SLOVENSKI STANDARD
SIST EN 60238:2005

01-junij-2005

Nadomešča:
SIST EN 60238:2000

Okovi za žarnice in sijalke z Edisonovim navojem (IEC 60238:2004) (vsebuje popravek AC:2005)

Edison screw lampholders

Lampenfassungen mit Edisongewinde

Douilles à vis Edison pour lampes

Ta slovenski standard je istoveten z: **EN 60238:2004**

ICS:

29.140.10 Grla in držala žarnic Lamp caps and holders

SIST EN 60238:2005 **en**

EUROPEAN STANDARD **EN 60238**

NORME EUROPÉENNE

EUROPÄISCHE NORM December 2004

ICS 29.140.10

Supersedes EN 60238:1998 + A1:1999 + A2:2002
Incorporates Corrigendum January 2005

English version

Edison screw lampholders
(IEC 60238:2004)

Douilles à vis Edison pour lampes
(CEI 60238:2004)

Lampenfassungen mir Edisongewinde
(IEC 60238:2004)

This European Standard 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 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 Central Secretariat 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 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 60238:2004 E

Foreword

The text of document 34B/1151/FDIS, future edition 8 of IEC 60238, 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 EN 60238 on 2004-10-01.

This European Standard supersedes EN 60238:1998 + corrigendum February 1999 + A1:1999 + A2:2002 + A2:2002/corrigendum July 2003.

In this edition the new requirements for creepage distances and clearances have been adopted which are currently circulated by IEC/SC 34D to amend the EN 60598 family of luminaire standards.

Additionally guidances for requirements in EN 61058-1 applicable to switches in lampholders (see Annex B) and for special requirements in appliance standards (see Annex C) have been included.

The following dates were fixed:

– latest date by which the EN 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 EN have to be withdrawn	(dow)	2007-10-01

Annex ZA has been added by CENELEC.

The contents of the corrigendum of January 2005 have been included in this copy.

Endorsement notice

The text of the International Standard IEC 60238:2004 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60061 (mod)	Series	Lamp caps and holders together with gauges for the control of interchangeability and safety	EN 60061	Series
IEC 60061-1 (mod)	- [1)]	Part 1: Lamp caps	EN 60061-1	1993 [2)]
IEC 60061-2 (mod)	- [1)]	Part 2: Lampholders	EN 60061-2	1993 [2)]
IEC 60061-3 (mod)	- [1)]	Part 3: Gauges	EN 60061-3	1993 [2)]
IEC 60068-2-20	1979	Basic environmental testing procedures Part 2: Tests - Test T: Soldering	HD 323.2.20 S3 [3)]	1988
IEC 60068-2-32	1975	Part 2: Tests - Test Ed: Free fall	EN 60068-2-32 [4)]	1993
IEC 60068-2-75	1997	Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2 [5)]	1980
IEC 60227 [6)]	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60245 [7)] (mod)	Series	Cables of rated voltages up to and including 450/750 V and having cross-linked insulation	-	-

1) Undated reference.

2) Valid edition at date of issue.

3) HD 323.2.20 S3 includes A1:1987 to IEC 60068-2-20.

4) EN 60068-2-32 includes A2:1990 to IEC 60068-2-32.

5) HD 214 S2 is superseded by EN 60112:2003, which is based on IEC 60112:2003.

6) The HD 21 series, which is related to, but not directly equivalent with the IEC 60227 series, applies instead.

7) The HD 22 series, which is related to, but not directly equivalent with the IEC 60245 series, applies instead.

Publication	Year	Title	EN/HD	Year
IEC 60335-1 (mod)	2001	Household and similar electrical appliances - Safety Part 1: General requirements	EN 60335-1 + A11	2002 2004
IEC 60352-1	1997	Solderless connections Part 1: Wrapped connections - General requirements, test methods and practical guidance	EN 60352-1	1997
IEC 60399	- [1)]	Barrel thread for lampholders with shade holder ring	EN 60399	2004 [2)]
IEC 60417	database	Graphical symbols for use on equipment	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
A1	1999		A1	2000
IEC 60598 (mod)	Series	Luminaires	EN 60598	Series
IEC 60598-1	- [1)]	Part 1: General requirements and tests	EN 60598	2004 [2)]
IEC 60664-1	1992	Insulation coordination for equipment within low-voltage systems		
+ A1	2000			
+ A2	2002	Part 1: Principles, requirements and tests	EN 60664-1	2003
IEC 60695-2-2	1991	Fire hazard testing – Part 2: Test methods – Section 2: Needle-flame test	EN 60695-2-2	1994
IEC 60695-2-10	2000	Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure	EN 60695-2-10	2001
IEC 60695-2-11	2000	Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products	EN 60695-2-11	2001
IEC 61058-1	2000	Switches for appliances –		
+ A1 (mod)	2001	Part 1: General requirements	EN 61058-1	2002
ISO 4046-4	2002	Paper, board, pulp and related terms – Vocabulary – Part 4: Paper and board grades and converted products	–	–

NORME INTERNATIONALE

INTERNATIONAL STANDARD

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Huitième édition
Eighth edition
2004-10

Douilles à vis Edison pour lampes

Edison screw lampholders

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EDISON SCREW LAMPHOLDERS

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 60238 has been prepared by subcommittee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment.

This eighth edition cancels and replaces the seventh edition published in 1998 and its amendments 1 (1999) and 2 (2002). This eighth edition constitutes a technical revision.

In this edition the new requirements for creepage distances and clearances have been adopted which are currently circulated by SC34D to amend the IEC 60598 family of luminaire standards.

Additionally guidances for requirements in IEC 61058-1 applicable to switches in lampholders (see Annex B) and for special requirements in appliance standards (see Annex C) have been included.

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

FDIS	Report on voting
34B/1151/FDIS	34B/1170/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.

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.

EDISON SCREW LAMPHOLDERS

1 General

1.1 Scope

This International Standard applies to lampholders with Edison thread E14, E27 and E40, designed for connection to the supply of lamps and semi-luminaires* only.

It also applies to switched-lampholders for use in a.c. circuits only, where the working voltage does not exceed 250 V r.m.s.

This standard also applies to lampholders with Edison thread E5 designed for connection to the supply mains of series connected lamps, with a working voltage not exceeding 25 V, to be used indoors, and to lampholders with Edison thread E10 designed for connection to the supply mains of series connected lamps, with a working voltage not exceeding 60 V, to be used indoors or outdoors. It also applies to lampholders E10 for building-in, for the connection of single lamps to the supply. These lampholders are not intended for retail sale.

As far as it reasonably applies, this standard also covers lampholders other than lampholders with Edison thread designed for connection of series-connected lamps to the supply.

NOTE This type of lampholder is for example used in Christmas tree lighting chains.

As far as it reasonably applies, this standard also covers adapters.

This standard also covers lampholders which are, wholly or partly, integral with a luminaire or intended to be built into appliances. It covers the requirements for the lampholder only. For all other requirements, such as protection against electric shock in the area of the terminals or of the lamp cap, the requirements of the relevant appliance standard shall be observed and tested after building into the appropriate equipment, when that equipment is tested according to its own standard. Such lampholders as well as lampholders provided with a snap-on outer shell, for use by luminaire manufacturers only, are not for retail sale.

This standard applies to lampholders to be used indoors or outdoors in residential as well as in industrial lighting installations. It also applies to candle lampholders. In locations where special conditions prevail, as for street lighting, on board ships, in vehicles and in hazardous locations, e.g. where explosions are liable to occur, special constructions may be required.

NOTE 1 This standard does not apply to three-light lampholders E26d.

NOTE 2 This standard is based on the following data relative to lamps for general lighting service:

– caps E14 are used for lamps with a current not exceeding 2 A;

– caps E27 are used for lamps with a current not exceeding 4 A;

– caps E40 are used for lamps with a current not exceeding 16 A.

NOTE 3 If the nominal voltage of the supply does not exceed 130 V, the maximum current for caps E40 is 32 A (see 4.5 and 5.3).

NOTE 4 Where lampholders are used in luminaires, their maximum operating temperatures are specified in IEC 60598.

* Requirements for lampholders suitable for semi-luminaires are under consideration.

1.2 Normative references

The following referenced documents are indispensable for the application 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 With regard to IEC 60598-1, the references cited in this document are liable to change.

IEC 60061 (all parts), *Lamp caps and holders together with gauges for the control of interchangeability and safety*

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

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 60068-2-20:1979, *Environmental testing – Part 2: Tests – Test T: Soldering*

IEC 60068-2-32:1975, *Environmental testing – Part 2: Tests – Test Ed: Free fall*

IEC 60068-2-75:1997, *Environmental testing – Part 2: Tests – Test Eh: Hammer tests*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

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

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

IEC 60335-1:2001, *Household and similar electrical appliances – Safety – Part 1: General requirements*

IEC 60352-1:1997, *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-DB:2002**)*Graphical symbols for use on equipment*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)* *)
Amendment 1 (1999)

IEC 60598 (all parts and sections), *Luminaires*

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

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests* ***)
Amendment 1 (2000)
Amendment 2 (2002)

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*) A consolidated edition 2.1 (2001) exists including edition 2.0 (1989) and its amendment 1(1999).

**) "DB" refers to the IEC on-line database.

***) A consolidated edition 1.2 (2002) exists including edition 1.0 (1992) and its amendment 1 (2000) and amendment 2 (2002).

IEC 60695-2-2:1991, *Fire hazard testing – Part 2: Test methods – Section 2: Needle-flame test*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2–10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

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*

IEC 61058-1:2000, *Switches for appliances – Part 1: General requirements*

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

2 Definitions

For the purpose of this International Standard, the following definitions apply. For clarification of some definitions, see also figure 17.

2.1
cord-grip lampholder
a lampholder incorporating a method of retaining a flexible cord by which it may then be suspended

2.2
threaded entry lampholder
a lampholder incorporating a threaded component at the point of entry of the supply wires permitting the lampholder to be mounted on a mating threaded support (formerly called "nipple lampholder")

2.3
backplate lampholder
a lampholder so designed as to be suitable for mounting by means of an associated or integral back plate, directly onto a supporting surface or appropriate box

2.4
lampholder for building-in
a lampholder designed to be built into a luminaire, an additional enclosure or the like

2.4.1
unenclosed lampholder
a lampholder for building-in so designed that it requires additional means, for example an enclosure, to meet the requirements of this standard with regard to protection against electric shock

2.4.2
enclosed lampholder
a lampholder for building-in so designed that on its own it fulfils the requirements of this standard with regard to protection against electric shock and IP classification, if appropriate

2.5
independent lampholder
a lampholder so designed that it can be mounted separately from a luminaire and at the same time providing all the necessary protection according to its classification and marking

2.6
terminal/contact assembly
a part or assembly of parts which provide(s) a means of connection between the termination of a supply conductor and the contact making surfaces of the corresponding lamp cap

2.7
outer shell
a cylindrical component protecting the user from contact with the lamp cap. It may or may not be provided with an external screw thread for fixing a shade ring

2.7.1
snap-on outer shell
an outer shell for screwless assembly which does not contain the screw shell

NOTE The lampholder should not be used when the snap-on outer shell is removed.

It is therefore recommended to place an approval mark, if provided, in such a way that it is not visible when this type of outer shell is removed.

2.8
screw shell
a cylindrical component having an internal screw thread of Edison form for the retention of the corresponding lamp (cap)

In some constructions, the screw shell is permanently fixed to or integral with the outer shell.

2.9
insulating ring
a cylindrical intermediate piece of insulating material separating a metal screw shell and a metal outer shell

2.10
shade ring
a cylindrical component having an internal thread or other means to engage a corresponding support on the outer shell and intended to carry or retain a shade

2.11
dome
a part of a cord-grip lampholder or threaded entry lampholder which shields the connecting terminals

2.12
basic insulation
an insulation applied to live parts to provide basic protection against electric shock

NOTE Basic insulation does not necessarily include insulation used exclusively for functional purposes.

2.13
supplementary insulation
an independent insulation applied in addition to basic insulation in order to provide protection against electric shock in the event of a failure of basic insulation

2.14
double insulation
an insulation comprising both basic insulation and supplementary insulation