SLOVENSKI STANDARD
SIST-TP CLC/TR 60079-32-1:2019

01-maj-2019

Nadomešča:

SIST-TP CLC/TR 60079-32-1:2015

Eksplozivne atmosfere - 32-1. del: Elektrostatske nevarnosti - Navodilo (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Explosive atmospheres - Part 32-1: Electrostatic hazards, guidance (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Explosionsgefährdete Bereiche - Teil 32-1: Elektrostatische Gefährdungen, Leitfaden (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Atmosphères explosives - Partie 32-1: Risques électrostatiques - Guide (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Ta slovenski standard je istoveten z: CLC/TR 60079-32-1:2018

ICS:

13.230	Varstvo pred eksplozijo	Explosion protection
13.260	Varstvo pred električnim udarom. Delo pod napetostjo	Protection against electric shock. Live working

SIST-TP CLC/TR 60079-32-1:2019 en,fr,de

TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CLC/TR 60079-32-1

December 2018

ICS 29.260.20

Supersedes CLC/TR 60079-32-1:2015

English Version

Explosive atmospheres - Part 32-1: Electrostatic hazards, guidance (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Atmosphères explosives - Partie 32-1: Risques électrostatiques - Guide (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Explosionsgefährdete Bereiche - Teil 32-1: Elektrostatische Gefährdungen, Leitfaden (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

This Technical Report was approved by CENELEC on 2018-10-22.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

Ref. No. CLC/TR 60079-32-1:2018 E

European foreword

This document (CLC/TR 60079-32-1:2018*)* consists of the text of IEC/TS 60079-32-1:2013 and IEC/TS 60079-32-1:2013/A1:2017 prepared by IEC/TC 31 "Equipment for explosive atmospheres".

This document supersedes CLC/TR 60079-32-1:2015.

The technical specification IEC/TS 60079-32-1 is written as a general guidance document for products in general and process properties necessary to avoid ignition hazards arising from static electricity in a hazardous area.

The IEC standard IEC 60079-0 specifies the general requirements, including the requirements to avoid electrostatic charging, for construction, testing and marking of Ex equipment and Ex Components intended for use in explosive atmospheres.

In some cases, the requirements given in IEC 60079-0 are different from the information given in IEC/TS 60079-32-1.

It was decided to have all information also given complete in the guidance document and therefore the new Clause 14 was added to the IEC/TS 60079-32-1 summarizing the requirements given in IEC 60079-0 for Ex equipment and Ex-Components as additional information.

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

Endorsement notice

The texts of the International Technical Specifications IEC/TS 60079-32-1:2013 and IEC/TS 60079-32-1:2013/A1:2017 were approved by CENELEC as a Technical Report without any modification.

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

IEC 60243-1	NOTE	Harmonized as EN 60243-1.
IEC 60243-2	NOTE	Harmonized as EN 60243-2.
IEC 60247	NOTE	Harmonized as EN 60247.
IEC 61340-2-1	NOTE	Harmonized as EN 61340-2-1.
IEC 61340-4-5	NOTE	Harmonized as EN 61340-4-5.
IEC 61340-4-7	NOTE	Harmonized as EN 61340-4-7.
ISO 8028	NOTE	Harmonized as EN ISO 8028.
ISO 8330	NOTE	Harmonized as EN ISO 8330.
ISO 13688	NOTE	Harmonized as EN ISO 13688.
ISO 20344	NOTE	Harmonized as EN ISO 20344.
ISO 20345	NOTE	Harmonized as EN ISO 20345.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60079-0	2011	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	2012
IEC 60079-10-1	-	Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres	EN 60079-10-1	-
IEC 60079-10-2	-	Explosive atmospheres - Part 10-2: Classification of areas - Combustible dust atmospheres	EN 60079-10-2	-
IEC 60079-14	-	Explosive atmospheres - Part 14: Electrical installations design, selection and erection	EN 60079-14	-
IEC 60079-20-1	-	Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data	EN 60079-20-1	-
IEC 60079-32-2	2015	Explosive atmospheres - Part 32-1: Electrostatics hazards - Tests	EN 60079-32-2	2015
IEC 60093	-	Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials	HD 429 S1	-
IEC 60167	-	Methods of test for the determination of the insulation resistance of solid insulating materials	HD 568 S1	-
IEC 61340-2-3	-	Electrostatics - Part 2-3: Methods of test for determining the resistance and resistivity of solid planar materials used to avoid electrostatic charge accumulation	EN 61340-2-3	-
IEC 61340-4-1	-	Electrostatics - Part 4-1: Standard test methods for specific applications - Electrical resistance of floor coverings and installed floors	EN 61340-4-1	-
IEC 61340-4-3	-	Electrostatics - Part 4-3: Standard test methods for specific applications - Footwear	EN 61340-4-3	-
IEC 61340-4-4	2012	Electrostatics - Part 4-4: Standard test methods for specific applications - Electrostatic classification of flexible intermediate bulk containers (FIBC)	EN 61340-4-4	2012

Publication	Year	Title	EN/HD	Year
ISO 284	-	Conveyor belts - Electrical conductivity - Specification and test method	EN ISO 284	-
ISO 6297	-	Petroleum products - Aviation and distillate fuels - Determination of electrical conductivity	-	-
ISO 8031	-	Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity	EN ISO 8031	-
ISO 9563	-	Belt drives - Electrical conductivity of antistatic endless synchronous belts - Characteristics and test method	-	-
ISO 12100-1	-	Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology	EN ISO 12100-1	-
ISO 16392	-	Tyres - Electrical resistance - Test method for measuring electrical resistance of tyres on a test rig	-	-
ISO 21178	-	Light conveyor belts - Determination of electrical resistances	EN ISO 21178	-
ISO 21179	-	Light conveyor belts - Determination of the electrostatic field generated by a running light conveyor belt	EN ISO 21179	-
ISO 21183-1	-	Light conveyor belts - Part 1: Principal characteristics and applications	EN ISO 21183-1	-
ASTM D257	-	Standard Test Methods for DC Resistance or Conductance of Insulating Materials	-	-
ASTM D2624-07a	-	Standard Test Methods for Electrical Conductivity of Aviation and Distillate Fuels	-	-
ASTM D4308-95	-	Standard Test Method for Electrical Conductivity of Liquid Hydrocarbons by Precision Meter	-	-
ASTM E582-88	-	Standard test method for minimum ignition energy and quenching distance in gaseous mixtures	-	-
ASTM E2019-03	-	Standard test method for minimum ignition energy of a dust cloud in air	-	-
ASTM F150	-	Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring	-	-
ASTM F1971	-	Standard Test Method for Electrical Resistance of Tires Under Load On the Test Bench	-	-
BS 5958-1	-	Code of practice for control of undesirable static electricity - Part 1: General considerations	-	-
BS 5958-2	-	Code of practice for control of undesirable static electricity - Part 2: Recommendations for particular industrial situations	-	-
BS 7506-2	-	Methods for measurements in electrostatics -- Part 2 Test methods		-

Publication	Year	Title	EN/HD	Year
DIN 51412-1	-	Testing of petroleum products; determination of the electrical conductivity - Part 1: laboratory method	-	-
DIN 51412-2	-	Testing of petroleum products; determination of the electrical conductivity - Part 2: field method	-	-
-	-	Resilient floor coverings - Determination of the electrical resistance	EN 1081	-
-	-	Protective clothing - Electrostatic properties - Part 3: Test methods for measurement of charge decay	EN 1149-3	-
-	-	Protective clothing - Electrostatic properties - Part 5: Material performance and design requirements	EN 1149-5	-
-	-	Rubber and plastic hoses and hose assemblies for measured fuel dispensing systems - Specification	EN 1360	-
-	-	Rubber hoses and hose assemblies for aviation fuel handling - Specification	EN 1361	-
-	-	Non-electrical equipment for use in potentially explosive atmospheres - Part 1: Basic method and requirements	EN 13463-1	-
-	-	Thermoplastic and flexible metal pipework for underground installation at petrol filling stations	EN 14125	-
-	-	Conveyor belts for use in underground installations - Electrical and flammability safety requirements	EN 14973	-
ISGOTT	2006	International Safety Guide for Oil Tankers and Terminals (ISGOTT), fifth edition, International chamber of shipping, 2006	-	-
JNIOSH TR 42		Recommendations for Requirements for Avoiding Electrostatic Hazards in Industry	-	-
NFPA 77	-	Recommended practice on static electricity	-	-
SAE J1645	-	Surface vehicle recommended practice - Fuel systems and Components - Electrostatic Charge Mitigation	-	-

IEC TS 60079-32-1

Edition 1.1 2017-03

FINAL VERSION

Explosive atmospheres –
Part 32-1: Electrostatic hazards, guidance

IEC TS 60079-32-1:2013-08+AMD1:2017-03 CSV(en)

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