IEC 60068-2-60

Edition 3.0 2015-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Environmental testing – Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test

Essais d'environnement – Partie 2-60: Essais – Essai Ke: Essai de corrosion dans un flux de mélange de gaz

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ENVIRONMENTAL TESTING –

Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test

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International Standard IEC 60068-2-60 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test.

This third edition cancels and replaces the second edition, published in 1995, and constitutes a technical revision.

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

– updated IEC format;
– updated normative references list;
– addition of information of the working volume;
– revision of the test procedure;
– revision of the figures in Annex B.

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

FDIS	Report on voting
104/655/FDIS	104/656/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.

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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

ENVIRONMENTAL TESTING –

Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test

1 Scope

This part of IEC 60068-2 determines the corrosive influence of operating and storage indoor environments on electrotechnical products components, equipment and materials, particularly contacts and connections, considered separately, integrated into a subassembly or assembled as a complete equipment.

It provides test methods giving information, on a comparative basis, to aid the selection of materials, choice of production processes and component design, with regard to corrosion resistance. A guide to the selection of methods and test duration is provided in Annex C.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, *Connectors for electronic equipment – Tests and measurements – Part 2-1: Electrical continuity and contact resistance tests – Test 2a: Contact resistance – Millivolt level resistance method*

IEC 60512-3-1, *Connectors for electronic equipment – Tests and measurements – Part 3-1: Insulation tests – Test 3a: Insulation resistance*

ISO 431, *Copper refinery shapes*

3 Test apparatus

The test apparatus consists of a climatic system, test enclosure, gas delivery system and means for measuring gas concentration.

Details of design and construction are optional but shall be such that the conditions specified for each method are fulfilled throughout the working volume and shall comply with the following requirements:

– water droplets or aerosols shall not be injected into the test enclosure;
– air and water used shall be sufficiently clean in order not to affect performance of the test;
– the test atmosphere shall flow through the enclosure in such a manner as to ensure uniform test conditions within the working volume;
– the sampling point for gas analysis shall be in the working volume of the test enclosure;
– the exhaust gases shall be treated in accordance with the relevant regulatory stipulations;
– the wet bulb pod shall be placed in the test chamber in such a manner not to exceed 0,1 % of the cross-section of the test chamber.