
**Meritev mikrofонов – 6. del: Elektrostatični aktuatorji za ugotavljanje
frekvenčnega odziva (IEC 61094-6:2004)**

Measurement microphones – Part 6: Electrostatic actuators for determination of
frequency response (IEC 61094-6:2004)

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Measurement microphones
Part 6: Electrostatic actuators for determination of frequency response
(IEC 61094-6:2004)

Microphones de mesure
Partie 6: Grilles d'entraînement
pour la détermination
de la réponse en fréquence
(CEI 61094-6:2004)

Messmikrofone
Teil 6: Elektrostatische Anregeelektroden
zur Ermittlung des Frequenzgangs
(IEC 61094-6:2004)

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This European Standard was approved by CENELEC on 2004-12-01. 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.

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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 29/562/FDIS, future edition 1 of IEC 61094-6, prepared by IEC TC 29, Electroacoustics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61094-6 on 2004-12-01.

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) | 2005-09-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2007-12-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61094-6:2004 was approved by CENELEC as a European Standard without any modification.

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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 Where 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>
IEC 61094-1	- ¹⁾	Measurement microphones Part 1: Specifications for laboratory standard microphones	EN 61094-1	2000 ²⁾
IEC 61094-2	- ¹⁾	Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique	EN 61094-2	1993 ²⁾
IEC 61094-3	- ¹⁾	Part 3: Primary method for free-field calibration of laboratory standard microphones by the reciprocity technique	EN 61094-3	1995 ²⁾
IEC 61094-5	- ¹⁾	Part 5: Methods for pressure calibration of working standard microphones by comparison	EN 61094-5	2001 ²⁾
ISO/IEC Guide Express	1995	Guide to the expression of uncertainty in measurement (GUM)	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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Microphones de mesure –

Partie 6:
Grilles d'entraînement pour la détermination
de la réponse en fréquence

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Measurement microphones –

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Commission Electrotechnique Internationale
International Electrotechnical Commission
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MEASUREMENT MICROPHONES –

**Part 6: Electrostatic actuators for determination
of frequency response**

FOREWORD

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International Standard IEC 61094-6 has been prepared by IEC technical committee 29: Electroacoustics.

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

FDIS	Report on voting
29/562/FDIS	29/565/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.

IEC 61094 consists of the following parts, under the general title *Measurement microphones*:

- Part 1: Specifications for laboratory standard microphones
- Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique
- Part 3: Primary method for free-field calibration of laboratory standard microphones by the reciprocity technique
- Part 4: Specifications for working standard microphones
- Part 5: Methods for pressure calibration of working standard microphones by comparison
- Part 6: Electrostatic actuators for determination of frequency response

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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MEASUREMENT MICROPHONES –

Part 6: Electrostatic actuators for determination of frequency response

1 Scope

This part of IEC 61094

- gives guidelines for the design of actuators for microphones equipped with electrically conductive diaphragms;
- gives methods for the validation of electrostatic actuators;
- gives a method for determining the electrostatic actuator response of a microphone.

The applications of electrostatic actuators are not fully described within this standard but may include

- a technique for detecting changes in the frequency response of a microphone,
- a technique for determining the environmental influence on the response of a microphone,
- a technique for determining the free-field or pressure response of a microphone without specific acoustical test facilities, by the application of predetermined correction values specific to the microphone model and actuator used,
- a technique applicable at high frequencies not typically covered by calibration methods using sound excitation.

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IEC 61094-2, *Measurement microphones – Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique*

IEC 61094-3, *Measurement microphones – Part 3: Primary method for free-field calibration of laboratory standard microphones by the reciprocity technique*

IEC 61094-5, *Measurement microphones – Part 5: Methods for pressure calibration of working standard microphones by comparison*

ISO/IEC GUIDE EXPRESS: 1995, *Guide to the expression of uncertainty in measurement (GUM)*