## **EESTI STANDARD**

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## LAMBIPESAD TORUKUJULISTELE LUMINOFOORLAMPIDELE JA SÜÜTURIPESAD

Lampholders for tubular fluorescent lamps and starterholders



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

<u> </u>				
See Eesti standard EVS-EN 60400:2017 sisaldab Euroopa standardi EN 60400:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 60400:2017 consists of the English text of the European standard EN 60400:2017.			
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.			
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.09.2017.	Date of Availability of the European standard is 22.09.2017.			
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.			
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Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

#### ICS 29.140.10

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN 60400

September 2017

ICS 29.140.10

Supersedes EN 60400:2008

**English Version** 

# Lampholders for tubular fluorescent lamps and starterholders (IEC 60400:2017)

Douilles pour lampes tubulaires à fluorescence et douilles pour starters (IEC 60400:2017) Lampenfassungen für röhrenförmige Leuchtstofflampen und Starterfassungen (IEC 60400:2017)

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

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#### European foreword

The text of document 34B/1900/FDIS, future edition 8 of IEC 60400, 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 approved by CENELEC as EN 60400:2017.

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)	2018-04-20
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-07-20

This document supersedes EN 60400:2008.

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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.

#### **Endorsement notice**

The text of the International Standard IEC 60400:2017 was approved by CENELEC as a European Standard without any modification.

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60061-1	NOTE	Harmonized as EN 60061-1.
IEC 60061-4	NOTE	Harmonized as EN 60061-4.
IEC 60068-2-20:2008	NOTE	Harmonized as EN 60068-2-20:2008.
IEC 60238	NOTE	Harmonized as EN 60238.
IEC 60664-1:2007	NOTE	Harmonized as EN 60664-1:2007.
IEC 60664-4:2005	NOTE	Harmonized as EN 60664-4:2005.
IEC 61199	NOTE	Harmonized as EN 61199.
IEC 60838-1:2016	NOTE	Harmonized as EN 60838-1:2017.
IEC 60838-1:2016/AMD1:2017	NOTE	Harmonized as EN 60838-1:2017/A1:2017.

#### Annex ZA

(normative)

## 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 1 When 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.

Publication	Year	Title	<u>EN/HD</u>	Year
IEC 60061-2		Lamp caps and holders together with gauges for the control of interchangeability and safety Part 2: Lampholders	-	-
IEC 60061-3	- 20	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 3: Gauges	EN 60061-3	-
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	-
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
IEC 60155	-	Glow-starters for fluorescent lamps	EN 60155	-
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	-
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	-
IEC 60695-2-11	2000	Fire hazard testing Part 2-11:	-	-
		Glowing/hot-wire based test methods - Glow-wire flammability test method for	ð	
		end-products		
IEC 60695-11-5	2016	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and	EN 60695-11-5	2017
ISO 4046-4	2016	guidance Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	- 2	-
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#### 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]

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Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1. General conditions		
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	5 1 1 5
2. Protection against hazards arising from the electrical		

equipmentMeasures 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 which might be caused by direct or indirect contact;	, 9, 10, 11, 12 and 16
animals are adequately protected against the danger of physical injury or other harm which might be caused by direct	
	1 12 14 17  and  19
b) temperatures, arcs or radiation which would cause a danger, are not produced;	1, 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;	, 11, 14, 15 and 19
d) the insulation is suitable for foreseeable conditions.	), 11, 15, 17 and 18
3. Protection against hazards which may be caused by external influences on the electrical equipment	Q.
Technical measures shall be laid down in accordance with point 1, in order to ensure that the electrical equipment:	CL I
a) meets the expected Clauses 8 mechanical requirements in such a way that persons, domestic animals and property are not endangered;	9, 11, 15 and 19
b) is resistant to non-mechanical Clauses 1 influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered;	1, 13, 17 and 18
c) does not endanger persons, domestic animals and property in foreseeable conditions of overload.	1, 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

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