



TÜRK STANDARDI
TURKISH STANDARD

TS EN 60079-11

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**POTANSİYEL
KULLANILAN
GÜVENLİK**

**PATLAYICI
ELEKTRİKLİ**

**ATMOSFERLERDE
CİHAZLAR-KENDİNDEN
"i"**

Explosive atmospheres - Part 11: Equipment protection by
intrinsic safety "i"

TÜRK STANDARDLARI ENSTİTÜSÜ
Necatibey Caddesi No.112 Bakanlıklar/ANKARA

Ön söz

- Bu standard, Türk Standardları Enstitüsü tarafından ilgili Avrupa standardı esas alınarak Türk Standardı olarak kabul edilmiştir.

English version

**Explosive atmospheres -
Part 11: Equipment protection by intrinsic safety "i"
(IEC 60079-11:2006)**

Atmosphères explosives -
Partie 11: Protection de l'équipement
par sécurité intrinsèque "i"
(CEI 60079-11:2006 + corrigendum 2006)

Explosionsfähige Atmosphäre -
Teil 11: Geräteschutz durch
Eigensicherheit "i"
(IEC 60079-11:2006)

This European Standard was approved by CENELEC on 2006-10-01. 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 31G/159/FDIS, future edition 5 of IEC 60079-11, prepared by SC 31G, Intrinsically safer apparatus, of IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60079-11 on 2006-10-01.

This European Standard supersedes EN 50020:2002.

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) 2007-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-10-01

This standard supplements and modifies the general requirements of EN 60079-0:2006, except as indicated in Table 1 (see Scope).

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 94/9/EC. See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60079-11:2006 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 60079-15 | NOTE Harmonized as EN 60079-15:2005 (not modified). |
| IEC 61086-1 | NOTE Harmonized as EN 61086-1:2004 (not modified). |
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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)	2004	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements	EN 60079-0	2006
IEC 60079-7	- ¹⁾	Explosive atmospheres - Part 7: Equipment protection by Increased safety "e"	EN 60079-7	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 60079-27	- ¹⁾	Electrical apparatus for explosive gas atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO) and Fieldbus non-incendive concept (FNICO)	EN 60079-27	2006 ²⁾
IEC 60085	- ¹⁾	Electrical insulation - Thermal classification	EN 60085	2004 ²⁾
IEC 60112	- ¹⁾	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003 ²⁾
IEC 60127	Series	Miniature fuses	EN 60127	Series
IEC 60317-3	- ¹⁾	Specifications for particular types of winding wires - Part 3: Polyester enamelled round copper wire, class 155	–	–
IEC 60317-7	- ¹⁾	Specifications for particular types of winding wires - Part 7: Polyimide enamelled round copper wire, class 220	EN 60317-7	1994 ²⁾
IEC 60317-8	- ¹⁾	Specifications for particular types of winding wires - Part 8: Polyesterimide enamelled round copper wire, class 180	EN 60317-8	1994 ²⁾

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 60317-13	- ¹⁾	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	1994 ²⁾
IEC 60529	- ¹⁾	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 ²⁾ 1993
IEC 60664-1 + A1 + A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2003
IEC 60664-3	2003	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2003
ANSI/UL 248-1	- ¹⁾	Low-voltage Fuses - Part 1: General requirements	-	-

Annex ZZ (informative)

Coverage of Essential Requirements of EC Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers only the following essential requirements out of those given in Annex II of the EC Directive 94/9/EC:

- ER 1.0.1, ER 1.0.2, ER 1.0.4, ER 1.0.5 (partly), ER 1.0.6 (partly)
- ER 1.1 (partly)
- ER 1.2.1 (partly), ER 1.2.2 (partly), ER 1.2.5, ER 1.2.6
- ER 1.3.1
- ER 1.6.4
- ER 2.0.1.1, ER 2.0.1.2, ER 2.0.1.3 (partly), ER 2.0.1.4
- ER 2.0.2.1, ER 2.0.2.2, ER 2.0.2.3 (partly)
- ER 2.1.1.1 to ER 2.1.1.3
- ER 2.2.1.1 to ER 2.2.1.3

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

WARNING: Other requirements and other EC Directives may be applicable to the products falling within the scope of this standard.