

WITHDRAWN IS
APRIL 1983

USE IEC 50(III)-1996

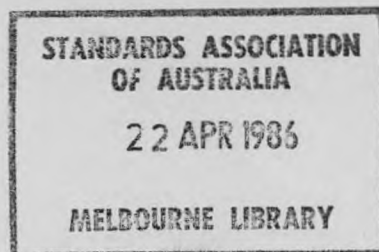
AS 1852(111-01)—1983
UDC 621.3.01(083.72)

Australian Standard[®] 1852(111-01)—1983

INTERNATIONAL ELECTROTECHNICAL
VOCABULARY

Chapter 111—PHYSICS AND
CHEMISTRY

Section 111-01—PHYSICAL
CONCEPTS



STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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 16 June 1983 and published on 2 December 1983.

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 Housing and Construction
Departments of Technical and Further Education, N.S.W. and Victoria
Electricity Supply Association of Australia
Institute of Draftsmen, Australia
Institution 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 SAA publications will be found in the Catalogue of SAA Publications; this information is supplemented each month by SAA's journal '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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn standards.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 the Association, 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.

[Details appear in TAS --- 1983, just as an endorsement. Published as an Australian Standard and received in the Information Centre in Dec 1986 but date in document given as Dec 1983, and nothing appeared in TAS]

AUSTRALIAN STANDARD

**INTERNATIONAL ELECTROTECHNICAL
VOCABULARY**

**CHAPTER 111:
PHYSICS AND CHEMISTRY**

**SECTION 111-01:
PHYSICAL CONCEPTS**

AS 1852(111-01)—1983

First published1983

**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.**

ISBN 0 7262 3919 4

PREFACE

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 in part, AS 1852(05)—1970, International Electrotechnical Vocabulary, Fundamental Definitions, which is now withdrawn.

This standard is identical with and has been reproduced from IEC 50(111-01)—1982. Acknowledgement is accordingly made to the International Electrotechnical Commission for this assistance.

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 any definitions.

CONTENTS

Section	<i>Page</i>
111-01 Physical Concepts	3
Index	20

© Copyright — STANDARDS ASSOCIATION OF AUSTRALIA

Users of standards are reminded that copyright subsists in all SAA publications. No part of this publication may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing of the Standards Association of Australia.

STANDARDS ASSOCIATION OF AUSTRALIA

 Australian Standard

INTERNATIONAL ELECTROTECHNICAL VOCABULARY

CHAPTER 111—PHYSICS AND CHEMISTRY

SECTION 111-01 — PHYSICAL CONCEPTS

Remarques:

1. Dans les définitions qui suivent, « corps » est employé au sens le plus général comprenant les formes solides, liquides et gazeuses d'un spécimen donné de matière.
2. Les locutions « quantité A par unité de quantité B » ou « quantité A unitaire » désignent la limite du quotient de la quantité ΔA par la quantité ΔB , c'est-à-dire,

$$\lim_{\Delta B \rightarrow 0} (\Delta A / \Delta B).$$

3. Dans tous les chapitres de la physique, il est nécessaire d'accepter un minimum de notions axiomatiques. Dans la section 111-01, la masse et la charge électrique sont introduites axiomatiquement.

Remarks:

1. In the following definitions, "body" is used in its most general sense including the solid, liquid and gaseous forms of a given sample of matter.
2. The phrase "quantity A per unit of quantity B" means the limit of the quotient of quantity ΔA by quantity ΔB , i.e.

$$\lim_{\Delta B \rightarrow 0} (\Delta A / \Delta B).$$

3. In every branch of physics it is necessary to accept a minimum number of axiomatic concepts. In section 111-01, mass and electric charge are introduced axiomatically.

Замечания:

1. В нижеследующих определениях слово « тело » применяется в наиболее общем смысле и обозначает твердую, жидкую и газообразную формы рассматриваемого объекта материи.
2. Выражение « величина A через единицу величины B » означает предел отношения величины ΔA к величине ΔB , т. е.

$$\lim_{\Delta B \rightarrow 0} (\Delta A / \Delta B).$$

3. Во всех главах, относящихся к физике, необходимо принять некоторый минимум понятий, введенных axiomатически. В разделе 111-01 такими понятиями являются масса и электрический заряд.