SLOVENSKI STANDARD
SIST EN 60079-17:2008

01-januar-2008

Nadomešča:
SIST EN 60079-17:2003
SIST EN 61241-17:2005

Eksplozivne atmosfere - 17. del: Pregledovanje in vzdrževanje električnih inštalacij (IEC 60079-17:2007)

Explosive atmospheres -- Part 17: Electrical installations inspection and maintenance

Explosionsfähige Atmosphäre - Teil 17: Prüfung und Instandhaltung elektrischer Anlagen

Atmosphères explosives -- Partie 17: Inspection et entretien des installations électriques

Ta slovenski standard je istoveten z: **EN 60079-17:2007**

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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 60079-17:2008 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60079-17

September 2007

ICS 29.260.20

Supersedes EN 60079-17:2003 and EN 61241-17:2005
Incorporates corrigendum July 2008

English version

Explosive atmospheres - Part 17: Electrical installations inspection and maintenance
(IEC 60079-17:2007)

Atmosphères explosives -
Partie 17: Inspection et entretien
des installations électriques
(CEI 60079-17:2007)

Explosionsfähige Atmosphäre -
Teil 17: Prüfung und Instandhaltung
elektrischer Anlagen
(IEC 60079-17:2007)

This European Standard was approved by CENELEC on 2007-09-01. 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

Foreword

The text of document 31J/145/FDIS, future edition 4 of IEC 60079-17, 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 60079-17 on 2007-09-01.

This European Standard supersedes EN 60079-17:2003 and 61241-17:2005.

The significant technical changes with respect to EN 60079-17:2003 are as follows:

– additional requirements for inspection and maintenance of electrical installations for combustible dusts are included;

– knowledge, skills and competencies of "responsible persons", "technical persons with executive function" and "operatives" are explained in new Annex B;

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

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)	2008-06-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-09-01

Annex ZA has been added by CENELEC.

The contents of the corrigendum of July 2008 have been included in this copy.

Endorsement notice

The text of the International Standard IEC 60079-17:2007 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 60079-6	NOTE	Harmonized as EN 60079-6:2007 (not modified).
IEC 60079-7	NOTE	Harmonized as EN 60079-7:2007 (not modified).
IEC 60079-18	NOTE	Harmonized as EN 60079-18:2004 (not modified).
IEC 60079-26	NOTE	Harmonized as EN 60079-26:2007 (not modified).
IEC 60079-28	NOTE	Harmonized as EN 60079-28:2007 (not modified).
IEC 60204-1	NOTE	Harmonized as EN 60204-1:2006 (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 60079-0 (mod)	-[1)]	Electrical apparatus for explosive gas atmospheres - Part 0: 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"	-	-
IEC 60079-7	-[1)]	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	2007[2)]
IEC 60079-10	-[1)]	Electrical apparatus for explosive gas atmospheres - Part 10: Classification of hazardous areas	EN 60079-10	2003[2)]
IEC 60079-11	-[1)]	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2007[2)]
IEC 60079-14	-[1)]	Electrical apparatus for explosive gas atmospheres - Part 14: Electrical installations in hazardous areas (other than mines)	EN 60079-14	2003[2)]
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 60079-19	-[1)]	Explosive atmospheres - Part 19: Equipment repair, overhaul and reclamation	EN 60079-19	2007[2)]
IEC 60364-6 (mod)	-[1)]	Low voltage electrical installations - Part 6: Verification	HD 60364-6	2007[2)]
IEC 61241	Series	Electrical apparatus for use in the presence of combustible dust	EN 61241	Series
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

[1)] Undated reference.

[2)] Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
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 61241-14	2004	Electrical apparatus for use in the presence of combustible dust - Part 14: Selection and installation	EN 61241-14	2004

IEC 60079-17

Edition 4.0 2007-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Explosive atmospheres –
Part 17: Electrical installations inspection and maintenance

Atmosphères explosives –
Partie 17: Inspection et entretien des installations électriques

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –

Part 17: Electrical installations inspection and maintenance

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60079-17 has been prepared by subcommittee 31J: Classification of hazardous areas and installation requirements, of IEC technical committee 31: Equipment for explosive atmospheres.

This fourth edition cancels and replaces the third edition published in 2002 and constitutes a technical revision.

The significant technical changes with respect to the previous edition are as follows:

- Additional requirements for inspection and maintenance of electrical installations for combustible dusts are included.
- Knowledge, skills and competencies of "responsible persons", "technical persons with executive function" and "operatives" are explained in new Annex B.
- Equipment Protection Levels (EPLs) have been introduced and are explained in the new Annex C.

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

FDIS	Report on voting
31J/145/FDIS	31J/148/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 60079 series, under the general title *Explosive atmospheres*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

INTRODUCTION

Electrical installations in hazardous areas possess features specially designed to render them suitable for operations in such atmospheres. It is essential for reasons of safety in those areas that, throughout the life of such installations, the integrity of those special features is preserved; they therefore require initial inspection and either

a) regular periodic inspections thereafter, or

b) continuous supervision by skilled personnel

in accordance with this standard and, when necessary, maintenance.

NOTE Correct functional operation of hazardous area installations does not mean, and should not be interpreted as meaning, that the integrity of the special features referred to above is preserved.

EXPLOSIVE ATMOSPHERES –

Part 17: Electrical installations inspection and maintenance

1 Scope

This part of IEC 60079 applies to users and covers factors directly related to the inspection and maintenance of electrical installations within hazardous areas only, where the hazard may be caused by flammable gases, vapours, mists, dusts, fibres or flyings.

It does not include:

- other fundamental installation and inspection requirements for electrical installations;
- the verification of electrical equipment;
- the repair and reclamation of explosion protected equipment (see IEC 60079-19).

This standard supplements the requirements of IEC 60364-6.

In the case of dusts, fibres or flyings the level of housekeeping may influence the inspection and maintenance requirements.

This standard is intended to be applied where there can be a risk due to the presence of explosive gas or dust mixtures with air or combustible dust layers under normal atmospheric conditions. It does not apply to

- underground mining areas,
- areas where a risk can arise due to the presence of hybrid mixtures,
- dusts of explosives that do not require atmospheric oxygen for combustion,
- pyrophoric substances.

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.

IEC 60079-0, *Explosive atmospheres – Part 0: Equipment – General requirements*

IEC 60079-1, E*xplosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"*

IEC 60079-2, *Explosive atmospheres – Part 2: Equipment protection by pressurized enclosures "p"*

IEC 60079-7, *Explosive atmospheres – Part 7: Equipment protection by increased safety “e”*

IEC 60079-10, *Electrical apparatus for explosive gas atmospheres – Part 10: Classification of hazardous areas*

IEC 60079-11, *Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i"*