

Australian Standard[®]

**High-voltage test techniques
for low-voltage equipment**

**Part 1: Definitions, test and
procedure requirements**

This Australian Standard was prepared by Committee EL/7, Power Switchgear. It was approved on behalf of the Council of Standards Australia on 22 November 1995 and published on 5 February 1996.

The following interests are represented on Committee EL/7:

Australian British Chamber of Commerce
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Electricity Supply Association of Australia
Institution of Engineers, Australia
Railways of Australia
Testing Interests, Australia
WorkCover Authority of N.S.W.

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This Standard was issued in draft form for comment as DR 95223.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/7 on Power Switchgear. It is identical with and has been reproduced from IEC 1180-1:1992, *High-voltage test techniques for low-voltage equipment*, Part 1: *Definitions, test and procedure requirements*.

It is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

This Standard is Part 1 of AS 4362, *High-voltage test techniques for low-voltage equipment*, which is published in two Parts as follows:

Part 1: Definitions, test and procedure requirements

Part 2: Test equipment

It covers the high-voltage testing of low-voltage equipment and is based on AS 1931.1—1996.

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References to international Standards should be replaced by equivalent Australian Standards, as follows:

<i>References to International Standard</i>		<i>Australian Standard</i>	
IEC		AS	
68	Environmental testing	1099	Basic environmental testing procedures for electrotechnology
68-1	Part 1: General and guidance	1099.1	Part 1: General
270	Partial discharge measurements	1018	Partial discharge measurements
664	Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment		

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AUSTRALIAN STANDARD

**HIGH-VOLTAGE TEST TECHNIQUES
FOR LOW-VOLTAGE EQUIPMENT****Part 1: Definitions, test and procedure requirements**

SECTION 1: GENERAL

1.1 Scope

This part of IEC 1180 is applicable to:

- dielectric tests with direct voltage;
- dielectric tests with alternating voltage;
- dielectric tests with impulse voltage;
- tests with impulse current;
- tests with combinations of the above.

This standard is applicable only to tests on equipment having a rated voltage of not more than 1 kV a.c. or 1,5 kV d.c.

This standard is mainly applicable to type testing. It may also be applied or adapted for sample and routine testing as specified by the relevant technical committee.

It is not intended to be used for electromagnetic compatibility tests on electric or electronic equipment.

This standard provides the relevant technical committees as far as possible with:

- defined terms of both general and specific applicability;
- general requirements regarding test objects and test procedures;
- methods for generation and measurement of test voltages and currents;
- test procedures;
- methods for the evaluation of test results and to indicate criteria for acceptance;
- requirements concerning approved measuring devices and checking methods.

Alternative test procedures may be required and these shall be specified by the relevant technical committees.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1180. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to