:1989/A1:1992

ICS:

97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances
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SIST EN 60335-2-46:1995**en**

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EUROPEAN STANDARD
NORME EUROPEENNE
EUROPÄISCHE NORM

EN 60 335-2-46
October 1989

UDC: 621.365:64-621-83:64:614.8.004.1-777:621.396.669.8

KEY WORDS: Household electrical appliance; commercial electric steam cooker; protection against electric shock; protection against fire risk; protection against mechanical hazard

ENGLISH VERSION

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES
PART 2: PARTICULAR REQUIREMENTS FOR COMMERCIAL ELECTRIC
STEAM COOKERS
(IEC 335-2-46 (1986) 1st edition, modified)

Sécurité des appareils électrodomestiques et analogues	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke
Deuxième partie:	Teil 2:
Règles particulières pour les cuiseurs à vapeur électriques à usage collectif (CEI 335-2-46 (1986) 1ère édition, modifiée)	Besondere Anforderungen für elektrische Dampfkocher für den gewerblichen Gebrauch (IEC 335-2-46 (1986) 1. Ausgabe, modifiziert)

[SIST EN 60335-2-46:1995](https://standards.iteh.ai/catalog/standards/sist/2b3c6519-d94a-40b7-8de2-99d548a1a3d9/sist-en-60335-2-46-1995)

<https://standards.iteh.ai/catalog/standards/sist/2b3c6519-d94a-40b7-8de2-99d548a1a3d9/sist-en-60335-2-46-1995>

This European Standard was ratified by CENELEC on 7 March 1989.

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 CENELEC 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, Luxemburg, 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 Bréderode 2, B - 1000 Brussels

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Ref. No. EN 60 335-2-46:1989 E

EN 60 335-2-46

BRIEF HISTORY

The proposal to endorse the first edition of IEC Publication 335-2-46, document CENELEC/TC 61 (SEC) 521, was circulated under the enquiry procedure in January 1987.

This proposal was discussed during the Brighton meeting in October 1987 when it was decided to submit a draft for EN 60 335-2-46 to the voting procedure. This procedure started in September 1988.

The text of this draft was ratified by the CENELEC Technical Board on the 7th of March 1989.

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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) 1989-12-01
- date of latest publication (dop) 1990-03-01
- date of withdrawal of conflicting national standards (dow) 1993-01-01

For products which have complied with the relevant national standard before 1993-01-01, as shown by the manufacturer or by a Certification Body, this previous standard may continue to apply for production until 1998-01-01.

This document supplements or modifies the corresponding clauses of IEC 335-2-46, first edition, so as to convert that standard into the European Standard EN 60 335-2-46, which has to be used in conjunction with EN 60 335-1 (1988), Safety of household and similar electrical appliances, Part 1: General requirements.

Sub-clauses which are in addition to those in IEC 335-2-46 are numbered starting with 601.

There are no special national conditions (snc) causing a deviation from this European Standard, other than those listed in Annex ZX of EN 60 335-1.

National deviations from this European Standard are listed in Annex ZY and are in addition to those in EN 60 335-1.

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

r The following print types referred to in the preface of IEC 335-2-46 are used:

- requirements proper: in roman type (indicated in this document in the margin by R);
- test specifications: in italic type (indicated in this document in the margin by i);
- explanatory matter: in smaller roman type (indicated in this document in the margin by r).

In addition:

- instructions for modification of the reference document: in italic type (indicated in this document in the margin by i).

EN 60 335-2-46

ENDORSEMENT NOTICE

R IEC 335-2-46, first edition (1986), applies, taking into account the following common modifications.

COMMON MODIFICATIONS

- i Foreword Delete.
- Preface Delete the sentence "Consideration may be given to future editions of, or amendments to, IEC Publication 335-1".
- Delete the text dealing with the differences existing in some countries.
- Replace the text dealing with the IEC publication quoted in this standard by:
- r Other publication quoted in this standard:
HD 365: Classification of degrees of protection provided by enclosures.
- iTeh STANDARD PREVIEW**
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1. SCOPE
- i 1.1 In the first paragraph of the explanations, delete "and the influence of the non-electrical parts on the electrical parts is taken into consideration".
4. GENERAL NOTES ON TESTS
- i Add:
- 4.601 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.
6. CLASSIFICATION
- i 6.1 Replace "IEC Publication 529" by "HD 365".
11. HEATING
- i 11.2 Replace the text of the first dash by:
- Appliances intended to be fixed to the floor are installed in accordance with the manufacturer's instructions. In the absence of such instructions, Part 1 is applicable.

COMMON MODIFICATIONS

15. **MOISTURE RESISTANCE**
- i 15.2 Replace "IEC Publication 529" by "HD 365".
18. **ENDURANCE**
- i 18.1 Replace the addition by:
- The tests are only made on the motor-operated part of the appliance but the heating elements are energized.
19. **ABNORMAL OPERATION**
- i 19.4 Replace the addition by:
- r The main contacts of a contactor intended for switching on and off the heating elements in normal use are locked in the "on" position. However, if two contactors operate independently of each other or if one contactor operates two independent sets of main contacts, these contacts are locked in the "on" position in turn.
- (standards.iteh.ai)
22. **CONSTRUCTION** [SIST EN 60335-2-46:1995](https://standards.iteh.ai/catalog/standards/sist/2b3e6519-d94a-40b7-8dc2-99d548a1a3d9/sist-en-60335-2-46-1995)
<https://standards.iteh.ai/catalog/standards/sist/2b3e6519-d94a-40b7-8dc2-99d548a1a3d9/sist-en-60335-2-46-1995>
- i Add: 99d548a1a3d9/sist-en-60335-2-46-1995
- 22.2 Replacement:
 R Appliances shall be at least drip proof.
- i Compliance is checked by inspection and by the relevant tests.
- 22.101 Replace this sub-clause by:
- R Appliances shall be protected in such a manner that moisture and grease will not collect in such a way that creepage distances and clearances are affected.
- i Compliance is checked by inspection.
- 22.104 Replace the requirement by:
- R It shall not be possible to open the door of the cooking chamber of a pressurized appliance until the pressure has been reduced to approximately atmospheric pressure.
- i 22.105 Delete.

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COMMON MODIFICATIONS

24. **COMPONENTS**
- i Replace the text by:
- R This clause of Part 1 is applicable except as follows:
- i 24.1 Addition:
- R Switches incorporated in the appliance shall be switches for frequent operation.
- i 24.11 Addition:
- R Appliances are considered to be intended for use unattended.
25. **SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CABLES AND CORDS**
- i 25.6 Replace "245 IEC 57" by "H05 RN-F".
30. **RESISTANCE TO HEAT, FIRE AND TRACKING**
- i Replace the text by:
- R This clause of Part 1 is applicable except as follows:
- i 30.3 Modification: [SIST EN 60335-2-46:1995](https://standards.iteh.ai/catalog/standards/sist/2b3e6519-d94a-40b7-8dc2-99d548a1a3d9/sist-en-60335-2-46-1995)
- R Instead of the requirement, the following applies:
- R Insulating parts retaining live parts in position and supplementary insulation of metal-encased Class II parts, shall be of material resistant to tracking.
32. **RADIATION, TOXICITY AND SIMILAR HAZARDS**
- i Replace the text by:
- R This clause of Part 1 is applicable except as follows:
- i 32.1 Replacement:
- R A test specification is not yet available.
- i Appendix C Delete.
- Appendix D Delete.

ANNEX ZY (informative)**National deviations**

R This document was compiled by CENELEC Technical Committee 61. It contains national deviations from the content of the European Standard EN 60 335-2-46. These deviations are in addition to those in EN 60 335-1 and could not yet be removed. They are only applicable in the countries concerned.

1. NATIONAL DEVIATIONS DUE TO LEGAL REQUIREMENTS**22.2 FRANCE (Décret 73 1007, 1973-10-31)**

For commercial cooking appliances, and for groups of such appliances, having a total maximum rated input exceeding 20 kW, parts situated at a height not exceeding 110 cm from the floor shall be jet proof (IPX5).

2. NATIONAL DEVIATIONS DUE TO PARTICULAR TECHNICAL REQUIREMENTS PERMITTED TO BE MAINTAINED UNTIL THE DATE SPECIFIED**7.12 GERMANY (standards.iteh.ai) 1990-01-01**

The statement in the instruction sheet that the appliance shall not be cleaned with a water jet, is required for all appliances, including jet-proof appliances.

20.1 GERMANY 1990-01-01

Trolleys are subjected to the following additional test. The trolley is loaded in accordance with the manufacturer's instructions and is placed on a plane inclined at an angle of 10° to the horizontal, the braking mechanism being applied as in normal use. During the test, the trolley shall not move by more than 100 mm.

20.2 GERMANY 1990-01-01

Operating means, such as handles, knobs, push-buttons and the like, shall be designed and located so that scalding or burning due to hot surfaces or steam is not possible under conditions of normal use.

Scalding by escaping steam or liquid shall not occur.

Compliance is checked by inspection and by manual test.

EN 60 335-2-46

R 21.1 FRANCE AND NETHERLANDS 1990-01-01

Parts of the appliance situated at a height not exceeding 110 cm from the floor are subjected to blows having an impact energy of 20 Nm.

24.1 GERMANY 1990-01-01

For testing switches incorporated in the appliance, the number of cycles of operation is reduced to 20 000.

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[SIST EN 60335-2-46:1995](https://standards.iteh.ai/catalog/standards/sist/2b3e6519-d94a-40b7-8dc2-99d548a1a3d9/sist-en-60335-2-46-1995)

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EUROPEAN STANDARD
NORME EUROPEENNE
EUROPAISCHE NORM

EN 60335-2-45/A51

July 1993

UDC 64.06-83:621.7-65:621.3-65:614.8

Descriptors: Household electrical appliances, soldering irons, portable electric tools, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

Amendment A51 to the English version of EN 60335-2-45

**SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES
PART 2: PARTICULAR REQUIREMENTS FOR PORTABLE ELECTRIC
HEATING TOOLS AND SIMILAR APPLIANCES**

Sécurité des appareils
électrodomestiques
et analogues
Deuxième partie:
Règles particulières pour
les outils chauffants
électroportatifs et
appareils analogues

Sicherheit elektrischer
Geräte für den Hausgebrauch
und ähnliche Zwecke
Teil 2:
Besondere Anforderungen
für ortsveränderliche
Elektrowärmewerkzeuge
und ähnliche Geräte

iTeh STANDARD PREVIEW

This amendment A51 modifies the European Standard EN 60335-2-45:1990. It was approved by CENELEC on 6 July 1993. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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

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

CENELEC members are the national electrotechnical committees of Austria, Belgium, 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

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EN 60335-2-45:1990/A51:1993

FOREWORD

R A proposal to amend EN 60335-2-45, document CLC/TC 61 (IT) 130, 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 prAB in February 1993 and was ratified by CENELEC as amendment A51 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 60335-2-45:1990 including its amendment A1:1992 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.

This amendment supplements or modifies the corresponding clauses of EN 60335-2-45:1990 and its amendment.

EN 60335-2-45:1990 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 and A55:1993.

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

There are no national deviations from this amendment.

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