

AS 2886—1986

Australian Standard[®]

**VOLTAGE MEASUREMENT—
SPHERE-GAP METHOD
(ONE SPHERE EARTHED)**

This Australian standard was prepared by Committee EL/7, Power Switchgear. It was approved on behalf of the Council of the Standards Association of Australia on 23 April 1986 and published on 7 July 1986.

The following interests are represented on Committee EL/7:

Australian British Chamber of Commerce
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Electricity Supply Association of Australia
Institution of Engineers, Australia
Railways of Australia Committee
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PREFACE

This standard was prepared by the Association's Committee on Power Switchgear to supersede AS C329—1961, Method for the Measurement of Voltage with Sphere-gaps (One Sphere Earthed), an endorsement of BS 358:1960.

This standard has been reproduced from IEC 52 (1960) and except for an amended title, a correction to the second equation in Clause 5.3.2 and a correction to the disruptive discharge voltage value in Table I for a 50 cm sphere diameter with 38 cm gap spacing, it is identical with IEC 52 (1960). Thus it has a different format from that of AS C329—1961.

This standard specifies requirements for the sphere-gaps and their use for the measurement of peak alternating voltages, direct voltages, standard lightning impulse voltages and lightning impulse voltages with longer tails.

Sphere-gaps have also been used to measure switching impulse voltages and it is anticipated that, following a study by CIGRE, some amendments will be made to IEC 52 and to this standard to cover the measurement of switching impulse voltages.

IEC 52(1960) was prepared by the International Electrotechnical Commission's Technical Committee IEC TC 42, High-voltage Testing Techniques, has been approved by the majority of National Committees and has achieved worldwide acceptance as a truly international standard for voltage measurement.

For the purpose of this standard, the reference to IEC publications should be replaced by reference to Australian Standards, as follows:

<i>Reference to IEC Publication</i>	<i>Appropriate Australian Standard</i>
IEC 60: High voltage test techniques	AS 1931 High Voltage Testing Techniques Part 1— General Definitions, Test Procedures and Measuring Devices

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