



SLOVENSKI STANDARD
SIST EN IEC 60598-2-20:2024

01-september-2024

Svetilke - 2-20. del: Posebne zahteve - Svetlobni nizi (IEC 60598-2-20:2022)

Luminaires - Part 2-20: Particular requirements - Lighting chains (IEC 60598-2-20:2022)

Leuchten - Teil 2-20: Besondere Anforderungen – Lichterketten (IEC 60598-2-20:2022)

Luminaires - Partie 2-20: Exigences particulières - Guirlandes lumineuses (IEC 60598-2-20:2022)

Ta slovenski standard je istoveten z: EN IEC 60598-2-20:2024

ICS:

29.140.40

Svetila

Luminaires

SIST EN IEC 60598-2-20:2024

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60598-2-20

June 2024

ICS 29.140.40

Supersedes EN 60598-2-20:2015; EN 60598-2-20:2015/AC:2017-01

English Version

Luminaires - Part 2-20: Particular requirements - Lighting chains (IEC 60598-2-20:2022)

Luminaires - Partie 2-20: Exigences particulières -
Guirlandes lumineuses
(IEC 60598-2-20:2022)

Leuchten - Teil 2-20: Besondere Anforderungen -
Lichterketten
(IEC 60598-2-20:2022)

This European Standard was approved by CENELEC on 2022-03-07. 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 CEN-CENELEC Management Centre 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 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.

[SIST EN IEC 60598-2-20:2024](https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024)

<https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024>



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

EN IEC 60598-2-20:2024 (E)**European foreword**

The text of document 34D/1646/FDIS, future edition 5 of IEC 60598-2-20, 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 60598-2-20:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-12-28 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-06-28 document have to be withdrawn

This document supersedes EN 60598-2-20:2015 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.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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.

iTeh Standards

(<https://standards.iteh.ai>)

Endorsement notice

Document Preview

The text of the International Standard IEC 60598-2-20:2022 was approved by CENELEC as a European Standard without any modification.

[SIST EN IEC 60598-2-20:2024](https://standards.iteh.ai)

<https://standards.iteh.ai> In the official version, for Bibliography, the following notes have to be added for the standard indicated: [98-2-20-2024](https://standards.iteh.ai)

IEC 60598-2-4 NOTE Approved as EN 60598-2-4

IEC 60598-2-21 NOTE Approved as EN 60598-2-21



IEC 60598-2-20

Edition 5.0 2022-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Luminaire –
Part 2-20: Particular requirements – Lighting chains**

**Luminaire –
Partie 2-20: Exigences particulières – Guirlandes lumineuses**

[SIST EN IEC 60598-2-20:2024](https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024)

<https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.140.40

ISBN 978-2-8322-4237-7

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD	4
INTRODUCTION	6
20.1 Scope	7
20.2 Normative references	7
20.3 Terms and definitions	8
20.4 General test requirements	10
20.5 Classification of luminaires	10
20.5.1 General	10
20.5.2 Protection against electric shock	10
20.5.3 Protection against dust, solid objects and moisture	10
20.6 Marking	10
20.6.1 General	10
20.6.2 Lighting chain marking	11
20.6.3 Lighting chain and packaging marking	11
20.6.4 Packaging or instructions marking	11
20.7 Construction	12
20.7.1 General	12
20.7.2 Lampholders	12
20.7.3 Terminal blocks	12
20.7.4 Terminals and supply connections	13
20.7.5 Gaskets	13
20.7.6 Mechanical strength	13
20.7.7 Lamp bridging devices	13
20.7.8 Control units and controlgear	13
20.7.9 Lamp rotation	14
20.7.10 Lamp insertion and withdrawal force	14
20.7.11 Lamp mechanical requirements	14
20.7.12 Temporarily installed protected lighting (TPL) chains	14
20.8 Creepage distances and clearances	15
20.9 Provisions for earthing	15
20.10 Terminals	15
20.11 External and internal wiring	15
20.11.1 General	15
20.11.2 Cables for lighting chains	15
20.11.3 Cord anchorage test	16
20.11.4 Plugs and cable length	16
20.11.5 Maximum length of extendable class II lighting chains	16
20.12 Protection against electric shock	17
20.12.1 General	17
20.12.2 Divisible plug	17
20.12.3 Electrification of decorations	17
20.12.4 Contacts of push-in lampholders	18
20.12.5 Blanking plugs	18
20.13 Endurance tests and thermal tests	19
20.13.1 General	19

20.13.2	Test voltage	19
20.13.3	Lamp bridging devices.....	19
20.13.4	Short-circuit test of rectifier	19
20.14	Resistance to dust, solid objects and moisture	19
20.15	Insulation resistance and electric strength	20
20.16	Resistance to heat, fire and tracking.....	20
Annex A (normative) Requirements for interconnecting connectors for use in lighting chains		21
Bibliography.....		23
Figure 1 – Examples of different types of lighting chains.....		10
Figure 2 – Example of a connector to a divisible plug for lighting chains		17
Figure 3 – Example of test device suitable for checking security of lampholder contacts		18
Table 1 – Cable or cord types for lighting chains.....		15
Table 2 – Conductor size for lighting chains.....		16

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 60598-2-20:2024](https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024)

<https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

Part 2-20: Particular requirements – Lighting chains

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60598-2-20 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lighting. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2014. This edition constitutes a technical revision.

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

- a) specific provisions for temporarily installed protected lighting (TPL) chains have been added;
- b) new terms and definitions have been added.

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

Draft	Report on voting
34D/1646/FDIS	34D/1651/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 2-20 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 types are used:

– *compliance statements: in italic type.*

A list of all the 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.

iTeh Standards
www.itesh.com
 Document Preview

SIST EN IEC 60598-2-20:2024

<https://standards.itec.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024>

INTRODUCTION

This new edition includes the following technical changes:

a) Inclusion of specific provisions for temporarily installed protected lighting (TPL) chains.

This form of lighting chain was not previously addressed with specific provisions in previous editions of the standard. A temporarily installed protected lighting chain is a physical impact protected rough service lighting chain intended for temporary installation on building sites during the construction or demolition phases of a building project.

b) Addition of terms and definitions

New terms and definitions have been added to include the expanded typology for lighting chains and to include a connector with breaking capacity (CBC).

c) Inclusion of graphical depictions of lighting chains

Graphical depictions have been added to clarify and differentiate the construction and installation configurations of the various different types of lighting chains. Word descriptions alone had limitations in clearly and precisely defining the characteristics of the numerous variants in this luminaire sector.

The illustrations show the three main types of lighting chains: permanently installed lighting chains, temporarily installed lighting chains and temporarily installed protected lighting (TPL) chains, as well as further differentiating by installation and/or fixing method where applicable.

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 60598-2-20:2024](https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024)

<https://standards.iteh.ai/catalog/standards/sist/2807ad0a-c6f4-4594-9b7b-f32b061009bb/sist-en-iec-60598-2-20-2024>