

**Digital addressable lighting interface - Part 206:
Particular requirements for control gear - Conversion
from digital signal into d. c. voltage (device type 5)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 62386-206:2009 sisaldab Euroopa standardi EN 62386-206:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 05.11.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 62386-206:2009 consists of the English text of the European standard EN 62386-206:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English version

**Semiconductor devices -
Mechanical and climatic test methods -
Part 20: Resistance of plastic encapsulated SMDs
to the combined effect of moisture and soldering heat
(IEC 60749-20:2008)**

Dispositifs à semiconducteurs -
Méthodes d'essais mécaniques
et climatiques -
Partie 20: Résistance
des CMS à boîtiers plastique
à l'effet combiné de l'humidité
et de la chaleur de brasage
(CEI 60749-20:2008)

Halbleiterbauelemente -
Mechanische und klimatische
Prüfverfahren -
Teil 20: Beständigkeit kunststoffverkappter
oberflächenmontierbarer Bauelemente
(SMD) gegenüber der kombinierten
Beanspruchung von Feuchte
und Lötwärme
(IEC 60749-20:2008)

This European Standard was approved by CENELEC on 2009-09-01. 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.

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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 47/1989/FDIS, future edition 2 of IEC 60749-20, prepared by IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60749-20 on 2009-09-01.

This European Standard supersedes EN 60749-20:2003.

The main changes are as follows:

- to reconcile certain classifications of EN 60749-20 and those of IPC/JEDEC J-STD-020C;
- reference EN 60749-35 instead of Annex A of EN 60749-20:2003;
- update for lead-free solder;
- correct certain errors in EN 60749-20:2003.

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) 2010-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60749-20:2008 was approved by CENELEC as a European Standard without any modification.

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 60068-2-20	2008	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	2008
IEC 60749-3	- ¹⁾	Semiconductor devices - Mechanical and climatic test methods - Part 3: External visual examination	EN 60749-3	2002 ²⁾
IEC 60749-35	- ¹⁾	Semiconductor devices - Mechanical and climatic test methods - Part 35: Acoustic microscopy for plastic encapsulated electronic components	EN 60749-35	2006 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTRODUCTION

This first edition of IEC 62386-206 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 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 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 206.

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".

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 206: Particular requirements for control gear – Conversion from digital signal into d. c. voltage (device type 5)

1 Scope

This International Standard specifies a protocol and test methods for the control by digital signals of electronic control gear, associated with the conversion from digital signal into d.c. voltage.

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.

4 General description

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

5 Electrical specifications

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

6 Interface power supply

The requirements of Clause 6 of IEC 62386-101:2009 and Clause 6 of IEC 62386-102:2009 shall 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 shall apply.