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## **Snabbkopplingar för permanent anslutning i den fasta installationen**

*Installation couplers intended for permanent connection in fixed installations*

Som svensk standard gäller europastandarden EN 61535:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61535:2009.

### **Nationellt förord**

Europastandarden EN 61535:2009

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61535, First edition, 2009 - Installation couplers intended for permanent connection in fixed installations**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS 428 08 90, utgåva 1, 2004, gäller ej fr o m 2012-05-01.

### *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

### *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

### *Stora delar av arbetet sker internationellt*

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

### *Var med och påverka!*

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**Installation couplers  
intended for permanent connection  
in fixed installations  
(IEC 61535:2009)**

Coupleurs d'installation  
pour connexions permanentes  
dans les installations fixes  
(CEI 61535:2009)

Installationssteckverbinder  
für dauernde Verbindung  
in festen Installationen  
(IEC 61535:2009)

This European Standard was approved by CENELEC on 2009-05-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 23/466/FDIS, future edition 1 of IEC 61535, prepared by IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by the CENELEC Reporting Secretariat SR 23, including a normative CENELEC annex to the future standard, was submitted to the formal vote.

The combined texts were approved by CENELEC as EN 61535 on 2009-05-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2010-05-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2012-05-01

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.

For this European Standard, any text concerning particular conditions in certain European countries – which are included in the main body of the International Standard – shall be disregarded and has been replaced by the normative Annex ZA, *Special national conditions*.

Annexes ZA and ZB have been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61535:2009 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      | NOTE Harmonized in EN 60309 series (partially modified). |
| IEC 60320      | NOTE Harmonized in EN 60320 series (not modified).       |
| IEC 60364-4-41 | NOTE Harmonized as HD 60364-4-41:2007 (modified).        |
| IEC 61995      | NOTE Harmonized in EN 61995 series (partially modified). |

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**Add** the following annexes:



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## Annex ZB (normative)

### Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

| <u>Publication</u>     | <u>Year</u> | <u>Title</u>                                                                                                                                                                                                                                                                                       | <u>EN/HD</u>            | <u>Year</u>  |
|------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|
| IEC 60068-2-31         | 2008        | Environmental testing -<br>Part 2-31: Tests - Test Ec: Rough handling<br>shocks, primarily for equipment-type<br>specimens                                                                                                                                                                         | EN 60068-2-31           | 2008         |
| IEC 60112              | 2003        | Method for the determination of the proof<br>and the comparative tracking indices of solid<br>insulating materials                                                                                                                                                                                 | EN 60112                | 2003         |
| IEC 60364<br>(mod)     | Series      | Low-voltage electrical installations                                                                                                                                                                                                                                                               | HD 60364                | Series       |
| IEC 60529              | 1989        | Degrees of protection provided by enclosures<br>(IP Code)                                                                                                                                                                                                                                          | EN 60529<br>+ corr. May | 1991<br>1993 |
| A1                     | 1999        |                                                                                                                                                                                                                                                                                                    | A1                      | 2000         |
| IEC 60664-1            | 2007        | Insulation coordination for equipment within<br>low-voltage systems -<br>Part 1: Principles, requirements and tests                                                                                                                                                                                | EN 60664-1              | 2007         |
| IEC 60695-2-11         | 2000        | Fire hazard testing -<br>Part 2-11: Glowing/hot-wire based test<br>methods - Glow-wire flammability test method<br>for end-products                                                                                                                                                                | EN 60695-2-11           | 2001         |
| IEC 60998-2-3<br>(mod) | 2002        | Connecting devices for low-voltage circuits<br>for household and similar purposes -<br>Part 2-3: Particular requirements for connecting<br>devices as separate entities with insulation-<br>piercing clamping units                                                                                | EN 60998-2-3            | 2004         |
| IEC 60999-1            | 1999        | Connecting devices - Electrical copper<br>conductors - Safety requirements for screw-<br>type and screwless-type clamping units -<br>Part 1: General requirements and particular<br>requirements for clamping units for conductors<br>from 0,2 mm <sup>2</sup> up to 35 mm <sup>2</sup> (included) | EN 60999-1              | 2000         |
| IEC 61032              | 1997        | Protection of persons and equipment by<br>enclosures - Probes for verification                                                                                                                                                                                                                     | EN 61032                | 1998         |

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## INSTALLATION COUPLERS INTENDED FOR PERMANENT CONNECTION IN FIXED INSTALLATIONS

### 1 Scope

This standard applies to two up to five wire installation couplers including earth, if provided, with a rated voltage up to and including 500 V a.c. and a rated connecting capacity up to and including 10 mm<sup>2</sup> for permanent connection in indoor electrical installations. Installation couplers with additional contacts for voltages other than mains voltages are outside the scope of this standard.

NOTE 1 Installation couplers according to this standard are used e.g. in prefabricated buildings, installation cavities, such as suspended floors and ceilings, or cable tray systems, cable ladder systems, cable ducting systems and cable trunking systems or in commercial show rooms, in partition walls and in any similar application or in furniture complying with IEC 60364-7-713.

NOTE 2 This standard may be used as a guide for installation couplers with additional contacts for voltages other than mains voltages.

NOTE 3 In the UK, where installation couplers have more than 5 wires, they shall meet the requirements of IEC 61535 as though they were included in the scope and shall be tested in such a way that all of the mains voltage pins are subjected to the same level of testing.

NOTE 4 In the USA, these installation couplers are not permitted to be used where they will not be visible after installation.

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 or luminaire supporting couplers (LSCs).

NOTE 5 For lower limits of in-service temperatures the necessary information is 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 may be required.

NOTE 6 Particular requirements for installation couplers e.g. 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.

NOTE 7 National rules may have requirements concerning the accessibility of installation couplers.

NOTE 8 Installation couplers are intended to be installed by instructed or skilled persons.

NOTE 9 National rules may specify who is allowed to carry out the connection and disconnection of installation couplers.

### 2 Normative references

The following referenced documents are indispensable for the application 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.