

SLOVENSKI STANDARD SIST EN 17064:2019

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Varnostne zahteve za žičniške naprave za prevoz oseb - Preprečevanje in gašenje požara

Safety requirements for cableway installations designed to carry persons - Prevention and fight against fire

iTeh STANDARD PREVIEW

Sicherheitsanforderungen an Seilbahnen für den Personenverkehr - Brandverhütung und -bekämpfung

SIST EN 17064:2019

Prescriptions de sécurité pour les installations à câbles transportant des personnes - Prévention et lutte contre les incendies

Ta slovenski standard je istoveten z: EN 17064:2018

ICS:

13.220.20 Požarna zaščita Fire protection

45.100 Oprema za žičnice Cableway equipment

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English Version

Safety requirements for cableway installations designed to carry persons - Prevention and fight against fire

Prescriptions de sécurité pour les installations à câbles transportant des personnes - Prévention et lutte contre les incendies Sicherheitsanforderungen an Seilbahnen für die Personenbeförderung - Brandverhütung und bekämpfung

This European Standard was approved by CEN on 13 May 2018.

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 COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 17064:2018) has been prepared by Technical Committee CEN/TC 242 "Safety requirements for cableway installations designed to carry persons", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, by May 2019 at the latest, and all conflicting national standards shall be withdrawn no later than May 2019.

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

This document will supersede CEN/TR 14819-1 and CEN/TR 14819-2.

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 Regulation (EU) 2016/424.

For the relationship with Regulation (EU) 2016/424, see informative Annex ZA, which is an integral part of this document.

iTeh STANDARD PREVIEW

This document comes in response to a request from the European Commission and the CEN and is intended for operators and designers of cableway installations designed to carry persons.

This European standard establishes the safety <u>nequirements</u> (that apply to prevention and fight against fire in cableway installations designed to carry persons rds/sist/02a225c9-6a6e-4388-b916-

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This European standard forms part of the standards programme relating to the safety requirements for cableway installations designed to carry persons. This programme comprises the following standards:

- EN 1907, Safety requirements for cableway installations designed to carry persons Terminology;
- EN 12929 (series), Safety requirements for cableway installations designed to carry persons General requirements;
- EN 12930, Safety requirements for cableway installations designed to carry persons Calculations;
- EN 12927 (series), Safety requirements for cableway installations designed to carry persons Ropes;
- EN 1908, Safety requirements for cableway installations designed to carry persons Tensioning devices;
- EN 13223, Safety requirements for cableway installations designed to carry persons Drive systems and other mechanical equipment;
- EN 13796 (series), Safety requirements for cableway installations designed to carry persons Carriers;
- EN 13243, Safety requirements for cableway installations designed to carry persons Electrical equipment other than for drive systems;

- EN 13107, Safety requirements for cableway installations designed to carry persons Civil engineering works;
- EN 1709, Safety requirements for cableway installations designed to carry persons Precommissioning inspection, maintenance and operational inspection and checks;
- EN 1909, Safety requirements for cableway installations designed to carry persons Recovery and evacuation;
- EN 12397, Safety requirements for cableway installations designed to carry persons Operation;
- EN 12408, Safety requirements for cableway installations designed to carry persons Quality assurance;
- EN 17064, Safety requirements for cableway installations designed to carry persons Fire prevention and firefighting.

Together these form a series of standards regarding the design, manufacture, construction, maintenance and operation of all cableway installations designed to carry persons.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are required to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, the Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, the Republic of Serbia, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This European standard establishes the safety requirements that apply to prevention and fight against fire in cableway installations designed to carry persons.

This standard defines safety principles relating to the prevention of and fight against fires in terms of design, operability and maintainability of cableway installations, and operation and maintenance instructions.

This document supplements the existing standards listed in the foreword exclusively in respect of aspects of fire prevention and firefighting.

This standard does not apply to cableway installations for the transportation of goods nor to lifts.

2 Normative references

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 cited edition applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1021-1, Furniture — Assessment of the ignitability of upholstered furniture — Part 1: Ignition source: smouldering cigarette

EN 1021-2, Furniture — Assessment of the ignitability of upholstered furniture — Part 2: Ignition source: match flame equivalent (standards.iteh.ai)

EN 1838, Lighting applications — Emergency lighting

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EN 1907, Safety requirements for cableway installations designed to carry persons ⁹¹⁶Terminology 6c2259bd82ee/sist-en-17064-2019

EN 12929-1, Safety requirements for cableway installations designed to carry persons — General requirements — Part 1: Requirements for all installations

EN 13243:2015, Safety requirements for cableway installations designed to carry persons — Electrical equipment other than for drive systems

EN 13501-1:2007+A1:2009, Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests

EN 50172, Emergency escape lighting systems

EN 50272-1, Safety requirements for secondary batteries and battery installations — Part 1: General safety information

EN 50272-2, Safety requirements for secondary batteries and battery installations — Part 2: Stationary batteries

EN 60204-1, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1)

EN 60695-11-10, Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods (IEC 60695-11-10)

EN 61730-1, Photovoltaic (PV) module safety qualification — Part 1: Requirements for construction (IEC 61730-1)

EN 61730-2, Photovoltaic (PV) module safety qualification — Part 2: Requirements for testing (IEC 61730-2)

EN ISO 7010, Graphical symbols — Safety colours and safety signs — Registered safety signs (ISO 7010)

EN ISO 8528-13, Reciprocating internal combustion engine driven alternating current generating sets — Part 13: Safety (ISO 8528-13)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1907 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: http://www.electropedia.org/
- ISO Online browsing platform: http://www.iso.org/obp

NOTE Where definitions are identical to those in the EN 13501 series, this is indicated.

3.1 iTeh STANDARD PREVIEW

fire resistance

ability of an object to maintain for a specified period the required fire stability, fire integrity, thermal insulation and/or any other required function specified in a standardized fire resistance test

Note 1 to clause: The qualifier "fire resistant" only applies to this ability 4388-b916-

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3.2

reaction to fire

behaviour of a material that, as a result of its own decomposition, feeds a fire to which it is exposed under specified conditions

[SOURCE: EN 13501-1:2007+A1:2009, 3.1.15, amended — "Product" has been replaced with "material" and the structure of this definition has been amended slightly.]

3.3

R - Load-bearing capacity

load-bearing capacity R is the ability of one or more surfaces of a building element to withstand exposure to fire for a given duration under defined mechanical actions, without loss of structural stability

[SOURCE: EN 13501-2:2016, 5.2.1]

3.4

E - Fire integrity criterion

fire integrity criterion E is the ability of one side of a separating building element to resist exposure to fire, without transferring the fire to the unexposed side through passage of large quantities of flame or hot gas to the non-exposed side

[SOURCE: EN 13501-2:2016, 5.2.2.1]

3.5

I - Thermal insulation

thermal insulation I is the ability of one side of a building element to resist exposure to fire without passing the fire from the exposed side to the unexposed side through significant heat transfer

[SOURCE: EN 13501-2:2016, 5.2.3.1]

3.6

REI tt, EI tt, R tt

tt: minimum time for which all of the criteria concerned in the specific case are met

EXAMPLE REI 60, EI 30, R 30.

3.7

Increased recovery time

iRT

time, expressed in minutes, equal to 1.5 times the duration which, in the event of fire, may be required for the loaded carrier to reach an evacuation area as quickly as possible, using the main or auxiliary drive system

Note 1 to clause: The factor 1.5 takes into account, among other things, the time that may be required to restart or change direction and the time required for persons exiting the carrier to reach a safe place.

3.8 iTeh STANDARD PREVIEW

evacuation area

an area where users may exit the carrier and reach a safe place, following an evacuation route if necessary (self-evacuation and/or assisted evacuation)

EXAMPLE Stations. SIST EN 17064:2019

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3.9

compact station

a type of station in which the technical components of the cableway installation and the shell of the station are supported by a single load-bearing structure

Note 1 to clause: Examples of compact stations. In example a), part of the compact station is included in a building.

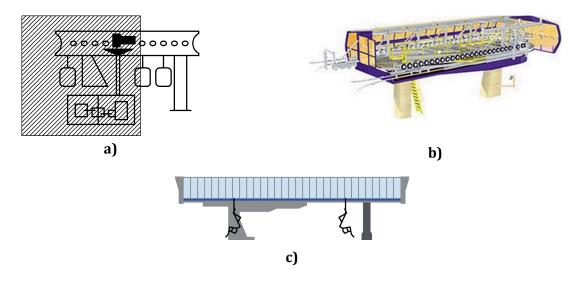


Figure 1 — Example of compact stations

3.10

fire mode

final operating mode enabling safety functions to be overridden easily and simply to facilitate the recovery of carriers in the event of a fire in the cableway installation

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3.11

tunnel

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natural or artificial covering, longer than 80 m, irrespective of the type of construction: whether hollowed out or submerged, a covered trench, acoustic shell, or partial covering with a permanent external opening of a surface area less than one-fifth of the surface area of the apron

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Note 1 to clause: The length of the tunnel is the distance between the two ends of the tunnel or between two stations.

4 General requirements

4.1 Application of the standard

The requirements of this document apply to all cableway installations designed to carry persons together with those of European standards EN 1709, EN 1908, EN 1909, EN 12397, EN 12408, EN 12927 (series), EN 12929 (series), EN 12930, EN 13107, EN 13223, EN 13243 and EN 13796 (series).

4.2 Safety principles

4.2.1 General

The safety principles set out in EN 12929-1 apply.

4.2.2 Hazard scenarios

The following events may lead to hazardous situations which may be avoided or limited by the requirements of this document:

- fire in a carrier;
- fire along the line and/or in the tunnel;
- fire in a station, particularly in a machinery space, a tensioning device space, electrical spaces, a drive unit in a compact station or a control point;

NOTE Examples of electrical spaces: power space, transformer space.

fire outside the cableway installation and/or in spaces and buildings neighbouring the cableway installation.

Specifically, the following aggravating elements should be taken into account:

- a) for all cableway installations:
 - 1) stoppage of the cableway installation or carriers when a safety device is triggered;
 - 2) because of the location or configuration of the cableway installation and the weather conditions, a certain time delay may be required for internal and/or external emergency and firefighting teams to arrive; (standards.iteh.ai)
 - 3) absence or insufficiency of an evacuation plan for persons;
 - 4) absence or insufficiency of an evacuation role of persons:
 - 5) foreseeable inappropriate behaviour of persons (passengers, personnel, third parties);
- b) for cableway installations in tunnels:

additionally:

- 1) tack effect of the tunnel;
- 2) change of direction of fumes and hot gases due to pressure differences.

4.2.3 Safety analysis and report

The safety analysis and report shall take into consideration fire hazards.

NOTE This standard is designed to help with drafting the safety analysis and report in relation to fire hazards.

4.2.4 Safety objectives

Fire outbreak and fire spread hazards shall be minimised in the design, operation and maintenance of cable installations.

The risk of endangering persons due to fire and/or any smoke emissions shall be minimised.