

BS EN 61231:2010+A1:2013



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International lamp coding system (ILCOS)

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National foreword

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The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1.

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 subcommittee can be obtained on request to its secretary.

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Date	Text affected
31 August 2013	Implementation of IEC amendment 1:2013 with CENELEC endorsement A1:2013. Changes made to Annex ZA

**International lamp coding system (ILCOS)
(IEC 61231:2010)**

Système international de codification
des lampes (ILCOS)
(CEI 61231:2010)

Internationales
Lampenbezeichnungssystem (ILCOS)
(IEC 61231:2010)

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CENELEC

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

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Foreword

The text of document 34A/1345/FDIS, future edition 1 of IEC 61231, prepared by SC 34A, Lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61231 on 2010-06-01.

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- latest date by which the EN has to be implemented
at national level by publication of an identical
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- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2013-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61231:2010 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 34A/1663/FDIS, future IEC 61231:2010/A1, prepared by SC 34A, “Lamps”, of IEC TC 34, “Lamps and related equipment” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61231:2010/A1:2013.

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The text of the International Standard IEC 61231:2010/A1:2013 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60357	-	Tungsten halogen lamps (non-vehicle) - Performance specifications	EN 60357	-
IEC 60432-1	-	Incandescent lamps - Safety specifications - Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	EN 60432-1	-
IEC 60432-2	-	Incandescent lamps - Safety specifications - Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	EN 60432-2	-
IEC 60838-2-2	-	Miscellaneous lampholders - Part 2-2: Particular requirements - Connectors for LED-modules	EN 60838-2-2	-
IEC/TR 60887	-	Glass bulb designation system for lamps	-	-
IEC 61167	-	Metal halide lamps	EN 61167	-
IEC/TR 62732	-	Three-digit code for designation of colour rendering and correlated colour temperature	-	-

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INTRODUCTION

The lamp industry strives continuously to meet customers' needs. Its innovative power has led to a tremendous variety of different light sources. To enable customers and experts to find their way within the diversity of products, a general system for the coding of lamps has been developed.

The code does not replace specific markings used by individual manufacturers on their lamps or in their catalogues, but it is promoted for cross-referencing purposes and, in due course, to replace national and regional lamp coding systems which already exist.

NOTE The code does not give all the technical characteristics necessary to specify a lamp fully. For this the relevant lamp standard and/or the manufacturer's literature have to be consulted.

INTERNATIONAL LAMP CODING SYSTEM (ILCOS)

1 Scope and object

This International Standard gives the rules for the international lamp coding system and covers all lamp categories, excluding vehicle lamps. Coding for the main lamp types is specified and, for the others, will follow by amendments to this standard as appropriate.

The object of the international lamp coding system is

- to improve communication about the different types of lamps;
- to help in discussions concerning interchangeability and compatibility of products;
- to create a closer relationship between international standards and manufacturers' literature (for example the code could be given in future in the relevant parts of a standard);
- to enable correct replacements of lamps;
- to be used as a complementary marking on the luminaire;
- to replace national and regional coding systems.

2 Normative references

The following referenced documents are indispensable for the application 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 60357, *Tungsten halogen lamps (non-vehicle) – Performance specifications*

IEC 60432-1, *Incandescent lamps – Safety specifications – Part 1: Tungsten filament lamps for domestic and similar general lighting purposes*

IEC 60432-2, *Incandescent lamps – Safety specifications – Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes*

IEC 60838-2-2, *Miscellaneous lampholders – Part 2-2: Particular requirements – Connectors for LED-modules*

IEC/TR 60887, *Glass bulb designation system for lamps*

IEC 61167, *Metal halide lamps*

A1 IEC/TR 62732, *Three-digit code for designation of colour rendering and correlated colour temperature* **A1**

3 Principles

The international lamp coding system has been developed on the basis of the following principles.

- It should be manufacturer-independent concerning its content and its wording.
- A relationship between the coding system and international standards should be established.

- It should be internationally acceptable. It is recognized that other systems with national and regional importance exist and that the change to an international code should be seen as a long-term process.
- The length of the code should be as short as possible and as long as necessary. Therefore, it should be possible to use the code in different lengths depending on the different purposes.
- In view of the technical diversity of the different lamp categories, it would not be practical to define the code for all types in the same way; the code depends therefore in its composition on the technical needs of the different lamp categories.
- The code should not replace manufacturer-specific marking on the lamp or in the catalogues, but should be used for cross-references in lamp and luminaire literature.
- The allocation of codes is based on interchangeability and compatibility.

An additional usage of the code on the lamp package should be envisaged for the future.

4 Basic structure

The complete lamp code ILCOS consists of a letter section and a figure section.

4.1 Letter section

The first letter of the letter section designates the lamp category as follows:

- A1 I Incandescent lamps – tungsten filament lamps A1
- H Tungsten halogen lamps (non-vehicle)
- F Fluorescent lamps
- A1 S High-pressure sodium vapour lamps
- L Low-pressure sodium vapour lamps
- Q High-pressure mercury vapour lamps A1
- M Metal halide lamps
- A1 D LED modules and lamps A1
- X Special lamps

NOTE Vehicle lamps, including their coding, are covered by national and/or regional legislation.

The next letters within the letter section give further details as outlined in the description of the different lamp categories. The letter section is separated from the rest by a hyphen.

4.2 Figure section

The figure section consists of several blocks mainly containing figures. Each block, separated by hyphens, contains characteristic values of lamps such as

- wattage;
- voltage;
- lamp cap;
- dimensional values.

As a hyphen is used to separate the blocks, it cannot be applied within a block. As a consequence, the sign of equality = is used instead of the hyphen, for example within the cap designation.

- A1 The sequence and the specific content of the blocks is determined for each lamp category and described in 5.1 to 5.9. A1