SLOVENSKI STANDARD
SIST HD 483.2 S2:1999

01-april-1999

Sound system equipment -- Part 2: Explanation of general terms and calculation methods (IEC 60268-2:1987 + A1:1991)

Sound system equipment -- Part 2: Explanation of general terms and calculation methods

Elektroakustische Geräte -- Teil 2: Allgemeine Begriffe und Berechnungsverfahren

Equipements pour systèmes électroacoustiques -- Partie 2: Explication des termes généraux et méthodes de calcul

Ta slovenski standard je istoveten z: HD 483.2 S2:1993

ICS:

33.160.01	Avdio, video in avdiovizualni sistemi na splošno	Audio, video and audiovisual systems in general

SIST HD 483.2 S2:1999 **en**

HARMONIZATION DOCUMENT HD 483.2 S2

DOCUMENT D'HARMONISATION

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ENGLISH VERSION

Sound system equipment
Part 2: Explanation of general terms and calculation methods
(IEC 268-2:1987 + A1:1991)

Equipements pour systèmes électroacoustiques
Deuxième partie: Explication des termes généraux et méthodes de calcul
(CEI 268-2:1987 + A1:1991)

Elektroakustische Geräte
Teil 2: Allgemeine Begriffe und Berechnungsverfahren
(IEC 268-2:1987 + A1:1991)

This Harmonization Document was approved by CENELEC on 1992-12-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

Up-to-date lists and bibliographical references concerning national implementation may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 268-2:1987 and its amendment 1:1991 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as Harmonization Document.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as HD 483.2 S2 on 9 December 1992.

The following dates were fixed:

- latest date of announcement of the HD at national level	(doa)	1993-06-01
- latest date of publication of a harmonized national standard	(dop)	1993-12-01
- latest date of withdrawal of conflicting national standards	(dow)	1993-12-01

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative.

ENDORSEMENT NOTICE

The text of the International Standard IEC 268-2:1987 and its amendment 1:1991 was approved by CENELEC as a Harmonization Document without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

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

IEC Publication	Date	Title	EN/HD	Date
268-1	1985	Sound system equipment Part 1: General	HD 483.1 S2*	1989
268-3	1969*	Part 3: Sound system amplifiers	-	-

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* HD 483.1 S2 includes A1:1988 to IEC 268-1
IEC 268-3:1969 is superseded by IEC 268-3:1988 + A1:1990 + A2:1991 which is harmonized as HD 483.3 S2:1992

NORME INTERNATIONALE

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CEI
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268-2

Deuxième édition
Second edition
1987-06

Equipements pour systèmes électroacoustiques

Deuxième partie: Explication des termes généraux et méthodes de calcul

Sound system equipment

Part 2: Explanation of general terms and calculation methods

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOUND SYSTEM EQUIPMENT

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FOREWORD

1) The formal decisions or agreements of the IEC technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of standards for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This standard has been prepared by IEC Technical Committee No. 84: Equipment and Systems in the Field of Audio, Video and Audiovisual Engineering.

This second edition replaces the first edition of IEC Publication 268-2 (1971).

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

Six Months' Rule	Report on Voting
84(CO)7	84(CO)25

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the above table.

The following IEC Publications are quoted in this standard:

Publication Nos. 268: Sound System Equipment.
268-1 (1985): Part 1: General.
268-3 (1969): Part 3: Sound System Amplifiers.

SOUND SYSTEM EQUIPMENT

Part 2: Explanation of general terms and calculation methods

For the purpose of this standard, the following explanations of general terms and calculation methods apply:

1. General terms

1.1 *Sound system*

An assembly of equipment which in combination enables sound signals or audio-frequency signals to be processed or transmitted.

Such equipment may be, for example, transducers, amplifiers, recorders, etc.

1.2 *Compatibility*

A component of a system is said to be compatible with another component if, when they are connected together, satisfactory operation is obtained.

1.3 *Variable consumption apparatus*

An apparatus in which the power drawn from the supply system may vary significantly during operation, as a function of the signal or the load impedance or of the control settings (excluding power supply switches).

Note. – For some purposes, changes of less than 15% may be insignificant.

1.4 *Noise signal*

A stationary random signal having normal probability distribution of instantaneous values. Unless otherwise stated, the mean value is zero.

Note. – This explanation applies to noise signals used for testing. Noise as an unwanted signal is considered in Clause 6.

1.4.1 *White noise signal*

A noise signal whose energy per unit bandwidth $\left(\frac{\Delta W}{\Delta f}\right)$ is independent of frequency.

1.4.2 *Pink noise signal*

A noise signal whose energy per unit bandwidth $\left(\frac{\Delta W}{\Delta f}\right)$ is inversely proportional to frequency.

1.4.3 *Broadband noise signal*

A noise signal, band-limited by means of a filter with defined amplitude/frequency response whose bandwidth is greater than that of the equipment under test.

Note. – A broadband noise signal may be a band-limited white or pink noise signal, or have some other defined power spectrum.

1.4.4 *Narrowband noise signal*

A noise signal, band-limited by means of a filter with defined amplitude/frequency response, whose bandwidth is small compared with that of the equipment under test.

1.5 *Rated values*

In this standard, the term "rated value" is used in a particular sense. Wherever it is used it means "the value stated by the manufacturer". The word "rated" has this meaning even though it is used in terms such as "rated conditions" or in the name of a characteristic.

1.5.1 *Rated conditions*

When an equipment is to be used or tested it has to be operated under certain conditions which are fixed by the manufacturer. These conditions include electrical, mechanical and climatic conditions, and they cannot, by their nature, be verified by measurement.

Rated conditions for a particular type of equipment generally include some or all of the following:

– *Electrical*
  - Rated power supply voltage(s)
  - Rated power supply frequency
  - Rated source impedance(s)
  - Rated source e.m.f.(s)
  - Rated load impedance(s)

– *Mechanical*
  - Mounting position
  - Ventilation

– *Climatic*
  - Rated ambient temperature ranges for operation and for full performance to specification
  - Rated relative humidity range
  - Rated air pressure range

Note. – Ranges are defined by the extreme values, each of which may be regarded as a separate rated condition.

1.5.2 *Rated value of a characteristic*

In IEC Publication 268, methods of measurement are given for a large number of characteristics. For each of these characteristics the manufacturer is required or permitted to state a value in the specification of equipment.

This stated value is, by definition, the rated value of that characteristic (see Sub-clause 1.5). The use of the term "rated" in this sense is not restricted to a limited set of major characteristics but may be applied to any characteristic for which a method of measurement is given. Since the rated value is the value stated by the manufacturer, the defining title of the "characteristic to be specified" does not, in general, include the word "rated"; the rated value is not something which is measured but is decided by the manufacturer taking into account measurements on many samples of the equipment and theoretical tolerance calculations.

For example, a method of measurement is described in IEC Publication 268-3 for the distortion-limited output power of an amplifier. The rated distortion-limited output power is the value stated by