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SIST EN 62386-202:2009

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Digitalni naslovljivi vmesnik za razsvetljavo - 202. del: Posebne zahteve za krmilja; avtonomna nujnostna razsvetljava (naprava tipa 1) (IEC 62386-202:2009)

Digital addressable lighting interface - Part 202: Particular requirements for control gears; self-contained emergency lighting (device type 1) (IEC 62386-202:2009)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 202: Besondere Anforderungen an Betriebsgeräte - Notbeleuchtung mit Einzelbatterie (Gerätetyp 1) (IEC 62386-202:2009)

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Interface d'éclairage adressable numérique - Partie 202: Exigences particulières pour les appareillages; blocs autonomes d'éclairage de secours (dispositifs de type 1) (CEI 62386 -202:2009)

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ICS:

29.140.50	Instalacijski sistemi za razsvetljavo	Lighting installation systems
35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST EN 62386-202:2009 **en,fr**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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English version

Digital addressable lighting interface - Part 202: Particular requirements for control gear - Self-contained emergency lighting (device type 1)

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Interface d'éclairage adressable numérique - Partie 202: Exigences particulières pour les appareillages de commande - Blocs autonomes d'éclairage de secours (dispositifs de type 1) (CEI 62386-202:2009)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 202: Besondere Anforderungen an Betriebsgeräte - Notbeleuchtung mit Einzelbatterie (Gerätetyp 1) (IEC 62386-202:2009)

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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.

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CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

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Ref. No. EN 62386-202:2009 E

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Foreword

The text of document 34C/880/FDIS, future edition 1 of IEC 62386-202, 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 62386-202 on 2009-07-01.

This Part 202 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 62386-202:2009 was approved by CENELEC as a European Standard without any modification.

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

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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).

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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.

Publication	Year	Title	EN/HD	Year
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 202: Particular requirements for control gear – Self-contained emergency lighting (device type 1)

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Interface d'éclairage adressable numérique –
Partie 202: Exigences particulières pour les appareillages de commande – Blocs autonomes d'éclairage de secours (dispositifs de type 1)

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CONTENTS

FOREWORD 5
INTRODUCTION 7
1 Scope 8
2 Normative references 8
3 Terms and definitions 8
4 General 10
5 Electrical specifications 10
6 Interface power suppy 10
7 Transmission protocol structure 10
8 Timing 10
9 Method of operation 10
10 Declaration of variables 14
11 Definition of commands 15
12 Test procedures 26
Annex A (informative) Examples 104
Bibliography 107

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Figure 1 – Example of light level definitions 12
Figure 2 – Modes of operation 13
Figure 3 – Application extended control or configuration command sequence example 16
Figure 4 – Test sequence 'Features' 27
Figure 5 – Test sequence 'RESET' 30
Figure 6 – Test sequence '100 ms-timeout' 32
Figure 7 – Test sequence 'Commands in-between' 34
Figure 8 – Test sequence 'Persistent memory' 36
Figure 9 – Test sequence 'ON AND OFF' 39
Figure 10 – Test sequence 'OFF WITH FADING' 41
Figure 11 – Test sequence 'Physical address allocation' 42
Figure 12 – Test sequence 'QUERY LAMP POWER ON' 44
Figure 13 – Test sequence 'REST' 45
Figure 14 – Test sequence 'INHIBIT' 47
Figure 15 – Test sequence 'START/STOP FUNCTION TEST' 48
Figure 16 – Test sequence 'FUNCTION TEST FAILURE' 50
Figure 17 – Test sequence 'FUNCTION TEST REQUEST PENDING' 52
Figure 18 – Test sequence 'START/STOP DURATION TEST' 53
Figure 19 – Test sequence 'DURATION TEST FAILURE' 54
Figure 20 – Test sequence 'DURATION TEST REQUEST PENDING' 56
Figure 21 – Test sequence 'TESTS IN PARALLEL' 58
Figure 22 – Test sequence 'LAMP TIMER' 59
Figure 23 – Test sequence 'STOP PENDING TEST' 60
Figure 24 – Test sequence 'STORE THE DTR AS EMERGENCY LEVEL' 62

SIST EN 62386-202:2009
https://standards.iteh.ai/catalog/standards/sist/f1524307-282f-4026-b2b0-12a88c5b9c1a/sist-en-62386-202-2009

SIST EN 62386-202:2009

Figure 25 – Test sequence 'EMERGENCY LEVEL vs. MIN / MAX' 64
Figure 26 – Test sequence 'STORE TEST TIMING' 66
Figure 27 – Test sequence 'EXECUTE AUTOMATIC TEST' 68
Figure 28 – Test sequence 'STORE TEST EXECUTION TIMEOUT' 70
Figure 29 – Test sequence 'STORE PROLONG TIME' 72
Figure 30 – Test sequence 'START IDENTIFICATION' 73
Figure 31 – Test sequence 'INTERFACE FAILURE' 74
Figure 32 – Test sequence 'QUERY BATTERY CHARGE' 75
Figure 33 – Test sequence 'QUERY HARDWIRED INHIBIT' 76
Figure 34 – Test sequence 'QUERY HARDWIRED SWITCHED MAINS POWER' 77
Figure 35 – Test sequence 'QUERY PHYSICAL SELECTED' 78
Figure 36 – Test sequence 'REST: APPLICATION EXTENDED COMMAND SEQUENCE' 80
Figure 37 – Test sequence 'INHIBIT & TEST: APPL. EXT. COMMAND SEQUENCES' 82
Figure 38 – Test sequence 'RESET FT DONE FLAG: APPL. EXT. COMMAND SEQUENCE' 84
Figure 39 – Test sequence 'RESET DT DONE FLAG: APPL. EXT. COMMAND SEQUENCE' 86
Figure 40 – Test sequence 'CONFIGURATION: Other command after Enable Device Type 1 88
Figure 41 – Test sequence 'CONFIGURATION: 100ms timeout' 90
Figure 42 – Test sequence 'CONFIGURATION: Commands in-between' 92
Figure 43 – Test sequence 'QUERY: Other command after Enable Device Type 1' 93
Figure 44 – Test sequence 'START IDENTIFICATION: APPL. EXT. COMMAND SEQUENCE' 95
Figure 45 – Test sequence 'Extended RESET' 97
Figure 46 – Test sequence 'Extended PERSISTENT MEMORY' 99
Figure 47 – Test sequence 'Restore Factory Settings' 101
Figure 48 – Test sequence 'Reserved DTR Selected Function' 102
Figure 49 – Test sequence 'QUERY EXTENDED VERSION NUMBER' 103
Figure A.1 – Duration test sequence example 105
Figure A.2 – Timing diagram for function and duration tests 105

Table 1 – Declaration of additional variables 14
Table 2 – Summary of the application extended command set 25
Table 3 – Types of emergency control gear 26
Table 4 – List of test sequences 'Configuration commands' 28
Table 5 – Parameters for test sequences 'RESET' 29
Table 6 – Parameters for test sequences '100 ms-timeout' 31
Table 7 – Parameters for test sequences 'Commands in-between' 33
Table 8 – Parameters for test sequences 'Persistent memory' 35
Table 9 – List of test sequences 'Arc power control commands' 37
Table 10 – Parameters for test sequences 'ON AND OFF' 38
Table 11 – Parameters for test sequences 'OFF WITH FADING' 40
Table 12 – List of test sequences 'Queries and reserved commands' 43

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SIST EN 62386-202:2009
https://standards.iteh.ai/catalog/standards/sist/f1524307-282f-4026-b2b0-12a88c5b9c1a/sist-en-62386-202-2009

SIST EN 62386-202:2009

Table 13 – Parameters for test sequences 'INHIBIT' 46
Table 14 – Parameters for test sequences 'FUNCTION TEST FAILURE' 49
Table 15 – Parameters for test sequences 'FUNCTION TEST REQUEST PENDING' 51
Table 16 – Parameters for test sequences 'DURATION TEST REQUEST PENDING' 55
Table 17 – Parameters for test sequences 'TESTS IN PARALLEL' 57
Table 18 – Parameters for test sequences 'STORE THE DTR AS EMERGENCY LEVEL' 61
Table 19 – Parameters for test sequences 'EMERGENCY LEVEL vs. MIN / MAX' 63
Table 20 – Parameters for test sequences 'STORE TEST TIMING' 65
Table 21 – Parameters for test sequences 'EXECUTE AUTOMATIC TEST' 67
Table 22 – Parameters for test sequences 'STORE TEST EXECUTION TIMEOUT' 69
Table 23 – Parameters for test sequences 'STORE PROLONG TIME' 71
Table 24 – Parameters for test sequences 'REST: APPLICATION EXTENDED COMMAND SEQUENCE' 79
Table 25 – Parameters for test sequences 'INHIBIT & TEST: APPL. EXT. COMMAND SEQUENCES' 81
Table 26 – Parameters for test sequences 'RESET FT DONE FLAG: APPL. EXT. COMMAND SEQUENCE' 83
Table 27 – Parameters for test sequences 'RESET DT DONE FLAG: APPL. EXT. COMMAND SEQUENCE' 85
Table 28 – Parameters for test sequences 'CONFIGURATION: Other command after Enable Device Type 1 87
Table 29 – Parameters for test sequences 'CONFIGURATION: 100ms timeout' 89
Table 30 – Parameters for test sequences 'CONFIGURATION: Commands in-between' 91
Table 31 – Parameters for test sequences 'QUERY: Other command after Enable Device Type 1' 93
Table 32 – Parameters for test sequences 'START IDENTIFICATION: APPL. EXT. COMMAND SEQUENCE' 94
Table 33 – Parameters for test sequences 'Extended RESET' 96
Table 34 – Parameters for test sequences 'Extended PERSISTENT MEMORY' 98
Table 35 – Parameters for test sequences 'Restore Factory Settings' 100

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(standards.iteh.ai)
SIST EN 62386-202:2009
https://standards.iteh.ai/catalog/standards/sist/f1524307-282f-4026-b260-13e88e5b9e1a/sist-en-62386-202-2009

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DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 202: Particular requirements for control gear – Self-contained emergency lighting (device type 1)

FOREWORD

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

FDIS	Report on voting
34C/880/FDIS	34C/887/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 202 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).

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A list of all parts of the 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 62386-202 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 recognized.

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, 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 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 statement "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 this Part 202.

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 202: Particular requirements for control gear – Self-contained emergency lighting (device type 1)

1 Scope

This International Standard specifies a protocol and test procedures for the control by digital signals of electronic control gear for use on a.c. or d.c. supplies, associated with self-contained emergency lighting.

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.

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

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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, together with the following.

3.1
normal mode (for self-contained emergency control gear)
mode in which mains supply is available, with the battery charged or charging

3.2
emergency mode (for self-contained emergency control gear)
mode in which mains supply has failed and whilst the control gear is powered by the battery until deep discharge point

3.3
rest mode (for self-contained emergency control gear)
mode in which the lamp is intentionally off whilst the control gear is powered by the battery

3.4
inhibit mode (for self-contained emergency control gear)
mode in which the control gear is powered from the mains but prevented from going into emergency mode in the event of mains failure

3.5
extended emergency mode (for self-contained emergency control gear)
mode in which the control gear continues to operate the lamp in the same way as in emergency mode for the programmed prolong time after the restoration of the mains supply

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3.6
function test
test to check the integrity of the circuit and the correct operation of a lamp, a changeover device and the self-contained battery

3.7
duration test
test to check if the self-contained battery supplies the system within the limits of rated duration of emergency operation

3.8
hardwired inhibit
optional additional input of the control gear which prevents the control gear from going into the emergency mode.

NOTE The hardwired inhibit input is specified by the manufacturer. The state of the switch may be “active” or “inactive”.

3.9
prolong time
time the extended emergency mode will last after restoration of the mains supply

3.10
non-maintained control gear
control gear which operates the lamp only in emergency mode or test mode and supports neither arc power control commands nor corresponding configuration commands

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3.11
maintained control gear
control gear which operates the lamp always, no matter whether the mains is present or not, but which supports neither arc power control commands nor corresponding configuration commands

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3.12
switched maintained non-dimmable control gear
control gear with physical minimum level equal to 254 (100 %)

NOTE If the mains is present, this type acts like a standard dimmable device with its minimum level set to 254. Therefore this type supports all arc power commands and corresponding configuration commands defined in Part 102. Because of the definition of the physical minimum level, all arc power commands will result in 'no reaction', 'lamp on' or 'lamp off' only – depending on the definition of the actual command.

3.13
switched maintained dimmable control gear
emergency control gear with a physical minimum level below 254 (100 %)

NOTE If the mains is present, this type acts like a standard dimmable device. Therefore this type supports all arc power commands and corresponding configuration commands defined in Part 102.

3.14
hardwired switch
optional additional input of the control gear to switch the lamp on and off in normal mode

NOTE The hardwired switch input is specified by the manufacturer. The state of the switch may be “on” or “off”.

3.15
integral emergency control gear
lamp control gear which forms a non-replaceable part of an emergency luminaire and which cannot be tested separately from the luminaire