AS 60068.2.60—2003
IEC 60068-2-60:1995

Australian Standard™

Environmental testing

Part 2.60: Tests—Test Ke: Flowing mixed gas corrosion test

Standards Australia

This Australian Standard was prepared by Committee EL-026, Protective Enclosures and Environmental Testing for Electrical/Electronic Equipment. It was approved on behalf of the Council of Standards Australia on 23 April 2003 and published on 19 June 2003.

The following are represented on Committee EL-026:

Australian Chamber of Commerce and Industry

Australian Electrical and Electronic Manufacturer's Association

Electrical Compliance Testing Association

Electrical Regulatory Authorities Council

Electricity Supply Association of Australia

Testing Interests (Australia)

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-026, Protective Enclosures and Environmental Testing for Electrical/Electronic Equipment.

The objective of this Standard is to provide the electrotechnology industry with a complete set of environmental test procedures published as a series under AS 60068 *Environmental testing*. This Standard is Part 2.60 of that series.

This Standard is identical with, and has been reproduced from, IEC 60068-2-60:1995, *Environmental testing – Part 2-60: Tests—Test Ke: Flowing mixed gas corrosion test*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this international standard’ should read ‘this Australian Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

In this Standard, the following print types are used:

– requirements proper: in arial type;

– *test specifications: in italic type;*

– explanatory matter: in smaller arial type.

Any international Standard referenced should be replaced by an equivalent Australian Standard when one is available. The availability of equivalent Australian Standards can be determined either from the Standards Australia catalogue or from the Standards Australia website (www.standards.com.au).

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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1 General

1.1 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.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60068-2. At the time of publication, the editions indicated were valid. All normative documents are subject to revision and parties to agreements based on this part of IEC 60068-2 are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. Members of IEC and ISO maintain registers of current valid International Standards.

IEC 60512-2: 1985, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods– Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests*

ISO 431: 1981, *Copper refinery shapes*

2 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 analyses shall be in the working volume of the test enclosure;

– the exhaust gases shall be treated in accordance with the relevant regulatory stipulations.