



BSI Standards Publication

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)

National foreword

This British Standard is the UK implementation of EN ISO 80079-37:2016. It supersedes BS EN 13463-5:2011, BS EN 13463-6:2005 and BS EN 13463-8:2003, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EXL/23, Explosion and fire precautions in industrial and chemical plant.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
30 June 2016	Annex A page format errors corrected

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 80079-37

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 nd 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 New reference 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	