AS 4362.2—1996
IEC 1180-2:1994

Australian Standard®

High-voltage test techniques for low-voltage equipment

Part 2: Test equipment

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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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 1180-2:1994, *High-voltage test techniques for low-voltage equipment*, Part 2: *Test equipment.*

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

This Standard is Part 2 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

The purpose of this Standard is to cover test equipment used for high-voltage testing of low-voltage equipment.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

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

(a) Its number is shown only on the cover and title page, while the international Standard number appears only on the cover.

(b) In the source text, 'this international Standard' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

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

References to International Standard		*Australian Standard*	
IEC		AS	
60	High-voltage test techniques	1931	High voltage testing techniques
60-1	Part 1: General definitions and test requirements	1931.1	General definitions, test requirements, test procedures and measuring devices
60-2	Part 2: Measuring systems	1931.2	Application guide for measuring devices
68	Environmental testing	1099	Basic environmental testing procedures for electrotechnology
68-1	Part 1: General and guidance	1099.1	Part 1: General
790	Oscilloscopes and peak voltmeters for impulse tests	—	
1083	Digital recorders for measurements in high-voltage impulse tests		
1083-1	Part 1: Requirements for digital recorders	—	
1180	High-voltage test techniques for low-voltage equipment		
1180-1	Part 1: Definitions, test and procedure requirements	—	

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NOTES

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AUSTRALIAN STANDARD

HIGH-VOLTAGE TEST TECHNIQUES FOR LOW-VOLTAGE EQUIPMENT –

Part 2: Test equipment

1 Scope

This part of IEC 1180 is applicable to the test equipment used for dielectric tests on low-voltage equipment. It covers tests with direct, alternating or impulse voltage, impulse current, and tests with a combination of impulse voltage and impulse current. Verification procedures necessary for ensuring that the dielectric tests comply with the voltage, or current, requirements stated in part 1 of this standard in shape and magnitude are stated.

The test equipment comprises a voltage and/or current generator and a measuring system. This standard covers test equipment in which the measuring system is protected against external interference and coupling by appropriate screening, for example a continuous conducting shield. Therefore, simple comparison tests are sufficient to ensure valid results.

Test equipment having measuring systems composed of non-screened components and/or connected by long leads is not covered in this standard. In this case guidance can be obtained from IEC 60-2 keeping in mind the less stringent requirements of this standard.

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 of this standard, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 1180 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 68-1:1988, *Environmental testing — Part 1: General and guidance*

IEC 790:1984, *Oscilloscopes and peak voltmeters for impulse test*

IEC 1083-1:1991, *Digital recorders for measurements in high-voltage impulse tests – Part 1: Requirements for digital recorders*

IEC 1180-1:1992, *High-voltage test techniques for low-voltage equipment – Part 1: Definitions, test and procedure requirements*

NOTE – The requirements of IEC 790 and IEC 1083-1 may be reduced because the uncertainty limits of this part of 1180 are less stringent than those in IEC 60-1, for example, ±5 % for peak value (±3 % in IEC 60-1).