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Programmerbara styrsystem – Del 7: Programmering för fuzzy-styrning (styrning med oskarp logik)

*Programmable controllers –
Part 7: Fuzzy control programming*

Som svensk standard gäller europastandarden EN 61131-7:2000. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61131-7:2000.

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Part 7: Fuzzy control programming**

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Programmable controllers
Part 7: Fuzzy control programming
(IEC 61131-7:2000)

Automates programmables
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(CEI 61131-7:2000)

Speicherprogrammierbare Steuerungen
Teil 7: Fuzzy-Control-Programmierung
(IEC 61131-7:2000)

This European Standard was approved by CENELEC on 2000-11-01. 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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Foreword

The text of document 65B/406/FDIS, future edition 1 of IEC 61131-7, 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 61131-7 on 2000-11-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
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- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-11-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annexes A, B, C, D and E are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61131-7:2000 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 60050-351	1998	International Electrotechnical Vocabulary Part 351: Automatic control	-	-
IEC 61131-3	1993	Programmable controllers Part 3: Programming languages	EN 61131-3	1993

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PROGRAMMABLE CONTROLLERS –

Part 7: Fuzzy control programming

1 Scope and object

This part of IEC 61131 defines a language for the programming of Fuzzy Control applications used by programmable controllers.

The object of this part of IEC 61131 is to offer the manufacturers and the users a well-defined common understanding of the basic means to integrate fuzzy control applications in the Programmable Controller languages according to IEC 61131-3, as well as the possibility to exchange portable fuzzy control programs among different programming systems.

To achieve this, annex A gives a short introduction to the theory of fuzzy control and fuzzy logic as far as it is necessary for the understanding of this part of IEC 61131. It may be helpful for readers of this part of IEC 61131 who are not familiar with fuzzy control theory to read annex A first.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61131. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61131 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050-351:1998, *International Electrotechnical Vocabulary (IEV) – Part 351: Automatic control*

IEC 61131-3:1993, *Programmable controllers – Part 3: Programming languages*

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