

SLOVENSKI STANDARD SIST EN 60968:2013

01-julij-2013

Nadomešča: SIST EN 60968:1999 SIST EN 60968:1999/A1:1999 SIST EN 60968:1999/A2:2000

Sijalke za splošno razsvetljavo z vgrajeno predstikalno napravo - Varnostne zahteve

Self-ballasted lamps for general lighting services - Safety requirements iTeh STANDARD PREVIEW

Lampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung -Sicherheitsanforderungen

SIST EN 60968:2013

https://standards.iteh.ai/catalog/standards/sist/9c735814-1156-4625-a662-Lampes à ballast intégré pour l'éclairage général of Rescriptions de sécurité

Ta slovenski standard je istoveten z: EN 60968:2013

ICS:

29.140.30 Fluorescenčne sijalke. Sijalke Fluorescent lamps. Discharge lamps

SIST EN 60968:2013

en



iTeh STANDARD PREVIEW (standards.iteh.ai)



EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 60968

January 2013

Supersedes EN 60968:1990 + A1:1993 + A2:1999

ICS 29.140.30

English version

Self-ballasted lamps for general lighting services -Safety requirements (IEC 60968:2012)

Lampes à ballast intégré pour l'éclairage général -Exigences de sécurité (CEI 60968:2012) Lampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung -Sicherheitsanforderungen (IEC 60968:2012)

iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2012-10-31. 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: d85e50f60at5/sist-en-60968-2013

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.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

© 2013 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

Foreword

The text of document 34A/1540/CDV, future edition 2 of IEC 60968, prepared by SC 34A "Lamps" of IEC/TC 34A "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60968:2013.

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)	2013-07-31
•	latest date by which the national standards conflicting with the	(dow)	2015-10-31

document have to be withdrawn

This document supersedes EN 60968:1990 + A1:1993 + A2:1999.

EN 60968:2013 includes the following significant technical changes with respect to EN 60968:1990 + A1:1993 + A2:1999:

- for reasons of photobiological safety, the scope has been extended;
- a new definition and clause on UV radiation have been introduced;
- clauses on normative references and an annex on literature were added;
- the latest IEC template has been adapted. DARD PREVIEW

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 60968:2012 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 62471:2006 NOTE Harmonised as EN 62471:2008 (modified).

Annex ZA (normative)

- 3 -

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

Publication	Year	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061	-	Lamp caps and holders together with gauges for the control of interchangeability and safety	-	-
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	- iT	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3 Gauges DARD PREVI	EN 60061-3	-
IEC 60238	-	Edison screw lampholders	EN 60238	-
IEC 60360	-	Standard method of measurement of lamp cap temperature rise	EN 60360	-
IEC 60695-2-10	2000 https://st	Fire hazard testing - dards/sist/9c735814-1156-4 Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	4625-a002-5-2-10	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	2010	Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials	EN 60695-2-12	2010
IEC 60695-2-13 + corr. February	2010 2012	Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials	EN 60695-2-13	2010
IEC 60901	-	Single-capped fluorescent lamps - Performance specifications	EN 60901	-



iTeh STANDARD PREVIEW (standards.iteh.ai)



Edition 2.0 2012-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Self-ballasted lamps tor general lighting services E Safety requirements (standards.iteh.ai) Lampes à ballast intégré pour l'éclairage général – Exigences de sécurité

> <u>SIST EN 60968:2013</u> https://standards.iteh.ai/catalog/standards/sist/9c735814-1156-4625-a662d85e50f60af5/sist-en-60968-2013

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE CODE PRIX



ICS 29.140.30

ISBN 978-2-83220-378-1

Warning! Make sure that you obtained this publication from an authorized distributor. Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

 Registered trademark of the International Electrotechnical Commission Marque déposée de la Commission Electrotechnique Internationale

CONTENTS

- 2 -

FO	REWORD	3				
INT	RODUCTION	5				
1	Scope	6				
2	Normative references					
3	Terms and definitions					
4	General requirement and general test requirements8					
5	Marking					
6	Interchangeability9					
7	Protection against electric shock10					
8	Insulation resistance and electric strength after humidity treatment	10				
	8.1 General	10				
	8.2 Insulation resistance	10				
	8.3 Electric strength	10				
9	Mechanical strength	11				
10	0 Cap temperature rise					
11	Resistance to heat.	12				
12	Resistance to flame and ignitionandards.iten.ai)	12				
13	Fault conditions	13				
14	UV radiation	17				
Bib	liography	18				
Fig	ure 1 – Dimming not allowed	9				
Fig	ure 2 – Standard test finger	14				
Fig	ure 3 – Holder for torsion test on lamps with screw caps	15				
Fig	ure 4 – Holder for torque test on lamps with bayonet caps	16				
Fig	ure 5 – Ball-pressure apparatus	17				
Tab	ole 1 – Interchangeability gauges and lamp cap dimensions	9				

- 3 -

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SELF-BALLASTED 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.
- The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user. (Standards.iten.al)
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter. https://standards.iteh.ai/catalog/standards/sist/9c735814-1156-4625-a662-
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 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 second edition cancels and replaces the first edition published in 1988, Amendment 1:1991 and Amendment 2:1999. This edition constitutes a technical revision.

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

- a) For reasons of photobiological safety, the scope has been extended.
- b) A new definition and clause on UV radiation have been introduced.
- c) Clauses on normative references and an annex on literature were added.
- d) The latest IEC template has been adapted.

- 4 -

60968 © IEC:2012

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

CDV	Report on voting
34A/1540/CDV	34A/1579/RVC

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 ANDARD PREVIEW
- amended.

(standards.iteh.ai)

60968 © IEC:2012

– 5 –

INTRODUCTION

With IEC 62471 and IEC/TR 62471-2, there are horizontal requirements available that need to be introduced into product standards, e.g. to IEC 60968. The horizontal requirement is transformed into a requirement for self-ballasted lamps.

The lamps within the scope of this standard are general lighting service (GLS) lamps according to the definition 3.11 in IEC 62471:2006. "...lamps intended for lighting spaces that are typically occupied or viewed by people...".

According to Clause 6 of IEC 62471:2006, radiation of GLS lamps is measured at a distance equivalent to 500 lx.

Measured at the 500 lx distance, GLS lamps will not exceed risk group 1 for blue light hazard and risk group 0 for IR radiation. This combination of risk group and hazard does not require marking (Table 1 of IEC/TR 62471-2:2009).

Hazards from UV radiation of GLS lamps will be covered by Clause 14 of IEC 60968.

Hence, IEC 62471 does not require any additional marking for GLS lamps.

iTeh STANDARD PREVIEW (standards.iteh.ai)