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Australian Standard 3159 – 1980

APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC SOUND AND VISION EQUIPMENT

STANDARDS ASSOCIATION OF AUSTRALIA
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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Broadcasting Commission

Confederation of Australian Industry

Department of Defence

Department of Productivity

Department of Transport

Electronics Importers Association

Federation of Australian Commercial Television Stations

Federation of Australian Radio Broadcasters

Independent testing organization

Institution of Radio and Electronics Engineers

Postal and Telecommunications Department

Telecom Australia

This standard, prepared by Committee TE/1, Safety of Electronic Equipment, was approved on behalf of the Council of the Standards Association of Australia on 15 April 1980, and was published on 1 July 1980.

To keep abreast of progress in industry, Australian standards are subject to continuous 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 their standards are up-to-date. Full details of all SAA publications will be found in the Annual List of Australian Standards; these details are supplemented by listings in the SAA monthly journal 'The Australian Standard'. Information on the Annual List and 'The Australian Standard' may be obtained from any sales office of the Association, where details are also available of the current status of individual standards. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

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Amendment No 1
to
AS 3159—1980
Approval and Test Specification
for
ELECTRONIC SOUND AND VISION EQUIPMENT

REVISED TEXT

The 1980 edition of AS 3159 is amended as follows; the amendments should be inserted in the appropriate places.

SUMMARY: The following sections of the standard are covered by this amendment: Clauses 2.17.1, 2.17.3 (new) and 2.20 (new), and Appendix F(F2). In addition references to AS C100, AS C112 and AS C126 have been changed to AS 3100, AS 3112 and AS 3126 respectively.

Published on 8 November 1982.

STANDARDS ASSOCIATION OF AUSTRALIA
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AMENDMENT No 2
to
AS 3159—1980
Approval and Test Specification
for
ELECTRONIC SOUND AND VISION EQUIPMENT

REVISED TEXT

The 1980 edition of AS 3159 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: The following clause of the standard is covered by this amendment: Clause 2.20.

Published on 11 May 1984.

Clause 2.20 as inserted by Amendment No 1 published 8 November 1982. AMDT No 2 MAY 1984

Delete the fourth paragraph which reads as follows:

'If it is evident from the design of the equipment that there will be no d.c. component, this test is not conducted.'

and *substitute* the following for the fourth paragraph:

'If it is evident from the design of the equipment that there will be no d.c. component, e.g. equipment provided with full-wave mains power supply or mains isolating transformer, this test is not conducted.'

This amendment forms part of the specification on publication.

August 1980

STANDARDS ASSOCIATION OF AUSTRALIA

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CORRIGENDUM
to
AS 3159—1980
APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC SOUND AND VISION EQUIPMENT

SUMMARY: This correction applies to Clause 6.6.5.

Published on 1 September 1980.

Page 32. Clause 6.6.5.

4th line—*alter* '(a) and (b)' to '(b) and (c)'.

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APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC SOUND AND VISION EQUIPMENT

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PREFACE

This edition of this standard was prepared by the Association's Committee on Safety of Electronic Equipment. It represents an updating of the 1976 edition of the standard by the incorporation of Amendments 1 to 5 thereto, plus changes to Clauses 2.5.1, 2.5.4, 2.12.2 (b), 2.14, 5.2, 6.1 and 6.6.5. The majority of these changes are editorial in nature introduced for the purpose of clarifying the intention of the particular clause. Clause 2.14 however, has been replaced entirely by the equivalent clause from IEC 65, modified by references to specific Australian approval and test specifications covering prescribed items of equipment.

It is one of a series of approval and test specifications issued by the Association under Part 2 of the SAA Wiring Rules. These specifications are accompanied by a general specification AS C100, containing definitions and general requirements for electrical materials and equipment. The purpose of these specifications is to outline conditions which must be satisfied to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This edition was prepared for the purpose of minimizing a number of difficulties encountered in the application of AS 3159, pending the completion of an even more extensive examination of approval and test criteria suitable for electrical approval purposes. It should be stressed that the information conveyed in this edition may well be modified and supplemented by other requirements after a thorough review of all factors involved which is being undertaken by the committee. In particular, attention has been given to the aligning of Australian requirements with those applying internationally. In the preparation of this edition, extensive reference was made to IEC 65, and acknowledgement is made for the assistance received therefrom.

This standard requires reference to the following Australian standards and approval and test specifications:

AS 1044 Limits of Electromagnetic Interference for Electrical Appliances and Equipment

AS 1053 Radio Interference Limits and Measurements for Television and Radio Receivers

AS 1099 Basic Environmental Testing Procedures for Electronics and Telecommunications Purposes

AS 1417 Rules for Antennas for the Reception of Radio and Television Broadcasting for the Range 30 to 1000 MHz

AS 3000, Part 1—SAA Wiring Rules

AS 3116 Elastomer Insulated Electric Cables and Flexible Cables for Working Voltages of 0·6/1 kV

AS 3121 Insulating Mouldings

AS 3133 Air Break Switches

AS 3145 Radio Interference Suppression Devices

AS 3147 PVC Insulated Electric Cables and Flexible Cables for Working Voltages of 0·6/1 kV

AS 3191 Electric Flexible Cords (Metric units)

AS 3100 ~~AS C100~~ Definitions and General Requirements for Electrical Materials and Equipment

SEE AMENDMENT No. 1.

AS C109 Appliance Plugs and Appliance Inlet-sockets

AS 3112 ~~AS C112~~ Plugs and Plug Sockets

AS 3126 ~~AS C126~~ Extra-low Voltage Transformers

AS C320 Classification of Insulating Materials for Electrical Machinery and Apparatus on the Basis of Thermal Stability in Service

ISO/4046 Paper, Board, Pulp and Related Terms—Vocabulary

BS 3196 Cotton Cheese Cloth: Tubulars, Flats and Caps

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Preface.

Delete 'AS C100', 'AS C112' and 'AS C126' and *substitute* 'AS 3100', 'AS 3112' and 'AS 3126' respectively.

AMDT No 1 NOV 1982

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC SOUND AND VISION EQUIPMENT

FOREWORD

This specification is one of the SAA Approval and Test Specifications which form Part 2: Materials, of AS 3000, SAA Wiring Rules. These specifications are intended to prevent injury to persons and damage to property by establishing essential requirements and minimum safety standards for materials and for the design and construction of fittings, accessories, appliances and equipment used in or in connection with any electrical installation.

In every State of Australia legislation has been enacted which requires that electrical equipment of a prescribed class or type shall not be marketed unless approved by the relevant Statutory Electricity Authority. In general, the basis of approval is the series of Approval and Test Specifications referred to above.

For equipment which is not prescribed, statutory and supply authorities may require proof that it complies with the relevant approvals specifications or some requirements thereof. For this reason, voluntary examination schemes are operated by the statutory authorities.

Though not a part of this specification, attention is drawn to the fact that Australian statutory electricity authorities prohibit the connection of television receivers of a kind that has a half-wave rectified power supply that is not electrically isolated from the mains power supply by means of a double-wound transformer incorporated in, or forming part of, the television receiver.

Irrespective of the need for approval of equipment covered by this specification, the Association wishes to emphasize that the specification establishes minimum standards of safety for electronic sound and vision equipment. For this reason alone there is a responsibility on each manufacturer or importer of electronic equipment to comply with the specification in all respects.