

SLOVENSKI STANDARD SIST EN 62031:2008

01-december-2008

Moduli LED za splošno razsvetljavo - Varnostne specifikacije (IEC 62031:2008)

LED modules for general lighting - Safety specifications (IEC 62031:2008)

LED-Module für Allgemeinbeleuchtung - Sicherheitsanforderungen (IEC 62031:2008)

Modules de DEL pour éclairage général - Spécifications de sécurité (CEI 62031:2008)

Ta slovenski standard je istoveten z: EN 62031:2008

SIST EN 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008

ICS:

29.140.99 Drugi standardi v zvezi z

žarnicami

lamps

Other standards related to

SIST EN 62031:2008 en,fr

SIST EN 62031:2008

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008

EUROPEAN STANDARD

EN 62031

NORME EUROPÉENNE EUROPÄISCHE NORM

September 2008

ICS 29.140.99; 31.080.99

English version

LED modules for general lighting - Safety specifications

(IEC 62031:2008)

Modules de DEL pour éclairage général -Spécifications de sécurité (CEI 62031:2008) LED-Module für Allgemeinbeleuchtung - Sicherheitsanforderungen (IEC 62031:2008)

This European Standard was approved by CENELEC on 2008-07-01. 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: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 34A/1237/FDIS, future edition 1 of IEC 62031, prepared by SC 34A, Lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62031 on 2008-07-01.

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) 2009-04-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2011-07-01

NOTE In this standard, the following print types are used:

- Requirements proper: in roman type.
- Test specifications: in italic type.
- Explanatory matter: in smaller roman type.

Annex ZA has been added by CENELEC.

iTeh STANDARD PREVIEW

(st Endorsement notice)

The text of the International Standard IEC 62031:2008 was approved by CENELEC as a European Standard without any modification.

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-

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

IEC 60968 NOTE Harmonized as EN 60968:1990 (modified).

IEC 62384 NOTE Harmonized as EN 62384:2006 (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>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
2003	Luminaires - Part 1: General requirements and tests	EN 60598-1 + corr. August	2004 2007
2006		A1	2006
- 1)	Miscellaneous lampholders - Part 2-2: Particular requirements - Connectors for LED modules	EN 60838-2-2 s	2006 ²⁾
2007	Lamp controlgear - Part 1: General and safety requirements	EN 61347-1	2008
2006 iT	a.c. supplied electronic controlgear for LED		2006
2006	tstandards.iten.ati	FN 62471	2008
2000	systems		2000
2002 https://sta	Paper board pulps and related terms, ple-4e2 Vocabulary 3 c64732/sist-en-62031-2008 Part 4: Paper and board grades and converted products	6-9dd3-	-
	2003 2006 - 1) 2007 2006 • IT (2003 Luminaires - Part 1: General requirements and tests 2006 - 1) Miscellaneous lampholders - Part 2-2: Particular requirements - Connector for LED modules 2007 Lamp controlgear - Part 1: General and safety requirements 2006 Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules 2006 Photobiological safety of lamps and lamp systems 2007 Standard Standar	2003 Luminaires - Part 1: General requirements and tests + corr. August 2006 A1 -1) Miscellaneous lampholders - Part 2-2: Particular requirements - Connectors for LED modules 2007 Lamp controlgear - Part 1: General and safety requirements 2006 Lamp controlgear - Part 2-13: Particular requirements for d.c. or Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules 2006 Photobiological safety of lamps and lamp systems 2006 Photobiological safety of lamps and lamp systems 2007 Paper, board, pulps and related terms Vocabulary 3-co4/732/sist-en-62031-2008 Part 4: Paper and board grades and

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

SIST EN 62031:2008

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008



IEC 62031

Edition 1.0 2008-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

LED modules for general lighting - Safety specifications W

Modules de DEL pour éclairage général – Spécifications de sécurité

SIST EN 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE CODE PRIX P

ICS 29.140.99; 31.080.99

CONTENTS

FΟ	REWORD	3
INT	RODUCTION	5
1	Scope	
2	Normative references	6
3	Terms and definitions	7
4	General requirements	8
5	General test requirements	8
6	Classification	9
7	Marking	9
	7.1 Mandatory marking for built-in or independent modules	9
	7.2 Location of marking	
	7.3 Durability and legibility of marking	
8	Terminals	
9	Provisions for protective earthing	
10	Protection against accidental contact with live parts	
11	Moisture resistance and insulation Thank D. P.	10
12	Electric strength	
13		
	13.1 General	11
	13.2 Overpower condition https://standards/sist/d5025940-79fe-4e26-9dd3-	11
14	5 Coded3CO+732/35t-CiFO2031-2000	
15	Construction	
16	Creepage distances and clearances	
17	Screws, current-carrying parts and connections	
18	Resistance to heat, fire and tracking	
19	Resistance to corrosion	12
Anı	nex A (normative) Tests	13
	nex B (informative) Overview of systems composed of LED modules and control	14
	nex C (informative) Conformity testing during manufacture	
Bib	liography	16
Fig	ure B.1 – Overview of systems composed of LED modules and control gear	14

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LED MODULES FOR GENERAL LIGHTING – SAFETY SPECIFICATIONS

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.
- 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 fe-4e26-9dd3-
- 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 62031 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this first edition is based on the following documents:

FDIS	Report on voting
34A/1237/FDIS	34A/1256/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.

62031 © IEC:2008

NOTE In this standard, the following print types are used:

- Requirements proper: in roman type.
- Test specifications: in italic type.
- Explanatory matter: in smaller roman type.

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 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008

-4-

62031 © IEC:2008

- 5 -

INTRODUCTION

The first edition of a safety standard for LED modules for general lighting applications acknowledges the need for relevant tests for this new source of electrical light, sometimes called "solid state lighting".

The provisions in the standard represent the technical knowledge of experts from the fields of the semiconductor industry and those of the traditional electrical light sources.

Two types of LED modules are covered: with integral and external control gear.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 62031:2008

https://standards.iteh.ai/catalog/standards/sist/d5025940-79fe-4e26-9dd3-c0abd3c64732/sist-en-62031-2008