SVENSK STANDARD SS-EN 61360-1

Fastställd	Utgåva	Sida	Ansvarig kommitté
2010-09-27	3	1 (1+85)	SEK TK 3

Datalelementtyper för elkomponenter med tillhörande klassificeringsschema – Del 1: Principer och metoder

Standard data element types with associated classification scheme for electric items – Part 1: Definitions – Principles and methods

Som svensk standard gäller europastandarden EN 61360-1:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61360-1:2010.

Nationellt förord

Europastandarden EN 61360-1:2010

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61360-1, Third edition, 2009 - Standard data element types with associated classification scheme for electric items - Part 1: Definitions - Principles and methods**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61360-1, utgåva 2, 2002 och SS-EN 61360-1/A1, utgåva 1, 2004, gäller ej fr o m 2013-05-01.

ICS 31.020

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: SEK, Box 1284, 164 29 KISTA
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61360-1

May 2010

ICS 31.020

Supersedes EN 61360-1:2002 + A1:2004

English version

Standard data elements types with associated classification scheme for electric items - Part 1: Definitions - Principles and methods

(IEC 61360-1:2009)

Types normalisés d'éléments de données avec plan de classification pour composants électriques - Partie 1: Définitions - Principes et méthodes (CEI 61360-1:2009)

Genormte Datenelementtypen mit Klassifikationsschema für elektrische Bauteile - Teil 1: Definitionen - Regeln und Methoden (IEC 61360-1:2009)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61360-1:2010 E

SEK Svensk Elstandard

Foreword

The text of document 3D/169/FDIS, future edition 3 of IEC 61360-1, prepared by 3D, Data sets for libraries, of IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61360-1 on 2010-05-01.

This European Standard supersedes EN 61360-1:2002 + A1:2004.

This EN 61360-1:2010 includes the following significant technical changes with respect to EN 61360-1:2002 + A1:2004 :

– extended administrative data for status and source of content;

– support of multiple language variants for data element types and classes;

– support for multiple alternative units for data element types;

– improved conventions for definition writing based on ISO 704 and ISO/IEC 11179-4;

– enhanced definitions and descriptions.

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

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)	2011-02-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61360-1:2009 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 60191-4:1999	NOTE	Harmonized as EN 60191-4:1999 (not modified).
IEC 60694	NOTE	Harmonized as EN 60694.

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	EN 60027	Series
IEC 60747	Series	Semiconductor devices	-	-
IEC 60748	Series	Semiconductor devices - Integrated circuits	-	-
IEC 61360-2	2002	Standard data element types with associated classification scheme for electric components - Part 2: EXPRESS dictionary schema	EN 61360-2	2002
IEC 61360-4	-	Standard data element types with associated classification scheme for electric components - Part 4: IEC reference collection of standard data element types and component classes	EN 61360-4	-
ISO/IEC 6523-1	-	Information technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization identification schemes	-	-
ISO/IEC 10646-1	-	Information technology - Universal Multiple-Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane	-	-
ISO/IEC 11179-3	-	Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements	-	-
ISO 31	Series	Quantities and units	EN ISO 31	Series
ISO 639-1	-	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 704	-	Terminology work - Principles and methods	-	-
ISO 843	1997	Information and documentation - Conversion of Greek characters into Latin characters	-	-
ISO 2382	Series	Data processing - Vocabulary	-	-
ISO 3166	Series	Codes for the representation of names of countries and their subdivisions	EN ISO 3166	Series
ISO 6093	-	Information processing - Representation of numerical values in character strings for information interchange	-	-

Publication	Year	Title	EN/HD	Year
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-
ISO 9735	-	Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules	-	-
ISO 10303-21	-	Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	-	-
ISO 13584-24	2003	Industrial automation systems and integration - Parts library - Part 24: Logical resources: Logical model of supplier library	-	-
ISO 13584-26	-	Industrial automation systems and integration - Parts library - Part 26: Logical resource: Information supplier identification	-	-
ISO 13584-42	-	Industrial automation systems and integration - Parts library - Part 42: Description methodology: Methodology for structuring part families	-	-
ISO 13731	-	Ergonomics of the thermal environment - Vocabulary and symbols	EN ISO 13731	-

CONTENTS

STANDARD DATA ELEMENTS TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC ITEMS –

Part 1: Definitions – Principles and methods

1 General

1.1 Scope

This part of IEC 61360 provides a firm basis for the clear and unambiguous definition of characteristic properties (data element types) of all elements of electrotechnical systems from basic components to sub-assemblies and full systems. Although originally conceived in the context of providing a basis for the exchange of information on electric/electronic components, the principles and methods of this standard may be used in areas outside the original conception such as assemblies of components and electrotechnical systems and subsystems.

In addition, this standard provides for establishing a classification hierarchy and the allocation of applicable and relevant properties to each of the classes so established in order to describe fully the characteristics of objects belonging to that class.

Use of this standard facilitates the exchange of data describing electrotechnical systems through a defined structure for the information to be exchanged in a computer-sensible form. Each property to be exchanged will have an unambiguously defined meaning and consistent naming, where relevant a defined value list, a prescribed format and defined units of measure for all quantitative values. There is also provision for:

– control of changes to definitions of the properties through version and revision numbers;
– inclusion of notes and remarks to clarify and help in the application of the definitions;
– indication of the sources of definitions and value lists;
– associated figures and formulae.

NOTE IEC TCs and SCs, or other organizations may take this part of IEC 61360 as a basis for the development of their own dictionaries.

1.2 ISO/IEC EXPRESS information model

Closely associated with this part of IEC 61360 is IEC 61360-2. This part contains the information model, using the EXPRESS modelling language. In this model, the definition and structure of IEC 61360-1 is formalized and presented in a computer-sensible form. Use of this information model allows dictionary information to be exchanged between different systems using the STEP physical file format as defined in ISO 10303-21.

This information model has also been accepted as the common information model with ISO/TC184/SC4 and is reproduced as ISO 13584-42. Use may be made of other standards in the ISO 13584 series of standards for extension of the concepts defined in this standard. In particular ISO 13584-24 contains provisions which allow:

– extensions of the class structure to include feature and functional model classes;
– tabulation of properties;
– functional relationships among properties;
– references to graphical information;
– structuring of parts libraries.

NOTE This part of IEC 61360 is intended to be compliant with the upcoming Edition 3 of IEC 61360-2 and Edition 2 of ISO 13584-42.

1.3 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 61360-2 :2002, *Standard data element types with associated classification scheme for electric components – Part 2: EXPRESS dictionary schema* (available in English only)

IEC 61360-4, *Standard data element types with associated classification scheme for electric components – Part 4: IEC reference collection of standard data element types and component classes* (available in English only)[1]

IEC 60747(all parts), *Semiconductor devices*

IEC 60748(all parts), *Semiconductor devices – Integrated circuits*

ISO 31(all parts), *Quantities and units*

ISO 639-1, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

ISO 704, *Terminology work – Principles and methods*

ISO 843:1997, *Information and documentation – Conversion of Greek characters into Latin characters*

ISO 2382 (all parts), *Information processing systems – Vocabulary*

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

ISO 6093, *Information processing – Representation of numerical values in character strings for information interchange*

ISO 8601, *Data elements and interchange formats – Information interchange – Representation of dates and times*

ISO 9735, *Electronic data interchange for administration, commerce and transport (EDIFACT) – Application level syntax rules*[2]

ISO 10303-21, *Industrial automation systems and integration – Product data representation and exchange – Part 21: Implementation methods: Clear text encoding of the exchange structure*

ISO 13584-24:2003, *Industrial automation systems and integration – Parts library – Part 24: Logical resource: Logical model of supplier library*

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1 This publication was withdrawn and replaced by IEC CDD (see bibliography)..

2 This normative reference is based on the Trade Data Elements Directory (TDED) of the United Nations Economic Commission for Europe (UNECE), Trade Facilitation.

ISO 13584-26, *Industrial automation systems and integration – Parts library – Part 26: Logical resource: Information supplier identification*

ISO 13584-42, *Industrial automation systems and integration – Parts library – Part 42: Description methodology: Methodology for structuring part families*

ISO 13731, *Ergonomics of the thermal environment – Vocabulary and symbols*

ISO/IEC 6523-1, *Information technology – Structure for the identification of organizations and organization parts – Part 1: Identification of organization identification schemes*

ISO/IEC 10646-1,*Information technology – Universal Multiple-Octet Coded Character set (UCS) – Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 11179-3, *Information technology – Metadata registries (MDR) – Part 3:Registry metamodel and basic attributes*