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APPROVAL AND TEST SPECIFICATION ELECTRIC BREAD TOASTERS



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The following interests are represented on Committee EL/2:

Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industries
Consumer Electronics Suppliers Association
Electrical Apparatus Approvals Authorities
Electrical Supply Association of Australia
Electrical Testing Laboratories
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AMENDMENT No 1
to
AS 3101—1985
Approval and Test Specification—
ELECTRIC BREAD TOASTERS

REVISED TEXT

The 1985 edition of AS 3101 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: The following section of the standard is covered by this amendment: Clause 10.7.

Published on 3 March 1986.

AS 3101/Amdt 2/1989-07-14

STANDARDS AUSTRALIA

**Amendment No 2
to
AS 3101—1985**



Approval and test specification—Electric bread toasters

REVISED TEXT

The 1985 edition of AS 3101, which was amended in March 1986, is further amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clause 8.1.

Published on 14 July 1989.

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. 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 3101—1981 and to effect changes to Clauses 6.1, 6.3, 10.3, 10.5 and 10.6 with regard to switches and temperature limits.

This specification supersedes AS 3101—1981 from date of publication.

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

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

APPROVAL AND TEST SPECIFICATION—
ELECTRIC BREAD TOASTERS

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 bread toasters as defined in Clause 2 below, intended for electrical operation by alternating current at low voltages.

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

AS 3100 Definitions and General Requirements for Electrical Materials and Equipment

AS 3109 Appliance Plugs and Appliance Inlet Sockets

AS 3191 Electric Flexible Cords

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

Electric bread toaster (hereinafter referred to as 'toaster')—any appliance which is intended primarily for toasting bread or similar foods.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General requirements of 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. A toaster shall be deemed to comply with this specification only if it complies with all the requirements of this specification and passes the tests specified herein.

3.3 Compliance with individual specifications. Electrical materials and equipment incorporated in a toaster shall comply with the appropriate requirements of any relevant approval and test specification.

4 SAFEGUARDING OF ELEMENTS AND LIVE PARTS.

4.1 General. Elements which are accessible to personal contact or with which bread may come in contact during any part of the toasting operation shall be provided with guards, in accordance with the requirements of Clauses 4.2 to 4.6.

4.2 Vertical elements. Vertical elements shall be provided with guards in the form of wires spaced not more than 40 mm apart throughout the length of the element, or such other arrangement of metal shielding which in the opinion of the Approvals Authority will provide at least an equivalent degree of safeguarding. Where wires are used they shall be—

(a) for automatic toasters which are enclosed except for the apertures into which the bread is inserted, not smaller than 0.9 mm diameter or such smaller size acceptable to the Approvals Authority having regard to the design and method of use of the toaster; and

(b) not smaller than 1.6 mm diameter in all other cases.

The elements and guards shall be arranged and supported so that a minimum clearance of 6 mm is maintained between any portion of the guards and any portion of the elements and other live parts under conditions likely to be experienced in service.

4.3 Horizontal elements. Horizontal elements shall be provided with guards in the following form:

(a) *Above the element.* A metal guard above the element, of wire not smaller than 0.9 mm diameter and not greater than 7 mm square mesh, or an arrangement of metal shielding which will, in the opinion of the Approvals Authority, provide at least an equivalent degree of safeguarding.

(b) *Below the element.* An arrangement below the element of non-ignitable shielding which will prevent any tray, reflector or cooking vessel from coming into contact with the element.

4.4 Materials for guards. Any wire guard immediately above a radiant horizontal element shall be constructed of metal which will not readily corrode when exposed to high temperatures. In all other cases, the wires or metal of the guard shall be plated or treated or made of such material that they will not corrode unduly when exposed to the heat of the element.

4.5 Construction of elements. In addition to complying with the requirements of Clause 4.2, elements and their supports shall be constructed and fixed so that, when in their normal position and in any position which may occur due to distortion which may take place under normal service conditions, clearance between the element wire and any guard shall not be reduced below 6 mm, and that clearances between live metal parts and other exposed metal parts shall not be substantially reduced.

For lapped mica supports there shall be sufficient overlap to ensure adequate rigidity of the elements.

The minimum thickness of an element support shall be not less than 0.17 mm if of mica, or 0.25 mm if of micanite.