

Australian/New Zealand Standard™

**Lamp controlgear**

**Part 2.8: Particular requirements for  
ballasts for fluorescent lamps  
(IEC 61347-2-8:2000 MOD)**

### **AS/NZS 61347.2.8:2003**

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 3 June 2003 and on behalf of the Council of Standards New Zealand on 24 June 2003. It was published on 25 July 2003.

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Australian Electrical and Electronic Manufacturers Association  
Electrical Compliance Testing Association of Australia  
Electrical Regulatory Authorities Council (Australia)  
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**RECONFIRMATION**  
**OF**  
**AS/NZS 61347.2.8:2003**  
**Lamp controlgear**  
**Part 2.8: Particular requirements for ballasts for fluorescent lamps**  
**(IEC 61347-2-8:2000, MOD)**

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Technical Committee EL-041 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## NOTES

# Australian/New Zealand Standard™

## Lamp controlgear

### Part 2.8: Particular requirements for ballasts for fluorescent lamps (IEC 61347-2-8:2000 MOD)

Originated as AS 3168—1983.  
Previous edition AS 3168—1991.  
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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 3168—1991, *Approval and test specifications—Fluorescent lamp ballasts*. In Australia, this Standard will co-exist with AS 3168—1991 until 30 December 2003, on which date AS 3168—1991 will be withdrawn.

The objective of this Standard is to provide the lighting industry with electrical safety requirements for ballasts, excluding resistance types used on a.c. supplies up to 1000 V a.c. 50/60 Hz.

This Standard is an adoption with national modifications and has been reproduced from, IEC 61347-2-8:2000, *Lamp controlgear—Part 2-8: Particular requirements for ballasts for fluorescent lamps*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Variations to IEC 61347-2-8:2000 are indicated at the appropriate places throughout this Standard. Strikethrough (**example**) identifies 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 2 of a series dealing with Lamp controlgear. Currently this series consists of the following Parts; additional Parts will be added from time to time:

## AS/NZS

61347	Lamp controlgear
61347.1	Part 1: General and safety requirements
61347.2.1	Part 2.1: Particular requirements for starting devices (other than glow starters)
61347.2.4	Part 2.4: Particular requirements for d.c. supplied electronic ballasts for general lighting
61347.2.5	Part 2.5: Particular requirements for d.c. supplied electronic ballasts for public transport
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 (this Standard)
61347.2.11	Part 2.11: Particular requirements for miscellaneous electronic circuits used with luminaires

Each Standard in Part 2 is intended to be used in conjunction with Part 1 in order to provide a complete Standard for that specific type of Lamp controlgear.

AS/NZS 61347.1, to which this Standard refers for its requirements, differs in some respects from IEC 61347-1. Therefore, lamp controlgear 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:

- 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 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 terms ‘normative’ and ‘informative’ have been used in this Standard 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 61347.2.8, published in conjunction with AS/NZS 61347.1, represents an editorial review of IEC 60920. 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 self-contained and, therefore, do not include references to each other.

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

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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 safety requirements for ballasts, excluding resistance types, for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz, associated with fluorescent lamps with or without pre-heated cathodes operated with or without a starter or starting device and having rated wattages, dimensions and characteristics as specified in AS/NZS 60081 and 60901.

This standard applies to complete ballasts and to their component parts such as reactors, transformers and capacitors. Particular requirements for thermally protected ballasts are given in annex B.

Ballasts for conventional operation of lamps at mains frequency are covered, while a.c. supplied electronic ballasts for high frequency operation are excluded. These are specified in IEC 61347-2-3.

Capacitors having a capacitance greater than 0,1  $\mu\text{F}$  are covered by AS/NZS 61048 and AS/NZS 61049. Capacitors having a capacitance less than or equal to 0,1  $\mu\text{F}$  are specified in IEC 60384-14.

Performance requirements are the subject of AS/NZS 60921.

**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 mentioned in this standard apply, together with the following additional normative references:

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 60384-14, *Fixed capacitors for use in electronic equipment – Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*

~~IEC 61048, *Capacitors for use in tubular fluorescent and other discharge lamp circuits – General and safety requirements*~~

AS/NZS 61048, *Capacitors for use in tubular fluorescent and other discharge lamp circuits – General and safety requirements*