

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Auxiliaries for lamps – Capacitors for use in tubular fluorescent and other discharge lamp circuits – General and safety requirements

Appareils auxiliaires pour lampes – Condensateurs destinés à être utilisés dans les circuits de lampes tubulaires à fluorescence et autres lampes à décharge – Prescriptions générales et de sécurité





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FOREWORD

This amendment has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this amendment is based on the following documents:

FDIS	Report on voting
34C/1155/FDIS	34C/1160/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

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

- reconfirmed,
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CONTENTS

Add the titles of the new Annexes E and F:

Annex E (normative) Additional requirements for built-in capacitors having an insulation equivalent to double or reinforced insulation

Annex F (informative) Information for luminaire design

1 Scope

Add, at the end of the scope, the following new sentence:

Particular requirements for built-in capacitors having an insulation equivalent to double or reinforced insulation are given in Annex E.

Add the following new Annexes E and F:

Annex E (normative)

Additional requirements for built-in capacitors having an insulation equivalent to double or reinforced insulation

E.1 Application of Annex E

This annex applies to built-in capacitors intended for use in Class II luminaires having insulation equivalent to double or reinforced insulation.

E.2 Terms and definitions

For the purposes of this annex, the following terms and definitions apply.

E.2.1

built-in capacitor having an insulation equivalent to double or reinforced insulation
capacitor designed to be built into a luminaire, an enclosure or the like not intended to be mounted outside a luminaire in which accessible metallic parts are insulated from the live parts by double or reinforced insulation

Note 1 to entry: For the definitions of double and reinforced insulation, see IEC 60598-1, 1.2.16, 1.2.17, 1.2.18 and 1.2.19.

Note 2 to entry: Particular requirements of IEC 60598-1, Section 10 and Section 11 apply.

E.3 General requirements [IEC 61048:2006/AMD1:2015](https://standards.iteh.ai/catalog/standards/sist/39e40cee-bf0c-4c77-81b3-1d1ac44359d8/iec-61048-2006-amd1-2015)

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Clause 4 of this standard applies.

E.4 General notes on tests

Clause 5 of this standard applies.

E.5 Marking

In addition to the marking mentioned under Clause 6 of this standard, built-in capacitors having an insulation equivalent to double or reinforced insulation shall be identified by the symbol IEC 60417-6295 (2014-09):



The meaning of this marking shall be explained in the manufacturer's literature or catalogue.

E.6 Terminations

Clause 7 of this standard applies.

E.7 Creepage distances and clearances

Clause 8 of this standard applies with the following addition.

For built-in capacitors having an insulation equivalent to double or reinforced insulation, the requirements of IEC 60598-1, Section 11 and Annex M apply.

E.8 Voltage rating

Clause 9 of this standard applies.

E.9 Fuses

Clause 10 of this standard applies.

E.10 Discharge resistors

Clause 11 of this standard applies.

E.11 Testing sequence

Clause 12 of this standard applies.

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E.12 Sealing and heating test

Clause 13 of this standard applies. <https://standards.iteh.ai/catalog/standards/sist/39e40cee-bf0c-4c77-81b3-cd7ac44359d8/iec-61048-2006-amd1-2015>

E.13 High-voltage test

E.13.1 General

Clause 14 of this standard applies with the following addition.

For built-in capacitors having an insulation equivalent to double or reinforced insulation, 14.2 shall be modified as in E.13.2

E.13.2 High-voltage test between terminals and case for Class II capacitors

The dielectric strength test given in IEC 60598-1, Table 10.2 shall be used for the high-voltage test between terminals and case.

E.14 Resistance to adverse operating conditions

Clause 15 of this standard applies.

E.15 Resistance to heat, fire and tracking

Clause 16 of this standard applies.

E.16 Self-healing test

Clause 17 of this standard applies.

E.17 Destruction test

Clause 18 of this standard applies, with the following modifications.

For built-in capacitors having an insulation equivalent to double or reinforced insulation:

- the last sentence of 18.1.2 shall be replaced by the following:
Compliance is checked by the requirements of 18.1.4. One failure is permitted for a) and b). No failures are permitted for c) and d).
- item d) of 18.1.4 shall be replaced by the following:
d) *the capacitor shall withstand the test of 14.2 (not modified as in E.13.2), the test voltage being reduced by 500 V.*
- item b) of 18.2.3.5 shall be replaced by the following:
b) *The capacitors shall withstand the high-voltage test between the terminals and the case in accordance with 14.2 (not modified as in E.13.2).*
- 18.2.3.6 shall be replaced by the following:
All capacitors becoming inoperative shall fulfil the requirements of 18.2.3.4 b) and c) and 18.2.3.5 b).
If one of the test specimens does not satisfy the criteria according to 18.2.3.4 a) and 18.2.3.5 a), the test may be repeated once on a further 40 samples. However, all the capacitors shall pass the repeat test.
If more than one capacitor does not satisfy the criteria according to 18.2.3.4 a) and 18.2.3.5 a), the test shall be regarded as having failed.

Annex F
(informative)

Information for luminaire design

For type B capacitors an adequate space on the top of the capacitor shall be free from other components, in order to allow the correct operation of the overpressure device.

The connections and the connected cable shall not provide appreciable resistance to the movement under the above-mentioned conditions.

After the operation of the overpressure device, creepage distances and clearances shall not be reduced below the required limits.

The capacitor manufacturer may be consulted to define the increased dimensions of the capacitor after operation of the overpressure device.

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