AS 60068.2.13—2003
IEC 60068-2-13:1983

Australian Standard™

Environmental testing

Part 2.13: Tests—Test M: Low air pressure

Standards Australia

This Australian Standard was prepared by Committee EL-026, Protective Enclosures and Environmental Tests for Electrical/Electronic Equipment. It was approved on behalf of the Council of Standards Australia on 10 April 2003 and published on 16 May 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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Part 2.13: Tests—Test M: Low air pressure

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-026, Protective Enclosures and Environmental Tests for Electrical/Electronic Equipment to supersede AS 1099.2.13—1990, *Basic environmental testing procedures for electrotechnology* Part 2.13: *Test M—Low air pressure*.

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 2.13 of that series.

This Standard is identical with, and has been reproduced from, IEC 60068-2-13:1983, *Environmental testing—Part 2-13: Tests—Test M: Low air pressure*.

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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1 Introduction

1.1 General

This standard deals with low pressure tests at room temperature.

The object of this test is to determine the ability of components, equipment or other articles to be stored, transported or used under low air pressure conditions.

NOTE – Articles to be stored, transported or used under a simultaneous combination of high or low temperature and low air pressure should, where the combination is important for the stresses imposed on the article or for the failure mechanisms, be tested according to:

– IEC 60068-2-40: Basic environmental testing procedures – Part 2: Tests – Test Z/AM: Combined cold/low air pressure tests, and
– IEC 60068-2-41: Part 2: Tests – Test Z/BM: Combined dry heat/low air pressure tests.

1.2 Related document

IEC 60068-1: Basic environmental testing procedures – Part 1: General and guidance.

2 General description

The specimen is introduced into the test chamber, the chamber air pressure is then reduced to the appropriate value specified in the relevant specification.

These conditions are maintained for the specified duration.

3 Description of test apparatus

The test chamber shall be capable of maintaining the air pressure conditions given in clause 4.

Care shall be taken to avoid air contamination by ancillary equipment and devices and by the air introduced when pressure is restored to normal.

When heat-dissipating specimens are tested, the relevant specification may prescribe requirements applicable to the test chamber in accordance with Test Z/BM.

4 Severities

The severities, as indicated by air pressure and duration of exposure, shall be specified in the relevant specification. The values shall preferably be selected from those given in 4.1 and 4.2.