

Australian/New Zealand Standard™

**Lamp controlgear
Part 1: General and safety requirements
(IEC 61347-1:2000, MOD)**

AS/NZS 61347.1:2002

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 30 July 2002 and on behalf of the Council of Standards New Zealand on 24 July 2002. It was published on 27 August 2002.

The following are represented on Committee EL-041:

Association of Consulting Engineers, Australia
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Consumer Federation of Australia
Electrical Compliance Testing Association of Australia
Energy Efficiency and Conservation Authority of New Zealand
Illuminating Engineering Society of Australia and New Zealand
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Australian/New Zealand Standard™

Lamp controlgear Part 1: General and safety requirements (IEC 61347-1:2000, MOD)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and related equipment.

The objective of this Standard is to provide the lighting industry with electrical safety requirements for lamp controlgear for use on d.c supplies up to 250 V and a.c. supplies up to 1000 V ac. at 50 Hz or 60 Hz.

This joint Standard has been reproduced from IEC 61347-1:2000, *Lamp controlgear—General and safety requirements* and modified for Australian/New Zealand conditions.

AS/NZS variations to IEC 61347.1 are identified separately. Strikethrough (~~example~~) identifies the IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand Standard, are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (**example**). Added figures are not themselves shaded, but are identified by a shaded border.

This Standard is a section of Part 1 of a series dealing with Lamp controlgear. Particular requirements are covered in Part 2 and the following sub-parts have been adopted and published as Australian/New Zealand Standards. Additional parts will be added from time to time.

AS/NZS 61347	Lamp controlgear
Part 1:	General and safety requirements (this Standard)
Part 2.1:	Particular requirements for starting devices (other than glow starters)
Part 2.4:	Particular requirements for d.c. supplied electronic ballasts for general lighting
Part 2.5:	Particular requirements for d.c. supplied electronic ballasts for public transport
Part 2.6:	Particular requirements for d.c. supplied electronic ballasts for aircraft lighting

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

- Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- A full point should be substituted for a comma when referring to a decimal marker.
- In reference to clauses in this Standard, equivalent AS/NZS Standard is substituted for IEC wherever applicable.

In this Standard, the following print types are used:

- requirements proper: in arial type;
- *test specifications: in italic type;*
- explanatory matter: in smaller arial type.

The term ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

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INTRODUCTION

This first edition of AS/NZS 61347.1, published in conjunction with parts 2-1 to 2-9, represents an editorial review of IEC 60926, IEC 61046, IEC 60928, IEC 60924, IEC 60920 and IEC 60922. The formatting into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognized.

The different parts which make up AS/NZS 61347.2 are technically equivalent to the original IEC standards on which they are based. As such, products which have been shown to comply with AS/NZS 60920, IEC 60922, IEC 60924, IEC 60926, AS/NZS 60928 and AS/NZS 61046 can be considered as complying with the requirements of the part 2 of IEC 61347 which replaces them. Similarly, where other standards call for compliance with AS/NZS 60920, IEC 60922, IEC 60924, IEC 60926, AS/NZS 60928 and AS/NZS 61046, conformity with the equivalent part 2 of AS/NZS 61347 is considered to meet this requirement.

This part of AS/NZS 61347 provides a set of general and safety requirements and tests which are considered to be generally applicable to most types of lamp controlgear and which can be called up as required by the different parts that make up AS/NZS 61347.2. This part 1 is thus not to be regarded as a specification in itself for any type of lamp controlgear, and its provisions apply only to particular types of lamp controlgear, to the extent determined by the appropriate part 2 of AS/NZS 61347.

The parts which make up AS/NZS 61347.2, in referring to any of the clauses of this part, specify the extent to which such a clause is applicable and the order in which the tests are to be performed; they also include additional requirements as necessary. The order in which the clauses of this part are numbered has no particular significance, as the order in which their provisions apply is determined for each type of lamp controlgear by the appropriate part 2 of AS/NZS 61347.2 series. All such parts are self-contained and therefore do not contain references to each other.

Where the requirements of any of the clauses of this part of AS/NZS 61347 are referred to in the various parts that make up AS/NZS 61347.2 by the phrase 'The requirements of clause n of IEC 61347-1 apply', this phrase will be interpreted as meaning that all requirements of the clause in question of part 1 apply, except any which are clearly inapplicable to the particular type of lamp controlgear covered by the part 2 concerned.

Lamp controlgear which complies with the text of this standard will not necessarily be judged to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

Lamp controlgear employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirement and, if found to be substantially equivalent, may be judged to comply with the safety principles of the standard.

Performance requirements for lamp controlgear are the subject of IEC 60921, IEC 60923, IEC 60925, IEC 60927, AS/NZS 60929 and AS/NZS 61047 as appropriate for the type of lamp controlgear.

NOTE - Safety requirements ensure that electrical equipment constructed in accordance with these requirements does not endanger the safety of persons, domestic animals or property when properly installed and maintained and used in applications for which it was intended.

Requirements for electronic lamp controlgear for other types of lamps will be the subject of a separate standard, as the need arises.

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Any IEC table, figure or passage of text that is struck-through is not part of this Standard. Any Australian/New Zealand table, figure or passage of text that is added (and identified by shading) is part of this Standard.

1 Scope

This part of AS/NZS 61347 specifies general and safety requirements for lamp controlgear for use on d.c. supplies up to 250 V and/or a.c. supplies up to 1 000 V at 50 Hz or 60 Hz.

This standard also covers lamp controlgear for lamps which are not yet standardized.

Tests dealt with in this standard are type tests. Requirements for testing individual lamp controlgear during production are not included.

Requirements for semi-luminaires are given in AS/NZS 60598.1.

In addition to the requirements given in this standard, annex B sets out general and safety requirements applicable to thermally protected lamp controlgear.

Annex C sets out additional general and safety requirements as they apply to electronic lamp controlgear with means of protection against overheating.

NOTE – Examples of products covered by this Standard are electronic starters, ballasts and electronic converters. Dimmers, iron core transformers (if not covered by 61347.2) are not included in this Standard.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of AS/NZS 61347. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of AS/NZS 61347 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

References to International Standards that are struck through in this Clause are replaced by references to equivalent Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is appropriately identified.

IEC 60065, *Audio, video and similar electronic apparatus – Safety requirements*

IEC 60081, *Double-capped fluorescent lamps – Performance specifications*