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Environmental testing - Part 2-14: Tests - Test N: Change of temperature

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/23

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EN IEC 60068-2-14

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English Version

**Environmental testing - Part 2-14: Tests - Test N: Change of
temperature
(IEC 60068-2-14:2023)**

Essais d'environnement - Partie 2-14: Essais - Essai N:
Variation de température
(IEC 60068-2-14:2023)

Umgebungseinflüsse - Teil 2-14: Prüfverfahren - Prüfung N:
Temperaturwechsel
(IEC 60068-2-14:2023)

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EN IEC 60068-2-14:2023 (E)**European foreword**

The text of document 104/991/FDIS, future edition 7 of IEC 60068-2-14, 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 60068-2-14:2023.

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IEC 60068 series	NOTE	Approved as EN 60068 series
IEC 60068-2-6	NOTE	Approved as EN 60068-2-6
IEC 60068-2-17	NOTE	Approved as EN 60068-2-17
IEC 60068-2-30	NOTE	Approved as EN 60068-2-30
IEC 60068-2-67	NOTE	Approved as EN 60068-2-67
IEC 60068-3-1	NOTE	Approved as EN 60068-3-1

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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-



IEC 60068-2-14

Edition 7.0 2023-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Environmental testing –
Part 2-14: Tests – Test N: Change of temperature**

**Essais d'environnement –
Partie 2-14: Essais – Essai N: Variation de température**



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IEC 60068-2-14

Edition 7.0 2023-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Environmental testing –
Part 2-14: Tests – Test N: Change of temperature**

**Essais d'environnement –
Partie 2-14: Essais – Essai N: Variation de température**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENVIRONMENTAL TESTING –

Part 2-14: Tests – Test N: Change of temperature

FOREWORD

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IEC 60068-2-14 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test. It is an International Standard.

This seventh edition cancels and replaces the sixth edition published in 2009. This edition constitutes a technical revision.

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

- a) updating of the figures for clarification purposes;
- b) updating of specimen temperature(s) and severities as well as tolerances for change of temperature tests;
- c) revision of standardized requirements for test reports for Tests Na and Nb.

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

Draft	Report on voting
104/991/FDIS	104/1016/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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 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

A change of temperature test is intended to determine the effect on the specimen of a change of temperature or a succession of changes of temperature.

It is not intended to show effects that are caused by low or high temperature exposure. For these effects, the cold test or the dry heat test, as specified in IEC 60068-2-1 and IEC 60068-2-2, should be used.

The effect of change of temperature tests is determined by

- values of high and low conditioning temperature between which the change is to be affected,
- the conditioning times for which the test specimen is kept at these temperatures,
- the rate of change between these temperatures,
- the number of cycles of conditioning,
- the amount of heat transfer into or from the specimen,
- the thermal conductivity and the materials of the specimen,
- the rate of change of the specimen's temperature on its surface (respectively in relevant positions) or in its core.

Guidance on the choice of suitable test parameters for inclusion in the detail specification is given throughout this document.

ENVIRONMENTAL TESTING –

Part 2-14: Tests – Test N: Change of temperature

1 Scope

This document provides tests with specified ambient temperature changes to analyse their impacts on specimens.

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 60068-2-1, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-2, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN