SLOVENSKI STANDARD
SIST EN 60400:2000/A2:2005

01-junij-2005

Okovi za cevaste fluorescenļne sijalke in starterski okovi - Dopolnilo A2 (IEC 60400:1999/A2:2004)

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 60400:2000/A2:2004**

ICS:

29.140.10 Grla in držala žarnic Lamp caps and holders

SIST EN 60400:2000/A2:2005 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60400/A2

October 2004

ICS 29.140.10

English version

Lampholders for tubular fluorescent lamps and starterholders
(IEC 60400:1999/A2:2004)

Douilles pour lampes tubulaires
à fluorescence et douilles pour starters
(CEI 60400:1999/A2:2004)

Lampenfassungen für röhrenförmige
Leuchtstofflampen und Starterfassungen
(IEC 60400:1999/A2:2004)

This amendment A2 modifies the European Standard EN 60400:2000; it was approved by CENELEC on 2004-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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Foreword

The text of document 34B/1154/FDIS, future amendment 2 to IEC 60400:1999, prepared by SC 34B, Lamp caps and holders, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60400:2000 on 2004-10-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2005-07-01

– latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2007-10-01

Endorsement notice

The text of amendment 2:2004 to the International Standard IEC 60400:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60400

1999

AMENDEMENT 2
AMENDMENT 2
2004-10

Amendement 2

Douilles pour lampes tubulaires à fluorescence et douilles pour starters

Amendment 2

Lampholders for tubular fluorescent lamps and starterholders

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

FOREWORD

This amendment has been prepared by subcommittee 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:

FDIS	Report on voting
34B/1154/FDIS	34B/1173/RVD

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

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

Page 11

1 General

1.1 Scope

Replace the last sentence of the fifth paragraph by the following:

Lampholders for use by luminaire manufacturers only are not for retail sale.

Page 13

2 Definitions

Add, after definition 2.15, on page 17, the following new definitions:

2.16
impulse withstand categorie
a numeral defining a transient overvoltage condition

NOTE Impulse withstand categories I, II, III and IV are used.

a) Purpose of classification of impulse withstand categories

Impulse withstand categories are to distinguish different degrees of availability of equipment with regard to required expectations on continuity of service and on an acceptable risk of failure.

By selection of impulse withstand levels of equipment, insulation co-ordination can be achieved in the whole installation, reducing the risk of failure to an acceptable level providing a basis for overvoltage control.

A higher characteristic numeral of an impulse withstand category indicates a higher specific impulse withstand of the equipment and offers a wider choice of methods for overvoltage control.

The concept of impulse withstand categories is used for equipment energized directly from the mains.

b) Description of impulse withstand categories

Equipment of impulse withstand category I is equipment which is intended to be connected to the fixed electrical installations of buildings. Protective means are taken outside the equipment - either in the fixed installation or between the fixed installation and the equipment - to limit transient overvoltages to the specific level.

Equipment of impulse withstand category II is equipment to be connected to the fixed electrical installations of buildings.

Equipment of impulse withstand category III is equipment which is part of the fixed electrical installations and other equipment where a higher degree of availability is expected.

Equipment of impulse withstand category IV is for use at or in the proximity of the origin of the electrical installations of buildings upstream of the main distribution board.

2.17
primary circuit
a circuit which is directly connected to the AC mains supply. It includes, for example, the means for connection to the AC mains supply, the primary windings of transformers, motors and other loading devices.

2.18
secondary circuit
a circuit which has no direct connection to a primary circuit and derives its power from a transformer, converter or equivalent isolation device, or from a battery.

Exception: autotransformers. Although having direct connection to a primary circuit, the tapped part of them is also deemed to be a secondary circuit in the above sense.

NOTE Mains transients in such a circuit are attenuated by the corresponding primary windings. Also, inductive ballasts reduce the mains transient voltage height. Therefore, components located after a primary circuit or after an inductive ballast can be suited for an impulse withstand category of one step lower, i.e. for impulse withstand category II.

Page 17

4.1 Tests according to this standard are type tests.

Add at the end of the note the following wording:

For further information see IEC 60061-4[1)] (inclusion of guidance on conformity testing during manufacture is in preparation).

1) IEC 60061-4: *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 4: Guidelines and general information*

Page 21

7 Marking

Add, on page 23, the following new paragraph at the end of 7.2:

For lampholders according to this standard, the distances for impulse withstand category II are applicable. This information has to be indicated in the manufacturer's catalogue or the like.

Page 25

8.1 *Amend, in the second paragraph, the reference to figure 39 to read "figure 41".*

Page 27

8.2 *Amend, in the third, fourth, fifth and seventh dashed items, the references to figure 39 to read "figure 41".*

Page 33

10.3.1

Replace, in the first paragraph, the term "single gauge" by the term "single-ended gauge".

Page 45

13 Endurance

Replace, in the the fourth paragraph, the phrase "figures 14 to 29" *by the phrase* "figures 6, 14 to 29, 39 and 40".

Page 55

16 Creepage distances and clearances

Replace, on page 57, Table 3a by the following note and table:

NOTE The voltages shown in Table 3a are working voltages, not ignition voltages.

Table 3a – Minimum distances for a.c. (50 Hz/60 Hz) sinusoidal voltages – Impulse withstand category II

Distances mm	Working voltage V			
	50	**150**	**250**	**500**
1 Between live parts of different polarity, and 2 Between live parts and external metal parts, or the outer surface of parts of insulating material which are permanently fixed to the holder[a], including screws or devices for fixing covers or fixing the holder to its support:				
– Creepage distances insulation PTI [b] ≥ 600	0,6	0,8	1,5	3
PTI [b] < 600	1,2	1,6	2,5	5
– Clearances	0,2	0,8	1,5	3
3 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 unfavourable circumstances:				
– Clearances	0,6	0,8	1,5	3

In Japan, the values given in the table are not applicable. Japan requires larger values than the values given in the table.

NOTE 1 The distances specified in the table apply to impulse withstand category II in accordance to IEC 60664-1 and refer to pollution degree 2, where normally only non-conductive pollution occurs but occasionally a temporary conductivity caused by condensation must be expected. For information on distances for other impulse withstand categories or higher pollution degrees, IEC 60598-1 and IEC 60664-1 should be consulted.

NOTE 2 Information on standard ratings for specific holder types is given in Clause 5.

NOTE 3 Values for creepage distances and clearances may be found for intermediate values of working voltages by linear interpolation between tabulated values. No values are specified for working voltages below 25 V as the voltage test of 12.3 is considered sufficient.

NOTE 4 Attention is drawn to the fact that the values for creepage distance and clearance given in this clause are the absolute minimum.

[a] The distances between live contacts and the lampholder face (reference plane) shall, however, be in accordance with the relevant standard sheets of IEC 60061-2.

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

[b] PTI (proof tracking index) in accordance with IEC 60112.

– In the case of creepage distances to parts not energized or not intended to be earthed, where no tracking can occur, the values specified for material with PTI ≥ 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 material with PTI ≥ 600 apply for all materials.

– For creepage distances not liable to contamination by dust or moisture, the values specified for material with PTI ≥ 600 apply for all materials (independent of the real PTI).