AS 1931.2—1996
IEC 60-2:1994

Australian Standard®

High-voltage test techniques

Part 2: Measuring systems

This Australian Standard was prepared by Committee EL/7, Power Switchgear. It was approved on behalf of the Council of Standards Australia on 10 November 1995 and published on 5 March 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 60-2:1994, *High-voltage test techniques,* Part 2: *Measuring systems,* to supersede AS 1931.2 — 1977, *High-voltage testing techniques,* Part 2: *Application guide for measuring devices.*

This Standard 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 1931, *High-voltage test techniques,* which is published in Parts as follows:

Part 1: General definitions and test requirements
Part 2: Measuring systems

The objective of this Standard, in addition to that stated in Clause 1, is to bring the superseded Standard into line with IEC 60-2.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annexes to which they apply. A 'normative' annex is an integral part of a Standard, whereas 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 Standards*	
IEC		AS	
50	International Electrotechnical Vocabulary	1852	International Electrotechnical Vocabulary
50(301)	General terms on measurements in electricity	1852.301	General terms on measurements in electricity
50(302)	Electrical measuring instruments	1852.302	Electrical measuring instruments
50(303)	Electronic measuring instruments	1852.303	Electronic measuring instruments
50(321)	Instrument transformers	1852.321	Instrument transformers
51	Direct acting indicating analogue electrical-measuring instruments and their accessories	—	
52	Recommendations for voltage measurement by means of sphere-gaps (one sphere earthed)	2886	Voltage measurement — Sphere-gap method (one sphere earthed)
60	High-voltage test techniques	1931	High-voltage test techniques
60-1	Part 1: General definitions and test requirements	1931.1	Part 1: General definitions and test requirements
71	Insulation co-ordination	1824	Insulation co-ordination
71-1	Part 1: Definitions, principles and rules	1824.1	Part 1: Definitions, principles and rules

IEC		AS	
790	Oscilloscopes and peak voltmeters for impulse tests	—	
833	Measurement of power-frequency electric fields	3720	Measurement of power-frequency electric fields
1083	Digital recorders for measurements in high-voltage impulse tests	—	
1083.1	Part 1: Requirements for digital recorders		

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CONTENTS

Clause *Page*

Clause *Page*

AUSTRALIAN STANDARD

HIGH-VOLTAGE TEST TECHNIQUES—
Part 2: Measuring Systems

1 Scope

This part of IEC 60 is applicable to complete Measuring Systems, and to their components, used for the measurement of high-voltages and currents during tests with direct voltage, alternating voltage, lightning and switching impulse voltages and for tests with impulse currents, or with combinations of them as specified in IEC 60-1.

The limits on measurement uncertainties stated in this International Standard apply to test levels stated in IEC 71-1. The principles of this International Standard apply also to higher levels but the uncertainty may be greater.

This standard:

—defines the terms used,
—states the requirements which the Measuring Systems shall meet,
—describes the methods for approving a Measuring System and checking its components,

—describes the procedure by which the user will show that a Measuring System meets the requirements of this standard.