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JUHTIMIS- JA LABORATOORIUMISEADMETELE. OSA
2-020: ERINÕUDED LABORATOORSETELE
TSENTRIFUUGIDELE

Safety requirements for electrical equipment for
measurement, control, and laboratory use - Part 2-020:
Particular requirements for laboratory centrifuges

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61010-2-020:2017 sisaldab Euroopa standardi EN 61010-2-020:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 61010-2-020:2017 consists of the English text of the European standard EN 61010-2-020:2017.
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 28.04.2017.	Date of Availability of the European standard is 28.04.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 19.080, 71.040.10

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EUROPEAN STANDARD

EN 61010-2-020

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2017

ICS 19.080; 71.040.10

Supersedes EN 61010-2-020:2006

English Version

**Safety requirements for electrical equipment for measurement,
control, and laboratory use - Part 2-020: Particular requirements
for laboratory centrifuges
(IEC 61010-2-020:2016)**

Règles de sécurité pour appareils électriques de mesurage,
de régulation et de laboratoire - Partie 2-020: Exigences
particulières pour centrifugeuses de laboratoire
(IEC 61010-2-020:2016)

Sicherheitsbestimmungen für elektrische Mess-, Steuer-,
Regel- und Laborgeräte - Teil 2-020: Besondere
Anforderungen an Laborzentrifugen
(IEC 61010-2-020:2016)

This European Standard was approved by CENELEC on 2016-07-01. 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 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.

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



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

European foreword

The text of document 66/542/CDV, future edition 3 of IEC 61010-2-020, 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 61010-2-020:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-10-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-04-28

This document supersedes EN 61010-2-020:2006.

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 document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Endorsement notice

The text of the International Standard IEC 61010-2-020:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standards indicated:

Addition

IEC 60034 (series) NOTE Harmonized as EN 60034 (series).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Addition

<u>Publication</u>	<u>Year</u> series	<u>Title</u>	<u>EN/HD</u>	<u>Year</u> series
ISO 3864		Graphical symbols - Safety colours and safety signs - Part 1: Design principles for safety signs and safety markings		

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

Part 2-020: Particular requirements for laboratory centrifuges

1 Scope and object

This clause of Part 1 is applicable except as follows:

1.1.1 Scope

Replacement:

This Part 2 is applicable to electrically powered LABORATORY CENTRIFUGES.

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 its publications for products similar to those mentioned in the scope of this standard, in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51.

NOTE 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 the following new item:

- aa) IEC 60034 (Rotating electrical machinery);

1.2 Object

1.2.1 Aspects included in scope

Addition:

Add the following new items:

- aa) contact with moving parts (see 7.3);
- bb) LABORATORY CENTRIFUGE movement during any DISRUPTION (see 7.3.101);
- cc) high energy chemical reaction after ROTOR DISRUPTION (see 7.7.2.2 l);
- dd) ineffectiveness of BIOSEALS (see 13.101)

1.2.2 Aspects excluded from scope

Addition:

Add the following new items:

- aa) additional precautions which may need to be observed when centrifuging materials which are flammable or explosive (see 5.4.101);