

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Environmental testing –

Part 3-7: Supporting documentation and guidance – Measurements in temperature chambers for tests A (Cold) and B (Dry heat) (with load)

Essais d'environnement –

**Partie 3-7: Documentation d'accompagnement et recommandations –
Mesurages dans les chambres d'essai en température pour les essais A (froid)
et B (chaleur sèche) (avec charge)**



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

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENVIRONMENTAL TESTING –

**Part 3-7: Supporting documentation and guidance –
Measurements in temperature chambers for
tests A (Cold) and B (Dry heat) (with load)**

FOREWORD

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International Standard IEC 60068-3-7 has been prepared by IEC technical committee TC 104: Environmental conditions, classification and methods of test.

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

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

- a) verbal forms have, in many parts, been changed to express requirements instead of recommendations ('shall' instead of 'should');
- b) Table 1 has been updated.

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

FDIS	Report on voting
104/868/FDIS	104/873/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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- withdrawn,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.

INTRODUCTION

IEC 60068 (all parts) contains fundamental information on environmental testing procedures and severities.

The expression "environmental conditioning" or "environmental testing" covers the natural and artificial environments to which components or equipment may be exposed so that an assessment can be made of their performance under conditions of use, transport and storage to which they may be exposed in practice.

Temperature chambers used for "environmental conditioning" or "environmental testing" are not described in any publication, although the method of maintaining and measuring temperature and/or humidity has great influence on test results. The physical characteristics of temperature chambers can also influence test results.

ENVIRONMENTAL TESTING –

Part 3-7: Supporting documentation and guidance – Measurements in temperature chambers for tests A (Cold) and B (Dry heat) (with load)

1 Scope

This part of IEC 60068 specifies a uniform and reproducible method of confirming that temperature test chambers conform to the requirements specified in the climatic test procedures of IEC 60068-2-1 and IEC 60068-2-2, when loaded with either heat-dissipating or non heat-dissipating specimens under conditions which take into account air circulation inside the working space of the chamber. This document is intended primarily for users when conducting regular chamber performance monitoring.

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 60068-3-5:2018, *Environmental testing – Part 3-5: Supporting documentation and guidance – Confirmation of the performance of temperature chambers*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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>

3.1

test specification

procedure applied to test chambers with or without forced air circulation, suitable for a wide range of chamber sizes

Note 1 to entry: A summary of test conditions in IEC 60068-2-1 and IEC 60068-2-2 is given in Table 1; conditions including sudden change of temperature have been removed from earlier versions of these documents.