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INTERNATIONAL STANDARD

colour inside

~~Lamp control gear –~~
Controlgear for electric light sources – Safety –
Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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~~LAMP CONTROL GEAR –~~ CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

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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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61347-2-3:2011+AMD1:2016 CSV. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 61347-2-3 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 2011 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) introduction of dated references where appropriate;

b) clarification of sample item numbers;

c) alignment of clause numbers with those of IEC 61347-1.

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

Draft	Report on voting
34C/1586/CDV	34C/1594/RVC

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 61347-1:2015 and IEC 61347-1:2015/AMD1:2017. Where the requirements of any of the clauses of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017 are referred to in this document by the phrase "IEC 61347-1:2015, Clause n and IEC 61347-1:2015/AMD1:2017, Clause n apply", this phrase is interpreted as meaning that all the requirements of the clause in question of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017 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.

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,
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- revised.

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

~~This second edition of IEC 61347-2-3, published in conjunction with IEC 61347-1, represents an review of the first edition of IEC 61347-2-3. The formatting into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognized.~~

~~This standard, and the parts which make up IEC 61347-2, in referring to any of the clauses of IEC 61347-1, specify the extent to which such a clause is applicable and the order in which the tests are to be performed; they also include additional requirements, as necessary. All parts which make up IEC 61347-2 are intended to be self-contained and, therefore, do not include references to each other. However, for the case of emergency lighting lamp control gear, some cross-referencing has been necessary.~~

~~Where the requirements of any of the clauses of IEC 61347-1 are referred to in this standard by the phrase "The requirements of clause n of IEC 61347-1 apply", this phrase is interpreted as meaning that all requirements of the clause in question of part 1 apply, except any which are clearly inapplicable to the specific type of lamp control gear covered by this particular part of IEC 61347-2.~~

The technical requirements in this document compared to IEC 61347-2-3:2011 and IEC 61347-2-3:2011/AMD1:2016 are essentially unchanged. Nevertheless, a new edition of this document could not be avoided, as without the introduction of dated references to IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017, the fourth edition of IEC 61347-1:—[1] would have been implicitly applicable due to the undated nature of the references to IEC 61347-1 in IEC 61347-2-3:2011 and IEC 61347-2-3:2011/AMD1:2016.

This document, in referring to any of the clauses of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017, specifies the extent to which such a clause is applicable. Additional requirements are also included, as necessary.

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

~~LAMP CONTROL GEAR –~~
CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

1 Scope

This part of IEC 61347 specifies safety requirements for electronic controlgear for use on AC supplies at 50 Hz or 60 Hz up to 1 000 V ~~and/~~or on DC supplies up to 1 000 V with lamp operating frequencies deviating from the supply frequency, associated with fluorescent lamps as specified in IEC 60081 and IEC 60901, low-pressure UV lamps, and other fluorescent lamps for high-frequency operation.

NOTE 1 Requirements for centrally supplied controlgear for emergency lighting are given in Annex B. This also includes performance requirements as far as they are considered to be safety-related with respect to reliable emergency operation.

NOTE 2 Requirements for emergency lighting controlgear operating from non-centralised power supplies are given in IEC 61347-2-7.

NOTE 3 Performance requirements are the subject of IEC 60929.

~~Performance requirements are the subject of IEC 60929.~~

~~Particular requirements for electronic control gear with means protection against overheating are given in Annex C.~~

~~For emergency lighting operation, particular requirements for control gear operated from a central supply are given in Annex J. Performance requirements appropriate to the safe operation of emergency lighting are also contained in Annex J.~~

~~Requirements for emergency lighting control gear operating from non-centralised power supplies are given in IEC 61347-2-7.~~

~~NOTE Performance requirements detailed by Annex J are those considered to be safety-related with respect to reliable emergency operation.~~

2 Normative references

~~For the purposes of this document, the normative references given in Clause 2 of IEC 61347-1 which are mentioned in this standard apply, together with the following 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 60081:1997, *Double-capped fluorescent lamps – Performance specifications*
IEC 60081:1997/AMD1:2000
IEC 60081:1997/AMD2:2003
IEC 60081:1997/AMD3:2005
IEC 60081:1997/AMD4:2010
IEC 60081:1997/AMD5:2013
IEC 60081:1997/AMD6:2017

IEC 60901:1997, *Single-capped fluorescent lamps – Performance specifications*
IEC 60901:1997/AMD1:1997
IEC 60901:1997/AMD2:2000
IEC 60901:1997/AMD3:2004
IEC 60901:1997/AMD4:2007
IEC 60901:1997/AMD5:2011
IEC 60901:1997/AMD6:2014

IEC 60929:2011, *AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements*
IEC 60929:2011/AMD1:2015

IEC 61347-1:~~2007~~2015, *Lamp controlgear – Part 1: General and safety requirements*
IEC 61347-1:2015/AMD1:~~2010~~2017

IEC 61347-2-7:2011, *Lamp controlgear – Part 2-7: Particular requirements for ~~battery~~ electric source for safety services (ESSS) supplied electronic controlgear for emergency lighting (self-contained)*~~1~~
IEC 61347-2-7:2011 /AMD1:2017
IEC 61347-2-7:2011 /AMD2:2021

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

~~1 To be published~~

IEC 61347-2-3

Edition 3.0 2024-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Controlgear for electric light sources – Safety – Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

Appareillages de commande pour les sources de lumière électriques – Sécurité – Partie 2-3: Exigences particulières – Appareillages électroniques alimentés en courant alternatif ou en courant continu pour lampes fluorescentes



IEC 61347-2-3:2024-05(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

FOREWORD

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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 61347-1:2015 and IEC 61347-1:2015/AMD1:2017. Where the requirements of any of the clauses of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017 are referred to in this document by the phrase "IEC 61347-1:2015, Clause n and IEC 61347-1:2015/AMD1:2017, Clause n apply", this phrase is interpreted as meaning that all the requirements of the clause in question of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017 apply, except any which are clearly inapplicable to the specific type of controlgear covered by this document.

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INTRODUCTION

The technical requirements in this document compared to IEC 61347-2-3:2011 and IEC 61347-2-3:2011/AMD1:2016 are essentially unchanged. Nevertheless, a new edition of this document could not be avoided, as without the introduction of dated references to IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017, the fourth edition of IEC 61347-1:—[1] would have been implicitly applicable due to the undated nature of the references to IEC 61347-1 in IEC 61347-2-3:2011 and IEC 61347-2-3:2011/AMD1:2016.

This document, in referring to any of the clauses of IEC 61347-1:2015 and IEC 61347-1:2015/AMD1:2017, specifies the extent to which such a clause is applicable. Additional requirements are also included, as necessary.

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

CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –

Part 2-3: Particular requirements – AC or DC supplied electronic controlgear for fluorescent lamps

1 Scope

This part of IEC 61347 specifies safety requirements for electronic controlgear for use on AC supplies at 50 Hz or 60 Hz up to 1 000 V or on DC supplies up to 1 000 V with lamp operating frequencies deviating from the supply frequency, associated with fluorescent lamps as specified in IEC 60081 and IEC 60901, low-pressure UV lamps, and other fluorescent lamps for high-frequency operation.

NOTE 1 Requirements for centrally supplied controlgear for emergency lighting are given in Annex B. This also includes performance requirements as far as they are considered to be safety-related with respect to reliable emergency operation.

NOTE 2 Requirements for emergency lighting controlgear operating from non-centralised power supplies are given in IEC 61347-2-7.

NOTE 3 Performance requirements are the subject of IEC 60929.

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.

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IEC 60081:1997/AMD2:2003
IEC 60081:1997/AMD3:2005
IEC 60081:1997/AMD4:2010
IEC 60081:1997/AMD5:2013
IEC 60081:1997/AMD6:2017

IEC 60901:1997, *Single-capped fluorescent lamps – Performance specifications*
IEC 60901:1997/AMD1:1997
IEC 60901:1997/AMD2:2000
IEC 60901:1997/AMD3:2004
IEC 60901:1997/AMD4:2007
IEC 60901:1997/AMD5:2011
IEC 60901:1997/AMD6:2014

IEC 60929:2011, *AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements*
IEC 60929:2011/AMD1:2015

IEC 61347-1:2015, *Lamp controlgear – Part 1: General and safety requirements*
IEC 61347-1:2015/AMD1:2017

IEC 61347-2-7:2011, *Lamp controlgear – Part 2-7: Particular requirements for electric source for safety services (ESSS) supplied electronic controlgear for emergency lighting (self-contained)*
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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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APPAREILLAGES DE COMMANDE POUR LES SOURCES DE LUMIÈRE ÉLECTRIQUES – SÉCURITÉ –

Partie 2-3: Exigences particulières – Appareillages électroniques alimentés en courant alternatif ou en courant continu pour lampes fluorescentes

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L'IEC 61347-2-3 a été établie par le sous-comité 34C: Appareils auxiliaires pour lampes, du comité d'études 34 de l'IEC: Éclairage. Il s'agit d'une Norme internationale.

Cette troisième édition annule et remplace la deuxième édition parue en 2011 et l'Amendement 1:2016. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) ajout de références datées le cas échéant;

b) clarification des numéros d'entités d'échantillonnage;

c) alignement des numéros d'articles sur ceux de l'IEC 61347-1.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
34C/1586/CDV	34C/1594/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications/.

Le présent document est destiné à être utilisé conjointement avec l'IEC 61347-1:2015 et l'IEC 61347-1:2015/AMD1:2017. Lorsque les exigences de l'un des articles de l'IEC 61347-1:2015 et de l'IEC 61347-1:2015/AMD1:2017 sont citées en référence dans le présent document par la phrase "L'IEC 61347-1:2015, Article n et l'IEC 61347-1:2015/AMD1:2017, Article n s'appliquent", cette phrase signifie que l'ensemble des exigences de cet article de l'IEC 61347-1:2015 et de l'IEC 61347-1:2015/AMD1:2017 s'appliquent, excepté les exigences qui ne s'appliquent explicitement pas au type particulier d'appareillage couvert par le présent document.

NOTE Dans le présent document, les caractères d'imprimerie suivants sont utilisés:

– *déclarations de conformité: caractères italiques.*

Une liste de toutes les parties de la série IEC 61347, publiées sous le titre général *Appareillages de commande pour les sources de lumière électriques – Sécurité*, se trouve sur le site web de l'IEC.

Les futurs documents de cette série porteront le nouveau titre général cité ci-dessus. Le titre des documents qui existent déjà dans cette série sera mis à jour lors de leur prochaine édition.

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INTRODUCTION

Les exigences techniques spécifiées dans le présent document par rapport à l'IEC 61347-2-3:2011 et à l'IEC 61347-2-3:2011/AMD1:2016 n'ont pratiquement pas évolué. Néanmoins, l'élaboration d'une nouvelle édition du présent document était inévitable, car sans l'ajout de références datées à l'IEC 61347-1:2015 et l'IEC 61347-1:2015/AMD1:2017, l'applicabilité de la quatrième édition de l'IEC 61347-1:—[1] aurait été implicite en raison des références à l'IEC 61347-1 non datées dans l'IEC 61347-2-3:2011 et l'IEC 61347-2-3:2011/AMD1:2016.

Lorsque le présent document fait référence à l'un des articles de l'IEC 61347-1:2015 et l'IEC 61347-1:2015/AMD1:2017, celui-ci spécifie le degré d'applicabilité de cet article. Des exigences supplémentaires sont également fournies, lorsque cela est nécessaire.

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1 Quatrième édition en cours d'élaboration. Stade à la date de publication IEC FDIS 61347-1:2024.

APPAREILLAGES DE COMMANDE POUR LES SOURCES DE LUMIÈRE ÉLECTRIQUES – SÉCURITÉ –

Partie 2-3: Exigences particulières – Appareillages électroniques alimentés en courant alternatif ou en courant continu pour lampes fluorescentes

1 Domaine d'application

La présente partie de l'EC 61347 spécifie les exigences de sécurité des appareillages électroniques destinés à être utilisés avec des alimentations jusqu'à 1 000 V en courant alternatif à 50 Hz ou 60 Hz ou avec des alimentations jusqu'à 1 000 V en courant continu avec des fréquences de fonctionnement des lampes différentes de la fréquence du réseau d'alimentation, associés aux lampes fluorescentes spécifiées dans l'IEC 60081 et l'IEC 60901, à des lampes à infrarouge à basse pression et à d'autres lampes fluorescentes fonctionnant à haute fréquence.

NOTE 1 Les exigences relatives aux appareillages à alimentation centralisée pour l'éclairage de secours sont fournies à l'Annexe B. Elles comprennent également les exigences de performance dans la mesure où celles-ci sont considérées comme liées à la sécurité pour la fiabilité du fonctionnement en mode secours.

NOTE 2 Les exigences relatives aux appareillages pour l'éclairage de secours fonctionnant à partir d'une alimentation non centralisée sont fournies dans l'IEC 61347-2-7.

NOTE 3 Les exigences de performance sont traitées dans l'IEC 60929.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60081:1997, *Lampes à fluorescence à deux culots – Prescriptions de performance*
IEC 60081:1997/AMD1:2000
IEC 60081:1997/AMD2:2003
IEC 60081:1997/AMD3:2005
IEC 60081:1997/AMD4:2010
IEC 60081:1997/AMD5:2013
IEC 60081:1997/AMD6:2017

IEC 60901:1997, *Lampes à fluorescence à culot unique – Prescriptions de performances*
IEC 60901:1997/AMD1:1997
IEC 60901:1997/AMD2:2000
IEC 60901:1997/AMD3:2004
IEC 60901:1997/AMD4:2007
IEC 60901:1997/AMD5:2011
IEC 60901:1997/AMD6:2014

IEC 60929:2011, *Appareillages électroniques alimentés en courant alternatif et/ou continu pour lampes tubulaires à fluorescence – Exigences de performances*
IEC 60929:2011/AMD1:2015

IEC 61347-1:2015, *Appareillages de lampes – Partie 1: Exigences générales et exigences de sécurité*
IEC 61347-1:2015/AMD1:2017

IEC 61347-2-7:2011, *Appareillages de lampes – Partie 2-7: Exigences particulières relatives aux appareillages électroniques alimentés par source électrique de sécurité (ESSS) pour l'éclairage de secours (autonome)*
IEC 61347-2-7:2011 /AMD1:2017
IEC 61347-2-7:2011 /AMD2:2021

IEC 61547, *Équipements pour l'éclairage à usage général – Exigences concernant l'immunité CEM*