



SLOVENSKI STANDARD

SIST EN 60268-5:2003/A1:2009

01-oktober-2009

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Sound system equipment - Part 5: Loudspeakers (IEC 60268-5:2003/A1:2007)

Elektroakustische Geräte - Teil 5: Lautsprecher (IEC 60268-5:2003/A1:2007)

Equipements pour systèmes électroacoustiques - Part 5: Haut-parleurs (CEI 60268-5:2003/A1:2007)

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Ta slovenski standard je istoveten z: **EN 60268-5:2003/A1:2009**

<https://standards.iteh.ai/catalog/standards/sist/5bc0d66a-d173-4bc1-b43d-65d595f2eb69/sist-en-60268-5-2003-a1-2009>

ICS:

33.160.50 Pribor Accessories

SIST EN 60268-5:2003/A1:2009 en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60268-5/A1

July 2009

ICS 33.160.50

English version

**Sound system equipment -
Part 5: Loudspeakers**
(IEC 60268-5:2003/A1:2007)

Equipements
pour systèmes électroacoustiques -
Part 5: Haut-parleurs
(CEI 60268-5:2003/A1:2007)

Elektroakustische Geräte -
Teil 5: Lautsprecher
(IEC 60268-5:2003/A1:2007)

This amendment A1 modifies the European Standard EN 60268-5:2003; it was approved by CENELEC on 2009-07-01. 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.

<https://standards.iteh.ai/catalog/standards/sist/5bc0d66a-d173-4bc1-b43d-058952c6484a/EN-60268-5:2003/A1:2009>

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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 100/1189/CDV, future amendment 1 to IEC 60268-5:2003, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60268-5:2003 on 2009-07-01.

The following dates were 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) 2010-04-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2012-07-01

Endorsement notice

The text of amendment 1:2007 to the International Standard IEC 60268-5:2003 was approved by CENELEC as an amendment to the European Standard without any modification.

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[SIST EN 60268-5:2003/A1:2009](https://standards.iteh.ai/catalog/standards/sist/5bc0d66a-d173-4bc1-b43d-65d595f2eb69/sist-en-60268-5-2003-a1-2009)

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INTERNATIONAL STANDARD

IEC
60268-5

2003

AMENDMENT 1
2007-07

Amendment 1

Sound system equipment –

**Part 5:
Loudspeakers**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

D

For price, see current catalogue

FOREWORD

This amendment has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this amendment is based on the following documents:

CDV	Report on voting
100/1189/CDV	100/1245/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

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Page 13

Replace the existing Clause 14 by the following new Clause 14:

14 Marking of terminals and controls

14.1 General

The terminals and controls shall be marked in accordance with IEC 60268-1 and IEC 60268-2 by the following principles.

14.2 Positive terminal

14.2.1 Characteristic to be specified

The terminal of a drive unit (see Note 1 in Clause 1), to which the application of a positive voltage with respect to the other terminal results in an increase of sound pressure at the front of the drive unit shall be specified as the positive terminal.

14.2.2 Marking

The positive terminal shall be marked with a + symbol, or a red marking, or in a way stated by the manufacturer.

14.2.3 Method of test

Apply a positive d.c. voltage briefly to the terminal marked as positive. Examine the change of sound pressure at a point close to the front of the drive unit. Correct marking is confirmed by an increase of sound pressure.

NOTE 1 The increase of sound pressure is produced by a positive excursion, i.e., the loudspeaker diaphragm coming closer to the microphone.

NOTE 2 Any other method which produces the same result as the method described above can be used.

Page 17

17 Input voltage

Add the following new subclause:

17.1.3 Listening test for normal operation

A listening test for normal operation may be conducted according to Annex D.

Add, on page 19, the following new subclause:

17.4.3 Listening test for mechanical noise (rattles)

A listening test for mechanical noise (rattles) may be conducted according to Annex D.

Page 45

Annex B – Standard measuring enclosure type B

Replace, on page 46, the existing Table B.1 by the following new Table B.1:

Table B.1 – Dimensions and ratios of scalable enclosure type B

Enclosure dimensions		Symbol	Ratios
Width	internal	Wi	1
	external	We	NA
Height	internal	Hi	1,202
	external	He	NA
Depth 1	internal	D1i	1,274 ^a
	external	D1e	NA
Depth 2	internal	D2i	1,596 ^a
	external	D2e	NA
Radius		R	100 mm
Panel thickness			> 24 mm ($V_n^b \geq 100$) > 18 mm ($V_n^b < 100$)
Side panel bracing			1× or 2×
NOTE Symbol “i” means internal and “e” means external measurement. NA means 'not applicable' – the dimension is controlled by other specified dimensions.			
^a The average depth ratio $D_i = 1,435$ and the back panel tilt angle $\alpha = 15^\circ$.			
^b V_n is the net volume in litres of the measuring enclosure			

Add, after Annex C, the following new Annex D:

Annex D (informative)

Listening tests

D.1 Listening test for normal operation

Confirm normal operation by applying a programme signal to the loudspeaker to be tested.

- a) Install the loudspeaker as described in Clause 10.
- b) Apply the programme signal with maximum r.m.s. voltage equal to the rated noise voltage of the loudspeaker.
- c) Check the sound level, tone quality, noise, and presence of other defects.

NOTE 1 The programme signal is a speech or music signal of normal spectral distribution.

NOTE 2 This test is conducted mainly during the manufacturing process and reporting of the result is not required.

D.2 Listening test for mechanical noise (rattles)

This test checks for rub and buzz by listening to ascertain that the loudspeaker works normally when applying the rated sinusoidal voltage to the loudspeaker terminals.

- a) Mount the loudspeaker as specified in Clause 10.
- b) Check the sound of the loudspeaker by applying the rated sinusoidal voltage to the loudspeaker, changing the frequency of the sinusoidal signal, within the rated frequency range. The measuring voltage may be set freely by the manufacturer if necessary.
- c) The listening position should be a position where any abnormal sound is easily heard, at a distance of more than 0,3 m from the reference point of the loudspeaker, unless otherwise stated.
- d) Check the sound level, sound quality, noise level and the existence of other abnormal sound
- e) The power amplifier should have an output impedance smaller than one-third of the rated impedance of the loudspeaker and be able to provide a sinusoidal voltage at least twice the rated sinusoidal voltage of the loudspeaker. The total harmonic distortion shall not exceed 1 % at the loudspeaker terminals.

NOTE This test is conducted mainly during the manufacturing process and reporting of the result is not required.
