

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Electroacoustics – Simulators of human head and ear –  
Part 7: Head and torso simulator for the measurement of sound sources close to  
the ear**

**Électroacoustique – Simulateurs de tête et d'oreille humaines –  
Partie 7: Simulateur de tête et de torse pour le mesurage des sources sonores à  
proximité de l'oreille**



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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## **ELECTROACOUSTICS – SIMULATORS OF HUMAN HEAD AND EAR –**

### **Part 7: Head and torso simulator for the measurement of sound sources close to the ear**

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This publication contains attached files in the form of 3D PDF files. These files are intended to be used as a complement and do not form an integral part of the publication.

This edition cancels and replaces IEC TS 60318-7:2017. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC TS 60318-7:2017:

- a) changing the title;
- b) extending the scope to sound sources close to the ear.

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

Draft	Report on voting
29/1118/FDIS	29/1121/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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

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# ELECTROACOUSTICS – SIMULATORS OF HUMAN HEAD AND EAR –

## Part 7: Head and torso simulator for the measurement of sound sources close to the ear

### 1 Scope

This part of IEC 60318 describes a head and torso simulator, or manikin, intended for the measurement of sound sources placed close to the ear in the frequency range from 100 Hz to 16 000 Hz.

The manikin described in this document is intended for airborne acoustic measurements only. It is not suitable for measurements which depend upon vibration transmission paths such as bone conduction, or for measurements requiring the simulation of bone or tissue.

This document specifies the manikin in terms of both its geometrical dimensions and its acoustical properties. Only manikins compliant with both sets of specifications are in conformance with this document.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60118-8, *Electroacoustics – Hearing aids – Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions*

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

ISO 3, *Preferred numbers – Series of preferred numbers*

### 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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