

## საქართველოს სტანდარტი

პოტენციურად ფეთქებად გარემოს დამცავი სისტემის უსაფრთხო  
ფუნქციონირების შეფასების მეთოდოლოგია

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

სსტ ენ 15233:2007/2015

## საინფორმაციო მონაცემები

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ICS 13.230

English Version

## Methodology for functional safety assessment of protective systems for potentially explosive atmospheres

Méthodologie relative à l'évaluation de la sécurité fonctionnelle des systèmes de protection pour atmosphères explosibles

Methodik zur Bewertung der funktionalen Sicherheit von Schutzsystemen für explosionsgefährdete Bereiche

This European Standard was approved by CEN on 13 July 2007.

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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 CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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# Contents

Page

Foreword.....	3
Introduction .....	4
1 Scope .....	5
2 Normative references .....	6
3 Terms and definitions .....	6
4 General requirements.....	6
5 Functional safety assessment procedure.....	8
6 Documentation.....	13
Annex A (informative) Example of a functional safety assessment.....	15
Annex B (informative) Methods for failure identification and functional safety assessment .....	20
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC .....	23
Bibliography .....	24

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

## Foreword

This document (EN 15233:2007) has been prepared by Technical Committee CEN/TC 305 "Potentially explosive atmospheres - Explosion prevention and protection", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2008, and conflicting national standards shall be withdrawn at the latest by February 2008.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 94/9/EC.

For relationship with EU Directive 94/9/EC, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

The function of this type A standard is to describe principles for a consistent systematic procedure for functional safety assessment for the design and manufacture of protective systems.

Annex A is informative and contains methods for estimating and assessing functional safety and reliability.

Annex B is informative and contains an example for functional safety assessment of a protective system.

Performing functional safety assessment is referred to in written instructions for use and possible additional precautions are introduced in the documentation.

It is in both the manufacturer's and user's interest to establish a common methodology for achieving functional safety, reliability and effectiveness in the operation of protective systems. Thus, functional safety assessment is a tool which provides the essential link between manufacturers and users, however, only aspects which directly address manufacturers are incorporated in this standard.

Integrated explosion safety is conceived to prevent the formation of explosive atmospheres as well as sources of ignition and, should an explosion nevertheless occur, to halt it immediately and/or to limit its effects. In this connection protective systems must be designed and constructed after due analysis of possible operating faults that limit or prevent the capacity of the system to stop an explosion. Therefore it is absolutely necessary to conduct a functional safety assessment process.

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძლება სტანდარტი.