AS/NZS 60598.2.23:2021

Australian/New Zealand Standard™

Luminaires

Part 2.23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources (IEC 60598-2-23:2020 (ED.2.0) MOD)

AS/NZS 60598.2.23:2021

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The following are represented on Committee EL-041:

Australian Industry Group
Better Regulation Division (Fair Trading, Safework NSW, TestSafe)
CHOICE
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Department of Industry, Science, Energy and Resources
Electrical Compliance Testing Association of Australia
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Joint Accreditation System of Australia & New Zealand
Joint Accreditation System of Australia and New Zealand —New Zealand
Lighting Council Australia
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Part 2.23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources (IEC 60598-2-23:2020 (ED.2.0) MOD)

First published as AS/NZS 60598.2.23:2002.
Second edition 2021.

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 60598.2.23:2002, *Luminaires, Part 2.23: Particular requirements - Extra low voltage* lighting systems *for filament lamps* (IEC 60598.2.23:1996 MOD)

The objective of this document is to specify 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.

The essential safety requirements of AS/NZS 3820, *Essential safety requirements for electrical equipment*, which could be applicable to lighting products within the scope of this document, are covered by this document.

This document is an adoption with national modifications, and has been reproduced from, IEC 60598-2-23:2020, *Luminaires — Part 2-23: Particular requirements — Extra-low-voltage lighting systems for ELV light sources*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ lists the variations to IEC 60598-2-23:2020 for the application of this document in Australia and New Zealand.

As this document has been reproduced from an International Standard the following applies:

(a) In the source text “this part of IEC 60598” should read “this document”.

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LUMINAIRES –

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

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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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.

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

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