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Environmental testing - Part 2-30: Tests - Test db:  
Damp heat, cyclic (12 h + 12 h cycle)

## EESTI STANDARDI EESSÕNA

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<p>See Eesti standard EVS-EN IEC 60068-2-30:2025 sisaldab Euroopa standardi EN IEC 60068-2-30:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.10.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 60068-2-30:2025 consists of the English text of the European standard EN IEC 60068-2-30:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 10.10.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 19.040

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EUROPEAN STANDARD

**EN IEC 60068-2-30**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

ICS 19.040

Supersedes EN 60068-2-30:2005

English Version

**Environmental testing - Part 2-30: Tests - Test Db: Damp heat,  
cyclic (12 h + 12 h cycle)  
(IEC 60068-2-30:2025)**

Essais d'environnement - Partie 2-30: Essais - Essai Db:  
Essai cyclique chaleur de humide (cycle de 12 h + 12 h)  
(IEC 60068-2-30:2025)

Umgebungseinflüsse - Teil 2-30: Prüfverfahren - Prüfung  
Db: Feuchte Wärme, zyklisch (12 + 12 Stunden)  
(IEC 60068-2-30:2025)

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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 104/1111/FDIS, future edition 4 of IEC 60068-2-30, 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 60068-2-30:2025.

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) 2026-10-31
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IEC 60068-2-38	NOTE	Approved as EN IEC 60068-2-38
IEC 60068-3-4	NOTE	Approved as EN IEC 60068-3-4
IEC 60068-3-6	NOTE	Approved as EN IEC 60068-3-6
IEC 60068-3-7	NOTE	Approved as EN IEC 60068-3-7

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Environmental testing -  
Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)**

**Essais d'environnement -  
Partie 2-30: Essais - Essai Db: Essai cyclique chaleur de humide (cycle de 12 h +  
12 h)**



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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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## CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General description .....	5
5 Description of test chamber .....	6
6 Severities .....	6
7 Testing procedure.....	6
7.1 General.....	6
7.2 Initial measurements .....	7
7.3 Preconditioning .....	7
7.4 Test cycle .....	8
7.5 Intermediate measurements .....	14
8 Recovery.....	14
9 Final measurements .....	15
10 Information to be given in the relevant specification.....	16
11 Information to be given in the test report .....	16
Annex A (informative) Selection of variant for the cooling period – Guidance.....	18
Annex B (normative) Supporting documentation for temperature and humidity limits in the test sequences.....	19
B.1 General.....	19
B.2 Preconditioning .....	19
B.3 Variant 1 .....	20
B.4 Variant 2 .....	20
B.5 Recovery .....	21
Annex C (informative) Supporting documentation for programming the set value .....	22
C.1 General.....	22
C.2 Preconditioning .....	22
C.3 Variant 1 .....	22
C.4 Variant 2 .....	23
C.5 Recovery .....	23
Bibliography .....	24
Figure 1 – Test Db – Preconditioning period .....	8
Figure 2 – Test Db – Test cycle – Variant 1, Method I.....	10
Figure 3 – Test Db – Test cycle – Variant 1, Method II.....	11
Figure 4 – Test Db – Test cycle – Variant 2, Method III.....	12
Figure 5 – Test Db – Test cycle – Variant 2, Method IV.....	13
Figure 6 – Test Db – Recovery at controlled conditions.....	15
Table 1 – Severities of Test Db .....	6
Table B.1 – Limits of relative humidity during preconditioning .....	19
Table B.2 – Temperature limits during preconditioning.....	19
Table B.3 – Limits of relative humidity and temperature during Variant 1 .....	20

Table B.4 – Limits of relative humidity and temperature during Variant 2 .....20

Table B.5 – Limits of relative humidity during recovery .....21

Table B.6 – Temperature limits during recovery .....21

Table C.1 – Example of programming of the preconditioning .....22

Table C.2 – Example of programming of the relative humidity and temperature  
(Variant 1) .....22

Table C.3 – Example of programming of the relative humidity and temperature  
(Variant 2) .....23

Table C.4 – Example of programming of the recovery procedure.....23

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### **Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)**

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IEC 60068-2-30 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2005. 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) change of the temperature tolerances of the test to limits;
- c) updating of the figures for clarification purposes;
- d) revision of the limits of the temperature and relative humidity during conditioning;
- e) revision of the intermediate measurements;
- 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
104/1111/FDIS	104/1125/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all the parts of 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](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

## 1 Scope

This part of IEC 60068 specifies a test procedure to determine the suitability of components, equipment, or other articles for use, transportation, and storage under conditions of high humidity combined with cyclic temperature changes and, in general, producing condensation on the surface of the specimen. This test method can also be used to validate the packaging of specimen for transportation and storage.

This document does only in exceptional cases apply to specimens that are energized throughout the test.

## 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*

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

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60068-1 apply.

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

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

## 4 General description

This test comprises one or more temperature cycles in which the relative humidity is maintained at a high level.

Two variants of the cycle are given which are identical except for the cooling period; during this part of the cycle, Variant 2 allows wider limits of relative humidity and the temperature change rate.

The conditioning temperature and the number of cycles (see Clause 6) determine the test severity.

The preconditioning phase is illustrated in Figure 1, the test procedure in Figure 2 to Figure 5 and the recovery procedure in Figure 6.

NOTE For small, low mass specimens, it can be difficult to produce condensation on the surface of the specimen using this procedure; considering an alternative test such as Test Z/AD (IEC 60068-2-38) can be helpful.