

**OHUTUSNÕUDED ELEKTRILISTELE MÕÕTMIS-,
JUHTIMIS- JA LABORATOORIUMISEADMETELE. OSA 2-
081: ERINÕUDED LABORATOORSETELE
AUTOMAATSETELE JA POOLAUTOMAATSETELE
ANALÜÜSI- JA MUUOTSTARBELISTELE SEADMETELE**

**Safety requirements for electrical equipment for
measurement, control and laboratory use - Part 2-081:
Particular requirements for automatic and semi-
automatic laboratory equipment for analysis and other
purposes**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61010-2-081:2015 sisaldab Euroopa standardi EN 61010-2-081:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 61010-2-081:2015 consists of the English text of the European standard EN 61010-2-081:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.03.2015.	Date of Availability of the European standard is 20.03.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

**Safety requirements for electrical equipment for measurement,
control and laboratory use - Part 2-081: Particular requirements
for automatic and semi-automatic laboratory equipment for
analysis and other purposes
(IEC 61010-2-081:2015)**

Règles de sécurité pour appareils électriques de mesurage,
de régulation et de laboratoire - Partie 2-081: Exigences
particulières pour les appareils de laboratoire, automatiques
et semi-automatiques, destinés à l'analyse et autres usages
(IEC 61010-2-081:2015)

Sicherheitsbestimmungen für elektrische Mess-, Steuer-,
Regel- und Laborgeräte - Teil 2-081: Besondere
Anforderungen an automatische und semiautomatische
Laborgeräte für Analysen und andere Zwecke
(IEC 61010-2-081:2015)

This European Standard was approved by CENELEC on 2015-02-27. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 66/544/FDIS, future edition 2 of IEC 61010-2-081, prepared by IEC/TC 66 "Safety of measuring, control and laboratory equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61010-2-081:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-11-27
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2018-02-27
standards conflicting with the
document have to be withdrawn

This document supersedes EN 61010-2-081:2002.

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 61010-2-081:2015 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

Annex ZA of EN 61010-1:2010 applies.

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

Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes

1 Scope and object

This clause of part 1 is applicable except as follows:

1.1.1 Equipment included in scope

Replacement:

Replace the text by the following:

This part of IEC 61010 applies to automatic and semi-automatic laboratory equipment for analysis and other purposes.

Automatic and semi-automatic laboratory equipment consists of instruments or systems for measuring or modifying one or more characteristics or parameters of samples, performing the complete process or parts of the process without manual intervention. Equipment forming part of such a system is within the scope of this standard.

Examples of equipment within the scope of this standard include:

- analytical equipment;
- automatic sampler (pipettor, aliquoter);
- equipment for sample replication and amplification.

NOTE 1 In the case of analytical equipment the complete process usually includes the following steps:

- taking a specific quantity of the sample;
- preparing the sample by chemical, thermal, mechanical or other means;
- measurement;
- display, transmission or printing of the results of measurement.

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, considerations have to be given to those other part 2 standards.

1.1.2 Equipment excluded from scope

Addition:

Add the following item:

- aa) IEC 61010-2-101 (IVD Equipment)

1.2 Object

1.2.1 Aspects included in scope

Addition:

Add the following items: