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Controlgear for electric light sources – Safety –
Part 2-13: Particular requirements – Electronic controlgear for LED light sources

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TITLE:

Controlgear for electric light sources - Safety - Part 2-13: Particular requirements - Electronic controlgear for LED light sources

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NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-13: Particular requirements – Electronic controlgear for LED light sources

FOREWORD

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IEC 61347-2-13 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lighting. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014 and Amendment 1:2016. This edition constitutes a technical revision.

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

a) alignment with respect to the fourth edition of IEC 61347-1:
   – introduction of dated references to the fourth edition of IEC 61347-1 as appropriate;
   – deletion of the clauses and subclauses which are either no longer relevant or now covered in IEC 61347-1;
b) update of normative references, introducing dated references where appropriate;
c) scope extension to 1 500 V for direct current;
d) scope clarification;
e) deletion of unused definitions;
f) revision of information and marking requirements;
g) new marking requirement "electronic controlgear for LED light sources";
h) new requirements for electronic controlgear for LED light sources with constant light output function or programmable current (additions to Clause 3, Clause 6, Clause 16 and Clause 18);
i) modification of requirements for the determination of the output working voltage (new Clause 17);
j) new requirements for the determination of the rated output characteristics (Clause 18).

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

Draft	Report on voting
34C/XX/FDIS	34C/XX/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/publications.

This document is intended to be used in conjunction with IEC 61347-1:—[1]. Where the requirements of any of the clauses of IEC 61347-1:— are referred to in this document by the phrase "IEC 61347-1:—, Clause n applies", this phrase is interpreted as meaning that all the requirements of the clause in question of IEC 61347-1:— apply, except any which are clearly inapplicable to the specific type of controlgear covered by this document.

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

– *compliance statements: in italic type*.

A list of all parts in the IEC 61347 series, published under the general title *Controlgear for electric light sources – Safety* can be found on the IEC website.

Future documents in this series will carry the new general title as cited above. Titles of existing documents in this series will be updated at the time of the next edition.

[1] Fourth edition under preparation. Stage at the time of publication IEC FDIS 61347-1:2024.

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, or
- revised.

INTRODUCTION

This document specifies safety requirements for electronic controlgear for LED light sources. All general requirements, which apply to controlgear for electric light sources in general, regardless of the specific type of light source in question, are contained in IEC 61347-1. The corresponding general requirements apply to electronic controlgear for LED light sources by clause-wise reference in this document to any of the clauses of IEC 61347-1, thereby specifying the extent to which such a clause is applicable and the order in which the tests are performed.

In the same way, further documents exist specifying individual safety requirements for different types of controlgear related to different types of electric light sources which, together with this document, constitute the IEC 61347-2 series.

Any such parts of the IEC 61347-2 series are the leading documents for the safety assessment of the corresponding types of controlgear; it is not IEC 61347-1.

Also, all parts of the IEC 61347-2 series are self-contained and therefore typically do not include references to each other.

CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-13: Particular requirements – Electronic controlgear for LED light sources

1 Scope

This part of IEC 61347 specifies safety requirements for electronic controlgear for LED light sources for use on DC supplies up to 1 500 V or on AC supplies up to 1 000 V at 50 Hz or 60 Hz.

This document is applicable for electronic controlgear for LED light sources with an output voltage (RMS) not higher than 1 000 V.

NOTE 1 Control units, such as devices connected between the power supply unit and LED light sources that control or adjust the operation of LED light sources, are covered by this document.

NOTE 2 Performance requirements are covered by IEC 62384.

NOTE 3 Such controlgear can also be used for electric sources producing optical radiation with the same technology used for purposes different than illumination and producing radiation other than visible spectrum.

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 61347-1:—[2], *Controlgear for electric light sources – Safety – Part 1: General requirements*

IEC 61547, *Equipment for general lighting purposes – EMC immunity requirements*

IEC 62384:2020, *DC or AC supplied electronic controlgear for LED modules – Performance requirements*

[2] Fourth edition under preparation. Stage at the time of publication IEC FDIS 61347-1:2024.