



STANDARDISERINGEN I SVERIGE
SWEDISH STANDARDS INSTITUTION

Handläggande organ

Svenska Elektriska Kommissionen, SEK

SVENSK STANDARD SS-EN 61 010-2-020

SVENSKA ELEKTROTEKNISKA NORMER, SEN

Fastställt

1995-01-13

Utgåva

1

Sida

1 (1+3+26)

Ingår i

SEK Översikt 66

Registrering

Reg 443 50 36

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**Elektrisk utrustning för mätning, styrning och för
laboratorieändamål -
Säkerhet -
Del 2-020: Särskilda fordringar på laboratoriecentrifuger**

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

Som svensk standard gäller europastandarden EN 61 010-2-020: 1994. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61 010-2-020: 1994.

Nationellt förord

Europastandarden EN 61 010-2-020: 1994

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 1010-2-020, First edition, 1992 - Safety requirements for electrical equipment for measurement, control and laboratory use -
Part 2-020: Particular requirements for laboratory centrifuges**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden skall användas tillsammans med SS-EN 61 010-1, utgåva 1, 1993, Elektrisk utrustning för mätning, styrning och för laboratorieändamål, Del 1: Allmänna fordringar.

Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.
Postadress: SIS, Box 3295, 103 66 Stockholm
Telefon: 08 - 613 52 00. Telefax: 08 - 411 70 35

Upplysningar om **sakinnehållet** i standarden lämnas av SEK.
Telefon: 08 - 750 78 20. Telefax: 08 - 751 84 70

Prisgrupp R

Tryckt i februari 1995

ICS 71.040.20

Descriptors: Electrical equipment for measurement, electrical equipment for control, electrical equipment for laboratory use, laboratory centrifuges, safety requirements

ENGLISH VERSION

Safety requirements for electrical equipment for measurement, control and laboratory use
Part 2-020: Particular requirements for laboratory centrifuges
(IEC 1010-2-020, modified)

Règles de sécurité pour
appareils électriques de
mesurage, de régulation et de
laboratoire
Partie 2-020: Prescriptions
particulières pour
centrifugeuses de laboratoire
(CEI 1010-2-020, modifiée)

Sicherheitsanforderungen an
elektrische Meß-,
Steuer-, Regel- und
Laborgeräte
Teil 2-020: Besondere
Anforderungen an
Laborzentrifugen
(IEC 1010-2-020, modifiziert)

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 1010-2-020:1992 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 61010-2-020 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

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.

The following publication is quoted in this standard:

ISO 3864-1984: Safety colours and safety signs.

ENDORSEMENT NOTICE

The text of the International Standard IEC 1010-2-020:1992 was approved by CENELEC as a European Standard with agreed common modifications as given below.

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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 Scope

Replacement:

This Part 2 is applicable to electrically powered LABORATORY CENTRIFUGES.

1.1.1 *Aspects excluded from scope*

Addition:

- additional precautions which may need to be observed when centrifuging materials which are flammable or explosive (see 5.4.101);
- additional precautions which may need to be observed when centrifuging materials that chemically interact vigorously (see 5.4.101).

1.1.2 *Equipment excluded from scope*

Addition:

- rotating electrical machinery within the scope of IEC 34;
- CENTRIFUGES (used in explosive atmospheres) within the scope of IEC 79.

1.2 Object

Addition:

- contact with moving parts (see 7.2);
- CENTRIFUGE movement during any DISRUPTION (see 7.3.101);
- expelled parts (see 7.5);
- small particles from ROTOR ASSEMBLIES, expelled in air exhaust systems (see 7.5.104);
- high energy chemical reaction after ROTOR DISRUPTION (see 7.5.105);
- ineffectiveness of BIOSEALS (see 13.101).

1.4 *Environmental conditions*

Modification:

Modify the third dash as follows:

- temperature +2 °C to +40 °C;

2 **Normative references**

This clause of Part 1 is applicable except as follows:

Addition:

ISO 3864: 1984, *Safety colours and safety signs*.