



SLOVENSKI STANDARD

SIST EN 60079-18:2010

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Eksplzivne atmosfere - 18. del: Zaščita opreme z zalivanjem z zalivno maso "m" (IEC 60079-18:2009 + corrigendum Jun. 2009)

Explosive atmospheres -- Part 18: Equipment protection by encapsulation m

Explosionsfähige Atmosphäre -- Teil 18: Geräteschutz durch Vergusskapselung m

Atmosphères explosives -- Partie 18: Protection du matériel par encapsulage m

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Ta slovenski standard je istoveten z: EN 60079-18:2009

SIST EN 60079-18:2010
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ICS:

29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60079-18

December 2009

ICS 29.260.20

Supersedes EN 60079-18:2004 + corr. April 2006 and EN 61241-18:2004

English version

**Explosive atmospheres -
Part 18: Equipment protection by encapsulation "m"
(IEC 60079-18:2009 + corrigendum 2009)**

Atmosphères explosives -
Partie 18: Protection du matériel
par encapsulage "m"
(CEI 60079-18:2009 + corrigendum 2009)

Explosionsfähige Atmosphäre -
Teil 18: Geräteschutz
durch Vergusskapselung "m"
(IEC 60079-18:2009 + Corrigendum 2009)

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This European Standard was approved by CENELEC on 2009-10-01. 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: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 31/784/FDIS, future edition 3 of IEC 60079-18, prepared by IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60079-18 on 2009-10-01.

This European Standard supersedes EN 60079-18:2004 + corrigendum April 2006 and EN 61241-18:2004.

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) 2010-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-10-01

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 ATEX (94/9/EC). See Annex ZZ.

CENELEC/TC 31 as the responsible committee has concluded that this new edition of EN 60079-18 does not contain substantial changes regarding the ESRs.

The State of the Art is included in Annex ZY "Significant changes between this European Standard and EN 60079-18:2004".

Annexes ZA, ZY and ZZ have been added by CENELEC.

[SIST EN 60079-18:2010](https://standards.iteh.ai/catalog/standards/sist/c373bbb9-813e-46e8-9b34-fb29d01a96df/sist-en-60079-18-2010)
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Endorsement notice

The text of the International Standard IEC 60079-18:2009 + corrigendum June 2009 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 60079-1	NOTE	Harmonized as EN 60079-1:2007 (not modified).
IEC 60079-2	NOTE	Harmonized as EN 60079-2:2007 (not modified).
IEC 60079-5	NOTE	Harmonized as EN 60079-5:2007 (not modified).
IEC 60079-6	NOTE	Harmonized as EN 60079-6:2007 (not modified).
IEC 60079-10	NOTE	Harmonized as EN 60079-10:2003 (not modified).
IEC 60079-14	NOTE	Harmonized as EN 60079-14:2008 (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 60086-1	NOTE	Harmonized as EN 60086-1:2007 (not modified).
IEC 60622	NOTE	Harmonized as EN 60622:2003 (not modified).
IEC 60664-1	NOTE	Harmonized as EN 60664-1:2007 (not modified).
IEC 61241-10	NOTE	Harmonized as EN 61241-10:2004 (not modified).
IEC 61951-1	NOTE	Harmonized as EN 61951-1:2003 (not modified).

IEC 61951-2 NOTE Harmonized as EN 61951-2:2003 (not modified).
IEC 61960-1 NOTE Harmonized as EN 61960-1:2001 (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	- ¹⁾	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	2009 ²⁾
IEC 60079-7	- ¹⁾	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	2007 ²⁾
IEC 60079-11	- ¹⁾	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2007 ²⁾
IEC 60079-15	- ¹⁾	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"	EN 60079-15	200X ³⁾
IEC 60079-26	- ¹⁾	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga	EN 60079-26	2007 ²⁾
IEC 60079-31	- ¹⁾	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"	EN 60079-31	2009 ²⁾
IEC 60127	Series	Miniature fuses	EN 60127	Series
IEC 60243-1	- ¹⁾	Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	1998 ²⁾
IEC 60691	- ¹⁾	Thermal-links - Requirements and application guide	EN 60691	2003 ²⁾
IEC 60730-2-9 (mod)	- ¹⁾	Automatic electrical controls for household and similar use - Part 2-9: Particular requirements for temperature sensing controls	-	-
IEC 60738-1	- ¹⁾	Thermistors - Directly heated positive temperature coefficient - Part 1: Generic specification	EN 60738-1	2006 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⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

³⁾ To be ratified.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61558-2-6	- ¹⁾	Safety of power transformers, power supply units and similar - Part 2-6: Particular requirements for safety isolating transformers for general use	EN 61558-2-6	2009 ²⁾
IEC 62326-4-1	- ¹⁾	Printed boards - Part 4: Rigid multilayer printed boards with interlayer connections - Sectional specification - Section 1: Capability Detail Specification - Performance levels A, B and C	EN 62326-4-1	1997 ²⁾
ISO 62	- ¹⁾	Plastics - Determination of water absorption	-	-
ANSI/UL 248-1	- ¹⁾	Standard for low-voltage fuses - Part 1: General requirements	-	-
ANSI/UL 746B	- ¹⁾	Standard for polymeric materials - Long-term property evaluations	-	-

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Annex ZY
(informative)

Significant changes between this European Standard and EN 60079-18:2004

The significant changes with respect to EN 60079-18:2004 are as listed below.

	Type		
	Minor and editorial changes	Extension	Substantial change regarding ESR's ^a
Incorporation of level of protection "mc"		X	
Equipment protection levels (EPL Ma, Ga, Da, Mb, Gb, Db, Gc, Dc)		X	
Incorporation of the dust requirements		X	
Incorporation of switching contacts for level of protection "ma"		X	
^a ESR = Essential Health and Safety Requirements (Annex II of Directive 94/9/EC)			

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General conclusion on the change of the State of the Art by this standard

CENELEC/TC 31 as the responsible committee has concluded that this new edition of EN 60079-18 does not contain substantial changes regarding the ESRs.

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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 (partly), ER 1.0.5 (partly)
- ER 1.1 (partly)
- ER 1.2.4, ER 1.2.8
- ER 1.3.1
- ER 1.6.4 (partly)
- ER 2.0.1 (partly)
- ER 2.0.2.1 (partly), ER 2.0.2.3 (partly)
- ER 2.1.1.1 (partly), ER 2.1.1.2 (partly)
- ER 2.1.2.1 (partly), ER 2.1.2.3 (partly)
- ER 2.2.1.1 (partly), ER 2.2.1.2 (partly)
- ER 2.2.2.1 (partly), ER 2.2.2.2 (partly)
- ER 2.3.1.1, ER 2.3.1.2
- ER 2.3.2.1, ER 2.3.2.2

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 60079-18

Edition 3.0 2009-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Explosive atmospheres –
Part 18: Equipment protection by encapsulation “m”**

**Atmosphères explosives –
Partie 18: Protection du matériel par encapsulage «m»**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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ELECTROTECHNIQUE
INTERNATIONALE

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