
Digitalni naslovljivi vmesnik za razsvetljavo - 204. del: Posebne zahteve za krmilja - Nizkonapetostne halogenske sijalke (naprava tipa 3) (IEC 62386-204:2009)

Digital addressable lighting interface - Part 204: Particular requirements for control gears; low voltage halogen lamps (device type 3) (IEC 62386-204:2009)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 204: Besondere Anforderungen an Betriebsgeräte - Niedervolt-Halogenlampen (Gerätetyp 3) (IEC 62386-204:2009)

Interface d'éclairage adressable numérique - Partie 204: Exigences particulières pour les appareillages; lampes à halogène à basse tension (dispositifs de type 3) (CEI 62386-204:2009)

Ta slovenski standard je istoveten z: EN 62386-204:2009

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35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

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EUROPEAN STANDARD
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EN 62386-204

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English version

**Digital addressable lighting interface -
Part 204: Particular requirements for control gear -
Low voltage halogen lamps (device type 3)
(IEC 62386-204:2009)**

Interface d'éclairage
adressable numérique -
Partie 204: Exigences particulières
pour les appareillages de commande -
Lampes à halogène à basse tension
(dispositif de type 3)
(CEI 62386-204:2009)

Digital adressierbare Schnittstelle
für die Beleuchtung -
Teil 204: Besondere Anforderungen
an Betriebsgeräte -
Niedervolt-Halogenlampen (Gerätetyp 3)
(IEC 62386-204:2009)

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This European Standard was approved by CENELEC on 2009-07-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 34C/876/FDIS, future edition 1 of IEC 62386-204, prepared by SC 34C, Auxiliaries for lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62386-204 on 2009-07-01.

This Part 204 is intended to be used in conjunction with EN 62386-101 and EN 62386-102, which contain general requirements for the relevant product type (control gear or control devices).

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62386-204:2009 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 60598-1	NOTE Harmonized as EN 60598-1:2008 (modified).
IEC 60669-2-1	NOTE Harmonized as EN 60669-2-1:2004 (modified).
IEC 60921	NOTE Harmonized as EN 60921:2004 (not modified).
IEC 60923	NOTE Harmonized as EN 60923:2005 (not modified).
IEC 60925	NOTE Harmonized as EN 60925:1991 (not modified).
IEC 60929	NOTE Harmonized as EN 60929:2006 (not modified).
IEC 61347-1	NOTE Harmonized as EN 61347-1:2008 (modified).
IEC 61347-2-3	NOTE Harmonized as EN 61347-2-3:2001 (not modified).
IEC 61547	NOTE Harmonized as EN 61547:2009 (not modified).
CISPR 15	NOTE Harmonized as EN 55015:2006 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62386-101	2009	Digital addressable lighting interface - Part 101: General requirements - System	EN 62386-101	2009
IEC 62386-102	2009	Digital addressable lighting interface - Part 102: General requirements - Control gear	EN 62386-102	2009

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Digital addressable lighting interface –
Part 204: Particular requirements for control gear – Low voltage halogen lamps
(device type 3)**

**Interface d'éclairage adressable numérique –
Partie 204: Exigences particulières pour les appareillages de commande –
Lampes à halogène à basse tension (dispositif de type 3)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –**Part 204: Particular requirements for control gear –
Low voltage halogen lamps (device type 3)****FOREWORD**

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International Standard IEC 62386-204 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/876/FDIS	34C/885/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.

This part 204 is intended to be used in conjunction with IEC 62386-101 and IEC 62386-102, which contain general requirements for the relevant product type (control gear or control devices).

A list of all parts of IEC 62386 series, under the general title *Digital addressable lighting interface*, can be found on the IEC website.

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.

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INTRODUCTION

This first edition of IEC 62386-204 is published in conjunction with IEC 62386-101 and IEC 62386-102. The division of IEC 62386 into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognised.

This International Standard, and the other parts that make up IEC 62386-200 series, in referring to any of the clauses of IEC 62386-101 or IEC 62386-102, specifies the extent to which such a clause is applicable and the order in which the tests are to be performed. The parts also include additional requirements, as necessary. All parts that make up the IEC 62386-200 series are self-contained and therefore do not include references to each other.

Where the requirements of any of the clauses of IEC 62386-101 or IEC 62386-102 are referred to in this International Standard by the sentence "The requirements of IEC 62386-1XX, clause 'n' apply", this sentence is to be interpreted as meaning that all requirements of the clause in question of Part 101 or Part 102 apply, except any which are inapplicable to the specific type of lamp control gear covered by Part 204.

All numbers used in this International Standard are decimal numbers unless otherwise noted. Hexadecimal numbers are given in the format 0xVV, where VV is the value. Binary numbers are given in the format XXXXXXXXb or in the format XXXX XXXX, where X is 0 or 1; "x" in binary numbers means "don't care".

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DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 204: Particular requirements for control gear – Low voltage halogen lamps (device type 3)

1 Scope

This International Standard specifies a protocol and methods of test for the control by digital signals of electronic control gear for use on a.c. or d.c. supplies, associated with low voltage halogen lamps.

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

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.

IEC 62386-101:2009, *Digital addressable lighting interface – Part 101: General requirements – System*

IEC 62386-102:2009, *Digital addressable lighting interface – Part 102: General requirements – Control gear*

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in Clause 3 of IEC 62386-101:2009 and Clause 3 of IEC 62386-102:2009 apply, with the following additions.

3.1

reference measurement

process during which gear determines the actual lamp load with internal procedures and measurements, not specified by this standard

NOTE The details of this process are a matter of detailed design of gear and are outside the scope of this standard.

3.2

detection of load decrease

recognition that the actual lamp load is significantly below the load measured during a successful 'reference measurement'

NOTE The criteria for regarding a load increase or decrease as significant can only be decided by the manufacturer and these criteria should be described in the manual.

3.3

detection of load increase

recognition that the actual lamp load is significantly above the load measured during a successful 'reference measurement'

NOTE The criteria for regarding a load increase or decrease as significant can only be decided by the manufacturer, and these criteria should be described in the manual.

3.4**current protector**

protective device switching off the output if the actual lamp load differs by more than ΔP from the load detected during the reference measurement.

NOTE The value ΔP can only be specified by the manufacturer of the control gear and this value should be stated in the manual.

3.5**thermal overload**

scenario where the maximum permissible gear temperature is exceeded

3.6**thermal shut down**

scenario where gear switches off the lamp because of a persistent thermal overload

3.7**light level reduction due to thermal overload**

reduction of light level with the objective of decreasing gear temperature

4 General

The requirements of Clause 4 of IEC 62386-101:2009 and Clause 4 of IEC 62386-102:2009 apply.

5 Electrical specifications

The requirements of Clause 5 of IEC 62386-101:2009 and Clause 5 of IEC 62386-102:2009 apply.

6 Interface power supply

The requirements of Clause 6 of IEC 62386-101:2009 and Clause 6 of IEC 62386-102:2009 apply, if a power supply is integrated with the control gear.

7 Transmission protocol structure

The requirements of Clause 7 of IEC 62386-101:2009 and Clause 7 of IEC 62386-102:2009 apply.

8 Timing

The requirements of Clause 8 of IEC 62386-101:2009 and Clause 8 of IEC 62386-102:2009 apply.

9 Method of operation

The requirements of Clause 9 of IEC 62386-101:2009 and Clause 9 of IEC 62386-102:2009 apply, except as follows:

Addition to Clause 9 of IEC 62386-102:2009: