BS EN IEC 60079-10-1:2021

BSI Standards Publication

Explosive atmospheres

Part 10-1: Classification of areas - Explosive gas atmospheres

bsi.

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National foreword

This British Standard is the UK implementation of EN IEC 60079-10-1:2021. It is identical to IEC 60079-10-1:2020. It supersedes BS EN 60079-10-1:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EXL/31/3, Codes of practice.

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Amendments/corrigenda issued since publication

Date	Text affected

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60079-10-1

February 2021

ICS 29.260.20

Supersedes EN 60079-10-1:2015 and all of its amendments and corrigenda (if any)

English Version

Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres (IEC 60079-10-1:2020)

Atmosphères explosives - Partie 10-1: Classification des emplacements - Atmosphères explosives gazeuses (IEC 60079-10-1:2020)

Explosionsgefährdete Bereiche - Teil 10-1: Einteilung der Bereiche - Gasexplosionsgefährdete Bereiche (IEC 60079-10-1:2020)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of document 31J/307/FDIS, future edition 3 of IEC 60079-10-1, prepared by SC 31J "Classification of hazardous areas and installation requirements" of IEC/TC 31 "Equipment for explosive atmospheres" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60079-10-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-10-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-01-22

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The text of the International Standard IEC 60079-10-1:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60079-0	NOTE	Harmonized as EN IEC 60079-0
IEC 60079-14	NOTE	Harmonized as EN 60079-14
IEC 60079-13	NOTE	Harmonized as EN 60079-13
IEC 60079-10-2	NOTE	Harmonized as EN 60079-10-2
IEC 61285	NOTE	Harmonized as EN 61285
IEC 61511-1:2016	NOTE	Harmonized as EN 61511-1:2017 (not modified)
ISO/IEC 80079-20-1	NOTE	Harmonized as EN ISO/IEC 80079-20-1

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EXPLOSIVE ATMOSPHERES –

Part 10-1: Classification of areas – Explosive gas atmospheres

FOREWORD

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International Standard IEC 60079-10-1 has been prepared by subcommittee 31J: Classification of hazardous areas and installation requirements, of IEC technical committee 31: Equipment for explosive atmospheres.

This third edition of IEC 60079-10-1 cancels and replaces the second edition, published in 2015, and constitutes a technical revision. The significant technical changes with respect to the previous edition are as follows:

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		Type		
Changes	**Clause**	**Minor and editorial changes**	**Extension**	**Major technical changes**
Deleting commercial and industrial applications for fuel gas from the Scope exemptions	1			C1
Updating editorial details and notes to the definitions	3		X	
Deletion of the previous edition clause 3.7.3 definition for catastrophic failure (dealt with in clause 4.5)			X	
Introduction of new Subclause **4.4.2 Zone of negligible extent**	4.4.2		X	
Introduction of new clause **5.3.2 Fuel gas installations**	5.3.2		X	
Renumbering of headings	7	X		
Introduction of **Figure 1 – Dilution volume**	7		X	
Upgrading **Table A.1** with UFL and its column 15 heading with the 'source of data'	A.1	X		
Updating the flow-chart in **Figure B.1**	B.6		X	
Updating equations for evaporation rate to align with the recent source modifications	B.7.3		X	
Updating the chart in **Figure B.2** according to the updated equations for evaporation rate and the ventilation velocity of 0,25 m/s	B.7.3		X	
Restructuring **Table C.1**	C.3.4		X	
Removal of safety factor ***k*** and deleting it from the horizontal axis of the chart in **Figure C.1**	C.3.5			C2
Revising equations (C.2) and (C.3)	C.5.2			C3
Revising equations (C.4) and (C.5)	C.5.3			C4
Revising the chart in **Figure C.6** by changing the label on the horizontal axis	C.5.3			C5
Revising equation (C.6) and deleting equation (C.7)	C.5.4			C6
Removal of safety factor ***k*** and deleting it from the horizontal axis of the charts in **Figure D.1**	D.3			C7
Imposing limitations to the use of the chart in **Figure D.1**	D.3		X	
Updating and corrections in **Annex E**	Annex E		X	
Upgrading **Annex G** on Flammable mists	Annex G		X	
Introducing new items in **Table K.1**	Annex K		X	
Introducing new items in the Bibliography	Bibliography		X	
NOTE The technical changes referred to include the significance of technical changes in the revised IEC Standard, but they do not form an exhaustive list of all modifications from the previous version.				

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