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Energy performance of lamp controlgear - Part 1: Controlgear for fluorescent lamps - Method of measurement to determine the total input power of controlgear circuits and the efficiency of the controlgear

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/19

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**Energy performance of lamp controlgear - Part 1: Controlgear for
 fluorescent lamps - Method of measurement to determine the
 total input power of controlgear circuits and the efficiency of the
 controlgear**
(IEC 62442-1:2018)

Performance énergétique des appareillages de lampes -
 Partie 1: Appareillages des lampes à fluorescence -
 Méthode de mesure pour la détermination de la puissance
 d'entrée totale des circuits d'appareillage et du rendement
 des appareillages
 (IEC 62442-1:2018)

Energieeffizienz von Lampenbetriebsgeräten - Teil 1:
 Betriebsgeräte für Leuchtstofflampen - Messverfahren zur
 Bestimmung der Gesamteinangsleistung von
 Betriebsgeräteschaltungen und des Wirkungsgrades von
 Betriebsgeräten
 (IEC 62442-1:2018)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62442-1:2018 (E)**European foreword**

The text of document 34C/1335A/CDV, future edition 2 of IEC 62442-1, prepared by SC 34C "Auxiliaries for lamps" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62442-1:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-03-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-09-28

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62442-1	NOTE Harmonized as EN 62442-1
IEC 62442-3	NOTE Harmonized as EN IEC 62442-3

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60081	1997	Double-capped fluorescent lamps Performance specifications	-EN 60081	1998
+ A4	2010		+ A4	2010
-	-		+ A11	2018
IEC 60901	1996	Single-capped fluorescent lamps Performance specifications	-EN 60901	1996
+ A5	2011		+ A5	2012
IEC 60921	2004	Ballasts for tubular fluorescent lamps Performance requirements	-EN 60921	2004
IEC 60929	2011	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps Performance requirements	EN 60929	2011
-	-		+ AC	2011
IEC 61347-2-3	-	Lamp control gear - Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps	EN 61347-2-3	-
IEC 61347-2-8	-	Lamp control gear - Part 2-8: Particular requirements for ballasts for fluorescent lamps	EN 61347-2-8	-



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Energy performance of lamp controlgear –
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the total input power of controlgear circuits and the efficiency of controlgear**

**Performance énergétique des appareillages de lampes –
Partie 1: Appareillages des lampes à fluorescence – Méthode de mesure pour la
détermination de la puissance d'entrée totale des circuits d'appareillage et du
rendement des appareillages**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENERGY PERFORMANCE OF LAMP CONTROLGEAR –

Part 1: Controlgear for fluorescent lamps – Method of measurement to determine the total input power of controlgear circuits and the efficiency of controlgear

FOREWORD

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International Standard IEC 62442-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision and has been harmonized with IEC 62442-2 and IEC 62442-3.

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

CDV	Report on voting
34C/1335A/CDV	34C/1376/RVC

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.

A list of all parts in the IEC 62442 series, published under the general title *Energy performance of lamp controlgear*, can be found on the IEC website.

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.

ENERGY PERFORMANCE OF LAMP CONTROLGEAR –

Part 1: Controlgear for fluorescent lamps – Method of measurement to determine the total input power of controlgear circuits and the efficiency of controlgear

1 Scope

This part of IEC 62442 defines a measurement and calculation method of the total input power for controlgear-lamp circuits when operating with their associated fluorescent lamp(s). The calculation method for the efficiency of the lamp controlgear is also defined. This document applies to electrical controlgear-lamp circuits consisting only of the controlgear and the lamp(s). It is intended for use on DC supplies up to 1 000 V and/or AC supplies up to 1 000 V at 50 Hz or 60 Hz.

NOTE Requirements for testing individual controlgear during production are not included.

This document specifies the measurement method for the total input power and the calculation method of the controlgear efficiency for all controlgear used for domestic and normal commercial purposes operating with the following fluorescent lamps:

- linear fluorescent lamps;
- single-ended (compact) fluorescent lamps;
- other general purpose fluorescent lamps.

This document does not apply to:

- controlgear which form an integral part of the lamp;
- controllable wire-wound magnetic controlgear;
- luminaires, which rely on additional optical performance aspects.

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 60081:1997, *Double-capped fluorescent lamps – Performance specifications*
IEC 60081:1997/AMD4:2010

IEC 60901:1996, *Single-capped fluorescent lamps – Performance specifications*
IEC 60901:1996/AMD5:2011

IEC 60921:2004, *Ballasts for tubular fluorescent lamps – Performance requirements*

IEC 60929:2011, *AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements*

IEC 61347-2-3, *Lamp control gear – Part 2-3: Particular requirements for AC and/or DC supplied electronic control gear for fluorescent lamps*

IEC 61347-2-8, *Lamp controlgear – Part 2-8: Particular requirements for ballasts for fluorescent lamps*

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