

# SLOVENSKI STANDARD SIST EN 60968:1999

01-julij-1999

Sijalke za splošno razsvetljavo z vgrajeno predstikalno napravo - Varnostne zahteve (IEC 60968:1988, spremenjen)

Self-ballasted lamps for general lighting services - Safety requirements

Lampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung - Sicherheitsanforderungen

iTeh STANDARD PREVIEW

Lampes à ballast intégré pour l'éclairage général - Prescriptions de sécurité

Ta slovenski standard je istoveten z: EN 60968:1990.

Hups//standards.iteli.av.catalog/standards/sis/Vic/idoea-26b0-4ece-b2a5-

db10ac5c9876/sist-en-60968-1999

ICS:

29.140.30 Fluorescenčne sijalke. Sijalke Fluorescent lamps.

Discharge lamps

SIST EN 60968:1999 en

SIST EN 60968:1999

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60968:1999

https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-db10ac5c9876/sist-en-60968-1999

EN 60968

NORME EUROPEENNE

EUROPÄISCHE NORM

September 1990

UDC 621.327:620.1:614.8

Descriptors: Lighting equipment, discharge lamp, safety requirement, interchangeability, test conditions, marking

#### **ENGLISH VERSION**

SELF-BALLASTED LAMPS FOR GENERAL LIGHTING SERVICES SAFETY REQUIREMENTS (IEC 968:1988 modified)

Lampes à ballast intégré pour l'éclairage général Prescriptions de sécurité (CEI 968:1988 modifiée)

Lampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung Sicherheitsanforderungen (IEC 968:1988 modifiziert)

### iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 1990-06-11.

CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving 6this European Standard the status of a national standard without jahy/calteratton/sst/0c7fd6ea-26b0-4ece-b2a5-db10ac5c9876/sist-en-60968-1999

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.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

#### CENELEC

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

Central Secretariat: rue Bréderode 2, B-1000 Brussels

(c) 1990 Copyright reserved to CENELEC members

Page 2 EN 60968:1990

#### FOREWORD

The proposal to endorse IEC 968:1988 was circulated under the CENELEC Questionnaire Procedure. The reference document was submitted to the CENELEC members for formal vote.

At the time of ratification, it became evident that a common modification was required, deleting all references to E26 caps, to be consistent with other previously approved European Standards.

The text of the draft was approved by CENELEC as EN 60968:1989 on 11 June 1990.

The following dates were fixed:

latest date of announcement of the EN at national level

(doa) 1990-12-15

latest date of publication of an identical national standard

(dop) 1991-06-15

latest date of withdrawal of conflicting national standards  $DARD\ P_{(dow)}VIF_{1991-06-15}$ 

## (standards.iteh.ai)

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative 1999 https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-

For products which have complified with the relevant national standard before 1991-06-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1996-06-15.

#### ENDORSEMENT NOTICE

en de la companya de la co

The text of the International Standard IEC 968:1988 was approved by CENELEC as a European Standard with agreed common modifications as given below.

#### COMMON MODIFICATIONS

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

Clause 5 Interchangeability (Table 1)
Clause 6 Protection against electric shock
Clause 8 Mechanical strength

Clause 9 Cap temperature rise Figure 2 Holder for torsion test on lamps with screw caps

Page 3 EN 60968:1990

#### ANNEX ZA (normative)

#### OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

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

<u>IEC</u> <u>Publication</u>	<u>Date</u>	<u>Title</u>	EN,	/HD	Date
61	-	Lamp caps and holders together with gauges for the control of interchangeability and safety		_	, -
61-1	-	Part 1: Lamp caps	HD	65.1	-
61-3		Part 3: Gauges	НD	65.3	_
238	<sup>1982</sup> Геһ	Edison screw lampholders	EN	60238*	1986
360	1987	Standard method of measurement of lamp cap temperature rise	EN	60360	1989
695-2-1	1980 https://standa	Fire hazard testing Part 2:  Testamethods dard twiffeet est-4-ce-b  and by widan ze/sist-en-60968-1999		444.2.1 S1	1983

<sup>\*</sup> superseded by:

**SIST EN 60968:1999** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60968:1999

https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-db10ac5c9876/sist-en-60968-1999

# NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 968

Première édition First edition 1988-11

# Lampes à ballast intégré pour l'éclairage général

Prescriptions de sécurité

## iTeh STANDARD PREVIEW

Self-ballasted lamps for general lighting services <u>SIST EN 60968:1999</u>

https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-

Safety requirements8-1999

© IEC 1988 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission Telefax: +41 22 919 0300 e-

e-mail: inmail@iec.ch IEC web

3, rue de Varembé Geneva, Switzerland ch IEC web site http://www.iec.ch



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия CODE PRIX
PRICE CODE

N

Pour prix, voir catalogue en vigueur For price, see current catalogue

### CONTENTS

		Page
FOR	EWORD	5
PRE	FACE	5
Clau	ise	
1.	Scope	7
2.	Definitions	7
3.	General requirement and general test requirements	9
4.	Marking	9
5.	Interchangeability	11
6.	Protection against electric shock	13
7.	Insulation resistance and electric strength after EW humidity treatment (standards:iteh:ai)	15
8.	Mechanical strength	17
9.	Cap temperaturedarils ech.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5db10ac5c9876/sist-en-60968-1999	17
10.	Resistance to heat	17
11.	Resistance to flame and ignition	19
12.	Fault conditions	21
EIG	LIDES	24

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### SELF-BALLASTED LAMPS FOR GENERAL LIGHTING SERVICES Safety requirements

#### **FOREWORD**

- The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

# iTeh STANDARDEPREVIEW

This standard has been prepared by Sub-Committee 34A: Lamps, of IEC Technical Committee No. 34: Lamps and related equipment.

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

https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-

Six Months Rule	n-68968-1999 Report on Voting
34A(CO)366	34A(CO)418

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

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 following IEC publications are quoted in this standard:

Lamp caps and holders together with gauges for the control of interchangeability and safety. Publications Nos. 61:

Part 1: Lamp caps. Part 3: Gauges.

61-3:

238 (1982): Edison screw lampholders.

360 (1987): Standard method of measurement of lamp cap

temperature rise.
Fire hazard testing, Part 2: Test methods, Glow-wire test and guidance. 695-2-1 (1980):

968 © IEC - 7 -

# SELF-BALLASTED LAMPS FOR GENERAL LIGHTING SERVICES Safety requirements

#### 1. Scope

This standard specifies the safety and interchangeability requirements, together with the test methods and conditions, required to show compliance of tubular fluorescent and other gas-discharge lamps with integrated means for controlling starting and stable operation (self-ballasted lamps), intended for domestic and similar general lighting purposes, having:

- a rated wattage up to 60 W;
- a rated voltage of 100 V to 250 V;
- Edison screw or bayonet caps.

The requirements of this standard relate only to type testing.

Recommendations for whole product testing or batch testing are under consideration  $iTeh\ STANDARD\ PREVIEW$ 

(standards.iteh.ai)

#### 2. Definitions

For the purposes of this standardsthe following definitions apply: https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-db10ac5c9876/sist-en-60968-1999

#### 2.1 Self-ballasted lamp

A tubular fluorescent or other discharge lamp unit that incorporates, permanently enclosed, all elements that are necessary for starting and for stable operation, and which does not include any replaceable or interchangeable parts.

#### 2.2 *Type*

Lamps that, independent of the type of cap, are identical in photometric and electrical rating.

#### 2.3 Rated voltage

The voltage or voltage range marked on the lamp.

#### 2.4 Rated wattage

The wattage marked on the lamp.

#### 2.5 Rated frequency

The frequency marked on the lamp.

- 9 ~

#### 2.6 Cap temperature rise ( $\Delta t_{\rm c}$ )

The surface temperature rise (above ambient) of a standard test lampholder fitted to the lamp, when measured in accordance with the standard method described in IEC Publication 360.

#### 2.7 Live part

A conductive part which may cause an electric shock in normal use.

#### 2.8 Type test

A test or series of tests made on a type test sample for the purpose of checking compliance of the design of a given product with the requirements of the relevant standard.

#### 2.9 Type test sample

A sample consisting of one or more similar units submitted by the manufacturer or responsible vendor for the purpose of the type test.

- 3. General requirement and general test requirements
- 3.1 Self-ballasted lamps shall be so designed and constructed that in normal use they function reliably and cause no danger to the user or surroundings.

In general, compliance SISS Enchecked by carrying out all the tests specified. https://standards.iteh.ai/catalog/standards/sist/0c7fd6ea-26b0-4ece-b2a5-db10ac5c9876/sist-en-60968-1999

3.2 All measurements unless otherwise specified, are carried out at rated voltage and frequency and in a draught-proof room at  $(25 \pm 1)$  °C.

If lamps are marked with a voltage range, rated voltage is taken as the mean of the voltage range marked.

3.3 Self-ballasted lamps are non repairable, factory sealed units. They shall not be opened for any tests. In the case of doubt based on the inspection of the lamp and the examination of the circuit diagram, and in agreement with the manufacturer or responsible vendor, lamps specially prepared so that a fault condition can be simulated shall be submitted for testing (see Clause 12).

#### 4. Marking

- 4.1 Lamps shall be clearly and durably marked with the following mandatory markings:
  - 1) Mark of origin (this may take the form of a trade mark, the manufacturer's name or the name of the responsible vendor).