SLOVENSKI STANDARD
SIST EN 61355:1997

01-december-1997

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

Classification and designation of documents for plants, systems and equipment

Klassifikation und Kennzeichnung von Dokumenten für Anlagen, Systeme und Einrichtungen

Classification et désignation des documents pour installations industrielles, systèmes et matériels

Ta slovenski standard je istoveten z: **EN 61355:1997**

ICS:

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

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EUROPEAN STANDARD

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English version

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

Classification et désignation des documents pour installations industrielles, systèmes et matériels
(CEI 61355:1997)

Klassifikation und Kennzeichnung von Dokumenten für Anlagen, Systeme und Einrichtungen
(IEC 61355:1997)

This European Standard was approved by CENELEC on 1997-03-11. 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.

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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

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Foreword

The text of document 3B/181/FDIS, future edition 1 of IEC 61355, prepared by SC 3B, Documentation, of IEC TC 3, Documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61355 on 1997-03-11.

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) 1998-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-01-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annexes B, C, D and E are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61355:1997 was approved by CENELEC as a European Standard without any modification.

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

IEC 61082-2	NOTE: Harmonized as EN 61082-2:1994 (not modified).
IEC 61082-3	NOTE: Harmonized as EN 61082-3:1994 (not modified).
IEC 61082-4	NOTE: Harmonized as EN 61082-4:1996 (not modified).
ISO 11442-1	NOTE: Harmonized as EN ISO 11442-1:1996 (not modified).
ISO 11442-2	NOTE: Harmonized as EN ISO 11442-2:1996 (not modified).
ISO 11442-3	NOTE: Harmonized as EN ISO 11442-3:1996 (not modified).
ISO 11442-4	NOTE: Harmonized as EN ISO 11442-4:1996 (not modified).

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.

Publication	Year	Title	EN/HD	Year
IEC 61082-1	1991	Preparation of documents used in electrotechnology Part 1: General requirements	EN 61082-1	1993
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
ISO 639	1988	Code for the representation of names of languages	-	-
ISO 3166	1993	Codes for the representation of names of countries	EN 23166	1993
ISO 7200	1984	Technical drawings - Title blocks	-	-
ISO 9000	series	Quality management and quality assurance standards	EN ISO 9000	series
ISO/IEC 8613-1	1994	Information technology - Open Document Architecture (ODA) and interchange format: Introduction and general principles	-	-

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Classification et désignation des documents pour installations industrielles, systèmes et matériels

Classification and designation of documents for plants, systems and equipment

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Classification and designation of documents for plants, systems and equipment

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.

3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

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

International Standard IEC 61355 has been prepared by sub-committee 3B: Documentation, of IEC technical committee 3: Documentation and graphical symbols.

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

FDIS	Report on voting
3B/181/FDIS	3B/203/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.

Annex A forms an integral part of this standard.

Annexes B, C, D and E are for information only.

INTRODUCTION

Documentation is necessary for the provision of information for all activities during the life-cycle of technical products which include plants, systems and equipment. It may be produced in any phase or activity. Documents may be received from and delivered to other parties. Different parties may need different information or different views on the same information, depending on what is most suitable for the intended purpose.

In this standard the term "document" is used in a very general sense. It covers information on all possible media on which data can be recorded. However the description of document kinds is derived from the paper-based presentation of this information, i.e. how the information is made visible and readable for the user.

One aim of this standard is to establish a method for better communication and understanding between parties involved in document interchange. In order to get a basis for a system, it is necessary to disregard, more or less, what a document is called today. Different names are in use for the same document kind or the names may have different meanings for different parties. The purpose and object of interest are sometimes also part of document titles, which hampers general understanding. Therefore the basis for a common understanding should be a classification scheme which is based only on the content of information.

Another aim of this standard is to set up rules for relating documents to the objects they describe. For this purpose a document designation system is provided, linking the document kind designation to the object designation used within the plant, system or equipment. Following the rules and recommendations given, the documentation reflects the structure of the "real installation". By that also guidance is given for order and filing as well as for structured searching for information, for example in document retrieval systems.

The principle of classification also covers the needs of computer-based documentation in general. An increasing amount of information will be stored and interchanged in a standardized data base format. The information to be delivered may be specified in such a way that each document kind required and agreed by parties can be derived from that data base by the receiver's computer system. This may initiate future standardization work, for example on information and data elements, detailed document kind definitions and detailed presentation rules.

Although this standard has been prepared mainly by experts from the field of electrotechnology, high value was set on the integration of non-electrotechnical documents. Experts from the more ISO-related fields of technology made considerable input to this document.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Classification and designation of documents for plants, systems and equipment

1 Scope

This International Standard provides rules and guidelines for the classification and designation of documents. It serves as a basis for agreements about the preparation of a structured documentation, primarily required for larger installations, for example plants with their systems and equipment. It covers all technical areas and is open for further development of documentation and documentation systems. Guidance is also given for applications such as communication in the field of documentation and for document identification.

Documents from non-technical areas are included to the extent required for and during the engineering process.

2 Normative references

The following normative documents 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 normative documents 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 normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61082-1: 1991, *Preparation of documents used in electrotechnology – Part 1: General requirements*

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

ISO 639: 1988, *Code for the representation of names of languages*

ISO 3166:1993, *Codes for the representation of names of countries*

ISO 7200: 1984, *Technical drawings – Title blocks*

ISO 9000: *Quality management and quality assurance standards*

ISO/IEC 8613-1: 1994, *Information technology – Open Document Architecture (ODA) and interchange format: Introduction and general principles*

3 Definitions

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

3.1 data medium: Material on which data can be recorded and from which they can be retrieved.

3.2 document:

NOTE – The term "document" is not restricted to its legal meaning.

a) 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. [IEC 61082-1]

NOTE – Information may appear in a static manner on paper and microform, or dynamically on (video) display devices.

b) Structured amount of information for human perception that can be interchanged as a unit between users and systems. [ISO/IEC 8613-1]

c) Information on a data carrier treated as a unit. (Definition from ISO/TC10/SC1 WG5)

3.3 document set: Composition of documents logically belonging together.

3.4 documentation: Collection of documents related to a given subject. [IEC 61082-1]

NOTE – This may include technical, commercial and/or other documents.

3.5 document kind: Type of document defined with respect to its specified content of information and form of presentation.

3.6 document kind class: Group of document kinds having similar characteristics concerning the content of information independent of the form of presentation.

3.7 object: Entity treated in the process of design, engineering, realisation, operation, maintenance and demolition. [IEC 61346-1]

NOTES

1 The entity may refer to a physical or non-physical "thing", or to a set of information associated with it.

2 Depending on its purpose, an object may be viewed in different ways called "aspects".

3.8 system: Set of interrelated objects with the purpose of performing a common function.

3.9 plant: Assembly of different systems on a specific site.

3.10 equipment: Components and parts used or required for a particular purpose.

3.11 project: Generic term for the sum of commercial and technical activities related to a specific object.

3.12 object designation: Identifier of a specific object.

NOTE – Examples of such designations are: reference designation (formerly called "item designation"), type number, serial number, name.

3.13 document designation: Identifier of a specific document in relation to an object to which the document is assigned.

4 Classification of document kinds

4.1 *General*

Documents provide information necessary for different activities and purposes during the life cycle of a plant, system or equipment. The term "document" is not restricted to a paper-based presentation of the information. It also covers other forms of information storage, such as data files on electronic media or in a data base.

Information by itself is not understandable for a human reader, unless it is presented in an agreed readable and interpretable form. In most cases, such a form is defined only for traditional paper-based documents. Therefore the descriptions of document kinds are derived from the paper-based presentation. Other forms of visualisation, e.g. presentation on a video screen or on a display, are assumed to be equal or at least similar to the paper-based presentation.

A document may be classified according to different aspects:

- object (to which it belongs);
- content of information;
- purpose (for what activity it is needed);
- form of presentation (see annex C).

The classification of document kinds is based on the content of information. The class definition is independent from the object to which a particular document belongs. The purpose for which a document is made cannot serve as a basis for classification, because a document normally serves more than one purpose. The same applies for the phase in the life cycle of a plant, system or equipment, in which a document is prepared or used. Nor is the form of presentation an adequate means for classification, because the information contained in a document may be presented in different ways.

A document kind is defined with respect to its characteristic information content and its form of presentation. Two different documents are of the same kind if they have similar characteristics concerning the content of information, and if they have the same form of presentation.

A document can be defined as a document kind with a specified content of information and form of presentation, prepared for a specific object and/or purpose.

A large variety of names of document kinds is used. Many of them are not standardized but may be well known to a specific group of users. The same kind of document may have different names among different groups of users. The use of names of document kinds is for this reason not sufficient for communication between different parties.

In order to reach a common understanding among parties about documents to be exchanged or delivered, a document kind classification code (DCC) has been established in this standard. This code shall be the common basis of understanding about the content of information, independent from the non-defined or standardized names of document kinds.

Each document kind classification code is accompanied by a short description of the content of information and examples of document kinds belonging to that class (see annex A). Examples of established document kinds, which are standardized or commonly known, are also presented, together with a short description of the content of information. Where feasible, the description has been divided into two parts: a list of the minimum content of information and possible additional information (see annex B).

The object of this standard is to cover all document kinds which are in use during the life cycle of a plant, system or equipment. The fact that documents from different technical areas may come together within one project and that they must be clearly distinguishable from one another shall be taken into consideration. Future development will establish new document kinds which shall fit into the defined structure. These aspects have been dealt with in the following ways:

- at top-level, document kinds may be separated according to the "technical area" aspect. Each technical area shall use the same classification scheme below that level;

  NOTE – Not all classes defined below the top-level may exist in each technical area. In such cases these classes remain empty.

- the division into main classes is valid for all technical areas;
- subclasses of document kinds have been established in a generic way in order to allow appropriate assignment of document kinds within all technical areas;
- within the letter code for main classes and subclasses of document kinds, space for future extension has been provided;
- user groups may define their specific document kinds which are not listed in this standard. This shall be done within the established subclasses of document kinds.

4.2 *Document kind classification code*

4.2.1 *Basic principles for classification of document kinds*

The main subject for the classification of document kinds shall be the content of information. If a document kind contains more than one kind of information, the leading aspect shall govern its classification.

Document kinds can be classified according to different levels and aspects (see figure 1).

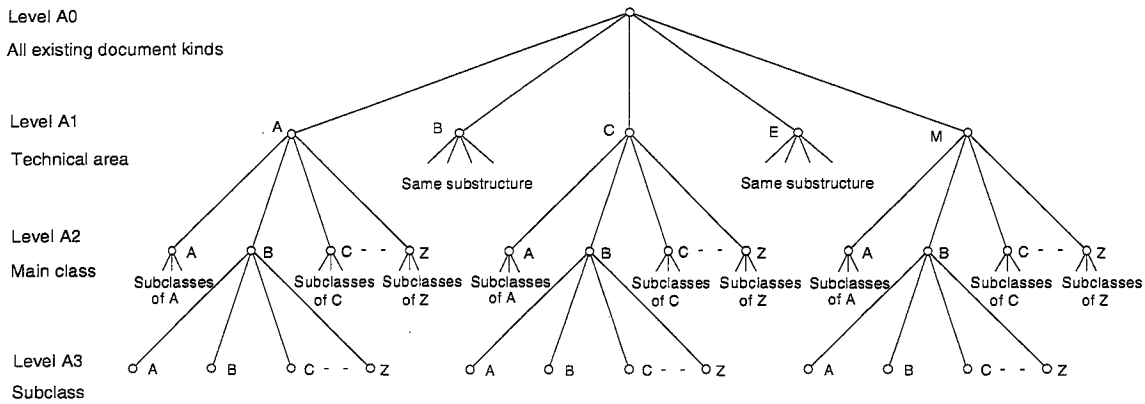

Figure 1 – Classification structure of document kinds

Level A0 represents all existing document kinds.

NOTE – According to structuring principles, the top-node is not associated with a designation.

Each node in level A1 represents all document kinds which are in use in a specific technical area. The node designated, for example, by letter E represents all document kinds used in electrotechnology. Each node in level A1 shall make use of the same substructure represented by levels A2 and A3.

Each node in level A2 represents a main class of document kinds. The main classes represent a subdivision of all document kinds related to one node in level A1. Document kinds belong to the same main class if they contain the same type of leading information.

Each node in level A3 represents a subclass of document kinds. The subclasses represent a subdivision of the main classes existing in level A2. Document kinds belong to the same subclass if they have a common description of the content of information within the description of the main class in level A2.