IEC 62384

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INTERNATIONAL STANDARD

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DC or AC supplied electronic controlgear for LED modules – Performance requirements

Appareillages électroniques alimentés en courant continu ou alternatif pour modules de LED – Exigences de performances



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DC OR AC SUPPLIED ELECTRONIC CONTROLGEAR FOR LED MODULES – PERFORMANCE REQUIREMENTS

FOREWORD

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International Standard IEC 62384 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2006 and Amendment 1:2009. This edition constitutes a technical revision.

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

a) scope extension (direct current from 250 V to 1 000 V);
b) new specifications for measuring the power factor for controlgear with settable/non-constant output (for instance, to allow for constant light output);
c) deletion of audio frequency requirements;
d) selection of current test circuit by module capacitance (instead of selecting by having or not having logic circuitry) plus test circuit setup changes.

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

FDIS	Report on voting
34C/1488/FDIS	34C/1489/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 document is to be read in conjunction with IEC 61347-2-13.

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- withdrawn,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
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DC OR AC SUPPLIED ELECTRONIC CONTROLGEAR FOR LED MODULES – PERFORMANCE REQUIREMENTS

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1 Scope

This document specifies performance requirements for electronic controlgear for use on DC or AC supplies up to 1 000 V (alternating current at 50 Hz or 60 Hz) and with an output frequency which can deviate from the supply frequency, associated with LED modules according to IEC 62031. Controlgear for LED modules specified in this document are designed to provide constant voltage or current. Deviations from the pure voltage and current types do not exclude the gear from this document.

NOTE 1 The tests in this document are type tests. Requirements for testing individual controlgear during production are not included.

NOTE 2 Requirements for controlgear which incorporate means for varying the output power are under consideration.

NOTE 3 It can be expected that controlgear complying with this document will ensure satisfactory operation between 92 % and 106 % of the rated supply voltage, taking into account the specifications of the LED module manufacturer.

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, *Lamp controlgear – Part 1: General and safety requirements*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61347-1 and the following apply.

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- IEC Electropedia: available at http://www.electropedia.org/
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3.1
total circuit power
total power dissipated by controlgear and LED module(s) in combination, at rated supply voltage of the controlgear and at the highest rated output load

3.2
circuit power factor
λ
ratio of the measured circuit power to the product of the supply voltage (RMS) and the supply current (RMS)