SVENSK STANDARD SS-EN 81714-2

Fastställd	Utgåva	Sida	Ansvarig kommitté
2007-12-17	2	1 (1+84)	SEK TK 3

Utformning av grafiska symboler för användning vid teknisk dokumentation av produkter – Del 2: Beskrivning av grafiska symboler för hantering i datorer, inklusive symboler för referensbibliotek och fordringar för utbyte

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

Som svensk standard gäller europastandarden EN 81714-2:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 81714-2:2007.

Nationellt förord

Europastandarden EN 81714-2:2007

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 81714-2, Second edition, 2006 - 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**

utarbetad inom International Electrotechnical Commission, IEC.

Del 1 av denna standard har beteckningen SS-EN ISO 81714-1.

Tidigare fastställd svensk standard SS-EN 81714-2, utgåva 1, 2000, gäller ej fr o m 2009-10-01.

ICS 01.080.50

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: SEK, Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00. *Telefax*: 08 - 444 14 30
E-post: sek@elstandard.se. *Internet*: www.elstandard.se

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.

SEK Svensk Elstandard
Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 81714-2

March 2007

ICS 01.080.50

Supersedes EN 81714-2:1998

English version

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 81714-2:2006)

Création de symboles graphiques utilisables dans la documentation technique de produits - Partie 2: Spécification pour symboles graphiques sous forme adaptée à l'ordinateur, y compris les symboles pour bibliothèque de références et exigences relatives à leur échange

(CEI 81714-2:2006)

Gestaltung von graphischen Symbolen zur Anwendung in der technischen Produktdokumentation - Teil 2: Spezifikation für graphische Symbole in rechnerinterpretierbarer Form einschließlich graphischer Symbole für eine Referenzbibliothek und Anforderungen für ihren Datenaustausch

(IEC 81714-2:2006)

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 81714-2:2007 E

Foreword

The text of the International Standard IEC 81714-2:2006, prepared by IEC TC 3, Information structures, documentation and graphical symbols, in cooperation with ISO subcommittee SC 1, Basic conventions, of ISO technical committee 10, Technical product documentation, was submitted to the formal vote and was approved by CENELEC as EN 81714-2 on 2006-10-01 without any modification.

This European Standard supersedes EN 81714-2:1998.

The main changes with respect to EN 81714-2:1998 are as follows:

Subclauses 6.16, 6.18 and Annex D contain the major changes; other changes are basically updates.

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)	2007-10-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-10-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 81714-2:2006 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:

ISO 10303-1	NOTE	Harmonized as ENV ISO 10303-1:1995 (not modified).
ISO 10303-11	NOTE	Harmonized as ENV ISO 10303-11:1995 (not modified).
ISO 10303-21	NOTE	Harmonized as ENV ISO 10303-21:1995 (not modified).
IEC 60445	NOTE	Harmonized as EN 60445:2000 (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 60617	Data-base	Graphical symbols for diagrams	-	-
IEC 61082-1	-[1)]	Preparation of documents used in electrotechnology - Part 1: Rules	EN 61082-1	2006[2)]
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 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 61346-2	2000	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes	EN 61346-2	2000
IEC 61360-1 A1	2002 2003	Standard data element types with associated classification scheme for electric components - Part 1: Definitions - Principles and methods	EN 61360-1 A1	2002 2004
IEC 61360-4	-[1)]	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 + corr. December	2005[2)] 2005
IEC 61666	1997	Industrial systems, installations and equipment and industrial products - Identification of terminals within a system	EN 61666	1997

[1)] Undated reference.

[2)] Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
IEC 61966-2-1	1999	Multimedia systems and equipment - Colour measurement and management - Part 2-1: Colour management - Default RGB colour space - sRGB	EN 61966-2-1	2000
IEC 81714-3	2004	Design of graphical symbols for use in the technical documentation of products - Part 3: Classification of connect nodes, networks and their encoding	-	-
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 7942-1	1994	Information technology - Computer graphics and image processing - Graphical Kernel System (GKS) - Part 1: Functional description	EN ISO/IEC 7942-1	1995
ISO/IEC 9592-1	1997	Information technology - Computer graphics and image processing - Programmer's Hierarchical Interactive Graphics System (PHIGS) - Part 1: Functional description	-	-
ISO 128-20	1996	Technical drawings - General principles of presentation - Part 20: Basic conventions for lines	EN ISO 128-20	2001
ISO 128-21	1997	Technical drawings - General principles of presentation - Part 21: Preparation of lines by CAD systems	EN ISO 128-21	2001
ISO 639-1	2002	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 3098-0	1997	Technical product documentation - Lettering - Part 0: General requirements	EN ISO 3098-0	1997
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 3166-1	1997	Codes for the representation of names of countries and their subdivisions - Part 1: Country codes	EN ISO 3166-1	1997
ISO 6428	1982	Technical drawings - Requirements for microcopying	EN ISO 6428	1999
ISO 6523-1	1998	Information technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization identification schemes	-	-
ISO 10303-201	1994	Industrial automation systems and integration - Product data representation and exchange - Part 201: Application protocol: Explicit draughting	ENV ISO 10303-201	1995

Publication	Year	Title	EN/HD	Year
ISO 81714-1	1999	Design of graphical symbols for use in the technical documentation of products - Part 1: Basic rules	EN ISO 81714-1	1999

CONTENTS

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

1 Scope

This part of International Standard 81714 specifies requirements for graphical symbols to be included in a reference symbol library in a computer sensible form, and requirements for their interchange among computer aided tools. The reference symbol library may be used as a basis for the design and editing of documents, and for the interchange of documents and graphical symbol libraries among computer-aided tools.

The specification of a physical file format required for the interchange is not included in this standard.

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 60617-DB, *Graphical symbols for diagrams*

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

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

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

IEC 61346-2:2000*, Industrial systems, installations and equipment, and industrial products – Structuring principles and reference designations – Part 2: Classification of objects and codes for classes*

IEC 61360-1:2004, *Standard data element types with associated classification scheme for electric components – Part 1: Definitions – Principles and methods*

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*