SLOVENSKI STANDARD
SIST EN 61010-2-061:2004

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Nadomešča:
SIST EN 61010-2-061:1999

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

Safety requirements for electrical equipment for measurement, control, and laboratory use -- Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte -- Teil 2-061: Besondere Anforderungen an Labor- Atomspektrometer mit thermischer Atomisierung und Ionisation

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire -- Partie 2-061: Prescriptions particulières pour spectromètres de laboratoire avec vaporisation et ionisation thermiques

Ta slovenski standard je istoveten z: **EN 61010-2-061:2003**

ICS:

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

SIST EN 61010-2-061:2004 **en**

EUROPEAN STANDARD **EN 61010-2-061**

NORME EUROPÉENNE

EUROPÄISCHE NORM October 2003

ICS 19.080; 71.040.20 Supersedes EN 61010-2-061:1996

English version

Safety requirements for electrical equipment for measurement, control, and laboratory use
Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization
(IEC 61010-2-061:2003)

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire
Partie 2-061: Prescriptions particulières pour spectromètres de laboratoire avec vaporisation et ionisation thermiques
(CEI 61010-2-061:2003)

Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte
Teil 2-061: Besondere Anforderungen an Labor-Atomspektrometer mit thermischer Atomisierung und Ionisation
(IEC 61010-2-061:2003)

This European Standard was approved by CENELEC on 2003-10-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

Ref. No. EN 61010-2-061:2003 E

Foreword

The text of document 66/326/FDIS, future edition 2 of IEC 61010-2-061, 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 61010-2-061 on 2003-10-01.

This European Standard supersedes EN 61010-2-061:1996.

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)	2004-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-10-01

This Part 2-061 is intended to be used in conjunction with EN 61010-1:2001.

This Part 2-061 supplements or modifies the corresponding clauses in EN 61010-1 so as to convert it into the European Standard: Safety requirements for laboratory atomic spectrometers with thermal atomization and ionization.

Where a particular clause or subclause of Part 1 is not mentioned in this part 2, that clause or subclause applies as far as is reasonable. Where this part 2 states "addition", "modification", "replacement" or "deletion" the relevant text of Part 1 is to be adapted accordingly.

In this standard:

1) the following print types are used:
   - requirements: in roman type;
   - NOTES: in smaller roman type;
   - *conformity and test: in italic type;*
   - terms used throughout this standard which have been defined in Clause 3: SMALL ROMAN CAPITALS;

2) subclauses, figures, tables and notes which are additional to those in Part 1 are numbered starting from 101.

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex F is normative and annex H is informative.

Endorsement notice

The text of the International Standard IEC 61010-2-061:2003 was approved by CENELEC as a European Standard without any modification.

INTERNATIONAL STANDARD

IEC 61010-2-061

Second edition
2003-06

GROUP SAFETY PUBLICATION

Safety requirements for electrical equipment for measurement, control, and laboratory use –

Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire –

Partie 2-061: Prescriptions particulières pour spectromètres de laboratoire avec vaporisation et ionisation thermiques

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61010-2-061 has been prepared by IEC technical committee 66: Safety of measuring, control and laboratory equipment.

This second edition cancels and replaces the first edition published in 1995, of which it constitutes a technical revision.

It has the status of a group safety publication in accordance with IEC Guide 104.

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

FDIS	Report on voting
66/326/FDIS	66/331/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.

This Part 2-061 is intended to be used in conjunction with IEC 61010-1. It was established on the basis of the second edition (2001). Consideration may be given to future editions of, or amendments to, IEC 61010-1.

This Part 2-061 supplements or modifies the corresponding clauses in IEC 61010-1 so as to convert that publication into the IEC standard: *Safety requirements for laboratory atomic spectrometers with thermal atomization and ionization.*

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" or "replacement", or "deletion", the relevant requirement, test specification or note in Part 1 should be adapted accordingly.

In this standard:

1) the following print types are used:
   - requirements: in roman type;
   - NOTES: in small roman type;
   - *conformity and test: in italic type;*
   - terms used throughout this standard which have been defined in clause 3: SMALL ROMAN CAPITALS;
2) subclauses, figures, tables and notes which are additional to those in Part 1 are numbered starting from 101.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

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

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

Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization

1 Scope and object

This clause of Part 1 is applicable except as follows:

1.1 Scope

1.1.1 Equipment included in scope

Replacement:

This part of IEC 61010 applies to electrically powered laboratory atomic spectrometers with thermal atomization.

NOTE 1 Examples include atomic absorption spectrometers, emission flame photometers, atomic fluorescence spectrophotometers, inductively coupled plasma spectrometers, microwave coupled plasma spectrometers and mass spectrometers, all with thermal atomization and ionization (including tubing and connectors which are provided by the manufacturer for connection to external supplies).

NOTE 2 If all or part of the equipment falls within the scope of one or more other part 2 standards of IEC 61010 as well as within the scope of this standard, it will also need to meet the requirements of those other part 2 standards.

1.1.2 Equipment excluded from scope

Addition:

Add as the first paragraph:

This standard does not apply to thermal atomization detectors (flame ionization detectors) used in gas chromatography.

2 Normative references

This clause of Part 1 is applicable.

3 Definitions

This clause of Part 1 is applicable except as follows:

Additional definitions:

3.2.101
SPRAY CHAMBER
chamber in which droplets of sample in aerosol are allowed to separate so that the droplets of necessary size can be passed onward to the burner, with the remainder draining to waste

3.2.102
GAS LOCK
device to allow drainage of waste sample liquid, and to prevent unintentional escape of gas from the SPRAY CHAMBER through its drain outlet (see for example Figure 101)