SVENSK STANDARD

SS-EN IEC 60598-2-18, utg 3:2022

Fastställd	Sida	Ansvarig kommitté
2022-10-19	1 (1+14)	SEK TK 34

Ljusarmatur –
Säkerhet –
Del 2-18: Särskilda fordringar på armatur för badbassänger och liknande

Luminaires –
Part 2-18: Particular requirements –
Luminaires for swimming pools and similar applications

Som svensk standard gäller europastandarden EN IEC 60598-2-18:2022. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60598-2-18:2022.

Nationellt förord

Europastandarden EN IEC 60598-2-18:2022

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60598-2-18, Third edition, 2022 - Luminaires - Part 2-18: Particular requirements - Luminaires for swimming pools and similar applications**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN IEC 60598-1, utg 9:2021.

Tidigare fastställd svensk standard SS-EN 60598-2-18, utg 2:1994 med ändringarna SS-EN 60598-2-18, utg 2:1994/C1:1996 och SS-EN 60598-2-18, utg 2:1994/A1:2012, gäller ej fr o m 2025-09-21.

ICS 29.140.40; 97.220.10

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60598-2-18

September 2022

ICS 29.140.40; 97.220.10

Supersedes EN 60598-2-18:1994;
EN 60598-2-18:1994/corrigendum May 1996;
EN 60598-2-18:1994/A1:2012

English Version

Luminaires - Part 2-18: Particular requirements - Luminaires for swimming pools and similar applications (IEC 60598-2-18:2022)

Luminaires - Partie 2-18: Exigences particulières - Luminaires pour piscines et usages analogues (IEC 60598-2-18:2022)

Leuchten - Teil 2: Besondere Anforderungen - Hauptabschnitt 18: Leuchten für Schwimmbecken und ähnliche Anwendungen (IEC 60598-2-18:2022)

This European Standard was approved by CENELEC on 2022-09-21. 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.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 34D/1663/FDIS, future edition 3 of IEC 60598-2-18, prepared by SC 34D "Luminaires" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60598-2-18:2022.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2023-06-21
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2025-09-21

This document supersedes EN 60598-2-18:1994 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60598-2-18:2022 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 61558 (series) NOTE Harmonized as EN 61558 (series)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN IEC 60598-1	-
IEC 60364-7-702	-	Low-voltage electrical installations - Part 7-702: Requirements for special installations or locations - Swimming pools and fountains	HD 60364-7-702	-
-	-	Electric cables - Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U) - Part 2-21: Cables for general applications - Flexible cables with crosslinked elastomeric insulation	EN 50525-2-21	2011

IEC 60598-2-18

Edition 3.0 2022-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Luminaires –
Part 2-18: Particular requirements – Luminaires for swimming pools and similar applications

Luminaires –
Partie 2-18: Exigences particulières – Luminaires pour piscines et usages analogues

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LUMINAIRES –

Part 2-18: Particular requirements – Luminaires for swimming pools and similar applications

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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IEC 60598-2-18 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lighting. It is an International Standard.

This third edition cancels and replaces the second edition published in 1993 and Amendment 1:2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) references to Part 1 have been updated;
b) some subclauses have been renumbered;
c) the standard has been redrafted such that it is applicable to both filament lamps and LED light sources;
d) marking requirements have been updated and 18.5.3 of the previous edition has been deleted;

e) 18.10.3 of the previous edition has been deleted, as it is no longer relevant, following the update of requirements for cross-sectional areas of external and internal cables in Section 5 of Part 1;

f) 18.10.4 and 18.10.5 of the previous edition renumbered as 18.11.4 and 18.11.5 in this edition have been adapted to allow the use of an alternative waterproof multi-core cable that conforms to the waterproof test of Annex D and Annex E of EN 50525-2-21:2011 or to an equivalent regional standard;

g) in 18.11 (18.10 in the previous edition), the cross-sectional area of wiring has been aligned with Part 1;

h) in 18.11 (18.10 in the previous edition), the types of cables have been updated with alternative regional cables.

The text of this International Standard is based on the following documents:

Draft	Report on voting
34D/1663/FDIS	34D/1667/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This Part 2-18 is to be used in conjunction with the latest edition of IEC 60598-1 and its amendment(s). It was established on the basis of the ninth edition (2020) of that standard.

NOTE 1 When "Part 1" is mentioned in this document, it refers to IEC 60598-1.

NOTE 2 In this document, the following print type is used:

– compliance statements: *in italic type*.

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

INTRODUCTION

For this third edition of IEC 60598-2-18 the main technical changes comprise the following.

For LED luminaires with bus control, multi-core cables which are suitable for the transmission of data streams are often used. These cables are not standardized. Subclauses 18.10.4 and 18.10.5 of the previous edition allowed the use of H05 RN-F cables but this type of cable is not suitable for the transmission of data streams.

Table 5.1 of Part 1 does not specify a special cable type for luminaires of protection class III. Therefore 18.10.4 and 18.10.5 of the previous edition renumbered as 18.11.4 and 18.11.5 in this edition have been adapted to allow an alternative waterproof multi-core cable that conforms to the waterproof test of Annex D and Annex E of EN 50525-2-21:2011 or to an equivalent regional standard.

Due to the update of Section 5 of IEC 60598-1 regarding cross-sectional areas of external and internal cables, 18.10.3 of the previous edition is no longer relevant. Subclause 18.10.3 was given as a less stringent requirement but in the meantime the requirements of IEC 60598-1 have become less stringent. Therefore 18.10.3 has been deleted.

LUMINAIRES –

Part 2-18: Particular requirements – Luminaires for swimming pools and similar applications

18.1 Scope

This part of IEC 60598 specifies requirements for fixed luminaires intended for use in water, or in contact with water, in, for example, the basins of swimming pools, fountains, paddling pools, and garden pools, and for use with electric light sources.

NOTE Electrical installation rules for swimming pools are given in IEC 60364-7-702.

This document does not cover luminaires not in contact with water (e.g. mounted behind a glass panel which is separate from the luminaire) or hand-held or portable luminaires.

18.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60598-1, *Luminaires – Part 1: General requirements and tests*

IEC 60364-7-702, *Low-voltage electrical installations – Part 7-702: Requirements for special installations or locations – Swimming pools and fountains*

EN 50525-2-21:2011, *Electric cables – Low voltage energy cables of rated voltages up to and including 450/750 V (U_0/U) – Part 2-21: Cables for general applications – Flexible cables with crosslinked elastomeric insulation*