## SLOVENSKI STANDARD

### SIST EN 60068-2-43:2005

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Okoljsko preskušanje – 2-43. del: Preskusi - Preskus Kd: Preskus z vodikovim sulfidom za kontakte in spoje (IEC 60068-2-43:2003)

Environmental testing - Part 2-43: Tests - Test Kd: Hydrogen sulphide test for contacts and connections (IEC 60068-2-43:2003)

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<u>SIST EN 60068-2-43:2005</u> https://standards.iteh.ai/catalog/standards/sist/dcc62e12-f1f5-4e18-857f-5877d20050c0/sist-en-60068-2-43-2005

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### EUROPEAN STANDARD

### EN 60068-2-43

### NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

September 2003

ICS 31.220.10

**English version** 

**Environmental testing** Part 2-43: Tests -Test Kd: Hydrogen sulphide test for contacts and connections (IEC 60068-2-43:2003)

Essais d'environnement Partie 2-43: Essais -

Essai Kd: Essai à l'hydrogène sulfuré

pour contacts et connexions

Umweltprüfungen Teil 2-43: Prüfungen -Prüfung Kd: Hydrogensulfid für Kontakte und Verbindungen

(CEI 60068-2-43:2003) eh STANDARD PRE (IEC 60068-2-43:2003)

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This European Standard was approved by CENELEC on 2003-09-01, 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

#### **Foreword**

The text of document 48B/1325/FDIS, future edition 2 of IEC 60068-2-43, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60068-2-43 on 2003-09-01.

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) 2004-06-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2006-09-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annex ZA is normative and annex A is informative. Annex ZA has been added by CENELEC.

# iTeh STANDARD PREVIEW

The text of the International Standard IEC 60068-2-43:2003 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 60068-2-46 NOTE Harmonized as HD 323.2.46 S1:1988 (not modified).

## 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.

PublicationYearTitleEN/HDYearIEC 60512-2-12002Connectors for electronic equipment -EN 60512-2-12002

Tests and measurements

Part 2-1: Electrical continuity and contact resistance tests - Test 2a: Contact resistance - Millivolt level method

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<u>SIST EN 60068-2-43:2005</u> https://standards.iteh.ai/catalog/standards/sist/dcc62e12-fl f5-4e18-857f-5877d20050c0/sist-en-60068-2-43-2005

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# NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60068-2-43

> Deuxième édition Second edition 2003-05

#### Essais d'environnement -

**Partie 2-43:** 

Essais -

Essai Kd: Essai à l'hydrogène sulfuré

pour contacts et connexions EW

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### **Environmental testing –**

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Tests -

Test Kd: Hydrogen sulphide test for contacts and connections

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Commission Electrotechnique Internationale International Electrotechnical Commission



#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **ENVIRONMENTAL TESTING -**

# Part 2-43: Tests – Test Kd: Hydrogen sulphide test for contacts and connections

#### **FOREWORD**

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense and they are accepted by the National PREVIEW
- Committees in that sense.

  4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to Indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards c62e12-f15-4e18-857f-
- 6) Attention is drawn to the possibility that some of the elements of this international Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60068-2-43 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This second edition cancels and replaces the first edition issued in 1976 and constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
48B/1325/FDIS	48B/1352/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

- · reconfirmed:
- withdrawn;
- · replaced by a revised edition, or
- amended.

#### **ENVIRONMENTAL TESTING -**

# Part 2-43: Tests – Test Kd: Hydrogen sulphide test for contacts and connections

#### 1 Scope and object

#### This test:

- is intended to provide accelerated means to assess the effects of the tarnishing of silver and silver alloys used for contacts and connections;
- is particularly suitable for giving information on a comparative basis;
- is not suitable as a general corrosion test, i.e. it may not predict the behaviour of contacts and connections in industrial atmospheres.

NOTE In view of the limited information to be obtained from accelerated corrosion tests, particular attention should be paid to the guidance on this test given in IEC 60068-2-46. Reference should also be made to IEC 60355.

#### The object of this test is:

- a) to determine the influence of atmospheres containing hydrogen sulphide on the contact properties of contacts made of:
  - silver or silver alloy; (standards.iteh.ai)
  - silver protected with another layer;
  - other metals covered with silver of silver all of 2005
- b) to check solderless connections made of the same material as in item a) with regard to their tightness or effectiveness.

In all tests, the major criterion of performance will be the change in contact resistance caused by exposure to the test atmosphere containing hydrogen sulphide.

#### 2 Normative references

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.

IEC 60512-2-1:2002, Connectors for electronic equipment – Tests and measurements – Part 2-1: Electrical continuity and contact resistance tests – Test 2a: Contact resistance – Millivolt level method

#### 3 Test apparatus

The test apparatus consists of a climatic system, test enclosures, a gas delivery system and means for measuring gas concentration, detailed in Annex A.