

**Industrial systems, installations and equipment and  
industrial products - Identification of terminals within a  
system**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61666:2010 sisaldab Euroopa standardi EN 61666:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.09.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 61666:2010 consists of the English text of the European standard EN 61666:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.10.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 17.09.2010.

The standard is available from Estonian standardisation organisation.

ICS 01.080.30

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**Industrial systems, installations and equipment and industrial products -  
Identification of terminals within a system  
(IEC 61666:2010)**

Systèmes industriels, installations  
et appareils, et produits industriels -  
Identification des bornes dans le cadre  
d'un système  
(CEI 61666:2010)

Industrielle Systeme, Anlagen  
und Ausrüstungen und Industrieprodukte -  
Identifikation von Anschlüssen  
in Systemen  
(IEC 61666:2010)

This European Standard was approved by CENELEC on 2010-09-01. 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.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 3/1001/FDIS, future edition 2 of IEC 61666, 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 61666 on 2010-09-01.

This European Standard supersedes EN 61666:1997.

This European Standard includes the following substantial changes with respect to EN 61666:1997:

- the terminology used in the publication has been adapted to the one used in EN 81346-1;
- a more comprehensive description of the designation principles is provided;
- additional examples illustrating terminal designations related to the function aspect and location aspect are provided;
- an additional example illustrating the use of terminal designation sets is provided;
- the former informative Annex A has been turned into a clause in the standard.

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) | 2011-06-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2013-09-01 |

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61666:2010 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 60034-8:2007 | NOTE | Harmonized as EN 60034-8:2007 (not modified). |
| IEC 60191-3:1999 | NOTE | Harmonized as EN 60191-3:1999 (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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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, conductor terminations and conductors	EN 60445	-
IEC 60757	-	Code for designation of colours	HD 457	-
IEC 61082-1	2006	Preparation of documents used in electrotechnology - Part 1: Basic rules	EN 61082-1	2006
IEC 81346-1	-	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Rules	EN 81346-1	-
IEC 81714-3	-	Design of graphical symbols for use in the technical documentation of products - Part 3: Classification of connect nodes, networks and their encoding	-	-

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# INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – IDENTIFICATION OF TERMINALS WITHIN A SYSTEM

## 1 Scope

This International Standard establishes general principles for the identification of terminals of objects within a system, applicable to all technical areas (for example mechanical engineering, electrical engineering, construction engineering, process engineering). They can be used for systems based on different technologies or for systems combining several technologies.

Requirements for marking of terminal designations on products are not part of this publication.

NOTE The standard is based on the general principles for the structuring of systems including structuring of the information about systems, established in the International Standard ISO/IEC 81346 series, published jointly by IEC and ISO.

## 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 conductor terminations*

IEC 60757, *Code for designation of colours*

IEC 61082-1:2006, *Preparation of documents used in electrotechnology – Part 1: Basic rules*

IEC 81346-1, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Rules*

IEC 81714-3, *Design of graphical symbols for use in the technical documentation of products – Part 3: Classification of connect nodes, networks and their encoding*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1 object

entity treated in a process of development, implementation, usage and disposal

NOTE 1 The object may refer to a physical or non-physical “thing”, i.e. anything that might exist, exists or did exist.

NOTE 2 The object has information associated to it..

[IEC 81346-1, definition 3.1]