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Irish Standard I.S. EN 60268-3:2013

# Sound system equipment -- Part 3: Amplifiers (IEC 60268-3:2013 (EQV))

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# EUROPEAN STANDARD

# EN 60268-3

# NORME EUROPÉENNE EUROPÄISCHE NORM

June 2013

ICS 33.160.10

Supersedes EN 60268-3:2000

English version

# Sound system equipment -Part 3: Amplifiers (IEC 60268-3:2013)

Equipements pour systèmes électroacoustiques -Partie 3: amplificateurs (CEI 60268-3:2013) Elektroakustische Geräte -Teil 3: Verstärker (IEC 60268-3:2013)

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#### Management Centre: Avenue Marnix 17, B - 1000 Brussels

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EN 60268-3:2013

## Foreword

The text of document 100/2010A/CDV, future edition 4 of IEC 60268-3, prepared by IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60268-3:2013.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national	(dop)	2014-02-28
	standard or by endorsement		
•	latest date by which the national standards conflicting with the	(dow)	2016-05-28

This document supersedes EN 60268-3:2000.

document have to be withdrawn

EN 60268-3:2013 includes the following significant technical changes with respect to EN 60268-3:2000:

- rated condition of multi-channel amplifier is expanded;
- arrangement for the D-class amplifier is added;
- method of measurement for output power (distortion-limited) is expanded;
- Annex B is newly added.

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.

#### **Endorsement notice**

The text of the International Standard IEC 60268-3:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60268-5:2003 NOTE Harmonised as EN 60268-5:2003 (not modified).

IEC 61606 series NOTE Harmonised in EN 61606 series.

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EN 60268-3:2013

## Annex ZA

#### (normative)

# Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication IEC 60065 (mod) + corr. August + A1 (mod) + A2 (mod)	<u>Year</u> 2001 2002 2005 2010	<u>Title</u> Audio, video and similar electronic apparatus Safety requirements	<u>EN/HD</u> -EN 60065 + corr. August + A1 + A2 + A11 + A12	Year 2002 2007 2006 2010 2008 2011
IEC 60268-1 + A1 + A2	1985 1988 1988	Sound system equipment - Part 1: General	HD 483.1 S2	1989
IEC 60268-2 + A1	1987 1991	Sound system equipment - Part 2: Explanation of general terms and calculation methods	HD 483.2 S2	1993
IEC 60417	Data- base	Graphical symbols for use on equipment	-	-
IEC 61000-4-13 + A1	2002 2009	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests	EN 61000-4-13 + A1	2002 2009
IEC 61000-4-17 + A1 + A2	1999 2001 2008	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	EN 61000-4-17 + A1 + A2	1999 2004 2009
IEC 61000-4-29	2000	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power por immunity tests	EN 61000-4-29 rt	2000
IEC 61938	1996	Audio, video and audiovisual systems - Interconnections and matching values - Preferred matching values of analogue signal	EN 61938 + corr. February s	1997 1997

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### SOUND SYSTEM EQUIPMENT -

#### Part 3: Amplifiers

#### FOREWORD

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International Standard IEC 60268-3 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This fourth edition cancels and replaces the third edition published in 2000. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- rated condition of multi-channel amplifier is expanded;
- arrangement for the D-class amplifier is added;
- method of measurement for output power (distortion-limited) is expanded;
- Annex B is newly added.

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

FDIS	Report on voting
100/2010A/CDV	100/2066/RVC

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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60268 series, published under the general title *Sound system equipment*, can be found on the IEC website.

This part of IEC 60268 shall be used in conjunction with IEC 60268-1:1985 and IEC 60268-2:1987.

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## SOUND SYSTEM EQUIPMENT -

## Part 3: Amplifiers

#### 1 Scope

This part of IEC 60268 applies to analogue amplifiers, and the analogue parts of analogue/digital amplifiers, which form part of a sound system for professional or household applications. It specifies the characteristics which should be included in specifications of amplifiers and the corresponding methods of measurement.

NOTE The methods of measurement for digital amplifiers and similar equipment are given in IEC 61606 [4]<sup>1</sup>.

In general, the specified methods of measurement are those which are seen to be most directly related to the characteristics. This does not exclude the use of other methods which give equivalent results.

In general, the methods are based on the simplest measuring equipment which can provide useful results. This does not exclude the use of more complex equipment which can give higher accuracy and/or allow automatic measurement and recording of results.

Rated conditions and standard measuring conditions are specified in order to allow measurements to be reliably repeated.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60065:2001, *Audio, video and similar electronic apparatus – Safety requirements* Amendment 1:2005 Amendment 2:2010

IEC 60268-1:1985, *Sound system equipment – Part 1: General* Amendment 1:1988 Amendment 2:1988

IEC 60268-2:1987, Sound system equipment – Part 2: Explanation of general terms and calculation methods Amendment 1:1991

IEC 60417, *Graphical symbols for use on equipment.* Available from: <u>http://www.graphical-symbols.info/equipment</u>

IEC 61000-4-13:2002, Electromagnetic compatibility (EMC) – Part 4-13: Testing and measurement techniques – Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests Amendment 1:2009

<sup>&</sup>lt;sup>1</sup> Numbers in square brackets refer to the Bibliography.



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