



# SLOVENSKI STANDARD

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### Elektroakustika - 1. del: Oprema za avdiometrijo čistega tona

Electroacoustics - Part 1: Equipment for pure-tone audiometry

Akustik - Audiometer - Teil 1: Reinton-Audiometer

Electroacoustique - Appareils audiométriques - Partie 1: Appareils pour l'audiométrie tonale

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Ta slovenski standard je istoveten z: **EN 60645-1:2015**

[SIST EN 60645-1:2015](https://standards.iteh.ai/catalog/standards/sist/en-60645-1-2015/4149-bc25-e3a84b558a/sist-en-60645-1-2015)

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#### **ICS:**

17.140.50

Elektroakustika

Electroacoustics

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EUROPEAN STANDARD

**EN 60645-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2015

ICS 17.140.50

Supersedes EN 60645-1:2001, EN 60645-4:1995

English Version

**Electroacoustics - Audiometric equipment -  
Part 1: Equipment for pure-tone audiometry  
(IEC 60645-1:2012)**

Électroacoustique - Appareils audiométriques -  
Partie 1: Appareils pour l'audiométrie tonale  
(IEC 60645-1:2012)

Akustik - Audiometer -  
Teil 1: Reinton-Audiometer  
(IEC 60645-1:2012)

This European Standard was approved by CENELEC on 2014-11-05. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 29/754/FDIS, future edition 3 of IEC 60645-1, prepared by IEC/TC 29 "Electroacoustics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60645-1:2015.

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) 2015-08-05
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-11-05

This document supersedes EN 60645-1:2001 and EN 60645-4:1995.

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This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

## iTeh STANDARD PREVIEW Endorsement notice (standards.iteh.ai)

The text of the International Standard IEC 60645-1:2012 was approved by CENELEC as a European Standard without any modification.

SIST EN 60645-1:2015

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

IEC 61260	NOTE	Harmonized as EN 61260.
ISO 389-9	NOTE	Harmonized as EN ISO 389-9.

## 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60268-3	-	Sound system equipment - Part 3: Amplifiers	EN 60268-3	-
IEC 60318-1	-	Electroacoustics - Simulators of human head and ear - Part 1: Ear simulator for the measurement of supra-aural and circumaural earphones	EN 60318-1	-
IEC 60318-3	-	Electroacoustics - Simulators of human head and ear - Part 3: Acoustic coupler for the calibration of supra-aural earphones used in audiometry	EN 60318-3	-
IEC 60318-4	-	Electroacoustics - Simulators of human head and ear - Part 4: Occluded-ear simulator for the measurement of earphones coupled to the ear by means of ear inserts	EN 60318-4	-
IEC 60318-5	-	Electroacoustics - Simulators of human head and ear - Part 5: 2 cm <sup>3</sup> coupler for the measurement of hearing aids and earphones coupled to the ear by means of ear inserts	EN 60318-5	-
IEC 60318-6	-	Electroacoustics - Simulators of human head and ear - Part 6: Mechanical coupler for the measurements on bone vibrators	EN 60318-6	-
IEC 60601-1	-	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance	EN 60601-1	-
IEC 60601-1-2	-	Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements and tests	EN 60601-1-2	-
IEC 60645-2	-	Audiometers - Part 2: Equipment for speech audiometry	EN 60645-2	-
IEC 61672-1	-	Electroacoustics - Sound level meters - Part 1: Specifications	EN 61672-1	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 266	-	Acoustics - Preferred frequencies	EN ISO 266	-
ISO 389-1	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 1: Reference equivalent threshold sound pressure levels for pure tones and supra-aural earphones	EN ISO 389-1	-
ISO 389-2	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 2: Reference equivalent threshold sound pressure levels for pure tones and insert earphones	EN ISO 389-2	-
ISO 389-3	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 3: Reference equivalent threshold force levels for pure tones and bone vibrators	EN ISO 389-3	-
ISO 389-4	1994	Acoustics - Reference zero for the calibration of audiometric equipment - Part 4: Reference levels for narrow-band masking noise	EN ISO 389-4	1998
ISO 389-5	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 5: Reference equivalent threshold sound pressure levels for pure tones in the frequency range 8 kHz to 16 kHz	EN ISO 389-5	-
ISO 389-7	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions	EN ISO 389-7	-
ISO 389-8	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 8: Reference equivalent threshold sound pressure levels for pure tones and circumaural earphones	EN ISO 389-8	-
ISO 4869-1	-	Acoustics - Hearing protectors - Part 1: Subjective method for the measurement of sound attenuation	EN 24869-1	-
ISO 8253-1	2010	Acoustics - Audiometric test methods - Part 1: Pure-tone air and bone conduction audiometry	EN ISO 8253-1	2010
ISO 8253-2	-	Acoustics - Audiometric test methods - Part 2: Sound field audiometry with pure-tone and narrow-band test signals	EN ISO 8253-2	-
ISO 8253-3	-	Acoustics - Audiometric test methods - Part 3: Speech audiometry	EN ISO 8253-3	-



IEC 60645-1

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

Electroacoustics – Audiometric equipment –  
Part 1: Equipment for pure-tone audiometry

Électroacoustique – Appareils audiométriques –  
Partie 1: Appareils pour l'audiométrie tonale

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROACOUSTICS –  
AUDIOMETRIC EQUIPMENT –**

**Part 1: Equipment for pure-tone audiometry**

**FOREWORD**

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International Standard IEC 60645-1 has been prepared by IEC technical committee 29: Electroacoustics.

This third edition cancels and replaces the second edition, published in 2001, and IEC 60645-4 published in 1994. It constitutes an editorial revision.

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

FDIS	Report on voting
29/754/FDIS	29/757/RVD

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 of the IEC 60645 series can be found, under the general title *Electroacoustics*, on the IEC website.

Future standard in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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- replaced by a revised edition, or
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