

# SLOVENSKI STANDARD SIST EN 60335-2-42:2003/A11:2012

01-junij-2012

Gospodinjski in podobni električni aparati - Varnost - 2-42. del: Posebne zahteve za komercialne električne pečice s prisilnim kroženjem zraka, parne kuhalnike in pečice s kroženjem pare - Dopolnilo A11

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

iTeh STANDARD PREVIEW
Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-42: Besondere Anforderungen für elektrische Heißumluftöfen. Dampfgeräte und Heißluftdämpfer für den gewerblichen Gebrauch

SIST EN 60335-2-42:2003/A11:2012

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Appareils électrodomestiques et analogues Sécurité Bartie 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 60335-2-42:2003/A11:2012

ICS:

97.040.20 Štedilniki, delovni pulti,

pečice in podobni aparati

Cooking ranges, working tables, ovens and similar

appliances

SIST EN 60335-2-42:2003/A11:2012 en,fr SIST EN 60335-2-42:2003/A11:2012

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<u>SIST EN 60335-2-42:2003/A11:2012</u> https://standards.iteh.ai/catalog/standards/sist/506d96bb-c0ff-4c65-a17b-50d86aa2e3fd/sist-en-60335-2-42-2003-a11-2012 **EUROPEAN STANDARD** 

EN 60335-2-42/A11

NORME EUROPÉENNE EUROPÄISCHE NORM

April 2012

ICS 97.040.20

English version

# Household and similar electrical appliances - Safety -

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

Appareils électrodomestiques et analogues - Sécurité -

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 (standards.iteh.ai)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -Teil 2-42: Besondere Anforderungen für elektrische Heißumluftöfen, Dampfgeräte und Heißluftdämpfer für den gewerblichen Gebrauch

<u>SIST EN 60335-2-42:2003/A11:2012</u> https://standards.iteh.ai/catalog/standards/sist/506d96bb-c0ff-4c65-a17b-50d86aa2e3fd/sist-en-60335-2-42-2003-a11-2012

This amendment A11 modifies the European Standard EN 60335-2-42:2003; it was approved by CENELEC on 2011-12-21. 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.

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# CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

#### **Foreword**

This document (EN 60335-2-42:2003/A11:2012) has been prepared by the CLC/TC 61, "Safety of household and similar electrical appliances".

The following dates are fixed:

 latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2012-12-21

 latest date by which the national standards conflicting with the amendment have to be withdrawn

(dow) 2014-12-21

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012, EN 60335-2-42:2003 and EN 60335-2-42:2003/A1:2008.

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

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

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#### Introduction

Replace the addition of CENELEC common modifications by the following:

The principle objectives of Low Voltage Directive, 2006/95/EC, are covered in this standard. The essential safety requirements of the Machinery Directive 2006/42/EC have also been taken into account for appliances covered by this part.

#### 1 Scope

Add the following paragraph before NOTE 101:

Additional requirements for appliances with power driven moving parts are given in Annex ZE.

Replace the NOTE 103 by the following text:

This standard does not apply to

- machines designed exclusively for industrial purposes,
- machines intended to be used in locations where a corrosive or an explosive atmosphere is present (dust, vapour or gas),
- continuous process machines for the mass production of food,
- machinery for processing cosmetics, chemicals and pharmaceutical products,
- microwave ovens (IEC 60335-2-90).

#### 3 **Definitions**

#### 3.109 Replacement

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#### installation wall

installation wall (standards.iteh.ai) fixed construction containing supply facilities for wall mounted appliances on one or both sides

#### General conditions for the tests 60335-2-42:2003/A11:2012 5

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# 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 °C ± 4 °C. Stepped controls are set so that this temperature is 220 °C ± 15 °C.

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

For ovens that are capable of attaining temperatures in excess of 270 °C, the controls are set so that the mean value of the temperature is 50 °C ± 4 °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 °C ± 5 °C in the case of appliances intended for connection to a cold water supply,
- 60 °C ± 5 °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 101 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  $^{\circ}$ C  $\pm$  5  $^{\circ}$ 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 102 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.

#### Combination mode

The appliance is operated as for the steaming only mode but with the forced convection fan/s and elements for heating the **cooking compartment** on and the temperature controls set as for the dry heat mode.

In all the above cases, motors incorporated in the appliance are operated in the intended manner under the most severe conditions that can be expected in normal use, taking into account the manufacturer's instructions.

#### 7 Marking and instructions

#### **7.12** Add the following text before the second paragraph:

The front cover of the instructions shall include the substance of the following:

CAUTION: Read the instructions before using the machine.

This wording may be replaced by symbols ISO 7000-0434 and ISO 7000-0790.

Add the following text before the first paragraph of the addition:

If symbols IEC 60417-5021, ISO 7000-0434 and ISO 7000-0790 are used on the product or in the instructions, their meaning shall be explained.

Delete the third paragraph of the addition and ards.iteh.ai)

Add the following:

The instructions shall also state the maximum weight of the empty appliance.

#### 7.12.1 Replace the last paragraph of the replacement by the following:012

For appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly if disconnected or not used for long periods, or during the initial installation, the instructions shall give recommendations regarding the rating and type of the additional **protective devices**, such as residual-current device(s), to be installed.

#### **Bibliography**

Add the following references:

EN 614-1:2006 + A1:2009, Safety of machinery – Ergonomic design principles – Part 1: Terminology and general principles

EN 614-2:2000 + A1:2008, Safety of machinery – Ergonomic design principles – Part 2: Interactions between the design of machinery and work tasks

#### Annex ZE

(normative)

### Specific additional requirements for appliances and machines with power driven moving parts and intended for commercial use

The following modifications to this standard are applicable for appliances and machines with power driven moving parts and intended for commercial use.

NOTE The additional paragraphs to Annex ZE of Part 1 are numbered starting with ZE.101.

#### Introduction

#### Replacement:

For the verification of compliance of appliances or machines intended for commercial use with the Essential Health and Safety Requirements (EHSR) of the Directive 2006/42/EC, the requirements in this Annex ZE shall apply.

#### 1 Scope

Add the following:

This annex deals with additional requirements concerning appliances and machines intended to be used by experts or trained users for example in restaurants, canteens, hospitals and commercial enterprises such as bakeries, butcheries, etc and appliances and machines which are declared to be for commercial use by lay persons.

Products covered by this standard do not create a noise hazard, therefore no specific provisions concerning noise are given. (standards.iteh.ai)

#### 2 Normative references

Add the following normative reference  $\underline{\rm SIST\,EN\,60335\text{-}2\text{-}42:2003/A11:2012}$ 

EN ISO 14159:2008, hSafetynofdmachineryog-stallygienet/sfequirements-cross-afthe design of machinery (ISO 14159:2002) 50d86aa2e3fd/sist-en-60335-2-42-2003-a11-2012

#### **Definitions** 3

This clause of Annex ZE of Part 1 is applicable.

#### General requirement

This clause of Annex ZE of Part 1 is applicable.

#### 7 Marking and instructions

This clause of Annex ZE of Part 1 is applicable except as follows:

#### 7.12 Modification

Add following dashed items:

- the intended use of the appliance as covered by the scope of this standard;
- instructions regarding user maintenance and operation of the appliance and, if necessary, instructions for the training of operators;
- instructions designed to enable adjustment and maintenance to be carried out safely, including the protective measures that should be taken during these operations;
- the conditions under which the appliance is stable during use, dismantling when out of use, testing or foreseeable breakdowns:
- the operating method to be followed in the event of accident or breakdown to prevent unsafe actions;
- information regarding the use of personal protection equipment in case of spreading hot food stuff;
- warning concerning possible slippery floor adjacent to the appliance.

#### **7.12.Z1** Replace the sixth dashed item by the following:

on airborne noise emissions, the A-weighted sound pressure level is below 70 dB(A).

Add the following subclause:

**7.12.ZE.101** The instructions shall include the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance. At least, it shall include the substance of the following.

WARNING: Appliances must be disconnected from their power supply during cleaning or maintenance and when replacing parts.

#### 21 Mechanical strength

This clause of Annex ZE of Part 1 is applicable.

#### 22 Construction

This clause of Annex ZE of Part 1 is applicable except as follows:

#### 22.ZE.1

This clause of Annex ZE of Part 1 is not applicable.

#### 22.ZE.5

Replace the second paragraph of the test specification by:

The **guard** is opened at the extent needed to cause the interlocking to operate and is then closed. This operation is carried out for 5 000 cycles at a rate of 5 cycles per min.

Add the following new subclauses:

# 22.ZE.101 iTeh STANDARD PREVIEW

Controls shall be

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- clearly visible and identifiable,
- positioned within easy reach of the operator's hand 2003/A112012
- secured against accidental actuation, if their actuation could result in a hazard.

Compliance is checked by inspection and by manual test if necessary.

#### 22.ZE.102

Appliances for permanent connected water supply shall withstand an allowable inlet water pressure of at least 600 kPa.

Compliance is checked as follows:

The appliance is subjected to a static pressure equal to twice the allowable inlet water pressure up to at least 1 200 kPa (12 bar), for a period of 5 min.

During the test, there shall be no leakage from any part of the appliance, including the inlet water hose.

**22.ZE.103** Appliances shall comply with the hygiene requirements.

Compliance is checked by inspection and by the requirements of EN ISO 14159.

22.ZE.104 Appliances shall meet ergonomic principles.

Compliance is checked by inspection

NOTE Guidance may be found in EN 614-1 and EN 614-2.