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Elektroniska driftdon för urladdningslampor andra än lysrör – Prestandaforordringar för drift med lågfrekvent fyrkantstvåg

*AC and/or DC-supplied electronic controlgear for discharge lamps (excluding fluorescent lamps) –
Performance requirements for low frequency square wave operation*

Som svensk standard gäller europastandarden EN 62811:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62811:2015.

Nationellt förord

Europastandarden EN 62811:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62811, First edition, 2015 - AC and/or DC-supplied electronic controlgear for discharge lamps (excluding fluorescent lamps) - Performance requirements for low frequency square wave operation**

utarbetad inom International Electrotechnical Commission, IEC.

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English Version

AC and/or DC-supplied electronic controlgear for discharge
lamps (excluding fluorescent lamps) - Performance requirements
for low frequency squarewave operation
(IEC 62811:2015)

Appareillage électronique alimenté en courant alternatif
et/ou continu pour lampes à décharge (à l'exclusion des
lampes fluorescentes) - Exigences de performance pour le
fonctionnement en onde carrée de basse fréquence
(IEC 62811:2015)

Gleich- und/oder wechsellspannungsversorgtes
elektronisches Betriebsgerät für Entladungslampen
(ausgenommen Leuchtstofflampen) - Anforderungen an die
Arbeitsweise für Niederfrequenz-Rechteckbetrieb
(IEC 62811:2015)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 34C/1132/FDIS, future edition 1 of IEC 62811, 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 62811:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-02-14
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2018-05-14
standards conflicting with the
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The text of the International Standard IEC 62811:2015 was approved by CENELEC as a European Standard without any modification.

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

IEC 61000-3-2:2000	NOTE	Harmonized as EN 61000-3-2:2000.
IEC 61000-4-30:2003	NOTE	Harmonized as EN 61000-4-30:2003.
IEC 61547	NOTE	Harmonized as EN 61547.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60050	series	International Electrotechnical Vocabulary	-	series
IEC 61000-4-14	1999	Electromagnetic compatibility (EMC) -- Part 4-14: Testing and measurement techniques - Voltage fluctuation immunity test	EN 61000-4-14	1999
+A1	2001		+A1	2004
+A2	2009		+A2	2009
IEC 61167	-		-	-
IEC 61347-1	-	Lamp controlgear - Part 1: General and safety requirement	EN 61347-1	-
IEC 61347-2-12	-	Lamp controlgear - Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)	-	-
IEC 62386	series	Digital addressable lighting interface	EN 62386	series

CONTENTS

FOREWORD	5
INTRODUCTION	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	8
4 General notes on tests	11
5 Marking	11
6 General statement	12
7 Starting conditions	12
7.1 General	12
7.2 Breakdown	12
7.3 Take-over	13
7.4 Run-up	13
7.4.1 Run-up current	13
7.4.2 Average peak current ratio (APCR)	13
7.4.3 D.C. current	14
8 Operating conditions	14
8.1 General	14
8.2 Power control	14
8.3 Frequency range of low frequency square wave	15
8.4 D.C. current	15
8.5 Average lamp potential against earth (for quartz arc bulbs only)	15
8.6 Average peak current ratio	15
8.7 Commutation time	15
8.8 HF ripple	16
8.9 Control interfaces	16
8.10 Operating sustainability	16
9 Displacement factor	17
10 Supply current	17
11 Endurance	17
11.1 General	17
11.2 Temperature cycling at –20 °C and at +80 °C	17
11.3 Test at $t_c + 10$ K	19
Annex A (normative) Tests	20
A.1 General requirements	20
A.1.1 General	20
A.1.2 Ambient temperature	20
A.1.3 Supply voltage and frequency	20
A.1.4 Magnetic effects	20
A.1.5 Mounting and connection of reference lamps	20
A.1.6 Reference lamp stability	20
A.1.7 Reference ballast	21
A.1.8 Instrument characteristics	21
Annex B (normative) Reference ballasts	22

B.1	Marking.....	22
B.2	Design characteristics.....	22
B.2.1	Reference ballast for frequencies of 70 Hz to 400 Hz	22
B.2.2	Protection	22
B.3	Operating characteristics for low frequency square wave	22
B.3.1	General	22
B.3.2	Impedance.....	22
B.3.3	Series inductance and parallel capacitance	23
B.4	Circuit for frequencies of low frequency square wave (see Figure 5)	23
B.4.1	Power supply	23
B.4.2	Instruments	23
B.4.3	Wiring.....	23
Annex C (normative)	Conditions for reference lamps	24
Annex D (normative)	Control interface for controllable controlgear	25
D.1	Overview.....	25
D.2	Control by d.c. voltage	25
D.2.1	Circuit diagram – Functional specification for d.c. voltage control (see Figure D.1)	25
D.2.2	Connection diagram.....	25
D.2.3	Electrical specifications	26
D.3	Control by pulse width modulation (PWM).....	27
D.3.1	Circuit diagram – Functional specification for PWM control (see Figure D.4)	27
D.3.2	Connection diagram.....	28
D.3.3	Electrical specifications	28
D.4	Control by DALI	28
Annex E (normative)	Spectral analysis of power ripple: calculation procedure for amplitude spectrum ratio and guidance	29
E.1	General.....	29
E.2	Mathematical background	29
E.3	Description of the algorithm	29
E.4	Measurement procedure	30
E.5	Test signal	30
E.5.1	General	30
E.5.2	Description of the test signal.....	31
E.5.3	Outcome of the test signal	31
Annex F (normative)	Open circuit voltage method of measurement for pulse ignition	32
Bibliography.....		33
Figure 1 – Measurement of APCR during run-up and steady state		14
Figure 2 – Test set-up for measuring the lamp potential against earth.....		15
Figure 3 – Commutation time, deviating waveform		16
Figure 4 – Example of the cycling described under 11.2; Clause E.2.....		18
Figure 5 – Low frequency square wave reference circuit		19
Figure D.1 – Schematic representation of the interface for 1 V to 10 V		25
Figure D.2 – Control device for multiple controlgear, for 1 V to 10 V		26
Figure D.3 – Control device is a current source.....		26
Figure D.4 – Schematic representation of the interface for PWM dimming.....		27

Figure D.5 – Some typically PWM signals	27
Figure D.6 – Control device for multiple controlgear, for PWM	28
Table 1 – Controlgear life time information.....	12
Table 2 – Minimum OCV	13
Table E.1 – Settings for the analysis	30

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AC AND/OR DC-SUPPLIED ELECTRONIC CONTROLGEAR
FOR DISCHARGE LAMPS (EXCLUDING FLUORESCENT LAMPS) –
PERFORMANCE REQUIREMENTS FOR
LOW FREQUENCY SQUARE WAVE OPERATION**

FOREWORD

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International Standard IEC 62811 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

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

FDIS	Report on voting
34C/1132/FDIS	34C/1149/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this 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,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This International Standard covers performance requirements for electronic controlgear for use on a.c., at 50 Hz or 60 Hz and/or d.c. supplies up to 1 000 V associated with discharge lamps as specified in IEC 61167 for low frequency square wave operation.

In order to obtain satisfactory performance of discharge lamps and electronic controlgears, it is necessary that certain features of their design be properly coordinated. It is essential, therefore, that specifications for them be written in terms of measurement made against some common baseline of reference, permanent and reproducible.

These conditions may be fulfilled by reference ballasts. Moreover, the testing of controlgear for discharge lamps will, in general, be made with reference lamps and, in particular, by comparing the results obtained using these lamps on the controlgear to be tested and on the reference ballast. Whereas the reference ballast for frequencies of 50 Hz or 60 Hz is a self-inductive coil, the low frequency square wave reference ballast is a resistor because of its independence of frequency and the lack of influence of parasitic capacitance.

AC AND/OR DC-SUPPLIED ELECTRONIC CONTROLGEAR FOR DISCHARGE LAMPS (EXCLUDING FLUORESCENT LAMPS) – PERFORMANCE REQUIREMENTS FOR LOW FREQUENCY SQUARE WAVE OPERATION

1 Scope

This International Standard specifies performance requirements for electronic controlgear for use on a.c. and/or d.c. supplies up to 1 000 V and/or a.c. supplies up to 1 000 V at 50 Hz or 60 Hz, associated with discharge lamps, as specified in IEC 61167, which have information for low frequency square wave operation, where the frequency range of the low frequency is from 70 Hz to 400 Hz.

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

There are regional standards regarding the regulation of mains current harmonics and immunity for end products like luminaires and independent controlgear. In a luminaire, the controlgear is dominant in this respect. Controlgear, together with other components, should comply with these standards.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary*

IEC 61000-4-14:1999, *Electromagnetic compatibility (EMC) – Part 4-14: Testing and measurement techniques – Voltage fluctuation immunity test*

IEC 61000-4-14:1999/AMD1:2001

IEC 61000-4-14:1999/AMD2:2009

IEC 61167, *Metal Halide lamps – Performance specifications*

IEC 61347-1, *Lamp controlgear – Part 1: General and safety requirements*

IEC 61347-2-12, *Lamp controlgear – Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)*

IEC 62386 (all parts), *Digital addressable lighting interface*