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Sekventiella funktionsdiagram och specifikationsspråket GRAFCET

GRAFCET specification language for sequential function charts

Som svensk standard gäller europastandarden EN 60848:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60848:2013.

Nationellt förord

Europastandarden EN 60848:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60848, Third edition, 2013 - GRAFCET specification language for sequential function charts**

utarbetad inom International Electrotechnical Commission, IEC.

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English version

**GRAFCET specification language for sequential function charts
(IEC 60848:2013)**

Langage de spécification GRAFCET pour
diagrammes fonctionnels en séquence
(CEI 60848:2013)

GRAFCET, Spezifikationssprache für
Funktionspläne der Ablaufsteuerung
(IEC 60848:2013)

This European Standard was approved by CENELEC on 2013-04-03. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 3/1135/FDIS, future edition 3 of IEC 60848, prepared by SC 3B "Documentation" of IEC/TC 3 "Information structures, documentation and graphical symbols" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60848:2013.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-01-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-04-03

This document supersedes EN 60848:2002.

EN 60848:2013 includes the following significant technical changes with respect to EN 60848:2002:

This edition constitutes a global technical revision with the extended definition of the concept of variables introducing: internal variable, input variable and output variable.

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

Endorsement notice

The text of the International Standard IEC 60848:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61131-3:2003	NOTE	Harmonised as EN 61131-3:2003 (not modified).
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INTRODUCTION

This International Standard is mainly aimed at people such as design engineers, maintenance engineers, etc., who need to specify the behaviour of a system, e.g. the control and command of an automation system, safety component, etc. This specification language should also serve as a communication means between designers and users of automated systems.

GRAFCET SPECIFICATION LANGUAGE FOR SEQUENTIAL FUNCTION CHARTS

1 Scope

This International Standard defines the GRAFCET¹ specification language for the functional description of the behaviour of the sequential part of a control system.

This standard specifies the symbols and rules for the graphical representation of this language, as well as for its interpretation.

This standard has been prepared for automated production systems of industrial applications. However, no particular area of application is excluded.

Methods of development of a specification that makes use of GRAFCET are beyond the scope of this standard. One method is for example the "SFC language" specified in IEC 61131-3, which defines a set of programming languages for programmable controllers.

NOTE See Annex C for further information on the relations between IEC 60848 and implementation languages such as the SFC of IEC 61131-3.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

(void)

¹ GRAFCET: GRAPhe Fonctionnel de Commande Etape Transition.