### SVENSK STANDARD SS-EN IEC 61914



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SEK TK 23

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### Kabelklammer

Cable cleats for electrical installations

Som svensk standard gäller europastandarden EN IEC 61914:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61914:2021.

### Nationellt förord

Europastandarden EN IEC 61914:2021

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 61914, Third edition, 2021 Cable cleats for electrical installations

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61914, utgåva 2, 2016, gäller ej fr o m 2024-11-10.

ICS 29.120.20

### Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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SEK Svensk Elstandard

Box 1284 164 29 Kista Tel 08-444 14 00 www.elstandard.se

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### **EN IEC 61914**

December 2021

ICS 29.120.20

Supersedes EN 61914:2016 and all of its amendments and corrigenda (if any)

**English Version** 

## Cable cleats for electrical installations (IEC 61914:2021)

Brides de câbles pour installations électriques (IEC 61914:2021)

Kabelhalter für elektrische Installationen (IEC 61914:2021)

This European Standard was approved by CENELEC on 2021-11-10. 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.

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 CENELEC 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 CENELEC 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 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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Ref. No. EN IEC 61914:2021 E

### **European foreword**

The text of document 23A/976/FDIS, future edition 3 of IEC 61914, prepared by SC 23A "Cable management systems" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61914:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-08-10 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-11-10 document have to be withdrawn

This document supersedes EN 61914:2016 and all of its amendments and corrigenda (if any).

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.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

#### **Endorsement notice**

The text of the International Standard IEC 61914:2021 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 60068-2-75	NOTE	Harmonized as EN 60068-2-75
IEC 60364-5-51	NOTE	Harmonized as HD 60364-5-51
IEC 60909 (series)	NOTE	Harmonized as EN 60909 (series)
IEC 60909-0	NOTE	Harmonized as EN 60909-0
IEC 61537:2006	NOTE	Harmonized as EN 61537:2007 (not modified)

## 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>	EN/HD	<u>Year</u>
IEC 60060-1	2010	High-voltage test techniques – Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60502-1	2021	Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = $1,2$ kV) up to 30 kV (Um = $36$ kV) - Part 1: Cables for rated voltages of 1 kV (Um = $1,2$ kV) and 3 kV (Um = $3,6$ kV)	-	-
IEC 60695-11-5	2016	Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2017
ISO 1461	2009	Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods	EN ISO 1461	2009
ISO 2081	2018	Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel	EN ISO 2081	2018
ISO 3575	2016	Continuous hot dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of commercial and drawing qualities	-	-
ISO 4287	1997	Geometrical product specifications (GPS) – Surface texture: Profile method – Terms, definitions and surface texture parameters	EN ISO 4287	1998
			+ A1	2009
ISO 4892-2	2013	Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps	EN ISO 4892-2	2013
ISO 4998	2014	Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon sheet steel of structural quality	-	-
ISO 9227	2017	Corrosion tests in artificial atmospheres – Salt spray tests	EN ISO 9227	2017
ISO 14713-1	2017	Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and	EN ISO 14713-1	2017

## EN IEC 61914:2021 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
		steel in structures - Part 1: General principles of design and corrosion resistance		
ISO 14713-2	2019	Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 2: Hot dip galvanizing		2020
-	-	Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions	EN 10346	2015



Edition 3.0 2021-10

## INTERNATIONAL STANDARD

## NORME INTERNATIONALE



Cable cleats for electrical installations

Brides de câbles pour installations électriques

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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## CONTENTS

F	SREWO	RD	5
1	Scop	e	7
2	Norm	ative references	7
3	Term	s, definitions and abbreviations	8
4		eral requirements	
5		eral notes on tests	
6		sification	
O			
	6.1 6.1.1	Classification according to material  Metallic	
	6.1.1		
	6.1.2		
	6.2	Classification according to maximum and minimum temperature	
	6.3	Classification according to maximum and imminum temperature	
	6.3.1	Very light	
	6.3.2	, ,	
	6.3.3	· ·	
	6.3.4		
	6.3.5	•	
	6.4	Classification according to type of retention or resistance to	
	0	electromechanical forces or both	13
	6.4.1	General	13
	6.4.2	With lateral retention	13
	6.4.3	With axial retention	13
	6.4.4	3	13
	6.4.5	Resistant to electromechanical forces, withstanding more than one short circuit	13
	6.5	Classification according to environmental influences	13
	6.5.1	Resistance to ultraviolet light for non-metallic and composite components	13
	6.5.2	Resistance to corrosion	13
	6.6	Classification according to electromagnetic compatibility	15
	6.6.1	Liable to inductive heating	15
	6.6.2	9	
7	Mark	ing and documentation	15
	7.1	Marking	15
	7.2	Durability and legibility	
	7.3	Documentation	16
8	Cons	truction	17
9	Mech	anical properties	17
	9.1	Requirements	17
	9.2	Impact test	17
	9.3	Lateral load test	19
	9.3.1	Lateral load test for cable cleats	19
	9.3.2	Lateral load test for intermediate restraints	21
	9.4	Axial load tests	23
	9.5	Test for resistance to electromechanical forces	24

	9.5.1	General	. 24
	9.5.2	For cable cleats and intermediate restraints classified in 6.4.4	.27
	9.5.3	For cable cleats and intermediate restraints classified in 6.4.5	.27
10	Fire I	hazards	. 27
1	0.1	Flame propagation	. 27
1	0.2	Smoke emission	. 28
	0.3	Smoke toxicity	
11	Envir	onmental influences	. 29
1	1.1	Resistance to ultraviolet light	
1	1.2	Resistance to corrosion	
	11.2.		
	11.2.	and the state of t	
	11.2.	•	
	11.2.	ÿ	
	11.2.	·	
40	11.2.	, ,	
		romagnetic compatibility	
-	2.1	Electromagnetic emission	
-	2.2	Inductive heating	
		(informative) Examples of cable cleats and intermediate restraints	
	·	(informative) Calculation of forces caused by short-circuit currents	
_	3.1	Characteristics	
_	3.2	Specification of the test current	
_	3.3	Calculation of the mechanical forces between conductors	
		(normative) Identification of MV or HV cable used in short-circuit test	
Bibli	iograp	bhy	.39
•		- Test piston dimensions	
Figu	ıre 2 -	- Typical arrangement for impact test	.18
Figu	ıre 3 -	- Typical arrangements for lateral load test for cable cleats	.21
Figu	ıre 4 -	- Typical arrangements for lateral load test for intermediate restraints	.22
Figu	ıre 5 -	- Typical arrangement for axial load test	.24
		- Typical assemblies for test for resistance to electromechanical force	
		- Typical arrangement of three cables in trefoil formation	
		- Typical arrangement of cables in flat formation	
		- Typical arrangement of the needle-flame test	
_			
_		1 – Metallic strap cable cleat for single or bundled cables	
_		2 – Metallic single bolt cable cleat for single cable	
_		3 – Metallic two-bolt cable cleat for single cable	
Figu	ıre A.4	4 - Composite cable cleat for three cables in trefoil formation	.32
Figu	ire A.5	5 - Non-metallic cable cleat for single cable	.32
Figu	ire A.6	6 - Metallic cable cleat for single cable with integral mounting stud	.32
Figu	re A.7	7 - Non-metallic cable cleat for three cables in flat formation	.32
Figu	ıre A.8	B – Metallic cable cleat for use with channel cable support system	.32
_		9 – Non-metallic cable cleat for three cables in trefoil formation	

Figure A.10 – Non-metallic cable cleat for three cables in trefoil formation with integral ladder rung clamp	33
Figure A.11 – Metallic intermediate restraint for three cables in flat formation	33
Figure A.12 – Composite intermediate restraint for bundled cables	33
Figure B.1 – Short-circuit current of a far-from-generator short circuit with constant a.c.	34
Figure B.2 – Short-circuit current of a near-to-generator short circuit with decaying a.c.	35
Figure B.3 – Two parallel conductors	36
Table 1 - Maximum temperature for permanent application	12
Table 2 – Minimum temperature for permanent application	12
Table 3 – Classification for resistance against corrosion for stainless steel components	14
Table 4 – Classification for resistance against corrosion for coated mild steel or cast- iron components	14
Table 5 – Impact test values	19
Table 6 – Component compliance and classification for resistance against corrosion	29
Table 7 – Zinc coating thickness of reference materials	30

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### CABLE CLEATS FOR ELECTRICAL INSTALLATIONS

#### **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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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61914 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This third edition cancels and replaces the second edition published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) requirements for mandrels used in testing rationalised and detailed in the general test requirements (Clause 5);
- b) definition of liner added and test requirements where liners and other optional parts are used;
- c) definitions for LV, MV and HV cables added and test requirements where MV & HV cable are used;
- d) new corrosion resistance classes for plated products added;
- e) new requirements and test for durability and legibility of markings added;
- f) new test requirements for axial load testing of cleats for more than one cable added;

g) lateral load test requirements for intermediate restraints added.

The text of this International Standard is based on the following documents:

FDIS	Report on voting		
23A/976/FDIS	23A/982/RVD		

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/standardsdev/publications">www.iec.ch/standardsdev/publications</a>.

In this standard, the following print types are used:

- requirements proper: in roman type;
- test specifications: in italic type;
- notes: in smaller roman type.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- · replaced by a revised edition, or
- amended.

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### CABLE CLEATS FOR ELECTRICAL INSTALLATIONS

### 1 Scope

This International Standard specifies requirements and tests for cable cleats used for securing cables in electrical installations and for intermediate restraints used for holding cables together in formation in electrical installations. Cable cleats provide resistance to electromechanical forces where declared. This document includes cable cleats that rely on a mounting surface specified by the manufacturer for axial and/or lateral retention of cables.

Various types of cable cleats and intermediate restraints are shown in Annex A.

NOTE Requirements for manufacturers in this document also apply to importers and responsible vendors where appropriate.

This document does not apply to cable ties.

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

IEC 60060-1:2010, High-voltage test techniques – Part 1: General definitions and test requirements

IEC 60502-1, Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m = 1.2$  kV) up to 30 kV ( $U_m = 36$  kV) – Part 1: Cables for rated voltages of 1 kV ( $U_m = 1.2$  kV) and 3 kV ( $U_m = 3.6$  kV)

IEC 60695-11-5, Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance

ISO 1461, Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods

ISO 2081, Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel

ISO 3575, Continuous hot dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of commercial and drawing qualities

ISO 4287, Geometrical Product Specifications (GPS) – Surface texture: Profile method –Terms, definitions and surface texture parameters

ISO 4892-2, Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps

ISO 4998, Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of structural quality

ISO 9227, Corrosion tests in artificial atmospheres - Salt spray tests

ISO 14713-1, Zinc coatings – Guidelines and recommendations for the protection against corrosion of iron and steel in structures – Part 1: General principles of design and corrosion resistance

ISO 14713-2, Zinc coatings – Guidelines and recommendations for the protection against corrosion of iron and steel in structures – Part 2: Hot dip galvanizing

EN 10346, Continuously hot-dip coated steel flat products for cold forming – Technical delivery conditions