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Tungsten filament lamps for domestic and similar general lighting purposes – Performance requirements

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

TUNGSTEN FILAMENT LAMPS FOR DOMESTIC AND SIMILAR GENERAL LIGHTING PURPOSES – PERFORMANCE REQUIREMENTS

FOREWORD

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International Standard IEC 60064 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This consolidated version of IEC 60064 consists of the sixth edition (1993) and its amendments 1(2000), 2(2002) et 3(2005).

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 6.3.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

INTRODUCTION

This edition of International Standard IEC 60064 introduces major technical and formatting changes. However, it maintains the basic requirements and compliance conditions.

The new technical coverage involves specifications for lamps with E26 caps and some lamp life ratings other than 1 000 h. General lighting service lamps with white finish are introduced, because they are becoming large factors in the Japanese and North American markets.

An editorial objective of this work has been to improve the groupings of certain types of information. An example is that all the requirements have been put into one section of the text, and moved toward the front due to their high importance. Similarly, all test procedures have been drawn together and put in an annex. Particular lamp specifications are now shown on specific lamp data sheets.

There are no changes in the guiding principles of whole production appraisal, nor in the separation of performance and safety requirements. Utilization of past experience, manufacturers' test data and reduced market samples for whole production appraisal were introduced in the fourth edition. The fifth edition introduced coverage of performance requirements only.

TUNGSTEN FILAMENT LAMPS FOR DOMESTIC AND SIMILAR GENERAL LIGHTING PURPOSES – PERFORMANCE REQUIREMENTS

Section 1: General

1.1 Scope

This International Standard applies to tungsten filament incandescent lamps for general lighting service (GLS) which comply with the safety requirements in IEC 60432-1 and having:

- rated wattage of 25 W to 200 W, inclusive;
- rated voltage 100 V to 250 V, including marked voltage range not exceeding $\pm 2,5$ % of the mean voltage¹⁾;
- bulbs of the A or PS shapes;
- bulbs with clear, frosted or equivalently coated finishes, or white finishes;
- caps B22d, E26 or E27.

Specific lamp types are covered in section 8.

This standard states the performance requirements for lamps, including test methods and means of confirming compliance with the requirements. Whole production appraisal methods regarding a lamp manufacturer's test record on finished products are defined. This method can be applied for certification purposes. Details of a batch test procedure, which can be used to make an assessment of specific batches, are included, but it is not suitable for certification purposes.

For some of the requirements given in this standard reference is made to "the relevant data sheet". For some lamps these data sheets are contained in this standard. For other lamps, falling under the scope of this standard, the relevant data are supplied by the lamp manufacturer or responsible vendor.

NOTE 1 A lamp used in China having a rated wattage 15 W and rated voltage 220 V is included.

NOTE 2 Separate references are made to E26/24 caps used in North America and E26/25 caps used in Japan. The two are not compatible.

1.2 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.

1) In countries in the process of changing from 220 V to 230 V nominal supply voltage, a range of $\pm 3,5$ % will apply temporarily.

IEC 60038:1983, *IEC standard voltages*

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 60432-1:1993, *Safety requirements for incandescent lamps – Part 1: Tungsten filament lamps for domestic and similar general lighting purposes*

IEC 60630:1979, *Maximum lamp outlines for general lighting lamps*

IEC 60887:1988, *Glass bulb designation system for lamps*