

საქართველოს სტანდარტი

სსკ: 25.040.40; 35.240.50

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(იეკ 61131-1:2003)

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საინფორმაციო მონაცემები

1 მიღებულია და დაშვებულია სამოქმედოდ: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს გენერალური დირექტორის 01/11/2021 წლის № 64 განკარგულებით

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3 პირველად

4 რეგისტრირებულია: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 01/11/2021 წლის №268-1.3-021469

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EUROPEAN STANDARD

EN 61131-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2003

ICS 25.040.40; 35.240.50

Supersedes EN 61131-1:1994

English version

Programmable controllers
Part 1: General information
(IEC 61131-1:2003)

Automates programmables
Partie 1: Informations générales
(CEI 61131-1:2003)

Speicherprogrammierbare Steuerungen
Teil 1: Allgemeine Informationen
(IEC 61131-1:2003)

This European Standard was approved by CENELEC on 2003-07-01. CENELEC 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 65B/484/FDIS, future edition 2 of IEC 61131-1, prepared by SC 65B, Devices, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61131-1 on 2003-07-01.

This European Standard supersedes EN 61131-1:1994.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-07-01

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative. Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61131-1:2003 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-2	- 1)	Programmable controllers Part 2: Equipment requirements and tests	EN 61131-2	2003 2)
IEC 61131-3	2003	Part 3: Programming languages	EN 61131-3	2003

1) Undated reference.

2) Valid edition at date of issue.

საინფორმაციო ნაწილი. სრული ტექსტის საწარმოო სტანდარტი.

INTERNATIONAL STANDARD

IEC
61131-1

Second edition
2003-05

Programmable controllers –

Part 1: General information

Automates programmables –

*Partie 1:
Informations générales*



Reference number
IEC 61131-1:2003(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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CONTENTS

FOREWORD 3

INTRODUCTION 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Functional characteristics 8

 4.1 Basic functional structure of a programmable controller system 8

 4.2 Characteristics of the CPU function 11

 4.3 Characteristics of the interface function to sensors and actuators 13

 4.4 Characteristics of the communication function 14

 4.5 Characteristics of the human-machine interface (HMI) function 14

 4.6 Characteristics of the programming, debugging, monitoring, testing and documentation functions 14

 4.7 Characteristics of the power-supply functions 16

5 Availability and reliability 16

Bibliography 18

Figure 1 – Basic functional structure of a PLC-system 8

Figure 2 – Programmable controller hardware model (from IEC 61131-5) 9

Figure 3 – Typical interface/port diagram of a PLC-system (from IEC 61131-2) 10

Table 1 – Summary of programmable functions 12

საინფორმაციო ნაწილი. სრული ტექსტის საწარმოო სტანდარტი.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PROGRAMMABLE CONTROLLERS –

Part 1: General information

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61131-1 has been prepared by subcommittee 65B: Devices, of IEC technical committee 65: Industrial-process measurement and control.

This second edition of IEC 61131-1 cancels and replaces the first edition published in 1992 and constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
65B/484/FDIS	65B/487/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 61131 consists of the following parts under the general title: *Programmable controllers*.

Part 1: General information

Part 2: Equipment requirements and tests

Part 3: Programming languages

Part 4: User guidelines

Part 5: Communications

Part 6: Reserved

Part 7: Fuzzy-control programming

Part 8: Guidelines for the application and implementation of programming languages for programmable controllers

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this standard may be issued at a later date.

INTRODUCTION

This Part of IEC 61131 constitutes Part 1 of a series of standards on programmable controllers and their associated peripherals and should be read in conjunction with the other parts of the series.

Where a conflict exists between this and other IEC standards (except basic safety standards), the provisions of this standard should be considered to govern in the area of programmable controllers and their associated peripherals.

The purposes of this standard are:

Part 1 establishes the definitions and identifies the principal characteristics relevant to the selection and application of programmable controllers and their associated peripherals;

Part 2 specifies equipment requirements and related tests for programmable controllers (PLC) and their associated peripherals;

Part 3 defines, for each of the most commonly used programming languages, major fields of application, syntactic and semantic rules, simple but complete basic sets of programming elements, applicable tests and means by which manufacturers may expand or adapt those basic sets to their own programmable controller implementations;

Part 4 gives general overview information and application guidelines of the standard for the PLC end-user;

Part 5 defines the communication between programmable controllers and other electronic systems;

Part 6 is reserved;

Part 7 defines the programming language for fuzzy control;

Part 8 gives guidelines for the application and implementation of the programming languages defined in Part 3.