

SLOVENSKI STANDARD

SIST EN 60318-6:2008

01-oktober-2008

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SIST HD 590 S1:2004

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a Yf]h YbU_cgfb] `j]VfUrcf` `f97`*`\$`%`!`*`&\$`\$+L

Electroacoustics - Simulators of human head and ear - Part 6: Mechanical coupler for the measurements on bone vibrators (IEC 60318-6:2007)

Akustik - Simulatoren des menschlichen Kopfes und Ohres - Teil 6: Mechanischer Kuppler für Messungen an Knochenleitungshörern (IEC 60318-6:2007)

Electroacoustique - Simulateurs de tête et d'oreille humaines - Partie 6: Coupleur mécanique destiné à la mesure des ossivateurs (CEI 60318-6:2007)

Ta slovenski standard je istoveten z: **EN 60318-6:2008**

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English version

**Electroacoustics -
Simulators of human head and ear -
Part 6: Mechanical coupler for the measurement of bone vibrators
(IEC 60318-6:2007)**

Electroacoustique -
Simulateurs de tête et d'oreille humaines -
Partie 6: Coupleur mécanique
destiné à la mesure des ossivibrateurs
(CEI 60318-6:2007)

Akustik -
Simulatoren des menschlichen
Kopfes und Ohres -
Teil 6: Mechanischer Kuppler
für Messungen an Knochenleitungshörern
(IEC 60318-6:2007)

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This European Standard was approved by CENELEC on 2008-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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.

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 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: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 29/615/CDV, future edition 1 of IEC 60318-6, prepared by IEC TC 29, Electroacoustics, was submitted to the IEC-CENELEC parallel Unique Acceptance Procedure and was approved by CENELEC as EN 60318-6 on 2008-06-01.

This European Standard supersedes HD 590 S1:1991.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2009-03-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60318-6:2007 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 60118-9	NOTE	Harmonized as HD 450.9 S1:1987 (not modified).
IEC 60645-1	NOTE	Harmonized as EN 60645-1:2001 (not modified).
ISO 389-3	NOTE	Harmonized as EN ISO 389-3:1998 (not modified).
ISO 266	NOTE	Harmonized as EN ISO 266:1997 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. 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>
BIPM/IEC/ISO/ IFCC/IUPAC/ IUPAP/OIML	1995	Guide to the expression of uncertainty in measurement (GUM)	-	-

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IEC 60318-6

Edition 1.0 2007-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electroacoustics – Simulators of human head and ear –
Part 6: Mechanical coupler for the measurement of bone vibrators**

**Electroacoustique – Simulateurs de tête et d'oreille humaines –
Partie 6: Coupleur mécanique destiné à la mesure des ossivibrateurs**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROACOUSTICS – SIMULATORS OF HUMAN HEAD AND EAR –

Part 6: Mechanical coupler for the measurement of bone vibrators

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60318-6 has been prepared by IEC technical committee 29: Electroacoustics.

This standard cancels and replaces IEC 60373 published in 1990. This first edition constitutes a technical revision.

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

CDV	Report on voting
29/615/CDV	29/628A/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.

A list of all parts of the IEC 60318 series under the general title: *Electroacoustics – Simulators of human head and ear*, can be found on the IEC website.

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

The committee has decided that the contents of this 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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ELECTROACOUSTICS – SIMULATORS OF HUMAN HEAD AND EAR –

Part 6: Mechanical coupler for the measurement of bone vibrators

1 Scope

This part of IEC 60318 describes a mechanical coupler for the measurement of the output force of bone vibrators. The mechanical impedance of the coupler is specified in the frequency range 125 Hz to 8 000 Hz. The coupler is intended for calibration of audiometers using bone vibrators having a plane circular tip area of $175 \text{ mm}^2 \pm 25 \text{ mm}^2$ and for determining the performance of bone conduction hearing aids.

The vibratory force developed by a bone vibrator is not, in general, the same on the coupler as on a person's mastoid. However, the IEC recommends its use as a means for the calibration of specified vibrators used in audiometry and for the exchange of specifications and of data on bone conduction hearing aids.

NOTE Some bone vibrators of hearing aids and some non-standardised bone vibrators still used in audiometry have a curved surface. Users should be aware that those vibrators in general will not be loaded on the mechanical coupler with the same mechanical impedance as the one specified in Table 1 of this standard.

2 Normative reference (standards.iteh.ai)

The following referenced document is indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BIPM, IEC, ISO, IFCC, IUPAC, IUPAP and OIML:1995, *Guide to the expression of uncertainty in measurement (GUM)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

bone-conduction vibrator

bone vibrator

electro-mechanical transducer that transforms electric oscillations into mechanical vibrations and is intended to be coupled to the bony structure of the head, most commonly the mastoid apophysis

3.2

mechanical coupler

device for calibrating bone-conduction vibrators designed to present a specified mechanical impedance to a vibrator applied with a specified static force, and equipped with an electromechanical transducer to enable the vibratory force level at the surface of contact between vibrator and mechanical coupler to be determined

3.3

alternating force level

ten times the logarithm to the base 10 of the ratio of the squared r.m.s. value of the alternating force transmitting the vibration to the square of the reference value of one micronewton