### SVENSK STANDARD SS-EN 61347-2-13



Fastställd 2014-11-19

Utgåva 2 Sida 1 (1+27) Ansvarig kommitté SEK TK 34

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Belysningsmateriel – Start- och driftdon för ljuskällor – Säkerhet –

### Del 2-13: Särskilda fordringar på elektroniska driftdon för lysdiodmoduler

Lamp controlgear -

Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules

Som svensk standard gäller europastandarden EN 61347-2-13:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61347-2-13:2014.

#### Nationellt förord

Europastandarden EN 61347-2-13:2014

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 61347-2-13, Second edition, 2014 Lamp controlgear Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61347-2-13, utgåva 1, 2006 och SS-EN 61347-2-13 C1, utgåva 1, 2011, gäller ej fr o m 2017-10-08.

ICS 29.140.99

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 61347-2-13

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ICS 29.140.99

Supersedes EN 61347-2-13:2006

### **English Version**

Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules (IEC 61347-2-13:2014)

Appareillages de lampes - Partie 2-13: Exigences particulières pour les appareillages électroniques alimentés en courant continu ou alternatif pour les modules de LED (CEI 61347-2-13:2014)

Geräte für Lampen - Teil 2-13: Besondere Anforderungen an gleich- oder wechselstromversorgte elektronische Betriebsgeräte für LED-Module (IEC 61347-2-13:2014)

This European Standard was approved by CENELEC on 2014-10-08. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

### **Foreword**

The text of document 34C/1092/FDIS, future edition 2 of IEC 61347-2-13, prepared by SC 34C, "Auxiliaries for lamps", of IEC TC 34, "Lamps and related equipment", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61347-2-13:2014.

The following dates are fixed:

•	latest date by which the document has	(dop)	2015-07-08
	to be implemented at national level by publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2017-10-08
	standards conflicting with the		
	document have to be withdrawn		

This document supersedes EN 61347-2-13:2006

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

### **Endorsement notice**

The text of the International Standard IEC 61347-2-13:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60051 Series	NOTE	Harmonised in EN 60051 Series.
IEC 60085:2004	NOTE	Harmonised as EN 60085:2008.
IEC 60364-4-41:2005	NOTE	Harmonised as HD 60364-4-41:2007.
IEC 60384-14:2005	NOTE	Harmonised as EN 60384-14:2005.
IEC 60950-1:2005	NOTE	Harmonised as EN 60950-1:2006.
IEC 61558-1:2005	NOTE	Harmonised as EN 61558-1:2005.
IEC 61558-2-1:2007	NOTE	Harmonised as EN 61558-2-1:2007.
IEC 61558-2-4:2009	NOTE	Harmonised as EN 61558-2-4:2009.
IEC 61558-2-13:2009	NOTE	Harmonised as EN 61558-2-13:2009.

### Annex ZA

(normative)

## Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: <a href="https://www.cenelec.eu">www.cenelec.eu</a>.

Publication IEC 61347-1 (mod)	<u>Year</u> 2007	<u>Title</u> Lamp controlgear Part 1: General and safety requirements	<u>EN/HD</u> EN 61347-1	<u>Year</u> 2008
+A1 +A2	2010 2012		+A1 +A2	2011 2013
IEC 61347-2-7	2011	Lamp controlgear Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)	EN 61347-2-7	2012
IEC 61547	-	Equipment for general lighting purposes - EMC immunity requirements	EN 61547	-
IEC 61558 series	-	Safety of power transformers, power supplies, reactors and similar products Part 1: General requirements and tests	EN 61558 series	-
IEC 61558-2-6	2009	Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers	EN 61558-2-6	2009
IEC 61558-2-16	2009	Safety of transformers, reactors, power supply units and similar products for voltages up to 1 100 V Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units	EN 61558-2-16	2009
IEC 62384	2006	D.C. or A.C. supplied electronic control gear for LED modules - Performance requirements	r EN 62384	2006

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### LAMP CONTROLGEAR -

## Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules

### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61347-2-13 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2006. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition.

- a) Replacement of the SELV-equivalent requirements by SELV requirements and reference to the SELV requirements of Annex L in IEC 61347-1:2007/AMD2:2012.
- b) Reference to IEC 61347-1 for the protection against accidental contact with live parts, moisture resistance and insulation and electric strength.
- c) New Annex J for emergency lighting requirements.

The text of this standard is based on the following documents:

FDIS	Report on voting
34C/1092/FDIS	34C/1106/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This standard shall be used in conjunction with IEC 61347-1. 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 61347-1:2007/AMD1:2010/AMD2:2012, 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.

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

In this standard, the following print types are used:

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

A list of all parts in the IEC 61347, published under the general title *Lamp controlgear* can be found on the IEC website.

The committee has decided that the contents of this publication 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 second edition of IEC 61347-2-13 is published in conjunction with IEC 61347-1. 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.

### LAMP CONTROLGEAR -

# Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules

### 1 Scope

This part of IEC 61347 specifies particular safety requirements for electronic controlgear for use on d.c. or a.c. supplies up to 1 000 V (a.c. at 50 Hz or 60 Hz) and at an output frequency which can deviate from the supply frequency, associated with LED modules.

Controlgear for LED modules specified in this standard are designed to provide constant voltage or current at SELV or higher voltages. Deviations from the pure voltage and current types do not exclude the gear from this standard.

The annexes of IEC 61347-1 which are applicable according to this Part 2-13 and using the word "lamp" are understood to also comprise LED modules.

Particular requirements for SELV controlgear are given in Annex I.

Performance requirements are covered by IEC 62384.

Plug-in controlgear, being part of the luminaire, are covered as for built-in controlgear by the additional requirements of the luminaire standard.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61347-1:2007, Lamp controlgear – Part 1: General and safety requirements Amendment 1:2010 Amendment 2:2012

IEC 61347-2-7:2011, Lamp controlgear – Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)

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

IEC 61558 (all parts), Safety of power transformers, power supplies, reactors and similar products

IEC 61558-2-6:2009, Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V - Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers

IEC 61558-2-16:2009, Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V – Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units

IEC 62384:2006, DC or AC supplied electronic controlgear for LED modules – Performance requirements