Australian/New Zealand Standard™

Auxiliaries for lamps—Capacitors for use in tubular fluorescent and other discharge lamp circuits—General and safety requirements (IEC 61048:1991, MOD)





#### AS/NZS 61048:2002

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-041, Lamps and related equipment. It was approved on behalf of the Council of Standards Australia on 30 July 2002 and on behalf of the Council of Standards New Zealand on 20 June 2002. It was published on 27 August 2002.

The following are represented on Committee EL-041:

Association of Consulting Engineers, Australia
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Consumer Federation of Australia
Electrical Compliance Testing Association of Australia
Energy Efficiency and Conservation Authority of New Zealand
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Auxiliaries for lamps—Capacitors for use in tubular fluorescent and other discharge lamp circuits—General and safety requirements (IEC 61048:1991, MOD)

Originated as AS 2644—1983.
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#### **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and related equipment.

In Australia, this Standard will supersede AS 2644—1990, Capacitors for use in discharge lamp circuits. AS 2644—1990 will co-exist with AS/NZS 61048 until 31 December 2002 on which date AS 2644 will be withdrawn.

The objective of this Standard is to specify general and safety requirements for continuous rated capacitors up to 2.5 kVAR intended for use in discharge lamp circuits up to 1000 V operating at 50/60 Hz.

This Standard is an adoption with national modifications and is reproduced from IEC 61048:1991, Auxiliaries for lamps—Capacitors for use in tubular fluorescent and other discharge lamp circuits—General and safety requirements (including Amendment 1:1995 and Amendment 2:1999 and has been varied as indicated to take account of Australian/New Zealand conditions. IEC Amendments 1 and 2 are identified by numbered marginal bars beside the affected text.

Variations to IEC 61048:1991 are indicated at the appropriate places throughout this Standard. Strikethrough (example) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand Standard, are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

A reference to an International Standard identified in the Normative References Clause by strikethrough (example) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

In this Standard, the following print types are used:

- requirements proper: in arial type;
- test specifications: in italic type;
- explanatory matter: in smaller arial type.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex to which they apply. A 'normative' annex is an integral part of a Standard, whereas an 'informative' annex is only for information and guidance.

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NOTES

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Any IEC table, figure or passage of text that is struck-through is not part of this Standard. Any Australian/New Zealand table, figure or passage of text that is added (and identified by shading) is part of this Standard.

## **SECTION 1 - GENERAL**

## 1 Scope

This International Standard states the requirements for both self-healing and non-self-healing continuously rated a.c. capacitors of up to and including 2,5 kvar, and not less than 0,1  $\mu$ F, having a rated voltage not exceeding 1 000 V, which are intended for use in discharge lamp circuits\* operating at 50 Hz or 60 Hz and at altitudes up to 3 000 m.

It covers capacitors intended for connection in shunt or in series with the lamp circuit or an effective combination of these.

It covers only impregnated or unimpregnated capacitors, having a dielectric of paper, plastic film or a combination of both, either metallized or with metal foil electrodes.

This standard does not cover radio-interference suppressor capacitors the requirements for which are found in IEC 60384-14.

Tests given in this standard are type tests. Requirements for testing individual capacitors during production are not included.

60081:1984, Tubular fluorescent lamps for general lighting service Amendments No. 1 (1987) and No. 2 (1988)

60188:1974, High-pressure mercury vapour lamps

Amendments No. 1 (1976), No. 2 (1979), No. 3 (1984) and No. 4 (1988)

60192:1973, Low pressure sodium vapour lamps

Amendment No. 2 (1988)

60920:1990, Ballasts for tubular fluorescent lamps. General and safety requirements

60922:1989, Ballasts for discharge lamps (excluding tubular fluorescent lamps ). General and safety requirements

<sup>\*</sup> These lamps and associated ballasts are covered in the specifications of the following IEC Standards: