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Eksplzivne atmosfere - 19. del: Popravilo, obnova in remont opreme (IEC 60079-19:2019)

Explosive atmospheres - Part 19: Equipment repair, overhaul and reclamation (IEC 60079-19:2019)

Explosionsgefährdete Bereiche - Teil 19: Gerätereparatur, Überholung und Regenerierung (IEC 60079-19:2019)

Atmosphères explosives - Partie 19: Réparation, révision et remise en état de l'appareil (IEC 60079-19:2019)

Ta slovenski standard je istoveten z: EN IEC 60079-19:2019

ICS:

29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres
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EUROPEAN STANDARD

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NORME EUROPÉENNE

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December 2019

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Supersedes EN 60079-19:2011 and all of its
amendments and corrigenda (if any)

English Version

**Explosive atmospheres - Part 19: Equipment repair, overhaul
and reclamation
(IEC 60079-19:2019)**Atmosphères explosives - Partie 19: Réparation, révision et
remise en état de l'appareil
(IEC 60079-19:2019)Explosionsgefährdete Bereiche - Teil 19: Gerätereparatur,
Überholung und Regenerierung
(IEC 60079-19:2019)

This European Standard was approved by CENELEC on 2019-11-22. CENELEC 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.

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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

EN IEC 60079-19:2019 (E)**European foreword**

The text of document 31J/295/FDIS, future edition 4 of IEC 60079-19, 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 60079-19:2019.

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) 2020-08-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-11-22

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The text of the International Standard IEC 60079-19:2019 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 60034 (series)	NOTE	Harmonized as EN 60034 (series)
IEC 60079-17	NOTE	Harmonized as EN 60079-17
IEC 60079-18	NOTE	Harmonized as EN 60079-18
IEC 60079-33	NOTE	Harmonized as CLC/TR 60079-33
IEC 60364 (series)	NOTE	Harmonized as HD 60364 (series)
ISO 4063	NOTE	Harmonized as EN ISO 4063
ISO 9000	NOTE	Harmonized as EN ISO 9000
ISO 9001	NOTE	Harmonized as EN ISO 9001
ISO/IEC 17000	NOTE	Harmonized as EN ISO/IEC 17000
ISO/IEC 17024	NOTE	Harmonized as EN ISO/IEC 17024
ISO/IEC 80079-34	NOTE	Harmonized as EN ISO/IEC 80079-34

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60034-23	-	Rotating electrical machines - Part 23: Repair, overhaul and reclamation	EN IEC 60034-23-	
IEC 60079-0	2017	Explosive atmospheres - Part 0: Equipment - General requirements	EN IEC 60079-0	2018
IEC 60079-1	-	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	EN 60079-1	-
IEC 60079-2	-	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"	EN 60079-2	-
IEC 60079-6	-	Explosive atmospheres - Part 6: Equipment protection by liquid immersion "o"	EN 60079-6	-
IEC 60079-7	-	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	-
IEC 60079-11	2011	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2012
IEC 60079-14	-	Explosive atmospheres - Part 14: Electrical installations design, selection and erection	EN 60079-14	-
IEC 60079-15	-	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"	EN IEC 60079-15-	
IEC 60079-26	-	Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga	EN 60079-26	-
IEC/IEEE 60079-30-1		Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements	EN 60079-30-1	-

EN IEC 60079-19:2019 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/IEEE 60079-30-- 2		Explosive atmospheres - Part 30-2: Electrical resistance trace heating - Application guide for design, installation and maintenance	EN 60079-30-2	-
IEC 60079-31	-	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"	EN 60079-31	-
IEC 60085	-	Electrical insulation - Thermal evaluation and designation	EN 60085	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 61241-0	-	Electrical apparatus for use in the presence of combustible dust -- Part 0: General requirements	-	-
IEC 61241-1	-	Electrical apparatus for use in the presence of combustible dust -- Part 1: Protection by enclosures "tD"	-	-
IEC 61241-1-1	-	Electrical apparatus for use in the presence of combustible dust -- Part 1-1: Electrical apparatus protected by enclosures and surface temperature Limitation Specification for apparatus	-	-
IEC 61241-4	-	Electrical apparatus for use in the presence of combustible dust -- Part 4: Type of protection 'pD'	-	-
ISO 4526	-	Metallic coatings – Electroplated coatings of nickel for engineering purposes	EN ISO 4526	-
ISO 6158	-	Metallic coatings – Electrodeposited coatings of chromium for engineering purposes	EN ISO 6158	-



IEC 60079-19

Edition 4.0 2019-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Explosive atmospheres –
Part 19: Equipment repair, overhaul and reclamation

Atmosphères explosives –
Partie 19: Réparation, révision et remise en état de l'appareil

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –**Part 19: Equipment repair, overhaul and reclamation**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60079-19 has been prepared by subcommittee 31J: Classification of hazardous areas and installation requirements, of IEC technical committee 31: Equipment for explosive atmospheres.

This fourth edition cancels and replaces the third edition published in 2010 together with Amendment 1:2015. This edition constitutes a technical revision.

The significance of the changes between IEC 60079-19, Edition 3 (2010), including Amendment 1 (2015), and IEC 60079-19, Edition 4 (2019) are as listed below:

Explanation of the significance of the changes	Clause	Type		
		Minor and editorial changes	Extension	Major technical changes
Relationship between IEC 60034-23 and IEC 60079-19	Introduction	X		
Document applicable to Type(s) of Protection "o" and "q"	1		X	
Standard for electrical resistance trace heating added	2		X	
Terms "repair facility" and "service facility" are considered equivalent. Changed "repair facility" to "service facility"	3 to 15	X		
Terms and definitions aligned alphabetically	3	X		
Clarification of definition "certificate"	3.2	X		
Addition of definition "Component Certificate"	3.2.1		X	
Addition of definition "Ex Equipment Certificate"	3.2.2		X	
Addition of definition "schedule drawing"	3.2.3		X	
Change in terms used from "certificate documents" to "schedule drawing"	4 Annex E	X		
Change in terms used from "certificate documents" to "Ex Equipment Certificates" and "schedule drawings"	4.2.1	X		
Change in terms used from "motor", "rotating machine", "rotating electrical machine" to "electric machine"	All	X		
Addition of specific operating requirements	4.3.2.1		X	
Clarification of requirements for repair of components	4.3.2.3		X	
Addition of a requirement to review "X" conditions	4.3.2.4.2		X	
Change in terms from "bolt" to "fastener"	4.3.2.5.2	X		
Addition of bullet point for marking of repairs to certification documentation	4.3.2.6 a)		X	
Addition of bullet point for fitness for purpose assessment to IEC 60079-17	4.3.2.6 e)		X	
Additional actions to be taken in case of uncertainty of a reclamation	4.3.3.1		X	
Change of "subject to repair" to "repairable"	4.3.3.2	X		
Elimination of duplication of requirements	4.3.3.3.1	X		
Addition of bullet point including other welding techniques to ISO 4063	4.3.3.4.5		X	
Addition of requirement for threaded hole verification using GO, NO-GO gauges and threaded hole reclamation test	4.3.3.4.7		X	
The role of a service facility clarified to exclude the role of a manufacturer when making alterations	4.3.4.1		X	
Addition of requirement that the Ex report following equipment modification shall not have an attestation of compliance	4.3.4.2		X	
Clarification of repairer's duty to confirm service condition following any reclamation	4.3.6.2	X		
Restructuring of requirements relating to testing of electric machines as subclauses of 4.3.6 from Type of Protection clauses 5, 7, 8, 9, 10 and 11 in previous editions.	4.3.6.3.1 and 4.3.6.3.2	X		
Addition of a requirement for greases with non-evaporating solvents for joint corrosion protection materials	5.2.1.1		X	
Revised a recommendation to a requirement "should" to "shall"	5.2.4		X	
Revised a recommendation to a requirement. "is necessary" to "shall be taken"	5.2.7.2		X	
Text amended to make requirement clearer	5.2.8.1	X		