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Miljötålighetsprovning – Del 2-2: Provningsmetoder – B: Värme, stationärt tillstånd

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

Som svensk standard gäller europastandarden EN 60068-2-2:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60068-2-2:2007.

Nationellt förord

Europastandarden EN 60068-2-2:2007^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60068-2-2, Fifth edition, 2007 - Environmental testing - Part 2-2: Tests - Test B: Dry heat**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60068-2-2, utgåva 1, 2001, SS-EN 60068-2-2/A1, utgåva 1 och SS-EN 60068-2-2/A2, utgåva 1, 2001, gäller ej fr o m 2010-09-01.

^{*)} EN 60068-2-2:2007 ikraftsattes 2007-12-17 som SS-EN 60068-2-2 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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English version

**Environmental testing -
Part 2-2: Tests -
Test B: Dry heat
(IEC 60068-2-2:2007)**

Essais d'environnement -
Partie 2-2: Essais -
Essai B: Chaleur sèche
(CEI 60068-2-2:2007)

Umgebungseinflüsse -
Teil 2-2: Prüfverfahren -
Prüfung B: Trockene Wärme
(IEC 60068-2-2:2007)

This European Standard was approved by CENELEC on 2007-09-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 104/412/FDIS, future edition 5 of IEC 60068-2-2, 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 60068-2-2 on 2007-09-01.

This European Standard supersedes EN 60068-2-2:1993 + A1:1993 + A2:1994.

The main changes from EN 60068-2-2:1993 + A1:1993 + A2:1994 are as follows: Tests Ba and Bc have been deleted since they were more severe tests than Test Nb, EN 60068-2-14: Change of temperature. Secondly it was considered justified to delete the 3 % value on the temperature difference between the chamber air and the wall temperatures. Thirdly it is proposed that the test specimen be powered throughout the test where required; and, finally, the annexes have been removed.

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) | 2008-06-01 |
| – latest date by which the national standards conflicting
with the EN have to be withdrawn | (dow) | 2010-09-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60068-2-2:2007 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 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	1988	Environmental testing - Part 1: General and guidance	EN 60068-1 ¹⁾	1994
IEC 60068-3-1	- ²⁾	Environmental testing - Part 3: Background information - Section One: Cold and dry heat tests	EN 60068-3-1	1999 ³⁾
IEC 60068-3-5	- ²⁾	Environmental testing - Part 3-5: Supporting documentation and guidance - Confirmation of the performance of temperature chambers	EN 60068-3-5	2002 ³⁾
IEC 60068-3-7	- ²⁾	Environmental testing - Part 3-7: Supporting documentation and guidance - Measurements in temperature chambers for tests A and B (with load)	EN 60068-3-7	2002 ³⁾
IEC 60068-5-2	- ²⁾	Environmental testing - Part 5: Guide to drafting of test methods - Terms and definitions	EN 60068-5-2	1999 ³⁾
IEC 60721	Series	Classification of environmental conditions	EN 60721	Series

¹⁾ EN 60068-1 includes A1:1992 to IEC 60068-1 + corr. October 1988.

²⁾ Undated reference.

³⁾ Valid edition at date of issue.

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INTRODUCTION

RELATIONSHIP OF SUFFIXES BETWEEN TESTS A: COLD, AND TESTS B: DRY HEAT

The relationship of suffixes between Tests A: Cold, and Tests B: Dry heat, is shown in the following table:

	Tests A: Cold			Tests B: Dry heat		
Suffix letter	Specimen type	Temperature change	Air velocity	Specimen type	Temperature change	Air velocity
a	Withdrawn			Withdrawn		
b	Non heat	Gradual	High preferred	Non heat	Gradual	High preferred
c	Withdrawn			Withdrawn		
d	Heat dissipating	Gradual	Low preferred	Heat	Gradual	Low preferred
e	Heat dissipating powered throughout	Gradual	Low preferred	Heat, powered throughout	Gradual	Low preferred

ENVIRONMENTAL TESTING –

Part 2-2: Tests – Test B: Dry heat

1 Scope

This standard deals with dry heat tests applicable both to heat-dissipating and non heat-dissipating specimens. For non heat-dissipating specimens, Tests Bb and Bd do not deviate essentially from earlier issues.

The object of the dry heat test is limited to the determination of the ability of components, equipment or other articles to be used, transported or stored at high temperature.

These dry heat tests do not enable the ability of specimens to withstand or operate during the temperature variations to be assessed. In this case, it would be necessary to use IEC 60068-2-14 Test N: Change of temperature.

The dry heat tests are subdivided as follows:

Dry heat test for non heat-dissipating specimens

- with gradual change of temperature, Bb.

Dry heat tests for heat-dissipating specimens

- with gradual change of temperature, Bd;
- with gradual change of temperature, specimen powered throughout, Be.

The procedures given in this standard are normally intended for specimens that achieve temperature stability during the performance of the test procedure.

2 Normative references

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-3-1, *Environmental testing – Part 3: Background information – Section one: Cold and dry heat tests*

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

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

IEC 60068-5-2, *Environmental testing – Part 5-2: Guide to drafting of test methods – Terms and definitions*

IEC 60721 (all parts), *Classification of environmental conditions*