SLOVENSKI STANDARD
oSIST prEN ISO 52127-1:2019

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Energijske lastnosti stavb - Sistem upravljanja stavb - 1. del: Modul M10-12 (ISO/DIS 52127-1: 2019)

Energy performance of buildings - Building management system - Part 1: Module M10-12 (ISO/DIS 52127-1: 2019)

Energieeffizienz von Gebäuden - Gebäudemanagementsystem - Teil 1: Modul M10-12 (ISO/DIS 52127-1:2019)

Performance énergétique des bâtiments - Système de gestion technique des bâtiments - Partie 1: Module M10-12 (ISO/DIS 52127-1: 2019)

Ta slovenski standard je istoveten z: **prEN ISO 52127-1**

ICS:

35.240.67	Uporabniške rešitve IT v gradbeništvu	IT applications in building and construction industry
91.120.10	Toplotna izolacija stavb	Thermal insulation of buildings
97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

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Energy performance of buildings — Building management system —

Part 1:
Module M10-12

Performance énergétique des bâtiments — Système de gestion technique des bâtiments —

Partie 1: Module M10-12

ICS: 91.120.10

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European foreword

This document (ISO DIS 52127-1) has been prepared by Technical Committee ISO TC 205 “Building environmental design”, the secretariat of which is held by ANSI under Vienna Agreement with ISO lead. This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by (date to be indicated) and conflicting national standards shall be withdrawn at the latest by (date to be indicated).

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

This document is part of the set of standards on the energy performance of buildings (the set of EPB standards)

In case this standard is used in the context of national or regional legal requirements, mandatory choices may be given at national or regional level for such specific applications, in particular for the application within the context of EU Directives transposed into national legal requirements.

Further target groups are users of the voluntary common European Union certification scheme for the energy performance of non-residential buildings (EPBD art.11.9) and any other regional (e.g. Pan European) parties wanting to motivate their assumptions by classifying the building energy performance for a dedicated building stock.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

ISO 52127-1 was prepared by ISO Technical Committee TC 205 Building Environment Design, in collaboration with European Committee for Standardization (CEN) Technical Committee CEN/TC 247 “Building automation and controls”, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 52127 consists of the following parts, under the general title Building Management System:

— Part 1: Module M10-12

— Part 2: Explanation and justification of ISO 52127-1

Introduction

This standard is part of a series of standards aiming at international harmonization of the methodology for the assessment of the energy performance of buildings, called “EPB set of standards”.

As part of the “EPB set of standards” it complies with the requirements for the set of basic EPB documents EN ISO 52000-1:2017 (see Normative references), CEN/TS 16628 and CEN/TS 16629 (see bibliography [2] and [3]) developed under a mandate given to CEN by the European Commission and the European Free Trade Association (Mandate M/480), and supports essential requirements of EU Directive 2010/31/EU on the energy performance of buildings (EPBD).

This standard is clearly identified in the modular structure developed to ensure a transparent and coherent EPB standard set in iso 52000-1. BAC (Building Automation and Control) is identified in the modular structure as Technical Building System M10. However, other standards issued by ISO TC 205 deal with control accuracy, control functions and control strategies using standards communications protocol (these last standards do not belong to the EPB standards set).

To avoid a duplication of calculation due to the BAC (avoid double impact), no calculation are done in BAC EPB standard set, but in each underlying standard of EPB set of standards (from M1 to M9 in the Modular Structure), an IDENTIFIER developed and present in the M10 covered by ISO 52120-1 is used where appropriate. These way of interaction is described in detailed in the Technical Report (ISO/TR 52000-2:2017) accompanying the over-arching standard. As consequence, the Annex A and Annex B concept as EXCEL sheet with the calculation formulas used in the EPB standards are not applicable for this standard.

The main target groups of this standard are all the users of the set of EPB standards (e.g. architects, engineers, regulators).

Further target groups are parties wanting to motivate their assumptions by classifying the building energy performance for a dedicated building stock.

More information is provided in the Technical Report accompanying this standard (ISO/TR 52127-1[1]).

Energy performance of buildings — Building management system —

Part 1: Module M10-12

1 Scope

This International Standard specifies operational activities, overall alarming, fault detection and diagnostics, reporting, monitoring, energy management functions, functional interlocks and optimizations to set and maintain energy performance of buildings.

Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in ISO 52000-1:2017.

NOTE 1 In ISO/TR 52000-2:2017 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying Technical Reports that are published or in preparation.

NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively.

Table 1 — Position of this standard (in casu M10–12), within the modular structure of the set of EPB standards

	Over-arching	Building (as such)	Technical Building System									
Submodule	**Descriptions**	**Descriptions**	**Descriptions**	**Heating**	**Cooling**	**Ventilation**	**Humidification**	**Dehumidification**	**Domestic Hot waters**	**Lighting**	**Building automation and control**	**PV, wind...**
sub1	**M1**	**M2**		**M3**	**M4**	**M5**	**M6**	**M7**	**M8**	**M9**	**M10**	**M11**
1	General	General	General									
2	Common terms and definitions; symbols, units and subscripts	Building Energy Needs	Needs									
3	Application	(Free) Indoor Conditions without Systems	Maximum Load and Power									
4	Ways to Express Energy Performance	Ways to Express Energy Performance	Ways to Express Energy Performance									
5	Building Functions and Building Boundaries	Heat Transfer by Transmission	Emission and control									

[a] The shaded modules are not applicable.