

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
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## Fastighetsnät för informationsöverföring – Provning av metalliska kablar i generella kabelnät enligt EN 50173 – Del 2: Korskopplings- och anslutningskablar

*Testing of balanced communication cabling in accordance with standards series EN 50173 –  
Part 2: Patch cords and work area cords*

Som svensk standard gäller europastandarden EN 61935-2:2005. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61935-2:2005\*).

### Nationellt förord

Europastandarden EN 61935-2:2005

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61935-2, Second edition, 2005 - Testing of balanced communication cabling in accordance with standards series EN 50173 - Part 2: Patch cords and work area cords**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61935-2, utgåva 1, 2003, gäller ej fr o m 2008-10-01.

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\*) Corrigendum, December 2005, till EN 61935-2:2005 ingår i standarden.

### *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*

Svenska Elektriska Kommissionen, SEK, 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.

#### **SEK**

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EUROPEAN STANDARD

**EN 61935-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2005

ICS 33.04.20; 33.120.20

Supersedes EN 61935-2:2003  
Incorporates Corrigendum December 2005

English version

**Testing of balanced communication cabling in accordance  
with standards series EN 50173  
Part 2: Patch cords and work area cords  
(IEC 61935-2:2005)**

Essais de câblages  
de télécommunications symétriques  
selon la série de normes EN 50173  
Partie 2: Cordons de brassage et cordons  
de zone de travail  
(CEI 61935-2:2005)

Prüfung der symmetrischen  
Kommunikationsverkabelung  
nach der Normenreihe EN 50173  
Teil 2: Rangierschnüre und  
Geräteanschlussschnüre  
(IEC 61935-2:2005)

This European Standard was approved by CENELEC on 2005-10-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 46A/726/FDIS, future edition 2 of IEC 61935-2, prepared by SC 46A, Coaxial cables, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61935-2 on 2005-10-01.

This European Standard supersedes EN 61935-2:2003 + corrigendum September 2003.

Significant technical changes with respect to EN 61935-2:2003 include requirements for NEXT.

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) 2006-07-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2008-10-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61935-2:2005 was approved by CENELEC as a European Standard without any modification.

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## Corrigendum to EN 61935-2:2005

### Title page

**Replace** "ISO/IEC 11801" by "standards series EN 50173".

### General

**Replace** all other occurrences of "ISO/IEC 11801" by "EN 50173".

This replacement is to be made in the introduction and in Subclauses 4.1, 5.6.5 and 5.7.5 (Note).

**Replace** all occurrences of "IEC 61935-1" by "EN 61935-1".

This replacement is to be made in (sub)clauses 3, 4.3 (three times), 5.3, 5.4, 5.5, 5.6.3, 5.7.3 and 5.7.5.

### Clause 1, Scope

**Replace** the text by:

This part of EN 61935 provides methods to ensure compatibility of modular plug cords to be used in cabling according to EN 50173 and provides test methods and associated requirements to demonstrate the performance and reliability of these cords during their operational lifetime.

### Clause 2, Normative references

**Replace** the references to IEC 61935-1 and ISO/IEC 11801 by:

EN 61935-1:2005, *Generic cabling systems - Specification for the testing of balanced communication cabling in accordance with standards series EN 50173 – Part 1: Installed cabling* (IEC 61935-1:2005, mod.)

EN 50173, series, *Information technology - Generic cabling systems*

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## Annex ZA (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 Where 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>
–	–	Information technology - Generic cabling systems	EN 50173	Series
IEC 60068-2-61	– <sup>1)</sup>	Environmental testing Part 2: Test methods - Test Z/ABDM: Climatic sequence	EN 60068-2-61	1993 <sup>2)</sup>
IEC 60603-7	Series	Connectors for electronic equipment Part 7: Detail specification for connectors, 8-way, including fixed and free connectors with common mating features, with assessed quality	EN 60603-7	Series
IEC 61076-3-104	- <sup>1)</sup>	Connectors for electronic equipment Part 3-104: Rectangular connectors - Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 600 MHz minimum	EN 61076-3-104	2003 <sup>2)</sup>
IEC 61156	Series	Multicore and symmetrical pair/quad cables for digital communications	-	-
IEC 61935-1 (mod)	- <sup>1)</sup>	Testing of balanced communication cabling in accordance with standards series EN 50173 Part 1: Installed cabling	EN 61935-1	2005 <sup>2)</sup>

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1) Undated reference.

2) Valid edition at date of issue.

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## TESTING OF BALANCED COMMUNICATION CABLING IN ACCORDANCE WITH ISO/IEC 11801 –

### Part 2: Patch cords and work area cords

#### 1 Scope

This part of IEC 61935 provides methods to ensure the compatibility of modular plug cords to be used in cabling according to ISO/IEC 11801 and provides test methods and associated requirements to demonstrate the performance and reliability of these cords during their operational lifetime.

#### 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.

IEC 60068-2-61, *Environmental testing – Part 2-61: Test methods – Test Z/ABDM: Climatic sequence*

IEC 60603-7 (all parts), *Connectors for frequencies below 3 MHz for use with printed boards – Part 7: Detail specification for connectors, 8-way, including fixed and free connectors with common mating features, with assessed quality*

IEC 61076-3-104: *Connectors for electronic equipment – Part 3-104: Rectangular connectors – Detail specification for 8-way shielded free and fixed connectors for data transmissions with frequencies up to 600 MHz minimum*

IEC 61156 (all parts) , *Multicore and symmetrical pair/quad cables for digital communications*

IEC 61935-1, *Testing of balanced communication cabling in accordance with ISO/IEC 11801 – Part 1: Installed cabling*

IEC 62153-4-7 *Metallic communication cable test methods – Part 4-7: Electro Magnetic Compatibility (EMC) – Shielded screening attenuation test method for measuring the transfer impedance  $Z_T$  and the screening attenuation  $a_s$  or the Coupling attenuation  $a_C$  of RF-Connectors and Assemblies up to and above 3 GHz<sup>1</sup>*

ISO/IEC 11801, *Information technology – Generic cabling for customer premises*

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<sup>1</sup> To be published.