

PLAHVATUSOHTLIKUD KESKKONNAD. OSA 7: SEADME
KAITSE SUURENDATUD OHUTUSEGA "E"

Explosive atmospheres - Part 7: Equipment protection
by increased safety "e"

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60079-7:2015 sisaldab Euroopa standardi EN 60079-7:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 60079-7:2015 consists of the English text of the European standard EN 60079-7:2015.
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 11.12.2015.	Date of Availability of the European standard is 11.12.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 29.260.20

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English Version

**Explosive atmospheres - Part 7: Equipment protection by
increased safety "e"
(IEC 60079-7:2015)**

Atmosphères explosives - Partie 7: Protection de
l'équipement par sécurité augmentée "e"
(IEC 60079-7:2015)

Explosionsfähige Atmosphäre - Teil 7: Geräteschutz durch
erhöhte Sicherheit "e"
(IEC 60079-7:2015)

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

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European foreword

The text of document 31/1182/FDIS, future edition 5 of IEC 60079-7, prepared by IEC/TC 31 "Equipment for explosive atmospheres" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60079-7:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-06-11
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2018-07-31
standards conflicting with the
document have to be withdrawn

This document supersedes EN 60079-7:2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60079-7:2015 was approved by CENELEC as a European Standard without any modification.

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

IEC/TS 60034-17	NOTE	Harmonized as CLC/TS 60034-17.
IEC 60034-18-41	NOTE	Harmonized as EN 60034-18-41.
IEC/TS 60034-25	NOTE	Harmonized as CLC/TS 60034-25.
IEC 60079-14	NOTE	Harmonized as EN 60079-14.
IEC 60079-17	NOTE	Harmonized as EN 60079-17.
IEC 60079-18	NOTE	Harmonized as EN 60079-18.
IEC 60079-20-1	NOTE	Harmonized as EN 60079-20-1.
IEC 60079-28	NOTE	Harmonized as EN 60079-28.
IEC 60079-29-2	NOTE	Harmonized as EN 60079-29-2.
IEC 60079-30-2	NOTE	Harmonized as EN 60079-30-2.
IEC 60079-35-1	NOTE	Harmonized as EN 60079-35-1.
IEC 60086-1	NOTE	Harmonized as EN 60086-1.
IEC 60095-1	NOTE	Harmonized as EN 60095-1.
IEC 60364-5-55	NOTE	Harmonized in EN 60364-5-55 series.
IEC 60622	NOTE	Harmonized as EN 60622.
IEC 60623	NOTE	Harmonized as EN 60623.
IEC 60664-3	NOTE	Harmonized as EN 60664-3.

IEC 60927	NOTE	Harmonized as EN 60927.
IEC 61008-1	NOTE	Harmonized as EN 61008-1.
IEC 61056-1	NOTE	Harmonized as EN 61056-1.
IEC 61347-2-1	NOTE	Harmonized as EN 61347-2-1.
IEC 61347-2-4	NOTE	Harmonized as EN 61347-2-4.
IEC 61347-2-7	NOTE	Harmonized as EN 61347-2-7.
IEC 61347-2-8	NOTE	Harmonized as EN 61347-2-8.
IEC 61347-2-9	NOTE	Harmonized as EN 61347-2-9.
IEC 61347-2-13	NOTE	Harmonized as EN 61347-2-13.
IEC 61951-1	NOTE	Harmonized as EN 61951-1.
IEC 62013-1	NOTE	Harmonized as EN 62013-1.
ISO 13849-1	NOTE	Harmonized as EN ISO 13849-1.

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 60034-1	-	Rotating electrical machines -- Part 1: Rating and performance	EN 60034-1	-
IEC 60044-6	-	Instrument transformers -- Part 6: Requirements for protective current transformers for transient performance	EN 60044-6	-
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 60064	-	Tungsten filament lamps for domestic and similar general lighting purposes - Performance requirements	EN 60064	-
IEC 60068-2-6	-	Environmental testing -- Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-27	2008	Environmental testing -- Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-42	-	Environmental testing -- Part 2-42: Tests - Test Kc: Sulphur dioxide test for contacts and connections	EN 60068-2-42	-
IEC 60079-0	-	Explosive atmospheres -- Part 0: Equipment - General requirements	EN 60079-0	-
IEC 60079-1	-	Explosive atmospheres -- Part 1: Equipment protection by flameproof enclosures "d"	EN 60079-1	-
IEC 60079-11	-	Explosive atmospheres -- Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	-
IEC 60079-30-1	-	Explosive atmospheres -- Part 30-1: Electrical resistance trace heating - General and testing requirements	EN 60079-30-1	-
IEC 60085	-	Electrical insulation - Thermal evaluation and designation	EN 60085	-
IEC 60112	-	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	-
IEC 60216-1	-	Electrical insulating materials - Thermal endurance properties -- Part 1: Ageing procedures and evaluation of test results	EN 60216-1	-

IEC 60216-2	-	Electrical insulating materials - Thermal endurance properties -- Part 2: Determination of thermal endurance properties of electrical insulating materials - Choice of test criteria	EN 60216-2	-
IEC 60228	-	Conductors of insulated cables	EN 60228	-
IEC 60238	-	Edison screw lampholders	EN 60238	-
IEC 60317-3 +A1	2004 2010	Specifications for particular types of winding wires -- Part 3: Polyester enamelled round copper wire, class 155	-	-
IEC 60317-8	-	Specifications for particular types of winding wires -- Part 8: Polyesterimide enamelled round copper wire, class 180	EN 60317-8	-
IEC 60317-13	-	Specifications for particular types of winding wires -- Part 13: Polyester or polyesterimide overcoated with polyamide-imide enamelled round copper wire, class 200	EN 60317-13	-
IEC 60317-46	-	Specifications for particular types of winding wires -- Part 46: Aromatic polyimide enamelled round copper wire, class 240	EN 60317-46	-
IEC 60400	-	Lampholders for tubular fluorescent lamps and starterholders	EN 60400	-
IEC 60432-1	-	Incandescent lamps - Safety specifications -- Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	EN 60432-1	-
IEC 60432-2	-	Incandescent lamps - Safety specifications -- Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	EN 60432-2	-
IEC 60432-3	-	Incandescent lamps - Safety specifications - Part 3: Tungsten halogen lamps (non-vehicle)	EN 60432-3	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 60598-1	-	Luminaires -- Part 1: General requirements and tests	EN 60598-1	-
IEC 60664-1	-	Insulation coordination for equipment within low-voltage systems -- Part 1: Principles, requirements and tests	EN 60664-1	-
IEC 60947-1	-	Low-voltage switchgear and controlgear -- Part 1: General rules	EN 60947-1	-
IEC 60947-7-1	-	Low-voltage switchgear and controlgear -- Part 7-1: Ancillary equipment - Terminal blocks for copper conductors	EN 60947-7-1	-
IEC 60947-7-2	-	Low-voltage switchgear and controlgear -- Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors	EN 60947-7-2	-
IEC 60947-7-4	-	Low-voltage switchgear and controlgear -- Part 7-4: Ancillary equipment - PCB terminal blocks for copper conductors	EN 60947-7-4	-
IEC 60998-2-4	-	Connecting devices for low voltage circuits for household and similar purposes -- Part 2-4: Particular requirements for twist-on connecting devices	EN 60998-2-4	-

IEC 60999-1	-	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units -- Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm ² up to 35 mm ² (included)	EN 60999-1	-
IEC 60999-2	-	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units -- Part 2: Particular requirements for clamping units for conductors above 35 mm ² up to 300 mm ² (included)	EN 60999-2	-
IEC 61184	-	Bayonet lampholders	EN 61184	-
IEC 61195	-	Double-capped fluorescent lamps - Safety specifications	EN 61195	-
IEC 61347-1	-	Lamp controlgear - Part 1: General and safety requirement	EN 61347-1	-
IEC 61347-2-3	-	Lamp controlgear -- Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps	EN 61347-2-3	-
IEC 62035	-	Discharge lamps (excluding fluorescent lamps) - Safety specifications	EN 62035	-
ISO 178	-	Plastics - Determination of flexural properties	EN ISO 178	-
ISO 527-2	-	Plastics - Determination of tensile properties -- Part 2: Test conditions for moulding and extrusion plastics	EN ISO 527-2	-
ISO 2859-1	-	Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-

Annex ZZ
(informative)

**Relationship between this European standard and the essential requirements of
Directive 94/9/EC aimed to be covered**

This European standard has been prepared under a Commission's standardisation request to provide one voluntary means of conforming to essential of Directive 94/9/EC of the European Parliament and the Council of 23 March 1994 on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZ.1 – Correspondence between this European standard and Annex II of Directive
94/9/EC**

<i>Essential Requirements of Directive</i>	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1.0.1.	All clauses	This is the purpose of the Standard.
1.0.2.	4.2 / 4.4 / 4.6 / 5.2 / 5.3 / 5.4 / 5.6 / 5.8 / 5.9 / A.3 / A.5 / B.4.2	
1.0.3.	5.2 / 5.3 / 5.6	
1.0.4.	4.2 / 4.6 / 4.8	
1.0.5.	5.2 / 5.3 / 5.7 / 5.9 / 8.1 / 8.2 / 9.4	
1.0.6.	5.7 / 8.2	
1.1.1.	5.6 / 4.2	
1.1.2.	4.6 / 4.7 / 5.2 / 5.3 / 5.6 / 6.6	
1.1.3.	4.2 / 4.3 / 4.9 / 5.2 / 5.3 / 5.6 / 5.8 / 6.1 / 6.6 / 6.7 / 6.8 / 7	
1.2.1.	All	All clauses of the standard contain up-to-date requirements
1.2.2.	5.3 / 5.6 / 5.9	
1.2.3.	5.6 / 6.6 / 6.7	
1.2.4.	Not covered	
1.2.5.	4.10 / 5.3 / B.1	
1.2.6.	4.11	
1.2.7.	4.8 / 5.6 / B.4	

1.2.8.	5.2 / 5.3 / 5.6 / 5.8 / 5.9	
1.2.9.	Not covered	
1.3.1.	4.2 / 4.4 / 4.6 / 5.3 / 5.6 / 6.8	
1.3.2.	Not covered	
1.3.3.	4.4 / 5.3 / 5.6	
1.3.4.	5.2	
1.3.5.	Not covered	
1.4.1.	4.2 / 4.11 5.3 / 6.2 / 6.3 / 6.4	
1.4.2.	4.2 / 4.3 / 4.6 / 4.9 / 5.2 / 5.3 / 5.6 / 5.8 / 6.2 / 6.3 / 6.8	
1.5.1	5.2 / 5.8 / 6.2	
1.5.2.	5.2 / 5.8 / 6.2	
1.5.3.	5.2 / 5.8 / 6.2	
1.5.4.	5.2 / 5.8 / 6.2	
1.5.5.	5.2 / 5.8 / 6.2	
1.5.6.	5.2 / 5.8 / 6.2	
1.5.7.	5.2 / 5.8 / 6.2	
1.5.8.	5.2 / 5.8 / 6.2	
1.6.1.	Not covered	
1.6.2.	Not covered	
1.6.3.	Not covered	
1.6.4.	Not covered	
1.6.5.	Not covered	
2.0.1.1.	Not covered	
2.0.1.2.	Not covered	
2.0.1.3.	Not covered	
2.0.1.4.	Not covered	

2.0.2.1.	4.11 / 5.3	
2.0.2.2.	Not covered	
2.0.2.3.	4.11 / 6.1 / 7.1	
2.1.1.1.	Not covered	
2.1.1.2.	Not covered	
2.1.1.3.	Not covered	
2.1.2.1.	Not covered	
2.1.2.2.	Not covered	
2.1.2.3.	Not covered	
2.2.1.1.	Not covered	
2.2.1.2.	Not covered	
2.2.1.3.	Not covered	
2.2.2.1.	Not covered	
2.2.2.2.	Not covered	
2.2.2.3.	Not covered	
2.2.2.4.	Not covered	
2.3.1.1.	Not covered	
2.3.1.2.	Not covered	
2.3.2.1.	Not covered	
2.3.2.2.	Not covered	
2.3.2.3.	Not covered	
3.0.1.	Not covered	
3.0.2.	Not covered	
3.0.3.	Not covered	
3.0.4.	Not covered	
3.1.1.	Not covered	
3.1.2.	Not covered	
3.1.3.	Not covered	
3.1.4.	Not covered	

3.1.5.	Not covered	
3.1.6.	Not covered	
3.1.7.	Not covered	
3.1.8.	Not covered	

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product falling within the scope of this standard.

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