

Australian/New Zealand Standard™

Lamp controlgear

Part 1: General and safety requirements  
(IEC 61347-1:2015, MOD)



## **AS/NZS 61347.1:2016**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 19 November 2015 and on behalf of the Council of Standards New Zealand on 12 February 2016.  
This Standard was published on 9 March 2016.

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The following are represented on Committee EL-041:

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*This Standard was issued in draft form for comment as DR AS/NZS 61347.1:2015.*

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## Lamp controlgear

### Part 1: General and safety requirements (IEC 61347-1:2015, MOD)

Originated as AS/NZS 61347.1:2002.  
Second edition 2016.  
Reissued incorporating Amendment No. 1 (March 2018).

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ISBN 978 1 76035 420 6

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment to supersede AS/NZS 61347.1:2002, *Lamp controlgear*, Part 1: *General and safety requirements (IEC 61347-1:2000, MOD)* six months after publication. Until that time, both editions of the Standard will operate in parallel. It is anticipated that the 2002 edition will then be withdrawn. This revision relates to rated voltage requirements, flammability and reference document changes.

*The Standard incorporates Amendment No. 1 (March 2018). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The objective of this Standard is to specify general requirements for controlgear intended for use with luminaires, for operation on d.c. supplies up to 250 V and/or a.c. supplies up to 1 000 V at 50 Hz or 60 Hz. The requirements and related tests of this Standard cover: classification, marking, mechanical construction and electrical construction.

This Standard is an adoption with national modifications as shown in Appendix ZZ and has been reproduced from IEC 61347-1, Ed.3.0 (2015), *Lamp controlgear*, Part 1: *General and safety requirements*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Amendment 1 to this Standard adds requirements for lamp controlgear to address safety issues identified where lamp controlgear is used in close proximity to or under building thermal insulation.

These requirements take into account requirements from AS/NZS 60598.2.2, *Luminaires*, Part 2.2: *Particular requirements—Recessed luminaires (IEC 60598-2-2, Ed. 3.0 (2011) MOD)*, which apply to recessed luminaires when used in conjunction with building thermal insulation.

The IEC edition includes the following significant technical changes with respect to the previous edition:

- (a) Additional marking requirements.
- (b) Additional requirements for creepage distances and clearances for—
  - (i) working voltages with operating frequencies up to 30 kHz;
  - (ii) working voltages with higher operating frequencies than 30 kHz;
  - (iii) impulse and resonance voltages ignition;
  - (iv) basic, supplementary and reinforced insulation;
  - (v) insulation between circuits; and
  - (vi) coated or potted controlgear.
- (c) Modification of definition of ELV and FELV.
- (d) Modification of schematic drawing, showing the different controlgear classification and insulation requirements.
- (e) Scope extension.
- (f) New Annex A—test to establish whether a conductive part is a live part which may cause an electric shock.
- (g) New Annex M—creepage distances and clearances for controlgear where a higher degree of availability (impulse withstand category III) may be requested.
- (h) New Annex Q—example for Up calculation.

- (i) New Annex P—creepage distances and clearances and distance through isolation (DTI) for lamp controlgear which are protected against pollution by the use of coating or potting.
- (j) New Annex R—concept of creepage distances and clearances.

A1 [Text deleted.]

This Standard is structured as follows:

- (A) Preface.
- (B) IEC 61347-1, Ed.3.0 (2015) unedited from the first clause to Bibliography.
- (C) Appendix ZZ—(Australian/New Zealand) variations to the source document.

The variations listed in Appendix ZZ address issues including the following:

- (1) Supply voltage.
- (2) Capacitor ratings.
- (3) Requirements for FELV connections.
- (4) Resistance to flame and ignition.

In this Standard, the following print types are used:

- Requirements proper: in roman type.
- *Test specifications: in italic type.*
- Explanatory matter: in smaller roman type.

A1 Amendment 1 adds additional requirements and test procedures for lamp controlgear used in close proximity to or under building thermal insulation. These are shown in—

- (a) Appendix ZZ; and
- (b) Appendix ZA.

The variations listed in Appendix ZZ and Appendix ZA include the following:

- (i) Classifications and definitions of independent lamp controlgear for use near, or being covered with, building elements or thermal insulation, or both.
- (ii) Tests, including ingress protection tests and thermal tests for normal and abnormal operating conditions, and marking and instructional requirements for the different classifications, with standardized test box, temperature limits, and requirements for any thermal protection.

AS/NZS 61347.1:2016 in its unamended form will also remain current for 12 months. After this time it will be superseded by AS/NZS 61347.1:2016 incorporating Amendment 1. Regulatory authorities that reference this standard in regulation may apply these requirements at a different time. Users of this standard should consult with these authorities to confirm their requirements.

As this Standard is reproduced from an International Standard, the following applies:

- (aa) In the source text ‘this part of IEC 61347’ should read ‘this Australian/New Zealand Standard’.
- (bb) A full point substitutes for a comma when referring to a decimal marker.

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