

Australian/New Zealand Standard™

## Lamp controlgear

**Part 2.1: Particular requirements  
for starting devices (other than  
glow starters) (IEC 61347-2-1:2013  
(ED 1.2) MOD)**



AS/NZS 61347.2.1:2019

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The following are represented on Committee EL-041:

- Australian Industry Group
- Consumers' Federation of Australia
- Department of the Environment and Energy (Australian Government)
- Electrical Compliance Testing Association of Australia
- Electrical Contractors Association of New Zealand
- Electrical Regulatory Authorities Council
- Energy Efficiency & Conservation Authority of New Zealand
- IES: The Lighting Society
- Joint Accreditation System of Australia and New Zealand
- Joint Accreditation System of Australia and New Zealand - New Zealand
- Lighting Council Australia
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## **Lamp controlgear**

### **Part 2.1: Particular requirements for starting devices (other than glow starters) (IEC 61347-2-1:2013 (ED 1.2) 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 to supersede AS/NZS 61347.2.1:2002, *Lamp controlgear, Part 2.1: Particular requirements for starting devices (other than glow starters)*.

The objective of this Standard is to specify particular safety requirements for starting devices (starters other than glow starters and ignitors) for fluorescent and other discharge lamps for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz which produce starting pulses not greater than 100 kV and which are used in combination with lamps and ballasts covered in AS/NZS 4782.1:2004, IEC 60188, IEC 60192, IEC 60662, AS/NZS 60901:2003, IEC 61167, IEC 61195, IEC 61199, AS/NZS 61347.2.8 and AS/NZS 61347.2.9.

It does not apply to glow starters or starting devices which are incorporated in discharge lamps or which are manually operated. Preheat transformers for fluorescent lamps are covered by AS/NZS 61347.2.8:2003.

This Standard is an adoption with national modifications, and has been reproduced from, IEC 61347-2-1:2000+AMD1:2005+AMD2:2013 CSV (ED 1.2) *Lamp controlgear — Part 2-1: Particular requirements for starting devices (other than glow starters)*. Appendix ZZ lists the variations for the application of this Standard in Australia and New Zealand.

As this document has been reproduced from an International Standard, the following applies:

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

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an ‘informative’ appendix or annex is only for information and guidance.

## NOTES

## CONTENTS

FOREWORD .....	3
INTRODUCTION .....	5
1 Scope .....	6
2 Normative references .....	6
3 Definitions .....	7
4 General requirements .....	8
5 General notes on tests .....	8
5.1 Starting devices for use with lamps having different electrical characteristics .....	8
5.2 Number of specimens .....	8
6 Classification .....	8
7 Marking .....	8
7.1 Mandatory markings .....	8
7.2 Information to be provided, if applicable .....	9
8 Protection against accidental contact with live parts .....	9
9 Terminals .....	9
10 Provisions for earthing .....	9
11 Moisture resistance and insulation .....	9
12 Electric strength .....	9
13 Thermal endurance test for windings .....	10
14 Fault conditions .....	10
15 Heating of built-in and independent starting devices .....	10
15.1 General .....	10
15.2 Normal operation .....	11
15.3 Abnormal operation .....	12
16 Pulse voltage of ignitors .....	14
17 Mechanical strength .....	14
18 Construction .....	15
19 Creepage distances and clearances .....	15
20 Screws, current-carrying parts and connections .....	16
21 Resistance to heat, fire and tracking .....	16
22 Resistance to corrosion .....	16
Annexes .....	17
Bibliography .....	22
Figure 1 – Starting voltage measurement for ignitors .....	16
Figure I.1 – Tumbling barrel .....	20

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**LAMP CONTROLGEAR –****Part 2-1: Particular requirements for starting devices  
(other than glow starters)**

## FOREWORD

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**This Consolidated version of IEC 61347-2-1 bears the edition number 1.2. It consists of the first edition (2000) [documents 34C/498/FDIS and 34C/512/RVD], its amendment 1 (2005) [documents 34C/697/FDIS and 34C/709/RVD] and its amendment 2 (2013) [documents 34C/1051/FDIS and 34C/1067/RVD]. The technical content is identical to the base edition and its amendments.**

**This Final version does not show where the technical content is modified by amendments 1 and 2. A separate Redline version with all changes highlighted is available in this publication.**

**This publication has been prepared for user convenience.**

International Standard IEC 61347-2-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This standard shall be used in conjunction with IEC 61347-1. It was established on the basis of the first edition (2000) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 61347-1, so as to convert that publication into the IEC Standard: Particular requirements for starting devices (other than glow starters).

NOTE 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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

Annexes A to J form an integral part of this standard.

IEC 61347 consists of the following parts, under the general title *Lamp controlgear*:

- Part 1: General and safety requirements
- Part 2-1: Particular requirements for starting devices (other than glow starters)
- Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps
- Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps
- Part 2-4: Particular requirements for d.c. electronic ballasts for general lighting
- Part 2-5: Particular requirements for d.c. supplied electronic ballasts for public transport lighting
- Part 2-6: Particular requirements for d.c. supplied electronic ballasts for aircraft lighting
- Part 2-7: Particular requirements for d.c. supplied electronic ballasts for emergency lighting
- Part 2-8: Particular requirements for ballasts for fluorescent lamps
- Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)
- Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)
- Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## INTRODUCTION

This first edition of IEC 61347-2-1, published in conjunction with IEC 61347-1, represents an editorial review of IEC 60926. 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 self-contained and, therefore, do not include references to each other.

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 controlgear covered by this particular part of IEC 61347-2.

## LAMP CONTROLGEAR –

### Part 2-1: Particular requirements for starting devices (other than glow starters)

#### 1 Scope

This part of IEC 61347 specifies particular safety requirements for starting devices (starters other than glow starters and ignitors) for fluorescent and other discharge lamps for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz which produce starting pulses not greater than 100 kV and which are used in combination with lamps and ballasts covered in IEC 60081, IEC 60188, IEC 60192, IEC 60662, IEC 60901, IEC 61167, IEC 61195, IEC 61199, IEC 61347-2-8 and IEC 61347-2-9.

It does not apply to glow starters or starting devices which are incorporated in discharge lamps or which are manually operated. Preheat transformers for fluorescent lamps are covered by IEC 61347-2-8.

NOTE Glow starters are dealt with in IEC 60155.

Performance requirements are given in IEC 60927.

#### 2 Normative references

For the purpose of this part of IEC 61347, 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 60052:2002, *Voltage measurement by means of standard air gaps*

IEC 60068-2-75:1997, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60155, *Glow-starters for fluorescent lamps*

IEC 60188, *High-pressure mercury vapour lamps*

IEC 60192, *Low-pressure sodium vapour lamps*

IEC 60255-8:1990, *Electrical relays – Part 8: Thermal electrical relays*

IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

IEC 60662, *High-pressure sodium vapour lamps*

IEC 61167, *Metal halide lamps*

IEC 61195, *Double-capped fluorescent lamps – Safety specifications*

IEC 61199, *Single-capped fluorescent lamps – Safety specifications*

IEC 61347-1, *Lamp controlgear – Part 1: General and safety requirements*