

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

Part 2-020: Particular requirements for laboratory centrifuges

The European Standard EN 61010-2-020:1994, including amendment A1:1996, has the status of a British Standard

ICS 71.040.20

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Laboratory Apparatus Standards Policy Committee (LBC/-) to Technical Committee LBC/21 upon which the following bodies were represented:

- Agricultural and Food Research Council
- Association of Clinical Pathologists
- BLWA Ltd. (The Association of the Laboratory Supply Industry)
- Biochemical Society
- CLEAPSS School Science Service
- Chemical Industries' Association
- Department of Health
- Health and Safety Executive
- Institute of Medical Laboratory Sciences
- Medical Research Council
- Ministry of Defence
- Royal College of Pathologists
- Universities Safety Association

This British Standard, having been prepared under the direction of the Laboratory Apparatus Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 November 1993

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The following BSI references relate to the work on this standard:
Committee reference LBC/21
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Amendments issued since publication

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National foreword

This British Standard has been prepared by Technical Committee LBI/21 and is the English language version of EN 61010-2-020:1994 *Safety requirements for electrical equipment for measurements, control, and laboratory use —*

Part 2-020: Particular requirements for laboratory centrifuges, including amendment A1:1996, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 1010-2-020:1992, including amendment 1:1996, published by the International Electrotechnical Commission (IEC).

This British Standard was first published as BS 7687-2.20:1993 (identical with IEC 1010-2-020:1992), which supersedes BS 4402:1982 and which was amended in 1995, to renumber the standard as BS EN 61010-2-020, when EN 61010-2-020 was published.

This British Standard is to be read in conjunction with BS EN 61010-1:1993 *Safety requirements for electrical equipment for measurement, control and laboratory use — Part 1: General requirements*, including amendment 1:1995, which it supplements or modifies. The many references to Part 1 should be read as references to BS EN 61010-1:1993 and amendment 1:1995. The requirements of this British Standard take precedence over those of BS EN 61010-1:1993.

The numbers of the clauses in this standard refer to the related clauses in BS EN 61010-1:1993. Clauses or subclauses which are additional to those of BS EN 61010-1:1993 are numbered starting from 101; additional annexes are lettered AA and BB. The changes from the text of BS EN 61010-1:1993 are specified by the use of the following words.

“Replacement” means that the clause, subclause or specified paragraph of BS EN 61010-1:1993 is replaced by the text of this standard.

“Amendment” means that the clause, subclause or specified paragraph of BS EN 61010-1:1993 is amended as indicated by the text of this standard.

“Addition” means that the text of this standard is additional to the requirements of BS EN 61010-1:1993.

A dynamic microbiological test method is given in Annex AA, while Annex BB provides general guidance and rationale.

This British Standard deals with equipment which falls within the scope of European Directive 73/23/EEC (Low Voltage Directive).

Cross-reference

Publication referred to Corresponding British Standard

IEC 34	BS 4999 <i>General requirements for rotating electrical machines</i>
	BS 5000 <i>Rotating electrical machines of particular types or for particular applications</i>

The Technical Committee has reviewed the provisions of ISO 3864:1984, to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard. A related British Standard to ISO 3864 is BS 5378.

Additional information. The following print types are used in this standard.

Requirements, compliance with which can be tested, and definitions: in roman type.

Explanations, advice and general statements: in small roman type.

Test procedures: in italic type

Terms defined in clause 3 of BS EN 61010-1:1993: IN SMALL CAPITALS

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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

(includes amendment A1:1996)
(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)
(inclut l'amendement A1:1996)

Sicherheitsanforderungen an elektrische Meß-,
Steuer-, Regel- und Laborgeräte
Teil 2-020: Besondere Anforderungen an
Laborzentrifugen
(IEC 1010-2-020, modifiziert)
(enthält Änderung A1:1996)

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

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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 a 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*.

Foreword of amendment A1:1996

The text of document 66/125/FDIS, future amendment 1 to IEC 1010-2-020:1992, 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 amendment A1 to EN 61010-2-020:1994 on 1996-03-05.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1996-12-01;
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1996-12-01.

For products which have complied with EN 61010-2-020:1994 before 1996-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-12-01.