SLOVENSKI STANDARD
SIST EN 60079-14:2009

01-januar-2009

Nadomešča:
SIST EN 60079-14:2003
SIST EN 61241-14:2005

Eksplozivne atmosfere - 14. del: Načrtovanje, izbira in namestitev električnih inštalacij (IEC 60079-14:2007)

Explosive atmospheres -- Part 14: Electrical installations design, selection and erection

Explosionsfähige Atmosphäre -- Teil 14: Projektierung, Auswahl und Errichtung elektrischer Anlagen

Atmosphères explosives -- Partie 14: Conception, sélection et construction des installations électriques

Ta slovenski standard je istoveten z: **EN 60079-14:2008**

ICS:

29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres
91.140.50	Sistemi za oskrbo z elektriko	Electricity supply systems

SIST EN 60079-14:2009 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60079-14

October 2008

ICS 29.260.20

Supersedes EN 60079-14:2003

English version

Explosive atmospheres - Part 14: Electrical installations design, selection and erection

(IEC 60079-14:2007)

Atmosphères explosives - Partie 14: Conception, sélection et construction des installations électriques (CEI 60079-14:2007)

Explosionsfähige Atmosphäre - Teil 14: Projektierung, Auswahl und Errichtung elektrischer Anlagen (IEC 60079-14:2007)

This European Standard was approved by CENELEC on 2008-07-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 60079-14:2008 E

Foreword

The text of document 31J/150/FDIS, future edition 4 of IEC 60079-14, prepared by SC 31J, Classification of hazardous areas and installation requirements, of IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60079-14 on 2008-07-01.

This European Standard supersedes EN 60079-14:2003.

It constitutes a technical revision with respect to gases and vapours and incorporates the requirements for dusts from EN 61241-14:2004. The incorporation of requirements for dust is without technical change.

The significant technical changes with respect to EN 60079-14:2003 are as follows:

– knowledge, skills and competencies of "Responsible Persons", “Operatives" and "Designers" are explained in Annex F;

– Equipment Protection Levels (EPLs) have been introduced and are explained in the new Annex I;

– dust requirements included from EN 61241-14:2004.

NOTE Dust requirements are included as an interim presentation for the purpose of EN 60079-14:2008 and will be refined in a next edition with other required technical changes.

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) 2009-05-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-07-01

Annexes ZA and ZB have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60079-14:2007 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 60034-17:2004 (not modified).
IEC/TS 60034-25	NOTE	Harmonized as CLC/TS 60034-25:2005 (not modified).
IEC 60332-2-2	NOTE	Harmonized as EN 60332-2-2:2004 (not modified)
IEC 60742	NOTE	Harmonized as EN 60742:1995 (modified). Superseded by EN 61558 series (partially modified)
IEC 61008-1	NOTE	Harmonized as EN 61008-1:2004 (modified)
IEC 61010-1	NOTE	Harmonized as EN 61010-1:2001 (not modified)
IEC 61024-1	NOTE	Superseded by IEC 62305-3, which is harmonized as EN 62305-3:2006 (modified)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60034-1	– [1)]	Rotating electrical machines - Part 1: Rating and performance	EN 60034-1	2004 [2)]
IEC 60034-5	– [1)]	Rotating electrical machines - Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification	EN 60034-5	2001 [2)]
IEC 60050-826	– [1)]	International Electrotechnical Vocabulary (IEV) - Part 826: Electrical installations	–	–
IEC 60060-1	– [1)]	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991 [2)]
IEC 60079	Series	Explosive atmospheres	EN 60079	Series
IEC 60079-0 (mod)	– [1)]	Explosive atmospheres - Part 0: Equipment – General requirements	EN 60079-0	2006 [2)]
IEC 60079-1	– [1)]	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	EN 60079-1	2007 [2)]
IEC 60079-2	– [1)]	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"	EN 60079-2	2007 [2)]
IEC 60079-5	– [1)]	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"	EN 60079-5	2007 [2)]
IEC 60079-6	– [1)]	Explosive atmospheres - Part 6: Equipment protection by oil immersion "o"	EN 60079-6	2007 [2)]
IEC 60079-7	– [1)]	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	2007 [2)]
IEC 60079-11	– [1)]	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2007 [2)]
IEC/TR 60079-13	– [1)]	Electrical apparatus for explosive gas atmospheres - Part 13: Construction and use of rooms or buildings protected by pressurization	–	–

[1)] Undated reference.

[2)] Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
IEC 60079-15	– [1]	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection "n" electrical apparatus	EN 60079-15	2005 [2]
IEC/TR 60079-16	– [1]	Electrical apparatus for explosive gas atmospheres - Part 16: Artificial ventilation for the protection of analyzer(s) houses	–	–
IEC 60079-18	– [1]	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation "m" electrical apparatus	EN 60079-18 + corr. April	2004 [2] 2006
IEC 60079-19	– [1]	Explosive atmospheres - Part 19: Equipment repair, overhaul and reclamation	EN 60079-19	2007 [2]
IEC 60079-25	– [1]	Electrical apparatus for explosive gas atmospheres - Part 25: Intrinsically safe systems	EN 60079-25 + corr. April	2004 [2] 2006
IEC 60079-26	– [1]	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga	EN 60079-26	2007 [2]
IEC 60079-27	– [1]	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)	EN 60079-27	2008 [2]
IEC 60079-28	– [1]	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation	EN 60079-28	2007 [2]
IEC 60079-29-1 (mod)	– [1]	Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases	EN 60079-29-1	2007 [2]
IEC 60079-29-2	– [1]	Explosive atmospheres - Part 29-2: Gas detectors - Selection, installation, use and maintenance of detectors for flammable gases and oxygen	EN 60079-29-2 + corr. December	2007 [2] 2007
IEC 60079-31	– [3]	Explosive Atmospheres - Part 31: Equipment dust ignition protection by enclosure "tD"	EN 60079-31	– [3]
IEC 60243-1	– [1]	Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	1998 [2]
IEC 60332-1-2	– [1]	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	EN 60332-1-2	2004 [2]
IEC 60364 (mod)	Series	Low-voltage electrical installations	HD 60364/ HD 384	Series

[3] To be published.

Publication	Year	Title	EN/HD	Year
IEC 60364-4-41 (mod)	– [1]	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41 + corr. July	2007 [2] 2007
IEC 60529	– [1]	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 [2] 1993
IEC 60950 (mod)	Series	Information technology equipment - Safety	EN 60950	Series
IEC 61010-1	– [1]	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements	EN 61010-1 + corr. June	2001 [2] 2002
IEC 61241	Series	Electrical apparatus for use in the presence of combustible dust	EN 61241	Series
IEC 61241-0 (mod)	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements	EN 61241-0	2006 [2]
IEC 61241-1	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"	EN 61241-1 + corr. December	2004 [2] 2006
IEC 61241-2-1	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 2: Test methods - Section 1: Methods for determining the minimum ignition temperatures of dust	–	–
IEC 61241-4	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 4: Type of protection 'pD'	EN 61241-4	2006 [2]
IEC 61241-10	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 10: Classification of areas where combustible dusts are or may be present	EN 61241-10	2004 [2]
IEC 61241-11	– [1]	Electrical apparatus for use in the presence of combustible dust - Part 11: Protection by intrinsic safety 'iD'	EN 61241-11	2006 [2]
IEC 61285	– [1]	Industrial-process control - Safety of analyser houses	EN 61285	2004 [2]
IEC 61558-2-6	– [1]	Safety of power transformers, power supply units and similar - Part 2-6: Particular requirements for safety isolating transformers for general use	EN 61558-2-6	1997 [2]
IEC 62305-3 (mod)	– [1]	Protection against lightning - Part 3: Physical damage to structures and life hazard	EN 62305-3 + corr. September	2006 [2] 2008
ISO 10807	– [1]	Pipework - Corrugated flexible metallic hose assemblies for the protection of electric cables in explosive atmospheres	EN ISO 10807	1996 [2]

Annex ZB
(informative)

ATEX Categories and Equipment Protection Levels (EPLs)

This European Standard has been written to incorporate the concept of Equipment Protection Levels (EPLs).

EPLs are analogous to the ATEX Categories, indeed the definitions are identical.

Wherever there is a reference to an EPL in the text it should be equated with the corresponding ATEX Category:

- EPL ‘Ga’ equates to ATEX Category 1G;
- EPL ‘Gb’ equates to ATEX Category 2G;
- EPL ‘Gc’ equates to ATEX Category 3G;
- EPL ‘Da’ equates to ATEX Category 1D;
- EPL ‘Db’ equates to ATEX Category 2D;
- EPL ‘Dc’ equates to ATEX Category 3D.

IEC 60079-14

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 14: Electrical installations design, selection and erection

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