

## Luminaires - Part 1: General requirements and tests (IEC 60598-1:2003,MOD)

november 2004  
ICS 29.140.40

Vervangt NEN-EN-IEC 60598-1:1997/A15:2002; NEN-EN-IEC 60598-1; 1995/A11:2002; NEN-EN-IEC 60598-1:2000; NEN-EN-IEC 60598-1:2000/A11:2001/C1:2001; NEN-EN-IEC 60598-1:2000/A11:2001; NEN-EN-IEC 60598-1:2000/A12:2002; NEN-EN-IEC 60598-1:2000/IS 01 t/m 27:2001

Als Nederlandse norm is aanvaard:

- EN 60598-1:2004, IDT
- IEC 60598-1:2003, MOD

Nederlands Elektrotechnisch Comité (NEC)  
Normcommissie 361 034 "Lampen en bijbehorende toestellen (NEC 34)"

Apart from exceptions provided by the law, nothing from this publication may be duplicated and/or published by means of photocopy, microfilm, storage in computer files or otherwise, which also applies to full or partial processing, without the written consent of the Netherlands Standardization Institute.

The Netherlands Standardization Institute shall, with the exclusion of any other beneficiary, collect payments owed by third parties for duplication and/or act in and out of law, where this authority is not transferred or falls by right to the Reproduction Rights Foundation.

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden veelevoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor veelevoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

Although the utmost care has been taken with this publication, errors and omissions cannot be entirely excluded. The Netherlands Standardization Institute and/or the members of the committees therefore accept no liability, not even for direct or indirect damage, occurring due to or in relation with the application of publications issued by the Netherlands Standardization Institute.

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaarden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdend met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

## Nederlands voorwoord

Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
IEC 60061-2	NEN 10061-2	Lampvoeten en lamphouders alsmede kalibers voor controle van de uitwisselbaarheid en veiligheid - Deel 2: Lamphouders (en,fr)
IEC 60061-3	NEN 10061-3	Lampvoeten en lamphouders alsmede kalibers voor controle van de uitwisselbaarheid en veiligheid - Deel 3: Kalibers (en,fr)
IEC 60065:2001	NEN-EN-IEC 60065:2002	Audio-, video- en soortgelijke elektronische toestellen - Veiligheidseisen ( )
IEC 60068-2-75	NEN-EN-IEC 60068-2-75	Klimatologische en mechanische beproevingsmethoden voor elektrotechnische producten - Deel 2: Beproevingen - Sectie 75: Proef Eh: Hamerproeven (en,fr)
IEC 60079:series	NEN-EN-IEC 60079:reeks	Elektrisch materieel voor plaatsen waar gasontploffingsgevaar kan heersen (en,fr)
IEC 60083	-	-
IEC 60085	NEN-EN-IEC 60085	Elektrische isolatiematerialen - Thermische classificatie (en,fr)
IEC 60112:2003	NEN-EN-IEC 60112:2003	Methode voor de bepaling van de kruipstroomvastheid van vaste isolatiematerialen onder vochtige omstandigheden (en,fr)
IEC 60155	NEN 10155	Starters voor fluorescentielampen (en)
IEC 60227:series	HD 21:reeks	Leidingen met aderisolatie van PVC en een nominale spanning tot en met 450/750 V (en)
IEC 60238:1998	NEN-EN-IEC 60238:1998	Lamphouders met Edisonschroefdraad (en,fr)
IEC 60245:series	HD 22:reeks	Leidingen met aderisolatie van rubber en een nominale spanning tot en met 450/750 V (en)
IEC 60320:series	NEN-EN-IEC 60320:reeks	Toestelstopcontacten voor huishoudelijk en dergelijk algemeen gebruik (en,fr)
IEC 60357	NEN-EN-IEC 60357	Halogeengloeilampen (anders dan voor voertuigen) - Prestatie-eisen (en)
IEC 60360	NEN-EN-IEC 60360	Standaardmethode voor het meten van de temperatuurstijging van lampvoeten (en,fr)
IEC 60384-14	NEN-IEC 60384-14	Vaste condensatoren voor elektronische apparatuur - Deel 14: Groepspecificatie: Vaste condensatoren voor onderdrukking van elektromagnetische storing en verbinding met de voeding (en,fr)
IEC 60400	NEN-EN-IEC 60400	Lamphouders voor buisvormige fluorescentielampen en starterhouders (en,fr)
IEC 60417-DB:2002	-	-
IEC 60432-1:1999	NEN-EN-IEC 60432-1:2000	Gloeilampen - Veiligheidsbepalingen - Deel 1: Gloeilampen met wolframdraad voor huishoudelijke en soortgelijke algemene verlichtingsdoeleinden (en,fr)
IEC 60432-2	NEN-EN-IEC 60432-2	Gloeilampen - Veiligheidsbepalingen - Deel 2: Halogeengloeilampen voor huishoudelijke en soortgelijke algemene verlichtingsdoeleinden (en,fr)
IEC 60432-3	NEN-EN-IEC 60432-3	Gloeilampen - Veiligheidsbepalingen - Deel 3: Halogeengloeilampen anders dan voor voertuigen (en,fr)
IEC 60529:1989	NEN 10529:1992	Beschermingsgraden van omhulsels van elektrisch materieel (IP-codering) (en,fr)
IEC 60570:2003	NEN-EN-IEC 60570:2003	Elektrische lichtrailsystemen (en,fr)
IEC 60598-2:series	NEN-EN-IEC 60598:reeks	Verlichtingsarmaturen (en,fr)
IEC 60598-2-4:1997	NEN-EN-IEC 60598-2-4:1997	Verlichtingsarmaturen - Deel 2: Bijzondere eisen - Sectie 4: Verplaatsbare armaturen voor algemeen gebruik (en,fr)

IEC 60634	NEN 10634	Beproevinglamp als warmtebron (HTS-lampen) voor het uitvoeren van thermische beproevingen op verlichtingsarmaturen (en,fr)
IEC 60662	NEN 10662	Hogedruk natriumlampen (en,fr)
IEC 60664-1	NEN-EN-IEC 60664-1	Coördinatie van isolatie voor inrichtingen binnen laagspanningssystemen - Deel 1: Uitgangspunten, eisen en beproevingen (en,fr)
IEC 60684:series	NEN-EN-IEC 60684:reeks	Soepele isolatiekous (en,fr)
IEC 60695-2:series	NEN-EN-IEC 60695:reeks	Brandbaarheid van elektrotechnische producten (en,fr)
IEC 60695-2-2	NEN 10695-2-2	Brandbaarheid van elektrotechnische producten - Deel 2: Beproevingsmethoden - Sectie 2: Naaldvlamproef (en,fr)
IEC 60695-2-10	NEN-EN-IEC 60695-2-10	Brandbaarheid van elektrotechnische producten - Deel 2-10: Beproevingsmethoden met gloeidraad/hete draad - Gloeidraadtoestellen en algemene beproevingsprocedure (en,fr)
IEC 60838:series	NEN-EN-IEC 60838:reeks	Bijzondere lamphouders (en,fr)
IEC 60901	NEN 10901	Fluorescentielampen met enkelvoudige lampvoet - Gebruikseigenschappen (en,fr)
IEC 60989	-	-
IEC 60990:1999	NEN-EN-IEC 60990:1999	Meetmethoden voor contactstroom en lekstroom (en,fr)
IEC 61032:1997	NEN-EN-IEC 61032:1998	Bescherming van personen en materieel door omhulsels - Hulpmiddelen om de bescherming te controleren (en,fr)
IEC 61058-1:2000	NEN-EN-IEC 61058-1:2002	Toestelschakelaars - Deel 1: Algemene eisen (en,fr)
IEC 61184	NEN-EN-IEC 61184	Bajonet-lamphouders (en,fr)
IEC 61195	NEN-EN-IEC 61195	Fluorescentielampen met twee lampvoeten - Veiligheidsbepalingen (en,fr)
IEC 61199:1999	NEN-EN-IEC 61199:2000	Fluorescentielampen met één lampvoet - Veiligheidsbepalingen (en,fr)
IEC 61347:series	NEN-EN-IEC 61347:reeks	Toebehoren voor lampen (en,fr)
IEC 61347-2-9	NEN-EN-IEC 61347-2-9	Toebehoren voor lampen - Deel 2-9: Bijzondere eisen voor voorschakelapparaten voor ontladingslampen (met uitzondering van buisvormige fluorescentielampen) (en,fr)
IEC 61558-2:series	NEN-EN-IEC 61558:reeks	Veiligheid van energietransformatoren, voedingseenheden en dergelijke (en,fr)
IEC 61558-2-5	NEN-EN-IEC 61558-2-5	Veiligheid van energietransformatoren, voedingseenheden en dergelijke - Deel 2-5: Bijzondere bepalingen voor transformatoren en voedingseenheden voor scheertoestellen (en,fr)
IEC 62035	NEN-EN-IEC 62035	Ontladingslampen (uitgezonderd fluorescentielampen) - Veiligheidspecificaties (en,fr)
IEC 80416-1	NEN-EN-IEC 80416-1	Basisprincipes voor grafische symbolen voor gebruik op apparatuur - Deel 1: Het maken van originelen (en,fr)
ISO 75-2:1993	-	-
ISO 4046-4:2002	NEN-ISO 4046-4:2002	Papier, karton, celstof en gerelateerde termen - Woordenlijst - Deel 4: Papier- en kartonclassificatie en afgeleide producten (en,fr)

Voorbeeld  
Preview

EUROPEAN STANDARD

**EN 60598-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2004

ICS 29.140.40

Supersedes EN 60598-1:2000 + A11:2000 + A12:2002

English version

## **Luminaire**

### **Part 1: General requirements and tests** (IEC 60598-1:2003, modified)

Luminaire  
Partie 1: Prescriptions générales et essais  
(CEI 60598-1:2003, modifiée)

Leuchten  
Teil 1: Allgemeine Anforderungen  
und Prüfungen  
(IEC 60598-1:2003, modifiziert)

This European Standard was approved by CENELEC on 2004-07-06. CENELEC members are bound to comply with the 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**

## Foreword

The text of the International Standard IEC 60598-1:2003, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, together with common modifications prepared by the Technical Committee CENELEC TC 34Z, Luminaires and associated equipment, was approved by CENELEC as EN 60598-1 on 2004-07-06.

This European Standard supersedes EN 60598-1:2000 + A11:2000 + corrigendum April 2001 + A12:2002.

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) 2005-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-07-01

Annexes ZA, ZB and ZC have been added by CENELEC.

Preview

### Endorsement notice

The text of the International Standard IEC 60598-1:2003 was approved by CENELEC as a European Standard with agreed common modifications as given below.

#### COMMON MODIFICATIONS

### 3 Marking

3.2.12 **Delete** Note 3.

3.3 **Add** new subclause:

**3.3.101** Where the terminal block is not supplied with the luminaire, the packaging needs to contain the following wording:

"Terminal block not included. Installation may require advice from a qualified person."

### 4 Construction

4.11.6 At the end of the paragraph commencing "Following completion of these tests...", **add**: "[the test voltage however being reduced to 1 500 V]".

### 5 External and internal wiring

5.2.1 **Replace** the indent relating to "fixed luminaires" by:

Fixed luminaires terminals; plugs for engagement with socket-outlets;  
non detachable flexible cables or cords;  
adapters for engagement with supply tracks;  
appliance inlets;  
connecting leads (tails);

account shall be taken of national installation rules/practice when deciding whether to supply a connection device or not. Where the luminaire is delivered with connecting leads (tails) and without a means of connection to the supply, the manufacturer of the luminaire shall specify which terminal block may be used which shall conform to EN 60998-2-1 or EN 60998-2-2; either the terminal block to be used shall be specified or the following shall be defined:

- the type of terminal (screw/screwless);
- number of terminals;
- rated voltage;
- rated connecting capacity;
- any necessary preparation of the ends of conductors;
- any fixing method.

The requirements of subclauses 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 shall be applied.

5.2.2 In paragraph 1, **replace** "IEC 60227 and IEC 60245" by "HD 21 and HD 22".

**Delete** paragraph 2.

Replace table 5.1 by:

**Table 5.1 - Non detachable flexible cables or cords**

	<b>Rubber</b>	<b>PVC</b>
Ordinary class I luminaires	HO3RT-F	HO3VVH2-F HO3VV-F
Ordinary class II luminaires	HO5RR-F	HO3VVH2-F HO3VV-F
Luminaires other than ordinary	HO5RN-F	–
Portable rough service luminaires	HO7RN-F	–

## 12 Endurance test and thermal test

12.4.2 c) Line 2, after "90° C" **add**: "(see note \*\*\* to table 12.2 relating to unsleeved fixed wiring)".

Table 12.2 In note \*\*\* **add** the following:

- after "European Installation Standards": "(HD 384)";
- after "European Cable Standards": "(HD 21)".



**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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061-2 (mod)	- <sup>1)</sup>	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 2: Lampholders	EN 60061-2	1993 <sup>2)</sup>
IEC 60061-3 (mod)	<sup>1)</sup>	Part 3: Gauges	EN 60061-3	1993 <sup>2)</sup>
IEC 60065 (mod)	2001	Audio, video and similar electronic apparatus - Safety requirements	EN 60065	2002
IEC 60068-2-75	- <sup>1)</sup>	Environmental testing Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997 <sup>2)</sup>
IEC 60079 (mod)	Series	Electrical apparatus for explosive gas atmospheres	EN 60079	Series
IEC 60083	- <sup>1)</sup>	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60085	- <sup>1)</sup>	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990 <sup>2)</sup>
IEC 60112	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
IEC 60155	- <sup>1)</sup>	Glow-starters for fluorescent lamps	EN 60155	1995 <sup>2)</sup>
IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	HD 21 <sup>3)</sup>	Series
IEC 60238	1998	Edison screw lampholders	EN 60238	1998
IEC 60245 (mod)	Series	Rubber insulated cables - rated voltages up to and including 450/750 V	HD 22 <sup>4)</sup>	Series
IEC 60320	Series	Appliance couplers for household and similar general purposes	EN 60320	Series

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

<sup>3)</sup> The HD 21 series is related to, but not directly equivalent with the IEC 60227 series.

<sup>4)</sup> The HD 22 series is related to, but not directly equivalent with the IEC 60245 series.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60357 (mod)	- <sup>1)</sup>	Tungsten halogen lamps (non-vehicle) - Performance specifications	EN 60357	2003 <sup>2)</sup>
IEC 60360	- <sup>1)</sup>	Standard method of measurement of lamp cap temperature rise	EN 60360	1998 <sup>2)</sup>
IEC 60384-14	- <sup>1)</sup>	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	-	-
IEC 60400 (mod)	- <sup>1)</sup>	Lampholders for tubular fluorescent lamps and starterholders	EN 60400	2000 <sup>2)</sup>
IEC 60417	1999	Graphical symbols for use on equipment	-	-
IEC 60432-1 (mod)	1999	Incandescent lamps - Safety specifications Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	EN 60432-1	2000
IEC 60432-2 (mod)	- <sup>1)</sup>	Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	EN 60432-2	2000 <sup>2)</sup>
IEC 60432-3	- <sup>1)</sup>	Part 3: Tungsten-halogen lamps (non-vehicle)	EN 60432-3	2003 <sup>2)</sup>
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60570	2003	Electrical supply track systems for luminaires	EN 60570	2003
IEC 60598-2 (mod)	Series	Luminaires Part 2: Particular requirements	EN 60598-2	Series
IEC 60598-2-4	1997	Part 2: Particular requirements - Section 4: Portable general purpose luminaires	EN 60598-2-4	1997
IEC 60634	- <sup>1)</sup>	Heat test source (H.T.S.) lamps for carrying out heating tests on luminaires	EN 60634	1995 <sup>2)</sup>
IEC 60662	- <sup>1)</sup>	High-pressure sodium vapour lamps	EN 60662	1993 <sup>2)</sup>
IEC 60664-1	- <sup>1)</sup>	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	EN 60664-1	2003 <sup>2)</sup>
IEC 60684	Series	Flexible insulating sleeving	EN 60684	Series
IEC 60695-2	Series	Fire hazard testing Part 2: Test methods	EN 60695-2	Series
IEC 60695-2-2	- <sup>1)</sup>	Part 2: Test methods Section 2: Needle-flame test	EN 60695-2-2	1994
IEC 60838	Series	Miscellaneous lampholders	EN 60838	Series
IEC 60901	- <sup>1)</sup>	Single-capped fluorescent lamps - Performance requirements	EN 60901	1996

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60989	- <sup>1)</sup>	Separating transformers, autotransformers, variable transformers and reactors	-	-
IEC 60990	1999	Methods of measurement of touch-current and protective conductor current	EN 60990	1999
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
IEC 61058-1 + A1 (mod)	2000 2001	Switches for appliances Part 1: General requirements	EN 61058-1	2002
IEC 61184	- <sup>1)</sup>	Bayonet lampholders	EN 61184	1997 <sup>2)</sup>
IEC 61195	- <sup>1)</sup>	Double-capped fluorescent lamps - Safety specifications	EN 61195	1999
IEC 61199	1999	Single-capped fluorescent lamps - Safety specifications	EN 61199	1999
IEC 61347	Series	Lamp controlgear	EN 61347	Series
IEC 61347-2-9	- <sup>1)</sup>	Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)	EN 61347-2-9	2001 <sup>2)</sup>
IEC 61558-2 (mod)	Series	Safety of power transformers, power supply units and similar	EN 61558-2-5	Series
IEC 61558-2-5	- <sup>1)</sup>	Part 2-5: Particular requirements for shaver transformers and shaver supply units	EN 61558-2-5	1998
IEC 62035 (mod)	- <sup>1)</sup>	Discharge lamps (excluding fluorescent lamps) - Safety specifications	EN 62035	2000 <sup>2)</sup>
IEC 80416-1	- <sup>1)</sup>	Basic principles for graphical symbols for use on equipment Part 1: Creation of symbol originals	EN 80416-1	2001
ISO 75-2	1993	Plastics - Determination of temperature of deflection under load Part 2: Plastics and ebonite	EN ISO 75-2	1996
ISO 4046-4	2002	Paper, board, pulp and related terms - Vocabulary Part 4: Paper and board grades and converted products	-	-

## Annex ZB (normative)

### Special national conditions

**Special national condition:** National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions. If it affects harmonization, it forms part of the European Standard or Harmonization Document.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

Clause	Special national condition
--------	----------------------------

3.3

#### Denmark

Supply cords of class I luminaires, which are delivered without a plug, shall be provided with a visible tag with the following text:

Vigtigt !

Lederen med grøn/gul isolation  
må kun tilsluttes en klemme mærket



eller

If essential for the safety of the luminaire, the tag shall in addition be provided with a diagram, which shows the connection of the other conductors, or be provided with the following text:

Fir tilslutning af the øvrige ledere,  
se medfølgende vejledning.

Class I luminaires which, according to the exemption for Denmark in subclause 5.2.1, are delivered with a supply cord with a plug in accordance with Standard Sheets DKA 2-1a, DKA 2-1b, C 1b, C 2b, C 3b or C 4, shall either be provided with the above tag or the same information shall be given in an enclosed instruction. The text concerning conductors having green/yellow insulation shall be quoted word-for-word.

NOTE "ø" may be replaced by "oe"; "æ" may be replaced by "ae".

#### Italy

For luminaires of class 0, the manufacturer's instructions shall include the following warning:

"ATTENZIONE - QUESTO APPARECHIO E' IDONEO SOLO PER AMBIENTI ISOLATI"

Clause Special national condition

4.5.1 **Denmark**

Socket-outlets intended for providing power to other appliances shall be in compliance with Section 107-2-D1, the Standard Sheets being applied as follows:

Class I ..... Standard Sheet DK 1-3a

For class I luminaires, the earthing contact of the socket-outlet shall be electrically connected to the earthing terminal of the appliance.

Class II luminaires shall not be fitted with socket-outlets for providing power to other appliances.

**EXEMPTION:**

Socket-outlets supplied from isolation transformers (shaver supply units) and socket-outlets on outdoor luminaires may be in accordance with the requirement of Section 107-2-D1 for fixed socket-outlets.

5.2.1 **Cyprus**

Domestic luminaires intended for connection to a standard United Kingdom 13 A socket must be pre-fitted with an approved plug complying with BS 1363.

Cord sets for domestic luminaires for connection with an appliance inlet must be pre-fitted with an approved plug complying with BS 1363.

Plugs must be fitted with the correct fuse.

**Denmark**

Supply cords on single phase portable luminaires having a rated current not exceeding 10 A shall be provided with a plug according to the following table:

		Plug	
Class of luminaire		Section 107-2-D1 Standard Sheet	EN 50075 Standard Sheet
I	Protection against indirect contact required	DK 2-1a*	
	Earthing connection not required	DK 2-1a, DKA 2-1a, DKA 2-1b, C 1b, C 2b, C 3b, C 4	
II		DKA 2-1a, DKA 2-1b, C 1b, C 5, C 6	I

\* Luminaires fitted with a socket-outlet for providing power to other appliances.

For luminaires which are mainly used in locations where protection against indirect contact is required, see Section 10, § 17.

Clause      Special national condition

## 5.2.1 (cont'd)

For luminaires having an appliance inlet, the plug on the supply cord shall comply with the above requirements. If other single-phase luminaires having a rated current not exceeding 10 A are provided with a supply cord with a plug, the plug shall comply with the above requirements.

**EXEMPTION:**

If single-phased fixed class I luminaires, intended for use in homes, and for which protection against indirect contact is required according to Section 10 of the Heavy Current Regulations, are provided with a plug, this plug may, until further notice, be in accordance with Standard Sheet DKA 2-1a, DKA 2-1b, C 1b, C 2b, C 3b or C 4, provided that the cord close to the plug is marked as required in § 3.3.

If multi-phase luminaires and single-phase luminaires having a rated current exceeding 10 A are provided with a supply cord with a plug, the plug shall comply with the following table:

Class of luminaire	Plug	
	Section 107-2-D1 Standard Sheet	Section 117 Standard Sheet
I	DK 6-1a	II
II	DK7-1a*	II*

\* Earthing contact not connected.

**Finland and Sweden**

For luminaires provided with non-detachable flexible cables and cords and a plug, the plug shall comply with the requirements of CEE Publication 7 and EN 50075, the Standard Sheets to be applied being as follows:

- Class I luminaires      CEE 7, sheet IV or VII
- Class II luminaires      CEE 7, sheet XVI (alt I only) or CEE 7, sheet XVII or EN 50075, sheet I

**United Kingdom**

Domestic luminaires intended for connection to a standard United Kingdom 13 A socket must be pre-fitted with an approved plug complying with BS 1363.

Cord sets for domestic luminaires for connection with an appliance inlet must be pre-fitted with an approved plug complying with BS 1363.

Plugs must be fitted with the correct fuse.

## Annex ZC (informative)

### A-deviations

**A-deviation:** National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard falls under Directive 73/23/EEC.

NOTE (from CEN/CENELEC IR Part 2, 3.1.9) Where standards fall under EC Directives, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

A-deviations in an EFTA-country are **valid instead** of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Deviation</u>
<b>4 &amp; 5</b>	<b>France</b> (Arrêté of the 22 <sup>th</sup> September 1969)  Socket-outlets 10/16 A intended for providing power to other appliances except those supplied by an isolating transformer shall be shuttered.
<b>13.3</b>	<b>Denmark</b> (Heavy Current Regulations, Section 6, 804.4)  Enclosures of luminaires installed within arms reach (e.g. lower than 2,5 m above floor level) in public access routes and escape routes indoor in dwelling houses shall comply with the needle flame test of 13.3.1. The flame being applied for 30 s.  <b>France</b> (Regulation on the safety against fire and panic hazards in premises open to public. Arrêté of the 19 <sup>th</sup> November 2001.)  External parts of fixed or suspended luminaires shall be subjected to a glow-wire test, the glow-wire temperature is : <ul style="list-style-type: none"><li>- 850°C for general purpose luminaires installed in closed horizontal routes and stairs;</li><li>- 850°C for general purpose luminaires installed in premises open to public if the total visible surface of the luminaires is more than 25% of the premise surface;</li><li>- 750°C for the other general purpose luminaires installed in premises open to public</li></ul> (Regulation on the safety against fire in high buildings. Arrêté of the 18th October 1977.)  External parts of fixed or suspended luminaires shall be subjected to a glow-wire test, the glow-wire temperature is : <ul style="list-style-type: none"><li>- 960°C for general purpose luminaires installed in all emergency exits;</li><li>- 750°C for the other general purpose luminaires installed in premises open to the public.</li></ul>
	<b>United Kingdom</b> (Approved Document B of the United Kingdom Building Regulations)  Particular fire protection requirements relating to thermoplastic diffusers are listed in clause 7.15 of the above Regulations.

# ALTIJD DE ACTUELE NORM IN UW BEZIT HEBBEN?

Nooit meer zoeken in de systemen en uzelf de vraag stellen:  
'Is NEN-EN-IEC 60598-1:2004 en;fr de laatste versie?'

Via het digitale platform NEN Connect heeft u altijd toegang tot de meest actuele versie van deze norm. Vervallen versies blijven ook beschikbaar. **U en uw collega's** kunnen de norm via NEN Connect makkelijk raadplagen, online en offline.

Kies voor slimmer werken en bekijk onze mogelijkheden op [www.nenconnect.nl](http://www.nenconnect.nl).

## Heeft u vragen?

Onze Klantenservice is bereikbaar maandag tot en met vrijdag, van 8.30 tot 17.00 uur.

Telefoon: 015 2 690 391

E-mail: [klantenservice@nen.nl](mailto:klantenservice@nen.nl)

