
Okovi za cevaste fluorescenčne sijalke in starterski okovi - Dopolnilo A1 (IEC 60400:2017/A1:2020)

Lampholders for tubular fluorescent lamps and starterholders (IEC 60400:2017/A1:2020)

Lampenfassungen für röhrenförmige Leuchtstofflampen und Starterfassungen (IEC 60400:2017/A1:2020)

Douilles pour lampes tubulaires à fluorescence et douilles pour starters (IEC 60400:2017/A1:2020)

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[SIST EN 60400:2018/A1:2021](http://standards.itteh.ai/catalog/standards/sist/60400/2018/a1/2021)

Ta slovenski standard je istoveten z: EN 60400:2017/A1:2021

<http://standards.itteh.ai/catalog/standards/sist/60400/2018/a1/2021>

ICS:

29.140.10 Grla in držala žarnic Lamp caps and holders

SIST EN 60400:2018/A1:2021**en**

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EUROPEAN STANDARD

EN 60400:2017/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2021

ICS 29.140.10

English Version

**Lampholders for tubular fluorescent lamps and starterholders
(IEC 60400:2017/A1:2020)**

Douilles pour lampes tubulaires à fluorescence et douilles
pour starters
(IEC 60400:2017/A1:2020)

Lampenfassungen für röhrenförmige Leuchtstofflampen und
Starterfassungen
(IEC 60400:2017/A1:2020)

This amendment A1 modifies the European Standard EN 60400:2017; it was approved by CENELEC on 2020-03-31. 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 CEN-CENELEC Management Centre 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 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels

EN 60400:2017/A1:2021 (E)**European foreword**

The text of document 34B/2072/FDIS, future IEC 60400/A1, prepared by SC 34B "Lamp caps and holders" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60400:2017/A1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2021-11-07 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-05-07 document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s), see informative Annex ZZ, which is an integral part of this document.

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The text of the International Standard IEC 60400:2017/A1:2020 was approved by CENELEC as a European Standard without any modification.
<https://standards.iteh.ai/standards/sist/84a81708-0ef2-4c2c-a30e-ac7973f0cd9e/sist-en-60400-2018-a1-2021>

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

IEC 61347-1:2015 NOTE Harmonized as EN 61347-1:2015 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061-2	-	Lamp caps and holders together with gauges for the control of interchangeability and safety -- Part 2: Lampholders		-
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety -- Part 3: Gauges	EN 60061-3	-
IEC 60068-2-20	2008	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	-EN 60068-2-20	2008
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	-EN 60068-2-75	2014
IEC 60081	-	Double-capped fluorescent lamps Performance specifications	-EN 60081	1998-
			+ A1	2002
			+ A2	2003
			+ A3	2005
			+ A4	2010
			+ A5	2013
			+ A6	2017
			+ A11	2018
IEC 60112	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
+ A1	2009		+ A1	2009

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IEC 60352-1	1997	Solderless connections -- Part 1: Wrapped connections - General requirements, test methods and practical guidance	EN 60352-1	1997
IEC 60399	-	Barrel thread for lampholders with shade holder ring	EN 60399	2004
			+ A1	2008
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corrigendum	May 1993
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60598-1	-	Luminaires -- Part 1: General requirements and tests	EN 60598-1	2015-
			+ A1	2018
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	2014
IEC 60695-11-5	2016	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2017
ISO 4046-4	2016	Paper, board, pulps and related terms -- Vocabulary - Part 4: Paper and board grades and converted products	-	-

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[SIST EN 60400:2018/A1:2021](https://standards.iteh.ai/catalog/standards/sist/84a81708-0ef2-4c2c-a30e-ac7973f0cd9e/sist-en-60400-2018-a1-2021)<https://standards.iteh.ai/catalog/standards/sist/84a81708-0ef2-4c2c-a30e-ac7973f0cd9e/sist-en-60400-2018-a1-2021>

Annex ZZ (informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under a Commission's standardisation request relating to harmonised standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 — Correspondence between this European standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1. General conditions	Clause 8	
a) the essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, shall be marked on the electrical equipment, or, if this is not possible, on an accompanying document;	Clause 8	
b) the electrical equipment, together with its component parts, shall be made in such a way as to ensure that it can be safely and properly assembled and connected;	All clauses	
c) the electrical equipment shall be so designed and manufactured as to ensure that protection against the hazards set out in points 2 and 3 is assured, providing that the equipment is used in applications for which it was made and is adequately maintained.	See item 2 and 3 of this table	
2. Protection against hazards arising from the electrical equipment Measures of a technical nature shall be laid down in accordance with point 1, in order to ensure that:		
a) persons and domestic animals are adequately protected against the danger of physical injury or other harm	Clauses 4, 9, 10, 11, 12 and 16	

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which might be caused by direct or indirect contact;		
b) temperatures, arcs or radiation which would cause a danger, are not produced;	Clauses 11, 12, 14, 17 and 18	
c) persons, domestic animals and property are adequately protected against non-electrical dangers caused by the electrical equipment which are revealed by experience;	Clauses 4, 11, 14, 15 and 19	
d) the insulation is suitable for foreseeable conditions.	Clauses 9, 11, 15, 17 and 18	
3. Protection against hazards which may be caused by external influences on the electrical equipment Technical measures shall be laid down in accordance with point 1, in order to ensure that the electrical equipment:		
a) meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered;	Clauses 8, 11, 15 and 19	
b) is resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered;	Clauses 11, 13, 17 and 18	
c) does not endanger persons, domestic animals and property in foreseeable conditions of overload.	Clauses 11, 13 and 18	

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.



IEC 60400

Edition 8.0 2020-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Lampholders for tubular fluorescent lamps and starterholders

Douilles pour lampes tubulaires à fluorescence et douilles pour starters

[SIST EN 60400:2018/A1:2021](https://standards.iteh.ai/catalog/standards/sist/84a81708-0ef2-4c2c-a30e-ac7973f0cd9e/sist-en-60400-2018-a1-2021)

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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/2072/FDIS	34B/2075/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 amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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.

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INTRODUCTION to Amendment 1

Two changes needed for IEC 60400 became obvious during the work relating to Edition 8.0 of IEC 60400.

Change 1:

Actual lamp holder safety standards require a ball pressure test in line with IEC 60695-10-2 in sections "Resistance to heat, fire and tracking". Within this test there is an alternative depth indentation method described for the calculation of the indentation diameter.

This alternative calculation option was removed from the latest edition of IEC 60695-10-2 dated 2014 and during its meeting held in Sydney in 2018, SC 34B/WG1 agreed to delete the alternative method as well from IEC 60400.

Change 2:

Based on IEC 60664-1:2007, 4.8.1.5 "Non tracking materials":

"For glass, ceramics or other inorganic insulating materials which do not track, creepage distances need not be greater than their associated clearance for the purpose of insulation coordination. The dimensions of Table F.2 for inhomogeneous field conditions are appropriate."