NSAI Standards

Standard Recommendation
S.R. CLC/TR 50552:2010

Home and Building Electronic Systems (HBES) - Open communication system - Interfaces - Medium interface, twisted pair, class 1

S.R. CLC/TR 50552:2010

Incorporating amendments/corrigenda issued since publication:

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TECHNICAL REPORT

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TECHNISCHER BERICHT

CLC/TR 50552

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Supersedes R205-010:1996

English version

Home and Building Electronic Systems (HBES) - Open communication system - Interfaces - Medium interface, twisted pair, class 1

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Open communication system -
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Medium interface, twisted pair, class 1

This Technical Report was approved by CENELEC on 2010-05-01.

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CENELEC

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

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Foreword

This Technical Report was prepared by the Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES), joined by the co-operating partner KNX Association.

This document supersedes R205-010:1996.

It was circulated for voting in accordance with the Internal Regulations, Part 2, Subclause 11.4.3.3 (simple majority) and was approved by CENELEC as CLC/TR 50552 on 2010-05-01.

This Technical Report relates to the HBES system as described in the EN 50090 series under the generic title "*Home and Building Electronic Systems (HBES)*", which comprises the following parts:

Part 1: Standardization structure

Part 2: System overview

Part 3: Aspects of application

Part 4: media independent layers

Part 5: Media and media dependent layers

Part 6: Interfaces

Part 7: System management

Part 8: Conformity assessment of products

Part 9: Installation requirements

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Introduction

In R205-010:1996 was published documenting the medium interface solutions for Twisted pair implementations of the then existing European home and building electronic systems, more specifically Batibus and EIB.

In 1997 the convergence process between the Batibus, EIB and EHSA was initiated, which resulted in 2003 in the publication of the KNX standard and in the subsequent submission of this standard by the KNX Association as CENELEC cooperating partner to CLC/TC 205. This resulted in a positive UAP vote of this standard as part of the EN 50090 series by the European National Committees.

This version intends to bring the description of the HBES medium interface up to date with the current technical situation.

1 Scope

This Technical Report describes the current realisations of Twisted Pair 1 medium interface solutions.

TP1 signal forms are not described in this technical report as they already form part of EN 50090-5-2.

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.

EN 50090-1 [1)]	Home and Building Electronic Systems (HBES) - Part 1: Standardization structure
EN 50090-2-2	Home and Building Electronic Systems (HBES) - Part 2-2: System overview - General technical requirements
EN 50090-5-2	Home and Building Electronic Systems (HBES) - Part 5-2: Media and media dependent layers - Network based on HBES Class 1, Twisted Pair
EN 60998-2-1	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units (IEC 60998-2-1)
EN 60998-2-2	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units (IEC 60998-2-2)
EN 60715:2001	Dimensions of low-voltage switchgear and controlgear - Standardized mounting on rails for mechanical support of electrical devices in switchgear and controlgear installations (IEC 60715:1981 + A1:1995)
EN 60669-1	Switches for household and similar fixed-electrical installations - Part 1: General requirements (IEC 60669-1)
EN 60603-7:2009	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors (IEC 60603-7:2008)
EN 60999 (Series)	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units (IEC 60999 (Series))
EN 61535	Installation couplers intended for permanent connection in fixed installations (IEC 61535)

1) Under consideration.