SLOVENSKI STANDARD
SIST EN 60838-1:2017

01-junij-2017

Nadomešča:
SIST EN 60838-1:2005
SIST EN 60838-1:2005/A1:2008
SIST EN 60838-1:2005/A2:2011

Razni okovi za žarnice in sijalke - 1. del: Splošne zahteve in preskusi (IEC 60838-1:2016)

Miscellaneous lampholders - Part 1: General requirements and tests (IEC 60838-1:2016)

Ta slovenski standard je istoveten z: **EN 60838-1:2017**

ICS:

29.140.10	Grla in držala žarnic	Lamp caps and holders

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EUROPEAN STANDARD

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EN 60838-1

April 2017

ICS 29.140.10

Supersedes EN 60838-1:2004

English Version

Miscellaneous lampholders - Part 1: General requirements and tests (IEC 60838-1:2016)

Douilles diverses pour lampes - Partie 1: Exigences générales et essais (IEC 60838-1:2016)

Sonderfassungen - Teil 1: Allgemeine Anforderungen und Prüfungen (IEC 60838-1:2016)

This European Standard was approved by CENELEC on 2016-06-23. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 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 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, 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: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 34B/1850A/FDIS, future edition 5 of IEC 60838-1, 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 60838-1:2017.

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)	2017-10-28
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-04-28

This document supersedes EN 60838-1:2004.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] 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.

Endorsement notice

The text of the International Standard IEC 60838-1:2016 was approved by CENELEC as a European Standard without any modification.

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	NOTE	Harmonized as EN 60068-2-20.

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	EN/HD	Year
IEC 60061	Series	Lamp caps and holders together with gauges for the control of interchangeability and safety	EN 60061	Series
IEC 60061-2	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 2: Lampholders	EN 60061-2	-
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges	EN 60061-3	-
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
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 60227	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60238	-	Edison screw lampholders	EN 60238	-
IEC 60245	Series	Rubber insulated cables - Rated voltages up to and including 450/750 V	-	-
IEC 60352-1	-	Solderless connections - Part 1: Wrapped connections - General requirements, test methods and practical guidance	EN 60352-1	-
IEC 60399	-	Barrel thread for lampholders with shade holder ring	EN 60399	-
IEC 60417-DB	-	Graphical symbols for use on equipment	-	-

Publication	Year	Title	EN/HD	Year
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
			+ corr. May	1993
+A1	1999		+A1	2000
+A2	2013		+A2	2013
IEC 60598-1 (mod)	2014	Luminaires - Part 1: General requirements and tests	EN 60598-1	2015
IEC 60664-1	-	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	-
IEC 60695-2-11	-	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)	EN 60695-2-11	-
IEC 60695-11-5	-	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	-
ISO 1456	-	Metallic and other inorganic coatings - Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium	EN ISO 1456	-
ISO 2081	-	Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel	EN ISO 2081	-
ISO 2093	-	Electroplated coatings of tin, Specification and test methods	-	-
ISO 4046-4	2002	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	-	-

IEC 60838-1

Edition 5.0 2016-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Miscellaneous lampholders –
Part 1: General requirements and tests

Douilles diverses pour lampes –
Partie 1: Exigences générales et essais

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MISCELLANEOUS LAMPHOLDERS –

Part 1: General requirements and tests

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60838-1 has been prepared by subcommittee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment.

This fifth edition cancels and replaces the fourth edition published in 2004, Amendment 1:2008 and Amendment 2:2011. This edition constitutes a technical revision.

The significant technical changes in this edition with respect to the previous edition include the introduction of new or revised requirements for single and dual contact ignition voltages, steel test caps and brass test caps and an Annex E listing amended requirements/clauses which require products to be retested.

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

FDIS	Report on voting
34B/1850A/FDIS	34B/1856/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60838 series, published under the general title *Miscellaneous lampholders*, can be found on the IEC website.

In this standard, the following type is used:

– *compliance statements: in italic type.*

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

MISCELLANEOUS LAMPHOLDERS –

Part 1: General requirements and tests

1 Scope

This part of IEC 60838 applies to lampholders of miscellaneous types intended for building-in (to be used with general purpose light sources, projection lamps, floodlighting lamps and street-lighting lamps with caps as listed in Annex A) and the methods of test to be used in determining the safe use of lamps in lampholders.

This part of IEC 60838 also covers lampholders which are integral with a luminaire. It covers the requirements for the lampholder only.

This part of IEC 60838 also covers lampholders integrated in an outer shell and dome similar to Edison screw lampholders. Such lampholders are further tested in accordance with the relevant clauses of IEC 60238.

Requirements for lampholders for tubular fluorescent lamps, Edison screw lampholders and bayonet lampholders are covered by separate standards.

2 Normative references

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.

IEC 60061 (all parts), *Lamp caps and holders together with gauges for the control of interchangeability and safety* (available at http://std.iec.ch/iec60061)

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*

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:2003, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*
IEC 60112:2003/AMD1:2009

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60238, *Edison screw lampholders*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60352-1, *Solderless connections – Part 1: Wrapped connections – General requirements, test methods and practical guidance*

IEC 60399, *Barrel thread for lampholders with shade holder ring*

IEC 60417, *Graphical symbols for use on equipment* (available at http://www.graphical-symbols.info/equipment)

IEC 60529:1989, *Degrees of protection provided by enclosures (IP code)*[1]
IEC 60529:1989/AMD1:1999
IEC 60529:1989/AMD2:2013

IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*

IEC 60664-1, *Insulation co-ordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-2-11, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end products (GWEPT)*

IEC 60695-11-5, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

ISO 1456, *Metallic and other inorganic coatings – Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium*

ISO 2081, *Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel*

ISO 2093, *Electroplated coatings of tin – Specification and test methods*

ISO 4046-4:2002, *Paper, board, pulps and related terms – Vocabulary – Part 4: Paper and board grades and converted products*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
rated voltage
voltage declared by the manufacturer to indicate the highest working voltage for which the lampholder is intended

3.2
working voltage
highest r.m.s. voltage that may occur across any insulation, transients being disregarded, both when the lamp is operating under normal conditions and when the lamp is removed

3.3
rated current
current declared by the manufacturer to indicate the highest current for which the lampholder is intended

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[1] A consolidated version of this publication exists, comprising IEC 60529:1989, IEC 60529:1989/AMD1:1999 and IEC 60529:1989/AMD2:2013.

3.4
lampholder for building-in
lampholder designed to be built into a luminaire, an additional enclosure or the like

3.4.1
unenclosed lampholder
lampholder for building-in so designed that it requires additional means, for example enclosures, to meet the requirements of this standard with regard to protection against electric shock

3.4.2
enclosed lampholder
lampholder for building-in so designed that it fulfils on its own the requirements of this standard with regard to protection against electric shock

3.5
rated operating temperature
highest temperature for which the lampholder is designed

3.6
rated pulse voltage
highest peak value of pulse voltages the holder is able to withstand

3.7
lamp connector
set of contacts specially designed to provide for electrical contact but not supporting the lamp

3.8
type test
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

3.9
type test sample
sample consisting of one or more similar specimens submitted by the manufacturer or responsible vendor for the purpose of a type test

3.10
live part
conductive part which may cause an electric shock

3.11
impulse withstand category
numeral defining a transient overvoltage condition

Note 1 to entry: 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