

Verlichtingsarmaturen -  
Deel 1: Algemene eisen en beproevingen  
(IEC 60598-1:1999,MOD)

Luminaires - Part 1: General requirements and tests  
(IEC 60598-1:1999,MOD)

oktober 2000  
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Vervangt NEN-EN-IEC 60598-1:1997; NEN-EN-IEC  
60598-1:1997/C1:1999; NEN-EN-IEC 60598-  
1:1997/A1:1998; NEN-EN-IEC 60598-  
1:1997/A1:1998/C2:1999; NEN-EN-IEC 60598-  
1:1997/A12:1999; NEN-EN-IEC 60598-1:1997/A13:1999

Als Nederlandse norm is aanvaard:  
- EN 60598-1:2000,IDT  
- IEC 60598-1:1999,MOD

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

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## 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 60061-2:1969	NEN 10061-2:1993	Lampvoeten en lamphouders alsmede kalibers voor controle van de uitwisselbaarheid en veiligheid - Deel 2: Lamphouders (en,fr)
IEC 60061-3:1969	NEN 10061-3:1993	Lampvoeten en lamphouders alsmede kalibers voor controle van de uitwisselbaarheid en veiligheid - Deel 3: Kalibers (en,fr)
IEC 60065:1985	-	-
IEC 60068-2-63:1991	-	-
IEC 60083:1975	-	-
IEC 60085:1984	NEN 10085:1986	Elektrische isolatiematerialen - Classificatie en beschouwing over de thermische eigenschappen (en,fr)
IEC 60112:1979	NEN 10112:1990	Bepaling van de vergelijkbare en vereiste kruipstroomvastheid van vaste isolatiematerialen onder vochtige omstandigheden (en,fr)
IEC 60155:1993	NEN 10155:1995	Starters voor fluorescentielampen (en)
IEC 60216:series	NEN 10216:reeks	Leidraad voor de bepaling van de warmtevastheidseigenschappen van elektrische isolatiematerialen (en,fr)
IEC 60227:series	HD 21:reeks	Leidingen met aderisolatie van PVC en een nominale spanning tot en met 450/750 V (en)
IEC 60238:1991	-	-
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 60357:1982	NEN-EN 60357:1989	Halogeengloeilampen anders dan voor voertuigen (en)
IEC 60360:1987	-	-
IEC 60364-3:1993	-	-
IEC 60364-7-702:1983	NEN 1010-7:2000	Veiligheidsbepalingen voor laagspanningsinstallaties - Deel 7: Bepalingen voor bijzondere installaties, ruimten en terreinen (nl)
IEC 60384-14:1993	NEN-IEC 60384-14:1999	Vaste condensatoren voor elektronische apparatuur - Deel 14: Groepsspecificatie: Vaste condensatoren voor onderdrukking van elektromagnetische storing en verbinding met de voeding (en,fr)
IEC 60400:1991	-	-
IEC 60416:1988	NEN 10416:1997	Algemene principes voor het maken van pictogrammen voor het gebruik op toestellen (en,fr)
IEC 60417:1973	-	-
IEC 60432-1:1993	-	-
IEC 60432-2:1994	-	-
IEC 60529:1989	NEN 10529:1992	Beschermingsgraden van omhulsels van elektrisch materieel (IP-codering) (en,fr)
IEC 60570:1995	NEN 10570:1997	Elektrische lichtrailssystemen (en,fr)
IEC 60598-2-4:1979	-	-
IEC 60630:1994	NEN-EN-IEC 60630:1998	Maximale lampcontouren voor gloeilampen (en,fr)
IEC 60634:1993	NEN 10634:1995	Beproevinglamp als warmtebron (HTS-lampen) voor het uitvoeren van thermische beproevingen op verlichtingsarmaturen (en,fr)
IEC 60662:1980	NEN 10662:1993	Hogedruk natriumlampen (en,fr)
IEC 60664-1:1992	NEN 10664-1:1996	Coördinatie van isolatie voor inrichtingen binnen laagspanningssystemen - Deel 1: Uitgangspunten, eisen en beproevingen (en)
IEC 60684:series	IEC 60684:reeks	Soepele isolatiekous (en,fr)

IEC 60695-2-2:1991	NEN 10695-2-2:1994	Brandbaarheid van elektrotechnische producten - Deel 2: Beproevingmethoden - Sectie 2: Naaldvlamproef (en,fr)
IEC 60742:1983	NEN 10742:1995	Beschermingstransformatoren en veiligheidstransformatoren - Eisen (en,fr)
IEC 60838:series	NEN-EN-IEC 60838:reeks	Bijzondere lamphouders (en,fr)
IEC 60901:1987	-	-
IEC 60920:1990	NEN 10920:1991	Voorschakelapparaten voor buisvormige fluorescentielampen - Algemene- en veiligheidseisen (en,fr)
IEC 60922:1989	-	-
IEC 60924:1990	NEN 10924:1991	Elektronische voorschakelapparaten met gelijkstroomvoeding voor buisvormige fluorescentielampen - Algemene en veiligheidseisen (en,fr)
IEC 60972:1989	NPR 10972:1995	Indeling en interpretatie van nieuwe producten voor verlichting (en,fr)
IEC 60989:1991	-	-
IEC 60990:1990	-	-
IEC 61032:1990	-	-
IEC 61046:1993	NEN 11046:1994	Elektronische spanningsregelaars met gelijkspannings- of wisselspanningsvoeding voor gloeilampen - Algemene en veiligheidseisen (en,fr)
IEC 61058-1:1990	NEN 11058-1:1992	Toestelschakelaars - Deel 1: Algemene eisen (en,fr)
IEC 61167:1992	NEN 11167:1994	Metaalhalogenidelampen (en,fr)
IEC 61184:1993	-	-
IEC 61195:1993	-	-
IEC 61199:1993	-	-
ISO 75-2:1993	NEN-EN-ISO 75-2:1996	Kunststoffen - Bepaling van de vervormingstemperatuur onder belasting - Deel 2: Kunststoffen en eboniet (en)
ISO 1891:1979	NEN-ISO 1891:1985	Bouten, schroeven, moeren en toebehoren - Verklarende zeventalige woordenlijst (nl,en,fr,ru,de,it)
ISO 4046:1978	NEN 3376:1995	Papier - Verklarende woordenlijst met vertalingen (Engels, Frans, Duits) (nl)

Voorbeeld  
Preview

English version

**Luminaire****Part 1: General requirements and tests**  
(IEC 60598-1:1999, modified)**Luminaire**  
**Partie 1: Prescriptions générales et essais**  
(CEI 60598-1:1999, modifiée)**Leuchten**  
**Teil 1: Allgemeine Anforderungen und**  
**Prüfungen**  
(IEC 60598-1:1999, modifiziert)

This European Standard was approved by CENELEC on 2000-04-01. 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, 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 the International Standard IEC 60598-1:1999, 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 2000-04-01.

This European Standard supersedes EN 60598-1:1997 + corrigendum June 1999 and its amendments A1:1998 + corrigendum December 1998, A12:1998 and A13:1999.

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) 2001-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-04-01

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, C, D, E, F, P, S, T, ZA and ZB are normative and annexes J, K, L, M, N, Q, R and ZC are informative.

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

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## Endorsement notice

The text of the International Standard IEC 60598-1:1999 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### 3 Marking

3.2.12 **Delete** the note.

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). 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**

	Rubber	PVC
Class 0 luminaires	H03RT-F	H03VH-H
Ordinary Class I luminaires	H03RT-F	H03VVH2-F H03VV-F
Ordinary Class II luminaires	H05RR-F	H03VVH2-F H03VV-F
Luminaires other than ordinary	H05RN-F	-
Portable rough service luminaires	H07RN-F	-

5.2.15 **Replace** the text of this subclause by:

Connecting leads [tails] of extra-low voltage d.c. supplied fluorescent luminaires where supplied as the means of connection of the luminaire to the supply shall be colour coded red to indicate positive and black to indicate negative.

## 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

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 60061-2 + supplements + amendments (mod)	1969	Part 2: Lampholders	EN 60061-2 + amendments	1993
IEC 60061-3 + supplements + amendments (mod)	1969	Part 3: Gauges	EN 60061-3 + amendments	1993
IEC 60065 (mod)	1985	Safety requirements for mains operated electronic and related apparatus for household and similar general use	EN 60065 <sup>1)</sup>	1993
IEC 60068-2-63	1991	Environmental testing Part 2: Test methods - Test Eg: Impact, spring hammer	EN 60068-2-63	1994
IEC 60083	1975	Plugs and socket outlets for domestic and similar general use - Standards	-	-
A1	1979			
IEC 60085	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
IEC 60155	1993	Glow-starters for fluorescent lamps	EN 60155	1995
IEC 60216	Series	Guide for the determination of thermal endurance properties of electrical insulating materials	EN 60216/HD 611	Series
IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	HD 21 <sup>2)</sup>	Series

1) EN 60065 is superseded by EN 60065:1998 + corrigendum June 1999, which is based on IEC 60065:1998, mod.

2) The HD 21 series is related to, but not directly equivalent with the IEC 60227 series.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60238 (mod)	1991	Edison screw lampholders	EN 60238 <sup>3)</sup>	1992
A1	1993		A1	1995
A2	1995		A2	1995
IEC 60245 (mod)	Series	Rubber insulated cables - rated voltages up to and including 450/750 V	HD 22 <sup>4)</sup>	Series
IEC 60320 (mod)	Series	Appliance couplers for household and similar general purposes	EN 60320	Series
IEC 60357 (mod)	1982	Tungsten halogen lamps (non-vehicle)	EN 60357	1988
+ A1 (mod)	1984			
A2 (mod)	1985			
+ A3 (mod)	1987			
+ A4 (mod)	1989		A4	1991
A5	1992			
+ corr. June	1992			
+ corr. November	1992			
A6	1993		A6	1994
A7	1994		A7	1994
A8	1995	A8	1995	
IEC 60360	1987	Standard method of measurement of lamp cap temperature rise	EN 60360 <sup>5)</sup>	1989
IEC 60364-3 (mod)	1993	Electrical installations of buildings Part 3: Assessment of general characteristics	HD 384.3 S2	1995
A1	1994		-	-
A2	1995		-	-
IEC 60364-7-702 (mod)	1983	Part 7: Requirements for special installations or locations -- Section 702: Swimming pools	HD 384.7.702 S1	1991
IEC 60384-14	1993	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)	1991	Lampholders for tubular fluorescent lamps and starterholders	EN 60400 <sup>6)</sup>	1992
A1	1993		+ corr. March	1992
A2	1994		A1	1994
			A2	1995
IEC 60416	1988	General principles for the creation of graphical symbols for use on equipment	HD 571 S1	1990
IEC 60417	1973	Graphical symbols for use on equipment - Index, survey and compilation of the single sheets	HD 243 S12 <sup>7)</sup>	1995

3) EN 60238 and its amendments are superseded by EN 60238:1998 + corrigendum February 1999, which is based on IEC 60238:1998.

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

5) EN 60360 is superseded by EN 60360:1998, which is based on IEC 60360:1998.

6) EN 60400 and its amendments are superseded by EN 60400:2000, which is based on IEC 60400:1999, mod.

7) HD 243 S12 is superseded by EN 60417-1:1999 and EN 60417-2:1999, which are based on IEC 60417-1:1998 and IEC 60417-2:1998.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60432-1 (mod)	1993	Safety specifications for incandescent lamps Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	EN 60432-1 <sup>8)</sup> + corr. April	1994 1995
A1	1995		A1	1997
IEC 60432-2 (mod)	1994	Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	EN 60432-2 <sup>9)</sup> + corr. March	1994 1995
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60570	1995	Electrical supply track systems for luminaires	EN 60570	1996
IEC 60598-2 (mod)	Series	Luminaires Part 2: Particular requirements	EN 60598-2	Series
IEC 60598-2-4 (mod)	1979	Part 2: Particular requirements -- Section 4: Portable general purpose luminaires	EN 60598-2-4 <sup>10)</sup>	1989
A3	1990		A3	1993
IEC 60630 (mod)	1984	Maximum lamp outlines for incandescent lamps	EN 60630 <sup>11)</sup>	1998
IEC 60634	1993	Heat test source (H.T.S.) lamps for carrying out heating tests on luminaires	EN 60634	1995
IEC 60662 + A2 + A3 A4 A5 A6 A7 A8	1980 1987 1990 1992 1993 1994 1995 1995	High-pressure sodium vapour lamps	EN 60662 A4 A5 A6 A7 -	1993 1994 1994 1994 1995 -
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
IEC 60684	Series	Flexible insulating sleeving	EN 60684/HD 523	Series
IEC 60695-2-2	1991	Fire hazard testing Part 2: Test methods Section 2: Needle-flame test	EN 60695-2-2	1994
IEC 60742 (mod)	1983	Isolating transformers and safety isolating transformers - Requirements	EN 60742 <sup>12)</sup>	1995
IEC 60838	Series	Miscellaneous lampholders	EN 60838	Series

8) EN 60432-1 and its amendments are superseded by EN 60432-1:2000, which is based on IEC 60432-1:1999, mod.

9) EN 60432-2 and its amendments are superseded by EN 60432-2:2000, which is based on IEC 60432-2:1999, mod.

10) EN 60598-2-4, which includes A1:1983 + A2:1987 to IEC 60598-2-4:1979 and its amendment A3:1993 are superseded by EN 60598-2-4:1997, which is based on IEC 60598-2-4:1997.

11) EN 60630 includes A1:1997 + A2:1998 to IEC 60630.

12) EN 60742 includes A1:1992 to IEC 60742.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60901	1987	Single-capped fluorescent lamps - Safety and performance requirements	EN 60901 <sup>13)</sup>	1990
A1	1989		A1	1990
A2	1992		A2	1993
IEC 60920	1990	Ballasts for tubular fluorescent lamps - General and safety requirements	EN 60920	1991
A1	1993		A1	1993
A2	1995		A2	1996
IEC 60922	1989	Ballasts for discharge lamps (excluding tubular fluorescent lamps) - General and safety requirements	EN 60922 <sup>14)</sup>	1991
A2	1992		A2	1993
IEC 60924	1990	D.C. supplied electronic ballasts for tubular fluorescent lamps - General and safety requirements	EN 60924	1991
A1	1993		A1	1994
IEC 60972	1989	Classification and interpretation of new lighting products	-	-
A1	1991	Classification and interpretation of new lighting products	-	-
IEC 60989	1991	Separating transformers, autotransformers, variable transformers and reactors	-	-
IEC 60990	1990	Methods of measurement of touch-current and protective conductor current	-	-
IEC 61032	1990	Test probes to verify protection by enclosures	HD 601 S1 <sup>15)</sup>	1991
IEC 61046	1993	D.C. or a.c. supplied electronic step-down converters for filament lamps - General and safety requirements	EN 61046	1994
A1	1995		A1	1996
IEC 61058-1	1990	Switches for appliances Part 1: General requirements	EN 61058-1	1992
A1	1993		A1	1993
A2	1994		-	-
IEC 61167	1992	Metal halide lamps	EN 61167	1994
A1	1995		A1	1995
IEC 61184 (mod)	1993	Bayonet lampholders	EN 61184 <sup>16)</sup>	1994
IEC 61195	1993	Double-capped fluorescent lamps - Safety specifications	EN 61195 <sup>17)</sup>	1994

13) EN 60901 and its amendments are superseded by EN 60901:1996; which is based on IEC 60901:1996.

14) EN 60922 and its amendment are superseded by EN 60922:1997; which is based on IEC 60922:1997.

15) HD 601 is superseded by EN 61032:1998, which is based on IEC 61032:1997.

16) EN 61184 is superseded by EN 61184:1997, which is based on IEC 61184:1997.

17) EN 61195 is superseded by EN 61195:1999, which is based on IEC 61195:1999.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61199	1993	Single-capped fluorescent lamps - Safety specifications	EN 61199 <sup>18)</sup>	1994
ISO 75-2	1993	Plastics - Determination of temperature of deflection under load Part 2: Plastics and ebonite	EN ISO 75-2	1996
ISO 1891	1979	Bolts, screws, nuts and accessories - Terminology and nomenclature	-	-
ISO 4046	1978	Paper, board, pulp and related terms - Vocabulary	-	-

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<sup>18)</sup> EN 61199 is superseded by EN 61199:1999, which is based on IEC 61199:1999.

## 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.

<u>Clause</u>	<u>Special national condition</u>
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2.2	If in the CENELEC countries the wiring rules do not allow luminaires of class 0, then luminaires shall not be classified according to the type of protection against electric shock provided, as class 0.
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NOTE In Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Norway, Sweden and the United Kingdom, wiring rules do not allow any luminaire to be class 0. In Italy, wiring rules do not allow any luminaire to be class 0 except in special installations called 'insulated installations'.

3.3	<b>Denmark</b>
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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



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"

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.

**France**

Socket-outlets 10/16 A intended for providing power to other appliances except those supplied by an isolating transformer shall be shuttered in accordance with standard sheet V of CEE Publication 7 and with clauses 9 and 20 of IEC 60884-1.

5.2.1 **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:

Class of luminaire		Plug	
		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.

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.

# ALTIJD DE ACTUELE NORM IN UW BEZIT HEBBEN?

Nooit meer zoeken in de systemen en uzelf de vraag stellen:  
“Is NEN-EN-IEC 60598-1:2000 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.

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## Heeft u vragen?

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

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