

Single-capped fluorescent lamps — Safety specifications

The European Standard EN 61199:1994 with the incorporation of amendments A1:1997 and A2:1998 has the status of a British Standard

ICS 29.140.30

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the national committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Electrical Illuminations Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 May 1994

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9783	January 1998	Indicated by a sideline in the margin
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National foreword

This British Standard has been prepared under the direction of the Electrical Illuminations Standards Policy Committee and is the English language version of EN 61199:1994 *Single-capped fluorescent lamps — Safety specifications*, including amendments A1:1997 and A2:1998, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 61199:1993 including amendments 1:1997 and 2:1998, published by the International Electrotechnical Commission (IEC) which has the same title as the European Standard.

The following print types are used in this standard:

- requirements proper in roman type
- *test specifications in italic type*
- explanatory matter in smaller roman type

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 22, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Descriptors: Lighting equipment, fluorescent lamp, lamp cap, safety, specification, insulation resistance, electric strength, heat resistance, heating, quality assessment, marking

English version

Single-capped fluorescent lamps — Safety specifications

(includes amendments A1:1997 and A2:1998)
(IEC 61199:1993 + A1:1997 + A2:1998)

Lampes à fluorescence à culot unique —
Prescriptions de sécurité
(inclut les amendements A1:1997 et A2:1998)
(CEI 61199:1993 + A1:1997 + A2:1998)

Einseitig gesockelte Leuchtstofflampen
Sicherheitsanforderungen
(enthält Änderungen A1:1997 und A2:1998)
(IEC 61199:1997 + A1:1997 + A2:1998)

This European Standard was approved by CENELEC on 1993-12-08. 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, 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

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Foreword

The text of document 34A(CO)657, as prepared by Sub-Committee 34: Lamps, of IEC Technical Committee No. 34A: Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote in December 1992.

The reference document was approved by CENELEC as EN 61199 on 8 December 1993.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1994-12-01
- latest date of withdrawal of conflicting national standards (dow) 1994-12-01

For products which have complied with the relevant national standard before 1994-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-12-01.

Annexes designated “normative” are part of the body of the standard. Annexes designated “informative” are given only for information. In this standard, Annex A, Annex B, Annex D, Annex E, Annex F, Annex G and Annex ZA are normative and Annex C is informative.

Foreword to amendment A1

The text of document 34A/708/FDIS, future amendment 1 to IEC 61199:1993, 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 amendment A1 to EN 61199:1994 on 1997-07-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level or by endorsement (dop) 1998-04-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1998-04-01

For products which have complied with EN 61199:1994 before 1998-04-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2003-4-01.

Foreword to amendment A2

The text of document 34A/787/FDIS, future amendment 2 to IEC 61199:1993, 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 amendment A2 to EN 61199:1994 on 1998-08-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-05-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-05-01

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Section 1. General

1.1 Scope

This International Standard IEC 1199 specifies the safety requirements for single-capped fluorescent lamps for general lighting purposes of all groups having 2G7, 2GX7, GR8, G10q, GR10q, GX10q, GY10q, 2G11, G23, GX23, G24, GX32 and 2G13 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.

Requirements for batch testing are included in order to enable the assessment of batches presumed to contain unsafe lamps. As some safety requirements cannot be checked by batch testing and as there is often no previous knowledge of the manufacturer's quality, batch testing cannot be used for certification purposes nor in any way for an approval of a batch. Where a batch is found to be acceptable, a testing agency may only conclude that there are no reasons to reject a batch on safety grounds.

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 901. The next edition of IEC 901 will contain only performance requirements.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and 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. Members of IEC and ISO maintain registers of currently valid International Standards. IEC 61-1:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 1: Lamp caps.*

IEC 61-2:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 2: Lampholders.*

IEC 61-3:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 3: Gauges.*

IEC 410:1973, *Sampling plans and procedures for inspection by attributes.*

IEC 529:1989, *Degrees of protection provided by enclosures (IP Code).*

IEC 598-1:1992, *Luminaires — Part 1: General requirements and tests.*

IEC 695-2-1:1991, *Fire hazard testing — Part 2: Test methods — Section 1: Glow wire test and guidance.*

IEC 901:1987, *Single-capped fluorescent lamps. Safety and performance requirements — Amendment No. 1 (1989).*

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 ultra-violet 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

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