

## საქართველოს სტანდარტი

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ფეთქებადი გარემო ნაწილი 29-1: აირის დეტექტორები - მოთხოვნები  
ფეთქებადი აირების დეტექტორებისათვის IEC 60079-29-1:2007  
(მოდულიფიცირებული)

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

სსტ ენ 60079-29-1:2007/2015

### საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2015 წლის 1 აპრილის № 24 და 2015 წლის 10 თებერვლის № 9 განკარგულებებით

2 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 60079-29-1:2007 „ ფეთქებადი გარემო ნაწილი 29-1: აირის დეტექტორები - მოთხოვნები ფეთქებადი აირების დეტექტორებისათვის IEC 60079-29-1:2007 (მოდულიზირებული)“

### 3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2015 წლის 1 აპრილი №268-1.3-7042

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

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

EUROPEAN STANDARD

**EN 60079-29-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2007

ICS 29.260.20

Supersedes EN 61779-1:2000 + A11:2004, EN 61779-2:2000, EN 61779-3:2000,  
EN 61779-4:2000, EN 61779-5:2000

English version

**Explosive atmospheres -  
Part 29-1: Gas detectors -  
Performance requirements of detectors for flammable gases  
(IEC 60079-29-1:2007, modified)**

Atmosphères explosives -  
Partie 29-1: Détecteurs de gaz -  
Exigences d'aptitude à la fonction  
des détecteurs de gaz inflammables  
(CEI 60079-29-1:2007, modifiée)

Explosionsfähige Atmosphäre -  
Teil 29-1: Gasmessgeräte -  
Anforderungen an das Betriebsverhalten  
von Geräten für die Messung  
brennbarer Gase  
(IEC 60079-29-1:2007, modifiziert)

This European Standard was approved by CENELEC on 2007-11-01. 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 31/695/FDIS, future edition 1 of IEC 60079-29-1, prepared by IEC TC 31, Equipment for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by SC 31-9, Electrical apparatus for the detection and measurement of combustible gases to be used in industrial and commercial potentially explosive atmospheres, of Technical Committee CENELEC TC 31, Electrical apparatus for explosive atmospheres, containing common modifications to document 31/695/FDIS was submitted to the formal vote.

The combined texts of document 31/695/FDIS and the draft amendment prAA were approved by CENELEC as EN 60079-29-1 on 2007-11-01.

This European Standard supersedes EN 61779-1:2000 + A11:2004, EN 61779-2:2000, EN 61779-3:2000, EN 61779-4:2000 and EN 61779-5:2000.

The main changes with respect to the EN 61779 series are listed below:

- Subclause 4.2.3 (Alarm or output functions) was modified to ensure alarm devices cannot be adjustable outside their measuring range and to include requirements for de-activation of alarm devices;
- Subclause 4.2.7 (Stand-alone gas detection apparatus for use with separate control units) was added to allow separate evaluation of detection apparatus providing an industry recognized output signal;
- Subclause 4.2.8 (Separate control units for use with stand-alone gas detection apparatus) was added to allow separate evaluation of control unit apparatus using an industry recognized input signal;
- Subclause 4.2.9 (Software-controlled apparatus) was added to the document for improved evaluation of software. The added text is based upon the guiding principles and requirements of EN 50271;
- Subclause 5.2.1.1 was modified to require the center wavelength of the optical filters of two apparatus at the minimum and maximum limit of this standard;
- Subclause 5.2.1.2 was modified to allow the order of testing within each block to be conducted at the discretion of the test laboratory;
- Subclause 5.3.11 (Communications options) was added to ensure maximum transaction rates are applied during testing;
- Subclause 5.3.12 (Gas detection apparatus as part of systems) was added to ensure maximum transaction rates are applied during testing;
- Subclause 5.4.6 (Alarm set point(s)) was modified to include text related to alarms that are activated at decreasing concentrations;
- Subclause 5.4.10 (Air velocity) was modified to include testing at 3 m/s and 6 m/s;
- Subclause 5.4.16 (Time of response) was modified to exclude recovery time test requirements for Group II apparatus with a volume fraction up to 100 % LFL indication;
- Subclause 5.4.18 (High gas concentration operation above the measuring range) was modified to define the sequence of tests;
- Annex A (Performance requirements) has undergone major modifications by eliminating the gas/vapour table and replacing the annex with the performance requirements of Parts 2 to 5 of EN 61779. Additionally, performance requirements of Parts 2 to 5 of EN 61779 were adjusted for consistency as appropriate. The intent of this change is to condense Parts 1 to 5 of EN 61779 within a single standard.