

Irish Standard I.S. EN 50143:2009

Cables for signs and luminousdischarge-tube installations operating from a no-load rated output voltage exceeding 1 000 V but not exceeding 10 000 V

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EUROPEAN STANDARD

EN 50143

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Supersedes EN 50143:1997 + A1:2003

## English version

# Cables for signs and luminous-discharge-tube installations operating from a no-load rated output voltage exceeding 1 000 V but not exceeding 10 000 V

Câbles pour installations d'enseignes et de tubes à décharges lumineuses fonctionnant avec une tension à vide supérieure à 1 000 V mais ne dépassant pas 10 000 V Leitungen für Leuchtröhrengeräte und Leuchtröhren-Anlagen mit einer Leerlaufspannung von über 1 000 V, aber nicht über 10 000 V

This European Standard was approved by CENELEC on 2009-02-01. 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.

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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.

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## **CENELEC**

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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## **Foreword**

This European Standard was prepared by the Technical Committee CENELEC TC 20, Electric cables.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50143 on 2009-02-01.

This European Standard supersedes EN 50143:1997 + A1:2003.

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) 2010-02-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2012-02-01

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Introduction

This revision of EN 50143 is made at the request of the European Sign Federation (ESF). It supports EN 50107.

By comparison with EN 50143:1997 the number of cable types has been rationalised. One new type (type L) has been introduced, and four types (types A, C1, D1 and H) withdrawn.

The object of the European Standard remains unchanged, namely:

- to standardise cables and cords that are safe and reliable when properly used in relation to the technical requirements of the installation of which they form a part;
- to state the characteristics and manufacturing requirements directly or indirectly bearing on safety; and
- to specify methods for checking conformity with those requirements.

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## 1 Scope

EN 50143 applies to single core cables of rated voltages up to and including 5/10 kV ( $U_{\circ}/U$ ) used with electric signs and high-voltage luminous-discharge-tube installations. These cables are for use in installations complying with EN 50107.

The particular types of cables are specified in Clauses 7 to 10 of this standard.

### 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.

| EN 50107 (series) |      | Signs and luminous-discharge-tube installations operating from a no-load rated output voltage exceeding 1 kV but not exceeding 10 kV                                                                                                         |
|-------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN 50267-2-1      |      | Common test methods for cables under fire conditions - Tests on gases evolved during combustion of materials from cables - Part 2-1: Procedures - Determination of the amount of halogen acid gas                                            |
| EN 50267-2-2      | 1998 | Common test methods for cables under fire conditions - Tests on gases evolved during combustion of materials from cables - Part 2-2: Procedures - Determination of degree of acidity of gases for materials by measuring pH and conductivity |
| EN 50363-1        | 2005 | Insulating, sheathing and covering materials for low voltage energy cables - Part 1: Cross-linked elastomeric insulating compounds                                                                                                           |
| EN 50363-3        | 2005 | Insulating, sheathing and covering materials for low voltage energy cables - Part 3: PVC insulating compounds                                                                                                                                |
| EN 50363-4-1      | 2005 | Insulating, sheathing and covering materials for low voltage energy cables - Part 4-1: PVC sheathing compounds                                                                                                                               |
| EN 50395          | 2005 | Electrical test methods for low voltage energy cables                                                                                                                                                                                        |
| EN 50396          | 2005 | Non electrical test methods for low voltage energy cables                                                                                                                                                                                    |
| EN 60228          |      | Conductors of insulated cables (IEC 60228)                                                                                                                                                                                                   |
| EN 60332-1-2      |      | Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame (IEC 60332-1-2)                                   |
| EN 60684-2        |      | Flexible insulating sleeving - Part 2: Methods of test (IEC 60684-2)                                                                                                                                                                         |
| EN 60811 (series) |      | Insulating and sheathing materials of electric and optical cables - Common test methods (IEC 60811 series)                                                                                                                                   |
| EN 61034-2        |      | Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements (IEC 61034-2)                                                                                                              |



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