

## საქართველოს სტანდარტი

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ფეთქებადი გარემო - ნაწილი 35 -1: მაღაროში გამოსაყენებელი ნახშირის  
გაზის აღმოჩენის სანათები - ზოგადი მოთხოვნები - აწყობა და გამოცდა  
გაჟონვის რისკთან კავშირში IEC 60079-35-1:2011

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

სსტ ენ 60079-35-1:2011/2015

### საინფორმაციო მონაცემები

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2 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 60079-35-1:2011 „ ფეთქებადი გარემო - ნაწილი 35 -1: მაღაროში გამოსაყენებელი ნახშირის გაზის აღმოჩენის სანათები - ზოგადი მოთხოვნები - აწყობა და გამოცდა გაჟონვის რისკთან კავშირში IEC 60079-35-1:2011“

### 3 პირველად

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აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

English version

**Explosive atmospheres -  
Part 35-1: Caplights for use in mines susceptible to firedamp -  
General requirements -  
Construction and testing in relation to the risk of explosion  
(IEC 60079-35-1:2011)**

Atmosphères explosives -  
Partie 35-1: Lampes-chapeaux utilisables  
dans les mines grisouteuses -  
Exigences générales -  
Construction et essais liés au risque  
d'explosion  
(CEI 60079-35-1:2011)

Kopfleuchten für die Verwendung in  
schlagwettergefährdeten Grubenbauen -  
Teil 35-1: Allgemeine Anforderungen -  
Konstruktion und Prüfung in Relation zum  
Explosionsrisiko  
(IEC 60079-35-1:2011)

This European Standard was approved by CENELEC on 2011-06-30. 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, Croatia, 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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 31/921/FDIS, future edition 1 of IEC 60079-35-1, prepared by IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60079-35-1 on 2011-06-30.

This European Standard supersedes EN 62013-1:2006.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2012-03-30
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-06-30

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.

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

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## Endorsement notice

The text of the International Standard IEC 60079-35-1:2011 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**

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 60050-426	-	International Electrotechnical Vocabulary - Part 426: Equipment for explosive atmospheres	-	-
IEC 60050-845	-	International Electrotechnical Vocabulary (IEV) - Chapter 845: Lighting	-	-
IEC 60079-0	-	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	-
IEC 60079-1	-	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	EN 60079-1	-
IEC 60079-7	-	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	-
IEC 60079-11	-	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	-
IEC 60127-2	-	Miniature fuses - Part 2: Cartridge fuse-links	EN 60127-2	-
IEC 60332-1-1	-	Tests on electric and optical fibre cables under fire conditions - Part 1-1: Test for vertical flame propagation for a single insulated wire or cable - Apparatus	EN 60332-1-1	-
IEC 60332-1-2	-	Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame	EN 60332-1-2	-
IEC 60664-3	-	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	-
UL 1642	-	Standard for Lithium Batteries	-	-

საინფორმაციო ნაწილი. სრული ტექსტის საწინააღმდეგო შეიქმნა სტანდარტი.

## Annex ZY (informative)

### Significant changes between EN 60079-35-1:2011 and EN 62013-1: 2006

This European Standard supersedes EN 62013-1:2006.

The significant changes with respect to EN 62013-1:2006 are as listed below.

Significant Changes	Clause	Type		
		Minor and editorial changes	Extension	Major technical changes
This first edition cancels and replaces EN 62013-1:2006, and constitutes a full technical revision.			X	
The requirements of EN 60079-0 now apply to this standard with the exceptions of the exclusions listed in Table 1. Provision has also been provided for a means to assess caplights to EPL Ma.	Scope		X	
The standard has been re-written to be more in-line with other EN 60079 series standards.		X		
Table 1 introduced to identify the clauses of EN 60079-0 which are excluded.	Table 1		X	
The requirements for caplights conforming to EPL Mb defined.	4.1	X		
The additional requirements for caplights conforming to EPL Ma defined.	4.2		X	
Thermal protection of electronic components added.	5.10		X	
Additional requirements applied to cells and batteries.	6.1		X	
Cells and batteries are now restricted to those meeting the requirements of EN 60079-0.	7		X	
Type verification testing, where applicable refers back to the requirements in EN 60079-0	8	X		

**NOTE: The technical changes referred include the significant technical changes from the EN revised but is not an exhaustive list of all modifications from EN 62013-1:2006.**

**Explanations:**

**A) Definitions**

<b>Minor and editorial changes</b>	clarification decrease of technical requirements minor technical change editorial corrections
------------------------------------	--

Changes in a standard classified as 'Minor and editorial changes' refer to changes regarding the previous standard, which modify requirements in an editorial or a minor technical way. Also changes of the wording to clarify technical requirements without any technical change are classified as 'Minor and editorial changes'.

A reduction in level of existing requirement is also classified as 'Minor and editorial changes'

<b>Extension</b>	addition of technical options
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Changes in a standard classified as 'extension' refers to changes regarding the previous standard, which add new or modify existing technical requirements, in a way that new options are given, but without increasing requirements for equipment that was fully compliant with the previous standard. Therefore these 'extensions' will not have to be considered for products in conformity with the preceding edition.

<b>Major technical change</b>	addition of technical requirements increase of technical requirements
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Changes in a standard classified as 'Major technical change' refer to changes regarding the previous standard, which add new or increase the level of existing technical requirements, in a way that a product in conformity with the preceding standard will not always be able to fulfil the requirements given in the standard. 'Major technical changes' have to be considered for products in conformity with the preceding edition. For every change classified as 'Major Technical Change' additional information is provided in clause B) of the Annex ZY.

Note: These changes represent current technological knowledge<sup>1</sup>. However, these changes should not normally have an influence on equipment already placed on the market.

**B) Information about the background of 'Major Technical Changes'**

None.

**Instructions:**

The manufacturer or his authorised representative in the Community is to draw up the instructions for use in the required Community languages.

**Marking:**

The marking in this standard is to be supplemented/modified by the marking according to Directive 94/9/EC. Examples are given below.

**European marking examples**

Directive part	Standard part	Equipment example
E I M2	Ex I Mb EN 60079-35-1 (0°C ≤ Ta ≤ +40°C)	Caplight suitable for EPL Mb
E I M1	Ex ia I Ma EN 60079-35-1 (-10°C ≤ Ta ≤ +40°C)	Caplight suitable for EPL Ma

<sup>1</sup> see also ATEX Guide 10.3 and Annex ZZ

საინფორმაციო ნაწილი. სრული ტექსტის სახასიათოდ შეიძინეთ სტანდარტი.

## **Annex ZZ** (informative)

### **Coverage of essential requirements of the directive 94/9/EC**

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 and out of those given in Annex II of the Directive 94/9/EC:

- ER 1.0.1 to ER 1.0.6;
- ER 1.1.1 to ER 1.1.3;
- ER 1.2.1 to ER 1.2.9;
- ER 1.3.1 to ER 1.3.5;
- ER 1.4.1 to ER 1.4.2;
- ER 2.0.1.1 to ER 2.0.1.4;
- ER 2.0.2.1 to ER 2.0.2.3;

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.



# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Explosive atmospheres –  
Part 35-1: Caplights for use in mines susceptible to firedamp – General  
requirements – Construction and testing in relation to the risk of explosion**

**Atmosphères explosives –  
Partie 35-1: Lampes-chapeaux utilisables dans les mines grisouteuses –  
Exigences générales – Construction et essais liés au risque d'explosion**





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La Commission Electrotechnique Internationale (CEI) est la première organisation mondiale qui élabore et publie des normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

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