

**SLOVENSKI STANDARD
SIST EN 61010-2-030:2010****01-december-2010****Nadomešča:****OSIST prEN 61010-2-030:2004**

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-030. del: Posebne zahteve za preskusna in merilna vezja (IEC 61010-2-030:2010)

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits (IEC 61010-2-030:2010)

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Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-030: Besondere Bestimmungen für Prüf- und Messkreise (IEC 61010-2-030:2010)

[SIST EN 61010-2-030:2010](https://standards.iteh.ai/catalog/standards/sist/e7f25ac5-dcfl-4b9c-9396-sist/en/61010-2-030-2010)[https://standards.iteh.ai/catalog/standards/sist/e7f25ac5-dcfl-4b9c-9396-](https://standards.iteh.ai/catalog/standards/sist/e7f25ac5-dcfl-4b9c-9396-sist/en/61010-2-030-2010)

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire - Partie 2-030: Prescriptions particulières pour les circuits de test et de mesure (CEI 61010-2-030:2010)

Ta slovenski standard je istoveten z: EN 61010-2-030:2010**ICS:**

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

SIST EN 61010-2-030:2010**en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61010-2-030

October 2010

ICS 19.080; 71.040.10

English version

**Safety requirements for electrical equipment for measurement, control,
and laboratory use -**

**Part 2-030: Particular requirements for testing and measuring circuits
(IEC 61010-2-030:2010)**

Règles de sécurité pour appareils
électriques de mesure, de régulation et
de laboratoire -
Partie 2-030: Exigences particulières pour
les circuits de test et de mesure
(CEI 61010-2-030:2010)

Sicherheitsbestimmungen für elektrische
Mess-, Steuer-, Regel- und Laborgeräte -
Teil 2-030: Besondere Bestimmungen für
Prüf- und Messkreise
(IEC 61010-2-030:2010)

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This European Standard was approved by CENELEC on 2010-10-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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 66/417/FDIS, future edition 1 of IEC 61010-2-030, prepared by IEC TC 66, Safety of measuring, control and laboratory equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61010-2-030 on 2010-10-01.

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:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-10-01

This Part 2-030 is to be used in conjunction with the latest edition of EN 61010-1, Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements. It was established on the basis of the 2010 edition of EN 61010-1. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This Part 2-030 supplements or modifies the corresponding clauses in EN 61010-1 so as to convert it into the European Standard: *Particular requirements for testing and measuring circuits*.

Where a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this part states “addition”, “modification”, “replacement”, or “deletion” the relevant requirement, test specification or note in Part 1 should be adapted accordingly.

In the second edition of EN 61010-1, the requirements for testing and measuring circuits were included in Part 1 itself. In the third edition of EN 61010-1, these requirements have been removed from Part 1 and have become the basis for the requirements in this Part 2.

In addition to the requirements removed from Part 1, the following major requirements have been added to this standard. Numerous other changes have also been made.

- The terminology for MEASUREMENT CATEGORY I has changed. In this Part 2, it is termed “not rated for measurements within MEASUREMENT CATEGORIES II, III, or IV”.
- CLEARANCES and CREEPAGE DISTANCES have been added for unmated measuring circuit TERMINALS.
- Requirements have been added for specialized measuring circuit TERMINALS.
- Requirements for TRANSIENT OVERVOLTAGE limiting devices have been revised.
- Requirements have been revised and added pertaining to REASONABLY FORESEEABLE MISUSE of measuring circuits, including disconnection of the protective earth and usage of the equipment in a manner that might cause arc flash.
- Insulation requirements for measuring circuits have been primarily located in Annex K.
- Annex AA has been added to describe the characteristics of MEASUREMENT CATEGORIES.
- Annex BB has been added to describe hazards that may be encountered when using measuring circuits.

NOTE 1 The following print types are used:

- requirements: in roman type;

- *conformity and test: in italic type;*
- NOTES: in small roman type;
- terms used throughout this standard which have been defined in Clause 3: SMALL ROMAN CAPITALS;

NOTE 2 Subclauses, figures, tables and notes which are additional to those in Part 1 are numbered starting from 101. Additional Annexes are numbered AA and BB.

Annex ZA of Part 1 is applicable.

Endorsement notice

The text of the International Standard IEC 61010-2-030:2010 was approved by CENELEC as a European Standard without any modification.

Bibliography

Add the following reference to the Bibliography of Part 1:

EN 41003:1999

IEC 61010-2-032

NOTE Harmonized as EN 61010-2-032

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IEC 61010-2-030

Edition 1.0 2010-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Safety requirements for electrical equipment for measurement, control, and laboratory use –
Part 2-030: Particular requirements for testing and measuring circuits**

**Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire –
Partie 2-030: Exigences particulières pour les circuits de test et de mesure**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX



ICS 19.080; 71.040.10

ISBN 978-2-88910-988-3

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-030: Particular requirements for testing and measuring circuits

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61010-2-030 has been prepared by IEC technical committee 66: Safety of measuring, control and laboratory equipment.

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

FDIS	Report on voting
66/417/FDIS	66/427/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 Part 2-030 is to be used in conjunction with the latest edition of IEC 61010-1. It was established on the basis of the third edition (2010) of IEC 61010-1. Consideration may be given to future editions of, or amendments to, IEC 61010-1.

This Part 2-030 supplements or modifies the corresponding clauses in IEC 61010-1 so as to convert that publication into the IEC standard: *Particular requirements for testing and measuring circuits*.

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This publication 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 publication will remain unchanged until the stability 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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