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**BS EN 62035:2014**



**BSI Standards Publication**

# **Discharge lamps (excluding fluorescent lamps) — Safety specifications**

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This British Standard is the UK implementation of EN 62035:2014. It is identical to IEC 62035:2014. It supersedes BS EN 62035:2000+A2:2012 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee CPL/34, Lamps and Related Equipment, to Subcommittee CPL/34/1, Electric lamps.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Published by BSI Standards Limited 2015

ISBN 978 0 580 77871 1  
ICS 29.140.30

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2015.

#### **Amendments/corrigenda issued since publication**

<b>Date</b>	<b>Text affected</b>
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## EUROPÄISCHE NORM

December 2014

ICS 29.140.30

Supersedes EN 62035:2000

English Version

Discharge lamps (excluding fluorescent lamps) - Safety  
specifications  
(IEC 62035:2014 , modified)

Lampes à décharge (à l'exclusion des lampes à  
fluorescence) - Prescriptions de sécurité  
(CEI 62035:2014 , modifiée)

Entladungslampen (ausgenommen Leuchtstofflampen) -  
Sicherheitsanforderungen  
(IEC 62035:2014 , modifiziert)

This European Standard was approved by CENELEC on 2014-09-15. 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.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (EN 62035:2014) consists of the text of IEC 62035:2014 prepared by SC 34A "Lamps", of IEC/TC 34 "Lamps and related equipment", together with the common modifications prepared by CLC/TC 34A "Lamps".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-09-15
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2017-09-15

This document supersedes EN 62035:2000.

EN 62035:2014 includes the following significant technical changes with respect to EN 62035:2000.

Photobiological safety requirements are taken care of on basis of the risk group concept of EN 62471 and the technical report IEC/TR 62778 on blue light hazard. This has consequences for terms, marking, structure of 4.6, and introduction of a new symbol "Caution, do not stare at light source". Special attention is given to blue light hazard.

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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## Endorsement notice

The text of the International Standard IEC 62035:2014 was approved by CENELEC as a European Standard with agreed common modifications.

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

IEC 60432-1	NOTE Harmonized as EN 60432-1.
IEC 60927	NOTE Harmonized as EN 60927.
IEC 60598-1	NOTE Harmonized as EN 60598-1.
IEC 61347-2-9	NOTE Harmonized as EN 61347-2-9.

## COMMON MODIFICATIONS

Delete all references to E26 and E39 lamp caps in the following clauses and figures:

Annex A	Data sheet references of IEC 60061 (Table A.1)
Annex B	Torsion test values (Table B.2)
Annex C	Torsion test holders (Figure C.1)
Annex F	Maximum lamp cap temperatures (Table F.1)

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(normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60050	-	International Electrotechnical Vocabulary (IEV)	-	-
IEC 60061-1	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps	EN 60061-1	-
IEC 60061-2	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 2: Lampholders	EN 60061-2	-
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges	EN 60061-3	-
IEC 60061-4	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 4: Guidelines and general information	EN 60061-4	-
IEC 60155	-	Glow-starters for fluorescent lamps	EN 60155	-
IEC 60662	-	High pressure sodium vapour lamps - Performance specifications	EN 60662	-
IEC 60695-2-10	2000	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001
IEC 60923	-	Auxiliaries for lamps - Ballasts for discharge lamps (excluding tubular fluorescent lamps) - Performance requirements	EN 60923	-
IEC 61167	-	Metal halide lamps - Performance specification	EN 61167	-
IEC 61347-2-1	-	Lamp controlgear - Part 2-1: Particular requirements for starting devices (other than glow starters)	EN 61347-2-1	-

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IEC/TR 62778	-	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires	-	-
ISO 4046-4	2002	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	-	-

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## DISCHARGE LAMPS (EXCLUDING FLUORESCENT LAMPS) – SAFETY SPECIFICATIONS

### 1 Scope

This International Standard specifies the safety requirements for discharge lamps (excluding fluorescent lamps) for general lighting purposes.

This International Standard is applicable to low-pressure sodium vapour lamps and to high-intensity discharge (HID) lamps, i.e. high-pressure mercury vapour lamps (including blended lamps), high-pressure sodium vapour lamps and metal halide lamps. It applies to single- and double-capped lamps, having caps as listed in Annex A.

This standard only concerns safety criteria and does not take into account performance. The performance standards IEC 60188, IEC 60192, IEC 60662, IEC 61167 and IEC 61549 should be referred to for such characteristics.

It may be expected that lamps which comply with this standard will operate safely at supply voltages between 90 % and 110 % of rated supply voltage and when operated with a ballast complying with IEC 61347-2-9 and IEC 60923, with a starting device complying with IEC 61347-2-1 and IEC 60927, and in a luminaire complying with IEC 60598-1.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050, *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org>)

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-2, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60061-4, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 4: Guidelines and general information*

IEC 60155, *Glow-starters for fluorescent lamps*

IEC 60662, *High-pressure sodium vapour lamps*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*