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SIST EN 61199:2000

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English version

Single-capped fluorescent lamps - Safety specifications
(IEC 61199:1999)

Lampes à fluorescence à culot unique
Prescriptions de sécurité
(CEI 61199:1999)

Einseitig gesockelte Leuchtstofflampen
Sicherheitsanforderungen
(IEC 61199:1999)

This European Standard was approved by CENELEC on 1999-12-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

Foreword

The text of document 34A/883/FDIS, future edition 2 of IEC 61199, prepared by SC 34A, Lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61199 on 1999-12-01.

This European Standard supersedes EN 61199:1994 and its amendments A1:1997 and A2:1998.

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) 2000-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-12-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A, B, D, E, F, G and ZA are normative and annexes C and H are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61199:1999 was approved by CENELEC as a European Standard without any modification.

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

IEC 60598-1 NOTE: Harmonized as EN 60598-1:1997 (modified).

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Annex ZA (normative)

**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061-1 + supplements (mod)	1969	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 1: Lamp caps	EN 60061-1 + amendments	1993
IEC 60061-2 + supplements (mod)	1969	Part 2: Lampholders	EN 60061-2 + amendments	1993
IEC 60061-3 + supplements (mod)	1969	Part 3: Gauges	EN 60061-3 + amendments	1993
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60598-1 (mod)	1996	Luminaires Part 1: General requirements and tests	EN 60598-1 + corr. June	1997 1999
IEC 60695-2-1/0	1994	Fire hazard testing Part 2: Test methods Section 1/sheet 0: Glow-wire test methods General	EN 60695-2-1/0	1996
IEC 60901	1996	Single-capped fluorescent lamps Performance specifications	EN 60901	1996

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CEI
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61199

Deuxième édition
Second edition
1999-10

Lampes à fluorescence à culot unique –
Prescriptions de sécurité

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Single-capped fluorescent lamps –
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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SINGLE-CAPPED FLUORESCENT LAMPS – SAFETY SPECIFICATIONS

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61199 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 1993, amendment 1 (1997), amendment 2 (1998) as well as consolidated edition 1.2 (1998). This second edition constitutes a technical revision.

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

FDIS	Report on voting
34A/883/FDIS	34A/897/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 3.

Annexes A, B, D, E, F and G form an integral part of this standard.

Annexes C and H are for information only.

The committee has decided that this publication remains valid until 2003-09

At this date, in accordance with the committee's decision, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

SINGLE-CAPPED FLUORESCENT LAMPS – SAFETY SPECIFICATIONS

1 General

1.1 Scope

This International Standard specifies the safety requirements for single-capped fluorescent lamps for general lighting purposes of all groups having 2G7, 2GX7, GR8, 2G10, G10q, GR10q, GX10q, GY10q, 2G11, G23, GX23, G24, GX24 and GX32 caps.

It also specifies the method a manufacturer should use to show compliance with the requirements of this standard on the basis of whole production appraisal in association with his test records on finished products. This method can also be applied for certification purposes. Details of a batch test procedure which can be used to make limited assessment of batches are also given in this standard.

NOTE – Compliance with this standard concerns only safety criteria and does not take into account the performance of single-capped fluorescent lamps for general lighting purposes with respect to luminous flux, colour, starting and operational characteristics. For this information, readers are referred to IEC 60901.

1.2 Normative references

The following normative documents contain provisions which through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

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 60410, *Sampling plans and procedures for inspection by attributes*

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

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

IEC 60695-2-1/0, *Fire hazard testing – Part 2: Test methods – Section 1/sheet 0: Glow-wire test methods – General*

IEC 60901, *Single-capped fluorescent lamps – Performance specifications*

1.3 Definitions

For the purposes of this International Standard, the following definitions apply.

1.3.1

single-capped fluorescent lamp

low-pressure mercury discharge lamp having a single cap in which most of the light from the lamp is emitted by a layer of fluorescent material excited by the ultraviolet radiation from the discharge

1.3.2

group

lamps having the same electrical and cathode characteristics, the same physical dimensions and the same starting method

1.3.3

type

lamps of the same group having the same photometric and colour characteristics

1.3.4

family

lamp groups which are distinguished by common features of materials, components, tube diameter and/or method of processing

1.3.5

nominal wattage

wattage used to designate the lamp

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1.3.6

design test

test made on a sample for the purpose of checking compliance of the design of a family, group or a number of groups with the requirements of the relevant clause

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1.3.7

periodic test

test, or series of tests, repeated at intervals in order to check that a product does not deviate in certain respects from the given design

1.3.8

running test

test repeated at frequent intervals to provide data for assessment

1.3.9

batch

all lamps of one family and/or group and identified as such and put forward at one time for test or checking compliance

1.3.10

whole production

production during a period of twelve months of all types of lamps within the scope of this standard and nominated in a list of the manufacturer for inclusion in the certificate

2 Safety requirements

2.1 General

Lamps shall be so designed and constructed that in normal use they present no danger to the user or the surroundings.

In general, compliance is checked by carrying out all the tests specified.

2.2 Marking

2.2.1 The following information shall be legibly and durably marked on the lamps:

- a) mark of origin (this may take the form of a trade mark, the manufacturer's name or the name of the responsible vendor);
- b) the nominal wattage (marked "W" or "watts") or any other indication which identifies the lamp.

2.2.2 Compliance is checked by the following:

- a) presence and legibility of the marking by visual inspection;
- b) durability of marking by applying the following test on unused lamps.

The area of the marking on the lamp shall be rubbed by hand with a smooth cloth damped with water for a period of 15 s.

After this test, the marking shall still be legible.

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2.3 Mechanical requirements for caps

2.3.1 Construction and assembly

Caps shall be so constructed and assembled to the tube(s) that the whole assembly remains intact and attached during and after operation.

Compliance is checked by carrying out the tests given in annex A.

At the end of the tests, the caps shall show no damage that impairs safety.

2.3.2 Dimensional requirements for caps

2.3.2.1 Lamps shall use standardized caps in accordance with the dimensional requirements of IEC 60061-1.

2.3.2.2 Compliance is checked by using the gauges shown in table 1.