

Product standard covering luminous signs with discharge lamps and/or LED (light emitting diodes) and/or EL (electroluminescent) lightsources with a nominal voltage not exceeding 1000 V, with the exclusion of general lighting, traffic- or emergency related purpose

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50107-3:2018 sisaldab Euroopa standardi EN 50107-3:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 50107-3:2018 consists of the English text of the European standard EN 50107-3:2018.
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 03.08.2018.	Date of Availability of the European standard is 03.08.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 29.140.30

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English Version

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Norme de produit couvrant les enseignes lumineuses avec des lampes à décharge et/ou à LED (diodes électroluminescentes) et/ou les sources lumineuses électroluminescentes (EL) avec une tension nominale ne dépassant pas 1000 V, à l'exclusion de l'éclairage général ainsi que des enseignes relatives à la circulation routière et aux situations d'urgence

Produktnorm für Lichtwerbeanlagen mit Entladungslampen und/oder LED- (lichtemittierende Dioden) und/oder EL- (elektrolumineszierende) Lichtquellen mit einer Nennspannung bis einschließlich 1 000 V, ausgenommen Allgemeinbeleuchtung, Verkehrs- oder Notbeleuchtung

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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

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European foreword

This document (EN 50107-3:2018) has been prepared by CLC/BTTF 142-1 "Product requirements for signs, artwork and accent lighting using low voltage cold cathode and/or LED".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-02-03
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-08-03

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1 Scope

This product standard contains electrical safety requirements for luminous signs, light-artwork or architectural accent lighting (finished functional sign, abbreviated: sign) using light sources with a nominal voltage not exceeding 1000 V with the exclusion of general lighting, traffic- or emergency related purposes.

The finished functional sign as a product fulfilling its intended purpose as luminous sign can be achieved by combining products with similar purpose through installation (according to HD 384 series/HD 60364) in order to yield a new product by itself.

NOTE 1 The scope of this product standard is specified by the areas C, D and E in the figure of Annex A.

NOTE 2 Even if the physical execution of a particular luminous sign might qualify the luminous sign to meet the requirements of a luminaire according to EN 60598, the exclusion of general lighting, traffic and emergency related purpose is intended to avoid the requirements of EN 60598 which are impracticable and/or impossible to fulfill for most luminous signs. To cover the special safety problems related with luminous signs, the present product standard is intended.

2 Normative references

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.

EN 50107-1:2002, *Signs and luminous-discharge-tube installations operating from a no-load rated output voltage exceeding 1 kV but not exceeding 10 kV - Part 1: General requirements*

EN 50107-2, *Signs and luminous-discharge-tube installations operating from a no-load rated output voltage exceeding 1 kV but not exceeding 10 kV - Part 2: Requirements for earth-leakage and open-circuit protective devices*

EN 60081, *Double-capped fluorescent lamps - Performance specifications (IEC 60081)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN 60598-2-23, *Luminaires - Part 2-23: Particular requirements - Extra low-voltage lighting systems for filament lamps (IEC 60598-2-23)*

EN 60901, *Single-capped fluorescent lamps - Performance specifications (IEC 60901)*

EN 60921, *Ballasts for tubular fluorescent lamps - Performance requirements (IEC 60921)*

EN 60929, *AC-supplied electronic ballasts for tubular fluorescent lamps - Performance requirements (IEC 60929)*

EN 61050, *Transformers for tubular discharge lamps having a no-load output voltage exceeding 1 kV (generally called neon-transformers) - General and safety requirements (IEC 61050)*

EN 61195, *Double-capped fluorescent lamps - Safety specifications (IEC 61195)*

EN 61199, *Single-capped fluorescent lamps - Safety specifications (IEC 61199)*

EN 61347-1:2008, *Lamp controlgear - Part 1: General and safety requirements (IEC 61347-1:2007)*

EN 61347-2-2:2012, *Lamp controlgear - Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps (IEC 61347-2-2:2011)*

EN 61347-2-3, *Lamp controlgear – Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps* (IEC 61347-2-3)

EN 61347-2-8, *Lamp controlgear - Part 2-8: Particular requirements for ballasts for fluorescent lamps* (IEC 61347-2-8)

EN 61347-2-10:2001, *Lamp controlgear - Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)* (IEC 61347-2-10:2000)

EN 61347-2-13:2006, *Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules* (IEC 61347-2-13:2006)

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

EN 62384, *DC or AC supplied electronic control gear for LED modules - Performance requirements* (IEC 62384)

EN 62532, *Fluorescent induction lamps - Safety specifications* (IEC 62532)

HD 384/60364 (all parts), *Electrical installations of buildings / Low-voltage electrical installations* (IEC 60364, all parts)

IEC 60050-826, *International Electrotechnical Vocabulary - Part 826: Electrical installations*

EN ISO 7010:2012, *Graphical symbols - Safety colours and safety signs - Registered safety signs* (ISO 7010:2011)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-826 (IEV) and the following apply.

3.1 General

3.1.1

luminous sign

system with light sources which is intended as finished functional sign, light-artworks, and/or decorative lighting with the exclusion of general lighting, traffic- or emergency related purpose, for indoor and/or outdoor operation, consisting of a combination of some products with similar purpose (apparatus, devices and components), through manufacturing or installation in order to yield the luminous sign as new product by itself

Note 1 to entry: See Annex A as guide to applicability of product and/or installation standard.

3.1.2

architectural accent lighting

fixed or portable lighting unit or installation to enhance elements of the design or the structure of a immobile construction and not intended for general lighting, signalling or traffic/ emergency purpose

3.1.3

general lighting

substantially uniform lighting of an area without provision for special local requirements

[SOURCE: IEV 845-09-06]