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SIST EN 60068-2-51:2001

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EUROPEAN STANDARD  
 NORME EUROPÉENNE  
 EUROPÄISCHE NORM

**EN 60068-2-51**

November 1999

ICS 19.040

Supersedes HD 323.2.51 S1:1987

English version

**Environmental testing**  
**Part 2: Tests - Tests Z/BFc: Combined dry heat/vibration (sinusoidal)**  
**tests for both heat-dissipating and non-heat-dissipating specimens**  
**(IEC 60068-2-51:1983)**

Essais d'environnement

Partie 2: Essais - Essais Z/BFc: Essais combinés chaleur sèche/vibrations (sinusoïdales) pour spécimens dissipant et ne dissipant pas d'énergie (CEI 60068-2-51:1983)

Umweltprüfungen

Teil 2: Prüfungen - Prüfungen Z/BFc: Kombinierte Prüfung - Trockene Wärme/Schwingen, sinusförmig für wärmeabgebende und nichtwärmeabgebende Prüflinge (IEC 60068-2-51:1983)

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This European Standard was approved by CENELEC on 1999-10-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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### Foreword

The text of the International Standard IEC 60068-2-51:1983, prepared by IEC TC 50 (transformed into IEC TC 104 "Environmental conditions, classification and methods of test"), was approved by CENELEC as HD 323.2.51 S1 on 1985-06-27.

This Harmonization Document was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 60068-2-51 on 1999-10-01.

The following date was 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) 2000-10-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annex ZA is normative.  
Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 60068-2-51:1983 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

Normative references to international publications  
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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		Environmental testing Part 1: General and guidance	EN 60068-1	
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 <sup>1)</sup>	1993
IEC 60068-2-6		Part 2: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	
IEC 60068-2-14		Part 2: Tests - Test N: Change of temperature	EN 60068-2-14	
IEC 60068-2-47	1982	Part 2: Tests - Mounting of components, equipment and other articles for dynamic tests including shock (Ea), bump (Eb), vibration (Fc and Fd) and steady-state acceleration (Ga) and guidance	EN 60068-2-47	1993
IEC 60068-3-1	1974	Part 3: Background information Section 1: Cold and dry heat tests	EN 60068-3-1 <sup>2)</sup>	1999

1) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

2) EN 60068-3-1 includes supplement A:1978 to IEC 60068-3-1.

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE  
NORME DE LA CEI

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
IEC STANDARD

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Publication 68-2-51

Première édition — First edition

1983

prejeto 13. IV. 1984

**Essais fondamentaux climatiques et de robustesse mécanique**

**Deuxième partie: Essais**

Essais Z/BFc: Essais combinés chaleur sèche/vibrations (sinusoïdales)  
pour spécimens dissipant et ne dissipant pas d'énergie

**(standards.iteh.ai)**  
**Basic environmental testing procedures**

**Part 2: Tests**

Tests Z/BFc: Combined dry heat/vibration (sinusoidal) tests for both heat-dissipating  
and non-heat-dissipating specimens



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## BASIC ENVIRONMENTAL TESTING PROCEDURES

Part 2: Tests — Tests Z/BFc: Combined dry heat/vibration (sinusoidal) tests  
for both heat-dissipating and non-heat-dissipating specimens

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

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## PREFACE

This standard has been prepared by IEC Technical Committee No. 50: Environmental Testing.

[SIST EN 60068-2-51:2001](https://standards.iteh.ai/catalog/standards/sist/7a82186e-e88d-479c-85ad-693749588e9/sist-en-60068-2-51-2001)

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A draft was discussed at the meeting held in The Hague in 1975. As a result of this meeting, a draft, Document 50(Central Office)181, was submitted to the National Committees for approval under the Six Months' Rule in July 1977.

Amendments, Document 50(Central Office)192, were submitted to the National Committees for approval under the Two Months' Procedure in December 1981.

The National Committees of the following countries voted explicitly in favour of publication:

Australia	Netherlands
Austria	Norway
Belgium	Poland
Brazil	Romania
Czechoslovakia	South Africa (Republic of)
Denmark	Spain
Egypt	Sweden
Finland	Switzerland
France	Turkey
German Democratic Republic	Union of Soviet
Germany	Socialist Republics
Hungary	United Kingdom
Israel	United States of America
Japan	