

DUPERSEDED BY

Dup  
AS 3106-1987

Amendment No 1 (March 1982)  
" 2 - May 1983  
" 3 - Oct 1983

AS 3106-1980  
UDC 621.31:643.352.5

# Australian Standard 3106-1980

---

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



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



*Incorporated by Royal Charter*

b

24 APR 1980

**THE FOLLOWING INDUSTRIAL, SCIENTIFIC AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this specification:**

- Australian Chamber of Commerce**
- Australian Electrical and Electronic Manufacturers Association**
- Confederation of Australian Industry**
- Electrical Apparatus Approvals Authorities**
- Electrical Contractors Associations of Australia**
- Electrical Testing Laboratories**
- Electricity Supply Association of Australia**
- Electronic Importers Association**

---

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.

First published (as AS C106 Ap.)	.....	1937
Revised	.....	1940
Revised	.....	1952
Revised and issued as AS 3106	..	April 1974
Revised	.....	April 1980

ISBN 0 7262 1893 6

**STANDARDS ASSOCIATION OF AUSTRALIA**

Incorporated by Royal Charter

**AMENDMENT No 3**

to

**AS 3106—1980**

**Approval and Test Specification for  
ELECTRIC JUGS (WITH NON-METALLIC BODIES)**

**REVISED TEXT**

The 1980 edition of AS 3106 which was amended in March 1982 and May 1983, is further amended as follows; the amendments should be inserted in the appropriate place.

*SUMMARY:* The following sections of the standard are covered by this amendment: Clauses 11 and 12.2.

Published on 7 October 1983.

---

**Page 8. Clause 11.**

*Delete first paragraph and substitute:*

**11 LOADING.** The loading in watts, when measured as described in Clause 12.2, shall not be more than 10 percent above the watts marked on the electric jug.

AMDT  
No 3  
OCT.  
1983

This amendment forms part of the specification upon publication.

---

**Page 9. Clause 12.2.**

*Delete first paragraph and substitute:*

**12.2 Loading.** The jug shall be approximately two thirds filled with a solution of sodium sulphate in distilled water containing approximately 0.15 g of crystalline salt ( $\text{Na}_2 \text{SO}_4 \cdot 10\text{H}_2\text{O}$ ) and about 2 ml of wetting agent per litre, to obtain a resistivity of  $4500 \pm 200 \Omega \text{ cm}$  at  $25^\circ \text{C}$ . With the jug operating at the marked voltage (the highest voltage if more than one voltage is marked), the current shall be measured until boiling occurs. The loading in watts shall be calculated from the product of the volts and the highest current (in amperes) measured.

AMDT  
No 3  
OCT.  
1983

This amendment forms part of the specification 6 months after publication.

---

17 OCT 83

**STANDARDS ASSOCIATION OF AUSTRALIA**  
Incorporated by Royal Charter

**AMENDMENT No 2**  
to

**AS 3106—1980**  
**Approval and Test Specification for**  
**ELECTRIC JUGS**

**REVISED TEXT**

The 1980 edition of AS 3106 which was previously amended in March 1982 is further amended as follows; the amendment should be inserted in the appropriate place.

*SUMMARY:* The following section of the standard is covered by this amendment: Table 1.

Published on 9 May 1983.

---

**Page 8. Table 1.**

After Test No 3 *add* the following test:

4	High Voltage Test†	8.4 of AS 3100
---	--------------------	----------------

†This test is carried out under the same conditions as specified for Test No 3.

*Renumber* test numbers 4 to 7 as 5 to 8.

**This amendment forms part of the specification 6 months after publication.**

---

6 MAY '83

AMDT  
No 2  
MAY  
1983

Amendment No 1  
March 1982

**STANDARDS ASSOCIATION OF AUSTRALIA**  
Incorporated by Royal Charter

---

**AMENDMENT No 1**

to

**AS 3106—1980**

**SAA Approval and Test Specification**

for

**ELECTRIC JUGS**

**25 FEB 1982**

The 1980 edition of AS 3106 is amended as follows; the amendment should be inserted in the appropriate place.

**SUMMARY:** The following sections of the standard are covered by this amendment: Table 1 and new Clauses 12.7 and 12.8. In addition a number of references to AS C100 have been changed to AS 3100.

Published on 15 March 1982.

## PREFACE

This specification, prepared by Committee EL/2, Electrical Approvals Standards, was approved on behalf of the Council of the Standards Association of Australia on 25 February 1980, and was published on 1 May 1980.

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 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 the previous three amendments to AS 3106—1974 and to effect changes to Clause 12 with regard to the tests required.

This specification supersedes AS 3106—1974 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.

This specification requires references to the following Australian Standard Approval and Test Specifications:

AS 3121	Insulating Mouldings
AS 3191	Electric Flexible Cords
AS C100	Definitions and General Requirements for Electrical Materials and Equipment
AS C109	Appliance Plugs and Appliance Inlet-sockets

SEE AMENDMENT No. 1

©Copyright — STANDARDS ASSOCIATION OF AUSTRALIA 1980

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**  
**Approval and Test Specification**  
**for**  
**ELECTRIC JUGS**  
**(WITH NON-METALLIC BODIES)**

AMENDMENT No. 1 3100

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

**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.

**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 and in which is incorporated 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 C100.** This specification shall be read in conjunction with AS C100, and the appropriate provisions of AS C100 shall apply to the construction of the appliance and the insulation and/or safeguarding of parts which normally carry current.