



NSAI
Standards

Irish Standard
I.S. EN IEC 60068-3-7:2020

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

I.S. EN IEC 60068-3-7:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 60068-3-7:2020 is the adopted Irish version of the European Document EN IEC 60068-3-7:2020, Environmental testing - Part 3-7: Supporting documentation and guidance - Measurements in temperature chambers for tests A (Cold) and B (Dry heat) (with load)

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EUROPEAN STANDARD

EN IEC 60068-3-7

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2020

ICS 19.040; 29.020

Supersedes EN 60068-3-7:2002 and all of its
amendments and corrigenda (if any)

English Version

**Environmental testing - Part 3-7: Supporting documentation and
guidance - Measurements in temperature chambers for tests A
(Cold) and B (Dry heat) (with load)
(IEC 60068-3-7:2020)**

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)
(IEC 60068-3-7:2020)

Umgebungseinflüsse - Teil 3-7: Unterstützende
Dokumentation und Leitfaden - Messungen in
Temperaturprüfkammern für Prüfungen A (Kälte) und B
(trockene Wärme) (mit Prüfgut)
(IEC 60068-3-7:2020)

This European Standard was approved by CENELEC on 2020-08-11. 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.

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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

EN IEC 60068-3-7:2020 (E)

European foreword

The text of document 104/868/FDIS, future edition 2 of IEC 60068-3-7, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60068-3-7:2020.

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) 2021-05-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-08-11

This document supersedes EN 60068-3-7:2002 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.

Endorsement notice

The text of the International Standard IEC 60068-3-7:2020 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 standards indicated:

IEC 60068-2-1	NOTE	Harmonized as EN 60068-2-1
IEC 60068-2-2:2007	NOTE	Harmonized as EN 60068-2-2:2007 (not modified)
IEC 60068-3-1	NOTE	Harmonized as EN 60068-3-1
IEC 60068-3-6:2018	NOTE	Harmonized as EN IEC 60068-3-6:2018 (not modified)
IEC 60584-1	NOTE	Harmonized as EN 60584-1
IEC 60751	NOTE	Harmonized as EN 60751

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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-3-5	-	Environmental testing - Part 3-5: Supporting documentation and guidance - Confirmation of the performance of temperature chambers	EN IEC 60068-3-5	-

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IEC 60068-3-7

Edition 2.0 2020-07

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 60068-3-7

Edition 2.0 2020-07

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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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.

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