

Edition 8.0 2017-06

# INTERNATIONAL STANDARD

Lampholders for tubular fluorescent lamps and starterholders

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 29.140.10 ISBN 978-2-8322-4430-2

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LAMPHOLDERS FOR TUBULAR FLUORESCENT LAMPS AND STARTERHOLDERS

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International Standard IEC 60400 has been prepared by subcommittee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment.

This eighth edition cancels and replaces the seventh edition published in 2008, Amendment 1:2011 and Amendment 2:2014. This edition constitutes a technical revision.

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

- a) alignment with ISO/IEC drafting rules;
- b) renumbering of clauses, tables and figures.

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

FDIS	Report on voting
34B/1900/FDIS	34B/1911/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.

In this standard, the following print types are used:

- requirements proper: in roman type;
- test specifications: in italic type;
- notes: in smaller roman type.

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

- · reconfirmed,
- · withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

### LAMPHOLDERS FOR TUBULAR FLUORESCENT LAMPS AND STARTERHOLDERS

#### 1 Scope

This document states the technical and dimensional requirements for lampholders for tubular fluorescent lamps and for starterholders, and the methods of test to be used in determining the safety and the fit of the lamps in the lampholders and the starters in the starterholders.

This document covers independent lampholders and lampholders for building-in, used with tubular fluorescent lamps provided with caps as listed in Annex A, and independent starterholders and starterholders for building-in, used with starters in accordance with IEC 60155, intended for use in AC circuits where the working voltage does not exceed 1 000 V r.m.s.

This document also covers lampholders for single-capped tubular fluorescent lamps integrated in an outer shell and dome similar to Edison screw lampholders (e.g. for G23 and G24 capped lamps). Such lampholders are tested in accordance with the following clauses and subclauses of IEC 60238: 9.4; 9.5; 9.6; 10.3; 11.7; 12; 13.2; 13.5; 13.6; 13.7; 14; 16.3; 16.4; 16.5 and 16.9.

This document also covers lampholders which are integral with a luminaire or intended to be built into appliances. It covers the requirements for the lampholder only. For all other requirements, such as protection against electric shock in the area of the terminals, the requirements of the relevant appliance standard are applicable and tested after building into the appropriate equipment, when that equipment is tested according to its own standard. Lampholders for use by luminaire manufacturers only are not for retail sale.

This document also applies, as far as is reasonable, to lampholders and starterholders other than the types explicitly mentioned above and to lamp connectors.

Where the term "holder" is used in this document, both lampholders and starterholders are intended.

Where the term "bi-pin lampholder" is used, lampholders for wedged caps are also intended.

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

IEC 60081, Double-capped fluorescent lamps – Performance specifications

IEC 60112:2003, Method for the determination of the proof and the comparative tracking indices of solid insulating materials IEC 60112:2003/AMD1:2009

IEC 60155, Glow-starters for fluorescent lamps

IEC 60352-1:1997, Solderless connections – Part 1: Wrapped connections – General requirements, test methods and practical guidance

IEC 60399, Barrel thread for lampholders with shade holder ring

IEC 60529:1989, Degrees of protection provided by enclosures (IP Code)

IEC 60529:1989/AMD1:1999 IEC 60529:1989/AMD2:2013

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

IEC 60695-2-11:2000, Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products (GWEPT)

IEC 60695-11-5:2016 Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance

ISO 4046-4:2016, Paper, board, pulps and related terms – Vocabulary – Part 4: Paper and board grades and converted products