

Digital addressable lighting interface - Part 216:  
Particular requirements for control gear - Load  
referencing (device type 15)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62386-216:2018 sisaldab Euroopa standardi EN IEC 62386-216:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62386-216:2018 consists of the English text of the European standard EN IEC 62386-216:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.06.2018.	Date of Availability of the European standard is 22.06.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 29.140.50, 29.140.99

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ICS 29.140.50; 29.140.99

English Version

**Digital addressable lighting interface - Part 216: Particular requirements for control gear - Load referencing (device type 15) (IEC 62386-216:2018)**

Interface d'éclairage adressable numérique - Partie 216:  
Exigences particulières pour les appareillages de  
commande - Référence de charge (dispositifs de type 15)  
(IEC 62386-216:2018)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil  
216: Anforderungen für Betriebsgeräte - Last-  
Referenzierung (Gerätetyp 15)  
(IEC 62386-216:2018)

This European Standard was approved by CENELEC on 2018-05-28. 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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## European foreword

The text of document 34/491/FDIS, future edition 1 of IEC 62386-216, prepared by IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62386-216:2018.

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) 2019-02-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-05-28

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

## Endorsement notice

The text of the International Standard IEC 62386-216:2018 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 61347 (series)	NOTE	Harmonized as EN 61347 (series).
IEC 61347-1	NOTE	Harmonized as EN 61347-1.

## Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62386-101	2014	Digital addressable lighting interface - Part 101: General requirements - System components	EN 62386-101	2014
+ A1 <sup>1</sup>	-		+ A1 <sup>2</sup>	-
IEC 62386-102	2014	Digital addressable lighting interface - Part 102: General requirements - Control gear	EN 62386-102	2014
+ A1 <sup>3</sup>	-		+ A1 <sup>4</sup>	-

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<sup>1</sup> Under preparation. Stage at the time of publication: IEC CCDV 62386-101/AMD1:2018.

<sup>2</sup> Under preparation. Stage at the time of publication: EN 62386-101:2014/prA1:2017.

<sup>3</sup> Under preparation. Stage at the time of publication: IEC CCDV 62386-102/AMD1:2018.

<sup>4</sup> Under preparation. Stage at the time of publication: EN 62386-102:2014/FprA1:2018.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIGITAL ADDRESSABLE LIGHTING INTERFACE –****Part 216: Particular requirements for control gear –  
Load referencing (device type 15)****FOREWORD**

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International Standard IEC 62386-216 has been prepared by IEC technical committee 34: Lamps and related equipment.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
34/491/FDIS	34/513/RVD

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

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

This Part 216 of IEC 62386 is intended to be used in conjunction with:

- Part 101, which contains general requirements for system components;
- Part 102, which contains general requirements for control gear.

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

The committee has decided that the contents of this document 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 document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

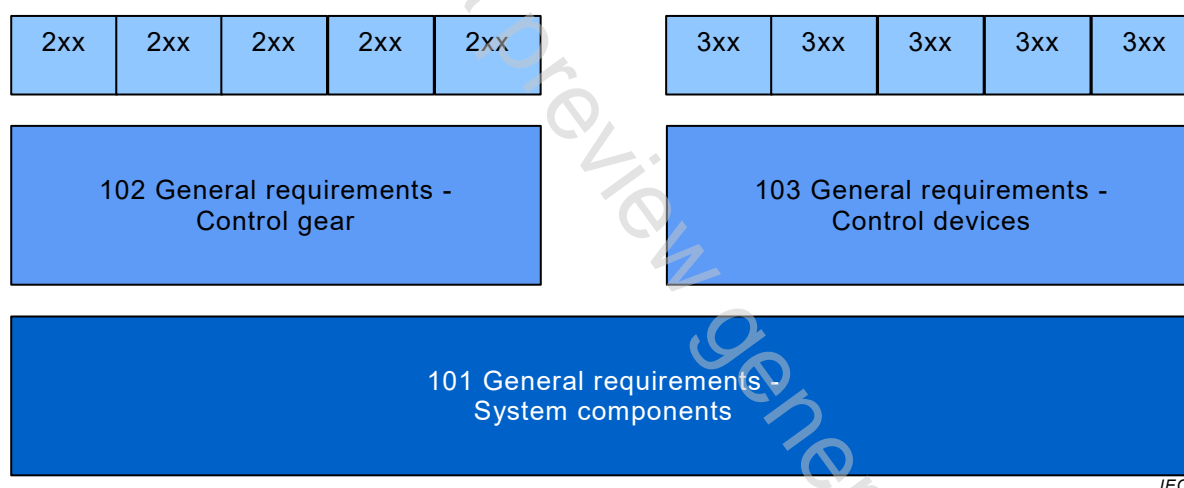
IEC 62386 contains several parts, referred to as series. The 1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general requirements 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 first edition of IEC 62386-216 is intended to be used in conjunction with IEC 62386-101:2014, IEC 62386-101:2014/AMD1:—, IEC 62386-102:2014 and IEC 62386-102:2014/AMD1:—. 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 recognized.

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



**Figure 1 – IEC 62386 graphical overview**

This document, and the other parts that make up the IEC 62386-200 series, in referring to any of the clauses of IEC 62386-1XX, specifies the extent to which such a clause is applicable; the parts also include additional requirements, as necessary.

Where the requirements of any of the clauses of IEC 62386-1XX are referred to in this document 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 1XX apply, except any which are clearly inapplicable.

The standardization of the control interface for control gear is intended to achieve compatible co-existence between electronic control gear and lighting control devices, below the level of building management systems. This document describes a method of implementing control gear.

All numbers used in this document 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”.

The following typographic expressions are used:

Variables: “*variableName*” or “*variableName*[3:0]”, giving only bits 3 to 0 of “*variableName*”.

Range of values: [lowest, highest]

Command: “COMMAND NAME”

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