

SLOVENSKI STANDARD

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SIST EN 60335-2-42:1997

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SIST EN 60335-2-42:1997/A2:1999

Varnost gospodinjskih in podobnih električnih aparatov - 2-42. del: Posebne zahteve za komercialne električne pečice s prisilnim kroženjem zraka, parne kuhalnike in pečice s kroženjem pare (IEC 60335-2-42:2000)

Safety of household and similar electrical appliances -- Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-42: Besondere Anforderungen für elektrische Heissluftöfen, Dämpfgeräte und Heissluftdämpfer für den gewerblichen Gebrauch

Sécurité des appareils électrodomestiques et analogues -- Partie 2-42: Règles particulières pour les fours électriques à convection forcée, les cuiseurs à vapeur électriques et les fours combinés vapeur-convection électriques à usage collectif

Ta slovenski standard je istoveten z: EN 60335-2-42:2000

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 60335-2-42:2001

en

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EUROPEAN STANDARD

EN 60335-2-42

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2000

ICS 97.040.20

Supersedes EN 60335-2-42:1995 + A1:1996 + A2:1999

English version

Safety of household and similar electrical appliances
Part 2-42: Particular requirements for commercial electric
forced convection ovens, steam cookers and steam-convection ovens
(IEC 60335-2-42:2000)

Sécurité des appareils
électrodomestiques et analogues
Partie 2-42: Règles particulières pour
les fours électriques à convection forcée,
les cuiseurs à vapeur électriques et les
fours combinés vapeur-convection
électriques à usage collectif
(CEI 60335-2-42:2000)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-42: Besondere Anforderungen
für elektrische Heissumluftöfen,
Dämpfgeräte und Heissluftdämpfer
für den gewerblichen Gebrauch
(IEC 60335-2-42:2000)

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This European Standard was approved by CENELEC on 2000-04-01. 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, Czech Republic, 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

Foreword

The text of document 61E/354/FDIS, future fourth edition of IEC 60335-2-42, prepared by SC 61E of the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-42 on 2000-04-01.

This European Standard replaces EN 60335-2-42:1995 and its amendments A1:1996 and A2:1999.

The following dates are applicable:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2001-01-01
- date on which national standards
conflicting with the EN have to be withdrawn (dow) 2003-04-01

This standard has to be used in conjunction with EN 60335-1, Safety of household and similar electrical appliances, Part 1: General requirements. It was established on the basis of the 1994 edition of that standard. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens.

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

Subclauses, figures and notes which are additional to those in part 1 are numbered starting with 101.

There are no special national conditions causing a deviation from this European Standard, other than those listed in annex ZA to EN 60335-1.

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

NOTE The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in clause 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

p *Add:***Introduction**

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Products covered by this standard may incorporate pressurized components for which the Pressure Equipment Directive, 97/23/EC, is applicable. An examination by CENELEC TC 61 has concluded that the relevant safety requirements of the directive are covered by this standard.

Endorsement notice

The text of the International Standard IEC 60335-2-42:2000 was approved by CENELEC as a European Standard without any modification.

p *Add:*

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 Annex ZB (Informative)
 A-deviations

Addition:[SIST EN 60335-2-42:2001](https://standards.iteh.ai/catalog/standards/sist/bed05258-47d9-4aa7-a2b3-2efc22f19814/sist-en-60335-2-42-2001)ClauseDeviation<https://standards.iteh.ai/catalog/standards/sist/bed05258-47d9-4aa7-a2b3-2efc22f19814/sist-en-60335-2-42-2001>

7.15

Austria (Elektroschutzverordnung 1995 - BGBl. Nr. 706/1995, § 7.15)

If the marking of fixed appliances is not visible after the appliance has been installed, the relevant information shall also be included in the instructions for use and on an additional label which can be fixed near the appliance after installation.

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INTERNATIONAL STANDARD

IEC 60335-2-42

Fourth edition
2000-03

Safety of household and similar electrical appliances –

Part 2-42:

Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens

[SIST EN 60335-2-42:2001](https://standards.iteh.ai/catalog/standards/sist/bed05258-47d9-4aa7-a2b3-2ef622f19814/sist-en-60335-2-42-2001)

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Sécurité des appareils électrodomestiques et analogues –

Partie 2-42:

Règles particulières pour les fours électriques à convection forcée, les cuiseurs à vapeur électriques et les fours combinés vapeur-convection électriques à usage collectif

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

M

For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60335-2-42 has been prepared by subcommittee 61E: Safety of electrical commercial catering equipment, of IEC technical committee 61: Safety of household and similar electrical appliances.

It forms the fourth edition of IEC 60335-2-42 and replaces the third edition, published in 1994, amendment 1 (1996) and amendment 2 (1998). It also replaces IEC 60335-2-46, published in 1986 and its amendment 1 (1990).

The text of this standard is based on the third edition, amendments 1 and 2, and the following documents:

FDIS	Report on voting
61E/354/FDIS	61E/367/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the third edition (1991) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert it into the IEC standard: Safety requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens

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 in part 1 is to be adapted accordingly.

NOTE 1 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type;

Words in **bold** in the text are defined in clause 2.

NOTE 2 Subclauses, figures and notes which are additional to those in part 1 are numbered starting from 101.

A bilingual version of this standard may be issued at a later date.

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SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens

1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electrically operated commercial **forced convection ovens, steam cookers, steam-convection ovens** and, exclusive of any other use, **steam generators**, not intended for household use, their **rated voltage** being not more than 250 V for single-phase appliances connected between one phase and neutral and 480 V for other appliances.

NOTE 1 These appliances are used for example in kitchens such as in restaurants, canteens, hospitals and commercial enterprises such as bakeries, butcheries, etc.

The electrical part of appliances making use of other forms of energy is also within the scope of this standard.

So far as is practicable, this standard deals with the common hazards presented by these types of appliances.

NOTE 2 Attention is drawn to the fact that

- 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;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities;
- in many countries additional requirements are specified for pressure appliances.

This standard does not apply to

- appliances where the cooking process is not only carried out by direct steam contact but also with the food partially or completely immersed in a liquid;
- appliances designed exclusively for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- continuous process appliances for the mass production of food;
- microwave ovens;
- appliances with electrode heaters.

2 Definitions

This clause of part 1 is applicable except as follows.

2.2.4 Addition:

NOTE The **rated power input** is the sum of the power inputs of all the individual elements in the appliance which can be on at one time; where there are several such combinations possible that giving the highest power input is used in determining the **rated power input**.

2.2.9 Replacement:

normal operation: Operation of the appliance under the following conditions:

Dry heat mode

The appliance is operated with all the shelves or the shelf trolley in position according to the manufacturer's instructions but with no load. The controls are set so that the mean value of the temperature over the **thermostat** cycle at the geometric centre of each usable space in the interior of the oven is maintained at $220\text{ °C} \pm 4\text{ °C}$. Stepped controls are set so that this temperature is $220\text{ °C} \pm 15\text{ °C}$.

For ovens which are unable to attain a temperature of 220 °C , the controls are set at the maximum.

For ovens which are capable of attaining temperatures in excess of 270 °C , the controls are set so that the mean value of the temperature is $50\text{ °C} \pm 4\text{ °C}$ below the maximum temperature attainable.

Steaming only mode

The appliance is operated in accordance with the manufacturer's instructions with all controls intended to be operated by the user adjusted to their maximum setting until reaching operating temperature. They are then readjusted, if possible, to the lowest setting that maintains that temperature.

Appliances with **steam generators** intended to be filled by hand or by a manually operated tap are filled to the **indicated level** on the **steam generator**.

Appliances with **steam generators** intended to be filled automatically are connected to a water supply having the pressure designated by the manufacturer. Where the manufacturer specifies a range of pressures, the pressure is adjusted to give the most unfavourable conditions.

The incoming water is maintained at

- $15\text{ °C} \pm 5\text{ °C}$ in the case of appliances intended for connection to a cold water supply;
- $60\text{ °C} \pm 5\text{ °C}$ or the temperature indicated in the instruction sheet, whichever is the higher, in the case of appliances intended for connection to a hot water supply only.

NOTE 1 If the appliance is intended for connection to either a hot or cold water supply, the temperature of the water is that which gives the most unfavourable results.

Lids, doors, and covers are in position and closed.

The **cooking compartment** of the appliance contains a water load, initially at $15\text{ °C} \pm 5\text{ °C}$, comprising 0,5 l/kg of the manufacturer's declared maximum food load. The water load is evenly distributed between the shelves or pans.

NOTE 2 Since pans may be perforated to allow for circulation of steam, the water load may be contained in suitable containers evenly distributed over the shelves or pans.