1985 ed. pub. May T.A.S.

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AS 3129—1981
UDC 631.273.3:621.316.544.1

Australian Standard 3129—1981

Amdt 1

APPROVAL AND TEST SPECIFICATION FOR ELECTRIC FENCE CONTROLLERS

1985

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

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

Australian Chamber of Commerce

Australian Electrical and Electronics Manufacturers Association

Confederation of Australian Industry

Electrical Apparatus Approvals Authorities

Electrical Contractors Associations of Australia

Electrical Testing Laboratories

Electricity Supply Association of Australia

Electronics Importers Association

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First edition ..... March 1959
Revised and issued as AS 3129 ... March 1981

ISBN 0 7262 2182 1

STANDARDS ASSOCIATION OF AUSTRALIA
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AMENDMENT No 3
to
AS 3129—1981
Approval and Test Specification for
ELECTRIC FENCE CONTROLLERS

REVISED TEXT

The 1981 edition of AS 3129 which was previously amended in August 1981 and April 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 2.

Published on 9 May 1983.

Page 8. Table 2.

AMDT No 3 MAY 1983

After Test No 4 *add* the following test:

5	Leakage Current Test	8.3.2 of AS 3100

Renumber test numbers 5 to 14 inclusive as 6 to 15 inclusive.

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

Amendment No 2
April 1982

STANDARDS ASSOCIATION OF AUSTRALIA

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AMENDMENT No 2
to
AS 3129—1981
Approval and Test Specification
for
ELECTRIC FENCE CONTROLLERS

The 1981 edition of AS 3129 which was previously amended in August 1981 is further amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: The following sections of the standard are covered by this amendment: Clauses 5, 12.11, 12.14 (new) and Table 2. In addition a number of references to AS C100 have been changed to AS 3100.

Published on 19 April 1982.

Preface.

Page 4. (Line under title.)

Clauses 3.1, 4.3, 6 and 12.

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

AMDT No 2 APRIL 1982

This amendment forms part of the specification on publication.

Page 5. Clause 5.

Delete existing Clause 5 and *substitute:*

5 MEANS OF CONNECTION. The controller shall be provided with one of the following means of connection to the supply:

(a) A set of terminals for permanent connection to fixed wiring in accordance with Clauses 4.3 and 4.9 of AS 3100.

(b) A Type C appliance inlet socket complying with AS C109.

(c) A power supply cord which shall be assembled with the appliance by one of the following methods:

Type X attachment.

Type M attachment.

Type Y attachment.

Type Z attachment.

AMDT No 2 APRIL 1982

This amendment forms part of the specification on publication.

Page 8. Table 2.

Add the following:

14*	Test for D.C. Component	12.14 herein

AMDT No 2 APRIL 1982

*This test may be conducted in conjunction with earlier appropriate tests.

This amendment forms part of the specification on 1 March 1983.

Page 11. Clause 12.11. AMDT No 2 APRIL 1982

Amend the last line to read—'requirements of Clause 12.3'.

This amendment forms part of the specification on publication.

New Clause 12.14. AMDT No 2 APRIL 1982

Add the following new clause:

12.14 Test for D.C. Component. The appliance shall be tested in accordance with Clause 3.12 of AS 3100.

The direct current in the appliance neutral shall not exceed 5 mA.

This amendment forms part of the specification on 1 March 1983.

Amendment No 1
August 1981

STANDARDS ASSOCIATION OF AUSTRALIA

Incorporated by Royal Charter

AMENDMENT No 1
to
AS 3129—1981
SAA Approval and Test Specification
for
ELECTRIC FENCE CONTROLLERS

The 1981 edition of AS 3129 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: Clauses 4, 12.13 (new); Table 2.

Published on 1 September 1981.

Page 4. Clause 4.1.

AMDT No 1 AUG. 1981

Add the following sentence to the first paragraph:

In addition any insulating material used in the construction of the casing shall meet the requirements of Clause 12.13.

This amendment forms part of the specification on 1 January 1983.

Page 8. Table 2.

AMDT No 1 AUG. 1981

Add the following new test:

13	Determination of Ignitability and Combustion Propagation	12.13 herein

This amendment forms part of the specification on 1 January 1983.

New Clause 12.13.

AMDT No 1 AUG. 1981

Add the following new clause:

12.13 Determination of Ignitability and Combustion Propagation. Solid insulating materials, non-metallic enclosures and all other insulating materials shall be subjected to the glow wire test as specified in AS 2420 and the results determined in accordance with the provisions thereof. The temperature of the glow wire tip and the duration of the test shall be as follows:

(a) All insulating material retaining or supporting current-carrying parts shall be subjected to the glow wire test at a temperature of 850° C for 30 s.

(b) Non-metallic enclosures shall be subjected to the glow wire test at a temperature of 850° C for 30 s.

(c) All other insulating materials shall be subjected to the glow wire test at a temperature of 550° C for 30 s.

Any failure recorded during the test of (a) above shall require any non-metallic enclosure to be subjected to the needle flame test as specified in AS 2420 and the results determined in accordance with the provisions thereof. The needle flame test shall be applied to areas where burning droplets would fall and within 50 mm of any flame produced.

NOTE: Components which have been found to comply with these tests when tested to individual approval and test specifications need not be retested.

This amendment forms part of the specification on 1 January 1983.

PREFACE

This revised specification, prepared by Committee EL/2, Electrical Approvals Standards, was approved on behalf of the Council of the Standards Association of Australia on 5 January 1981, and was published on 1 April 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, 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.

The purpose of the revision is to express the requirements in metric units having regard to Australian Government legislation under the Metric Conversion Act 1970, which has the objective of the progressive adoption of such units. The '3000' series of numbers has been allocated for new and revised SAA approval and test specifications expressed in metric units, the letter classification 'C' being dropped; thus this specification which was numbered AS C129 in the imperial units series becomes AS 3129 in the metric series.

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. No attempt has been made to revise established criteria; however, various items have been updated in line with current drafting practice.

This specification supersedes AS C129—1959 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.

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

AS 3121	Insulating Mouldings
AS 3145	Radio Interference Suppression Devices
AS 3191	Electric Flexible Cords
AS C100	Definitions and General Requirements for Electrical Materials and Equipment

and to AS 1939, Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment. In addition, reference to other approval and test specifications may be required for approval of particular components incorporated in electric fence controllers (see Clause 3.3).

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
APPROVAL AND TEST SPECIFICATION FOR ELECTRIC FENCE CONTROLLERS

This specification shall be read in conjunction with AS ~~C100~~ 3100 (amdt 2). (See also Clause 3, below.)

1 SCOPE. This specification prescribes safety requirements for electric fence controllers intended for electrical operation by direct or alternating current at low or medium voltage.

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

2.1 Electric fence controller—an appliance intended to regulate and control the supply of electrical energy to electric fences.

2.2 Electric fence—a conductor energized through an electric fence controller and arranged as a barrier to animals.

2.3 Fence circuit—the circuit within the controller intended to energize the fence.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General Requirements of AS ~~C100~~ 3100 (amdt 2). This specification shall be read in conjunction with ~~AS C100~~, and the appropriate provisions of AS ~~C100~~ shall apply to the construction of the electric fence controller and the insulation and safeguarding of parts which normally carry current.

3.2 Specific Requirements of this Specification. An electric fence controller 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 a controller 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 MECHANICAL CONSTRUCTION.

4.1 Enclosing Case. The controller shall have an enclosing case made of a suitable grade of insulating material. Any insulating moulding used in the