

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
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Beteckningar för signaler och förbindningar

*Industrial systems, installations and equipment and industrial products –
Designation of signals*

Som svensk standard gäller europastandarden EN 61175:2005. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61175:2005.

Nationellt förord

Europastandarden EN 61175:2005

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 61175, Second edition, 2005 - Industrial systems, installations and equipment and industrial products - Designation of signals

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61175, utgåva 1, 1994, gäller ej fr o m 2008-11-01.

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

Svenska Elektriska Kommissionen, SEK, 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

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EUROPEAN STANDARD

EN 61175

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2005

ICS 29.020

Supersedes EN 61175:1993

English version

**Industrial systems, installations
and equipment and industrial products -
Designation of signals
(IEC 61175:2005)**

Systemes, installations, appareils
et produits industriels -
Désignation des signaux
(CEI 61175:2005)

Industrielle Systeme, Anlagen und
Ausrüstungen und Industrieprodukte -
Kennzeichnung von Signalen
(IEC 61175:2005)

This European Standard was approved by CENELEC on 2005-11-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 text of document 3/753/FDIS, future edition 2 of IEC 61175, prepared by IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61175 on 2005-11-01.

This European Standard supersedes EN 61175:1993.

It includes the following significant technical changes with respect to EN 61175:1993:

The structure of the signal designation has been extended and specified in more detail:

- the term “item designation” has been replaced by “reference designation” with the same meaning as before;
- the term “basic signal name” has been extended. It has been replaced by “signal name”; then subsequently consisting of “class”, “short name” and “basic signal name”, where “basic signal name” has the same meaning as before;
- classification codes have been introduced in order to facilitate the understanding of the signal name, for example the type of signal and hence the “signal direction” can be recognized by the code;
- the concept of “signal name domain” has been introduced for improved identification of signal name in relation to an applicable object;
- the term “version identifier” has been changed to “variant” with the same meaning as before;
- the earlier possibility to provide additional information on “signal level” has been generalized to an area of “additional information” to be used to supplement information on “version”, “time stamp”, “level” and other system related parameters. The additional information is stated to belong to a variant of the signal (not to the signal designation in general).

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) 2006-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61175:2005 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 60227	NOTE	The HD 21 series is related to, but not directly equivalent with the IEC 60227 series.
IEC 61355	NOTE	Harmonized as EN 61355:1997 (not modified).
IEC 61850-4	NOTE	Harmonized as EN 61850-4:2002 (not modified).

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60417	data-base	Graphical symbols for use on equipment	-	-
IEC 60445	- ¹⁾	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals and of terminations of certain designated conductors, including general rules for an alphanumeric system	EN 60445	2000 ²⁾
IEC 60447	- ¹⁾	Basic and safety principles for man-machine interface, marking and identification - Actuating principles	EN 60447	2004 ²⁾
IEC 61082-1	- ³⁾	Preparation of documents used in electrotechnology Part 1: Rules	EN 61082-1	- ³⁾
IEC 61131	Series	Programmable controllers	EN 61131	Series
IEC 61346	Series	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations	EN 61346	Series
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 8859-1	1998	Information technology - 8-bit single-byte coded graphic character sets Part 1: Latin alphabet No.1	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date issue.

³⁾ To be published.

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INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – DESIGNATION OF SIGNALS

1 Scope

This International Standard provides rules for the composition of designations and names for the identification of signals and signal connections. This includes the designation of power supply circuits.

The standard is applicable to all types of signals within an industrial system, installation and equipment.

The standard is not applicable for the identification of wiring, terminals and other hardware for connections.

The standard does not establish rules for

- the graphical/physical representation of a signal on devices, nor
- the graphical representation of signals in documentation.

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 60417, *Graphical symbols for use on equipment*

IEC 60445, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals and of terminations of certain designated conductors, including general rules for an alphanumeric system*

IEC 60447, *Basic and safety principles for man-machine interface, marking and identification – Actuating principles*

IEC 60747, *Semiconductor devices - Discrete devices*

IEC 61082-11, *Preparation of documents used in electrotechnology – Part 1: Rules*

IEC 61131 (all parts), *Programmable controllers*

IEC 61346 (all parts), *Industrial systems, installations and equipment and industrial products Structuring principles and reference designations*

ISO/IEC 646: 1991, *Information technology ISO 7-bit coded character set for information processing interchange*

ISO/IEC 8859-1: 1998, *Information technology – 8-bit single-byte coded graphic character sets – Part 1: Latin alphabet No. 1*

¹ To be published.