



BSI Standards Publication

Environmental testing

Part 2-13: Tests — Test M: Low air pressure

National foreword

This British Standard is the UK implementation of EN IEC 60068-2-13:2021. It is identical to IEC 60068-2-13:2021. It supersedes BS EN 60068-2-13:1999, which will be withdrawn on 7 April 2024.

The UK participation in its preparation was entrusted to Technical Committee GEL/104, Environmental conditions, classification and testing.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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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

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European foreword

The text of document 104/889/FDIS, future edition 5 of IEC 60068-2-13, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60068-2-13:2021.

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) 2022-01-07
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-07

This document supersedes EN 60068-2-13:1999 and all of its amendments and corrigenda (if any).

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

Endorsement notice

The text of the International Standard IEC 60068-2-13:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2 (series) NOTE Harmonized as EN IEC 60068-2 (series)

IEC 60721-3 (series) NOTE Harmonized as EN 60721-3 (series)

IEC 60068-2-2 NOTE Harmonized as EN 60068-2-2

IEC 60068-2-39 NOTE Harmonized as EN 60068-2-39

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENVIRONMENTAL TESTING –**Part 2-13: Tests – Test M: Low air pressure****FOREWORD**

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IEC 60068-2-13 has been prepared by IEC technical committee 104: Environmental conditions, classification, and methods of test. It is an International Standard.

This fifth edition cancels and replaces the fourth edition, published in 1983. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) alignment with recently revised parts of IEC 60068-2;
- b) Clause 5: severities aligned with IEC 60721-2-3 and IEC 60721-3 (all parts);
- c) addition of Annex A (guidance on selecting the duration of exposure).

The text of this International Standard is based on the following documents:

FDIS	Report on voting
104/889/FDIS	104/893/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 60068 series, published under the general title *Environmental testing*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

ENVIRONMENTAL TESTING –

Part 2-13: Tests – Test M: Low air pressure

1 Scope

This part of IEC 60068 specifies methods of test applicable to specimens which, during transportation, storage or in service, can be subjected to low air pressure.

The object of the low air pressure test is to determine the ability of components, equipment or other articles to be used, transported or stored at low air pressure.

Components, equipment or other articles to be used, transported or stored under a simultaneous combination of high or low temperature and low air pressure, where the combination is important for the stresses imposed on the articles or for the failure mechanisms, are then tested in accordance with IEC 60068-2-39.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Test description

4.1 General

The specimen is introduced into the test chamber, the chamber air pressure is then reduced to the appropriate value specified in the relevant specification.

These conditions are maintained for the specified duration.

4.2 Description of test apparatus

The test chamber shall be capable of maintaining the air pressure conditions given in Clause 5.

Care should be taken to avoid air contamination by ancillary equipment and devices and by the air introduced when pressure is restored to normal.