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APPROVAL AND TEST SPECIFICATION FOR CORD EXTENSION SOCKETS

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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:

Association of Consulting Engineers Australia

Australian Electrical and Electronic Manufacturers Association

Confederation of Australian Industries

Department of Housing and Construction

Department of Industry and Commerce

Department of Public Works, N.S.W.

Electrical Contractors Associations of Australia

Electrical regulatory authorities

Electricity Supply Association of Australia

Plastics Institute of Australia Incorporated

Railways of Australia Committee

Telecom Australia

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AMENDMENT No 1
to
AS 3120—1981
Approval and Test Specification for
CORD EXTENSION SOCKETS

REVISED TEXT

The 1981 edition of AS 3120 is amended as follows; the amendments should be inserted in the appropriate place.

SUMMARY: The following sections of the standard are covered by these amendments: Clauses 12.1 and 22.5. In addition the references to AS C100 have been changed to AS 3100.

Published on 5 October 1984.

Page 5. Preface.

AMDT No 1 OCT. 1984

(First line under title) Clauses 3.1, 15, 18.2, 21.1, 21.4, 21.5.1, 22.2.3, 22.5.

Delete 'AS C100' and *insert* 'AS 3100'.

This amendment forms part of the specification on publication.

Page 6. Clause 12.1.

AMDT No 1 OCT. 1984

Delete final paragraph and *substitute* the following:

The minimum distance from the edge of the live pin aperture to the extremity of the socket face or faceplate shall be not less than 11.7 mm, except for 20A rated sockets, which shall be not less than 10.7 mm.

This amendment forms part of the specification on publication.

Page 9. Clause 22.5.

AMDT No 1 OCT. 1984

Delete 2nd paragraph and *substitute* the following:

The temperature rise of any part shall not exceed 40 °C.

This amendment forms part of the specification on publication.

PREFACE

This specification, prepared by Committee EL/4, Electrical Accessories, was approved on behalf of the Council of the Standards Association of Australia on 2 September 1981, and was published on 14 December 1981.

It is one of a series of approval and test specifications issued by the Association. These specifications are accompanied by a general specification AS C100, Definitions and General Requirements for Electrical Materials and Equipment. The purpose of these specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

In this edition, no attempt has been made to revise established criteria; however, various items have been updated in line with current practice. It should be noted that the metric values herein are a 'soft' conversion, i.e. a direct conversion from imperial to metric units, rounded off as was considered appropriate.

This specification supersedes AS C120—1964 from the date of publication.

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

AS 3112	Plugs and Plug Sockets
AS 3121	Insulating Mouldings
AS 3133	Air Break Switches
AS C100	Definitions and General Requirements for Electrical Materials and Equipment
AS C109	Appliance Plugs and Appliance Inlet-sockets

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APPROVAL AND TEST SPECIFICATION
FOR
CORD EXTENSION SOCKETS

This specification shall be read in conjunction with AS ~~C100~~ 3100. (See also Clause 3, below.)

1 SCOPE. This specification applies to cord extension sockets, as defined in Clause 2, intended for use at extra-low, low and medium voltages.

This specification does not apply to cord extension sockets which are enclosed within an appliance in such a way that they are not exposed to personal contact, or which are intended for use solely where they will be so enclosed.

2 DEFINITION. For the purpose of this specification, the following definition applies:

Cord extension socket—a device arranged for attachment to a flexible cord and having contacts whereby a detachable connection may be made with pins of a plug.

The term 'socket' shall be taken to mean 'cord extension socket' where used in this specification.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General Requirements of AS ~~C100~~ 3100. This specification shall be read in conjunction with AS ~~C100~~ 3100 and the appropriate provisions of AS ~~C100~~ 3100. shall apply to the construction of a cord extension socket and the insulation and safeguarding of parts which normally carry current.

3.2 Specific Requirements of the Specification. A cord extension socket shall be deemed to comply with this specification only if it complies with all requirements of this specification and passes the tests specified herein.

4 EXEMPTIONS FOR EXTRA-LOW VOLTAGE SOCKETS. Extra-low voltage type sockets shall not be required to comply with Clauses 17, 18 and 22.2.

5 LIMITATION OF OUTLETS. Sockets shall accommodate one plug only.

6 TERMINALS AND INTERNAL CONNECTIONS.

6.1 Material. Terminals and internal connections intended primarily for carrying current shall be of suitable corrosion-resisting metal, of sufficient hardness and rigidity for the intended application.

6.2 Construction of Terminals. The terminals shall be capable of accommodating the conductors of a flexible cord of current rating corresponding to the marked current rating of the socket.

Facilities shall be provided to prevent slipping or spreading of the conductors or conductor strands. Where the facilities are such that the conductor is to be located around the shank of the terminal screw and clamped under the screw head, the following requirements shall apply:

(a) When the terminal screw is screwed into the limit of its thread, the clearance between the head of the screw and the washer or means of retention of the conductor shall not exceed 0.4 mm.

(b) The terminal screw shall be of sufficient length to enable it to be backed off sufficiently from the washer or means of retention of the conductor so that the conductor may be located around the shank without difficulty.

(c) Where the means of retention of the conductor is not continuous, e.g. prongs, there shall be at least three points of retention and the maximum angle between any two points shall not exceed 150 degrees.

(d) Where the means of retention of the conductor is continuous, e.g. portion of the insulating moulding, the angle subtended by the arc of the means of retention shall be not less than 180 degrees.

The diameter of conductor hole in tunnel-type terminals shall not exceed—

(i) for sockets rated at 10 A or less .. 3.3 mm; or

(ii) for sockets rated at 15 A ..... 4 mm.

When the socket is correctly assembled the terminals shall be held firmly in position.

7 CONTACTS.

7.1 Material. Contacts shall be of corrosion-resisting metal of sufficient rigidity and durability for the intended application.

7.2 Construction. The contacts shall be such that they make and maintain, under normal service conditions, satisfactory electrical and mechanical contact with the pins of the appropriate type of plug. For sockets intended to accommodate plugs with flat pins, contact shall be made with both sides of each pin.

The alignment and contact-making properties of contacts shall be independent of terminal screws.

The effectiveness of the contacts shall be independent of pressure from any thermoplastic or resilient moulding.

In sockets designed for use with plugs complying with Fig. 2.1 of AS 3112, the contacts shall be self-adjusting in pitch and contact making.