

High-voltage test techniques - Part 2: Measuring systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 60060-2:2011 sisaldab Euroopa standardi EN 60060-2:2011 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 28.02.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 28.01.2011.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60060-2:2011 consists of the English text of the European standard EN 60060-2:2011.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 28.01.2011.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English version

**High-voltage test techniques -
Part 2: Measuring systems**
(IEC 60060-2:2010)

Techniques des essais à haute tension -
Partie 2: Systèmes de mesure
(CEI 60060-2:2010)

Hochspannungs-Prüftechnik -
Teil 2: Messsysteme
(IEC 60060-2:2010)

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CENELEC

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

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Foreword

The text of document 42/281/FDIS, future edition 3 of IEC 60060-2, prepared by IEC TC 42, High-voltage testing techniques, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60060-2 on 2011-01-01.

This European Standard supersedes EN 60060-2:1994 + A11:1998.

The significant technical changes with respect to EN 60060-2:1994+A11:1998 are as follows:

- a) The general layout and text was updated and improved to make the standard easier to use.
- b) The standard was revised to align it with EN 60060-1.
- c) The treatment of measurement uncertainty estimation has been expanded.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

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|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2011-10-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2014-01-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60060-2:2010 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 60051 series	NOTE	Harmonized in EN 60051 series (not modified).
IEC 60060-3:2006	NOTE	Harmonized as EN 60060-3:2006 (not modified).
IEC 60071-1:2006	NOTE	Harmonized as EN 60071-1:2006 (not modified).
IEC 60270	NOTE	Harmonized as EN 60270.
IEC 62475	NOTE	Harmonized as EN 62475.
ISO/IEC 17025:2005	NOTE	Harmonized as EN ISO/IEC 17025:2005 (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>
IEC 60052	-	Voltage measurement by means of standard air gaps	EN 60052	-
IEC 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 61083-1	-	Instruments and software used for measurement in high-voltage impulse tests - Part 1: Requirements for instruments	EN 61083-1	-
IEC 61083-2	-	Digital recorders for measurements in high-voltage impulse tests Part 2: Evaluation of software used for the determination of the parameters of impulse waveforms	EN 61083-2	-
ISO/IEC Guide 98-3 2008		Uncertainty of measurement Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)	-	-

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HIGH-VOLTAGE TEST TECHNIQUES –

Part 2: Measuring systems

1 Scope

This part of IEC 60060 is applicable to complete measuring systems, and to their components, used for the measurement of high voltages during laboratory and factory tests with direct voltage, alternating voltage and lightning and switching impulse voltages as specified in IEC 60060-1. For measurements during on-site tests see IEC 60060-3.

The limits on uncertainties of measurements stated in this standard apply to test levels stated in IEC 60071-1:2006. The principles of this standard apply also to higher levels but the uncertainty may be greater.

This standard:

- defines the terms used;
- describes methods to estimate the uncertainties of high-voltage measurements;
- states the requirements which the measuring systems shall meet;
- describes the methods for approving a measuring system and checking its components;
- describes the procedures by which the user shall show that a measuring system meets the requirements of this standard, including the limits set for the uncertainty of measurement.

2 Normative references

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

IEC 60052, *Voltage measurement by means of standard air gaps*

IEC 60060-1, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 61083-1, *Instruments and software used for measurement in high-voltage impulse tests – Part 1: Requirements for instruments*

IEC 61083-2, *Digital recorders for measurement in high-voltage impulse tests – Part 2: Evaluation of software used for the determination of the parameters of impulse waveforms*

ISO/IEC Guide 98-3:2008, *Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurements (GUM)*

NOTE Further related standards, guides, etc. on subjects included in this International Standard are given in the bibliography.

3 Terms and definitions

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