



IEC 61347-2-11

Edition 1.1 2017-07  
CONSOLIDATED VERSION

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



Lamp controlgear –  
Part 2-11: Particular requirements for miscellaneous electronic circuits used  
with luminaires (<https://standards.iteh.ai>)

Appareillages de lampes –  
Partie 2-11: Prescriptions particulières pour circuits électroniques divers utilisés  
avec les luminaires

<https://standards.iteh.ai/cstdng/standards/ics/198c95db-61a8-447b-bc32-325adc15d6e0/iec-61347-2-11-2001>



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## VERSION REDLINE



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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LAMP CONTROLGEAR –

### Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

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IEC 61347-2-11 edition 1.1 contains the first edition (2001-04) [documents 34C/528/FDIS and 34C/532/RVD] and its corrigendum (2001-12), and its amendment 1 (2017-07) [documents 34C/1328/FDIS and 34C/1343/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 61347-2-11 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.

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

IEC 61347, which appears under the general title *Lamp controlgear*, comprises the following parts:

- 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. supplied 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 amendment 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.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

## INTRODUCTION

This first edition of IEC 61347-2-11, published in conjunction with IEC 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 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.~~

Where the statement "The requirements of clause XX of IEC 61347-1 apply" is used in this document, it is interpreted as meaning that the mentioned requirements are also suitable for testing miscellaneous electronic circuits used in or with luminaires, for example devices controlling the light output of the luminaires.

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## LAMP CONTROLGEAR –

### Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

#### 1 Scope

This part of IEC 61347 specifies general and safety requirements for miscellaneous electronic circuits used with luminaires for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz and/or d.c. supplies up to ~~250~~ 1 000 V. This part of IEC 61347 does not apply to circuits or devices for which specific IEC standards are published.

NOTE Examples of miscellaneous electronic circuits used with luminaires are

- electronic ballast control circuits;
- switching circuits used in association with daylight and/or presence sensors;
- circuits to assist EMC performance;
- intermittence and similar devices used with lighting chains;
- earth leakage or open-circuit protective devices used with neon transformers.

#### 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.

IEC 61347-1:2000, *Lamp controlgear – Part 1: General and safety requirements*

#### 3 Definitions

<https://standards.iteh.ai/cstdng/standards/iec/198c93db-61a8-447b-bc32-325adc15d6e0/iec-61347-2-11-2001>

For the purpose of this part of IEC 61347, the definitions of clause 3 of IEC 61347-1 apply together with the following.

##### 3.1

##### **miscellaneous electronic circuits used with luminaires**

electronic circuits for use with a luminaire. The circuit may assist the functioning of the lamp controlgear and/or provide additional functions for the luminaire such as switching or circuit monitoring

NOTE Electronic circuits covered by their own IEC standards are not included in this definition.

#### 4 General requirements

The requirements of clause 4 of IEC 61347-1 apply.

#### 5 General notes on tests

Clause 5 of IEC 61347-1 is applicable with the following addition:

##### 5.1 Number of specimens

The following number of specimens shall be submitted for testing:

- 1 unit for the tests of clauses 6 to 13 and clauses 15 to 19;

- 1 unit for the tests of clause 14, fault conditions (additional units or components, where necessary, may be required in consultation with the manufacturer).

## 6 Classification

The requirements of clause 6 of IEC 61347-1 apply.

## 7 Marking

Miscellaneous electronic circuits that form an integral part of the luminaire need not be marked.

### 7.1 Mandatory marking

Miscellaneous electronic circuits, other than integral, shall be clearly and durably marked with the following mandatory markings in accordance with the requirements of 7.1 of IEC 61347-1:

Items a), b), d), e), f), k), l) **and s)** of 7.1 of IEC 61347-1:~~2015~~ together with:

- for controllable circuits, the control terminals shall be identified;
- for miscellaneous circuits classified independent, the marking of  $t_a$  rating is considered an acceptable alternative to the marking of  $t_c$  rating.

The requirements of 7.2 of IEC 61347-1 shall be satisfied.

### 7.2 Information to be provided, if applicable

In addition to the above mandatory markings, the following information, if applicable, shall be given either on the miscellaneous electronic circuit, or be made available in the manufacturer's catalogue or the like.

~~Items h), i) and j) given in 7.1 of IEC 61347-1.~~ <https://standards.iteh.ai/IEC-61347-2-11:2001>

The requirements of 7.2 of IEC 61347-1 shall be satisfied.

## 8 Protection against accidental contact with live parts

The requirements of clause 10 of IEC 61347-1 apply.

## 9 Terminals

The requirements of clause 8 of IEC 61347-1 apply.

## 10 Provisions for earthing

The requirements of clause 9 of IEC 61347-1 apply.

## 11 Moisture resistance and insulation

The requirements of clause 11 of IEC 61347-1 apply.