

Australian Standard® 3150—1985

APPROVAL AND TEST SPECIFICATION— INSECT ELECTROCUTORS



**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
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This Australian standard was prepared by Committee EL/2, Electrical Approvals Standards. It was approved on behalf of the Council of the Standards Association of Australia on 20 February 1985 and published on 7 June 1985.

The following interests are represented on Committee EL/2:

- Australian Consumers Association
 - Australian Electrical and Electronic Manufacturers Association
 - Confederation of Australian Industry
 - Consumer Electronics Suppliers Authorities
 - Electrical Testing Laboratories
 - Electricity Supply Association of Australia
 - Institution of Engineers Australia
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First published (as AS C150)	1968
Revised	1971
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Third edition	1985

ERROR IN AUSTRALIAN

STANDARD

AS 3150 - 1985

Copies to - T.S.O.

- Ross Johnson

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History Block

- Details for AS C150

Revised 1971

Should be deleted

- The edition was 1968, which

included amendments to 1977.

- Last reprint incorporating Amendment 1

was Oct 1971 & this was

reprinted Sept 1976.

- History Block incorrect in AS 3150-1978
AS 3150-1982
AS 3150-1985

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AMENDMENT No 2
to
AS 3150—1985
Approval and Test Specification—
INSECT ELECTROCUTORS

REVISED TEXT

The 1985 edition of AS 3150 which was amended in November 1986 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: Clause 10.

Published on 6 April 1987.

Page 5. Clause 10.

Delete Clause 10 and substitute the following:

10 SWITCHES. Any switch incorporated in the insect electrocutor shall be a Category 3 switch, except that—

- (a) a switch intended to control the input to a portable insect electrocutor shall operate in all live conductors; and
- (b) a switch intended to control the input to an insect electrocutor intended for permanent connection to fixed wiring shall be a Category 2 switch with its 'OFF' position marked.

This amendment forms part of the specification on publication.

AMDT
No 2
APR.
1987

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STANDARDS ASSOCIATION OF AUSTRALIA
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AMENDMENT No 1
to
AS 3150—1985
APPROVAL AND TEST SPECIFICATION—INSECT ELECTROCUTORS

REVISED TEXT

The 1985 edition of AS 3150 is amended as follows; the amendments should be inserted in the appropriate place.

SUMMARY: The following section of the standard is covered by this amendment: Clauses 13.1, 15.13 and 15.20.

Published on 3 November 1986.

AMDT
No 1
NOV.
1986

Page 5. Clause 13.1.

Add the following new item (e).

- (e) Disconnect from supply before replacing lamp or starter.

This amendment forms part of the specification on publication.

AMDT
No 1
NOV.
1986

Page 6. Clause 15.13.

Delete the final paragraph and *substitute* the following:

The maximum temperature of winding insulation and of other materials or insulation, which may be exposed to excessive temperatures, shall not exceed the limit specified in Table 5.7 of AS 3100 based on a reference ambient temperature of 40 °C.

This amendment forms part of the specification on publication.

AMDT
No 1
NOV.
1986

Page 8. Clause 15.20.

Delete this clause and *add* the following:

15.20 Determination of ignitability and combustion propagation. This test shall be carried out in accordance with the provisions of Clause 6.1 of AS 3100 with values in Clause 6.1.1.2 for (a) and (b) as follows except that the test shall not be applied to textile material:

- (a) 850 °C for 30 s.
(b) 750 °C for 30 s.

This amendment forms part of the specification on publication.

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 No 1 to AS 3150—1982 and to effect changes to Clauses 1, 8, 14 and 15.22 and Table 1 with regard to:

- (a) clarification to the scope that the secondary high voltage may be by means other than a transformer.
- (b) requirements for double insulation and associated tests.

Also a list of referenced documents has been added to Clause 1 and a Note with regard to the AS Mark added to Clause 13.1.

This standard supersedes AS 3150—1982 from date of publication.

The Association desires to call attention to the fact that this standard 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—
INSECT ELECTROCUTORS

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 insect electrocutors, suitable for connection to low voltage supply and intended to provide a secondary high voltage generated by a transformer or other means, for the destruction of insects.

NOTE: For the purpose of this specification, 'secondary high voltage' includes the output voltage generated in transformerless insect electrocutors.

1.2 Referenced documents. The following documents are referred to in this standard.

1.2.1 Standards.

AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment.

1.2.2 Approval and test specifications.

AS 3100 Definitions and General Requirements for Electrical Materials and Equipment

AS 3133 Air Break Switches

AS 3168 Fluorescent Lamp Ballasts

AS 3191 Electric Flexible Cords

2 DEFINITIONS. For the purpose of this specification the following definitions apply:

2.1 Insect electrocutor—an appliance designed to destroy insects by means of a high voltage discharge.

2.2 Grid—the component of the insect electrocutor which, under operating conditions, has a high voltage applied to it.

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 insect electrocutor and the insulation and safeguarding of parts which normally carry current.

3.2 Specific requirements of this specification. An insect electrocutor 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 Requirements of other specifications. Components incorporated in an insect electrocutor which are depended upon for safety shall comply with the appropriate requirements of any relevant approval and test specification unless such requirements are varied herein.

4 SECONDARY VOLTAGE AND CURRENT.

4.1 Voltage. The insect electrocutor shall not have

a secondary voltage in excess of 7000 V peak, when measured in accordance with Clause 15.11.

4.2 Current. The insect electrocutor shall not have a secondary current in excess of 30 mA r.m.s., when measured in accordance with Clause 15.15.

5 ENCLOSURE. The enclosure of the insect electrocutor shall comply with the following requirements:

(a) It shall comply with the requirements of Clause 15.20.

(b) If not of inherently corrosion-resisting material it shall be protected against corrosion both internally and externally.

(c) Unless marked in a legible and indelible manner 'SUITABLE FOR INDOOR USE ONLY', it shall be designed to prevent the ingress of water in accordance with the requirements of AS 1939 for Classification IPX3.

(d) It shall be provided with means of attachment of mounting of adequate mechanical strength to support the device as a whole.

(e) Doors, covers and guards shall be securely fixed in place, and where these are required to be frequently removed in service, the means of fixing shall be such as will not readily deteriorate under such conditions. Self-tapping screws and the like are not acceptable for such conditions.

(f) The grid shall be protected by a guard consisting of not less than 2.5 mm round steel, or its equivalent and shall be of robust construction. The areas of any opening in the guard shall not exceed 1000 mm² and the guard shall be capable of complying with Clause 15.19.

The guard shall be fitted in such a manner as will prevent contact of the standard test finger with the grid.

NOTE: Guards may be constructed of non-metallic material, provided that the requirements of Clause 15.19 are satisfied.

6 REMOVABLE TRAY. The surface of any removable tray provided to facilitate the collection and removal of insects shall be insulated or the tray should be manufactured of insulating material. The tray shall be so mounted as to prevent accidental contact with the grid.

With the tray partially or completely removed it shall not be possible for the standard test finger to contact the grid.

7 MEANS OF CONNECTION.

7.1 Arrangement of input and output conductors. The means of connection shall be so arranged that the