

SLOVENSKI STANDARD oSIST prEN IEC 63356-1:2022

01-marec-2022

Značilnosti LED-svetlobnega vira - 1. del: Preglednice

LED light source characteristics - Part 1: Datasheets

iTeh STANDARD

Caractéristiques de source lumineuse à LED - Partie 1: Feuilles de caractéristiques

Ta slovenski standard je istoveten z: 2 prEN IEC 63356-1:2022

oSIST prEN IEC 63356-1:2022

ICS:

https://standards.iteh.ai/catalog/standards/sist/2618eb17-

Žarnice na splošno Lamps in general 2022 29.140.01

oSIST prEN IEC 63356-1:2022

en

oSIST prEN IEC 63356-1:2022

iTeh STANDARD PREVIEW (standards.iteh.ai)

oSIST prEN IEC 63356-1:2022

https://standards.iteh.ai/catalog/standards/sist/2618eb17-b459-47ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1-2022

oSIST prEN IEC 63356-1:2022

PROJECT NUMBER: IEC 63356-1 ED1

DATE OF CIRCULATION:



34A/2264/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

CLOSING DATE FOR VOTING:

	2021-12-31		2022-03-25			
	SUPERSEDES DOCU	MENTS:				
	34A/2236/CD, 34	A/2245/CC				
IEC SC 34A : ELECTRIC LIGHT SOURCES	<u> </u>					
SECRETARIAT:		SECRETARY:				
United Kingdom		Mr Petar Luzajic				
OF INTEREST TO THE FOLLOWING COMMI	TTEES:	PROPOSED HORIZO	NTAL STANDARD:			
TC 34,SC 34B,SC 34C,SC 34D						
il	Teh STA	Other TC/SCs are any, in this CDV to	requested to indicate their interest, if the secretary.			
FUNCTIONS CONCERNED:	PREV	IEW				
☐ EMC ☐ ENVIR	ONMENT	QUALITY ASSURA	ANCE SAFETY			
SUBMITTED FOR CENELEC PARALLE	LVOTINGUAL	NOT SUBMITTED	FOR CENELEC PARALLEL VOTING			
Attention IEC-CENELEC parallel voi						
The attention of IEC National Committees, members of CENELEC, is drawn to the fact/that this Committee/Draftlog/standards/sist/2618eb17-for Vote (CDV) is submitted for parallel voting b439-4/ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1-						
The CENELEC members are invited to vote through the 22 CENELEC online voting system.						
This document is still under study and	subject to change.	It should not be us	ed for reference purposes.			
Recipients of this document are invite which they are aware and to provide s			cation of any relevant patent rights of			
TITLE:						
LED light source characteristics	- Part 1: Datash	eets				
PROPOSED STABILITY DATE: 2025						
NOTE FROM TC/SC OFFICERS:						

Copyright © 2021 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

2

34A/2264/CDV

1	
2	

CONTENTS

2	
J	

·		
4	FOREWORD	3
5	INTRODUCTION	5
6	1 Scope	6
7	2 Normative references	
8	3 Terms and definitions	6
9	4 Overview and common information	
10	4.1 General	
11	4.2 Numbering system	
12	4.3 List of datasheets	
13	4.3.1 List of single-capped LED lamp datasheets	7
14	4.3.2 List of double-capped LED lamp datasheets	7
15	4.3.3 List of LED module datasheets	
16	5 Single-capped LED lamp datasheets 5.1 Single-capped LED lamps STANDARD	7
17	5.1 Single-capped LED lamps S.I.A.N.D.A.K.D.	7
18	6 Double-capped LED lamp datasheets	8
19	6.1 Linear double-capped LED lamp with GX16t-5 caps	8
20	6.1.1 Diagrammatic information for location of lamp dimensions	8
21		
22	7 LED module datasheets	
23	Bibliography OSIST prEN IEC 63356-1:2022	20
24	https://standards.iteh.ai/catalog/standards/sist/2618eb17-	
25	Figure 1 – Location of dimensions of linear double-capped lamps with GX16t-5 caps .	8
26		
27	Table 1 – List of double-capped LED lamp datasheets in the order of sheet number	7

28

3

34A/2264/CDV

INTERNATIONAL ELECTROTECHNICAL COMMISSION

31

32

33 34

LED LIGHT SOURCE CHARACTERISTICS

35 36

Part 1: Datasheets

37 38

39 40

41 42

43

44

45 46

47

48 49

54

55

56

57 58

59

60 61

62 63

64 65

66

67 68

69 70

71

72

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.
- 2) 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 itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and in some areas, access to IEC marks of conformity, IEC is not responsible for any services carried out by independent certification bodies.

 6) All users should ensure that they have the latest edition of this publication.
- 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.
- 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.
- IEC 63356-1 has been prepared by subcommittee 34A: Electric light sources, of IEC technical 73 committee 34: Lighting. It is an International Standard. 74
- The text of this International Standard is based on the following documents: 75

Draft	Report on voting	
XX/XX/FDIS	XX/XX/RVD	

- Full information on the voting for its approval can be found in the report on voting indicated in the above table. 78
- The language used for the development of this International Standard is English. 79
- 80 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available 81

4

34A/2264/CDV

- at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.
- The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website 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
- 90 amended.

91

iTeh STANDARD PREVIEW (standards.iteh.ai)

oSIST prEN IEC 63356-1:2022 https://standards.iteh.ai/catalog/standards/sist/2618eb17b459-47ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1-2022 5

34A/2264/CDV

INTRODUCTION 92 IEC 63356 LED LIGHT SOURCE CHARACTERISTICS is split into 2 parts: 93 Part 1: Datasheets 94 The scope of Part 1 covers datasheets that are comprehensive specifications for unique LED 95 light sources (LED lamp or LED module). These are full specifications for products including, 96 where necessary, information on interchangeability aspects, e.g. mechanical, electrical, optical. 97 98 Each datasheet in this part relates to an individual type of LED lamp or LED module. Part 2: Design parameters and values 99 The scope of Part 2 covers design parameters and values that are used in the design of an LED 100 light source (LED lamp or LED module) or a related component. This document does not provide 101 full product specifications but includes important interface aspects (e.g. mechanical, electrical, 102 optical) that should be taken account of in the design of LED light sources and related 103 104 components.

> iTeh STANDARD PREVIEW (standards.iteh.ai)

oSIST prEN IEC 63356-1:2022 https://standards.iteh.ai/catalog/standards/sist/2618eb17b459-47ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1-2022

105

IEC CDV 63356-1 © IEC 2021

106

Integrated 220-xxxx

148

6

34A/2264/CDV

108	LED LIGHT SOURCE CHARACTERISTICS
109 110	Part 1: Datasheets
111	Tart II Datasiiosto
112	
113	
114	1 Scope
115 116 117	This part of IEC 63356 specifies datasheets of LED lamps and LED modules with a series of parameters per datasheet for a specific LED light source that enables interchangeability between products from different LED light source manufacturers.
118 119	Compliance criteria relating to datasheet parameters in this document are covered by IEC 63220 for safety, or IEC 63221 for performance.
120	2 Normative references
121	There are no normative references in this document.
122	3 Terms and definitions
123	No terms and definitions are listed in this document. DARD
124 125	ISO and IEC maintain terminological databases for use in standardization at the following addresses:
126	IEC Electropedia: available at https://www.electropedia.org
127	ISO Online browsing platform: available at https://www.iso.org/obp
128	4 Overview and common information EC 63356-1:2022
129	4.1 General https://standards.iteh.ai/catalog/standards/sist/2618eb17-
130	b459-47ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1- Unless otherwise specified, mechanical dimensions refer to a temperature of 25 °C ± 5 K.
131	4.2 Numbering system
132	Datasheets are numbered so that:
133 134	 The first part represents the number of the publication "63356-1", followed by the letters "IEC".
135	 The second three-digit number represents the datasheet group.
136	 The third four-digit number represents the datasheet number.
137	 The fourth single-digit number represents the datasheet edition.
138 139	Note In cases where a datasheet has more than one page, all pages of the specific datasheet are issued with the same updated edition number.
140	Datasheet numbers are grouped as follows:
141	 Single-capped LED lamp datasheets:
142	Non-integrated 100-xxxx
143	Semi-integrated 110-xxxx
144	Integrated 120-xxxx
145	 Double-capped LED lamp datasheets:
146	Non-integrated 200-xxxx
147	Semi-integrated 210-xxxx

7

34A/2264/CDV

- 149 LED module datasheets:
- Non-integrated 300-xxxx
- Semi-integrated 310-xxxx
- Integrated 320-xxxx
- 153 EXAMPLE 63356-1-IEC-110-0001-1: Single-capped LED lamp, semi-integrated, number 0001, version 1.
- 154 4.3 List of datasheets
- 155 4.3.1 List of single-capped LED lamp datasheets
- 156 Void.

157

158

4.3.2 List of double-capped LED lamp datasheets

Table 1 - List of double-capped LED lamp datasheets in the order of sheet number

Sheet no. 63356-1- IEC-2xx-xxx	Shape	Nominal length (mm)	Rated diameter (mm)	Rated current	Rated voltage	Power range (W)	Сар
63356-1- IEC-200- 0001-1	linear	600	25,5	0,35 A d.c.		7,9 - 16,6	GX16t-5
63356-1- IEC-200- 0002-1	linear	600 iTe	32,5 h ST	0,35 A d.c.	RD	7,9 - 16,6	GX16t-5
63356-1- IEC-200- 0003-1	linear	900	25,5 PRE	0,35 A d.c.	7	11,0 - 24,8	GX16t-5
63356-1- IEC-200- 0004-1	linear	(Sta	ndar	0,35 Ad.c.	n.ai)	11,0 - 24,8	GX16t-5
63356-1- IEC-200- 0005-1	linear	1 200 <u>oSI</u> ns://standard		0,35 A d.c. EC 63356-1:		14,3 - 33,3 1 <i>7</i> -	GX16t-5
63356-1- IEC-200- 0006-1	linear 645	9-47ce-b2d	2-e7ee41c9	alog ballaala	ren-iec-6335	6-14,3 - 33,3	GX16t-5
63356-1- IEC-200- 0007-1	linear	1 500	25,5	0,35 A d.c.		14,3 - 42,0	GX16t-5
63356-1- IEC-200- 0008-1	linear	1 500	32,5	0,35 A d.c.		14,3 - 42,0	GX16t-5
63356-1- IEC-200- 0009-1	linear	2 400	25,5	0,35 A d.c.		28,7 - 66,5	GX16t-5
63356-1- IEC-200- 0010-1	linear	2 400	32,5	0,35 A d.c.		28,7 - 66,5	GX16t-5

4.3.3 List of LED module datasheets

160 Void.

5 Single-capped LED lamp datasheets

162 5.1 Single-capped LED lamps

163 Void.

164

159

165

166

168

169

170

171

172 173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192 193

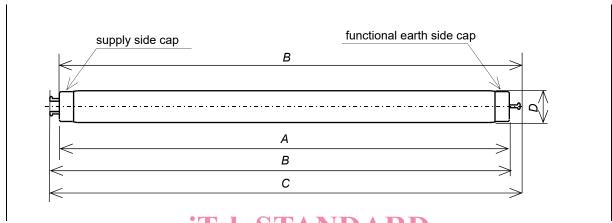
6 Double-capped LED lamp datasheets

6.1 Linear double-capped LED lamp with GX16t-5 caps

167 Note The datasheets in clause 6.1.2 are taken from IEC 62931:2017 without technical modifications.

6.1.1 Diagrammatic information for location of lamp dimensions

Figure 1 indicates the dimensions to be controlled and are to be used in conjunction with the relevant GX16t-5 LED lamp datasheet.



1) For lamps with GX16t-5 caps and nominal length up to or equal to 1 200 mm

The values for dimensions A, B and C are derived from a basic value, designated X.

A = cap face to cap face

 $A_{\text{max}} = X$

B = cap face to end of opposite pins and ards.iteh.ai)

 $B_{\text{max}} = X + 7.1 \text{ mm}$

 $B_{\min} = X + 4.7 \text{ mm}$

C = overall length of the lamp between pin ends IEC 63356-1:2022

 $c_{\text{max}} = x + (2 \sin \frac{1}{2} \sin \frac{1}{2} \sin \frac{1}{2} \cos \frac{1}{2} \sin \frac{1}{2} \cos \frac{$

C_{min} = not specifie 9-47ce-b2d2-e7ee41c91293/osist-pren-iec-63356-1-

2) For lamps with GX16t-5 caps and nominal length greater than 1 200 mm

The values for dimensions A, B and C are derived from a basic value, designated X.

A = cap face to cap face

B = cap face to end of opposite pins

 $B_{\text{max}} = X + 7.4 \text{ mm}$

 $B_{\min} = X + 4.4 \text{ mm}$

C = overall length of the lamp between pin ends

 $C_{\text{max}} = X + (2 \times 7.4) = X + 14.8 \text{ mm}$

 C_{\min} = not specified

NOTE Dimension D specifies the maximum dimension of the cross section of the tube.

Figure 1 - Location of dimensions of linear double-capped lamps with GX16t-5 caps

9

34A/2264/CDV

194 **6.1.2 Datasheets**

195 <u>Datasheet 63356-1-IEC-200-0001-1:</u>

Note This datasheet was numbered 62931-IEC-600-1 (rated D = 25.5 mm) in IEC 62931:2017.

Nominal length Rated DC lamp current		Range of lamp power	Сар
mm	Α	W	
600	0,35	7,9 to16,6	GX16t-5

Dimensions							
			m	m			
A B C			ı	D			
Min.	Rated	Max.	Min.	Max.	Max.	Rated	Max.
587,4	588,5	589,8 C	594,5 A	596,9 A	R604,0	25,5	26,7

PREVIEW

(standards.iteh. Electrical characteristics	ai)	
DC test current prEN IEC 63356-1:203		np voltage
https://standards.iteh.ai/catalog/standards/s b459-47ce-b2d2-e7ee41c91293/osist-prer		Max.
0,35 2022	22,5	47,5

Information for controlgear design					
Type of controlgear	Constant DC current output				
	Max.	Min.			
DC output voltage range for the constant DC current V	47,5	22,5			
Tolerance of the constant DC current	±10	0 %			