SLOVENSKI STANDARD
SIST EN 50090-4-3:2015

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Nadomešča:
SIST EN 50090-4-3:2008

Stanovanjski in stavbni elektronski sistemi (HBES) - 4-3. del: Nivoji, neodvisni od medijev - Komunikacija preko IP (EN 13321-2)

Home and Building Electronic Systems (HBES) - Part 4-3: Media independent layers - Communication over IP (EN 13321-2)

Elektrische Systemtechnik für Heim und Gebäude (ESHG) - Teil 4-3: Medienunabhängige Schicht Kommunikation über IP (EN 13321-2)

Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) - Partie 4-3: Couches indépendantes des medias - Communication sur IP (EN 13321-2)

Ta slovenski standard je istoveten z: **EN 50090-4-3:2015**

ICS:

35.240.99	Uporabniške rešitve IT na drugih področjih	IT applications in other fields
97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

SIST EN 50090-4-3:2015   **en,fr,de**

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50090-4-3

June 2015

English Version

Home and Building Electronic Systems (HBES) - Part 4-3: Media independent layers - Communication over IP (EN 13321-2)

Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) - Partie 4-3: Couches indépendantes des medias - Communication sur IP (EN 13321-2)

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CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 50090-4-3:2015 (E)

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Foreword

This document (EN 50090-4-3:2015) has been prepared by CLC/TC 205 "Home and Building Electronic Systems (HBES)" in collaboration with CEN/TC 247, "Building Automation, Controls and Building Management" - and with participation of its cooperating partner KNX - to reference the European Standard EN 13321-2, prepared by CEN/TC 247, also as a CLC/TC 205 standard and to extend its area of application to Home and Building Electronic Systems (HBES).

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-05-25
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2018-05-25

This document supersedes EN 50090-4-3:2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

EN 50090-4-3 is part of the EN 50090 series of European Standards, 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.

EN 50090-4-3:2015 (E)

Introduction

Home and Building Electronic Systems as provided by the HBES Open Communication System are a specialized form of automated, decentralised and distributed process control, dedicated to the needs of home and building applications.

The specification of the HBES Open Communication System provides, besides runtime characteristics, a "toolkit" of services and mechanisms for network management.

On the HBES Open Communication System Device Network, all devices form distributed applications, which are able to interact with one another taking into account Interworking rules (standardized Datapoint Types and "Functional Block" objects, modelling logical device channels). This run-time Interworking allows the creation of a comprehensive and multi-domain home and building communication system.

The available communication media range from Twisted Pair to Powerline and 868 MHz band Radio Frequency.

The HBES Open Communication system is independent of any specific microprocessor platform or architecture. Depending on the profile chosen by the manufacturer, any suitable industry-standard chip can be chosen. Some HBES Open Communication System profiles allow a tiny system footprint (say < 5 kb) and can run on an 8-bit processor. Implementations can however also be realised on 16- or 32-bit processors, or even PC's.

The features of HBES Open Communication System allow its use in different application domains and installation types, and also in "Service Network" environments (usually based on broadband networks running IP, the Internet Protocol). To address this need, the transmission of HBES Open Communication System frames across an IP network has been standardised.

CENELEC takes no position concerning the evidence, validity and scope of patent rights.

KNX Association as Cooperating Partner to CENELEC confirms that to the extent that the standard contains patents and like rights, the KNX Association's members are willing to negotiate licenses thereof with applicants throughout the world on fair, reasonable and non-discriminatory terms and conditions.

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1 Scope

This European Standard concentrates on control applications for Home and Building HBES Open Communication System and covers any combination of electronic devices linked via a digital transmission network. Home and Building Electronic System as provided by the HBES Open Communication System is a specialized form of automated, decentralized and distributed process control, dedicated to the needs of home and building applications.

This European Standard defines the mandatory and optional requirements for the medium independent communication over IP for HBES products and systems, a multi-application bus system where the functions are decentralised, distributed and linked through a common communication process.

This European Standard is used as a product family standard. It is not intended to be used as a stand-alone standard. Other parts from the EN 50090 series may apply.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13321-1:2012, *Open data communication in building automation, controls and building management – Home and building electronic system – Part 1: Product and system requirement*

3 Requirements

HBES products and systems using the HBES Open Communication System according to this standard series shall use the requirements stated in EN 13321-2.

When using EN 13321-2, read any reference to

EN 13321-1, *Open data communication in building automation, controls and building management – Home and building electronic system – Part 1: Product and system requirement*

as

EN 50090 (series), *Home and Building Electronic Systems (HBES)*.