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REDLINE VERSION

Miljötålighetsprovning – Del 2-78: Provningsmetoder – Cab: Fukt och värme, stationärt tillstånd

Environmental testing –

Part 2-78: Tests –

Test Cab: Damp heat, steady state

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IEC 60068-2-78

Edition 3.0 2025-08

INTERNATIONAL STANDARD

REDLINE VERSION

**Environmental testing -
Part 2-78: Tests - Test Cab: Damp heat, steady state**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
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- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60068-2-78:2012. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 60068-2-78 has been prepared by technical committee 104: Environmental conditions, classification, and methods of test. It is an International Standard.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

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

- a) revision of the requirements for the test chamber;
- b) revision of the severities and including the dew point temperatures;
- c) change of the temperature tolerances of the test to limits;
- d) inclusion of a specified preconditioning procedure;
- e) inclusion of a new figure for clarification purposes;
- f) revision of standardized requirements for the test report.

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

Draft	Report on voting
104/1109/FDIS	104/1126/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/publications.

A list of all the parts in the IEC 60068 series, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

This part of IEC 60068 provides a test method of high humidity at constant temperature without condensation on the specimen over a ~~prescribed~~ specified period. This test is performed to evaluate the specimen as it is influenced by the absorption and diffusion of moisture and moisture vapour.

1 ~~Scope and object~~

This part of IEC 60068 establishes a test method for determining the ability of components or equipment to withstand transportation, storage and use under conditions of high humidity.

The object of this document is to investigate the effect of high humidity at constant temperature without condensation on a specimen over a ~~prescribed~~ specified period.

It is applicable to small equipment or components as well as large equipment, and can be applied to both heat-dissipating and non-heat-dissipating specimens.

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 60068-1:2013, *Environmental testing - Part 1: General and guidance*

IEC 60068-2-67, *Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components*

~~IEC 60068-3-6, *Environmental testing - Part 3-6: Supporting documentation and guidance - Confirmation of the performance of temperature and humidity chambers*~~

~~IEC Guide 104, *The preparation of safety publications and the use of basic safety publications and group safety publications*~~

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Miljötålighetsprovning – Del 2-78: Provningsmetoder – Cab: Fukt och värme, stationärt tillstånd

*Environmental testing –
Part 2-78: Tests –
Test Cab: Damp heat, steady state*

Som svensk standard gäller europastandarden EN IEC 60068-2-78:2025. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60068-2-78:2025.

Nationellt förord

Europastandarden EN IEC 60068-2-78:2025

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60068-2-78, Third edition, 2025 - Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60068-2-78, utg 2:2013 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2028-10-31.

ICS 19.040.00; 29.020.00

Denna standard är fastställd av SEK Svensk Elstandard, som också kan lämna upplysningar om **sakinnehållet** i standarden.
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E-post: sek@elstandard.se. Internet: elstandard.se

Standarder underlättar utvecklingen och höjer elsäkerheten

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Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

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Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

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English Version

**Environmental testing - Part 2-78: Tests - Test Cab: Damp heat,
steady state
(IEC 60068-2-78:2025)**

Essais d'environnement - Partie 2-78: Essais - Essai Cab:
Chaleur humide, essai continu
(IEC 60068-2-78:2025)

Umgebungseinflüsse - Teil 2-78: Prüfverfahren - Prüfung
Cab: Feuchte Wärme, konstant
(IEC 60068-2-78:2025)

This European Standard was approved by CENELEC on 2025-09-10. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 104/1109/FDIS, future edition 3 of IEC 60068-2-78, prepared by TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60068-2-78:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-10-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-10-31 document have to be withdrawn

This document supersedes EN 60068-2-78:2013 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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60068-2-78:2025 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 standard indicated:

IEC 60068-3-6 NOTE Approved as EN IEC 60068-3-6

IEC 60068-3-7 NOTE Approved as EN IEC 60068-3-7

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-67	-	Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components	EN 60068-2-67	-



IEC 60068-2-78

Edition 3.0 2025-08

INTERNATIONAL STANDARD

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