



SLOVENSKI STANDARD

SIST EN 61082-1:1997

01-december-1997

Preparation of documents used in electrotechnology - Part 1: General requirements (IEC 1082-1:1991)

Preparation of documents used in electrotechnology -- Part 1: General requirements

Dokumente der Elektrotechnik -- Teil 1: Allgemeine Regeln

Etablissement des documents utilisés en électrotechnique -- Partie 1: Prescriptions générales

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Ta slovenski standard je istoveten z: **EN 61082-1:1993**

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ICS:

01.110	Tehnična dokumentacija za izdelke	Technical product documentation
29.020	Elektrotehnika na splošno	Electrical engineering in general

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en

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EUROPEAN STANDARD

EN 61082-1

NORME EUROPEENNE

EUROPÄISCHE NORM

September 1993

UDC 621.3:061:003.62

Supersedes HD 246.1 S1:1977,
HD 246.3 S1:1977 and HD 246.7 S1:1984

Descriptors: Documentation, electrotechnology, general requirements,
drawing rules, diagrams

ENGLISH VERSION

Preparation of documents used in electrotechnology
Part 1: General requirements
(IEC 1082-1:1991)

Etablissement des documents
utilisés en électrotechnique
Partie 1: Prescriptions
générales
(CEI 1082-1:1991)

Erstellung von in der
Elektrotechnik verwendeten
Dokumenten
Teil 1: Allgemeine Anforderungen
(IEC 1082-1:1991)

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This European Standard was approved by CENELEC on 1993-07-06.
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,
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

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

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 1082-1:1991 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 61082-1 on 6 July 1993.

This European Standard replaces HD 246.1 S1:1977, HD 246.3 S1:1977 and HD 246.7 S1:1984.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1994-10-01
- latest date of withdrawal of conflicting national standards (dow) 1994-10-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given only for information. In this standard, annex A is informative and annex ZA is normative.

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ENDORSEMENT NOTICE

The text of the International Standard IEC 1082-1:1991 was approved by CENELEC as a European Standard without any modification.



ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD
WITH THE REFERENCES OF THE RELEVANT 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.

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

IEC Publication	Date	Title	EN/HD	Date
27-1	1971	Letter symbols to be used in electrical technology - Part 1: General	HD 245.1 S3*	1979
76-4, mod	1976	Power transformers - Part 4: Tappings and connections	HD 398.4 S1	1980
417	1973	Graphical symbols for use on equipment Index, survey and compilation of the single sheets	HD 243 S10*	1993
617-1	1985	Graphical symbols for diagrams Part 1: General information, general index - a Cross-reference tables	-	-
617-2	1983	Part 2: Symbol elements, qualifying symbols and other symbols having general application	-	-
617-3	1983	Part 3: Conductors and connecting devices	-	-
617-4	1983	Part 4: Passive components	-	-
617-5	1983	Part 5: Semiconductors and electron tubes	-	-
617-6	1983	Part 6: Production and conversion of electrical energy	-	-
617-7	1983	Part 7: Switchgear, controlgear and protective devices	-	-
617-8	1983	Part 8: Measuring instruments, lamps and signalling devices	-	-
617-9	1983	Part 9: Telecommunications: Switching and peripheral equipment	-	-
617-10	1983	Part 10: Telecommunications: Transmission	-	-

* HD 245.1 S3 includes A1:1974 and A2:1977 to IEC 27-1
HD 243 S10 includes supplements A:1974 to K:1991 to IEC 417

IEC Publication	Date	Title	EN/HD	Date
617-11	1983	Part 11: Architectural and topographical installation plans and diagrams	-	-
617-12	1991	Part 12: Binary logic elements	-	-
617-13	1978*	Part 13: Analogue elements	-	-
750	1983	Item designation in electrotechnology	-	-
848	1988	Preparation of function charts for control systems (Corrigendum 1990)	-	-
1082-2	-	Preparation of documents used in electrotechnology Part 2: Function-oriented diagrams (in preparation)	-	-

Other publications quoted:

ISO 31-1	1978	Quantities and units of space and time	
ISO 31-2	1978	Quantities and units of periodic and related phenomena	
ISO 31-3	1978	Quantities and units of mechanics	
ISO 31-4	1978	Quantities and units of heat	
ISO 31-5	1979	Quantities and units of electricity and magnetism	
ISO 31-6	1980	Quantities and units of light and related electromagnetic radiations	
ISO 31-7	1978	Quantities and units of acoustics	
ISO 31-8	1980	Quantities and units of physical chemistry and molecular physics	
ISO 31-9	1980	Quantities and units of atomic and nuclear physics	
ISO 31-10	1980	Quantities and units of nuclear reactions and ionizing radiations	
ISO 31-11	1978	Mathematical signs and symbols for use in the physical sciences and technology	
ISO 31-12	1981	Dimensionless parameters	
ISO 31-13	1981	Quantities and units of solid state physics	

* IEC 617-13:1978 is superseded by IEC 617-13:1993, which is harmonized as EN 60617-13:1993

Other publications quoted:

ISO 128	1982	General principles of presentation
ISO 129	1985	Technical drawings - Dimensioning - General principles, definitions, methods of execution and special indications
ISO 216	1975	Writing paper and certain classes of printed matter Trimmed sizes - A and B series
ISO 1219	1976	Fluid power systems and components - Graphic symbols
ISO 2594	1972	Building drawings - Projection methods
ISO 3098-1	1974	Technical drawings - Lettering Part 1: Currently used characters
ISO 3098-2	1984	Technical drawings - Lettering Part 2: Greek characters
ISO 3098-3	1987	Technical drawings - Lettering Part 3: Diacritical and particular marks for the Latin alphabet
ISO 3098-4	1984	Technical drawings - Lettering Part 4: Cyrillic characters
ISO 3461-2	1987	Graphical symbols - Part 2: General principles for creation of graphical symbols for use in technical product documentation
ISO 5455	1979	Technical drawings - Scales
ISO 5457	1980	Technical drawings - Sizes and layout of drawing sheets
ISO 6428	1982	Technical drawings - Requirements for microcopying
ISO 7200	1984	Technical drawings - Title blocks

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INTERNATIONAL STANDARD

IEC 61082-1

First edition
1991-12

Preparation of documents used in electrotechnology –

Part 1: General requirements

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PREPARATION OF DOCUMENTS USED IN
ELECTROTECHNOLOGY

Part 1: General requirements

FOREWORD

1. The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees in which all the National Committees having a special interest are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
2. They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
3. In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This International Standard has been prepared by Sub-Committee 3B: Documentation, of IEC Technical Committee No. 3: Documentation and graphical symbols.

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

Six Months' Rule	Report of Voting	Two Months' Procedure	Report of Voting
3B(CO)42	3B(CO)44	3B(CO)45	3B(CO)46

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

The publication consists of several parts as set out below:

- Part 1: General requirements
- Part 2: Function-oriented diagrams (*in preparation*)
- Part 3: Connection diagrams, tables and lists (*in preparation*)

Other subjects are under consideration:

- *Parts lists*
- *Spare parts lists*
- *Installation documents*

IEC 1082 is derived from the previous IEC 113 and will replace this publication in its entirety. Due to restructuring and extensions of the material, there is no exact correspondence between the parts of IEC 1082 and those of IEC 113. However, the following list gives an approximate indication:

- IEC 1082-1 corresponds to IEC 113-1, -3 and parts of -7 and -8.
- IEC 1082-2 corresponds to IEC 113-4 and parts of -7 and -8.
- IEC 1082-3 corresponds to IEC 113-5 and -6.

Annex A of the first part of the standard contains extracts from ISO Standards dealing with general drawing rules. The standards as such are normative. However, as standards are subject to revision, Annex A should, for the purpose of this standard, be considered as informative. For further information, see Clause 1.2.

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Section 1 - General

PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY

1.1 Scope

This International Standard provides general rules and guidelines for the preparation of documents used in electrotechnology, and specific rules and guidelines for certain kinds of documents.

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

1.2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 27-1:1971	Letter symbols to be used in electrical technology - Part 1: General
IEC 76-4:1976	Power transformers - Part 4: Tappings and connections
IEC 417:1973	Graphical symbols for use on equipment - Index, survey and compilation of the single sheets
IEC 617-1:1985	Graphical symbols for diagrams - Part 1: General information, general index. Cross-reference tables
IEC 617-2:1983	Graphical symbols for diagrams - Part 2: Symbol elements, qualifying symbols and other symbols having general application
IEC 617-3:1983	Graphical symbols for diagrams - Part 3: Conductors and connecting devices
IEC 617-4:1983	Graphical symbols for diagrams - Part 4: Passive components
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IEC 617-9:1983	Graphical symbols for diagrams - Part 9: Telecommunications: Switching and peripheral equipment
IEC 617-10:1983	Graphical symbols for diagrams - Part 10: Telecommunications: Transmission
IEC 617-11:1983	Graphical symbols for diagrams - Part 11: Architectural and topographical installation plans and diagrams
IEC 617-12:1991	Graphical symbols for diagrams - Part 12: Binary logic elements
IEC 617-13:1978	Graphical symbols for diagrams - Part 13: Analogue elements
IEC 750:1983	Item designation in electrotechnology
IEC 848:1988	Preparation of function charts for control systems
IEC 1082-2	Preparation of documents used in electrotechnology - Part 2: Function-oriented diagrams (<i>in preparation</i>)
ISO 31-1:1978	Quantities and units of space and time
ISO 31-2:1978	Quantities and units of periodic and related phenomena
ISO 31-3:1978	Quantities and units of mechanics
ISO 31-4:1978	Quantities and units of heat
ISO 31-5:1979	Quantities and units of electricity and magnetism
ISO 31-6:1980	Quantities and units of light and related electromagnetic radiations
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Section 2 - DEFINITIONS, CLASSIFICATION

2.1 Definitions

For the purpose of this International Standard, the following definitions apply.

In the definitions, terms that are defined elsewhere within this clause, are shown in *italics*.

2.1.1 Basic terms

The interrelations among some of the terms are illustrated in figure 1.

2.1.1.1 medium : Material on which information is recorded, for example paper, microform, magnetic or optical disk.

2.1.1.2 document : Information on a data *medium*. Normally, a document is designated in accordance with the type of information and the form of presentation, for example *overview diagram*, *connection table*, *function chart*.

Note: - Information may appear in a static manner on paper and microform or dynamically on (video) display devices.

2.1.1.3 drawing (technical) : *Document* presenting information in a graphical manner, which may include text.

2.1.1.4 documentation :

1. collection of *documents* related to a given subject;
2. processing of *documents*.

2.1.2 Forms of the presentation of information

2.1.2.1 pictorial form : Graphical presentation depicting the shape, size, etc. of a physical part or assembly, often to scale.

2.1.2.2 plan¹⁾ : *Drawing* showing a horizontal view, section or cut.

2.1.2.3 diagram¹⁾ : Graphical presentation depicting, by the use of graphical symbols and outlines with inscriptions, the relations among the components and the parts of a system or of an equipment including the interconnections.

2.1.2.4 map¹⁾ : Graphical presentation of an installation with respect to its surrounding topography.

2.1.2.5 chart, graph¹⁾ : Graphical presentation describing the behaviour of a system, for example the relations between two or more variable quantities, operations or states.

2.1.2.6 table, list¹⁾ : Presentation form using columns and rows.

2.1.2.7 textual form : Presentation form using text, for example in written instructions and descriptions.

¹⁾ The term is used with two different meanings: for the form of presentation (as defined) and for the document.