

Australian Standard<sup>®</sup>

---

**International electrotechnical  
vocabulary**

**Chapter 441. Switchgear,  
controlgear and fuses**

---

This Australian standard was prepared by Committee TE/13, Symbols, Units and Quantities for Electrotechnology. It was approved on behalf of the Council of the Standards Association of Australia on 1 February 1985 and published on 7 June 1985.

---

The following interests are represented on Committee TE/13:

Australian Electrical and Electronic Manufacturers Association Limited  
Confederation of Australian Industry  
Department of Aviation  
Department of Defence  
Department of Defence Support  
Department of Housing and Construction  
Departments of Technical and Further Education, N.S.W. and Victoria  
Electricity Supply Association of Australia  
Institute of Draftsmen, Australia  
Institute of Radio and Electronics Engineers Australia  
Melbourne and Metropolitan Board of Works  
Queensland Chamber of Mines  
Railways of Australia Committee  
The Technical Press  
Telecom Australia

---

**Review of Australian Standards.** To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard<sup>®</sup>

---

**International electrotechnical  
vocabulary**

**Chapter 441 Switchgear,  
controlgear and fuses**

---

|                       |      |
|-----------------------|------|
| First published ..... | 1975 |
| Second edition .....  | 1985 |

PUBLISHED BY STANDARDS AUSTRALIA  
(STANDARDS ASSOCIATION OF AUSTRALIA)  
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 3695 0

## PREFACE

This edition of this standard was prepared by the Association's Committee on Symbols, Units and Quantities for Electrotechnology under the authority of both the Telecommunications and Electronics Standards Board and the Electrical Standards Board. This standard supersedes AS 1852(441)—1975, International Electrotechnical Vocabulary, Switchgear and Controlgear.

This standard is identical with and has been reproduced from IEC 50(441) — 1984.

This edition, in addition to being updated, contains various additions, particularly in the field of factory-built enclosed switchgear and controlgear assemblies, and is the outcome of work undertaken since 1977 by two Working Groups operating in close collaboration; viz: Working Group 1 of IEC Technical Committee No 17: Switchgear and Controlgear, and Working Group 1 of IEC Technical Committee No 32: Fuses. Also, to avoid misunderstanding between terms, the sections of this edition have been numbered from 11 to 18, whereas the sections of the 1975 edition, were numbered from 01 to 07.

This standard is one of the AS 1852 series of standards. In the past, this series has consisted of direct endorsements of the IEC 50 series of the International Electrotechnical Vocabulary. In future, newly issued parts of IEC 50 where appropriate, will be issued as Australian standards, i.e. not endorsements. The full text of the definitions in English, French, and Russian has been included as some definitions are considered to be incomplete when produced in one language.

The purpose of the AS 1852 series is to provide a glossary of terms used in electrical engineering. The series lists terms in English, French and Russian and, in some cases, Spanish. It is intended that other Australian standards will refer to AS 1852 and not repeat and definitions.

Note: On the CD-ROM, only the English language definitions are available. For the full version incorporating French and Russian terms, please refer to the hard copy.

## CONTENTS

| SECTION  | <i>Page</i> |
|--|-------------|
| 441-11 GENERAL TERMS .....   | 3           |
| 441-12 ASSEMBLIES OF SWITCHGEAR AND CONTROLGEAR .....                          | 6           |
| 441-13 PARTS OF ASSEMBLIES .....   | 9           |
| 441-14 SWITCHING DEVICES .....   | 11          |
| 441-15 PARTS OF SWITCHING DEVICES .....  | 23          |
| 441-16 OPERATION .....   | 29          |
| 441-17 CHARACTERISTIC QUANTITIES OF SWITCHGEAR, CONTROLGEAR<br>AND FUSES ..... | 41          |
| 441-18 FUSES .....   | 54          |
| INDEX .....  | 62          |

### © Copyright — STANDARDS AUSTRALIA

Users of standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

INTERNATIONAL ELECTROTECHNICAL VOCABULARY  
CHAPTER 441—SWITCHGEAR, CONTROLGEAR AND FUSES

## SECTION 441-11—GENERAL TERMS

**441-11-01****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.

**441-11-02****switchgear**

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. Intended in principle for use in connection with generation, transmission, distribution and conversion of electric energy.