



**iTeh STANDARD PREVIEW**  
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SIST EN 62560:2013/A11:2019

<https://standards.iteh.ai/catalog/standards/sist/469a59d9-3df1-4ec5-bf43-0e19a5bf908b/sist-en-62560-2013-a11-2019>

EUROPEAN STANDARD

**EN 62560:2012/A11**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 29.140.30

English Version

**Self-ballasted LED-lamps for general lighting services by voltage  
> 50 V - Safety specifications**

Lampes à DEL autoballastées pour l'éclairage général  
fonctionnant à des tensions > 50 V - Spécifications de  
sécurité

LED-Lampen mit eingebautem Vorschaltgerät für  
Allgemeinbeleuchtung für Spannungen > 50 V -  
Sicherheitsanforderungen

This amendment A11 modifies the European Standard EN 62560:2012; it was approved by CENELEC on 2019-05-15. 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.

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 amendment 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, Serbia, 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: Rue de la Science 23, B-1040 Brussels**

**EN 62560:2012/A11:2019**

## European foreword

This document (EN 62560:2012/A11:2019) has been prepared by CLC/TC 34 “*Lamps and related equipment*”.

The following dates are fixed:

- latest date by which this document has to be implemented at (dop) 2019-12-26  
national level by publication of an identical national  
standard or by endorsement
- latest date by which the national standards conflicting with this (dow) 2021-12-26  
document have to be withdrawn

Clauses, subclauses, notes, tables, figures and annexes, which are additional to those in IEC 62560:2011 and EN 62560:2012/A1:2015 are prefixed “Z”.

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

This document has been prepared under mandates given to CENELEC by the European Commission and the European Free Trade Association, and covers the Principal Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2014/35/EU).

For the relationship with EU Directives see informative Annex ZZA, which are integral parts of this document.

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CONTENTS **Replace the following annex:**

Annex ZA (normative) Normative references to international publications with their corresponding European publications

**Add** the following annex:

Annex ZZA (informative) Relationship between this European standard and the safety objectives of Directive 2014/35/EU

## 1 Scope

**Add** at the end the following note:

NOTE Z1 Radio equipment can be part of the Self-Ballasted lamp.

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**EN 62560:2012/A11:2019****7 Protection against accidental contact with live parts**

After the title of Clause 7 **add** the following new sub clause title 7.Z1

## 7.Z1 General

At the end of Clause 7 **add** the following new sub Clauses 7.Z2, 7.Z2.1 and 7.Z2.2

## 7.Z2 Fixing of conductors

## 7.Z2.1 Requirements

The fixing of the conductors inside the lamp shall be such that, if a conductor becomes loose or detached, the conductor cannot reduce clearances or creepage distances below the values as specified in 14.

For the purpose of these requirements, it is assumed that:

- two independent fixings will not become loose or detached at the same time; and
- parts fixed by means of screws or nuts provided with self-locking washers or other means of locking are not liable to become loose or detached.

NOTE Spring washers and the like can provide satisfactory locking.

**7.Z2.2 Compliance criteria**

Compliance is checked by inspection, by measurement or in case of doubt by applying a force of 10 N in the most unfavourable direction.

EXAMPLE Constructions regarded as meeting the requirements include:

- close-fitting tubing (for example, a heat shrink or rubber sleeve), applied over the wire and its termination;
- conductors connected by soldering and held in place near to the termination, independently of the soldered connection;
- conductors connected by soldering and securely hooked in before soldering, provided that the hole through which the conductor is passed is not unduly large;
- conductors connected to screw terminals, with an additional fixing near to the terminal that clamps, in the case of stranded conductors, the insulation and not only the conductors;
- conductors connected to screw terminals and provided with terminators that are unlikely to become free (for example, ring lugs crimped onto the conductors), however, the pivoting of such terminators is considered; or
- short rigid conductors that remain in position when the terminal screw is loosened.

## 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: [www.cenelec.eu](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges	EN 60061-3 + amendments up to A53	2011
IEC 60360	-	Standard method of measurement of lamp cap temperature rise	EN 60360	1998
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May 1993	1991
IEC 60598-1 (mod)	2008	Luminaires Part 1: General requirements and tests	EN 60598-1 + A11	2008
IEC 60695-2-10	2000	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001
IEC 60695-2-11 + corr. January	2000 2001	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end products	EN 60695-2-11	2001
IEC 60695-2-12	2000	Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability test method for materials	EN 60695-2-12 <sup>1)</sup>	2001

<sup>1)</sup> EN 60695-2-12 is superseded by EN 60695-2-12:2010, which is based on IEC 60695-2-12:2010.

## EN 62560:2012/A11:2019

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-2-13	2000	Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignitability test method for materials	EN 60695-2-13 <sup>2)</sup>	2001
IEC 61199	1999	Single-capped fluorescent lamps - Safety specifications	EN 61199 <sup>3)</sup>	1999
IEC 61347-1	2007	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	2008
IEC 62031	2008	LED modules for general lighting - Safety specifications	EN 62031	2008
IEC/TS 62504	-	General lighting - LEDs and LED modules - Terms and definitions	EN 62504	2014
ISO 4046-4	2002	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	-	-
IEC/TR 62778	2014	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires	-	-

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2) EN 60695-2-13 is superseded by EN 60695-2-13:2010, which is based on IEC 60695-2-13:2010 + corrigendum Feb. 2012.

3) EN 61199 is superseded by EN 61199:2011, which is based on IEC 61199:2011.



## Annex ZZA (informative)

### Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZA.1 – Correspondence between this European standard and Article 3 of Directive 2014/35/EU [2014 OJ L96]**

Safety Objectives of Directive 2014/35/EU [2014 OJ L96]	Clause(s) / subclause(s) of this EN	Remarks / Notes
1 (a)	Clause 5	None
1 (b)	Clause 4, 19	None
1 (c)	See items 2 and 3 of this table	None
2 (a)	Clause 6, 7, 8, 9, 11, 12, 13, 14	None
2 (b)	Clause 6, 8, 9, 10, 11, 12, 13, 17, 19	EMF is not covered in this standard
2 (c)	Clause 6, 8, 9, 11, 12, 13	None
2 (d)	Clause 6, 7, 8, 9, 11, 12, 13, 14	None
3 (a)	Clause 6, 7, 8, 9, 11, 12, 13	None
3 (b)	Clause 6, 8, 9, 11, 12, 13, 14	None
3 (c)	Clause 6, 8, 9, 10, 11, 12, 13, 14	None