SIST

SLOVENSKI STANDARD
SIST EN 81346-2:2009

01-december-2009

Nadomešča:

SIST EN 61346-2:2003

SIST EN 61346-2:2003

Industrijski sistemi, inštalacije in oprema ter industrijski izdelki - Načela strukturiranja in referenčne oznake - 2. del: Razvrščanje objektov v razrede in njihove kode (IEC 81346-2:2009)

Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes (IEC 81346-2:2009)

Industrielle Systeme, Anlagen und Ausrüstungen und Industrieprodukte - Strukturierungsprinzipien und Referenzkennzeichnung - Teil 2: Klassifizierung von Objekten und Kennbuchstaben für Klassen (IEC 81346-2:2009)

Systèmes industriels, installations et appareils, et produits industriels - Principes de structuration et désignations de référence - Partie 2: Classification des objets et codes pour les classes (CEI 81346-2:2009)

Ta slovenski standard je istoveten z: EN 81346-2:2009

ICS:

01.110	Tehnična dokumentacija za izdelke	Technical product documentation
29.020	Elektrotehnika na splošno	Electrical engineering in general

SIST EN 81346-2:2009 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 81346-2

October 2009

ICS 01.110; 29.020

Supersedes EN 61346-2:2000

English version

Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes (IEC 81346-2:2009)

Systèmes industriels, installations et appareils, et produits industriels - Principes de structuration et désignations de référence - Partie 2: Classification des objets et codes pour les classes (CEI 81346-2:2009)

Industrielle Systeme, Anlagen und Ausrüstungen und Industrieprodukte - Strukturierungsprinzipien und Referenzkennzeichnung - Teil 2: Klassifizierung von Objekten und Kennbuchstaben für Klassen (IEC 81346-2:2009)

This European Standard was approved by CENELEC on 2009-08-01. 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, Bulgaria, 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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 81346-2:2009 E

Foreword

The text of document 3/945/FDIS, future edition 1 of IEC 81346-2, prepared by IEC TC 3, Information structures, documentation and graphical symbols, and ISO TC 10, Technical product documentation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 81346-2 on 2009-08-01.

This European Standard supersedes EN 61346-2:2000.

EN 81346-2:2009 includes the following technical changes with respect to EN 61346-2:2000:

– all rules concerning the application of letter codes have been removed as these should be included in another publication dealing with the application of letter codes within reference designations.

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)	2010-05-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-08-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 81346-2:2009 was approved by CENELEC as a European Standard without any modification.

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 81346-1	-[1)]	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Basic rules	EN 81346-1	2009[2)]
ISO 14617-6	2002	Graphical symbols for diagrams - Part 6: Measurement and control functions	-	-

[1)] Undated reference.

[2)] Valid edition at date of issue.

IEC 81346-2

Edition 1.0 2009-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Systèmes industriels, installations et appareils, et produits industriels – Principes de structuration et désignations de référence – Partie 2: Classification des objets et codes pour les classes

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX X

ICS 01.110; 29.020

ISBN 2-8318-1053-5

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – STRUCTURING PRINCIPLES AND REFERENCE DESIGNATIONS –

Part 2: Classification of objects and codes for classes

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) The formal decisions or agreements of 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 IEC National Committees.

3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.

4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.

5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.

6) All users should ensure that they have the latest edition of this publication.

7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.

8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 81346-2 has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols and ISO technical committee 10: Technical product documentation.

It is published as a double logo standard.

This edition cancels and replaces the first edition of IEC 61346-2, published in 2000 and the first edition of IEC/PAS 62400, published in 2005.

This edition includes the following technical changes with respect to IEC 61346-2 Ed.1:

- all rules concerning the application of letter codes have been removed as these should be included in another publication dealing with the application of letter codes within reference designations;

and, with respect to IEC/PAS 62400 Ed.1:

- the definitions of the sub-classes have been reviewed and made consistent;
- the basis for the sub-classification is indicated;
- some new subclasses for class B and class P have been added;
- the table of terms sorted according to the two-letter code has been removed;

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

FDIS	Report on voting
3/945/FDIS	3/957RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table. In ISO, the standard has been approved by 12 members out of 13 having cast a vote.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 81346 series, formerly IEC 61346 series, published under the general title *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations*, can be found on the IEC website.

Future standards in this series will carry the new general number 81346. Numbers of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under “http://webstore.iec.ch” in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

0.1 General

The aim of this part of IEC 81346 is to establish classification schemes for objects with associated letter codes which can be applied throughout all technical areas, e.g. electrical, mechanical and civil engineering as well as all branches of industry, e.g. energy, chemical industry, building technology, shipbuilding and marine technology. The letter codes are intended for use with the rules for the construction of reference designations in accordance with IEC 81346-1.

Annex A illustrates how objects may be classified according to their intended purpose or task related to a generic process.

Annex B illustrates how objects may be classified according to their position in an infrastructure.

0.2 Basic requirements for this standard

The basic requirements were developed during the preparation of IEC 61346-2 Ed. 1, and accepted by vote by the national committees.

NOTE These basic requirements concern the development of the letter code classification system in this standard and not its application. They are therefore not normative vis-à-vis the application of this standard.

(1) Letter codes shall be based on a classification scheme.

(2) A classification scheme is the set of definitions for the types of objects (for example, a classification scheme for function types containing the definition of the different function types of objects).

(3) A classification scheme shall allow for hierarchical classification of types of objects, i.e. subclasses and superclasses.

(4) A letter code for a type of object shall be independent of the actual position of the instances of that type of object in a system.

(5) Distinct classes shall be defined on each level of the classification scheme.

(6) The definitions of the classes of a particular level within a classification scheme shall have a common basis (for example, a classification scheme that, on one level, classifies objects according to colour shall not contain classes that classify objects by shape). The basis, however, may vary from one level to another.

(7) A letter code should indicate the type of object and not an aspect of this object.

(8) A classification scheme shall allow for expansion in order to take into account future development and needs.

(9) A classification scheme shall be usable within all technical areas without favouring a specific area.

(10) It shall be possible to use the letter codes consistently throughout all technical areas. The same type of object should preferably have only one letter code independent of the technical area where it is being used.

(11) It should be possible to indicate in a letter code from which technical area the object originates, if this is wanted.

(12) A classification scheme should reflect the practical application of letter codes.

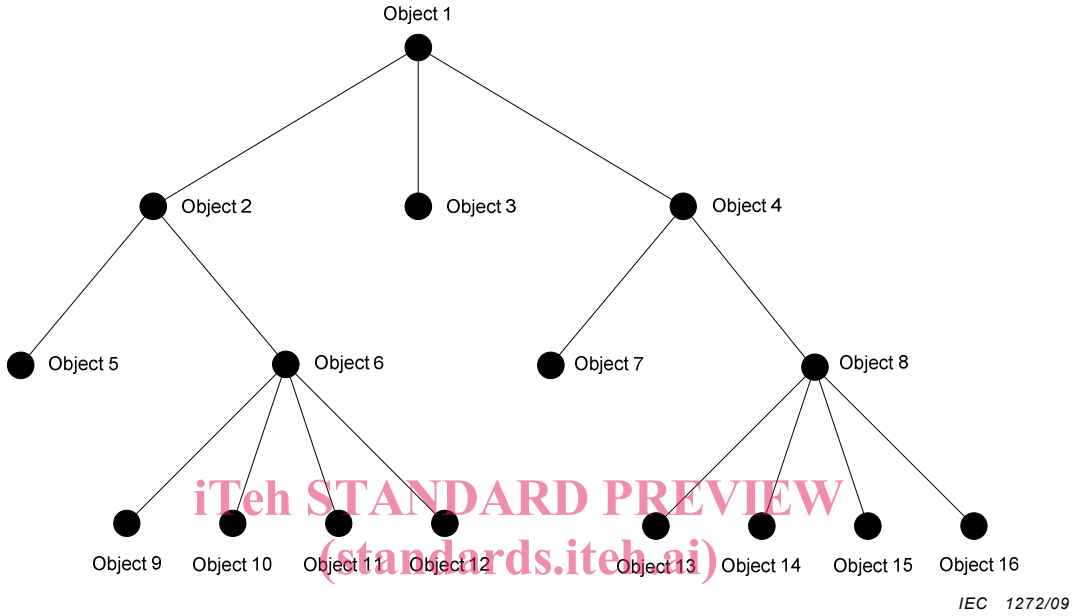
(13) Letter codes should not be mnemonic, as this cannot be implemented consistently throughout a classification scheme and for different languages.

(14) Letter codes shall be formed using capital letters from the Latin alphabet, excluding I and O due to possible confusion with the digits 1 (one) and 0 (zero).

(15) Different classification schemes shall be allowed and be applicable for the same type of object.

(16) Objects may be classified for example according to function types, shapes, colours, or material. This means that the same type of object may be assigned different letter codes according to the different classification schemes.

(17) Objects that are directly constituents of another object using the same aspect shall be assigned letter codes according to the same classification scheme as shown in Figure 1. See also Figure A.1.



Objects 2, 3, and 4, which are direct constituents of object 1, shall be assigned letter codes from the same classification scheme.

Objects 5 and 6, which are direct constituents of object 2, shall be assigned letter codes from the same classification scheme.

Objects 7 and 8, which are direct constituents of object 4, shall be assigned letter codes from the same classification scheme.

Objects 9, 10, 11, and 12, which are direct constituents of object 6, shall be assigned letter codes from the same classification scheme.

Objecst 13, 14, 15, and 16, which are direct constituents of object 8, shall be assigned letter codes from the same classification scheme.

Figure 1 – Constituent objects

(18) If products from different manufacturers are combined into a new product, the constituents of this product may be assigned codes according to different classification schemes.