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GX16t-5 capped tubular led lamp - Safety specifications

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 11/17

Obsahuje: EN 62931:2017, IEC 62931:2017

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017

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EUROPEAN STANDARD

EN 62931

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

ICS 29.140.10

English Version

**GX16t-5 capped tubular led lamp -
Safety specifications
(IEC 62931:2017)**

Lampe à led tubulaire munie d'un culot GX16t-5 -
Spécifications de sécurité
(IEC 62931:2017)

Zweiseitig gesockelte LED-Lampen mit Passungssystem
GX16t-5 - Sicherheitsanforderungen
(IEC 62931:2017)

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European foreword

The text of document 34A/1957/FDIS, future edition 1 of IEC 62931, prepared by SC 34A "Lamps", of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62931:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2018-03-01
national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2020-06-01
the document have to be withdrawn

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

IEC 60081	NOTE	Harmonized as EN 60081.
IEC 60529:1989 + A1:1999 + A2:2013	NOTE	Harmonized as EN 60529:1991 (not modified) + A1:2000 (not modified) + A2:2013 (not modified).
IEC 60921	NOTE	Harmonized as EN 60921.
IEC 61195	NOTE	Harmonized as EN 61195.
IEC 61347-2-13	NOTE	Harmonized as EN 61347-2-13.
IEC 62471	NOTE	Harmonized as EN 62471.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60061-1	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps	EN 60061-1	-
IEC 60061-2	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 2: Lampholders	EN 60061-2	-
IEC 60061-3	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges	EN 60061-3	-
IEC 60061-4	-	Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 4: Guidelines and general information	EN 60061-4	-
IEC 60360	-	Standard method of measurement of lamp cap temperature rise	EN 60360	-
IEC 60400	2008	Lampholders for tubular fluorescent lamps and starterholders	EN 60400	2008
+ A1	2011		+ A1	2011
+ A2	2014		+ A2	2014
IEC 60598-1 (mod)	2014	Luminaires - Part 1: General requirements and tests	EN 60598-1	2015
IEC 60695-2-10	2000	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001 ¹⁾

1) EN 60695-2-10:2001 is superseded by EN 60695-2-10:2013, which is based on IEC 60695-2-10:2013.

EN 62931:2017

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60838-2-3	-	Miscellaneous lampholders - Part 2-3: Particular requirements - Lampholders for double-capped linear LED lamps	EN 60838-2-3	-
IEC 60695-2-11	2000	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001 ²⁾
IEC 61347-1	2015	Lamp controlgear - Part 1: General and safety requirement	EN 61347-1	2015
IEC 62031	-	LED modules for general lighting - Safety specifications	EN 62031	-
IEC 62504	-	General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions	EN 62504	-
IEC/TR 62778	2014	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires	-	-
ISO 4046-4	2016	Paper, board, pulps and related terms - Vocabulary - Part 4: Paper and board grades and converted products	-	-

2) EN 60695-2-11:2001 is superseded by EN 60695-2-11:2014, which is based on IEC 60695-2-11:2014.



INTERNATIONAL STANDARD

NORME INTERNATIONALE

GX16t-5 capped tubular led lamp – Safety specifications

Lampe à led tubulaire munie d'un culot GX16t-5 – Spécifications de sécurité





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IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

GX16t-5 capped tubular led lamp – Safety specifications

Lampe à led tubulaire munie d'un culot GX16t-5 – Spécifications de sécurité

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GX16t-5 CAPPED TUBULAR LED LAMP – SAFETY SPECIFICATIONS

FOREWORD

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International Standard IEC 62931 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

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

FDIS	Report on voting
34A/1957/FDIS	34A/1974/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.

In this standard, the following type is used:

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

GX16t-5 CAPPED TUBULAR LED LAMP – SAFETY SPECIFICATIONS

1 Scope

This document specifies the safety and interchangeability requirements together with the test methods and conditions required to show compliance of non-integrated tubular LED lamps, intended for general lighting purposes, having:

- a rated wattage up to 70 W,
- a rated voltage up to 190 V ripple free DC,
- GX16t-5 cap as listed in Table 1.

The requirements of this document relate only to type testing.

NOTE 1 Where in this document the term "lamp(s)" is used, it is understood to stand for "non-integrated GX16t-5 capped tubular LED-lamp(s)", except where it is obviously assigned to other types of lamps.

NOTE 2 The lamp specified in this document is operated with a controlgear specified in Annex B. See Clause 18.

NOTE 3 This document includes photobiological safety.

2 Normative references

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.

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-2, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60061-4, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 4: Guidelines and general information*

IEC 60360, *Standard method of measurement of lamp cap temperature rise*

IEC 60400:2008, *Lampholders for tubular fluorescent lamps and starterholders*
 IEC 60400:2008/AMD1:2011
 IEC 60400:2008/AMD2:2014

IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods; Glow-wire apparatus and common test procedure¹*

¹ Withdrawn

IEC 60838-2-3, *Miscellaneous lampholders – Part 2-3: Particular requirements – Lampholders for double-capped linear LED lamps*

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end products (GWEPT)*²

IEC 61347-1:2015, *Lamp controlgear – Part 1: General and safety requirements*

IEC 62031, *LED modules for general lighting – Safety specifications*

IEC 62504, *General lighting – Light emitting diode (LED) products and related equipment – Terms and definitions*

IEC TR 62778:2014, *Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires*

ISO 4046-4:2016, *Paper, board, pulps and related terms – Vocabulary – Part 4: Paper and board grades and converted products*

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² Withdrawn