

**General requirements for Home and Building Electronic Systems (HBES)
and Building Automation and Control Systems (BACS) -
Part 6-3: HBES installations -
Assessment and definition of levels**

Allgemeine Anforderungen an die
Elektrische Systemtechnik für Heim und
Gebäude (ESHG) und an Systeme der
Gebäudeautomation (GA) -
Teil 6 3: ESHG-Installationen -
Bewertung und Festlegung der Stufen

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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Contents

Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms, definitions and abbreviations	5
3.1 Terms and definitions	5
3.2 Abbreviations	7
4 Classification	8
4.1 General	8
4.2 Transmission media	8
4.3 Topology	8
4.4 HBES complexity level	8
5 HBES levels	9
5.1 General	9
5.2 Complexity level	9
5.3 Energy performance level	9
6 Requirements of an HBES installation and its devices	13
7 Verification of the installation	13
Annex A (informative) Examples of application	14
Bibliography	15

Table

Table 1 – Points of the HBES applications and devices for allocation of an HBES level, with indication of the associated clusters	10
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Foreword

This document (CLC/TR 50491-6-3:2011) has been prepared by CLC/TC 205, "Home and Building Electronic Systems (HBES)".

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Introduction

HBES are based on the integrated control of the components of an installation, and the clusters for HBES include the following:

- energy management;
- security;
- comfort;
- communication from and to the system through external telecommunication networks

Due to the increasing bandwidth in the telecommunication networks, the number of functions that can be provided by HBES systems, related to the clusters mentioned above, has increased. Additional clusters are audio/video and information technology.

The system control networks, i.e. dedicated cable, power line communication or radio-frequency, should be installed in relation with the existing networks, i.e. electricity, telephone and TV, according to the installation rules defined for the respective control networks, to minimise perturbations of the system.

1 Scope

This Technical Report establishes the general rules for assessing HBES installations, according to its complexity and energy performance.

This Technical Report applies to

- household HBES installation, from and up to the connection point with the utility (i.e. electricity, telecommunications, tele-service, water, gas, security and similar),
- HBES installations that include applications related to automation and integrated control of electrical and/or electronic devices,
- the networks used for the HBES interconnection regardless of the transmission media used for their communications,
- new HBES installations, retrofitting and enlargement of existing installations.

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 15232, *Energy performance of buildings – Impact of Building Automation, Controls and Building Management*

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 50491-5-1, *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*

EN 50491-5-2, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment*

EN 50491-5-3, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 5-3: EMC requirements for HBES/BACS used in industry environment*

EN 50491-6-1 ¹⁾, *General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 6-1: HBES installations – Installation and planning*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purpose of this document, the following terms and definitions apply:

3.1.1

actuator

device responsible for actuating a physical device in the system

EXAMPLES Electro valves, alarms, electric motors, dimmers, etc.

¹⁾ At draft stage.