SLOVENSKI STANDARD

SIST EN ISO 16484-5:2004

01-februar-2004

Avtomatizacija stavb in sistemi za regulacijo – 5. del: Protokol izmenjave podatkov (ISO 16484-5:2003)

Building automation and control systems - Part 5: Data communication protocolcity (ISO 16484-5:2003)

Systeme der Gebäudeautomation - Teil 5: Datenkommunikationsprotokoll (ISO 16484-5:2003)

Systemes d'automatisation et de gestion technique du bâtiment - Partie 5: Protocole de communication de données (ISO 16484-5:2003)

Ta slovenski standard je istoveten z: EN ISO 16484-5:2003

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35.240.99

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SIST EN ISO 16484-5:2004 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16484-5

November 2003

ICS 35.240.99; 91.040.01

Supersedes ENV 1805-1:1998

English version

Building automation and control systems - Part 5: Data communication protocolcity (ISO 16484-5:2003)

Systèmes d'automatisation et de gestion technique du bâtiment - Partie 5: Protocole de communication de données (ISO 16484-5:2003)

Systeme der Gebäudeautomation - Teil 5: Datenkommunikationsprotokoll (ISO 16484-5:2003)

This European Standard was approved by CEN on 14 October 2003.

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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 CEN member into its own language and notified to the Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 16484-5:2003) 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of an identical text or by endorsement, at the latest by May 2004, and conflicting national standards shall be withdrawn at the latest by May 2004.

This document supersedes ENV 1805-1:1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

NOTE FROM CMC The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZA for the references to international publications with their relevant European publications will be circulated with the German version.

Endorsement notice

The text of ISO 16484-5:2003 has been approved by CEN as EN ISO 16484-5:2003 without any modifications.

INTERNATIONAL STANDARD

ISO 16484-5

First edition
2003-11-01

Building automation and control systems —

Part 5: Data communication protocol

Systèmes d'automatisation et de gestion technique du bâtiment —
Partie 5: Protocole de communication de données

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 16484-5 was prepared by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) (as ANSI/ASHRAE 135-2001) and was adopted without modifications by Technical Committee ISO/TC 205, *Building environment design*.

ISO 16484 consists of the following parts, under the general title *Building automation and control systems*:

— *Part 1: Overview and definitions*

— *Part 2: Hardware*

— *Part 3: Functions*

— *Part 5: Data communication protocol*

Further parts are under preparation.

Building automation and control systems —

Part 5:
Data communication protocol

1 Scope

This part of ISO 16484 defines data communication services and protocols for computer equipment used for monitoring and control of heating, ventilation, air-conditioning and refrigeration (HVAC&R) and other building systems. It defines, in addition, an abstract, object-oriented representation of information communicated between such equipment, thereby facilitating the application and use of digital control technology in buildings.

The scope and field of application are furthermore detailed in Clause 2 of the enclosed ANSI/ASHRAE publication.

2 Requirements

Requirements are the technical recommendations made in the following publication (reproduced on the following pages), which is adopted as an International Standard:

ANSI/ASHRAE 135-2001, *A Data Communication Protocol for Building Automation and Control Networks*

The text on the back of the title page of the ANSI/ASHRAE standard and the policy statement on the last page are not relevant for the purposes of international standardization.

International Standards cited in the text are the following:

ISO/IEC 7498 (all parts), *Information technology — Open Systems Interconnection — Basic Reference Model*

ISO/TR 8509, *Information processing systems — Open Systems Interconnection — Service conventions*

ISO/IEC 8802-2, *Information technology — Telecommunications and information exchange between systems — Local and metropolitan area networks — Specific requirements — Part 2: Logical link control*

ISO/IEC 8824 (all parts), *Information technology — Abstract Syntax Notation One (ASN.1): Specification of basic notation*

3 Revision of ANSI/ASHRAE 135

It has been agreed with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) that TechnicalCommittee ISO/TC 205 will be consulted in the event of any revision or amendment of ANSI/ASHRAE 135. To this end, ANSI will act as a liaison body between ASHRAE and ISO.

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ANSI/ASHRAE Standard 135-2001

(Including ANSI/ASHRAE Addenda listed in the History of Revisions)

ASHRAE STANDARD

BACnet®

A Data Communication Protocol for Building Automation and Control Networks

Approved by the ASHRAE Standards Committee June 23, 2001; by the ASHRAE Board of Directors June 28, 2001; and by the American National Standards Institute September 7, 2001. See "History of Revisions" section for approval dates of addenda.

This standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadlines are given at the back of this document and may be obtained in electronic form from ASHRAE's Internet Home Page, *http://www.ashrae.org*, or in paper form from the Manager of Standards. The latest edition of an ASHRAE Standard and printed copies of a public review draft may be purchased from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. E-mail: *orders@ashrae.org*. Fax: 404-321-5478. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in U.S. and Canada).

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SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus standard developed under the auspices of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Consensus is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

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The Manager of Standards of ASHRAE should be contacted for:
a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard,
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