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REDLINE VERSION

Belysningsmateriel – Drivdon för ljuskällor – Säkerhet –

Del 2-1: Särskilda fordringar på startanordningar andra än glimtändare

Controlgear for electric light sources –

Safety –

Part 2-1: Particular requirements –

Starting devices (other than glow starters)

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IEC 61347-2-1

Edition 2.0 2024-05
REDLINE VERSION

INTERNATIONAL STANDARD



~~Lamp controlgear –~~
Controlgear for electric light sources – Safety –
Part 2-1: Particular requirements – Starting devices (other than glow starters)

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.140.99

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 2-1: Particular requirements – Starting devices
(other than glow starters)**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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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 61347-2-1:2000+AMD1:2005+AMD2:2013 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 61347-2-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lighting. It is an International Standard.

This second edition cancels and replaces the first edition published in 2000, Amendment 1:2005 and Amendment 2:2013. This edition constitutes a technical revision.

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

- a) update of normative references, introducing dated references where appropriate;
- b) clarification of sample item numbers;
- c) alignment of clause numbers with those of IEC 61347-1;
- d) renumbering of Clause 15 and Clause 16.

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

Draft	Report on voting
34C/1582/CDV	34C/1590/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,
- withdrawn, or
- 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 first edition of IEC 61347-2-1, published in conjunction with IEC 61347-1, represents an editorial review of IEC 60926. 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 self-contained and, therefore, do not include references to each other.~~

~~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 controlgear covered by this particular part of IEC 61347-2.~~

The technical requirements in this document compared to IEC 61347-2-1:2000, IEC 61347-2-1:2000/AMD1:2005 and IEC 61347-2-1:2000/AMD2:2013 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 61347-2-1:2000, IEC 61347-2-1:2000/AMD1:2005 and IEC 61347-2-1:2000/AMD2:2013.

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.

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

Part 2-1: Particular requirements – Starting devices (other than glow starters)

1 Scope

This part of IEC 61347 specifies safety requirements for starting devices (starters other than glow starters and ignitors) for fluorescent and other discharge lamps for use on AC supplies up to 1 000 V at 50 Hz or 60 Hz which produce starting pulses not greater than 100 kV and which are used in combination with lamps and ~~ballasts~~ controlgear covered in IEC 60081, IEC 60188, IEC 60192, IEC 60662, IEC 60901, IEC 61167, IEC 61195, IEC 61199, IEC 61347-2-8 and IEC 61347-2-9.

This document does not apply to glow starters or starting devices which are incorporated in discharge lamps or which are manually operated. ~~Preheat transformers for fluorescent lamps are covered by IEC 61347-2-8.~~

NOTE 1 Glow starters are dealt with in IEC 60155.

NOTE 2 Performance requirements are given in IEC 60927.

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 60052:2002, *Voltage measurement by means of standard air gaps*

IEC 60068-2-75:1997/2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60081, *Double-capped fluorescent lamps – Performance specifications*

IEC 60155:1993, *Glow-starters for fluorescent lamps*

IEC 60155:1993/AMD1:1995

IEC 60155:1993/AMD2:2006

~~IEC 60188, High-pressure mercury vapour lamps~~

~~IEC 60192, Low-pressure sodium vapour lamps~~

IEC 60255-8:1990², *Electrical relays – Part 8: Thermal electrical relays*

IEC 60598 (all parts), *Luminaires*

² Withdrawn.

IEC 60598-1:2020, *Luminaires – Part 1: General requirements and tests*

~~IEC 60662, High-pressure sodium vapour lamps~~

IEC 60901, *Single-capped fluorescent lamps – Performance specifications*

~~IEC 61167, Metal halide lamps~~

~~IEC 61195, Double-capped fluorescent lamps – Safety specifications~~

~~IEC 61199, Single-capped fluorescent lamps – Safety specifications~~

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

IEC 61347-1:2015/AMD1:2017

ISO 3864 (all parts), *Graphical symbols – Safety colours and safety signs*

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Del 2-1: Särskilda fordringar på startanordningar andra än glimtändare

Controlgear for electric light sources –

Safety –

Part 2-1: Particular requirements –

Starting devices (other than glow starters)

Som svensk standard gäller europastandarden EN IEC 61347-2-1:2024. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61347-2-1:2024.

Nationellt förord

Europastandarden EN IEC 61347-2-1:2024

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61347-2-1, Second edition, 2024 - Controlgear for electric light sources – Safety – Part 2-1: Particular requirements – Starting devices (other than glow starters)**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 61347-1, utg 3:2015 och dess separat utgivna tillägg.

Tidigare fastställd svensk standard SS-EN 61347-2-1, utg 1:2001 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2027-06-18.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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Supersedes EN 61347-2-1:2001;
EN 61347-2-1:2001/corrigendum Jul. 2003;
EN 61347-2-1:2001/A1:2006;
EN 61347-2-1:2001/A1:2006/corrigendum Nov. 2006;
EN 61347-2-1:2001/corrigendum Dec. 2010;
EN 61347-2-1:2001/A2:2014

English Version

Controlgear for electric light sources - Safety - Part 2-1:
Particular requirements - Starting devices (other than glow
starters)
(IEC 61347-2-1:2024)

Appareillages de commande pour les sources de lumière
électriques - Sécurité - Partie 2-1: Exigences particulières -
Dispositifs d'amorçage (autres que starters à lueur)
(IEC 61347-2-1:2024)

Betriebsgeräte für elektrische Lichtquellen - Sicherheit - Teil
2-1: Besondere Anforderungen - Startgeräte (andere als
Glimmstarter)
(IEC 61347-2-1:2024)

This European Standard was approved by CENELEC on 2024-06-18. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



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

European foreword

The text of document 34C/1582/CDV, future edition 2 of IEC 61347-2-1, 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 61347-2-1:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-03-18 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-06-18 document have to be withdrawn

This document supersedes EN 61347-2-1:2001 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN 61347-1:2015 and EN 61347-1:2015/A1:2021.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61347-2-1:2024 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60188	NOTE	Approved as EN 60188
IEC 60192	NOTE	Approved as EN 60192
IEC 60662	NOTE	Approved as EN 60662
IEC 60927	NOTE	Approved as EN 60927
IEC 61167	NOTE	Approved as EN 61167
IEC 61195	NOTE	Approved as EN 61195
IEC 61199	NOTE	Approved as EN 61199
IEC 61347-2-1:2000	NOTE	Approved as EN 61347-2-1:2001 (not modified)
IEC 61347-2-1:2000/A1:2005	NOTE	Approved as EN 61347-2-1:2001/A1:2006 (not modified)
IEC 61347-2-1:2000/A2:2013	NOTE	Approved as EN 61347-2-1:2001/A2:2014 (not modified)
IEC 61347-2-8	NOTE	Approved as EN 61347-2-8
IEC 61347-2-9	NOTE	Approved as EN 61347-2-9

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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60052	2002	Voltage measurement by means of standard air gaps	EN 60052	2002
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 60081	-	Double-capped fluorescent lamps - Performance specifications	EN 60081	-
IEC 60155	1993	Glow-starters for fluorescent lamps	EN 60155	1995
+ A1	1995		+ A1	1995
+ A2	2006		+ A2	2007
IEC 60255-8 ¹	1990	Electrical relays -- Part 8: Thermal electrical relays	EN 60255-8 ¹	1998
IEC 60598	series	Luminaires	EN IEC 60598	series
IEC 60598-1	2020	Luminaires - Part 1: General requirements and tests	EN IEC 60598-1	2021
IEC 60901	-	Single-capped fluorescent lamps - Performance specifications	EN 60901	-
IEC 61347-1	2015	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	2015
+ A1	2017		+ A1	2021
ISO 3864	series	Graphical symbols - Safety colours and safety signs	-	series

¹ Withdrawn.



IEC 61347-2-1

Edition 2.0 2024-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Controlgear for electric light sources – Safety –
Part 2-1: Particular requirements – Starting devices (other than glow starters)**

**Appareillages de commande pour les sources de lumière électriques – Sécurité –
Partie 2-1: Exigences particulières – Dispositifs d'amorçage (autres que starters
à lueur)**

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY –**Part 2-1: Particular requirements – Starting devices
(other than glow starters)**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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IEC 61347-2-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lighting. It is an International Standard.

This second edition cancels and replaces the first edition published in 2000, Amendment 1:2005 and Amendment 2:2013. This edition constitutes a technical revision.

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

- a) update of normative references, introducing dated references where appropriate;
- b) clarification of sample item numbers;
- c) alignment of clause numbers with those of IEC 61347-1;
- d) renumbering of Clause 15 and Clause 16.

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

Draft	Report on voting
34C/1582/CDV	34C/1590/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,
- withdrawn, or
- revised.

INTRODUCTION

The technical requirements in this document compared to IEC 61347-2-1:2000, IEC 61347-2-1:2000/AMD1:2005 and IEC 61347-2-1:2000/AMD2:2013 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 61347-2-1:2000, IEC 61347-2-1:2000/AMD1:2005 and IEC 61347-2-1:2000/AMD2:2013.

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 2-1: Particular requirements – Starting devices (other than glow starters)

1 Scope

This part of IEC 61347 specifies safety requirements for starting devices (starters other than glow starters and ignitors) for fluorescent and other discharge lamps for use on AC supplies up to 1 000 V at 50 Hz or 60 Hz which produce starting pulses not greater than 100 kV and which are used in combination with lamps and controlgear covered in IEC 60081, IEC 60188, IEC 60192, IEC 60662, IEC 60901, IEC 61167, IEC 61195, IEC 61199, IEC 61347-2-8 and IEC 61347-2-9.

This document does not apply to glow starters or starting devices which are incorporated in discharge lamps or which are manually operated.

NOTE 1 Glow starters are dealt with in IEC 60155.

NOTE 2 Performance requirements are given in IEC 60927.

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 60052:2002, *Voltage measurement by means of standard air gaps*

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60081, *Double-capped fluorescent lamps – Performance specifications*

IEC 60155:1993, *Glow-starters for fluorescent lamps*

IEC 60155:1993/AMD1:1995

IEC 60155:1993/AMD2:2006

IEC 60255-8:1990², *Electrical relays – Part 8: Thermal electrical relays*

IEC 60598 (all parts), *Luminaires*

IEC 60598-1:2020, *Luminaires – Part 1: General requirements and tests*

IEC 60901, *Single-capped fluorescent lamps – Performance specifications*

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

IEC 61347-1:2015/AMD1:2017

² Withdrawn.

ISO 3864 (all parts), *Graphical symbols – Safety colours and safety signs*