

Australian Standard™

Environmental testing

**Part 5.2: Guide to drafting of test
methods—Terms and definitions**

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 28 February 2003 and published on 8 May 2003.

The following are represented on Committee EL-026:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Electrical Compliance Testing Authorities
Electrical Regulatory Authorities Council
Electricity Supply Association of Australia
Testing Interests (Australia)

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First published as AS 60068.5.2—2003.

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Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5151 2

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 5.2 of that series.

This Standard is identical with, and has been reproduced from, IEC 60068-5-2:1990, *Environmental testing— Part 5: Guide to drafting of test methods – Terms and definitions*.

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).

CONTENTS

	<i>Page</i>
Introduction.....	iv
1 Object	1
2 Normative references	1
3 Terminology for environmental testing	2
4 General	2
5 Shocks, vibration and steady-state acceleration	4
6 Climatic tests.....	6
7 Sealing tests	8
8 Solderability tests.....	9
Alphabetical index	11

INTRODUCTION

IEC 60068 is applicable to the environmental testing of electrotechnical products. Its general requirements are contained in:

Part 1: General and guidance

These requirements and guidance are applicable in general to the test methods in the many booklets comprising:

Part 2: Tests

A considerable proportion of the booklets include guidance on the conduct and/or applicability of the individual test methods. Where guidance is applicable to more than one test method it may be separately published in Part 2 or be treated as "background information" and published in:

Part 3: Background information

An entirely different function is performed by:

Part 4: Information for specification writers – Test summaries

which, as its title implies, has a restricted specific objective as has

Part 5: Guide to drafting of test methods:

Part 5 is intended primarily for those members of National Committees, working groups, etc., who are engaged in drafting initial proposals, revisions and amendments and wish for assistance in satisfying the "IEC/ISO Rules for the drafting and presentation of International Standards" (Directives Part 3, 2nd edition 1989) and maintaining uniformity in the presentation of the individual standards.

Each standard, excluding IEC 60068-3 and IEC 60068-4, will contain preliminary elements (see 2.2 of IEC/ISO Rules); normative elements, both "general" (see 2.3 of IEC/ISO Rules) and "technical" (see 2.4 of IEC/ISO Rules); and supplementary elements (see 2.5 of IEC/ISO Rules).

STANDARDS AUSTRALIA

Australian Standard**Environmental testing****Part 5.2: Guide to drafting of test methods—Terms and definitions**

1 Object

1.1 To define terms used in the environmental testing of specimens of electrotechnical products, such as components, subassemblies, assemblies and equipments.

1.2 The environmental conditions for which provision is made include shock and vibration, climatic (temperature, humidity and air pressure), sealing (against ingress of solids, liquids and gasses or to maintain a pressure difference), soldering heat (including thermal shock from soldering).

1.3 Terms for fire hazard testing are not included as they are to form a part of IEC 60695. The following conditions have not been considered: solar radiation, mould growth, corrosion, robustness of terminations, durability of marking, dust, sand and rain, nuclear radiation, acoustically induced vibration.

NOTES

- 1 The scope of IEC 60068 is in clause 2 of IEC 60068-1. In other standards of IEC 60068, clause 1 is termed the "object" clause and serves the purpose of object and field of application.
- 2 This guide uses, in principle, existing terms and definitions from IEC 60068 listed according to a classification of environmental conditions that is not that of IEC 60721 but is better suited to the needs of IEC 60068-2 test methods.
- 3 Some definitions from specialized vocabularies, for example from ISO 2041 and IEC 60721-1, have been included where there is no definition in IEC 60068. This standard identifies the relation between the definitions given and those other sources.

2 Normative references

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

IEC 60068: *Environmental testing*

IEC 60068-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-2: *Environmental testing – Part 2: Tests*

IEC 60068-3-1: 1974, *Environmental testing – Part 3: Background information – Section One: Cold and dry heat tests*

IEC 60068-3-1A: 1978, *Environmental testing – Part 3: Background information – Section One: Cold and dry heat tests – First supplement*

IEC 60721: *Classification of environmental conditions*

IEC 60721 1: 1981, *Classification of environmental conditions – Part 1: Classification of environmental parameters and their severities*

ISO/IEC Guide 2: 1986, *General terms and their definitions concerning standardisation and related activities*