

Australian Standard™

Environmental testing

Part 1: General and guidance

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 14 February 2003 and published on 20 March 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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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 60068.1–2003

Environmental testing

Part 1: General and guidance

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Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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NOTES

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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 to supersede AS 1099.1—1989, *Basic environmental testing procedures for electrotechnology Part 1: General*.

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 1 of that series.

This Standard is identical with, and has been reproduced, from IEC 60068-1:1991, *Environmental testing—Part 1: General and guidance* incorporating Amendment 1:1992.

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).

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STANDARDS AUSTRALIA

Australian Standard**Environmental testing**
Part 1: General and guidance

1 Introduction

1.1 IEC 60068 contains fundamental information on environmental testing procedures and severities of tests. In addition, Part 1 contains information on atmospheric conditions for measurement and testing.

It is intended to be used in those cases where a relevant specification for a certain type of product (electrical, electromechanical and electronic equipment and devices, their subassemblies and constituent parts and components), hereinafter referred to as “specimen”, has to be prepared, so as to achieve uniformity and reproducibility in the environmental testing of this product.

NOTE – Although primarily intended for electrotechnical products, many of the environmental testing procedures in Part 2 of this publication are equally applicable to other industrial products.

The expression “environmental conditioning” or “environmental testing” covers the natural and artificial environments to which specimens may be exposed so that an assessment can be made of their performance under conditions of use, transport and storage to which they may be subjected in practice.

The requirements for the performance of specimens subjected to environmental conditioning are not covered by this publication. The relevant specification for the specimen under test defines the allowed performance limits during and after environmental testing.

When drafting a relevant specification or purchasing contract, only those tests should be specified that are necessary for the relevant specimen taking into account the technical and economic aspects.

IEC 60068 consists of:

- a) this first Part (IEC 60068-1) which deals with generalities;
NOTE – Attention is drawn to IEC 60068-2-48.
- b) the second Part (IEC 60068-2) published as separate booklets each dealing with a family of tests or a particular test or guidance for their application;
NOTE – Attention is drawn to IEC 60068-2-47.
- c) the third Part (IEC 60068-3) published as separate booklets each dealing with background information on a family of tests;
- d) the fourth Part (IEC 60068-4), giving information for specification writers, published in two sections of which the second, in loose-leaf form, contains summaries of all the current tests in IEC 60068-2;
NOTE – Fire hazard tests are separately published in IEC 60695.

1.2 The following historical survey gives the significant features of this and of the earlier editions:

First edition (1954)

Contained not only the general part but also many of the individual tests which now form part of the IEC 60068-2 series.