
Svetilke - 2-14. del: Posebne zahteve - Svetilke za cevaste sijalke (neonske cevi) in podobne naprave (IEC 60598-2-14:2009)

Luminaire - Part 2-14: Particular requirements - Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment (IEC 60598-2-14:2009)

Leuchten - Teil 2-14: Besondere Anforderungen - Leuchten für röhrenförmige Kaltkathoden-Entladungslampen (Neonröhren) und ähnliche Einrichtungen (IEC 60598-2-14:2009)

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Luminaire - Partie 2-14: Règles particulières - Luminaires pour lampes à décharge tubulaire à cathode froide (tubes néons) et équipements similaires (CEI 60598-2-14:2009)

Ta slovenski standard je istoveten z: EN 60598-2-14:2009

ICS:

29.140.40 Svetila Luminaires

SIST EN 60598-2-14:2009 en,fr

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60598-2-14

April 2009

ICS 29.140.40

English version

**Luminaire -
Part 2-14: Particular requirements -
Luminaire for cold cathode tubular discharge lamps (neon tubes)
and similar equipment
(IEC 60598-2-14:2009)**

Luminaire -
Partie 2-14: Règles particulières -
Luminaire pour lampes à décharge
tubulaire à cathode froide (tubes néons)
et équipements similaires
(CEI 60598-2-14:2009)

Leuchten -
Teil 2-14: Besondere Anforderungen -
Leuchten für röhrenförmige
Kaltkathoden-Entladungslampen
(Neonröhren)
und ähnliche Einrichtungen
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This European Standard was approved by CENELEC on 2009-04-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 34D/907/FDIS, future edition 1 of IEC 60598-2-14, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60598-2-14 on 2009-04-01.

This European Standard is to be used in conjunction with the latest edition of and any amendments to EN 60598-1: *Luminaires - Part 1: General requirements and tests*.

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) 2010-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-04-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60598-2-14:2009 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 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 60529	- ¹⁾	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 ²⁾ 1993
IEC 61050 (mod)	1991	Transformers for tubular discharge lamps having a no-load output voltage exceeding 1 000 V (generally called neon-transformers) - General and safety requirements	EN 61050	1992
IEC 61347-2-10	2000	Lamp controlgear - Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)	EN 61347-2-10	2001
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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IEC 60598-2-14

Edition 1.0 2009-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Luminaires – iTeh STANDARD PREVIEW
Part 2-14: Particular requirements – Luminaires for cold cathode tubular
discharge lamps (neon tubes) and similar equipment

[SIST EN 60598-2-14:2009](https://standards.iteh.ai/catalog/standards/sist/c9718035-0b91-40fe-8606-41268579a1/iec-60598-2-14:2009)

Luminaires – <https://standards.iteh.ai/catalog/standards/sist/c9718035-0b91-40fe-8606-41268579a1/iec-60598-2-14:2009>
Partie 2-14: Règles particulières – Luminaires pour lampes à décharge tubulaire
à cathode froide (tubes néons) et équipements similaires

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

T

ICS 29.140.40

ISBN 2-8318-1027-0

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

**Part 2-14: Particular requirements –
Luminaires for cold cathode tubular discharge
lamps (neon tubes) and similar equipment**

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 60598-2-14 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

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

FDIS	Report on voting
34D/907/FDIS	34D/910/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.

This publication is intended to be read in conjunction with IEC 60598-1: *Luminaires – Part 1: General requirements and tests*. It was established on the basis of the seventh edition (2008) of that standard.

A list of all parts of the IEC 60598 series, under the general title: *Luminaires*, can be found on the IEC website

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.

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LUMINAIRES –

Part 2-14: Particular requirements – Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment

14.1 Scope

This part of IEC 60598 applies to luminaires for cold cathode tubular discharge lamps and similar equipment, operating on a no-load rated output voltage over 1 000 V but not exceeding 10 000 V, mainly used for general lighting, for indoor or outdoor applications and for supply voltages up to 1 000 V.

NOTE In Japan, the output voltage of 15 000 V is acceptable.

It covers luminaires incorporating luminous-discharge tubes and supply units, of fixed or portable type, supplied by high, mains or ELV voltages by transformers, inverters or converters.

This standard does not cover luminaires for luminous-discharge tubes operating at rated voltages not exceeding 1 000 V (pre-heated cathodes), for which reference is made to the relevant part 2 of IEC 60598, and luminous discharge tube luminaires to be assembled in site as an electrical lighting system, for which regional wiring rules apply.

This standard is read in conjunction with those sections of Part 1 to which reference is made.

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14.2 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.

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

IEC 61050:1991, *Transformers for tubular discharge lamps having a no-load output voltage exceeding 1 000 V (generally called neon-transformers) – General and safety requirements*

IEC 61347-2-10:2000, *Lamp controlgear – Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)*

IEC 60417, *Graphical symbols for use on equipment*

14.3 General test requirements

The provisions in Section 0 of IEC 60598-1 apply.

NOTE This section of IEC 60598-1 covers complete products, on which routine tests according to Annex Q of Part 1 can be made.

14.4 Definitions

For the purposes of this document, the definitions given in Section 1 of IEC 60598-1 apply, together with the following.

14.4.1

luminous-discharge tube

tube, or other vessel or device, which is constructed of translucent material, hermetically sealed, and designed for the emission of light arising from the passage of an electric current through a gas or vapour contained within it

NOTE The tube may be with or without a fluorescent coating.

14.4.2

no-load rated output voltage

maximum rated voltage between the terminals of the output winding(s) of the transformer, as in 2.8 of IEC 61050, or maximum rated voltage between output terminals of inverters/converters as in 3.2 of IEC 61347-2-10

14.4.3

insulating sleeve

envelope designed to be placed over the exposed high-voltage connections at tube electrodes or over cable-end insulators

14.4.4

earth leakage protective device

device which will remove the output power from one or more control gear(s) in the event of a short circuit between any relevant part of the output circuit and earth

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NOTE The device may be in two parts, a sensor and a protective switch (see 14.7.3), or may be combined in units (either inside or outside control gears)

14.4.5

open-circuit protective device

device which will remove the output power from one or more control gear(s) in the event of an interruption of the secondary high voltage circuit

NOTE The device may be in two parts, a sensor and a protective switch (see 14.7.4), or may be combined in one unit.

14.4.6

open-circuit condition

a disconnection or lamp fault in the output circuit that causes either the load current of, or the mains supply current to, the control gear feeding the lamp circuit to fall below the respective shut-down current limit

14.4.7

shut-down current limit

secondary load current of a transformer at which an open-circuit protective device operates

NOTE Although the shut-down current limit is specified in terms of the current flowing in the output circuit, the manufacturer of the device may measure this by other than direct means. Such means might include, e.g. measuring the current reflected into the primary winding of the transformer or measuring a change in circuit power factor.

14.4.8

sensor

part of a protective device which detects the presence of a secondary earth fault and/or an open circuit condition and provides a signal to operate the protective device