

# SLOVENSKI STANDARD SIST EN 60400:1992/A1:1994

01-december-1994

Dopolnilo A1:1994 k EN 60400:1992

Lampholders for tubular fluorescent lamps and starterholders

Lampenfassungen für röhrenförmige Leuchtstofflampen und Starterfassungen

Douilles pour lampes tubulaires à fluorescence et douilles pour starters

Ta slovenski standard je istoveten z: EN 60400:1992/A1:1994

SIST EN 60400:1992/A1:1994

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ICS:

29.140.10 Grla in držala žarnic Lamp caps and holders

SIST EN 60400:1992/A1:1994 en

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<u>SIST EN 60400:1992/A1:1994</u> https://standards.iteh.ai/catalog/standards/sist/2ad983ba-1a12-4da2-bcda-e9a270e5a006/sist-en-60400-1992-a1-1994 EUROPEAN STANDARD

EN 60400/A1

NORME EUROPEENNE

EUROPÄISCHE NORM

Septembre 1994

UDC 621.316.583/.584.032.434.-777.001.33.001.4.002.2(083.71)

Descriptors: Holder for fluorescent tubes, holder for external starting devices, requirements, testing, definitions

Amendment A1 to the English version of EN 60400

Lampholders for tubular fluorescent lamps and starterholders (IEC 400:1991/A1:1993)

Douilles pour lampes tubulaires à flourescence et douilles pour starters

(CEI 400:1991/A1:1993)

Lampenfassungen für röhrenförmige Leuchtstofflampen und Starterfassungen (IEC 400:1991/A1:1993)

This amendment A1 modifies the European Standard EN 60400-1992. It was approved by CENELEC on 1993-12-08. 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.

SISTEN 60400:1992/A1:1994
Up-to-date lists and bibliographical references concerning auch national standards may be obtained on application 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 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 de Stassart 35, 8-1050 Brussels

Page 2 EN 60400:1992/A1:1994

#### FOREWORD

At the request of the CENELEC Technical Committee TC 34Z, Luminaires and assciated equipment, amendment 1:1993 to the the International Standard IEC 400:1991 was submitted to the CENELEC Unique Acceptance Procedure (UAP) in April 1993 for acceptance as a European Standard.

The text of the International Standard was approved by CENELEC as amendment A1 to EN 60400:1992 on 1993-12-08.

The following dates were fixed:

- latest date of publication of an identical national standard
- (dop) 1995-04-01
- latest date of withdrawal of conflicting national standards
- (dow) 1995-04-01

For products which have complied with EN 60400:1992 before 1995-04-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-04-01.

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### ENDORSEMENT NOTICE

SIST EN 60400:1992/A1:1994

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The text of amendment 1:1993 000 the International Standard IEC 400:1991 was approved by CENELEC as an amendment to the European Standard without any modification.

NOTE 1: The following parts of amendment 1 to IEC 400 have already been endorsed by a CENELEC corrigendum to EN 60400:1992, dated March 1992:

- subclause 1.1;
- subclause 4.5 (that part relating to clause 12.3);
- subclause 7.4;
- figures 14 to 20, 23, 25 to 29.

NOTE 2: The IEC amendment regarding letter d) on page 15 (which should have been letter d) of subclause 7.1 on page 17) may be disregarded since the reference to the note has been deleted by the CENELEC corrigendum to EN 60400:1992, dated March 1992.

SIST EN 60400:1992/A1:1994

# NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 400

1991

AMENDEMENT 1
AMENDMENT 1

1993-03

(comprenant le corrigendum de juin 1992) (including the corrigendum of June 1992)

#### Amendement 1

# Douilles pour lampes tubulaires à fluorescence et douilles pour starters

## iTeh STANDARD PREVIEW

(Amendments.iteh.ai)

Lampholders for tubular fluorescent lamps

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Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



CODE PRIX
PRICE CODE



400 Amend, 1 © IEC:1993

-3-

#### **FOREWORD**

This amendment has been prepared by sub-committee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment.

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

DIS	Report on Voting
34B(CO)719	34B(CO)746

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

Page 7

Subclause 1.1, third paragraph

Instead of: ... in accordance with the following subclauses of IEC 238: 9.4; 9.5; 9.6; 10.3; 11.7; 12; 13.2; 13.5; 13.6; 13.7; 14; 16.3; 16.4; 16.5 and 16.9.

Read: ... in accordance with the following subclauses of IEC 238: 8.4; 8.5; 8.6; 9.3; 10.7; 11; 12.2; 12.5; 12.6; 12.7; 13; 15.3; 15.4; 15.5 and 15.9.

Page 9

SIST EN 60400:1992/A1:1994

https://standards.iteh.ai/catalog/standards/sist/2ad983ba-1a12-4da2-bcda-e9a270e5a006/sist-en-60400-1992-a1-1994

#### 2 Definitions

Add, on page 11, the following definition:

2.14 rated pulse voltage: The highest peak value of pulse voltages the holder is able to withstand.

Page 15

Subclause 4.5, note, first paragraph

Instead of: ... clause 123 onwards.

Read: ... clause 12 onwards.

letter d)

Instead of: (see note to clause 6);

Read: (see note to clause 5);

400 Amend. 1 @ IEC:1993

-5-

Page 17

#### 7 Marking

- 7.1 Amend item c) to read:
  - c) rated voltage in volts and rated pulse voltage in kV, if applicable;

Page 21

Subclause 7.4, last indent:

Instead of: (for example  $0.5 \, \square$ ).

Read: (for example  $0,5\square$ ).

Page 29

#### 10 Construction

10.3.1 Replace, on page 31, the text of the note by the following:

NOTE - For other lampholder constructions, for example where the contact is made by a sleeve over the pins, a test for checking the contact force is under consideration.

Contact making at the pin ends is not recommended for new lampholder design.

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Page 45

SIST EN 60400:1992/A1:1994

- **Mechanical strength**dards.iteh.ai/catalog/standards/sist/2ad983ba-1a12-4da2-bcda-e9a270e5a006/sist-en-60400-1992-a1-1994
- 14.1 Add the following note at the end of this subclause:

NOTE - The mechanical strength of lampholders used in luminaires or other equipment may have to be checked by means of the spring operated impact apparatus. In IEC 598-1, the test impact energy used varies from 0,2 Nm to 0,7 Nm depending on component material and luminaire type.

Page 49

### 15 Screws, current-carrying parts and connections

15.6 Add, on page 53, the following text before the note:

The tests of clause 18 will show whether current-carrying parts are equivalent to copper in respect to current-carrying capacity, mechanical strength and corrosion likely to be met in normal service.

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<del>-</del> 7 -

#### Page 55

#### 16 Creepage distances and clearances

Delete table 3 and replace by the following new tables and notes:

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

	Rated voltage						
Distances		V					
mm	150	250	500	750	1 000		
Between live parts of different polarity, and							
<ol> <li>Between live parts and accessible metal parts, or the outer surface of parts of insulating material which are permanently fixed to the holder<sup>1</sup>, including screws or devices for fixing covers or fixing the holder to its support</li> </ol>							
<ul> <li>Creepage distances</li> <li>Insulation PTI<sup>2</sup> ≥ 600</li> <li>PTI &lt; 600</li> <li>Clearances</li> </ul>	1,4 1,6 1,4	1,7 2,5 1,7	3 5 3	4 8 4	5,5 10 5,5		
Between live parts and the mounting surface or a loose metal cover, if any, if the construction does not ensure that the values under item 2 are maintained under the most	RE	VIE	V				
unfavourable circumstances  - Clearances	3,2	3,6	4,8	6	8		

#### SIST EN 60400:1992/A1:1994

#### **NOTES**

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The distances between live contacts and the lampholder face (reference plane) shall, however, be in accordance with the relevant standard sheets of IEC 61-2.

The distances for starter holders shall be in accordance with figures 10 and 10a.

- <sup>2</sup> PTI (Proof Tracking Index) in accordance with IEC 112\*.
  - a) In the case of creepage distances to parts not energized or not intended of being earthed, where no tracking can occur, the values specified for material with  $PTI \ge 600$  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.

- b) For creepage distances not liable to contamination by dust or moisture, the values specified for material with PTI ≥ 600 apply (independent of the real PTI).
- 3 The distances specified in the table apply to appliance level installation category in accordance with IEC 664 and 664A\*\* and refer to pollution degree 2, where normally only non-conductive pollution occurs but occasionally a temporary conductivity caused by condensation must be expected. Extension of the table to cover other installation categories or higher pollution degrees, is under consideration.
- 4 Information on standard ratings for specific holder types is given in clause 5.

IEC 664A: 1981, First complement.

<sup>\*</sup> IEC 112: 1979, Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions.

<sup>\*\*</sup> IEC 664: 1980, Insulation co-ordination within tow-voltage systems including clearances and creepage distances for equipment.

400 Amend. 1 © IEC:1993

-9-

Table 3b - Minimum distances for non-sinusoidal pulse voltages

Rated pulse voltage (peak kV)	2	2,5	3	4	5	6	8
Minimum clearance (mm)	1	1,5	2	3	4	5,5	8

For distances subjected to both sinusoidal voltages and non-sinusoidal pulse voltages, the minimum required distance shall not be less than the highest value indicated in either table.

Creepage distances shall not be less than the required minimum clearance.

Page 81

Figures 14 to 20, and 23, and 25 to 29

Change the tolerance for reference E from:

 $\pm$  0,05 to  $\pm$  0,02 mm.

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