Building automation and control systems (BACS) - Part 6: Data communication conformance testing (ISO 16484-6:2026)

EVS • EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 16484-6:2026 sisaldab Euroopa standardi EN ISO 16484-6:2026 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16484-6:2026 consists of the English text of the European standard EN ISO 16484-6:2026.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.04.2026.	Date of Availability of the European standard is 15.04.2026.
Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16484-6

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Supersedes EN ISO 16484-6:2025

English Version

Building automation and control systems (BACS) - Part 6: Data communication conformance testing (ISO 16484-6:2026)

Systèmes d'automatisation et de gestion technique du bâtiment (BACS) - Partie 6: Essais de conformité de la communication de données (ISO 16484-6:2026)

Systeme der Gebäudeautomation - Teil 6: Datenübertragungsprotokoll - Konformitätsprüfung (ISO 16484-6:2026)

This European Standard was approved by CEN on 14 February 2026.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 16484-6:2026) has been prepared by Technical Committee ISO/TC 205 "Building environment design" in collaboration with Technical Committee CEN/TC 247 “Building Automation, Controls and Building Management” the secretariat of which is held by SNV.

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 October 2026, and conflicting national standards shall be withdrawn at the latest by October 2026.

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

This document supersedes EN ISO 16484-6:2025.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 16484-6:2026 has been approved by CEN as EN ISO 16484-6:2026 without any modification.

International Standard

ISO 16484-6

Sixth edition
2026-02

Building automation and control systems (BACS) —

Part 6: Data communication conformance testing

Systèmes d'automatisation et de gestion technique du bâtiment (BACS) —

Partie 6: Essais de conformité de la communication de données

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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 document should be noted (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 205, *Building environmental design*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 247, *Building Automation, Controls and Building Management*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement) and with the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE).

This sixth edition cancels and replaces the fifth edition (ISO 16484-6:2024), which has been technically revised.

The main changes are as follows:

— see the detailed list of changes on pages 1039 to 1043.

A list of all parts in the ISO 16484 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

1. PURPOSE

To define a standard method for verifying that an implementation of the BACnet protocol provides each capability claimed in its Protocol Implementation Conformance Statement (PICS) in conformance with the BACnet standard.

2. SCOPE

This standard provides a comprehensive set of procedures for verifying the correct implementation of each capability claimed on a BACnet PICS including:

(a) support of each claimed BACnet service, either as an initiator, executor, or both,
(b) support of each claimed BACnet object-type, including both required properties and each claimed optional property,
(c) support of the BACnet network layer protocol,
(d) support of each claimed data link option, and
(e) support of all claimed special functionality.

3. DEFINITIONS

All definitions from ANSI/ASHRAE Standard 135-2020 also apply to this addendum.

3.1 Terms Adopted from International Standardss

local network: the network to which a BACnet device is directly connected.

remote network: a network that is accessible from a BACnet device only by passing through one or more routers.

test database: a database of BACnet functionality and objects created by reading the contents of an EPICS.

3.2 Abbreviations and Acronyms Used in the Standard

BNF Backus-Naur Form syntax
EPICS electronic protocol implementation conformance statement
IUT implementation under test
TCSL testing and conformance scripting language
TD testing device
TPI text protocol information

3.3 Common language used in tests

'**any valid value**': Any valid value refers to any value of the correct data type and within the vendor's range specified for the property this is applied to.

'**any appropriate password**': Any password that meets the Configuration Requirements specified in the test or test section. Passwords when required by the vendor are required to be no more than 20 characters.

'**reset**': Some tests require to reset the IUT. Reset includes power cycle via switch, power cycle via loss of power, and reinitializeDevice WARMSTART. As defined by the BACnet standard, "WARMSTART shall mean to reboot the device and start over, retaining all data and programs that would normally be retained during a brief power outage."