SLOVENSKI STANDARD

SIST EN 61360-4:2000

01-februar-2000

Standard data element types with associated classification scheme for electric components - Part 4: IEC collection of standard data element types, component classes and terms (IEC 61360-4:1997)

Standard data element types with associated classification scheme for electric components -- Part 4: IEC reference collection of standard data element types, component classes and terms

Genormte Datenelementtypen mit Klassifikationsschema für elektrische Bauteile -- Teil 4: IEC Nachschlagewerk für genormte Datenelementtypen, Bauteilklassen und Terme

Types normalisés d'éléments de données avec plan de classification pour composants électriques -- Partie 4: Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes

Ta slovenski standard je istoveten z: **EN 61360-4:1997**

<u>**ICS:**</u>

29.100.20	Električni in elektromehanski sestavni deli	Electrical and electromechanical components

SIST EN 61360-4:2000 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English version

Standard data element types with associated classification scheme for electric components Part 4: IEC reference collection of standard data element types, component classes and terms (IEC 61360-4:1997)

Types normalisés d'éléments de données avec plan de classification pour composants électriques Partie 4: Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes (CEI 61360-4:1997)

Genormte Datenelementtypen mit Klassifikationsschema für elektrische Bauteile Teil 4: IEC Nachschlagewerk für genormte Datenelementtypen, Bauteilklassen und Terme (IEC 61360-4:1997)

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.

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

Ref. No. EN 61360-4:1997 E

Foreword

The text of document 3D/48/FDIS, future edition 1 of IEC 61360-4, prepared by SC 3D, Data sets for libraries of electric component data, of IEC TC 3, Documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61360-4 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 to J and ZA are normative and annex K is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61360-4:1997 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.

Publication	Year	Title	EN/HD	Year
IEC 61360-1	1995	Standard data element types with associated classification scheme for electric components Part 1: Definitions - Principles and methods	EN 61360-1	1995
IEC 3D/38/CDV	[1]	Part 2: EXPRESS dictionary schema	-	-
IEC 61360-3	1995	Part 3: Maintenance and validation procedures	-	-

1) Future IEC 61360-2.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

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IEC
61360-4

Première édition
First edition
1997-04

Types normalisés d'éléments de données avec plan de classification pour composants électriques –

Partie 4: Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes

Standard data element types with associated classification scheme for electric components –

Part 4: IEC reference collection of standard data element types, component classes and terms

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

STANDARD DATA ELEMENT TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC COMPONENTS — Part 4 : IEC reference collection of standard data element types, component classes and terms

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 Organisation 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. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61360-4 has been prepared by subcommittee 3D: Data sets for libraries of electric component data of IEC technical committee 3: Documentation and graphical symbols.

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

FDIS	Report on voting
3D/48/CDV	3D/51/RVC

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

IEC 61360 consists of the following parts, under the general title Standard data element types with associated classification scheme for electric components:

Part 1 : Definitions - Principles and methods
Part 2 : EXPRESS Dictionary schema
Part 3 : Maintenance and validation procedures
Part 4 : IEC reference collection of standard data element types, component classes and terms.

Annexes A, B, C, D, E, F, G, H and J form an integral part of this standard.
Annex K is for information only.

It is envisaged that this IS issue will be the last one as hard copy, but that subsequent amendments which will include data element types added by the validation and maintenance agencies will result in such a large volume that the bulk of the information will only be supplied in a computer sensible form.

STANDARD DATA ELEMENT TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC COMPONENTS —

Part 4 : IEC reference collection of standard data element types, component classes and terms

1 General

1.1 *Scope and object*

This part of IEC 61360 specifies within three dictionaries:
- the definitions of data element types for electric components and materials used in electrotechnical equipment and systems;
- the definitions of the component classes with associated classification scheme;
- the definitions of the terms used to clarify this classification scheme and those terms used in the data element type definitions which could possibly be misunderstood.

These definitions are related to electric components including electronic and electromechanical components and materials used in electrotechnical equipment and systems.

The object of this standard is to provide a set of uniquely-identified data element types with
- an unambiguously defined meaning;
- a defined value format, and
- a prescribed value domain for the non-quantitative data element types.

The classification scheme for components, the component class definitions (whereby the relevant and the valid characteristic properties by specific data element types are assigned to each class of components) and the terms definitions are used to define the data element types unambiguously and to make the entire set of data element types manageable.

The collection of data element types from this International Standard are meant for use in computerized systems for component selection and component management, parts list processing and computer-aided design, -manufacturing and -testing.

1.2 *Normative references*

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61360. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this part of 1360 are encouraged to investigate the possibility of applying the most recent editions of the normative documents below. Members of and ISO maintain registers of currently valid International Standards.

IEC 61360-1: 1995,	*Standard data element types with associated classification scheme for electric components — Part 1: Definitions - Principles and methods*
IEC 3D/38/CDV	*Standard data element types with associated classification scheme for electric components — Part 2: EXPRESS dictionary schema* (future IEC 61360-2)

IEC 61360-3: 1995, *Standard data element types with associated classification scheme for electric components — Part 3: Maintenance and validation procedures*

1.3 *Informative references*

All mentioned references in the definitions of the entities in this document are listed in the informative annex K.

2 Definitions

For the purpose of this part of IEC 61360, the definitions as given in clause 2 of IEC 61360-1 as well as those given in annex G apply.

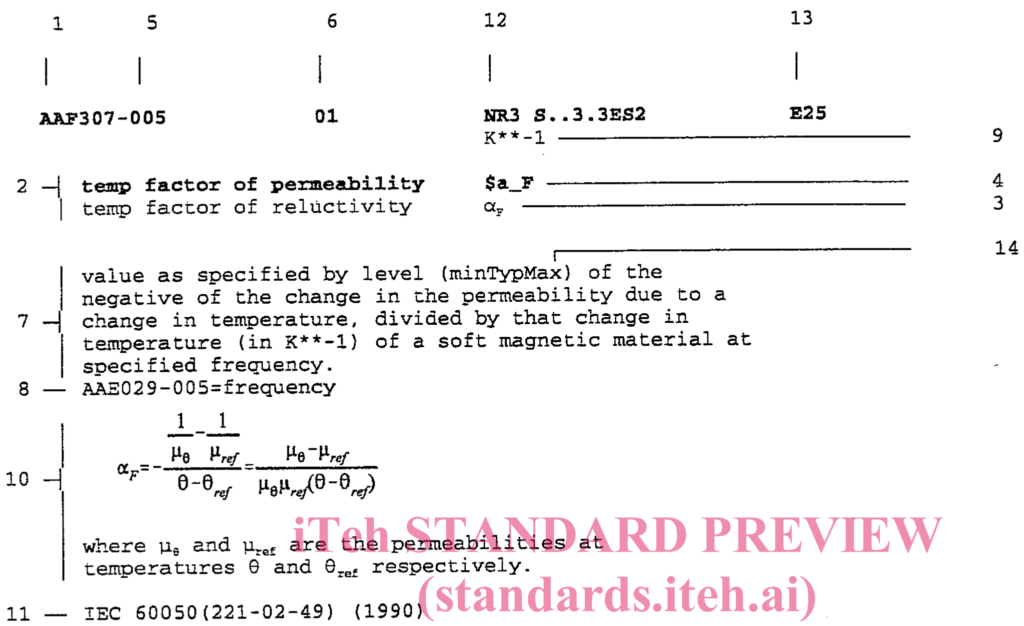
3 Maintenance and validation methodology

The collection of entities as defined in this standard is a dynamic collection which needs actively to be maintained.
IEC 61360-3 specifies the procedures that shall be followed by the Validation Agency and the Maintenance Agency of the IEC vocabulary of standard technical data element types with associated classification scheme, component classes as defined by this classification scheme and terms associated with the value meaning of classifying data element types used to clarify the classification scheme and those terms used in the data element type definitions which could possibly be misunderstood.

4 Data element types

4.1 *Data element type specification attributes*

The various attributes of the data element types are explained with the aid of figure 1. For a detailed description of the various attributes of the data element type definitions, see IEC 61360-1.


1
5
6
12
13
AAF307-005
01
NR3 S..3.3ES2
E25
K**-1
9
2
temp factor of permeability
temp factor of reluctivity
$a_F
4
3
14
7
value as specified by level (minTypMax) of the negative of the change in the permeability due to a change in temperature, divided by that change in temperature (in K**-1) of a soft magnetic material at specified frequency.
8
AAE029-005=frequency
10
$\alpha_F = -\frac{\frac{1}{\mu_\theta} - \frac{1}{\mu_{ref}}}{\theta - \theta_{ref}} = \frac{\mu_\theta - \mu_{ref}}{\mu_\theta \mu_{ref}(\theta - \theta_{ref})}$
where μ_θ and μ_{ref} are the permeabilities at temperatures θ and θ_{ref} respectively.
11
IEC 60050(221-02-49) (1990)

1 Code (3.2.1) [1)]
2 Preferred name / synonymous name (3.2.2/3.2.3) [1)]
3 Preferred letter symbo l /synonymous letter symbol (3.2.4/3.2.5) [1)]
4 Short name (3.2.6) [1)]
5 Version number (3.2.7) [1)]
6 Revision number (3.2.8) [1)]
7 Definition (3.3.1) [1)]
8 Condition(s) (3.5.3) [1)]
9 Unit of measure (3.4.3) [1)]
10 Formula (3.3.5) [1)]
11 Source document of data element type definition (3.3.6) [1)]
12 Value format (3.4.1) [1)]
13 Data element type class (3.5.2) [1)]
14 Level (3.4.5) [1)]

Figure 1 - Quantitative data element type specification attributes

4.2 *Data element type definitions*

In annex A the definitions of the data element types of materials and electric components, including electronic components, are given.
The definitions are presented in an alphanumerical sequence of the data element type identifier.

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1) These subclauses refer to the subclauses in IEC 61360-1.
Other attributes as specified in IEC 61360-1 may be applicable for other definitions.

4.2.1 *Index on letter symbol and/or short name*

In annex B an index is given presenting the data element type definitions sorted with the letter symbol and/or short name as primary key. The letter symbol/short name are sorted according to: bracket <<(>>, dollar sign <<$>>, commercial add <<@>>, absolute sign <<|>> and alphabetic. Greek letters are sorted according to the <<Latin writing>> of the Greek characters.
The layout of this index as used in this standard is given in figure 2.

Short name / letter symbol	Identifier
drive feature	AAF014-005
dV_com/dt	AAE741-005
dV_{com}/dt	AAE741-005
dV_D/dt	AAE740-005
dV_D/dt	AAE741-005
dV_D/dt	AAE740-005
E	AAE180-005
E series	AAE030-005
E_abs	AAE480-005

Figure 2 - Index on letter symbol and/or short name

4.2.2 *Index on keywords from the preferred names and synonymous names*

In annex C an index is presented in which the significant keywords from the preferred names and synonymous names of the data element type definitions are taken as primary keys.
The keywords are sorted according to: bracket <<(>> and further alpha-numeric.
The layout of this index as used in this standard is given in figure 3.

Keyword	Preferred name / synonymous names	Identifier
(2-tau)	spurious signal level (2-tau)	AAE888-005
(3-tau)	spurious signal level (3-tau)	AAE879-005
(air)	(air) gap length	AAE778-005
(BH)_max	field strength at (BH)_max	AAF289-005
	flux density at (BH)_max	AAF293-005
(cap)	circuit application (cap)	AAE034-005
	temperature coefficient (cap)	AAE067-005
(capacitor)	(capacitor) dielectric	AAE004-006
(ceramic	dielectric class (ceramic cap)	AAE038-005
(IEC)	resistance law (IEC)	AAE141-005
	voltage at class current (IEC)	AAE319-005

Figure 3 - Index on keywords from the preferred names and synonymous names

5 Component classes

5.1 *Component classification principles*

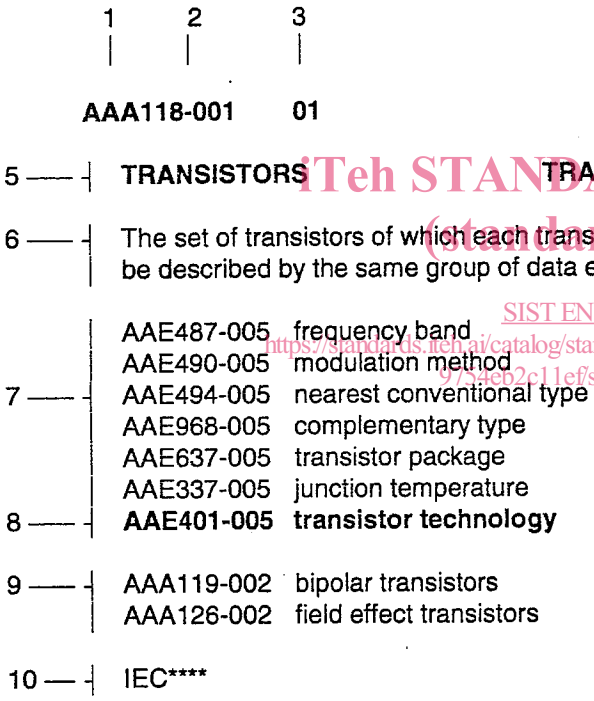
For the classification of components the principle of dividing the whole set of components into parts has been applied repeatedly, thereby creating a hierarchical tree of several levels of classes.

The goal of this classification scheme of components is to arrange the data element types in an unambiguous-structured way.

A detailed description of the classification principles is given in IEC 61360-1.

5.2 *Component class attributes*

The various attributes of the component classes are explained with the aid of figure 4. The layout is shown as used in this standard.
For a detailed description of the various attributes of the component class definitions see IEC 61360-1.



1 Code (5.3.1) [2)]
2 Version number (5.3.2) [2)]
3 Revision number (5.3.3) [2)]
4 Coded name (5.3.6) [2)]
5 Preferred name (5.3.5) [2)]
6 Definition (5.4.1) [2)]
7 Describing data element types, identifier + preferred name (3.2.9 - 3.2.2) [2)]
8 Classifying data element type, identifier + preferred name (2.12 - 3.2.9 - 3.2.2) [2)]
9 Subclasses, identifier + preferred name (5.3.4 - 5.3.5) [2)]
10 Source document of component class definition (5.4.4) [2)]

Figure 4 - Component class specification attributes

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2) These subclauses refer to the subclauses in IEC 61360-1.
Other attributes as specified in IEC 61360-1 may be applicable for other definitions.