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Standards

Irish Standard  
I.S. EN IEC 62384:2020

# DC or AC supplied electronic controlgear for LED modules - Performance requirements

**I.S. EN IEC 62384:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

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EUROPEAN STANDARD

**EN IEC 62384**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2020

ICS 29.140.99; 31.080.99

Supersedes EN 62384:2006 and all of its amendments  
and corrigenda (if any)

English Version

**DC or AC supplied electronic controlgear for LED modules -  
Performance requirements  
(IEC 62384:2020)**

Appareillages électroniques alimentés en courant continu  
ou alternatif pour modules de LED - Exigences de  
performances  
(IEC 62384:2020)

Gleich- oder wechselstromversorgte elektronische  
Betriebsgeräte für LED-Module - Anforderungen an die  
Arbeitsweise  
(IEC 62384:2020)

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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 62384:2020 (E)**

### **European foreword**

The text of document 34C/1488/FDIS, future edition 2 of IEC 62384, prepared by SC 34C "Auxiliaries for lamps" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62384:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-03-17
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-17

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IEC 62031      NOTE      Harmonized as EN IEC 62031

## **Annex ZA**

(normative)

### **Normative references to international publications with their corresponding European publications**

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61347-1	-	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	-
IEC 61347-2-13	-	Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	EN 61347-2-13	-

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**IEC 62384**

Edition 2.0 2020-05

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**



**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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**IEC 62384**

Edition 2.0 2020-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**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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ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### 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 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.

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

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

### 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.

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>

#### 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**

$\lambda$

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

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