

Australian/New Zealand Standard™

**Lamp controlgear**

**Part 2.3: Particular requirements for a.c.  
supplied electronic ballasts for  
fluorescent lamps  
(IEC 61347-2-3:2000, MOD)**

#### **AS/NZS 61347.2.3:2004**

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 22 March 2004 and on behalf of the Council of Standards New Zealand on 30 April 2004. It was published on 17 May 2004.

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The following are represented on Committee EL-041:

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Australian Electrical and Electronic Manufacturers Association  
Consumer Federation of Australia  
Electrical Compliance Testing Association of Australia  
Electrical Regulatory authorities council (Australia)  
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# Australian/New Zealand Standard™

## Lamp controlgear

### **Part 2.3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps (IEC 61347-2-3:2000, MOD)**

Originated as AS 3134(Int)—1991.  
Previous edition AS/NZS 60928:2000.  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment to supersede AS/NZS 60928:2000, *Auxiliaries for lamps—A.C. supplied electronic ballasts for tubular fluorescent lamps—General and safety requirements*. In Australia, this Standard will co-exist with AS/NZS 60928 until 30 December 2006, on which date AS/NZS 60928 will be withdrawn.

The objective of this Standard is to specify particular safety requirements for electronic ballasts associated with fluorescent lamps.

This Standard is an adoption with national modifications and has been reproduced from IEC 61347-2-3:2000, *Lamp controlgear – Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Variations to IEC 61347-2-3:2000 are indicated at the appropriate places throughout this standard. Strikethrough (**example**) identifies IEC text, tables and figures which, for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures 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 2 of AS/NZS 61347 *Lamp controlgear*. Currently this Series consists of the following parts. Additional parts will be added from time to time.

### AS/NZS

61347.1	Part 1: General and safety requirements
61347.2.1	Part 2.1: Particular requirements for starting devices (other than glow starters)
61347.2.2	Part 2.2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps
61347.2.3	Part 2.3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps (this Standard)
61347.2.4	Part 2.4: Particular requirements for d.c. electronic ballasts for general lighting
61347.2.5	Part 2.5: Particular requirements for d.c. supplied electronic ballasts for public transport lighting
61347.2.6	Part 2.6: Particular requirements for d.c. supplied electronic ballasts for aircraft lighting
61347.2.8	Part 2.8: Particular requirements for ballasts for fluorescent lamps
61347.2.9	Part 2.9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)
61347.2.10	Part 2.10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)
61347.2.11	Part 2.11: Particular requirements for miscellaneous electronic circuits used with luminaires

This Standard is to be read in conjunction with AS/NZS 61347.1.

It is to be noted that AS/NZS 61347.1 has variations from IEC and hence product complying with IEC 61347-1 may not comply with AS/NZS 61347.1.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

- (b) In the source text ‘this international standard’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
- (d) Any French text on figures should be ignored.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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## INTRODUCTION

This first edition of AS/NZS 61347.2.3, published in conjunction with AS/NZS 61347.1, represents an editorial review of AS/NZS 60928. 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.

This standard, and the parts which make up AS/NZS 61347.2, in referring to any of the clauses of AS/NZS 61347.1, 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. All parts which make up AS/NZS 61347.2 are intended to be self-contained and, therefore, do not include references to each other. However, for the case of emergency lighting lamp controlgear, some cross-referencing has been necessary.

Where the requirements of any of the clauses of AS/NZS 61347.1 are referred to in this standard by the phrase "The requirements of clause n of AS/NZS 61347.1 apply", this phrase is interpreted as meaning that all requirements of the clause in question of part 1 apply, except any which are clearly inapplicable to the specific type of lamp controlgear covered by this particular part of AS/NZS 61347.2.

NOTES

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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fluorescent lamps**  
**(IEC 61347-2-3:2000, MOD)**

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**1 Scope**

This part of AS/NZS 61347 specifies particular safety requirements for electronic ballasts for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz with operating frequencies deviating from the supply frequency, associated with fluorescent lamps as specified in AS/NZS 4782.1 and AS/NZS 60901, and other fluorescent lamps for high-frequency operation.

Particular requirements for electronic ballasts with means of protection against overheating are given in annex C.

Particular requirements for a.c./d.c. supplied electronic ballasts for maintained emergency lighting are given in annex J.

Performance requirements are the subject of AS/NZS 60929.

**2 Normative references**

For the purpose of this part of AS/NZS 61347, the normative references given in clause 2 of AS/NZS 61347.1 which are mentioned in this standard apply, together with the following normative references.

IEC 60598-2-22, *Luminaires – Part 2-22: Particular requirements – Luminaires for emergency lighting*

AS/NZS 61347.1, *Lamp controlgear – Part 1: General and safety requirements*

IEC 61347-2-7, *Lamp controlgear – Part 2-7: Particular requirements for d.c. supplied electronic ballasts for emergency lighting<sup>\*)</sup>*

**3 Definitions**

For the purpose of this part of AS/NZS 61347, the definitions of clause 3 of AS/NZS 61347.1 apply, together with the following:

**3.1****a.c. supplied electronic ballast**

mains-supplied a.c. to a.c. inverter including stabilizing elements for starting and operating one or more tubular fluorescent lamps, generally at high frequency

**3.2****controllable ballast**

lamp power (light output) of the electronic ballast controlled between the minimum value (or off) and the maximum value by the signal on the control input of the ballast

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<sup>\*)</sup> To be published.