EESTI STANDARD EVS-EN 61082-1:2006

Preparation of documents used in electrotechnology Part 1: Rules

Preparation of documents used in electrotechnology
Part 1: Rules

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

Käesolev Eesti standard EVS-EN 61082-1:2006 sisaldab Euroopa standardi EN 61082-1:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 22.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 61082-1:2006 consists of the English text of the European standard EN 61082-1:2006. This document is endorsed on 22.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

NATIONAL FOREWORD

Käsitlusala: This part of IEC 61082 provides general rules and guidelines for the presentation of information in documents, and specific rules for diagrams, drawings and tables used in electrotechnology Excluded from this standard are rules and guidelines for all kind of audio or video presentations.	**Scope:** This part of IEC 61082 provides general rules and guidelines for the presentation of information in documents, and specific rules for diagrams, drawings and tables used in electrotechnology Excluded from this standard are rules and guidelines for all kind of audio or video presentations.

ICS 01.110, 29.020

Võtmesõnad: diagrams, documentation, drawing rules, electrotechnology, general requirements

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61082-1

July 2006

ICS 29.020.; 01.110

Supersedes EN 61082-1:1993 + A1:1995 + A2:1996, EN 61082-2:1994, EN 61082-3:1994 and EN 61082-4:1996

English version

Preparation of documents used in electrotechnology
Part 1: Rules
(IEC 61082-1:2006)

Etablissement des documents utilisés en électrotechnique
Partie 1: Règles
(CEI 61082-1:2006)

Dokumente der Elektrotechnik
Teil 1: Regeln
(IEC 61082-1:2006)

This European Standard was approved by CENELEC on 2006-06-01. 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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

Ref. No. EN 61082-1:2006 E

Foreword

The text of document 3/771/FDIS, future edition 2 of IEC 61082-1, prepared by IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61082-1 on 2006-06-01.

This European Standard supersedes EN 61082-1:1993 + A1:1995 + A2:1996, EN 61082-2:1994, EN 61082-3:1994 and EN 61082-4:1996.

Compared to the above replaced standards, the following substantial changes have been made:

– the scope of EN 61082 has been gradually shifted from the rules of preparation of documents to the rules of presentation of information in documents;

– the information is split in a way to establish general rules that are valid for the preparation of all document kinds, to more specific rules for specific document kinds;

– terminology has been improved in a way that terms related to document kinds are clearly differentiated from those related to forms of presentations;

– the publication is focusing on rules that support the legibility of a document and not on the process of developing the document;

– examples in the publication are shown only to that extent necessary for the understanding of the concepts described. The use of comprehensive examples and diagrams are limited as such examples do not illustrate rules more efficiently than small sketches.

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)	2007-03-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-06-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61082-1:2006 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60073	NOTE	Harmonized as EN 60073:2002 (not modified).
IEC 60204-1	NOTE	IEC 60204-1:2005 is harmonized as EN 60204-1:2006 (modified).
IEC 60445	NOTE	Harmonized as EN 60445:2000 (not modified).
IEC 60446	NOTE	Harmonized as EN 60446:1999 (not modified).
ISO 128-21	NOTE	Harmonized as EN ISO 128-21:2001 (not modified).

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

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

Publication	Year	Title	EN/HD	Year
IEC 60027	Series	Letter symbols to be used in electrical technology	HD 60027	Series
IEC 60375	2003	Conventions concerning electric and magnetic circuits	EN 60375	2003
IEC 60757	1983	Code for designation of colours	HD 457 S1	1985
IEC 60617	Data-base	Graphical symbols for diagrams	-	-
IEC 60848	2002	GRAFCET specification language for sequential function charts	EN 60848	2002
IEC 61175	2005	Industrial systems, installations and equipment and industrial products - Designation of signals	EN 61175	2005
IEC 61286 (mod)	2001	Information technology - Coded graphic character set for use in the preparation of documents used in electrotechnology and for information interchange	EN 61286	2002
IEC 61293	1994	Marking of electrical equipment with ratings related to electrical supply - Safety requirements	EN 61293	1994
IEC 61346-1	1996	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations Part 1: Basic rules	EN 61346-1	1996
IEC 61355	1997	Classification and designation of documents for plants, systems and equipment	EN 61355	1997
IEC 61666	1997	Industrial systems, installations and equipment and industrial products - Identification of terminals within a system	EN 61666	1997
IEC/TS 61804-1	2003	Function blocks (FB) for process control Part 1: Overview of system aspects	-	-

Publication	Year	Title	EN/HD	Year
IEC 61804-2	2004	Function Blocks (FB) for process control Part 2: Specification of FB concept and Electronic Device Description Language (EDDL)	EN 61804-2	2004
IEC 62023	2000	Structuring of technical information and documentation	EN 62023	2000
IEC 62027	2000	Preparation of parts lists	EN 62027	2000
IEC 62079	2001	Preparation of instructions - Structuring, content and presentation	EN 62079	2001
IEC 81714-2	1998	Design of graphical symbols for use in the technical documentation of products Part 2: Specification for graphical symbols in a computer sensible form, including graphical symbols for a reference library, and requirements for their interchange	EN 81714-2	1998
IEC 82045-1	2001	Document management Part 1: Principles and methods	EN 82045-1	2001
IEC 82045-2	2004	Document management Part 2: Metadata elements and information reference model	EN 82045-2	2005
ISO 31	Series	Quantities and units of space and time	-	-
ISO 128-22	1999	Technical drawings - General principles of presentation Part 22: Basic conventions and applications for leader lines and reference lines	-	-
ISO 128-30	2001	Technical drawings - General principles of presentation Part 30: Basic conventions for views	-	-
ISO 2594	1972	Building drawings - Projection methods	-	-
ISO 3098-5	1997	Technical product documentation - Lettering Part 5: CAD lettering of the Latin alphabet, numerals and marks	EN ISO 3098-5	1997
ISO 5807	1985	Information processing - Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts	-	-
ISO 5455	1979	Technical drawings - Scales	EN ISO 5455	1994
ISO 5456-2	1996	Technical drawings - Projection methods Part 2: Orthographic representations	EN ISO 5456-2	1999
ISO 5457	1999	Technical product documentation - Sizes and layout of drawing sheets	EN ISO 5457	1999
ISO 10209-1	1992	Technical product documentation Part 1: Terms relating to technical drawings: general and types of drawings	-	-

Publication	Year	Title	EN/HD	Year
ISO 10628	1997	Flow diagrams for process plants - General rules	EN ISO 10628	2000
ISO 14617	Series	Graphical symbols for diagrams	-	-
ISO 81714-1	1999	Design of graphical symbols for use in the technical documentation of products Part 1: Basic rules	-	-

INTERNATIONAL STANDARD

IEC 61082-1

Second edition
2006-04

Preparation of documents used in electrotechnology –

Part 1: Rules

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*

Reference number
IEC 61082-1:2006(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.

Further information on IEC publications

The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

- **IEC Web Site (www.iec.ch)**

- **Catalogue of IEC publications**

  The on-line catalogue on the IEC web site (www.iec.ch/searchpub) enables you to search by a variety of criteria including text searches, technical committees and date of publication. On-line information is also available on recently issued publications, withdrawn and replaced publications, as well as corrigenda.

- **IEC Just Published**

  This summary of recently issued publications (www.iec.ch/online_news/ justpub) is also available by email. Please contact the Customer Service Centre (see below) for further information.

- **Customer Service Centre**

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INTERNATIONAL STANDARD

IEC 61082-1

Second edition
2006-04

Preparation of documents used in electrotechnology –

Part 1: Rules

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE XE

For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY

Part 1: Rules

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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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5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.

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

International Standard IEC 61082-1 has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols.

FDIS	Report on voting
3/771/FDIS	3/798/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 second edition is a consolidated version of IEC 61082 Parts 1 to 4 and cancels and replaces the first editions of them published correspondingly in 1991, 1993, 1996. This second edition constitutes technical revisions.

Compared to the first editions, the following substantial changes have been made:

- the scope of IEC 61082 has been gradually shifted from the rules of preparation of documents to the rules of presentation of information in documents;
- the information is split in a way to establish general rules that are valid for the preparation of all document kinds, to more specific rules for specific document kinds;
- terminology has been improved in a way that terms related to document kinds are clearly differentiated from those related to forms of presentations;
- the publication is focusing on rules that support the legibility of a document and not on the process of developing the document;
- examples in the publication are shown only to that extent necessary for the understanding of the concepts described. The use of comprehensive examples and diagrams are limited as such examples do not illustrate rules more efficiently than small sketches.

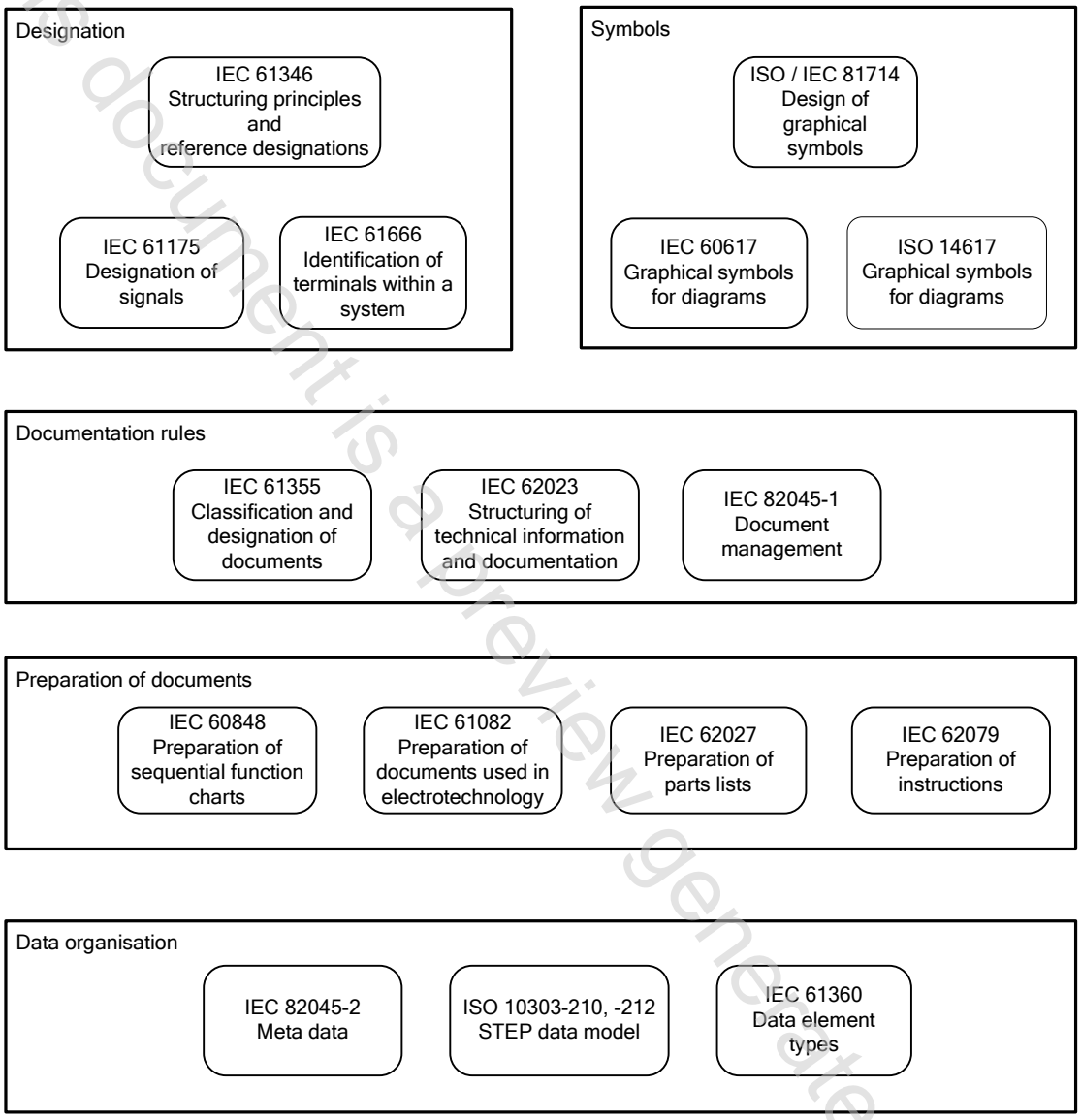
This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

INTRODUCTION

IEC 61082 deals with the presentation of information in documents. Part of this information is described in other International Standards. The following illustration provides an overview on the interrelation between some of these standards.



Examples in this part are intended to illustrate a given rule and are not necessarily representative of complete documents.

PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY

Part 1: Rules

1 Scope

This part of IEC 61082 provides general rules and guidelines for the presentation of information in documents, and specific rules for diagrams, drawings and tables used in electrotechnology

Excluded from this standard are rules and guidelines for all kind of audio or video presentations.

2 Normative references

The following referenced documents are indispensable for the application 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.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60375:2003, *Conventions concerning electric and magnetic circuits*

IEC 60757:1983, *Code for designation of colours*

IEC 60617-DB: 2001, *Graphical symbols for diagrams*

IEC 60848:2002, *GRAFCET specification language for sequential function charts*

IEC 61175:2005, *Industrial systems, installations and equipment and industrial products- Designation of signals*

IEC 61286:2001, *Information technology – Coded graphic character set for use in the preparation of documents used in electrotechnology and for information interchange*

IEC 61293:1994, *Marking of electrical equipment with ratings related to electrical supply – Safety requirements*

IEC 61346-1:1996, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Basic rules*

IEC 61355:1997, *Classification and designation of documents for plants, systems and equipment*

IEC 61666:1997, *Industrial systems, installations and equipment and industrial products – Identification of terminals within a system*

IEC 61804-1:2003, *Function blocks (FB) for process and control – Part 1: Overview of system aspects*

IEC 61804-2:2004, *Function blocks (FB) for process and control – Part 2: Specification of FB concept and Electronic Device Description Language (EDDL)*

IEC 62023:2000, *Structuring of technical information and documentation*

IEC 62027:2000, *Preparation of parts lists*

IEC 62079:2001, *Preparation of instructions – Structuring, content and presentation*

IEC 81714-2:1998, *Design of graphical symbols for use in the technical documentation of products – Part 2: Specification for graphical symbols in a computer-sensible form including graphical symbols for a reference library, and requirements for their interchange*

IEC 82045-1:2001, *Document management – Part 1: Principles and methods*

IEC 82045-2:2004, *Document management – Part 2: Metadata elements and information reference model*

ISO 31 (all parts), *Quantities and units* [1]

ISO 128-22:1999, *Technical drawings – General principles of presentation – Part 22: Basic conventions and applications for leader lines and reference lines*

ISO 128-30:2001, *Technical drawings – General principles of presentation – Part 30: Basic conventions for views*

ISO 2594:1972, *Building drawings – Projection methods*

ISO 3098-5:1997, *Technical product documentation – Lettering – Part 5: CAD- lettering of the Latin alphabet, numerals and marks*

ISO 5807:1985, *Information processing – Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts*

ISO 5455:1979, *Technical drawings – Scales*

ISO 5456-2:1996, *Technical drawings – Projection methods – Part 2: Orthographic representations*

ISO 5457:1999, *Technical product documentation – Sizes and layout of technical drawing sheets*

ISO 10209-1:1992, *Technical product ducumentation – Vocabulary – Part 1: Terms relating to technical drawings: general and types of drawings*

ISO 10628:1997, *Flow diagrams for process plants – General rules*

ISO 14617 (all parts), *Graphical symbols for diagrams*

ISO 81714-1:1999, *Design of graphical symbols for use in the technical documentation of products – Part 1: Basic rules*

[1] Published as a compilation in ISO Standards Handbook, Quantities and units.