AS/NZS 61347.2.3:2016

Australian/New Zealand Standard™

Lamp controlgear

Part 2.3: Particular requirements for a.c. and/or d.c. supplied electronic controlgear for fluorescent lamps (IEC 61347-2-3, Ed.2.0 (2011) MOD)

STANDARDS Australia

STANDARDS NEW ZEALAND PAEREWA AOTEAROA

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 11 December 2015.
This Standard was published on 9 March 2016.

The following are represented on Committee EL-041:

Australian Industry Group
Consumers' Federation of Australia
Department of Industry
Electrical Compliance Testing Association
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Energy Efficiency and Conservation Authority of New Zealand
Fair Trading NSW
IES: The Lighting Society
Independent Pricing and Regulatory Tribunal
Institution of Professional Engineers New Zealand
Joint Accreditation System of Australia and New Zealand
Lighting Council Australia
Lighting Council New Zealand
Masters Electricians
Ministry of Business, Innovation and Employment, New Zealand

Additional Interests:

Australasian Fire and Emergency Service Authorities Council

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the online catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 61347.2.3:2015.

Australian/New Zealand Standard™

Lamp controlgear

Part 2.3: Particular requirements for a.c. and/or d.c. supplied electronic controlgear for fluorescent lamps (IEC 61347-2-3, Ed.2.0 (2011) MOD)

Originated in Australia as AS 3134(Int)—1991.
Originated in New Zealand as AS/NZS 60928:2000.
Previous edition AS/NZS 61347.2.3.2004.
Fourth edition 2016.

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 1 76035 421 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede on publication, AS/NZS 61347.2.3:2004, *Lamp controlgear*, Part 2.3 *Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps (IEC 61347-2-3:2000, MOD)*.

The significant revisions with respect to the first edition are as follows:

(a) Rectifying test conditions when dimming.

(b) Construction requirements.

(c) Measurement circuits and limits for HF leakage currents.

(d) Modification of the structure to become a Standard exclusively for a.c. and d.c. supplied electronic controlgear for general lighting and Annex J cover centrally-supplied emergency controlgear.

The objective of this Standard is to specify particular minimum safety requirements for electronic controlgear to reduce the risk of electric shock and the fire hazard of such devices having given due consideration to requirements within International Standards and those specific to the Australian and New Zealand environmental and regulatory framework.

This Standard is an adoption with national modifications. It has been reproduced from IEC 61347-2-3, Ed. 2.0 (2011), *Lamp control gear*, Part 2-3: *Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps*, and has been modified as indicated to take account of Australian/New Zealand conditions.

The variations made to IEC 61347-2-3 Ed 2.0 (2011) are specified in Appendix ZZ. These form the Australian and New Zealand variations for the purpose of the IECEE CB Scheme for recognition of testing to standards for safety of electrical equipment.

This Standard is to be read in conjunction with AS/NZS 61347.1, *Lamp controlgear*, Part 1: *General and safety requirements (IEC 61347-1:2015, MOD)*.

This Standard covers the essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to lamp controlgear, taken in conjunction with any other relevant requirements affecting safety.

This Standard is structured in the following layout:

(i) Preface (including Australian and New Zealand references).

(ii) IEC 61347-2-3, Ed. 2.0 (2011) (unedited from the contents page to the final Clause of the IEC Standard).

(iii) Appendix ZZ—Australian/New Zealand variations to the IEC Standard.

Appendix ZZ introduces marking requirements for Australia/New Zealand voltages.

In this standard, the following print types are used:

(A) Requirements proper: in roman type.

(B) *Test specifications: in italic type.*

(C) Explanatory matter: in smaller roman type.

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

(1) In the source text ‘this part of IEC 61347’ should read ‘this Australian/New Zealand Standard’.

(2) A full point substitutes for a comma when referring to a decimal marker.

Unless otherwise indicated in Appendix ZZ, references to International Standards in this Standard should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS/NZS	
61347	Lamp controlgear	61347	Lamp controlgear
61347-1	Part 1: General and safety requirements	61347.1	Part 1: General and safety requirements (IEC 61347-1:2000, MOD)

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex or appendix to which they apply. A ‘normative’ annex or appendix is an integral part of a Standard, whereas an ‘informative’ annex or appendix is for information and guidance only.

CONTENTS

Page

INTRODUCTION

This second edition of IEC 61347-2-3, published in conjunction with IEC 61347-1, represents an review of the first edition of IEC 61347-2-3. 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 IEC 61347-2, in referring to any of the clauses of IEC 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 IEC 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 control gear, some cross-referencing has been necessary.

Where the requirements of any of the clauses of IEC 61347-1 are referred to in this standard by the phrase ”The requirements of clause n of IEC 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 control gear covered by this particular part of IEC 61347-2.

AUSTRALIAN/NEW ZEALAND STANDARD

Lamp controlgear

Part 2.3:
Particular requirements for a.c. and/or d.c. supplied electronic controlgear for fluorescent lamps (IEC 61347-2-3, Ed.2.0 (2011) MOD)

1 Scope

This part of IEC 61347 specifies particular safety requirements for electronic control gear for use on a.c. and d.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 IEC 60081 and IEC 60901, and other fluorescent lamps for high-frequency operation.

Performance requirements are the subject of IEC 60929.

Particular requirements for electronic control gear with means protection against overheating are given in Annex C.

For emergency lighting operation, particular requirements for control gear operated from a central supply are given in Annex J. Performance requirements appropriate to the safe operation of emergency lighting are also contained in Annex J.

Requirements for emergency lighting control gear operating from non-centralised power supplies are given in IEC 61347-2-7.

NOTE Performance requirements detailed by Annex J are those considered to be safety-related with respect to reliable emergency operation.

2 Normative references

For the purposes of this document, the normative references given in Clause 2 of IEC 61347-1 which are mentioned in this standard apply, together with the following normative references.

IEC 60929: 2011, *AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements*

IEC 61347-1:2007, *Lamp control gear – Part 1: General and safety requirements* Amendment 1(2010)

IEC 61347-2-7,___ *Lamp control gear – Part 2-7: Particular requirements for battery supplied electronic control gear for emergency lighting (self-contained)*[1]

IEC 61547, *Equipment for general lighting purposes – EMC immunity requirements*

1 To be published