

STN	Programovateľné regulátory Časť 3: Programovacie jazyky	STN EN IEC 61131-3 18 7050
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Programmable controllers - Part 3: Programming languages

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/25

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English Version

**Programmable controllers - Part 3: Programming languages
(IEC 61131-3:2025)**

Automates programmables - Partie 3: Langues de
programmation
(IEC 61131-3:2025)

Speicherprogrammierbare Steuerungen - Teil 3:
Programmiersprachen
(IEC 61131-3:2025)

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Comité Européen de Normalisation Electrotechnique
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EN IEC 61131-3:2025 (E)**European foreword**

The text of document 65B/1281/FDIS, future edition 4 of IEC 61131-3, prepared by SC 65B "Measurement and control devices" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61131-3:2025.

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IEC 60848 NOTE Approved as EN 60848

Annex ZA **(normative)**

Normative references to international publications with their corresponding European publications

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-1	-	Programmable controllers - Part 1: General information	EN 61131-1	-
IEC 61131-5	-	Programmable controllers - Part 5: Communications	EN 61131-5	-
ISO/IEC 10646	-	Information technology - Universal coded character set (UCS)	-	-
ISO/IEC 60559	-	Information technology - Microprocessor Systems - Floating-Point arithmetic	-	-



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Edition 4.0 2025-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Programmable controllers –
Part 3: Programming languages**

**Automates programmables –
Partie 3: Langues de programmation**

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IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PROGRAMMABLE CONTROLLERS –

Part 3: Programming languages

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IEC 61131-3 has been prepared by subcommittee 65B: Measurement and control devices, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) inclusion of UTF-8 strings and their associated functions;
- b) Annex B contains a comprehensive list of features that have been added, removed or deprecated in comparison to IEC 61131-3:2013.

The text of this International Standard is based on the following documents:

Draft	Report on voting
65B/1281/FDIS	65B/1291/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all the parts in the IEC 61131 series, published under the general title *Programmable controllers* can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

PROGRAMMABLE CONTROLLERS –

Part 3: Programming languages

1 Scope

This part of IEC 61131 specifies the syntax and semantics of programming languages for programmable controllers as defined in IEC 61131-1.

This document specifies the syntax and semantics of a unified suite of programming languages for programmable controllers (PCs). This suite consists of the textual language structured text (ST), and the graphical languages, ladder diagram (LD) and function block diagram (FBD).

An additional set of graphical and equivalent textual elements named sequential function chart (SFC) is defined for structuring the internal organization of programs and function blocks. Also, configuration elements are defined which support the installation of programmable controller programs into programmable controller systems.

In addition, features are defined which facilitate communication among programmable controllers and other components of automated systems.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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