



**NSAI**  
Standards

Irish Standard  
I.S. EN 61347-2-12:2005

Lamp controlgear -- Part 2-12:  
Particular requirements for d.c. or a.c.  
supplied electronic ballasts for  
discharge lamps (excluding fluorescent  
lamps) (IEC 61347-2-12:2005 (EQV))

## I.S. EN 61347-2-12:2005

*Incorporating amendments/corrigenda issued since publication:*

EN 61347-2-12:2005/A1:2010

EN 61347-2-12:2005/AC:2010

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Corrigendum to EN 61347-2-12:2005

English version

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Foreword

**Delete** the date of the reference EN 61347-1

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December 2010

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61347-2-12/A1**

November 2010

ICS 29.140.99

English version

**Lamp controlgear -  
Part 2-12: Particular requirements for d.c. or a.c. supplied electronic  
ballasts for discharge lamps (excluding fluorescent lamps)  
(IEC 61347-2-12:2005/A1:2010)**

Appareillages de lampes -  
Partie 2-12: Exigences particulières pour  
les ballasts électroniques alimentés en  
courant continu ou alternatif pour lampes  
à décharge (à l'exclusion des lampes  
fluorescentes)  
(CEI 61347-2-12:2005/A1:2010)

Geräte für Lampen -  
Teil 2-12: Besondere Anforderungen an  
gleich- oder wechselstromversorgte  
elektronische Vorschaltgeräte für  
Entladungslampen (ausgenommen  
Leuchtstofflampen)  
(IEC 61347-2-12:2005/A1:2010)

This amendment A1 modifies the European Standard EN 61347-2-12:2005; it was approved by CENELEC on 2010-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

**I.S. EN 61347-2-12:2005**

EN 61347-2-12:2005/A1:2010

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**Foreword**

The text of document 34C/898/CDV, future amendment 1 to IEC 61347-2-12:2005, prepared by SC 34C, Auxiliaries for lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 61347-2-12:2005 on 2010-11-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-08-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2013-11-01

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**Endorsement notice**

The text of amendment 1:2010 to the International Standard IEC 61347-2-12:2005 was approved by CENELEC as an amendment to the European Standard without any modification.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### LAMP CONTROLGEAR –

#### **Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)**

### FOREWORD

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**This consolidated version of IEC 61347-2-12 consists of the first edition (2005) [documents 34C/683/FDIS and 34C/687/RVD] and its amendment 1 (2010) [documents 34C/898/CDV and 34C/933/RVC]. It bears the edition number 1.1.**

**The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.**

International Standard IEC 61347-2-12 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard shall be used in conjunction with IEC 61347-1. It was established on the basis of the first (2000) edition 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 d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps).

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- *test specifications: in italic type*;
- notes: in small roman type.

IEC 61347-2 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. 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
- Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)
- Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules<sup>1)</sup>

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<sup>1)</sup> To be published.

**I.S. EN 61347-2-12:2005**

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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.

**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 publication using a colour printer.**

## INTRODUCTION

This standard, and the parts which make up IEC 61347-1, 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 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)

#### 1 Scope

This part of IEC 61347 specifies particular general and safety requirements for d.c. or a.c. supplied electronic ballasts. The supply comprises a.c. voltages up to 1000 V at 50 Hz/60 Hz. The type of ballast is an converter that may contain igniting and stabilising elements for operation of a discharge lamp at d.c. or at a frequency that can deviate from the supply frequency. The lamps associated with the ballast are specified in IEC 60188 (High pressure mercury vapour lamps), IEC 60192 (Low pressure sodium vapour lamps), IEC 60662 (High pressure sodium vapour lamps), IEC 61167 (Metal halide lamps) and else for general purpose lighting. Ballasts for fluorescent lamps and for lamps for special applications like for theatre and for vehicles are excluded.

#### 2 Normative references

For the purpose of this part of IEC 61347, the normative references given in Clause 2 of IEC 61347-1 apply together with the following:

IEC 60052:2002, *Voltage measurement by means of standard air gaps*

IEC 60417-DB<sup>2)</sup>, *Graphical symbols for use on equipment*

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

#### 3 Definitions

For the purpose of this part of IEC 61347, the definitions given in Cause 3 of IEC 61347-1 apply together with the following:

##### 3.1

##### **output power**

value of the mean power intended to be provided by an electronic ballast

##### 3.2

##### **output terminals**

ballast terminals, intended to be connected to the HID lamp

NOTE This terminal is not understood as a terminal allowing for intermediate operation of e.g. tungsten halogen lamps.

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<sup>2)</sup> "DB" refers to the IEC on-line database.

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