SLOVENSKI STANDARD
SIST EN 62491:2008

01-november-2008

Industrijski sistemi, inštalacije, oprema in industrijski izdelki - Označevanje kablov in žil (IEC 62491:2008)

Industrial systems, installations and equipment and industrial products - Labelling of cables and cores (IEC 62491:2008)

Industrielle Systeme, Anlagen und Ausrüstungen und Industrieprodukte - Beschriftung von Kabeln / Leitungen und Adern (IEC 62491:2008)

Systemes, installations, appareils et produits industriels - Marquage des câbles et des conducteurs isolés (CEI 62491:2008)

Ta slovenski standard je istoveten z: **EN 62491:2008**

ICS:

01.110	Tehnična dokumentacija za izdelke	Technical product documentation
29.060.01	Električne žice in kabli na splošno	Electrical wires and cables in general

SIST EN 62491:2008 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62491

September 2008

ICS 01.110; 29.020.20

English version

Industrial systems, installations and equipment and industrial products - Labelling of cables and cores

(IEC 62491:2008)

Systèmes industriels, installations et appareils et produits industriels - Etiquetage des câbles et des conducteurs isolés (CEI 62491:2008)

Industrielle Systeme, Anlagen und Ausrüstungen und Industrieprodukte - Beschriftung von Kabeln / Leitungen und Adern (IEC 62491:2008)

This European Standard was approved by CENELEC on 2008-07-01. 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: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 62491:2008 E

Foreword

The text of document 3/849/CDV, future edition 1 of IEC 62491, 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 62491 on 2008-07-01.

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)	2009-04-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62491:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60446 NOTE Harmonized as EN 60446:2007 (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 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 60445 (mod)	-[1)]	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals and conductor terminations	EN 60445	2007[2)]
IEC 60757	-[1)]	Code for designation of colours	HD 457 S1	1985[2)]
IEC 61082-1	2006	Preparation of documents used in electrotechnology - Part 1: Rules	EN 61082-1	2006
IEC 61175	-[1)]	Industrial systems, installations and equipment and industrial products - Designation of signals	EN 61175	2005[2)]
IEC 61666	-[1)]	Industrial systems, installations and equipment and industrial products - Identification of terminals within a system	EN 61666	1997[2)]
IEC 81346-1	200X[3)]	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Basic rules	-	-
ISO/IEC 646	-[1)]	Information technology - ISO 7-bit coded character set for information interchange	-	-

[1)] Undated reference.

[2)] Valid edition at date of issue.

[3)] To be published.

IEC 62491

Edition 1.0 2008-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Industrial systems, installations and equipment and industrial products – Labelling of cables and cores

Systèmes industriels, installations et appareils et produits industriels – Etiquetage des câbles et des conducteurs isolés

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – LABELLING OF CABLES AND CORES

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.
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International Standard IEC 62491 has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols.

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

CDV	Report on voting
3/849/CDV	3/881/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

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

Additional labelling of cables and cores might be required within larger systems or installations with many cores of the same colour or with many cables, and where therefore the use of the designations provided by the cable manufacturer only would be ambiguous.

Due consideration should be given to the fact that additional labelling will cause additional cost, usually increasing with the number of characters in the labelling string and the number of different labelling elements. The available space may also impose restrictions with regard to the number of characters, their height and the length of the labelling. As a general rule the use of additional labelling should therefore be limited to a necessary minimum and be kept as short as practicable.

However, also the advantages and benefits should be taken into considerations in choosing additional labelling of cables and cores.

It is important to notice that a single machine or a system has different needs of information in the different phases of its lifecycles (assembling, production, service and maintenance).

Additional labelling of cables and cores gives the following advantages:

- the possibilities to communicate and identify signals and connections across different involved engineering disciplines and departments like:
  - process engineering,
  - software engineering,
  - electrical engineering,
  - mechanical/fluid engineering,
  - control engineering;
- minimizing the time used to locate an eventual error (and the reason for it) in the test phase;
- saving time when locating an eventual error (and the reason for it) in the service and maintenance phase;
- remove the doubt of which core should be connected to which terminal, when replacing components that are placed close to each other;
- if used in pre-planning, it gives a clear view for panel-builders, electricians/technicians; service/maintenance and system controllers which will minimize misunderstandings regarding connections.

Besides being used in connections between terminal blocks, labelling can also be used when single core cables connect components inside units as: cubicle, pulpit, case, etc.; such methods make possible:

- a rapid and secure cabling between the terminals of two objects;
- a rapid visual check of cabling, not necessarily looking up in the circuit diagrams;
- a correct and secure change of an object during the maintenance operations of plants.