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SIST EN 60079-17:1998

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EUROPEAN STANDARD

EN 60079-17

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 1997

ICS 29.260.20

English version

**Electrical apparatus for explosive gas atmospheres  
Part 17: Inspection and maintenance of electrical installations  
in hazardous areas (other than mines)  
(IEC 60079-17:1996)**

Matériel électrique pour atmosphères  
explosives gazeuses  
Partie 17: Inspection et entretien  
des installations électriques dans les  
emplacements dangereux (autres que  
les mines)  
(CEI 60079-17:1996)

Elektrische Betriebsmittel für  
gasexplosionsgefährdete Bereiche  
Teil 17: Prüfung und Instandhaltung  
elektrischer Anlagen in  
explosionsgefährdeten Bereichen  
(ausgenommen Grubenbaue)  
(IEC 60079-17:1996)

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This European Standard was approved by CENELEC on 1997-03-11. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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/49/FDIS, future edition 2 of IEC 60079-17, prepared by SC 31J, Classification of hazardous areas and installation requirements, of IEC TC 31, Electrical apparatus for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60079-17 on 1997-03-11.

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) 1998-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1999-12-01

Annexes designated "normative" are part of the body of the standard.  
Annexes designated "informative" are given for information only.  
In this standard, annex ZA is normative and annex A is informative.  
Annex ZA has been added by CENELEC.

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#### Endorsement notice

The text of the International Standard IEC 60079-17:1996 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

Normative references to international publications  
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE 1: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2: Where a standard cited below belongs to the EN 50000 series, this European Standard applies instead of the relevant International Standard.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60079-0	1983	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements	EN 50014	1992
IEC 60079-1	1990	Part 1: Construction and verification test of flameproof enclosures of electrical apparatus	EN 50018	1994
IEC 60079-2	1983	Part 2: Electrical apparatus - Type of protection "p"	EN 50016	1995
IEC 60079-7	1990	Part 7: Increased safety "e"	EN 50019	1994
IEC 60079-10	1995	Part 10: Classification of hazardous areas	EN 60079-10	1996
IEC 60079-11	1991	Part 11: Intrinsic safety "i"	EN 50020	1994
IEC 60079-14	1996	Part 14: Electrical installations in hazardous areas (other than mines)	EN 60079-14	1997
IEC 60079-15	1987	Part 15: Electrical apparatus with type of protection "n"	-	-
IEC 60364	series	Electrical installations of buildings	HD 384	series
IEC 60364-6-61 (mod)	1986	Part 6: Verification -- Chapter 61: Initial verification	HD 384.6.61 S1	1992
A1	1993		-	-

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**79-17**

Deuxième édition  
Second edition  
1996-12

**Matériel électrique pour atmosphères  
explosives gazeuses –**

**Partie 17:  
Inspection et entretien des installations  
électriques dans les emplacements  
dangereux (autres que les mines)**

**Electrical apparatus for explosive  
gas atmospheres –**

**Part 17:  
Inspection and maintenance of  
electrical installations in hazardous  
areas (other than mines)**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL APPARATUS  
FOR EXPLOSIVE GAS ATMOSPHERES –Part 17: Inspection and maintenance of electrical  
installations in hazardous areas  
(other than mines)

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International standard IEC 79-17 has been prepared by subcommittee 31J: Classification of hazardous areas and installation requirements, of the IEC technical committee 31: Electrical apparatus for explosive atmospheres.

This second edition cancels and replaces the first edition which was issued as technical report in 1990. It constitutes a technical revision and now has the status of an International Standard.

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

FDIS	Report on voting
31J/49/FDIS	31J/51/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.

Annex A is for information only.

## 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:

- 1) regular periodic inspections thereafter; or
- 2) continuous supervision by skilled personnel and, when necessary, maintenance.

### NOTES

- 1 In some countries, "skilled personnel" may be interpreted as a "responsible engineer".
- 2 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.

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**ELECTRICAL APPARATUS  
FOR EXPLOSIVE GAS ATMOSPHERES –  
Part 17: Inspection and maintenance of electrical  
installations in hazardous areas  
(other than mines)**

## 1 Scope

This International Standard is intended to be applied by users, and covers factors directly related to the inspection and maintenance of electrical installations within hazardous areas only. It does not include conventional requirements for electrical installations, nor the testing and certification of electrical apparatus. It does not cover Group I apparatus (applications for mines susceptible to firedamp). It does not cover the alternative of "Continuous supervision by skilled personnel".

This standard supplements the requirements laid down in IEC 364-6-61.

## 2 Normative references

The following normative documents contain provisions which, through reference in the text, constitute provisions of this part of IEC 79. At the time of publication, the editions were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 79 are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. Members of IEC and ISO maintain registers of currently valid international Standards.

IEC 79-0: 1983, *Electrical apparatus for explosive gas atmospheres – Part 0: General requirements*

<https://standards.iteh.ai/catalog/standards/sist/f64d73f8-2904-4e94-a1ce->

IEC 79-1: 1990, *Electrical apparatus for explosive gas atmospheres – Part 1: Construction and verification test of flameproof enclosures of electrical apparatus*

IEC 79-2: 1983, *Electrical apparatus for explosive gas atmospheres – Part 2: Electrical apparatus – Type of protection "p"*

IEC 79-7: 1990, *Electrical apparatus for explosive gas atmospheres – Part 7: Increased safety "e"*

IEC 79-10: 1995, *Electrical apparatus for explosive gas atmospheres – Part 10: Classification of hazardous areas*

IEC 79-11: 1991, *Electrical apparatus for explosive gas atmospheres – Part 11: Intrinsic safety "i"*

IEC 79-14: 1996, *Electrical apparatus for explosive gas atmospheres – Part 14: Electrical installations in hazardous areas (other than mines)*

IEC 79-15: 1987, *Electrical apparatus for explosive gas atmospheres – Part 15: Electrical apparatus with type of protection "n"*

IEC 364: *Electrical installations of buildings*

IEC 364-6-61: 1986, *Electrical installation of buildings – Part 6: Verification – Chapter 61: Initial verification*

Amendment 1 (1993)