

PLAHVATUSOHTLIKUD KESKKONNAD. OSA 37:  
MITTEELEKTRILISED SEADMED  
PLAHVATUSOHTLIKELE KESKKONDADELE.  
MITTEELEKTRILINE KAITSMINE  
KONSTRUKTSIOONIOHUTUSKLASSI "C" ABIL,  
SÜTTIMISALLIKA KONTROLLI "B" ABIL,  
VEDELIKIMMERSIOONI "K" ABIL

Explosive atmospheres - Part 37: Non-electrical  
equipment for explosive atmospheres - Non-electrical  
type of protection constructional safety "c", control of  
ignition sources "b", liquid immersion "k" (ISO  
80079-37:2016)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 80079-37:2016 sisaldab Euroopa standardi EN ISO 80079-37:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 80079-37:2016 consists of the English text of the European standard EN ISO 80079-37:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.04.2016.	Date of Availability of the European standard is 06.04.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 13.230

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

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EUROPEAN STANDARD

EN ISO 80079-37

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2016

ICS 29.260.20

Supersedes EN 13463-5:2011, EN 13463-6:2005, EN 13463-8:2003

English Version

**Explosive atmospheres - Part 37: Non-electrical equipment  
for explosive atmospheres - Non-electrical type of  
protection constructional safety "c", control of ignition  
sources "b", liquid immersion "k" (ISO 80079-37:2016)**

Atmosphères explosives - Partie 37: Appareils non électriques destinés à être utilisés en atmosphères explosives - Mode de protection non électrique par sécurité de construction "c", par contrôle de la source d'inflammation "b", par immersion dans un liquide "k" (ISO 80079-37:2016)

Explosionsgefährdete Bereiche - Teil 37: Nicht-elektrische Geräte für den Einsatz in explosionsgefährdeten Bereichen - Schutz durch konstruktive Sicherheit 'c', Zündquellenüberwachung 'b', Flüssigkeitskapselung 'k' (ISO 80079-37:2016)

This European Standard was approved by CEN on 8 February 2016.

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

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

## European Foreword

This document (EN ISO 80079-37:2016) has been prepared by Technical Committee ISO/TMBG "Technical Management Board - groups" in collaboration with 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 October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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.

The significant changes with respect to EN 13463-5:2011, EN 13463-6:2005 and EN 13463-8:2003 are included in Annex ZB "*Significant changes between this European Standard and EN 13463-5:2011, EN 13463-6:2005 and EN 13463-8:2003*".

This document supersedes EN 13463-5:2011, EN 13463-6:2005, EN 13463-8:2003.

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 2014/34/EU.

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Extensions to the marking scheme described in the Directive are found in the ATEX Guidelines published by the European Commission. These are particularly useful for equipment that conforms to more than one category.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 80079-37:2016 has been approved by CEN as EN ISO 80079-37:2016 without any modification.

## Annex ZA (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive 2014/34/EU

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2014/34/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 94/9/EC**

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of 2014/34 EU	Qualifying remarks/Notes
4	1.1.1 1.1.3	
5.1	1.3.4 1.4.1	See also 80079-36 Clause has some limited relevance to ESR 1.2.4
5.2	1.1.1	
5.3.1	1.3.1	See also 80079-36
5.3.2	1.2.3	See also 80079-36
5.4	1.3.1	See also 80079-36
5.6.1	1.0.6a 1.1.3	Not much additional information
5.6.2	1.3.4	See also 80079-36
5.6.3	1.3.1	See also 80079-36
5.7.1	1.0.6a 1.0.6c 1.2.1	
5.7.2	1.3.1	See also 80079-36
5.7.3	1.1.3	
5.8.1	1.1.3 1.3.1 1.3.4	See also 80079-36 Limited information in respect of 1.1.3
5.8.2.1	1.3.1	See also 80079-36
5.8.2.2	1.3.1	See also 80079-36

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of 2014/34 EU	Qualifying remarks/Notes
	1.3.2	
5.8.2.3	1.3.4	See also 80079-36
5.8.2.4	1.3.4	See also 80079-36
5.8.5.1	1.3.4	See also 80079-36
5.9.3	1.3.4	See also 80079-36
6.1	1.3.1	See also 80079-36
6.2	1.0.6a 1.1.3 1.2.1 1.3.4 1.4.1	See also 80079-36 Clause has some limited relevance to ESR 1.2.4
6.3	1.0.6a 1.2.1	
6.4	1.0.6a 1.2.1	
6.5	1.0.6a 1.2.1	
7.1	1.0.6a 1.2.1 1.3.2 1.3.4 1.4.1	See also 80079-36 Clause has some limited relevance to ESR 1.2.4
7.2	1.0.6a 1.2.1	
7.3	1.0.6a 1.1.3 1.2.1	
7.3.3	1.3.1	
7.3.4	1.2.3 1.3.2	See also 80079-36

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

**Annex ZB**  
(informative)

**Significant changes between this European Standard and EN 13463-5:2011,  
EN 13463-6:2005 and EN 13463-8:2003**

This European Standard supersedes EN 13463-5:2011, EN 13463-6:2005 and EN 13463-8:2003.

**Table ZB.1 — Significant changes between this European Standard and EN 13463-5:2011,  
EN 13463-6:2005 and EN 13463-8:2003**

Clauses of this European Standard		Type		
		Minor and formal changes	Extension	Substantial change regarding ESRs
Introduction of new definitions and slight redefinitions concerning ignition sources to improve ignition hazard assessment (EN 13463-5, EN 13463-6, EN 13463-8 Clause 3)	Clause 3	X	X	
Differentiation in requirements for ingress prevention for dust and liquids (EN 13463-5, Clause 4.3.4)	5.2.2	X		
Changing note to normative text (EN 13463-5, Clause 4.4.3)	5.3.3	X	X	
Note 2 deleted and moved to 5.6 (EN 13463-5, Clause 4.6)	5.5	X		
Additional requirement listed (2 <sup>nd</sup> clause) (from EN 13463-5, Clause 4.6)	5.6	X	X	
Additional measure listed (EN 13463-5, Clause 5.3)	5.6.3	X	X	
Changing of wording regarding information for instructions (EN 13463-5, Clause 6.1)	5.7.1	X		
Changing of wording regarding information for instructions (EN 13463-5, Clause 6.2)	5.7.2	X		
Additional requirement regarding electrostatic requirements (EN 13463-5, note in 7.2.2) New note	5.8.2.2	X		
Changing of wording (EN 13463-5, Clause 7.6.5)	5.8.2.5	X		
Changing to clarify dependency of requirements (EN 13463-5, Clause 7.3.2)	5.10	X		
Differentiation to clarify dependency of	5.11.1	X	X	

Clauses of this European Standard		Type		
		Minor and formal changes	Extension	Substantial change regarding ESRs
requirements (EN 13463-5, Clause 8.1)				
Additional requirement (EN 13463-5, Clause 10.3)	5.13.3	X		
Editorial modification for clarification (EN 13463-6, Clause 6.1)	Clause 6	X	X	
Editorial modification for clarification (EN 13463-8, Clause 5.1)	7.1	X		
Editorial modification for clarification (EN 13463-8, Clause 7.2)	7.3.2	X		
Additional example (EN 13463-8, Clause 7.4)	7.3.4	X		
Editorial modification for clarification (EN 13463-8, Clause 7.8)	7.3.6	X		
Introduction of new definitions for marking	Clause 10	X	X	

NOTE 1 The technical changes referred include the significant technical changes from the EN revised but is not an exhaustive list of all modifications from the previous version.

### **Explanations:**

#### **A) Definitions**

##### **Minor and editorial changes**

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'

##### **Extension**

addition of technical options

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.



**Major technical changes**

addition of technical requirements

increase of technical requirements

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 ZB.

NOTE 2 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

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