
Digitalni naslovljivi vmesnik za razsvetljavo - 203. del: Posebne zahteve za krmilja - Sijalke (razen fluorescentnih sijalk) (naprava tipa 2) (IEC 62386-203:2009)

Digital addressable lighting interface - Part 203: Particular requirements for control gears; discharge lamps (excluding fluorescent lamps) (device type 2) (IEC 62386-203:2009)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 203: Besondere Anforderungen an Betriebsgeräte - Entladungslampen (ausgenommen Leuchtstofflampen) (Gerätetyp 2) (IEC 62386-203:2009)

Interface d'éclairage adressable numérique - Partie 203: Exigences particulières pour les appareillages; lampes à décharge (à l'exclusion des lampes fluorescentes) (dispositifs de type 2) (CEI 62386-203:2009)

Ta slovenski standard je istoveten z: EN 62386-203:2009

ICS:

29.140.30	Fluorescenčne sijalke. Sijalke	Fluorescent lamps. Discharge lamps
29.140.50	Instalacijski sistemi za razsvetljavo	Lighting installation systems
35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST EN 62386-203:2009**en,fr**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62386-203:2009

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62386-203

August 2009

ICS 29.140.50; 29.140.99

English version

**Digital addressable lighting interface -
Part 203: Particular requirements for control gear -
Discharge lamps (excluding fluorescent lamps)
(device type 2)
(IEC 62386-203:2009)**

Interface d'éclairage
adressable numérique -
Partie 203: Exigences particulières
pour les appareillages de commande -
Lampes à décharge
(à l'exclusion des lampes fluorescentes)
(dispositif de type 2)
(CEI 62386-203:2009)

Digital adressierbare Schnittstelle
für die Beleuchtung -
Teil 203: Besondere Anforderungen
an Betriebsgeräte -
Entladungslampen
(ausgenommen Leuchtstofflampen)
(Gerätetyp 2)
(IEC 62386-203:2009)

[SIST EN 62386-203:2009](https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009)

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>

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/875/FDIS, future edition 1 of IEC 62386-203, 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 62386-203 on 2009-07-01.

This Part 203 is 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 62386-203:2009 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).
IEC 62034	NOTE Harmonized as EN 62034:2006 (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

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62386-203:2009](https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009)

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62386-203:2009

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>



IEC 62386-203

Edition 1.0 2009-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Digital addressable lighting interface –
Part 203: Particular requirements for control gear – Discharge lamps (excluding
fluorescent lamps) (device type 2)**

**Interface d'éclairage adressable numérique –
Partie 203: Exigences particulières pour les appareillages de commande –
Lampes à décharge (à l'exclusion des lampes fluorescentes) (dispositifs de
type 2)**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

U

ICS 29.140.50; 29.140.99

ISBN 2-8318-1040-3

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	6
4 General.....	7
5 Electrical specifications.....	7
6 Interface power supply.....	7
7 Transmission protocol structure.....	7
8 Timing.....	7
9 Method of operation.....	7
10 Declaration of variables.....	8
11 Definition of commands.....	9
12 Test procedures.....	13
Annex A (informative) Examples.....	25
Bibliography.....	26
iTeh STANDARD PREVIEW (standards.iteh.ai)	
Figure 1 – Example of the use of the "Arc Power At Requested Value" bit.....	8
Figure 2 – Application extended control or configuration command sequence example.....	9
Figure 3 – Test sequence "Physical selection supported".....	14
Figure 4 – Test sequence 'START IDENTIFICATION'.....	15
Figure 5 – Test sequence 'MAINS VOLTAGE TOO LOW'.....	16
Figure 6 – Test sequence 'MAINS VOLTAGE TOO HIGH'.....	17
Figure 7 – 'LAMP VOLTAGE OUT OF SPECIFICATION'.....	18
Figure 8 – 'QUERY WAITING FOR IGNITION, IGNITION TIME OUT'.....	19
Figure 9 – 'QUERY CYCLING FAIL'.....	20
Figure 10 – 'QUERY THERMAL OVERLOAD'.....	21
Figure 11 – 'QUERY HID STATUS'.....	22
Figure 12 – 'QUERY EXTENDED VERSION NUMBER'.....	23
Figure 13 – 'RESERVED APPLICATION EXTENDED COMMANDS'.....	24
Table 1 - Declaration of additional variables.....	9
Table 2 – Summary of the application extended command set.....	13

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –**Part 203: Particular requirements for control gear –
Discharge lamps (excluding fluorescent lamps)
(device type 2)**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62386-203 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/875/FDIS	34C/884/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 203 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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62386-203:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>

INTRODUCTION

This first edition of IEC 62386-203 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 the IEC 62386-200 series, in referring to any of the clauses of IEC 62386-101 or IEC 62386-102, specify 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 which 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 clearly inapplicable to the specific type of lamp control gear covered by Part 203.

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'.

iteh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 62386-203:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/e4dec457-c989-443c-b573-e9e8046d5c67/sist-en-62386-203-2009>

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 203: Particular requirements for control gear – Discharge lamps (excluding fluorescent lamps) (device type 2)

1 Scope

This International Standard specifies a protocol and test procedures for the control of electronic control gear by digital signals used on a.c. or d.c. supplies, associated with discharge lamps (excluding fluorescent 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*

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 additional terms and definitions.

3.1

lamp cycling

periodic igniting and extinguishing of the lamp

3.2

lamp failure

lamp parameter outside of the tolerances for the normal lamp operation

NOTE The number of attempts to ignite the lamp parameter before final switching off is control gear dependent.

3.3

run-up time

time which the system of control gear and lamp(s) needs to set the lamp output power to its nominal lamp power value after switching on the lamp

3.4

waiting for ignition

control gear status with ignition function maximal up to the ignition time out without lamp ignition