SLOVENSKI STANDARD
SIST EN 60968:2015

01-september-2015

Nadomešča:
SIST EN 60968:2013
SIST EN 60968:2013/A11:2015

Sijalke za splošno razsvetljavo z vgrajeno predstikalno napravo - Varnostne zahteve (IEC 60968:2015, spremenjen+ COR1:2015, spremenjen)

Self-ballasted fluorescent lamps for general lighting services - Safety requirements (IEC 60968:2015, modified + COR1:2015, modified)

Leuchtstofflampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung - Sicherheitsanforderungen (IEC 60968:2015, modifiziert + COR1:2015, modifiziert)

Lampes à fluorescence à ballast intégré pour l'éclairage général - Règles de sécurité (IEC 60968:2015, modifiée + COR1:2015, modifiée)

Ta slovenski standard je istoveten z: **EN 60968:2015**

ICS:

29.140.30	Fluorescenčne sijalke. Sijalke	Fluorescent lamps. Discharge lamps

SIST EN 60968:2015 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60968

May 2015

ICS 29.140.30

Supersedes EN 60968:2013

English Version

Self-ballasted fluorescent lamps for general lighting services - Safety requirements (IEC 60968:2015, modified + COR1:2015, modified)

Lampes à fluorescence à ballast intégré pour l'éclairage général - Règles de sécurité (IEC 60968:2015, modifiée + COR1:2015, modifiée)

Leuchtstofflampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung - Sicherheitsanforderungen (IEC 60968:2015, modifiziert + COR1:2015, modifiziert)

This European Standard was approved by CENELEC on 2015-03-30. 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

Ref. No. EN 60968:2015 E

Foreword

The text of document 34A/1811/FDIS, future edition 3 of IEC 60968 prepared by subcommittee 34A “Lamps”, of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60968:2015.

A draft amendment, which covers common modifications to IEC 60968 (34A/1811/FDIS), was prepared by CLC/TC 34A "Lamps" and approved by CENELEC.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-03-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-03-30

This document supersedes EN 60968:2013.

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 60968:2015 + COR1:2015 was approved by CENELEC as a European Standard with agreed common modifications.

COMMON MODIFICATIONS

CONTENTS **Add** the following annexes:
Annex ZA (normative) Normative references to international publications with their corresponding European publications

Delete all references to E17, E26 and E39 lamp caps in the following clauses and figures:

Clause 6 Interchangeability (Table 2)

Clause 9 Mechanical strength (Table 3 and 4)

Clause 10 Cap temperature rise (Table 5)

Figure 5 Holder for torsion test on lamps with screw caps

Bibliography **Add** the following standards:

Add the following notes for the standards indicated:

IEC 60432-1 NOTE Harmonized as EN 60432-1
IEC 60529:1989 NOTE Harmonized as EN 60529:1991 (not modified)
IEC 62471:2006 NOTE Harmonized as EN 62471:2008 (modified).

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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.

Publication	Year	Title	EN/HD	Year
IEC 60061-1	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps	EN 60061-1	-
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges	EN 60061-3	-
IEC 60360	-	Standard method of measurement of lamp cap temperature rise	EN 60360	-
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN 60598-1	-
IEC 60695-2-10	-	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	-
IEC 60695-2-11	2000	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 60901	-	Single-capped fluorescent lamps - Performance specifications	EN 60901	-
IEC 61199	-	Single-capped fluorescent lamps – Safety specifications	EN 61199	-
IEC 61347-1	2015	Lamp controlgear – Part 1: General and safety requirements	EN 61347-1	2015
ISO 4046-4	2002	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products		

IEC 60968

Edition 3.0 2015-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Self-ballasted fluorescent lamps for general lighting services – Safety requirements

Lampes à fluorescence à ballast intégré pour l'éclairage général – Règles de sécurité

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.140.30

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SELF-BALLASTED FLUORESCENT LAMPS FOR GENERAL LIGHTING SERVICES – 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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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 60968 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition, where additions have been made to the following:

a) caps and prevention of cap misuse;
b) interchangeability;
c) mechanical and electrical strength;
d) creepage distances and clearances;
e) end of lamp life precaution;
f) abnormal operation;

g) test conditions for dimmable and three-way lamps;

h) water contact related marking;

i) verification, and assessment;

j) information for luminaire design in the form of annexes.

The text of this third edition is based on the following documents:

FDIS	Report on voting
34A/1811/FDIS	34A/1838/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.

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.

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.

The contents of the corrigendum of March 2015 have been included in this copy.

SELF-BALLASTED FLUORESCENT LAMPS FOR GENERAL LIGHTING SERVICES – SAFETY REQUIREMENTS

1 Scope

This International Standard specifies the safety and interchangeability requirements, together with the test methods and conditions required to show compliance of tubular fluorescent lamps with integrated means for controlling starting and stable operation (self-ballasted fluorescent lamps).

These lamps are intended for domestic and similar general lighting purposes, having a rated voltage of 50 V to 250 V, having a rated frequency of 50 Hz or 60Hz and having IEC 60061-1 compliant caps.

For a cap-holder system not specifically mentioned in this standard, the relevant information on safety related tests provided by the manufacturer will apply.

The requirements of this standard relate only to type testing.

Recommendations for whole product testing or batch testing are given in Annex A.

This part of the standard covers photobiological safety according to IEC 62471 and IEC TR 62471-2. Blue light and infrared hazards are below the level which requires marking.

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 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60360, *Standard method of measurement of lamp cap temperature rise*

IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

IEC 60695-2-10, *Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure*

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end products*

IEC 60901, *Single-capped fluorescent lamps – Performance specifications*

IEC 61199, *Single-capped fluorescent lamps – Safety specifications*