

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

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60068-2-78:2003 sisaldab Euroopa standardi EN 60068-2-78:2001 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 15.01.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 18.10.2001.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60068-2-78:2003 consists of the English text of the European standard EN 60068-2-78:2001.

This standard is ratified with the order of Estonian Centre for Standardisation dated 15.01.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 18.10.2001.

The standard is available from Estonian standardisation organisation.

ICS 19.040, 29.020

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EUROPEAN STANDARD

**EN 60068-2-78**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2001

ICS 19.040; 29.020

English version

**Environmental testing**  
**Part 2-78: Tests -**  
**Test Cab: Damp heat, steady state**  
(IEC 60068-2-78:2001)

Essais d'environnement  
Partie 2-78: Essais -  
Essai Cab: Chaleur humide, essai continu  
(CEI 60068-2-78:2001)

Umweltprüfungen  
Teil 2-78: Prüfungen -  
Prüfung Cab: Feuchte Wärme, konstant  
(IEC 60068-2-78:2001)

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**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 text of document 104/207/FDIS, future edition 1 of IEC 60068-2-78, prepared by IEC TC 104, Environmental conditions, classification and methods of test, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60068-2-78 on 2001-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2002-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-10-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60068-2-78:2001 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	- <sup>1)</sup>	Environmental testing Part 1: General and guidance	EN 60068-1	1994 <sup>2)</sup>
IEC 60068-2-2	- <sup>1)</sup>	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 <sup>3)</sup>	1993

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at time of issue.

<sup>3)</sup> EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2:1974.

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

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

**Essais d'environnement –  
Partie 2-78: Essais – Essai Cab: Chaleur humide, essai continu**



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# INTERNATIONAL STANDARD

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BASIC SAFETY PUBLICATION  
PUBLICATION FONDAMENTALE DE SÉCURITÉ

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**Environmental testing –  
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ENVIRONMENTAL TESTING –**

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

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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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International Standard IEC 60068-2-78 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test.

The text of this standard is based on the following documents:

FDIS	Report on voting
104/207/FDIS	104/214/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

It has the status of a basic safety publication in accordance with IEC Guide 104.

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

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

## ENVIRONMENTAL TESTING –

### Part 2-78: Tests – Test Cab: Damp heat, steady state

#### 1 Scope

This part of IEC 60068 provides a test method for determining the suitability of electrotechnical products, components or equipment for transportation, storage and use under conditions of high humidity. The test is primarily intended to permit the observation of the effect of high humidity at constant temperature without condensation on the specimen over a prescribed period.

This test provides a number of preferred severities of high temperature, high humidity and test duration. The test can be applied to both heat-dissipating and non-heat dissipating specimens.

The test is applicable to small equipment or components as well as large equipment having complex interconnections with test equipment external to the chamber, requiring a set-up time which prevents the use of preheating and the maintenance of specified conditions during the installation period.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60068. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However parties to agreements based on this part of IEC 60068 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

IEC 60068-2-2, *Basic environmental testing procedures – Part 2: Tests – Tests B: Dry heat*

#### 3 General description

In this test, the specimen is introduced into the chamber, both of which are at laboratory temperature.

The conditions in the chamber are adjusted to the severity required according to clause 5 and maintained for the prescribed time.

Because the conditions of temperature and humidity adjacent to a heat-dissipating specimen can be different from the specified test values, the measurement of these parameters is prescribed in the manner used for free air conditions (see 4.4 and 4.6.2 of IEC 60068-1).