SLOVENSKI STANDARD
SIST EN IEC 61535:2020

01-april-2020

Nadomešča:
SIST EN 61535:2009
SIST EN 61535:2009/A1:2013

Inštalacijske spojke za trajni spoj v fiksnih napeljavah (inštalacijah) (IEC 61535:2019)

Installation couplers intended for permanent connection in fixed installations (IEC 61535:2019)

Installationssteckverbinder für dauernde Verbindung in festen Installationen (IEC 61535:2019)

Coupleurs d'installation pour connexions permanentes dans les installations fixes (IEC 61535:2019)

Ta slovenski standard je istoveten z: **EN IEC 61535:2019**

ICS:

29.120.30	Vtiči, vtičnice, spojke	Plugs, socket-outlets, couplers

SIST EN IEC 61535:2020 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61535

December 2019

ICS 29.100.99

Supersedes EN 61535:2009 and all of its amendments and corrigenda (if any)

English Version

Installation couplers intended for permanent connection in fixed installations (IEC 61535:2019)

Coupleurs d'installation pour connexions permanentes dans les installations fixes (IEC 61535:2019)

Installationssteckverbinder für dauernde Verbindung in festen Installationen (IEC 61535:2019)

This European Standard was approved by CENELEC on 2019-11-20. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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. EN IEC 61535:2019 E

European foreword

The text of document 23/792/CDV, future edition of IEC 61535:2019, prepared by IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61535:2019.

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) 2020-08-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-11-20

This document supersedes EN 61535:2009 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 mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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

Endorsement notice

The text of the International Standard IEC 61535:2019 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 60309 (series)	NOTE	Harmonized as EN 60309-4:2007/A1 (series)
IEC 60320 (series)	NOTE	Harmonized as EN 60320 (series)
IEC 60364 (series)	NOTE	Harmonized as HD 60364 (series)
IEC 60364-4-41:2005	NOTE	Harmonized as HD 60364-4-41:2017
IEC 60364-5-52:2009	NOTE	Harmonized as HD 60364-5-52:2011
IEC 61995 (series)	NOTE	Harmonized as EN 61995-2:2009/A1 (series)

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.

Publication	Year	Title	EN/HD	Year
IEC 60068-2-31	2008	Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	2008
IEC 60112	-	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
			+ A1	2009
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 60695-2-11	-	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)	EN 60695-2-11	-
IEC 60998-2-3	-	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-3: Particular requirements for connecting devices as separate entities with insulation-piercing clamping units	EN 60998-2-3	-
IEC 60999-1	1999	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units - Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm2 up to 35 mm2 (included)	EN 60999-1	2000
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998

Annex ZZ
(informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under a Commission's standardisation request relating to harmonised standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 — Correspondence between this European standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
(1)(a)	Clauses 1, 7, 8, Annex D, Annex E	
(1)(b)	Clauses 6.2, 6.3, 8.3, 8.4, 9, 11, 12, 19, 22, Annex A, Annex E	
(1)(c)	Clause 4	
(2)(a)	Clauses 9, 10, 12, 14, 16, 19.5, 20, 21, 23, Annex A	
(2)(b)	Clauses 11.2, 12.9, 15, 16, 17, 21.5	
(2)(c)	Clauses 10.1, 12, 24	
(2)(d)	Clauses 6, 10, 14, 21, 23, 24	
(3)(a)	Clauses 9.1, 12, 13, 18, 19.2, 19.3, 19.4, 20, 21.3, 21.4, 22	
(3)(b)	Clauses 13, 21, 24, 25	
(3)(c)	Clauses 11.2, 12.2, 12.3	

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

IEC 61535

Edition 2.0 2019-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Installation couplers intended for permanent connection in fixed installations

Coupleurs d'installation pour connexions permanentes dans les installations fixes

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.120.99

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INSTALLATION COUPLERS INTENDED FOR PERMANENT CONNECTION IN FIXED 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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
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International Standard IEC 61535 has been prepared by IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2009 and Amendment 1:2012. This edition constitutes a technical revision.

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

a) enlargement of the scope to DC application;
b) addition of further requirements as regards DC application (marking, etc.), no additional test procedures were deemed necessary; however some modifications were necessary in the normative text;
c) changes and enhancement of the field of application of installation couplers into outdoor applications;
d) addition of a suitable temperature range;

e) updating of the list of normative references, modified to undated references, where possible.

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

CDV	Report on voting
23/792/CDV	23/848/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type*;
- explanatory matter: 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 "http://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.

INTRODUCTION

AC and DC installation couplers according to this document may be used, for example, in prefabricated buildings, commercial showrooms, installation cavities, such as suspended floors and ceilings, in partition walls and in any similar applications, or cable tray systems, cable ladder systems, cable ducting systems and cable trunking systems or in furniture complying with IEC 60364-7-713.

This document may be used as a guide for installation couplers with additional contacts for voltages other than mains voltages.

Particular requirements for installation couplers, for example, for use at higher ambient temperatures, with higher mechanical durability (e.g. metal housings), with higher fire resistance and for use in control circuits (e.g. SELV), are under consideration.

National rules can have requirements concerning the accessibility of installation couplers.

National rules can specify who is allowed to carry out the connection and disconnection of installation couplers.

National rules can have requirements concerning installation couplers with metal conduits.

INSTALLATION COUPLERS INTENDED FOR PERMANENT CONNECTION IN FIXED INSTALLATIONS

1 Scope

This document applies to two-wire, up to five-wire installation couplers, including earth, if provided, with a rated voltage up to and including 500 V AC or DC and a rated connecting capacity up to and including 10 mm^2 for permanent connection in electrical installations. Installation couplers with additional contacts for voltages other than mains voltages are outside the scope of this document.

An installation coupler consists of an installation female connector and an installation male connector for permanent connection not intended to be engaged or disengaged under load nor to be engaged or disengaged other than during first installation or during reconfiguration or maintenance of the wiring system in which installation couplers have been installed. This means that installation couplers are only intended for infrequent use.

Installation couplers are not suitable for use in place of socket-outlet systems. Installation couplers are not suitable for use in place of devices for connecting luminaires (DCLs) according to IEC 61995 (all parts) or in place of luminaire supporting couplers (LSCs).

Installation couplers complying with this document are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average over a period does not exceed +35 °C, with a lower limit of the ambient air temperature of −5 °C, either for indoor or outdoor use.

NOTE 1 Additional tests for use in cold climates are under consideration.

NOTE 2 For other temperatures, necessary information can be given in the manufacturer's installation instructions.

In locations where special conditions prevail, as in ships, vehicles and the like and in hazardous locations, for example where explosions are liable to occur, special constructions can be required.

NOTE 3 Installation couplers are intended to be installed by instructed or skilled persons.

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 60068-2-31:2008, *Environmental testing – Part 2-31: Tests – Test Ec: Rough handling shocks, primarily for equipment-type specimens*

IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*
IEC 60529:1989/AMD1:1999
IEC 60529:1989/AMD2:2013