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## **Ljudanläggningar – Del 3: Ljutförstärkare**

*Sound system equipment –  
Part 3: Amplifiers*

Som svensk standard gäller europastandarden EN 60268-3:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60268-3:2013.

### **Nationellt förord**

Europastandarden EN 60268-3:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60268-3, Fourth edition, 2013 - Sound system equipment - Part 3: Amplifiers**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60268-3, utgåva 1, 2001, gäller ej fr o m 2016-05-28.

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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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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

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 standard or by endorsement (dop) 2014-02-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-05-28

This document supersedes EN 60268-3:2000.

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.                |

## 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.

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

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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: <http://www.graphical-symbols.info/equipment>

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

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

IEC 61000-4-17:1999, *Electromagnetic Compatibility (EMC) – Part 4-17: Testing and measurement techniques – Ripple on d.c. input power port immunity test*  
Amendment 1:2001  
Amendment 2:2008

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 ports immunity tests*

IEC 61938:1996, *Audio, video and audiovisual systems – Interconnections and matching values – Preferred matching values of analogue signals*