SVENSK STANDARD SS-EN 62386-101

Fastställd	Utgåva	Sida	Ansvarig kommitté
2015-02-18	2	1 (1+81)	SEK TK 34

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Digitalt adresserbart gränssnitt för ljusarmaturer (DALI) – Del 101: Allmänna fordringar på systemkomponenter

Digital addressable lighting interface –
Part 101: General requirements –
System components

Som svensk standard gäller europastandarden EN 62386-101:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62386-101:2014.

Nationellt förord

Europastandarden EN 62386-101:2014

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62386-101, Second edition, 2014 - Digital addressable lighting interface - Part 101: General requirements - System components**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62386-101, utgåva 1, 2010, gäller ej fr o m 2017-12-12.

ICS 29.140.00; 29.140.50

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 62386-101:2009

English Version

Digital addressable lighting interface - Part 101: General requirements - System components (IEC 62386-101:2014)

Interface d'éclairage adressable numérique - Partie 101: Exigences générales - Composants de système (CEI 62386-101:2014)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 101: Allgemeine Anforderungen - Systemkomponenten (IEC 62386-101:2014)

This European Standard was approved by CENELEC on 2014-12-12. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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

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Ref. No. EN 62386-101:2014 E

SEK Svensk Elstandard

Foreword

The text of document 34C/1098/FDIS, future edition 2 of IEC 62386-101, 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 62386-101:2014.

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)	2015-09-12
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-12-12

This document supersedes EN 62386-101:2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62386-101:2014 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:

CISPR 15	NOTE	Harmonized as EN 55015.
IEC 61547	NOTE	Harmonized as EN 61547.
ISO/IEC 7498-1	NOTE	Harmonized as EN ISO/IEC 7498-1 [1)].

[1)] Withdrawn publication.

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

Publication	Year	Title	EN/HD	Year
IEC 61347	Series	Lamp controlgear	EN 61347	Series
IEC 61347-1	-	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	-
IEC 62386-102	2014	Digital addressable lighting interface - Part 102: General requirements - Control gear	EN 62386-102	2014
IEC 62386-103	2014	Digital addressable lighting interface - Part 103: General requirements - Control devices	EN 62386-103	2014
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	-

CONTENTS

FOREWORD 7
INTRODUCTION 9
1 Scope 10
2 Normative references 10
3 Terms and definitions 10
4 General 15
4.1 Purpose 15
4.2 Version number 15
4.3 System structure and architecture 15
4.4 System information flow 16
4.5 Command types 16
4.6 Bus units 17
4.6.1 Transmitters and receivers in bus units 17
4.6.2 Control gear 17
4.6.3 Input device 17
4.6.4 Single master application controller 17
4.6.5 Multi-master application controller 18
4.6.6 Sharing an interface 18
4.7 Bus power supply and load calculations 19
4.7.1 Current demand coverage 19
4.7.2 Maximum signal current compliance 19
4.7.3 Simplified system calculation 19
4.8 Wiring 19
4.8.1 Wiring structure 19
4.8.2 Wiring specification 19
4.9 Insulation 20
4.10 Earthing of the bus 20
4.11 Power interruptions at bus units 20
4.11.1 Different levels of power interruptions 20
4.11.2 Short power interruptions of external power supply 20
4.11.3 External power cycle 21
4.11.4 Short interruptions of bus power supply 21
4.11.5 Bus power down 21
4.11.6 System start-up timing 21
5 Electrical specification 23
5.1 General 23
5.2 Marking of the interface 23
5.3 Capacitors between the interface and earth 23
5.4 Signal voltage rating 23
5.5 Signal current rating 24
5.6 Marking of bus powered bus unit 24
5.7 Signal rise time and fall time 24
6 Bus power supply 26
6.1 General 26
6.2 Marking of the bus power supply terminals 26
6.3 Capacitors between the interface and earth 26

6.4 Voltage rating 26
6.5 Current rating 26
6.5.1 General current rating 26
6.5.2 Single bus power supply current rating 27
6.5.3 Integrated bus power supply current rating 27
6.5.4 Dynamic behaviour of the bus power supply 27
6.6 Bus power supply timing requirements 28
6.6.1 Short power supply interruptions 28
6.6.2 Short circuit behaviour 29
7 Transmission protocol structure 29
7.1 General 29
7.2 Bit encoding 29
7.2.1 Start bit and data bit encoding 29
7.2.2 Stop condition encoding 30
7.3 Frame description 30
7.4 Frame types 30
7.4.1 16 bit forward frame 30
7.4.2 24 bit forward frame 30
7.4.3 Reserved forward frame 30
7.4.4 Backward frame 30
7.4.5 Proprietary forward frames 30
8 Timing 31
8.1 Transmitter timing 31
8.1.1 Transmitter bit timing 31
8.1.2 Transmitter frame sequence timing 32
8.2 Receiver timing 32
8.2.1 Receiver bit timing 32
8.2.2 Receiver bit timing violation 34
8.2.3 Receiver frame size violation 34
8.2.4 Receiver frame sequence timing 34
8.2.5 Reception of backward frames 35
8.3 Multi-master transmitter timing 35
8.3.1 Multi-master transmitter bit timing 35
8.3.2 Multi-master transmitter frame sequence timing 36
9 Method of operation 36
9.1 Collision avoidance, collision detection and collision recovery 36
9.1.1 General 36
9.1.2 Collision avoidance 37
9.1.3 Collision detection 37
9.1.4 Collision recovery 38
9.2 Transactions 39
9.3 Send-twice forward frames and send-twice commands 40
9.4 Command iteration 40
9.5 Usage of a shared interface 41
9.5.1 General 41
9.5.2 Backward frames 41
9.5.3 Forward frames 41
9.6 Use of multiple bus power supplies 41

9.7 Command execution 42
10 Declaration of variables 42
11 Definition of commands 42
12 Test procedures 42
12.1 General notes on test 42
12.1.1 Abbreviations 42
12.1.2 Ambient temperature 42
12.1.3 External power supply voltage and frequency 43
12.1.4 Measurement requirements 43
12.1.5 Test signal generators and bus voltage sources 43
12.1.6 Deviation from documentation 43
12.1.7 Test setup 43
12.1.8 Notation 43
12.2 General interface tests 49
12.2.1 Label and literature check 49
12.2.2 Interface marking check 49
12.2.3 Bus powered bus unit marking check 50
12.2.4 Bus power supply marking check 52
12.2.5 Insulation test 54
12.2.6 Capacitor check 55
12.3 Bus power supply tests 55
12.3.1 Voltage rating test 55
12.3.2 Voltage rise time test 56
12.3.3 Current rating test 56
12.3.4 Dynamic behaviour test 58
12.3.5 Power-on open circuit test 60
12.3.6 Power-on timing test 61
12.3.7 Power supply short interruptions test 62
12.3.8 Power supply short circuit test 63
12.3.9 Power supply current consumption test 64
12.4 Control device tests 65
12.5 Control gear tests 65
Annex A (informative) Background information for systems 66
A.1 Wiring information 66
A.2 System architectures 67
A.2.1 General 67
A.2.2 Single master architecture 67
A.2.3 Multi-master architecture with one application controller 68
A.2.4 Multi-master architecture with more than one application controller 69
A.2.5 Multi-master architecture with integrated input device 70
A.2.6 Multi-master architecture with integrated input device and power supply 71
A.3 Collision detection 72
A.4 Timing definition explanations 73
A.4.1 General 73
A.4.2 Receiver timing 73
A.4.3 Transmitter timing 73
A.4.4 Grey areas 74
A.5 Maximum current consumption calculation explanation 74

A.5.1 Single bus power supply 74
A.5.2 Multiple bus power supplies 75
A.5.3 Redundant bus power supplies 76
A.6 Communication layer overview 77
A.6.1 General 77
A.6.2 Physical layer 77
A.6.3 Data link layer 77
A.6.4 Network layer 77
A.6.5 Transport layer 78
A.6.6 Session layer 78
A.6.7 Presentation layer 78
A.6.8 Application layer 78
Bibliography 79

Figure 1 – IEC 62386 graphical overview 9
Figure 2 – System structure example 16
Figure 3 – Communication between bus units (example) 16
Figure 4 – Example of a shared interface 18
Figure 5 – Start up timing example 22
Figure 6 – Maximum signal rise and fall time measurements 25
Figure 7 – Minimum signal rise and fall time measurements 25
Figure 8 – Bus power supply current behaviour 28
Figure 9 – Bus power supply voltage behaviour 28
Figure 10 – Frame example 29
Figure 11 – Bi-phase encoded bits 30
Figure 12 – Bit timing example 31
Figure 13 – Settling time illustration 32
Figure 14 – Receiver timing decision example 34
Figure 15 – Collision detection timing decision example 38
Figure 16 – Collision recovery example 39
Figure 17 – Current rating test signal 57
Figure 18 – Dynamic behaviour test setup 58
Figure 19 – Dynamic behaviour test signal 59
Figure A.1 – Single master architecture example 68
Figure A.2 – Multi-master architecture example with one application controller 69
Figure A.3 – Multi-master architecture example with two application controllers 70
Figure A.4 – Multi-master architecture example with integrated input device 71
Figure A.5 – Multi-master architecture example with integrate input device and bus power supply 72
Figure A.6 – Collision detection timing diagram 73
Figure A.7 – Transmitter and receiver timing illustration 74
Figure A.8 – Bus power supply current values 75
Figure A.9 – Current demand coverage 75
Figure A.10 – Combination of 4 bus power supplies 76
Figure A.11 – Redundant bus power supplies 76

Table 1 – System components 15
Table 2 – Transmitters and receivers in bus units 17
Table 3 – Power-interruption timing of external power 20
Table 4 – Power-interruption timing of bus power 20
Table 5 – Short power interruptions 21
Table 6 – Start-up timing 22
Table 7 – System voltage levels 23
Table 8 – Receiver voltage levels 23
Table 9 – Transmitter voltage levels 24
Table 10 – Current rating 24
Table 11 – Signal rise and fall times 25
Table 12 – Bus power supply output voltage 26
Table 13 – Bus power supply current rating 27
Table 14 – Bus power supply dynamic behaviour 27
Table 15 – Short circuit timing behaviour 29
Table 16 – Transmitter bit timing 32
Table 17 – Transmitter settling time values 32
Table 18 – Receiver timing starting at the beginning of a logical bit 33
Table 19 – Receiver timing starting at an edge inside of a logical bit 33
Table 20 – Receiver settling time values 35
Table 21 – Multi-master transmitter bit timing 35
Table 22 – Multi-master transmitter settling time values 36
Table 23 – Checking a logical bit, starting at an edge at the beginning of the bit 37
Table 24 – Checking a logical bit, starting at an edge inside the bit 38
Table 25 – Collision recovery timing 39
Table 26 – Transmitter command iteration timing 41
Table 27 – Receiver command iteration timing 41
Table 28 – Function call keywords 44
Table 29 – Defined operators 47
Table A.1 – Maximum cable length 67
Table A.2 – OSI layer model of IEC 62386 77

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 101: General requirements – System components

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.
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International Standard IEC 62386-101 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 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) collection of all bus timing requirements defined in IEC 62386-101:2009 and IEC 62386-102:2009 and rework of the timing requirements to facilitate the preparation of a future control devices standard, taking particular account of the requirements for multi-master systems. The 10 % tolerances have been replaced by minimum and maximum timing values;
b) integration of multi-master timing requirements;

c) extension of the defined forward frames;

d) addition of wiring requirements;

e) improvement of the bus power supply requirements;

f) improvement of test sequences and description of the test sequences in the form of pseudo code instead of flow charts.

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

FDIS	Report on voting
34C/1098/FDIS	34C/1111/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 Part 101 is intended to be used in conjunction with:

- Part 102, which contains general requirements for the relevant product type (control gear), and with the appropriate Part 2xx (particular requirements for control gear);
- Part 103, which contains general requirements for the relevant product type (control devices), and the appropriate Part 3xx (particular requirements for control devices).

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

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 stability 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.

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

IEC 62386 contains several parts, referred to as series. The 1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general requirements for control devices.

The 2xx parts extend the general requirements for control gear with lamp specific extensions (mainly for backward compatibility with Edition 1 of IEC 62386) and with control gear specific features.

The 3xx parts extend the general requirements for control devices with input device specific extensions describing the instance types as well as some common features that can be combined with multiple instance types.

This second edition of IEC 62386-101 is published in conjunction with IEC 62386-102:2014 and with the various parts that make up the IEC 62386-2xx series for control gear, together with IEC 62386-103:2014 and the various parts that make up the IEC 62386-3xx series of particular requirements for control devices. The division 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.

The setup of the standard is graphically represented in Figure 1 below.

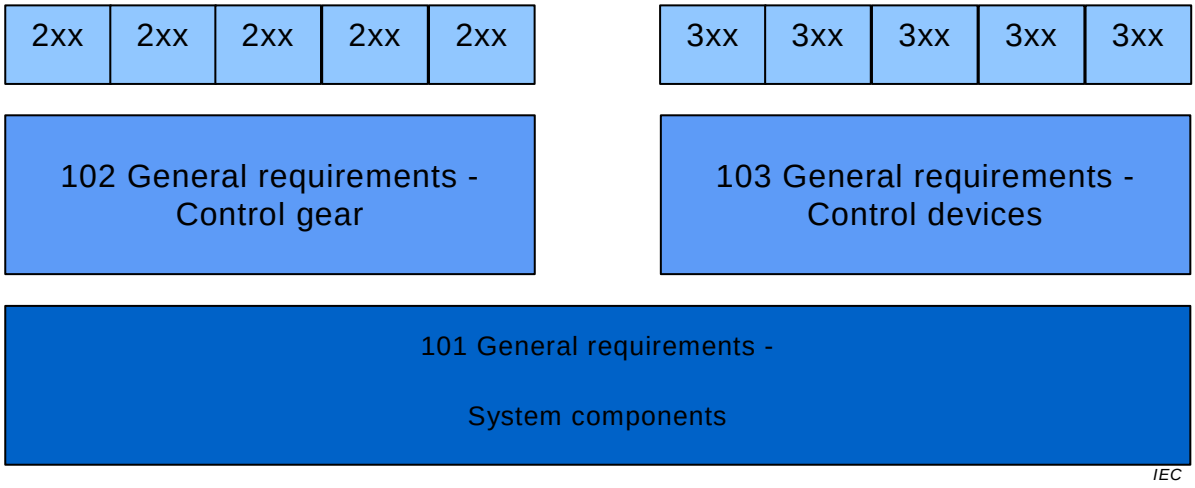

Figure 1 – IEC 62386 graphical overview

When this part of IEC 62386 refers to any of the clauses of the other two parts of the IEC 62386-1xx series, the extent to which such a clause is applicable and the order in which the tests are to be performed are specified. The other parts also include additional requirements, as necessary.

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, w here X is 0 or 1, "x" in binary numbers means "don't care".

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 101: General requirements – System components

1 Scope

This part of IEC 62386 is applicable to system components in a bus system for control by digital signals of electronic lighting equipment. This electronic lighting equipment should be in line with the requirements of IEC 61347, with the addition of d.c. supplies.

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

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 61347 (all parts), *Lamp controlgear*

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

IEC 62386-102:2014, *Digital addressable lighting interface – Part 102: General requirements – Control gear*

IEC 62386-103:2014, *Digital addressable lighting interface – Part 103: General requirements – Control devices*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) – Part 4-11:Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests*