



# SLOVENSKI STANDARD

## SIST EN 61347-1:2008

01-september-2008

Nadomešča:

SIST EN 61347-1:2002

SIST EN 61347-1:2002/A1:2008

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**Stikalne naprave za sijalke - 1. del: Splošne in varnostne zahteve (IEC 61347-1:2007, spremenjen)**

Lamp controlgear -- Part 1: General and safety requirements

Geräte für Lampen -- Teil 1: Allgemeine und Sicherheitsanforderungen

Appareillages de lampes -- Partie 1: Exigences générales et exigences de sécurité

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**Ta slovenski standard je istoveten z: EN 61347-1:2008**

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**ICS:**

29.130.01	Stikalne in krmilne naprave na splošno	Switchgear and controlgear in general
29.140.99	Drugi standardi v zvezi z žarnicami	Other standards related to lamps

**SIST EN 61347-1:2008**

**en,fr**

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English version

**Lamp controlgear -  
Part 1: General and safety requirements  
(IEC 61347-1:2007, modified)**

Appareillages de lampes -  
Partie 1: Exigences générales  
et exigences de sécurité  
(CEI 61347-1:2007, modifiée)

Geräte für Lampen -  
Teil 1: Allgemeine  
und Sicherheitsanforderungen  
(IEC 61347-1:2007, modifiziert)

**STANDARD PREVIEW**  
This European Standard was approved by CENELEC on 2008-04-16. 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.  
(standards.iteh.ai)

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

<https://standards.iteh.ai/catalog/standards/sist/25a918b4-8040-4ae2-b5ff-1bd7e600ca4a/iec-61347-1-2008>  
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 Central Secretariat has the same status as the official versions.

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

# CENELEC

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of the International Standard IEC 61347-1:2007, prepared by SC 34C, Auxiliaries for lamps, of IEC TC 34, Lamps and related equipment, together with the common modifications prepared by the Technical Committee CENELEC TC 34Z, Luminaires and associated equipment, was submitted to the formal vote and was approved by CENELEC as EN 61347-1 on 2008-04-16.

This European Standard supersedes EN 61347-1:2001 + corrigendum July 2003 + A1:2008.

The definition clause has been extended (rated no-load output voltage, controllable ballasts, control terminals, control signal). General requirements for lamp control gear which do not have their own enclosure have been added. The informative information (for ballasts in lamp standards) is now transformed into a normative requirement (in ballast standards). The test schedule has been minimised where possible, see 5.7 and Annex J. For printed circuit boards, the (non-) inflammability requirements have been specified. An annex on conformity testing during manufacture has been added.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-05-01

This Part 1 is to be used in conjunction with the appropriate Part 2, which contains clauses to supplement or modify the corresponding clauses in Part 1, to provide the relevant requirements for each type of product.

SIST EN 61347-1:2008

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.

Clauses, subclauses, notes, tables and figures which are additional to those in IEC 61347-1:2007 are prefixed „Z“.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61347-1:2007 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### 16 Creepage distances and clearances

**Add** the following notes after Paragraph 1:

NOTE Z1 Attention is drawn to the fact that the values for creepage distances and clearances given in this clause are the absolute minimum.

NOTE Z2 The way in which creepage distances and clearances are measured is specified in EN 60664-1.

**Add** the following text after Paragraph 6:

Values for creepage distances and clearances may be found for intermediate values of working voltages by linear interpolation between tabulated values.

NOTE Z3 For details of pollution degrees or overvoltage categories, EN 60664-1 should be consulted.

The minimum distances specified are based on the following parameters:

- for use with up to 2 000 m above sea level;
- pollution degree 2 where normally only non-conductive pollution occurs but occasionally a temporary conductivity caused by condensation is to be expected;
- equipment of impulse withstand category II which is energy-consuming equipment to be supplied from the fixed installation.

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Replace Table 3 with the following:

**Table 3 – Minimum distances for a.c. (50 Hz/60 Hz) sinusoidal voltages**

RMS working voltage not exceeding V	50	150	250	500	750	1 000
Distances mm						
a) between live parts of different polarity, and b) between live parts and accessible metal parts which are permanently fixed to the lamp control gear, including screws or devices for fixing covers or fixing the lamp control gear to its support c) for ballasts declared not to rely on the luminaire enclosure for protection against electric shock – between live parts and the outer accessible surface of insulating parts						
Creepage distances <sup>a</sup>						
– Basic insulation PTI <sup>b</sup> ≥ 600	0,6	0,8	1,5	3	4	5,5
– Basic insulation PTI <sup>b</sup> < 600	1,2	1,6	2,5	5	8	10
– Supplementary insulation PTI <sup>b</sup> ≥ 600	–	0,8	1,5	3	4	5,5
– Supplementary insulation PTI <sup>b</sup> < 600	–	1,6	2,5	5	8	10
– Reinforced insulation	–	3,2 <sup>c</sup>	5 <sup>c</sup>	6	8	11
Clearances <sup>d</sup>						
– Basic insulation	0,2	0,8	1,5	3	4	5,5
– Supplementary insulation	–	0,8	1,5	3	4	5,5
– Reinforced insulation	–	1,6	3	6	8	11
<sup>a</sup> For creepage distances the equivalent d.c. voltage is equal to the r.m.s. value of the sinusoidal a.c. voltage. <sup>b</sup> PTI (proof tracking index) in accordance with EN 60112. <sup>c</sup> For insulation material with PTI ≥ 600 this is reduced to twice that of the basic insulation for this material. <sup>d</sup> For clearances the equivalent d.c. voltage is equal to the peak of the a.c. voltage.						

NOTE 1 In the case of creepage distances to parts not energized or not intended to be earthed where tracking cannot occur, the values specified for material with PTI ≥ 600 apply for all materials (in spite of the real PTI).

For creepage distances subjected to working voltages of less than 60 s duration, the values specified for materials with PTI ≥ 600 apply for all materials.

NOTE 2 For creepage distances not liable to contamination by dust or moisture, the values specified for materials with PTI ≥ 600 apply (regardless of the real PTI).

NOTE 3 For lamp controlgear specified in EN 61347-2-1, accessible metal parts are rigidly placed in relation to live parts.

NOTE 4 The creepage distances and clearances specified in this clause do not apply to those devices specified in EN 61347-2-1 which comply with the dimensions specified in EN 60155. In such instances, the requirements of that standard apply.

## Bibliography

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

IEC 60065 + A1	NOTE	Harmonized as EN 60065:2002 (modified) + A1:2006 (modified).
IEC 60112	NOTE	Harmonized as EN 60112:2003 (not modified).
IEC 60155	NOTE	Harmonized as EN 60155:1995 (not modified).
IEC 60216-1	NOTE	Harmonized as EN 60216-1:2001 (not modified).
IEC 60598	NOTE	Harmonized in EN 60598 series (modified).
IEC 60664-1 + A1 + A2	NOTE	Harmonized as EN 60664-1:2003 (not modified).
IEC 60664-4	NOTE	Harmonized as EN 60664-4:2006 (not modified).
IEC 60664-5	NOTE	Harmonized as EN 60664-5:2003 (not modified).
IEC 60925 + A1 + A2	NOTE	Harmonized as EN 60925:1991 (not modified) + A1:1996 (not modified) + A2:2001 (not modified).
IEC 60927 + A1 + A2	NOTE	Harmonized as EN 60927:1996 (not modified) + A1:1999 (not modified) + A2:2004 (not modified).
IEC 61047	NOTE	Harmonized as EN 61047:2004 (not modified).
IEC 61347-2-1 + A1	NOTE	Harmonized as EN 61347-2-1:2001 (not modified) + A1:2006 (not modified).
IEC 61347-2-2 + A1 + A2	NOTE	Harmonized as EN 61347-2-2:2001 (not modified) + A1:2006 (not modified) + A2:2006 (not modified).
IEC 62384	NOTE	Harmonized as EN 62384:2006 (not modified).

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## Annex ZA (normative)

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

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

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60081	- <sup>1)</sup>	Double-capped fluorescent lamps - Performance specifications	EN 60081	1998 <sup>2)</sup>
IEC 60317-0-1	1997	Specifications for particular types of winding	EN 60317-0-1	1998
A1	1999	wires -	A1	2000
A2	2005	Part 0-1: General requirements - Enamelled round copper wire	A2	2005
IEC 60417	Data base	Graphical symbols for use on equipment	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
A1	1999		A1	2000
IEC 60598-1 (mod)	2003	Luminaires - Part 1: General requirements and tests	EN 60598-1 + corr. August	2004 2007
IEC 60664-3	<sup>1)</sup>	Insulation coordination for equipment within low-voltage systems Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2003 <sup>2)</sup>
IEC 60691	2002	Thermal-links - Requirements and application guide	EN 60691	2003
IEC 60695-2-10	- <sup>1)</sup>	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001 <sup>2)</sup>
IEC 60695-11-5	- <sup>1)</sup>	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005 <sup>2)</sup>
IEC 60730-2-3 (mod)	- <sup>1)</sup>	Automatic electrical controls for household and similar use - Part 2-3: Particular requirements for thermal protectors for ballasts for tubular fluorescent lamps	EN 60730-2-3	2007 <sup>2)</sup>
IEC 60901	- <sup>1)</sup>	Single-capped fluorescent lamps - Performance specifications	EN 60901	1996 <sup>2)</sup>
IEC 60921	2004	Ballasts for tubular fluorescent lamps - Performance requirements	EN 60921	2004

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.



<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60923	2005	Auxiliaries for lamps - Ballasts for discharge lamps (excluding tubular fluorescent lamps) - Performance requirements	EN 60923	2005
IEC 60929	2006	AC-supplied electronic ballasts for tubular fluorescent lamps - Performance requirements	EN 60929 + corr. December	2006 2006
IEC 60990	1999	Methods of measurement of touch current and protective conductor current	EN 60990	1999
IEC 61189-2	- <sup>1)</sup>	Test methods for electrical materials, interconnection structures and assemblies - Part 2: Test methods for materials for interconnection structures	EN 61189-2	2006 <sup>2)</sup>
IEC 61249-2	Series	Materials for printed boards and other interconnecting structures - Part 2: Reinforced base materials, clad and unclad	EN 61249-2	Series
IEC 61347-2	Series	Lamp controlgear - Part 2: Particular requirements	EN 61347-2	Series
IEC 61347-2-8	- <sup>1)</sup>	Lamp controlgear - Part 2-8: Particular requirements for ballasts for fluorescent lamps	EN 61347-2-8 + corr. July	2001 <sup>2)</sup> 2003
IEC 61347-2-9	2000	Lamp controlgear - Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)	EN 61347-2-9 + corr. July	2001 2003
A1	2003		A1	2003
A2	2006		A2	2006
ISO 4046-4	2002	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	-	-

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NORME  
INTERNATIONALE  
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STANDARD

CEI  
IEC

61347-1

Deuxième édition  
Second edition  
2007-01

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**Appareillages de lampes –**

**Partie 1:  
Exigences générales et exigences de sécurité**

**iTeh STANDARD PREVIEW**  
**Lamp controlgear –**  
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**Part 1:  
General and safety requirements**

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International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**LAMP CONTROLGEAR –****Part 1: General and safety requirements**

## 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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International Standard IEC 61347-1 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 2000 and its Amendment 1 (2003). It constitutes a technical revision. The definition clause has been extended (rated no-load output voltage, controllable ballasts, control terminals, control signal). General requirements for lamp control gear which do not have their own enclosure have been added. The informative information (for ballasts in lamp standards) is now transformed into a normative requirement (in ballast standards). The test schedule has been minimised where possible, see 5.7 and Annex J. For printed circuit boards, the (non-) inflammability requirements have been specified. An Annex on conformity testing during manufacture has been added.

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

FDIS	Report on voting
34C/776/FDIS	34C/779/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 1 is to be used in conjunction with the appropriate part 2, which contains clauses to supplement or modify the corresponding clauses in Part 1, to provide the relevant requirements for each type of product.

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.

A list of all parts of the IEC 61347 series, 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 maintenance result 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; [SIST EN 61347-1:2008](https://standards.iteh.ai/catalog/standards/sist/en-61347-1-2008)
- withdrawn; <https://standards.iteh.ai/catalog/standards/sist/25a918b4-8040-4ae2-b5ff-1097e4eb00c/sist-en-61347-1-2008>
- replaced by a revised edition, or
- amended.