

SLOVENSKI STANDARD

SIST EN ISO 80079-36:2016

01-julij-2016

Nadomešča:
SIST EN 13463-1:2009

Eksplzivne atmosfere - 36. del: Neelektrična oprema za potencialno eksplozivne atmosfere - Osnovne metode in zahteve (ISO 80079-36:2016)

Explosive atmospheres - Part 36: Non-electrical equipment for use in explosive atmospheres - Basic methods and requirements (ISO 80079-36:2016)

Explosionsfähige Atmosphären - Teil 36: Nichtelektrische Geräte für den Einsatz in explosionsfähigen Atmosphären - Grundlagen und Anforderungen (ISO 80079-36:2016)

Atmosphères explosives - Partie 36: Matériels non électriques destinés à être utilisés en atmosphères explosives - Méthodologie et exigences (ISO 80079-36:2016)

Ta slovenski standard je istoveten z: EN ISO 80079-36:2016

ICS:

13.230	Varstvo pred eksplozijo	Explosion protection
29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres

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EUROPEAN STANDARD

EN ISO 80079-36

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2016

ICS 29.260.20

Supersedes EN 13463-1:2009

English Version

Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements (ISO 80079-36:2016)

Atmosphères explosives - Partie 36: Appareils non
électriques destinés à être utilisés en atmosphères
explosives - Méthodologie et exigences (ISO 80079-
36:2016)

Explosionsfähige Atmosphären - Teil 36: Nicht-
elektrische Geräte für den Einsatz in explosionsfähigen
Atmosphären - Grundlagen und Anforderungen (ISO
80079-36:2016)

This European Standard was approved by CEN on 18 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
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European Foreword

This document (EN ISO 80079-36:2016) 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 13463-1:2009 are included in Annex ZB "Significant changes between this European Standard and EN 13463-1:2009".

This document supersedes EN 13463-1:2009.

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 80079-36:2016 has been approved by CEN as EN ISO 80079-36:2016 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 2014/34/EU

Clauses/sub-clauses of this EN	Essential Requirements (ERs) of EU Directive 2014/34/EU	Qualifying remarks/Notes
4	1.0.1 1.0.2	
5.1	1.0.1 1.0.2 1.0.3	
5.2	1.0.2 1.3	
6.1	1.3	
6.2.1, 6.2.2, 6.2.3	1.2.8 1.3.1 1.4.1	
6.2.4	2.0.1 2.0.2	
6.2.5, 6.2.6	2.1.1 2.2.1 2.3.1	
6.2.7	2.1.2 2.2.2 2.3.2	
6.3	1.3.1	reference to EN 1127-1

Table ZA.1 (continued)

Clauses/sub-clauses of this EN	Essential Requirements (ERs) of EU Directive 2014/34/EU	Qualifying remarks/Notes
6.4	1.3.4	
6.5	1.0.1 1.3.1	reference to EN 60079 series
6.6	1.3.3	
6.7	1.3.2	
6.8 - 6.9	1.3.1	
7.1, 7.2	1.3.4	
7.3	1.2.6	
7.4	1.1.3 1.4.1 1.4.2	
7.5	1.2.2 1.2.6	
7.6	1.1.3 1.4.2	
7.7	1.1.3 1.4.1 1.4.2	
8	1.1.3 1.2.1 1.2.2 1.2.5	
9.1	1.0.1 1.0.3 1.0.4	
9.5	1.0.6	
10	1.0.5	
Annexes A - G	1.0.2 1.3.1	

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

Annex ZB (informative)

Correspondence of equipment groups

In all cases Equipment Protection Levels (EPL) as defined by EN 60079-0 are related to the corresponding Equipment Groups and Equipment Categories according to the following table. The same applies if a standard makes reference to the intended use of equipment in Zones according to the definitions in EN 60079-10.

Table ZB.1 — Correspondence of equipment groups

EN 60079-0		Directive 2014/34/EU		EN 60079-10-1 and EN 60079-10-2
EPL	Group	Equipment Group	Equipment Category	Zones
Ma	I	I	M1	NA
Mb			M2	
Ga	II	II	1G	0
Gb			2G	1
Gc			3G	2
Da	III	III	1D	20
Db			2D	21
Dc			3D	22




Instructions

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

Marking

The marking according to this standard is to be supplemented by the marking according to Directive 2014/34/EU. Examples are given below.

European marking examples

Directive part	Standard part	Equipment example
 I M2	Ex h I Mb	Non-electrical equipment for Mining Industry,
 II 2 G	Ex h IIB T4 Gb	Non-electrical equipment intended to be used in Surface Industry classified as Gas Explosive Atmosphere - Zone1
 II 1 D	Ex h IIIC 120°C Da	Non-electrical equipment intended to be used in Surface Industry classified as Explosive Atmosphere of Combustible Dust - Zone 20

Annex ZC (informative)

Significant changes between this European Standard and EN 13463-1:2009

This European Standard supersedes EN 13463-1:2009

Table ZC.1 — Significant changes between this European Standard and EN 13463-1:2009

Modifications significatives	Clause	Minor and formal changes	Extensions	Extensions
Introduction of new definitions and slight redefinitions concerning ignition sources to improve ignition hazard assessment	Clause 3	X		
Introduction of Equipment Protection Level instead of Category relating to ATEX Directive	Clause 4.1		X	
Introduction of Dust groups defined as Group IIIA, IIIB, & IIIC	Clause 4.4		X	
Introduction in the instructions for safe use and required maintenance for the equipment shall be specified by the manufacturer	Clause 5.1		X	
Change of wording regarding the formal Ignition hazard identification and assessment	Clause 5.2.1	X		
Introduction of what the assessment shall show	Clause 5.2.2.1		X	
Change of wording regarding EPL Mb equipment requirement	Clause 5.2.2.2	X		
Introduction of a new note regarding the risk of ignition due to other ignition source	Clause 6.1		X	
Change of wording regarding the ambient temperature	Clause 6.2.2	X		
Introduction of a new note regarding the option to calculate maximum temperatures	Clause 6.2.3		X	
Introduction of a new note regarding the layers of coal dust	Clause 6.2.3		X	
Introduction of a new note regarding the instructions	Clause 6.2.5		X	

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Table ZC.1 (continued)

Modifications significatives	Article	Minor and formal changes	Extensions	Extensions
Introduction of a new column regarding requirement for T5 classification	Clause 6.2.6.1		X	
Introduction of two new notes regarding the enclosed volume	Clause 6.2.6.2		X	
Introduction of requirement regarding External hot surfaces	Clause 6.2.6.3		X	

NOTE 1 The technical changes referred to include the significant technical changes from the revised EN but this 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

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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 knowledge¹. 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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¹ see also ATEX Guideline 10.3 and Annex ZA

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Explosive atmospheres –
Part 36: Non-electrical equipment for explosive atmospheres – Basic method
and requirements**

**Atmosphères explosives –
Partie 36: Appareils non électriques destinés à être utilisés en atmosphères
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