



**SLOVENSKI STANDARD**  
**kSIST FprEN 15232:2011**  
**01-september-2011**

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**Energijske lastnosti stavb - Vpliv avtomatizacije stavb in izvršnih elementov ter upravljanja stavb**

Energy performance of buildings - Impact of Building Automation, Controls and Building Management

Energieeffizienz von Gebäuden - Einfluss von Gebäudeautomation und Gebäudemanagement

Performance énergétique des bâtiments - Impact de l'automatisation, de la régulation et de la gestion technique

**Ta slovenski standard je istoveten z: FprEN 15232**

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**ICS:**

91.140.10	Sistemi centralnega ogrevanja	Central heating systems
97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

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## Energy performance of buildings - Impact of Building Automation, Controls and Building Management

Performance énergétique des bâtiments - Impact de l'automatisation, de la régulation et de la gestion technique

Energieeffizienz von Gebäuden - Einfluss von Gebäudeautomation und Gebäudemanagement

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 247.

If this draft becomes a European Standard, CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## **Foreword**

This document (FprEN 15232:2011) has been prepared by Technical Committee CEN/TC 247 “Building Automation, Controls and Building Management”, the secretariat of which is held by SNV.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 15232:2007.

## Introduction

This European Standard was created to establish conventions and methods for estimation of the impact of building automation and control systems (BACS) and technical building management (TBM) on energy performance and energy use in buildings.

This European Standard also provides guidance for taking BACS and TBM functions as far as possible into account in the relevant standards prepared under the mandate M/343. Therefore it is coordinated between CEN/TC 247 and CEN/TC 89, CEN/TC 156, CEN/TC 169 and CEN/TC 228 to support these TCs by strong cooperation in specifying how the impact of the BACS and TBM functions are taken into account in their standards. The results concerning BACS and TBM in the relevant standards are summarized in Clause 5.

This European Standard specifies a method to estimate energy saving factors which can be used in conjunction with energy assessment of buildings. This European Standard supplements a series of standards which are drafted to calculate the energy efficiency of technical building services, e.g. heating, cooling, ventilation, lighting systems. This European Standard takes into account the fact that with BACS and TBM the energy consumption of a building can be reduced.

This European Standard should be used for existing buildings and for design of new or renovated buildings.

**FprEN 15232:2011 (E)****1 Scope**

This European Standard specifies:

- a structured list of Building Automation and Control System (BACS) and Technical Building Management (TBM) functions which have an impact on the energy performance of buildings;
- a method to define minimum requirements regarding BACS and TBM functions to be implemented in buildings of different complexities;
- a factor based method to get a first estimation of the impact of these functions on typical buildings;
- detailed methods to assess the impact of these functions on a given building. These methods enable to introduce the impact of these functions in the calculations of energy performance ratings and indicators calculated by the relevant standards.

This European Standard is defined for:

- building owners, architects or engineers, defining the functions to be implemented for a given new building or for the renovation of an existing building;
- public authorities, defining minimum requirements for BACS and TBM functions for new buildings as well as for renovation, as defined in the relevant standard;
- public authorities, defining inspection procedures of technical systems as well as inspectors applying these procedures to check if the level of BACS and TBM functions implemented is appropriate;
- public authorities, defining calculation methods which take into account the impact of BACS and TBM functions on the energy performance of buildings as well as software developers implementing these calculation methods and designers using them;
- designers, checking that the impact of all BACS and TBM functions are taken into account when assessing the energy performance of a building.

**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 12098-1, *Controls for heating systems — Part 1: Outside temperature compensated control equipment for hot water heating systems*

EN 12098-2, *Controls for heating systems — Part 2: Optimum start-stop control equipment for hot water heating systems*

EN 12098-3, *Controls for heating systems — Part 3: Outside temperature compensated control equipment for electrical heating systems*

EN 12098-4, *Controls for heating systems — Part 4: Optimum start-stop control equipment for electrical systems*

EN 12098-5, *Controls for heating systems — Part 5: Start-stop schedulers for heating systems*