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IEC STANDARDS+

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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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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IEC 60068-2-78:2012

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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

This second edition cancels and replaced the first edition, published in 2001 and constitutes a technical revision.

This edition includes editorial and format changes with respect to the previous edition:

– The test chamber from IEC 60068-3-6 has been introduced.

This is a preview of "S+ IEC 60068-2-78 Ed...". Click here to purchase the full version from the ANSI store.

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

FDIS	Report on voting
104/582/FDIS	104/588/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 2.

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

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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

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INTRODUCTION

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

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ENVIRONMENTAL TESTING –

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

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 standard is to investigate the effect of high humidity at constant temperature without condensation on a specimen over a prescribed 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 60068-3-6, *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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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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ESSAIS D'ENVIRONNEMENT –

Partie 2-78: Essais – Essai Cab: Chaleur humide, essai continu

AVANT-PROPOS

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La Norme internationale CEI 60068-2-78 a été établie par le comité d'études 104 de la CEI: Conditions, classification et essais d'environnement.

Cette deuxième édition annule et remplace la première édition, publiée en 2001, et constitue une révision technique.

Cette édition inclut des modifications éditoriales et de mise en page par rapport à l'édition précédente:

– L'essai en chambre de la CEI 60038-3-6 est ajouté.

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Le texte de cette norme est issu des documents suivants:

FDIS	Rapport de vote
104/582/FDIS	104/588/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

Cette publication a été rédigée selon les Directives ISO/CEI, Partie 2.

Elle a le statut d'une publication fondamentale de sécurité conformément au Guide CEI 104.

Une liste de toutes les parties de la série CEI 60068, présentées sous le titre général *Essais d'environnement,* peut être consultée sur le site web de la CEI.

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INTRODUCTION

La présente partie de la CEI 60068 fournit une méthode d’essai de forte humidité à température constante, sans condensation sur le spécimen, sur une période prescrite. Cet essai est réalisé pour évaluer le spécimen lorsqu'il est influencé par l'absorption et la diffusion d'humidité et de vapeur d'humidité.

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ESSAIS D'ENVIRONNEMENT –

Partie 2-78: Essais – Essai Cab: Chaleur humide, essai continu

1 Domaine d'application et objet

La présente partie de la CEI 60068 établit une méthode d'essai en vue de déterminer la capacité des composants ou des matériels à supporter le transport, le stockage et l'utilisation dans des conditions de forte humidité.

L'objet de cette norme est de rechercher l'effet d'une forte humidité à température constante sans condensation sur un spécimen, au cours d'une période prescrite.

Elle est applicable aussi bien à des petits matériels ou composants qu'à des matériels volumineux, et peut être appliquée à la fois à des spécimens dissipateurs de chaleur et non dissipateurs de chaleur.

2 Référence normatives

Les documents suivants sont cités en référence de manière normative, en intégralité ou en partie, dans le présent document et sont indispensables pour son application. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

CEI 60068-1, *Essais d'environnement – Partie 1: Généralités et guide*

CEI 60068-3-6, *Essais d'environnement – Partie 3-6: Documentation d'accompagnement et guide – Confirmation des performances des chambres d'essai en température et humidité*

IEC Guide 104, *The preparation of safety publications and the use of basic safety publications and group safety publications*
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BASIC SAFETY PUBLICATION

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

IEC 60068-2-78:2012

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ENVIRONMENTAL TESTING –

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

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INTRODUCTION

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ENVIRONMENTAL TESTING –

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

1 Scope and object

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

~~The test is primarily intended to permit the observation of~~ The object of this standard is to investigate the effect of high humidity at constant temperature without condensation on a 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~~ It 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~~, and can be applied to both heat-dissipating and non-heat-dissipating specimens.

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.~~

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 60068-2-2, *Basic environmental testing procedures – Part 2: Tests – Tests B: Dry heat*~~

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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