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**Explosive atmospheres –
Part 34: Application of quality systems for ex product manufacture
(ISO/IEC 80079-34:2018);
English version EN ISO/IEC 80079-34:2020,
English translation of DIN EN ISO/IEC 80079-34:2020-06**

Explosionsgefährdete Bereiche –
Teil 34: Anwendung von Qualitätsmanagementsystemen für die Herstellung von
Ex-Produkten (ISO/IEC 80079-34:2018);
Englische Fassung EN ISO/IEC 80079-34:2020,
Englische Übersetzung von DIN EN ISO/IEC 80079-34:2020-06

Atmosphères explosives –
Partie 34: Application de systèmes de management de la qualité pour la fabrication des
produits Ex (ISO/IEC 80079-34:2018);
Version anglaise EN ISO/IEC 80079-34:2020,
Traduction anglaise de DIN EN ISO/IEC 80079-34:2020-06

Document comprises 88 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

The text of ISO/IEC 80079-34:2018 has been prepared by Technical Committee ISO/TMBG „Technical Management Board — groups“ of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) and has been adopted as EN ISO/IEC 80079-34:2020 by Technical Committee CEN/TC 305 “Potentially explosive atmospheres — Explosion prevention and protection” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Sicherheitstechnische Grundsätze* (DIN Standards Committee Safety Design Principles), Working Committee NA 095-02-06 AA “Terminology and Methodology”.

For current information on this standard, please go to DIN’s website (www.din.de) and search for the document number in question.

The DIN documents corresponding to the international documents referred to in this document are as follows:

IEC 60079 (all parts)	DIN EN 60079 (all parts)
ISO 2738	DIN EN ISO 2738
ISO 2859-1	DIN ISO 2859-1
ISO 3951-1	DIN ISO 3951-1
ISO 4003	DIN ISO 4003
ISO 9000	DIN EN ISO 9000
ISO 9001:2015	DIN EN ISO 9001:2015-11
ISO 16852	DIN EN ISO 16852
ISO 80079-36	DIN EN ISO 80079-36
ISO 80079-37	DIN EN ISO 80079-37
ISO/IEC 17021 (all parts)	DIN EN ISO/IEC 17021 (all parts)
ISO/IEC 17050-1	DIN EN ISO/IEC 17050-1

Amendments

This standard differs from DIN EN ISO/IEC 80079-34:2012-03 as follows:

- a) the standard has been brought in line with ISO 9001:2015;
- b) a new Annex C “External Provider's Declaration of Conformity” has been included;
- c) a new Annex D “ISO/IEC 80079-34:2011 to ISO/IEC 80079-34 Edition 2 Correlation Matrix” has been included;
- d) the European annexes have been updated;
- e) contents from the European annexes have been moved to Annex A of the international document;
- f) EN 16009, EN 16020 and EN 16447 have been incorporated into Annex ZB;
- g) the standard has been editorially revised.

Previous editions

DIN EN 13980: 2003-02

DIN EN ISO/IEC 80079-34: 2012-03

National Annex NA (informative)

Bibliography

DIN EN 60079 (all parts), *Explosive atmospheres*

DIN EN ISO 2738, *Sintered metal materials, excluding hardmetals — Permeable sintered metal materials — Determination of density, oil content and open porosity*

DIN EN ISO 9000, *Quality management systems — Fundamentals and vocabulary*

DIN EN ISO 9001:2015-11, *Quality management systems — Requirements (ISO 9001:2015)*

DIN EN ISO 16852, *Flame arresters — Performance requirements, test methods and limits for use*

DIN EN ISO/IEC 17021(all parts) *Conformity assessment — Requirements for bodies providing audit and certification of management systems*

DIN EN ISO/IEC 17050-1, *Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements*

DIN EN ISO 80079-36, *Explosive atmospheres — Part 36: Non-electrical equipment for explosive atmospheres — Basic method and requirements*

DIN EN ISO 80079-37, *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"*

DIN ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

DIN ISO 3951-1, *Sampling procedures for inspection by variables — Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL*

DIN ISO 4003, *Permeable sintered metal materials — Determination of bubble test pore size*

English Version

Explosive atmospheres —
Part 34: Application of quality systems for ex product
manufacture
(ISO/IEC 80079-34:2018)

Atmosphères explosives —
Partie 34: Application de systèmes de management
de la qualité pour la fabrication des produits Ex
(ISO/CEI 80079-34:2018)

Explosionsgefährdete Bereiche —
Teil 34: Anwendung von Qualitätsmanagementsystemen
für die Herstellung von ExProdukten
(ISO/IEC 80079-34:2018)

This European Standard was approved by CEN on 29 December 2019.

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.

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European foreword

The text of ISO/IEC 80079-34:2018 has been prepared by Technical Committee ISO/TMB “Technical Management Board — groups” of the International Organization for Standardization (ISO) and has been taken over as EN ISO/IEC 80079-34:2020 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 September 2020, and conflicting national standards shall be withdrawn at the latest by March 2023.

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

This document supersedes EN ISO/IEC 80079-34:2011.

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(s).

For relationship with EU Directives, see informative Annex ZA, ZB, ZC and ZD, which are 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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO/IEC 80079-34:2018 has been approved by CEN as EN ISO/IEC 80079-34:2020 without any modification.

Annex ZA (normative)

Normative references to international publications and the corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60050-426	—	International Electrotechnical Vocabulary — Part 426: Equipment for explosive atmospheres	—	—
IEC 60079-0	—	Explosive atmospheres — Part 0: Equipment — General requirements	EN IEC 60079-0	2018
ISO 9000	2015	Quality management systems — Fundamentals and vocabulary	EN ISO 9000	2015

Annex ZB (informative)

Information relevant to equipment and protective systems according to standards harmonized under Directive 2014/34/EU

ZB.1 Introduction

The requirements laid down in the Directive and the standards harmonized under the Directive are the basis for the quality assurance of the production process and the assessment of the quality system as well. The quality system must ensure that the products resulting from the regular production process comply with the types tested in the EU-type examination and with the applicable requirements of the Directive.

This annex draws attention to a number of standards harmonized under the Directive which can be used to gain detailed information on specific requirements. These references might be useful for manufacturers to check whether the safety-relevant aspects are considered in the quality system and covered by adequate procedures (see 8). They can also be used for internal or external quality audits (see 9.1 and 9.2).

In quality system assessments according to Annexes IV and VII of Directive 2014/34/EU performed by a Notified Body the auditing team must have knowledge with regard to the product specific requirements according to the Directive.

NOTE The following examples do not cover all protection concepts and product specific requirements but give some advice and will be supplemented to in the next edition.

ZB.2 Non-electrical equipment (EN 13463-1)

Safety aspects are covered by clause A.14 for non-electrical equipment (EN ISO 80079-36).

ZB.3 Protection by flow restricting enclosure “fr” (EN 13463-2)

Safety aspects are covered by the general clause for non-electrical equipment (EN ISO 80079-36).

ZB.4 Protection by flameproof enclosure “d” (EN 13463-3)

The same safety aspects as for electrical equipment apply (see A.3; for aspects of dust ignition protection, see also A.10).

ZB.5 Protection by constructional safety “c” (EN 13463-5)

Safety aspects are covered by clause A.15 for non-electrical equipment (EN ISO 80079-37).

ZB.6 Protection by control of ignition sources “b” (EN 13463-6)

Safety aspects are covered by clause A.16 for non-electrical equipment (EN ISO 80079-37).

ZB.7 Protection by pressurised enclosures “p” (EN 13463-7)

The same safety aspects as for electrical equipment apply (A.6), according to A.14.1.