

STN	Elektroakustika Audiometrické zariadenia Časť 3: Skúšobné signály s krátkym trvaním	STN EN IEC 60645-3 36 8811
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Electroacoustics - Audiometric equipment - Part 3: Test signals of short duration

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/21

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Supersedes EN 60645-3:2007 and all of its amendments
and corrigenda (if any)

English Version

**Electroacoustics - Audiometric equipment - Part 3: Test signals
of short duration
(IEC 60645-3:2020)**Électroacoustique - Appareils audiométriques - Partie 3:
Signaux d'essai de courte durée
(IEC 60645-3:2020)Akustik - Audiometer - Teil 3: Kurzzeit-Hörprüfsignale
(IEC 60645-3:2020)

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EN IEC 60645-3:2020 (E)**European foreword**

The text of document 29/1066/FDIS, future edition 3 of IEC 60645-3, prepared by IEC/TC 29 "Electroacoustics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60645-3:2020.

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IEC 61672-1	NOTE	Harmonized as EN 61672-1
ISO 8253-2	NOTE	Harmonized as EN ISO 8253-2
IEC 60645-1	NOTE	Harmonized as EN 60645-1
IEC 60645-6	NOTE	Harmonized as EN 60645-6
IEC 60645-7	NOTE	Harmonized as EN 60645-7

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 ³ 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 measurement on bone vibrators	EN 60318-6	-
IEC 61260-1	-	Electroacoustics - Octave-band and fractional-octave-band filters - Part 1: Specifications	EN 61260-1	-
ISO 389-6	-	Acoustics - Reference zero for the calibration of audiometric equipment - Part 6: Reference threshold of hearing for test signals of short duration	EN ISO 389-6	-



IEC 60645-3

Edition 3.0 2020-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electroacoustics – Audiometric equipment –
Part 3: Test signals of short duration**

**Électroacoustique – Appareils audiométriques –
Partie 3: Signaux d'essai de courte durée**

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Part 3: Test signals of short duration**

**Électroacoustique – Appareils audiométriques –
Partie 3: Signaux d'essai de courte durée**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROACOUSTICS – AUDIOMETRIC EQUIPMENT –

Part 3: Test signals of short duration

FOREWORD

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International Standard IEC 60645-3 has been prepared by IEC technical committee 29: Electroacoustics.

This third edition cancels and replaces the second edition published in 2007. This edition constitutes a technical revision.

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

- a) new figures of reference signals;
- b) changes in definitions.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
29/1066/FDIS	29/1070/RVD

Full information on the voting for the approval of this document can be found in the report on voting indicated in the above table.

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

A list of all parts of IEC 60645 series, under the general title *Electroacoustics – Audiometric equipment*, can be found on the IEC website.

The committee has decided that the contents of this document 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 document will be

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INTRODUCTION

Developments in the field of hearing measurements for diagnostic, hearing conservation and rehabilitation purposes have resulted in the availability of a wide range of audiometric equipment. In addition, it is possible to consider audiometric equipment in terms of a set of functional units that can be specified independently. By specifying these functional units, it is then possible to specify the performance of other audiometric equipment that uses these units. The IEC 60645 series consists of a number of parts. IEC 60645-3 covers the requirements for reference and other test signals of short duration.

Examples of test methods, where such signals are commonly used, are the recording of auditory evoked potentials and evoked otoacoustic emissions. Reference signals are described in order to provide a basis for calibration and as a recommendation for use when there is no specific reason to have an alternative signal. Measurement methods for short duration acoustic and vibratory test signals are described.

ELECTROACOUSTICS – AUDIOMETRIC EQUIPMENT –

Part 3: Test signals of short duration

1 Scope

This part of IEC 60645 specifies a means of describing the physical characteristics, in terms of electrical waveforms, of audiometric reference and test signals of short duration and methods for their measurement.

The object of this document is to ensure that audiometric stimuli of short duration are specified and measured in the same way and that the calibration of equipment using such signals is carried out using defined methods.

This document does not describe the method of use of short-duration test signals.

2 Normative references

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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*

IEC 60318-5, *Electroacoustics – Simulators of human head and ear – Part 5: 2 cm³ coupler for the measurement of hearing aids and earphones coupled to the ear by means of ear inserts*

IEC 60318-6, *Electroacoustics – Simulators of human head and ear – Part 6: Mechanical coupler for the measurement on bone vibrators*

IEC 61260-1, *Electroacoustics – Octave-band and fractional-octave-band filters – Part 1: Specifications*

ISO 389-6, *Acoustics – Reference zero for the calibration of audiometric equipment – Part 6: Reference threshold of hearing for test signals of short duration*

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