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Explosiv atmosfär – Del 17: Kontroll och underhåll av elektriska installationer

*Explosive atmospheres –
Part 17: Electrical installations inspection and maintenance*

Som svensk standard gäller europastandarden EN 60079-17:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60079-17:2007^{*)}.

Nationellt förord

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^{*)}Corrigendum, July 2008, till EN 60079-17, är inarbetat i texten.

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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

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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, *Explosive 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"*

IEC 60079-14, *Electrical apparatus for explosive gas atmospheres – Part 14: Electrical installations in hazardous areas (other than mines)*

IEC 60079-15, *Electrical apparatus for explosive gas atmospheres – Part 15: Construction, test and marking of type of protection "n" electrical apparatus*

IEC 60079-19, *Explosive atmospheres – Part 19: Equipment repair, overhaul and reclamation*

IEC 60364-6, *Low-voltage electrical installations – Part 6: Verification*

IEC 61241 (all parts), *Combustible dust*

IEC 61241-1, *Electrical apparatus for use in the presence of combustible dust – Part 1: Protection by enclosures "tD"*

IEC 61241-4, *Electrical apparatus for use in the presence of combustible dust – Part 4: Type of protection "pD"*

IEC 61241-10, *Electrical apparatus for use in the presence of combustible dust – Part 10: Classification of areas where combustible dusts are or may be present*

IEC 61241-11, *Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety "iD"*

IEC 61241-14:2004, *Electrical apparatus for use in the presence of combustible dust – Part 14: Selection and installation*

