



NSAI
Standards

Irish Standard
I.S. EN 50491-1:2014

General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 1: General requirements

I.S. EN 50491-1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:

EN 50491-1:2014

Published:

2014-06-06

*This document was published
under the authority of the NSAI
and comes into effect on:*

2014-06-24

ICS number:

NOTE: If blank see CEN/CENELEC cover page

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EUROPEAN STANDARD

EN 50491-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2014

ICS 97.120

English Version

General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 1: General requirements

Exigences générales pour systèmes électroniques pour les
foyers domestiques et les bâtiments (HBES) et pour
systèmes de gestion technique du bâtiment (SGTB) - Partie
1: Exigences générales

Allgemeine Anforderungen an die Elektrische
Systemtechnik für Heim und Gebäude (ESHG) sowie an
Systeme der Gebäudeautomation (GA) -Teil 1: Allgemeine
Anforderungen

This European Standard was approved by CENELEC on 2014-03-10. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms, definitions and abbreviations	5
3.1 Terms and definitions	5
3.2 Abbreviations	6
4 General requirements	6
5 Elements of the HBES Open Communication System Architecture	6
5.1 EN 50491-2, Environmental conditions	6
5.2 EN 50491-3, Electrical safety requirements	6
5.3 EN 50491-4, Functional safety — EN 50491-4-1, General requirements	7
5.4 EN 50491-5, EMC requirements	7
5.4.1 EN 50491-5-1, EMC general requirements, conditions and test set-up	7
5.4.2 EN 50491-5-2, EMC requirements for residential, commercial and light industry environments	7
5.4.3 EN 50491-5-3, EMC requirements for building industry environments	7
5.5 EN 50491-6, Installation of HBES	7
5.5.1 CLC/TR 50491-6-2, Inspection and testing (under consideration)	7
5.5.2 CLC/TR 50491-6-3, Definition of levels of HBES installations	7
5.5.3 prEN 50491-11 Smart metering — Application specification — Home display;	7
5.5.4 prEN 50491-12 Smart grid — Application specification — Interface and framework for customer	8
6 HBES/BACS applications and clusters overview	8
Table 1 - Summary of the most relevant application requirements	9
Table 2 - Applications and cluster of services for HBES/BACS	10
Bibliography	11

Foreword

This document (EN 50491-1:2014) has been prepared by CLC/TC 205 "Home and Building Electronic Systems (HBES)".

The following dates are fixed:

- latest date by which this document has to be (dop) 2015-03-10
implemented at national level by publication of
an identical national standard or by
endorsement
- latest date by which the national standards (dow) 2017-03-10
conflicting with this document have to
be withdrawn

EN 50491-1 is part of the EN 50491 series, which comprises the following parts under the generic title *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)*:

- *Part 1: General requirements;*
- *Part 2: Environmental conditions;*
- *Part 3: Electrical safety requirements;*
- *Part 4-1: General functional safety requirements for products intended to be integrated in Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS);*
- *Part 5-1: EMC requirements, conditions and test set-up;*
- *Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment;*
- *Part 5-3: EMC requirements for HBES/BACS used in industry environment;*
- *Part 6-3: HBES installations — Assessment and definition of levels [Technical Report];*
- *Part 11: Smart Metering — Application Specifications — Simple External Consumer Display; (under development);*
- *Part 12: Smart grid — Application specification — Interface and framework for customer (under development).*

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.

1 Scope

This European Standard applies to all Home and Building Electronic Systems (HBES) and Building Automation Control Systems (BACS) and specifies the general requirements for these systems and products covering the following functionalities:

- HBES class 1: simple control and command;
- HBES class 2: simple voice and stable video transmission including class 1;
- HBES class 3: video transfers including class 2.

This European Standard provides an overview of this series of European Standards.

To enable integration of a wide spectrum of applications, EN 50491 series covers:

- electrical safety,
- functional safety,
- environmental conditions,
- EMC requirements,
- installation and cabling rules and topologies,
- Smart Metering – Application specification (under development),
- Smartgrid — Application specification — Interface and framework (under development).

EN 50491 series is a product family standard.

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 50174-2, *Information technology — Cabling installation — Part 2: Installation planning and practices inside buildings*

EN 50491-2, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) — Part 2: Environmental conditions*

EN 50491-3, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 3: Electrical safety requirements*

EN 50491-4-1, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) — Part 4-1: General functional safety requirements for products intended to be integrated in Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)*

EN 50491-5-1, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) — Part 5-1: EMC requirements, conditions and test set-up*

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