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Australian Standard®
3106—1987

APPROVAL AND TEST SPECIFICATION—
ELECTRIC JUGS
(WITH NON-METALLIC BODIES)

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

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This Australian standard was prepared by Committee EL/2, Electric Approvals Standards. It was approved on behalf of the Council of the Standards Association of Australia on 20 January 1987 and published on 2 March 1987.

The following interests are represented on Committee EL/2:

Australian Chamber of Commerce
Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Consumer Electronics Suppliers Association
Electrical Apparatus Approvals Authorities
Electrical Supply Association of Australia
Electrical Testing Laboratories
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for history block with redactings see attached sheet

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STANDARDS ASSOCIATION OF AUSTRALIA

ESTABLISHED UNDER THE AEGIS OF THE COMMONWEALTH AND STATE GOVERNMENTS FOR THE PROMOTION OF STANDARDISATION AND SIMPLIFIED PRACTICE

S. A. A.

~~Provisional~~ Approval and Test Specification

for

Electric Jugs

(Type A—Jugs with Open Elements)

PRICE SIXPENCE POSTAGE TWOPENCE

STANDARDS ASSOCIATION OF AUSTRALIA

AMENDMENT No. 1

to

S.A.A. Approval and Test Specification

for

ELECTRIC JUGS

(Type A—With Open Elements)

(No. C 106—1940. Ap.)

Revised Edition ..... July, 1940

Amended and Redated ..... July, 1947

The S.A.A. Approval and Test Specification for Electric Jugs (Type A—With Open Elements) (No. C 106—1940. Ap.) has been amended as indicated hereunder, and is therefore redated as No. C 106—1947. Ap.

The redating slip should be affixed to the top of the cover page, and the amendments should be inserted at the appropriate pages.

SCOPE AND DEFINITION.

1. SCOPE. This specification shall apply to electric jugs with open (bare) resistor-type heating elements intended for electrical operation by alternating current at low voltages.

STANDARDS ASSOCIATION OF AUSTRALIA

AMENDMENT No. 2

to

S.A.A. Approval and Test Specification

for

ELECTRIC JUGS

(Type A—With Open Elements)

(No. C. 106—1940. Ap.)

Revised Edition ..... July, 1940

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The S.A.A. Approval and Test Specification for Electric Jugs (Type A—With Open Elements) (No. C. 106—1940. Ap., as amended July, 1947) has been further amended as indicated hereunder, and is therefore redated as No. C. 106—1948. Ap.

The redating slip should be affixed to the top of the cover page, and the amendments should be inserted at the appropriate pages.

SCOPE AND DEFINITION.

1. SCOPE. This specification shall apply to electric jugs with open (bare) resistor-type heating elements intended for electrical operation by alternating current at low voltages.

2. DEFINITION.

Electric Jug. For the purpose of this specification the term "electric jug" shall mean a jug or similar vessel in which an open (bare) resistor-type heating element is incorporated in such a manner that it will be immersed when the vessel is filled with liquid.

NOTE.—Jugs with electrode type elements shall be deemed electric jugs (Type B) within the scope of a further specification (to be prepared at a later date).

PREFACE

This standard was prepared by Committee EL/2, Electrical Approvals Standards.

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 3100, containing 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.

This edition was published to incorporate into the specification Amendment Nos 1 to 3 to AS 3106—1980 and to effect changes to Clauses 7, 10 (was 11) and 11 (was 12) with regard to new requirements for appliance inlets. The original Clause 8 has been deleted. Also a list of referenced documents has been added to Clause 1 and a Note with regard to the StandardsMark added to Clause 9.

This specification supersedes AS 3106—1980 from date of publication.

The Association desires to call attention to the fact that this specification does not purport to include all the necessary conditions of a contract.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

APPROVAL AND TEST SPECIFICATION— ELECTRIC JUGS (WITH NON-METALLIC BODIES)

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

1 SCOPE AND REFERENCED DOCUMENTS.

1.1 Scope. This specification applies to electric jugs, as defined in Clause 2 below, having non-metallic bodies and intended for electrical operation at low voltage.

The specification provides for three types of electric jug, as follows:

Type A—Electric jug having an open (bare) resistor-type element.

Type B—Electric jug having an electrode-type element.

Type C—Electric jug having a resistor-type element enclosed within a metal sheath with no provision for earthing the sheath.

NOTES:

1. The use of electric jugs having electrode-type elements is prohibited in certain States and electricity supply areas.
2. An appliance in the form of a container incorporating a sheathed element with provision for earthing the sheath is within the scope of AS 3172, and not this specification (AS 3106), even though it may have a non-metallic body and, in shape, resemble a conventional jug.

1.2 Referenced documents. The following approval and test specifications are referred to in this specification:

AS 3100 Definitions and General Requirements for Electrical Materials and Equipment

AS 3109 Appliance Couplers for Household and Similar General Purposes

AS 3121 Insulating Mouldings

AS 3191 Electric Flexible Cords

2 DEFINITION.

2.1 Electric jug. For the purpose of this specification, the term 'electric jug' shall mean a jug or similar vessel having a body of non-metallic material which incorporates a bare electric heating element, a sheathed resistor-type electric heating element with no provision for earthing the sheath, or electrodes.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General requirements of specification AS 3100. This specification shall be read in conjunction with AS 3100, and the appropriate provisions of AS 3100 shall apply to the construction of the appliance and the insulation and/or safeguarding of parts which normally carry current.

3.2 Specific requirements of this specification. An electric jug shall be deemed to comply with this specification only if it complies with all the requirements of this specification and satisfactorily passes the tests specified herein.

3.3 Compliance with other specifications. Equipment and components, the function of which is likely to give rise to a hazard, incorporated in an electric jug shall comply with the appropriate requirements of any relevant approval and test specification unless such requirements are varied herein.

4 MATERIALS. The body and the lid of the jug shall be made entirely of non-metallic material which may be either vitreous material or an insulating material complying with AS 3121.

Unless live parts are mounted on it, a lid of vitreous material shall not be required to comply with the porosity test specified in Clause 11.5.

5 SUPPORT OF ELEMENTS OR ELECTRODES. The heating elements of a Type A electric jug and the electrodes of a Type B electric jug shall be so supported that they are maintained at least 6 mm from all parts of the interior surface of the electric jug.

The element supports of Types A and B electric jugs shall be secured between metal surfaces at the point of attachment to the body of the electric jug. Removal of element supports from an electric jug shall not involve the loosening of contact pins.

The element supports of Type A and Type B electric jugs, and the element sheathing of Type C electric jugs, shall be of material which will not readily corrode in service.

6 SAFEGUARDING.

6.1 General. The electric jug with its lid shall be so constructed that when in operation with the lid closed neither the liquid nor any metallic part can be touched with the standard test finger.

In particular, any metallic part used for location or attachment of the lid shall be recessed or covered so that it cannot be touched by the standard test finger.

6.2 Interlocking.

6.2.1 *Connecting device forming part of lid.* The electric jug shall be so arranged and constructed as to prevent—

(a) connection being made with the lid open, and

(b) the lid being opened after such connection has been made.

6.2.2 *Connecting device not forming part of lid.* If an electric jug is intended for connection by means of an appliance plug or connector not incorporated in the lid, compliance with this requirement shall be checked with an appliance plug or connector of appropriate form. If the lid of such an electric jug is designed to tilt vertically, it shall be checked in addition