IEC 60598-2-23

Edition 2.0 2020-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Luminaires –
Part 2-23: Particular requirements – Extra-low-voltage lighting systems for ELV light sources

Luminaires –
Partie 2-23: Exigences particulières – Systèmes d'éclairage à très basse tension pour sources de lumière TBT:

IEC 60598-2-23:2020-07(en-fr)

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IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

Part 2-23: Particular requirements – Extra-low-voltage lighting systems for ELV light sources

FOREWORD

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International Standard IEC 60598-2-23 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 1996 and Amendment 1:2000. This edition constitutes a technical revision.

This edition includes the following technical changes with respect to the previous edition (there are no major technical changes, see Annex A):

a) The title has been modified to allow the inclusion of other light sources;
b) The scope has been updated to be aligned with the other parts of the IEC 60598-2 series and to include other light sources;
c) Normative references and the reference to transformer and controlgear standards have been updated;
d) The short circuit test (23.7.6.1 and 23.7.6.2) was removed and reference is now made to the same test in Part 1.

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

FDIS	Report on voting
34D/1543/FDIS	34D/1557/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2-23 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 (20XX) of that standard (under preparation).

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

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

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

- *compliance statements: in italic type*

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

- reconfirmed,
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LUMINAIRES –

Part 2-23: Particular requirements – Extra-low-voltage lighting systems for ELV light sources

23.1 Scope

This part of IEC 60598 specifies requirements for extra-low-voltage lighting systems for ELV light sources, intended for ordinary interior use on supply voltages not exceeding 1 000 V. The luminaires, being connected in parallel, are supplied via freely suspended continuous supporting conductors or profiles, the current in the ELV part of the system not exceeding 25 A.

23.2 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 TR 60083, *Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC*

IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

IEC 61347-2-2, *Lamp controlgear – Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps*

IEC 61347-2-13, *Lamp controlgear – Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules*

IEC 61558-2-6, *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V – Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers*

IEC 61558-2-16, *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V – Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units*

23.3 Terms and definitions

For the purposes of this document, the terms and definitions given in Part 1 and the following apply (see Figure 1).

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

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23.3.1
extra-low-voltage lighting system
lighting system in kit form for light sources consisting of a transformer/convertor or controlgear, supporting conductors and luminaires, as well as all the necessary fixing devices and the electrical/mechanical connectors

23.3.2
supporting conductor
conductive span wire or profile freely spanned or mounted between the main points of support, serving to supply the luminaires, and carrying the mass of the luminaires of the extra-low-voltage lighting system

23.3.3
main support
device ensuring a sufficient mechanical connection of the supporting conductor(s) with the appropriate parts of the building in which the extra-low-voltage lighting system is to be used

Note 1 to entry: Auxiliary supports may be necessary between the main supports.

23.3.4
auxiliary support
device along the supporting conductor to hold it in its intended position

23.3.5
spacer
device maintaining the supporting conductors at the intended separation distance

23.3.6
connector for supporting conductor
component for connecting electrically the supporting conductor(s) to the transformer/convertor or controlgear

23.3.7
luminaire connector
component for connecting electrically and mechanically the luminaire to the supporting conductor

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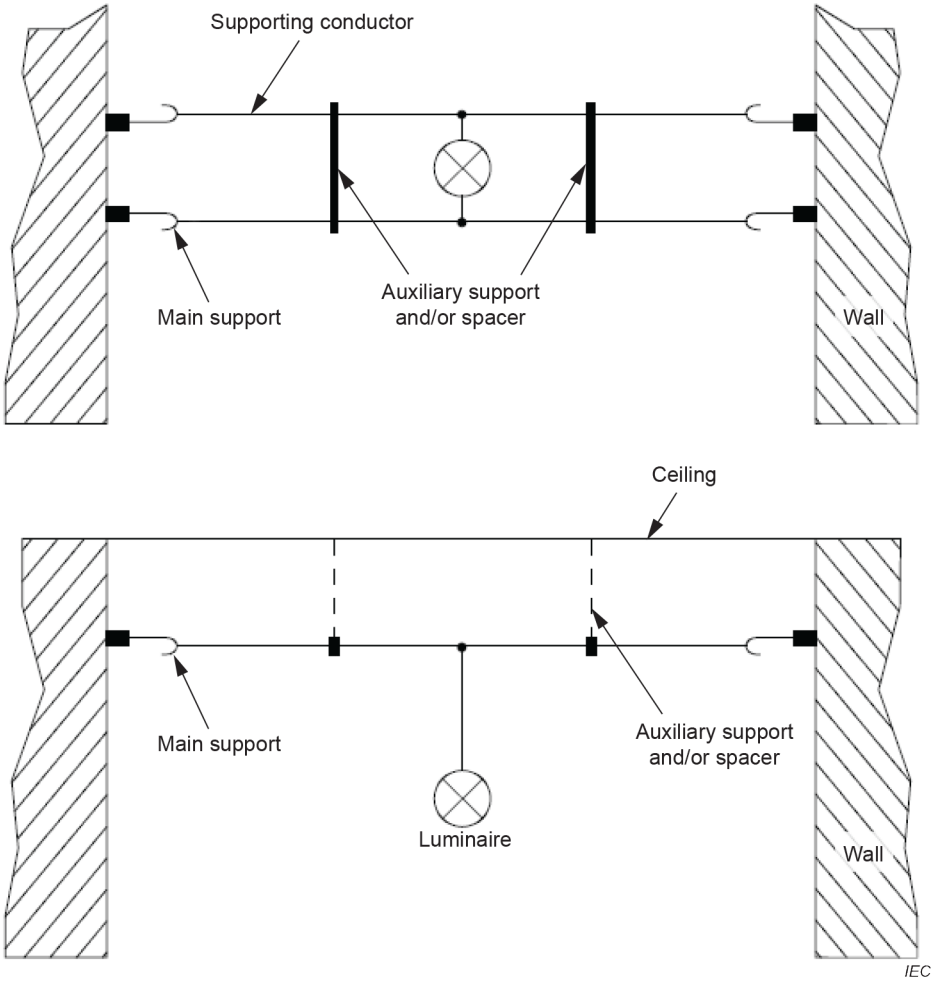

Figure 1 – Typical supporting methods for lighting systems

23.4 General test requirements

The provisions of Section 0 of Part 1 apply. The tests described in each appropriate section of Part 1 shall be carried out in the order listed in this document.

Type tests shall be carried out on the complete extra-low-voltage lighting system as provided by the manufacturer.

23.5 Classification

Extra-low-voltage lighting systems shall be classified in accordance with the provisions of Section 2 of Part 1, together with the following requirement.

Luminaires in extra-low-voltage lighting systems shall be class III.

23.6 Marking

The provisions of Section 3 of Part 1 apply, together with the following requirements.

The extra-low-voltage lighting system shall be accompanied by installation instructions, including a complete list of all parts belonging to the system. The number and type of each part shall be clearly shown.

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