



SLOVENSKI STANDARD
SIST EN IEC 60335-2-90:2021/oprAA:2023
01-junij-2023

Gospodinjski in podobni električni aparati - Varnost - 2-90. del: Posebne zahteve za mikrovalovne pečice za komercialno uporabo - Dopolnilo AA

Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave ovens

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-90: Besondere Anforderungen für gewerbliche Mikrowellenkochgeräte

Appareils électrodomestiques et analogues - Sécurité - Partie 2-90: Exigences particulières pour les fours à micro-ondes à usage commercial

Ta slovenski standard je istoveten z: EN IEC 60335-2-90:2021/prAA

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 IEC 60335-2-90:2021/oprAA:2023

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN IEC 60335-2-90:2021

prAA

March 2023

ICS 97.040.20

English Version

Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave ovens

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-90: Exigences particulières pour les fours à micro-
ondes à usage commercial

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-90: Besondere Anforderungen für
gewerbliche Mikrowellenkochgeräte

This draft amendment prAA, if approved, will modify the European Standard EN IEC 60335-2-90:2021; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2023-06-23.

It has been drawn up by CLC/TC 61.

If this draft becomes an amendment, 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.

This draft amendment was established by CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

		Page
1	European foreword	2
2	1 Modification to the Introduction	3
3	2 Modification to the Scope	3
4	3 Modification to Clause 3, “Terms and definitions”	3
5	4 Modification to Clause 7, “Marking and instructions”	4
6	5 Modification to Clause 8, “Protection against access to live parts”	4
7	6 Modification to Clause 20, “Stability and mechanical hazards”	4
8	7 Modification to Clause 22, “Construction”	4
9	8 Modification to the annexes	5
10	9 Modification to Bibliography	11

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EN IEC 60335-2-90:2021/prAA:2023 (E)

11 **European foreword**

12 This document (EN IEC 60335-2-90:2021/prAA:2023) has been prepared by CLC/TC 61 "Safety of household
13 and similar electrical appliances".

14 This document is currently submitted to the Enquiry.

15 The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

16 The numbering system for European clauses, subclasses, notes, tables, figures and annexes that are
17 additional to those in the IEC standard are prefixed with the letter "Z".

18 This document has been prepared under a Standardization Request given to CENELEC by the European
19 Commission and the European Free Trade Association, and supports essential requirements of EU
20 Directive(s) / Regulation(s).

21 For the relationship with EU Directive(s) / Regulation(s), see informative Annexes ZZA and ZZB, which are an
22 integral part of this document.

23 **Secretary Note: All IM notes and relative boxes will be removed before publication.** The boxes contain
24 the relational for the changes.

25

26 **Rational Issue manager:**

27 *The link to legislation will be reintroduced because we have an IM for this standard. The standard is linked to
28 MD because in the market there are products with moving parts covered by machinery directive*

29

30 **Secretary Note for HAS consultants:** The consolidated version of the IEC standards + EN Common
31 modifications can be requested to the secretary: luca_reina@whirlpool.com

32 **1 Modification to the Introduction**

33 *Addition:*

34 This European amendment A11 supplements or modifies the corresponding clauses of the standards below:

- 35 — EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021+A16:2022 (Part 1)
- 36 — EN IEC 60335-2-90:2021+A1:2021 (Part 2)

37 **2 Modification to the Scope**

38 *Replace the sixth paragraph, starting from “In general, this standard does not take into account ...” up to “–*
 39 *playing with the appliance by young children.” with the following:*

40 “This document deals with the reasonably foreseeable hazards presented by appliances and machines that
 41 are encountered by all persons.

42 However, in general, it does not take into account:

- 43 — **children** playing with the commercial **microwave ovens**;
- 44 — the use of the commercial **microwave ovens** by **young and very young children**;
- 45 — the use of the commercial **microwave ovens** by **older children** without supervision, for appliances
 46 declared by the manufacturer as designed to be used in **areas open to the public**;
- 47 — the use of the commercial **microwave ovens** by **children**; for other appliances not used in **areas open**
 48 **to the public**;

49 It is recognized that **very vulnerable people** can have needs beyond the level addressed in this document.”

50 *Addition:*

51 “Additional requirements for commercial **microwave ovens** with power driven moving parts are given in
 52 Annex ZE.

53 Products covered by this document do create neither a noise hazard, nor a vibration hazard; therefore, no
 54 specific provisions concerning noise and vibration are given.

55 For the purpose of this document, the term „appliance” as used in Part 1 is to be read as “commercial
 56 **microwave ovens**”.”

57 **3 Modification to Clause 3, “Terms and definitions”**

58 *Add the following new term entry:*

59 “

60 **3.Z101**

61 **areas open to the public**

62 areas in which the general public including children can enter

63 Note 1 to entry: Examples are dining areas in restaurants, coffee shops, canteens.

Note from IM: This new definition is necessary. The probe 18 introduced in part 1 is only applicable for commercial microwave ovens intended to be used in area open to the public. The corresponding requirement in Clause 7, 8, 20 are added.

64 **4 Modification to Clause 7, “Marking and instructions”**

65 **7.12 Modification:**

66 *Replace the third paragraph in the Part 1 starting with “The instructions shall include the substance of the*
 67 *following ...” up to “Cleaning and user maintenance shall not be made by children without supervision.” with*
 68 *the following:*

69 “The instructions for commercial **microwave ovens** not intended to be used in **areas open to the public**, the
 70 instructions shall state the substance of the following:

71 **WARNING:** This appliance shall not be installed in areas where general public including children has access.

72 The instructions for commercial **microwave ovens** intended to be used in **areas open to the public**, the
 73 instructions shall state the substance of the following:

74 This appliance can be used by children aged from 8 years and above if they have been given supervision or
 75 instruction concerning use of the appliance in a safe way and if they understand the hazards involved.
 76 Cleaning and user maintenance shall not be made by children unless they are aged from 8 years and above
 77 and supervised.

78 The instructions for appliances that are not in compliance with 22.ZE.104, but intended to be used in **areas**
 79 **open to the public** shall state that the appliance shall be installed or placed equal to or higher than 850 mm
 80 above the floor.”

81 **5 Modification to Clause 8, “Protection against access to live parts”**

82 *Addition:*

83 *Add the following after “... application”:* “except as follows”

84 **“8.1.1 Addition:**

85 Test probe 18 of EN 61032 is not applied to appliances for commercial use unless they are intended to be
 86 installed in an **area open to the public**.

87 **8.1.3 Addition:**

88 Test probe 18 of EN 61032 is not applied to appliances for commercial use unless they are intended to be
 89 installed in an **area open to the public**.”

90 **6 Modification to Clause 20, “Stability and mechanical hazards”**

91 **20.2 Addition:**

92 *Add after the second dashed item in the compliance criteria in the Part 1, starting from “ -test probe 18 of*
 93 *EN 61032,...” the following:*

94 “Test probe 18 of EN 61032 is not applied to appliances for commercial use unless they are intended to be
 95 installed in an **area open to the public**.”

96 **7 Modification to Clause 22, “Construction”**

97 **22.55 Modification**

98 *Add the following text after the third paragraph in the Part 1, starting from “The sound of the motor ... :*

99 “The requirements are not applicable for commercial appliances unless they are used in **areas open to the**
 100 **public**.”

101 **8 Modification to the annexes**102 **Annex ZC**
103 **(normative)**104
105 **Normative references to international publications with their**
106 **corresponding European publications**

107 The following documents are referred to in the text in such a way that some or all of their content constitutes
108 requirements of this document. For dated references, only the edition cited applies. For undated references,
109 the latest edition of the referenced document (including any amendments) applies.

110 NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the
111 relevant EN/HD applies.

112 NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here:
113 www.cenelec.eu.

114 *Addition*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-52	-	Environmental testing – Part 2–52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)	EN IEC 60068-2-52	2018
<i>Modification</i>				
IEC 60335-2-36	-	Household and similar electrical appliances- Safety - Part 2–36: Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements	EN 60335-2-36 + A1 + Corrigendum + A2 + A11	2002 2004 2007 2008 2012
IEC 60335-2-75	-	Household and similar electrical appliances - Safety - Part 2–75: Particular requirements for commercial dispensing appliances and vending machines	EN IEC 60335-2-75 + A1 + A2 + A11 + A12	2004 2005 2008 2006 2010

115

Note from IM: the corresponding European publication to these 2 standards in EN IEC 60335-2-90: 2021+A1:2021 were incorrect. This modification is needed

Annex ZE (normative)

Specific additional requirements for commercial microwave ovens with power driven moving parts

NOTE The additional paragraphs to Annex ZE of this Part 2 are numbered starting with ZE.101.

1 Scope

Replace the addition with the following:

“This annex deals with additional requirements concerning commercial **microwave ovens** with power driven parts 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 with power driven parts which are declared to be for commercial use by lay persons.

NOTE The statement from the manufacturer in the product information concerning the specific product is the criterion that is considered to determine the intended use of the appliance. The statement is expected to accurately reflect the reasonably foreseeable use of the product.

2 Normative references

Add the following normative references:

EN ISO 14159:2008, *Safety of machinery - Hygiene requirements for the design of machinery*

3 Terms and definitions

Add the following new terms and definitions:

“

3.ZE101 food area

machine and machine components surfaces which are exposed to food or from which food or other materials can drain, drip, diffuse or be drawn into the food

Note 1 to entry: There is no **food area** for commercial **microwave ovens**.

3.ZE102 splash area

area composed of surfaces on which part of the food can splash or flow along under intended conditions of use and does not return into the food

3.Z103 non-food area

any area other than **food area** or **splash area**

3.Z104 cleanable

designed and constructed so that soils can be removed

“

7 Marking and instructions

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

154 **7.12.ZE1 Replacement**

155 *Replace the sixth dashed item with the following:*

156 “

157 — on airborne noise emissions, the A-weighted sound pressure level is ≤ 70 dB(A).”

158 **20 Stability and mechanical hazards**

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

160 **20.2**

161 *Replace the second dashed item of the compliance criterion of Annex ZE of Part 1 with the following:*

162 “

163 — for appliances not intended to be used in **area open to the public**, adjustable **guards** restricting access
164 to those sections of the moving parts where access is necessary.”

165 *Addition:*

166 **22.ZE.101** Appliances shall meet hygiene requirements.

167 *Compliance is checked by inspection and by the requirements of EN ISO 14159: 2008.*

168 **22.ZE.102** The cavity surfaces of commercial **microwave ovens** which are **splash areas** shall be **cleanable**
169 so that all unwanted matter can be removed.

170 *Compliance is checked by inspection after having operated the appliance as in normal use then cleaning it in
171 accordance with the instructions for use.*

172 **22.ZE.103 Non-food areas** that are not adequately separated from **splash areas** shall be so constructed that
173 the retention of moisture or unwanted matter is prevented. When this is unavoidable, the surfaces of relevant
174 **non-food areas** shall be **cleanable** according to 22.ZE.102.

175 **22.ZE.104**

176 For appliances intended to be used in an **area open to the public** which are installed or placed lower than
177 850 mm above the floor and have a **cavity** volume exceeding 60 l where a child can be entrapped and which
178 is accessible after opening the **door** and removing **detachable** internal parts including **shelves**, containers
179 and dishes, if any, it shall be possible to open the **door** from the inside with a force not exceeding 70 N.
180 Calculating the volume, any single dimension not exceeding 150 mm or any two orthogonal dimensions not
181 exceeding 200 mm, is ignored.

182 *Compliance is checked by inspection, by measurement and by applying a force of 70 N at the midpoint of the
183 edge farthest from the hinge axis in the direction perpendicular to the plane of the door.*

184 As an alternative, the force may be applied from the outside.”