
Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 1. del: Splošne zahteve - Dopolnilo 2

Amendment 2 - Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 1: Allgemeine Anforderungen

Amendement 2 - Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire - Partie 1: Exigences générales

Ta slovenski standard je istoveten z: EN 61010-1:2010/prA2:2025

[SIST EN 61010-1:2010/oprA2:2025](https://standards.net/en/catalog/standards/sist/61010-1:2010/oprA2:2025)

ICS:

19.080	Električno in elektronsko preskušanje	Electrical and electronic testing
71.040.10	Kemijski laboratoriji. Laboratorijska oprema	Chemical laboratories. Laboratory equipment

SIST EN 61010-1:2010/oprA2:2025

en,fr,de



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COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:

IEC 61010-1/AMD2 ED3

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2025-05-30

SUPERSEDES DOCUMENTS:

66/818/CD, 66/824B/CC

IEC TC 66 : SAFETY OF MEASURING, CONTROL AND LABORATORY EQUIPMENT	
SECRETARIAT: United Kingdom	SECRETARY: Ms Stephanie Lavy
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S): TC 66 Horizontal Group Safety
ASPECTS CONCERNED: Safety	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:

Amendment 2 - Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

PROPOSED STABILITY DATE: 2027

NOTE FROM TC/SC OFFICERS:

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FOREWORD

This second amendment to the third edition builds on the first amendment to the third edition, published in 2016. This amendment constitutes a technical revision.

Full information on the voting for the approval of this International Standard Amendment 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 the IEC 61010 series, under the general title *Safety requirements for electrical equipment for measurement, control, and laboratory use*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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[SIST EN 61010-1:2010/oprA2:2025](https://standards.iteh.ai/catalog/standards/sist/b66d7f50-a9f3-413a-bd4f-07ef0571b034/sist-en-61010-1-2010-opra2-2025)

<https://standards.iteh.ai/catalog/standards/sist/b66d7f50-a9f3-413a-bd4f-07ef0571b034/sist-en-61010-1-2010-opra2-2025>

INTRODUCTION

Replace the text of the existing introduction with the following text:

This document specifies the safety requirements that are generally applicable to all equipment within its scope. For certain types of equipment, these requirements will be supplemented or modified by the special requirements of the following parts 2 which must be read in conjunction with the requirements of this document.

IEC 61010-2-010 Particular requirements for laboratory equipment for the heating of materials

IEC 61010-2-011 Particular requirements for refrigerating equipment

IEC 61010-2-012 Particular requirements for climatic and environmental testing and other temperature conditioning equipment

IEC 61010-2-020 Particular requirements for laboratory centrifuges

IEC 61010-2-030 Particular requirements for equipment having testing or measuring circuits

IEC 61010-2-032 Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement

IEC 61010-2-033 Particular requirements for hand-held multimeters and other meters for domestic and professional use, capable of measuring mains voltage

IEC 61010-2-034 Particular requirements for measurement equipment for insulation resistance and test equipment for electric strength

IEC 61010-2-040 Particular requirements for sterilizers and washer-disinfectors used to treat medical materials

IEC 61010-2-051 Particular requirements for laboratory equipment for mixing and stirring

IEC 61010-2-061 Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

IEC 61010-2-081 Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes

IEC 61010-2-091 Particular requirements for cabinet X-ray systems

IEC 61010-2-101 Particular requirements for in vitro diagnostic (IVD) medical equipment

IEC 61010-2-130 Particular requirements for equipment intended to be used in educational establishments by children

IEC 61010-2-201 Particular requirements for control equipment

IEC 61010-2-202 Particular requirements for electrically operated valve actuators

Attention is also drawn to the following standard:

IEC 61010-031 Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 031: Safety requirements for hand-held and hand-manipulated probe assemblies for electrical test and measurement

SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE –

Part 1: General requirements

1 Scope and object

1.1 Scope

1.1.1 Equipment included in scope

Replace the first two paragraphs with the following paragraph:

This document specifies general safety requirements for the following types of electrical equipment and their accessories, wherever they are intended to be used.

Delete the last sentence of note 1.

In the second paragraph of item a), replace the word “standard” with the word “document”.

Replace the two paragraphs of item c) with the following paragraph:

This is equipment which measures, indicates, monitors, inspects or analyses materials, or is used to prepare materials. This equipment may also be used in areas other than laboratories.

Add the following two paragraphs at the end of this subclause:

This group safety publication is primarily intended to be used as a product safety standard for the products mentioned in the scope but shall also be used by technical committees in the preparation of their publications for products similar to those mentioned in the scope of this document, in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51.

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications and/or group safety publications in the preparation of its publications.

1.1.2 Equipment excluded from scope

Replace the text of this subclause with the following text:

This document does not apply to equipment within the scope of:

- a) IEC 60335-1 (Household and similar electrical appliances);
- b) IEC 60364-1 (Electrical installations of buildings);
- c) IEC 61439-1 (Low-voltage switchgear and control gear assemblies);
- d) IEC 60601-1 (Medical electrical equipment);
- e) IEC 62368-1 (Audio/video, information and communication technology equipment, except as specified in 14.1);
- f) IEC 61558-1 (Power transformers, power supply units and similar);
- g) IEC 61010-031 (Hand-held probe assemblies);
- h) IEC 61243-3 (Live working – Voltage detectors – Part 3: Two-pole low-voltage type).

1.1.3 Computing equipment

Replace in two locations the word “standard” with the word “document”.

Delete the note.

Add the following new clause 1.1.4

1.1.4 Detection or sensing equipment used for signalling or alarms

This document applies to equipment intended to detect and signal an imminent hazardous level of physical or electrical quantities only when used in conjunction with a standard providing additional requirements for performance and reliability (see 1.2.2). Where no such standard exists, a RISK assessment procedure is specified in Clause 17.

NOTE 1 Detecting an imminent hazard is understood to include measuring, sensing or other methods of detecting physical or electrical quantities with the intent of identifying a HAZARDOUS SITUATION.

NOTE 2 Signal is understood to include signalling, safety alarm initiation, notification and release, or other methods of signalling when an imminent hazard has been detected. Examples include signalling beacons, lights, audible alarms and sirens or automatic initiation of hazardous level mitigations such as ventilation or shutdown.

NOTE 3 Examples of standards that can be used in conjunction with this document (IEC 60079-29-1, IEC 62990-1).

1.2 Objects

Replace the existing title with this following new title:

1.2 Aspects**1.2.1 Aspects included in scope**

Replace the two first paragraphs with the following two new paragraphs:

The purpose of the requirements of this document is to ensure that HAZARDS to the OPERATOR, SERVICE PERSONNEL, and the surrounding area are reduced to a tolerable level. This document is intended to be used in conjunction with the manufacturer's process of RISK assessment and RISK reduction but not to replace it.

Requirements for protection against particular types of HAZARD are given in Clauses 6 to 13, and 16, as follows:

Replace item f) of the second paragraph with the following new item f):

f) effects of radiation, sonic and ultrasonic pressure (see Clause 12);

Add a new item h):

h) HAZARDS related to the use and REASONABLY FORESEEABLE MISUSE of the equipment (see Clause 16).

In the last paragraph, replace Clause 16 with Clause 17

1.2.2 Aspects excluded from scope

In the first paragraph, replace the word “standard” with the word “document”.