

Environmental testing —

Part 3-4: Supporting documentation and guidance — Damp heat tests

The European Standard EN 60068-3-4:2002:2002 has the status of a British Standard

ICS 19.040; 19.080

National foreword

This British Standard is the official English language version of EN 60068-3-4:2002. It is identical with IEC 60068-3-4:2001. It supersedes BS 2011-2.2 C and D:1990 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/10, Environmental conditions, classification and testing, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Cross-references

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This British Standard, having been prepared under the direction of the Electrotechnical Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 21 March 2002

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Environmental testing
Part 3-4: Supporting documentation and guidance –
Damp heat tests
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Essais d'environnement
Partie 3-4: Documentation
d'accompagnement et guide –
Essais de chaleur humide
(CEI 60068-3-4:2001)

Umweltprüfungen
Teil 3-4: Unterstützende
Dokumentation und Leitfaden –
Prüfungen mit feuchter Wärme
(IEC 60068-3-4:2001)

This European Standard was approved by CENELEC on 2001-12-04. 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, Malta, 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

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Foreword

The text of document 104/208/FDIS, future edition 1 of IEC 60068-3-4, 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 60068-3-4 on 2001-12-04

This European Standard supersedes HD 323.2.28 S1:1988.

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) 2002-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-12-01

Annexes designated "informative" are given for information only.
In this standard, annex A is informative.

Endorsement notice

The text of the International Standard IEC 60068-3-4:2001 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 60068-1	NOTE	Harmonized as EN 60068-1:1994 (not modified).
IEC 60068-2-1	NOTE	Harmonized as EN 60068-2-1:1993 (not modified).
IEC 60068-2-10	NOTE	Harmonized as HD 323.2.10 S3:1988 (not modified).
IEC 60068-2-14	NOTE	Harmonized as EN 60068-2-14:1999 (not modified).
IEC 60068-2-17	NOTE	Harmonized as EN 60068-2-17:1994 (not modified).
IEC 60068-2-30	NOTE	Harmonized as EN 60068-2-30:1999 (not modified).
IEC 60068-2-38	NOTE	Harmonized as EN 60068-2-38:1999 (not modified).
IEC 60068-2-39	NOTE	Harmonized as EN 60068-2-39:1999 (not modified).
IEC 60068-2-61	NOTE	Harmonized as EN 60068-2-61:1993 (not modified).
IEC 60068-2-66	NOTE	Harmonized as EN 60068-2-66:1994 (not modified).
IEC 60068-2-67	NOTE	Harmonized as EN 60068-2-67:1996 (not modified).
IEC 60068-2-78	NOTE	Harmonized as EN 60068-2-78:2001 (not modified).

CONTENTS

INTRODUCTION	4
1 Scope	5
2 Definitions	5
3 Procedures for the production and control of humidity	6
3.1 General	6
3.2 Injection of water (spraying)	6
3.3 Injection of water vapour (steam)	6
3.4 Saturation type	6
3.5 Surface evaporation	6
3.6 Aqueous solutions	7
3.7 Dehumidification	7
3.8 Control of humidity	7
4 Physical appearance of the effects of humidity	7
4.1 Condensation	7
4.2 Adsorption	8
4.3 Absorption	8
4.4 Diffusion	8
5 Acceleration	8
5.1 General	8
5.2 Acceleration factor	9
6 Comparison of steady-state and cyclic tests	9
6.1 Test C: Damp heat, steady-state	9
6.2 Test Db: Damp heat, cyclic test	9
6.3 Sequences of tests and composite tests	9
7 Influence of test environment on specimens	10
7.1 Change of physical characteristics	10
7.2 Change of electrical characteristics	10
7.3 Corrosion	11
Annexe A (informative) Humidity effects diagram	12
Bibliography	16
Figure A.1 – Physical processes involved in humidity testing	14

INTRODUCTION

Temperature and relative humidity (RH) of the air, in varying combinations, are climatic factors which act upon a product during storage, transportation and operation.

Meteorological measurements made over many years have shown that a relative humidity >95 % combined with a temperature >30 °C does not occur in free air conditions over long periods, except in regions with extreme climates. In dwelling rooms and workshops temperatures of >30 °C may occur but in most cases are combined with a lower relative humidity than in the open air.

Special conditions exist in certain wet rooms for example, in the chemical industry, metallurgical plants, mines, electroplating plants and laundries, where the temperature can reach 45 °C combined with a relative humidity up to saturation over long periods.

Certain equipment placed under particular conditions may be subjected to relative humidities of more than 95 % at higher temperatures. This may happen when the equipment is placed in enclosures, such as vehicles, tents or aircraft cockpits, since this can result in intense heating through solar radiation while, because of inadequate ventilation, any humidity that may be developed will be retained permanently within the interior.

In rooms having several heat sources, temperatures and relative humidities may vary in different parts of the room.

Atmospheric pollution can intensify the effects of a damp climate on products. Attention is drawn to this fact because of its general importance, although pollutants are not contained in the atmospheres used for damp heat testing. If the effects of pollutants, for example corrosion and mould growth, are to be investigated, a suitable test from the IEC 60068-2 series should be used.