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**Safety requirements for electrical equipment for measurement, control and laboratory use -- Part 2-010: Particular requirements for laboratory equipment for the heating of materials (IEC 61010-2-010:1992)**

Safety requirements for electrical equipment for measurement, control and laboratory use -- Part 2-010: Particular requirements for laboratory equipment for the heating of materials

**iTeh STANDARD PREVIEW**  
Sicherheitsbestimmungen für elektrische Meß-, Steuer-, Regel- und Laborgeräte -- Teil 2-010: Besondere Anforderungen an Laborgeräte für das Erhitzen von Stoffen

**SIST EN 61010-2-010:1999**  
Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire -- Partie 2-010: Prescriptions particulières pour appareils de laboratoire utilisés pour l'échauffement des matières

**Ta slovenski standard je istoveten z: EN 61010-2-010:1994**

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**ICS:**

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

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ICS 71.040.20

Descriptors: Electrical equipment for measurement, electrical equipment for control, electrical equipment for laboratory use, laboratory equipment for the heating of materials, safety requirements

## ENGLISH VERSION

Safety requirements for electrical equipment for measurement, control and laboratory use  
Part 2-010: Particular requirements for laboratory equipment for the heating of materials  
(IEC 1010-2-010:1992, modified)

Règles de sécurité pour appareils électriques de mesure, de régulation et de laboratoire  
Partie 2-010: Prescriptions particulières pour appareils de laboratoire utilisés pour l'échauffement des matières  
(CEI 1010-2-010:1992, modifiée)

Sicherheitsanforderungen an elektrische Meß-, Steuer-, Regel- und Laborgeräte  
Teil 2-010: Besondere Anforderungen an Labor-Elektrowärmegeräte  
(IEC 1010-2-010:1992, modifiziert)

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This European Standard was approved by CENELEC on 1994-03-08. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 1010-2-010:1992 could be accepted without textual changes, has shown that some common modifications were necessary for the acceptance as European Standard.

The reference document, together with the common modifications prepared by the CENELEC Reporting Secretariat SR 66, was submitted to the CENELEC members for formal vote.

The text of the draft was approved by CENELEC as EN 61010-2-010 on 8 March 1994.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-03-15
- latest date of withdrawal of conflicting national standards (dow) 1995-03-15

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For products which have complied with the relevant national standard before 1995-03-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-03-15.

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ENDORSEMENT NOTICE

The text of the International Standard IEC 1010-2-010:1992 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

5.4.4.101 Replace Table 1A by

Table 1A - Time-temperature conditions

Absolute pressure kPa	Corresponding steam temperature		Minimum hold time min
	Nominal °C	Range °C	
325	136,0	134 - 138	3
250	127,5	126 - 129	10
215	122,5	121 - 124	15
175	116,5	115 - 118	30

NOTE - "Minimum hold time" means the time the contaminant is at steam temperature.

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1010-2-010

Première édition  
First edition  
1992-08

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PUBLICATION GROUPEE DE SÉCURITÉ  
GROUP SAFETY PUBLICATION

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

**Partie 2-010:**

Prescriptions particulières pour appareils de  
laboratoire utilisés pour l'échauffement des matières  
(standards.iteh.ai)

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

**Part 2-010:**

Particular requirements for laboratory equipment  
for the heating of materials

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Commission Electrotechnique Internationale  
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Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 2-010: Particular requirements for laboratory equipment  
for the heating of materials**

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This Particular International Standard has been prepared by Sub-Committee 66E: Safety of measuring, control and laboratory equipment, of IEC Technical Committee No. 66: Electrical and electronic test and measuring instruments, systems and accessories.

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:

DIS	Report on Voting
66E(CO)10	66E(CO)16

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the above table.

This Part 2 is intended to be used in conjunction with IEC 1010-1. It was established on the basis of the first edition (1990) and its Amendment 1 (1991). Consideration may be given to future editions of, or amendments to, IEC 1010-1.

This Part 2 supplements or modifies the corresponding clauses in IEC 1010-1 so as to convert that publication into the IEC standard: Safety requirements for laboratory equipment for the heating of materials.

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

Annex AA is for information only.

In this standard:

1) the following print types are used:

- requirements: in roman type;
- NOTES: in small roman type;
- *compliance: in italic type;*
- terms used throughout this standard which have been defined in clause 3: SMALL ROMAN CAPITALS.

2) subclauses or figures which are additional to those in Part 1 are numbered starting from 101; additional annexes are lettered AA, BB, etc.

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

## Part 2-010: Particular requirements for laboratory equipment for the heating of materials

### 1 Scope and object

This clause of Part 1 is applicable except as follows:

#### 1.1 Scope

*Replacement:*

This Part 2 applies only to electrically powered laboratory equipment for the heating of materials.

#### 1.1.2 Equipment excluded from scope

*Addition:*

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- equipment for the heating and ventilation of laboratories;
  - sterilizing equipment;
  - heating equipment which the OPERATOR is intended to enter, and which is large enough for the OPERATOR to remain inside with the door or doors closed.

### 2 Normative references

This clause of Part 1 is applicable.

### 3 Definitions

This clause of Part 1 is applicable.

### 4 Tests

This clause of Part 1 is applicable except as follows:

#### 4.3.2 State of equipment

*Addition:*

NOTE - In case of doubt, a test may have to be made with more than one combination of conditions.