

**Testing of balanced and coaxial information technology cabling - Part 3: Installed cabling as specified in EN 50173-4 and related standards**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61935-3:2010 sisaldab Euroopa standardi EN 61935-3:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.12.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 61935-3:2010 consists of the English text of the European standard EN 61935-3:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 23.12.2009.

The standard is available from Estonian standardisation organisation.

ICS 33.120.20

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**Testing of balanced and coaxial information technology cabling -  
Part 3: Installed cabling as specified in EN 50173-4  
and related standards  
(IEC 61935-3:2008, modified)**

Essais des câblages de technologies  
de l'information symétriques et coaxiaux -  
Partie 3: Câblages installés  
selon les spécifications de l'EN 50173-4  
et des normes connexes  
(CEI 61935-3:2008, modifiée)

Prüfung der symmetrischen und coaxialen  
informationstechnischen Verkabelung -  
Teil 3: Installierte Verkabelung  
nach EN 50173-4 und  
entsprechenden Normen  
(IEC 61935-3:2008, modifiziert)

This European Standard was approved by CENELEC on 2008-06-01. 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.

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**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 46/261/FDIS, future edition 1 of IEC 61935-3, prepared by 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 61935-3 on 2008-06-01.

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) 2010-07-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2011-06-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61935-3:2008 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### Title page

**Replace** "ISO/IEC 15018" by "EN 50173-4".

#### Clause 2, Normative references

**Replace** the references to ISO/IEC 11801 and ISO/IEC 15018 by

EN 50173-1, *Information technology - Generic cabling systems – Part 1: General requirements*

EN 50173-4, *Information technology - Generic cabling systems – Part 4: Homes*

#### General

**Replace** all other occurrences of "ISO/IEC 11801" by "EN 50173-1". This replacement is to be made in Subclauses 3.1 and 5.3.

**Replace** all other occurrences of "ISO/IEC 15018" by "EN 50173-4". This replacement is to be made in the Introduction and in Subclauses 6.1 (twice), 6.2, 6.3.1 and 6.3.2.

## 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 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>        |
|--------------------|-----------------|--|--------------|--------------------|
| –                  | –               | Information technology - Generic cabling systems -<br>Part 1: General requirements   | EN 50173-1   | – <sup>1)</sup>    |
| –                  | –               | Information technology - Generic cabling systems -<br>Part 4: Homes  | EN 50173-4   | – <sup>1)</sup>    |
| IEC 60728-1        | – <sup>1)</sup> | Cable networks for television signals, sound signals and interactive services -<br>Part 1: System performance of forward paths | EN 60728-1   | 2008 <sup>2)</sup> |
| IEC 60728-12       | – <sup>1)</sup> | Cabled distribution systems for television and sound signals -<br>Part 12: Electromagnetic compatibility of systems            | –            | –                  |

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue

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## INTRODUCTION

Telecommunication cabling for homes has evolved into the specification and deployment of generic cabling. This generic cabling system for homes is specified within ISO/IEC 15018. Formerly, there had been no test requirement for home cabling. Connectivity tests and visual inspection were, at best, random and insufficient. However, bandwidth requirements of the home applications are ever increasing and home-owners need assurance that their generic cabling will indeed support intended network technologies that are delivered to the home and distributed throughout the home. This part of IEC 61935 addresses both verification and qualification of home cabling.



# TESTING OF BALANCED AND COAXIAL INFORMATION TECHNOLOGY CABLING –

## Part 3: Installed cabling as specified in ISO/IEC 15018 and related standards

### 1 Scope

This part of IEC 61935 specifies conformance testing for home cabling. These conformance tests include visual inspection, verification testing and either qualification testing or certification testing. Documentation for the test results are also specified.

### 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 60728-1, *Cable networks for television signals, sound signals and interactive services – Part 1: System performance of forward paths*

IEC 60728-12, *Cabled distribution systems for television and sound signals – Part 12: Electromagnetic compatibility of systems*

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

ISO/IEC 15018, *Information technology – Generic cabling for homes*

### 3 Terms and definitions

For the purposes of this document, the following definitions apply.

#### 3.1

##### **certification**

measurements of installed cabling specified in ISO/IEC 11801 (e.g., class D, class E, class F); this requires field testers with traceable accuracy to national standards

#### 3.2

##### **qualification**

measurements of installed cabling for specific network technologies (e.g., 100BASE-T, 1000BASE-T, IEEE 1394b<sup>1</sup>); the measurement accuracy of field testers is not traceable to national standards

#### 3.3

##### **verification**

measurements of installed cable or cabling for continuity; no other transmission performance parameters other than connectivity are measured

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<sup>1</sup> IEEE 1394b: 2002, *High Performance Serial Bus (High Speed Supplement*