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(Based on Version of IEC 466)

Australian Standard®
2264—1985

HIGH-VOLTAGE A.C. SWITCHGEAR AND CONTROLGEAR—
INSULATION-ENCLOSED FOR RATED VOLTAGES ABOVE 1 kV UP TO AND INCLUDING 36 kV

[Title allocated by the Defence Cataloguing Authority:
SWITCHGEAR AND CONTROLGEAR, ELECTRICAL
(Insulation-enclosed, above 1 kV up to and including 36 kV)]

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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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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STANDARDS ASSOCIATION OF AUSTRALIA
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AMENDMENT No 1
to
AS 2264—1985
HIGH-VOLTAGE A.C. SWITCHGEAR AND CONTROLGEAR—INSULATION-ENCLOSED FOR RATED VOLTAGES ABOVE 1 kV UP TO AND INCLUDING 36 kV

CORRECTION

The 1985 edition of AS 2264 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: This amendment applies to Clause 5.102.2, Items (a) and (b).

Published on 6 September 1985.

AMDT No 1 SEPT. 1985

Page 8. Clause 5.102.2.

In the second line of Item (a), *replace* the words 'Items (a) to (c)' by 'Items (a)(i), (a)(ii) and (a)(iii)'.

In the third line of Item (b), *replace* the words 'Item (d) or Item (e)' by 'Item (b)(i) or Item (b)(ii)'.

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AUSTRALIAN STANDARD

HIGH-VOLTAGE A.C. SWITCHGEAR AND CONTROLGEAR—

INSULATION-ENCLOSED FOR RATED VOLTAGES ABOVE 1 kV UP TO AND INCLUDING 36 kV

AS 2264—1985

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PREFACE

This edition of this standard was prepared by the Association's Committee on Power Switchgear to supersede AS 2264—1979, Insulation-enclosed Switchgear and Controlgear for Rated Voltages Above 1 kV Up to and Including 36 kV.

It is based on IEC document 17C (Central Office) 52 for the revision of IEC 466, which includes significant technical changes introduced by IEC documents 17C (Central Office) 33 and 35.

This edition closely follows the editorial format of AS 2650, High-voltage A.C. Switchgear and Controlgear—Common Requirements, and also the clause numbering of IEC document 17C (Central Office) 52.

This standard is intended to be read in conjunction with AS 2650 as, in general, the clauses herein refer to, modify or supplement the corresponding clauses of AS 2650. Clauses having numbers with a component part of 101 or greater are specific only to this standard.

Where this standard deviates technically from the above IEC Secretariat documents by way of additional or different requirements, this fact is indicated by a rule in the margin against the clause, or part thereof, affected. A summary of technical variations between this standard and the above IEC documents is given in the Annex.

In the Contents, clauses printed in bold type indicate those clauses in AS 2650 which apply without amendment in this standard.

CONTENTS

NOTE: Clauses printed in **bold** type below indicate those clauses in AS 2650 which apply without amendment in this standard.

1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for factory assembled a.c. insulation-enclosed switchgear and controlgear of rated voltages above 1 kV and up to and including 36 kV for indoor installation and for service frequencies up to and including 60 Hz.

Insulation-enclosed switchgear and controlgear for special use, e.g. in inflammable atmospheres, in mines or on board ships, may be subject to additional requirements.

This standard does not deal with components contained in insulation-enclosed switchgear and controlgear for which individual standards exist.

NOTE: This standard principally covers switchgear and controlgear assemblies with insulation obtained by solid material and air at atmospheric pressure. At present, standards are not available for oil or gas filled pressurized insulation-enclosed switchgear and controlgear. Switchgear and controlgear assemblies having a metal enclosure are covered by AS 2086.

1.2 APPLICATION. This standard should be read in conjunction with AS 2650.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1018 Recommendations for Partial Discharge Measurements

AS 1255 Methods of Test for Electrical Characteristics of Solid Plastics Insulating Materials

1255.3—Determination of Electrical Strength at Power Frequencies

AS 1306 High Voltage Isolators (Disconnectors) and Earthing Switches

AS 1852 International Electrotechnical Vocabulary

1852(441)—Switchgear and Controlgear

AS 1931 High-voltage Testing Techniques
Part 1—General Definitions, Test Requirements, Test Procedures and Measuring Devices.

AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment

AS 2006 High Voltage Alternating Current Circuit-breakers

AS 2086 High-voltage A.C. Switchgear and Controlgear—Metal-enclosed for Rated Voltages Above 1 kV up to and Including 72.5 kV

AS 2650 High-voltage A.C. Switchgear and Controlgear—Common Requirements

AS 2467 Maintenance of Electrical Switchgear

2. SERVICE CONDITIONS

2.1 NORMAL SERVICE CONDITIONS. Unless otherwise specified, the insulation-enclosed switchgear and controlgear is designed to be used under normal indoor service conditions as specified in Clause 2.1.1 of AS 2650.

2.2 SPECIAL SERVICE CONDITIONS. Clause 2.2 of AS 2650 applies.

NOTE: Special service conditions are subject to arrangement between the purchaser and manufacturer.

3. DEFINITIONS

3.1 GENERAL. For the purpose of this standard, the definitions in AS 1852(441), and in Clause 3 of AS 2650 apply. Additional terms used in this standard are defined below.

3.101 Switchgear and controlgear—a general term covering switching devices and their combination with associated control, measuring, protective and regulating equipment, also assemblies of such devices and equipment with associated interconnections, accessories, enclosures and supporting structures.

3.102 Insulation-enclosed switchgear and controlgear—switchgear and controlgear assemblies with an external insulation enclosure, complete except for external connections.

3.103 Transport unit—a part of insulation-enclosed switchgear and controlgear suitable for shipment without being dismantled.

3.104 Functional unit—a part of insulation-enclosed switchgear and controlgear comprising all the components of the main circuits and auxiliary circuits that contribute to the fulfilment of a single function.

NOTE: Functional units may be distinguished according to the function for which they are intended, e.g. incoming unit, through which electrical energy is normally fed into the insulation enclosed switchgear, outgoing unit through which electrical energy is normally supplied to one or more external circuits.

3.105 Insulation enclosure—a solid insulation surrounding the insulation-enclosed switchgear and controlgear used as protection against dangerous effects of electricity, and intended to protect persons against approach to or contact with live parts and against contact with moving parts contained therein and to protect the equipment against external influences.

3.106 Insulation-embedded component—a component, the live parts of which are, with the exception of the terminals, integrally surrounded by solid insulation.

NOTE: The insulation may form part of the insulation enclosure.

3.107 Compartment—a part of insulation-enclosed switchgear and controlgear enclosed except for openings necessary for interconnection, control or ventilation.

NOTE: A compartment may be designated by the main component contained therein, e.g. circuit-breaker compartment, busbar compartment.

3.108 Component—an essential part of the main or earthing circuits of insulation-enclosed switchgear and controlgear which serves a specific function, e.g. circuit-breaker, disconnector, switch, fuse, instrument transformer, bushing, busbar.

3.109 Shutter—a part of insulation-enclosed switchgear and controlgear that can be moved from a position where it permits contacts of a removable part to engage fixed contacts, to a position where it becomes a part of the insulation enclosure shielding the fixed contacts.

3.110 Removable part—a part of insulation-enclosed switchgear and controlgear that may be removed entirely from the insulation-enclosed switchgear and controlgear and replaced, even though the main circuit is alive.