



SLOVENSKI STANDARD
SIST EN 60079-27:2008
01-september-2008

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SIST EN 60079-27:2006

Eksplozivne atmosfere - 27. del: Zasnova lastnovarnega procesnega vodila (FISCO) (IEC 60079-27:2008)

Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)

Explosionsfähige Atmosphäre - Teil 27: Konzept für eigensichere Feldbussysteme (FISCO)

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Atmospheres explosives - Partie 27: Concept de réseau de terrain de sécurité intrinsèque (FISCO)

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Ta slovenski standard je istoveten z: EN 60079-27:2008

ICS:

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English version

**Explosive atmospheres -
Part 27: Fieldbus intrinsically safe concept (FISCO)
(IEC 60079-27:2008)**

Atmosphères explosives -
Partie 27: Concept de réseau de terrain
de sécurité intrinsèque (FISCO)
(CEI 60079-27:2008)

Explosionsfähige Atmosphäre -
Teil 27: Konzept für eigensichere
Feldbussysteme (FISCO)
(IEC 60079-27:2008)

This European Standard was approved by CENELEC on 2008-04-01. 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/169/CDV, future edition 2 of IEC 60079-27, prepared by SC 31G, Intrinsically-safe apparatus, of IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC Parallel Unique Acceptance Procedure and was approved by CENELEC as EN 60079-27 on 2008-04-01.

This European Standard supersedes EN 60079-27:2006.

The significant change with respect to EN 60079-27:2006 is that EN 60079-27:2008 replaces the FNICO requirements with the requirements of an "ic" FISCO system.

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) 2009-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-04-01

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.

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Endorsement notice

[SIST EN 60079-27:2008](https://standards.iteh.ai/standards/IEC/60079-27-54-6113-49748075)

The text of the International Standard IEC 60079-27:2008 was approved by CENELEC as a European Standard without any modification. [6f709284fa04/sist-en-60079-27-2008](https://standards.iteh.ai/standards/IEC/60079-27-54-6113-49748075)

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⁾	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	2006 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 60079-25	- ¹⁾	Electrical apparatus for explosive gas atmospheres - Part 25: Intrinsically safe systems	EN 60079-25 + corr. April	2004 ²⁾ 2006
IEC 61158-2	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN 61158-2	2008 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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 1.0.3, ER 1.0.4, ER 1.0.5 (partly)
- ER 1.1
- ER 1.2.1, ER 1.2.2, ER 1.2.4 (partly), ER 1.2.6, ER 1.2.7 (partly)
- ER 1.3.1, ER 1.3.2
- ER 1.4.1
- ER 2.0.1, ER 2.0.2
- ER 2.1.1, ER 2.2.1

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.

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IEC 60079-27

Edition 2.0 2008-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Explosive atmospheres –
Part 27: Fieldbus intrinsically safe concept (FISCO)

Atmosphères explosives –
Partie 27: Concept de réseau de terrain de sécurité intrinsèque (FISCO)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –

Part 27: Fieldbus intrinsically safe concept (FISCO)

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 60079-27 has been prepared by subcommittee 31G: Intrinsically-safe apparatus, of IEC technical committee 31: Equipment for explosive atmospheres.

This second edition cancels and replaces the first edition issued in 2005. It constitutes a technical revision.

The significant change with respect to the first edition is that this standard replaces the FNICO requirements with the requirements of an "ic" FISCO system.

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

CDV	Report on voting
31G/169/CDV	31G/176A/RVC

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