

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



HORIZONTAL STANDARD  
NORME HORIZONTALE

Preparation of documents used in electrotechnology –  
Part 1: Rules

**(standards.iteh.ai)**

Établissement des documents utilisés en électrotechnique –  
Partie 1: Règles

<https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1-2e90fd482ca2/iec-61082-1-2014>



**THIS PUBLICATION IS COPYRIGHT PROTECTED**  
**Copyright © 2014 IEC, Geneva, Switzerland**

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

#### About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

#### About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

#### IEC Catalogue - [webstore.iec.ch/catalogue](http://webstore.iec.ch/catalogue)

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

#### IEC publications search - [www.iec.ch/searchpub](http://www.iec.ch/searchpub)

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

#### IEC Just Published - [webstore.iec.ch/justpublished](http://webstore.iec.ch/justpublished)

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

#### Electropedia - [www.electropedia.org](http://www.electropedia.org)

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in 14 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

#### IEC Glossary - [std.iec.ch/glossary](http://std.iec.ch/glossary)

More than 55 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

#### IEC Customer Service Centre - [webstore.iec.ch/csc](http://webstore.iec.ch/csc)

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: [csc@iec.ch](mailto:csc@iec.ch).

#### A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

#### A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

#### Catalogue IEC - [webstore.iec.ch/catalogue](http://webstore.iec.ch/catalogue)

Application autonome pour consulter tous les renseignements bibliographiques sur les Normes internationales, Spécifications techniques, Rapports techniques et autres documents de l'IEC. Disponible pour PC, Mac OS, tablettes Android et iPad.

#### Recherche de publications IEC - [www.iec.ch/searchpub](http://www.iec.ch/searchpub)

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

#### IEC Just Published - [webstore.iec.ch/justpublished](http://webstore.iec.ch/justpublished)

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

#### Electropedia - [www.electropedia.org](http://www.electropedia.org)

Le premier dictionnaire en ligne de termes électroniques et électriques. Il contient plus de 30 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans 14 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

#### Glossaire IEC - [std.iec.ch/glossary](http://std.iec.ch/glossary)

Plus de 55 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.

#### Service Clients - [webstore.iec.ch/csc](http://webstore.iec.ch/csc)

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: [csc@iec.ch](mailto:csc@iec.ch).



IEC 61082-1

Edition 3.0 2014-10

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



HORIZONTAL STANDARD

NORME HORIZONTALE

Preparation of documents used in electrotechnology –  
Part 1: Rules

**(standards.iteh.ai)**

Établissement des documents utilisés en électrotechnique –  
Partie 1: Règles

<https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1-2e90fd482ca2/iec-61082-1-2014>

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 01.110; 29.020

ISBN 978-2-8322-1872-3

**Warning! Make sure that you obtained this publication from an authorized distributor.  
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

## CONTENTS

FOREWORD.....	8
INTRODUCTION.....	10
1 Scope.....	11
2 Normative references .....	11
3 Terms and definitions .....	12
3.1 Basic terms.....	13
3.2 Terms related to the forms of presentation of information.....	14
3.3 Terms related to specific document kinds.....	15
4 Documentation principles .....	16
4.1 General considerations .....	16
4.2 Structure of documentation .....	16
4.3 Presentation of information .....	17
4.4 Document identification and designation .....	18
5 Rules for presentation of information .....	18
5.1 Legibility .....	18
5.2 Text orientation.....	19
5.3 Colours, shading and patterns.....	19
5.4 Paper page sizes .....	19
5.5 Paper page reproduction.....	20
5.6 Page identification .....	20
5.7 Page layout.....	21
5.7.1 General.....	21
5.7.2 Identification area.....	22
5.7.3 Content area.....	22
5.8 Cross-references .....	25
5.9 Hyperlinks.....	26
5.10 Line widths .....	26
5.11 Text fonts.....	27
5.12 Symbols.....	27
5.12.1 Choice of symbols .....	27
5.12.2 Symbol size.....	28
5.12.3 Orientation of symbols .....	29
5.13 Scales.....	29
5.14 Pictorial presentation .....	29
5.15 Quantities, units, values and colour codes .....	29
5.16 Presentation of ranges and set of elements .....	29
5.17 Dimension lines .....	31
5.18 Leader lines and reference lines .....	31
5.19 Explanatory notes and markings .....	32
5.20 Designation of objects.....	32
5.20.1 General .....	32
5.20.2 Reference designations .....	32
5.20.3 Simplified presentation .....	33
5.20.4 Cable core designations .....	34
5.21 Terminal designations.....	34
5.22 Signal designations.....	34

6	Document kinds .....	34
7	Diagrams .....	35
7.1	General .....	35
7.1.1	Flow of energy, signal, etc. ....	35
7.1.2	Symbols .....	35
7.1.3	Connecting lines .....	38
7.1.4	Representation of binary logic circuits .....	44
7.1.5	Boundary frames .....	47
7.1.6	Presentation of reference designations .....	47
7.1.7	Presentation of terminal designations .....	52
7.1.8	Presentation of signal designations .....	52
7.1.9	Method of presentation of multi-phase circuits .....	53
7.1.10	Emphasizing of circuits .....	54
7.2	Overview diagrams .....	54
7.3	Function diagrams .....	58
7.3.1	General .....	58
7.3.2	Equivalent-circuit diagrams .....	58
7.3.3	Logic-function diagram .....	58
7.4	Circuit diagrams .....	59
7.4.1	General .....	59
7.4.2	Layout .....	59
7.4.3	Methods for representation of components .....	60
7.4.4	Representation of components with movable parts .....	65
7.4.5	Representation of supply circuits .....	67
7.4.6	Representation of binary logic elements .....	68
7.4.7	Symbols with a large number of terminals .....	69
7.4.8	Wired functions (wired-AND, wired-OR) .....	69
7.5	Connection diagrams .....	70
7.5.1	General .....	70
7.5.2	Representation of devices, units or assemblies .....	71
7.5.3	Representation of terminals .....	72
7.5.4	Representation of cables and its constituent cores .....	72
7.5.5	Representation of conductors .....	72
7.5.6	Simplified presentation .....	74
8	Drawings .....	75
8.1	General .....	75
8.2	Requirements on base documents .....	75
8.3	Arrangement drawings .....	77
9	Tables .....	80
9.1	General .....	80
9.2	Presentation of reference designations .....	80
9.3	Connection tables .....	81
10	Charts, graphs .....	83
10.1	General .....	83
10.2	Function charts .....	83
10.3	Sequence charts and time sequence charts .....	83
11	Structured documentation .....	84
11.1	General .....	84

11.2	Presentation of occurrences of an object type in diagrams.....	85
11.2.1	General .....	85
11.2.2	Using an instance diagram .....	85
11.2.3	Using a single symbol.....	85
11.3	Referencing .....	87
11.4	Document metadata.....	89
12	CAX conformance requirements.....	89
Annex A (normative)	Construction of a symbol for an object which does not have a symbol in IEC 60617.....	91
A.1	General rules .....	91
A.2	Example – Miniature circuit-breaker .....	91
A.3	Example – miniature circuit-breaker with an RCD (Residual Current Device).....	94
A.4	Example – RCD (residual current device) / RCM (residual monitoring device).....	95
A.5	Example – PLC .....	96
Annex B (informative)	Document management information and title blocks .....	98
B.1	Presentation of document management information .....	98
B.2	Example of the layout of a title block.....	99
B.3	Examples of the location of identification areas.....	100
Annex C (informative)	Document kind designations and content of information .....	101
Bibliography	.....	106
Figure 1	– Overview of standards related to the presentation of information in documents.....	10
Figure 2	– Documents generated from information stored in a database .....	17
Figure 3	– Documents prepared and stored in a database.....	18
Figure 4	– Viewing directions of a document.....	19
Figure 5	– Examples of documents with document and page identifications .....	20
Figure 6	– Example of documents with multiple document identifiers .....	21
Figure 7	– Examples of pages with defined identification areas.....	22
Figure 8	– Example of a reference grid .....	24
Figure 9	– Examples of the application of cross-references.....	26
Figure 10	– Example of the use of symbols for fibre optics.....	27
Figure 11	– Example of replacing a symbol with a general symbol .....	28
Figure 12	– Example of enlarging a symbol.....	28
Figure 13	– Turning and/or mirroring of symbol S00055 in IEC 60617 .....	29
Figure 14	– Terminators of dimension lines (from ISO 129).....	31
Figure 15	– Examples of leader lines (from ISO 128-22) .....	31
Figure 16	– Example of the use of leader lines to connecting lines.....	31
Figure 17	– Example of an explanatory note .....	32
Figure 18	– Presentation of reference designations and sets of reference designations .....	33
Figure 19	– The common initial portion of reference designations .....	33
Figure 20	– Examples of cable core designations.....	34
Figure 21	– Example of functional grouping and signal flow directions; a control system.....	35
Figure 22	– Example of symbols and different location of connections .....	36
Figure 23	– Simplified presentation.....	36

iTech STANDARD PREVIEW  
(standards.iteh.ai)

https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1-2e90fd482ca2/iec-61082-1-2014

Figure 24 – Simplified presentation of parallel connected identical objects.....	37
Figure 25 – Simplified presentation of serial connected identical objects .....	37
Figure 26 – Example of cross-references related to detached presentations .....	38
Figure 27 – Example for technical data associated with a symbol .....	38
Figure 28 – Example of technical data shown inside a symbol .....	38
Figure 29 – Symbols representing joining of connecting lines .....	39
Figure 30 – Symbol representing the interconnection of crossing connecting lines .....	39
Figure 31 – Examples of the joining of connecting lines .....	39
Figure 32 – Example of the joining of connecting lines with indication of where the physical wire goes .....	40
Figure 33 – Example of the joining of connecting lines where the connecting lines represent bundles of wires .....	40
Figure 34 – Different presentation methods for wireless interconnections .....	41
Figure 35 – Example of presentations of mechanical links .....	41
Figure 36 – Example for avoiding bends and cross-overs.....	42
Figure 37 – Spacing of lines.....	42
Figure 38 – Examples for technical data associated with connecting lines .....	43
Figure 39 – Presentation of bundles.....	44
Figure 40 – Indication of sequence within bundles .....	44
Figure 41 – Illustration of the terms “states” and “levels”.....	45
Figure 42 – Detail of a circuit diagram using positive logic convention .....	46
Figure 43 – Detail of a circuit diagram using direct logic polarity convention .....	46
Figure 44 – Boundary frame with a reference to another document.....	47
Figure 45 – Location of reference designations at a symbol .....	48
Figure 46 – Examples of reference designations associated with connecting lines .....	48
Figure 47 – Presentation of reference designations at a boundary frame .....	49
Figure 48 – Presentation of reference designations including different aspect.....	50
Figure 49 – Presentation of reference designation sets at a boundary frame.....	50
Figure 50 – Presentation of reference designation .....	51
Figure 51 – Presentation of reference designations excluded from concatenation .....	51
Figure 52 – Examples for the presentation of terminal designations .....	52
Figure 53 – Examples of signal designations associated with connecting lines .....	52
Figure 54 – Examples of reference and signal designations ass. with connecting lines .....	53
Figure 55 – Presentation of signal designations .....	53
Figure 56 – Example for a multi-phase circuit .....	54
Figure 57 – Overview diagram for a material handling plant .....	55
Figure 58 – Overview diagram for one conveyer belt function .....	56
Figure 59 – Overview diagram process plant.....	56
Figure 60 – Overview diagram of an electrical plant.....	57
Figure 61 – Signal flow in a function diagram.....	58
Figure 62 – Example of an equivalent-circuit diagram .....	58
Figure 63 – Minimized use of logic negations.....	59
Figure 64 – Lining-up of symbols .....	60
Figure 65 – Grouping of symbols for functionally related components .....	60



Figure 66 – Attached presentation of symbols.....	61
Figure 67 – Detached presentation of symbols.....	62
Figure 68 – Example of the use of inset tables.....	63
Figure 69 – Example of presentation of internal connection .....	64
Figure 70 – Repeated presentation of a symbol for a quadruple multiplexer.....	64
Figure 71 – Simplified repeated presentation of a symbol for a quadruple multiplexer.....	65
Figure 72 – Symbol of a five-position switch supplemented with a graph.....	66
Figure 73 – Examples of pilot switch .....	66
Figure 74 – Symbol of a pilot switch supplemented with a note .....	66
Figure 75 – Orientation of contact symbols .....	67
Figure 76 – Representation of a.c. supply circuits .....	67
Figure 77 – Representation of d.c. supply circuits .....	68
Figure 78 – Examples of use of logic polarity indication .....	68
Figure 79 – Examples of mismatched polarity indications.....	68
Figure 80 – Example of a split presentation of a symbol.....	69
Figure 81 – Example of a connection diagram.....	71
Figure 82 – Example of presentation of termination of a multi-core cable.....	72
Figure 83 – Example of cable connections.....	73
Figure 84 – Example of connection diagram for a sub-rack.....	74
Figure 85 – Example of simplified presentation of a connection diagram.....	75
Figure 86 – Example of the use of a base document.....	77
Figure 87 – Presentation of technical data.....	77
Figure 88 – Examples of the use of symbols for indication mounting methods.....	78
Figure 89 – An arrangement drawing the mounting panel of a cubicle.....	79
Figure 90 – An arrangement drawing of an industrial plant.....	80
Figure 91 – Example setting the common initial portion in the table header.....	81
Figure 92 – Example omitting the common initial portion on successive lines.....	81
Figure 93 – Example of a terminal-oriented connection table .....	82
Figure 94 – Example of a connection table with remote end designations .....	82
Figure 95 – Example of a connection-oriented connection table .....	83
Figure 96 – Example of a time sequence chart.....	84
Figure 97 – Example of an instance diagram of a motor starter .....	85
Figure 98 – A symbol for a motor starter .....	85
Figure 99 – Example of a document in table form describing the relations between external terminals of a motor starter to the internal terminals of its components.....	86
Figure 100 – A symbol for the motor starter, for single-line presentations .....	86
Figure 101 – Example of a document in table form describing the relations between external terminals of a motor starter to the internal terminals of its components.....	87
Figure 102 – Referencing in accordance with IEC 62023 .....	88
Figure 103 – Direct referencing.....	89
Figure A.1 – The general symbols for an object in IEC 60617 .....	91
Figure A.2 – Miniature circuit-breaker shown with the symbol for a circuit-breaker .....	92
Figure A.3 – Miniature circuit-breaker shown with the general symbol for a switch qualified with the symbol for automatic tripping.....	92



Figure A.4 – Miniature circuit-breaker shown with the symbol for a circuit-breaker qualified with the symbol for automatic tripping .....	93
Figure A.5 – Miniature circuit-breaker shown with the general symbol for a switch qualified with the symbols for thermal and electromagnetic effects .....	93
Figure A.6 – Miniature circuit-breaker shown with the symbol for a circuit-breaker qualified with the symbol for thermal and electromagnetic effects .....	93
Figure A.7 – Symbol for a miniature circuit-breaker with an RCD, version 1 .....	94
Figure A.8 – Symbol for a miniature circuit-breaker with an RCD, version 2 .....	94
Figure A.9 – Symbol for a miniature circuit-breaker with an RCD, version 3 .....	95
Figure A.10 – Example of a symbol for an RCD .....	95
Figure A.11 – Example of a symbol for an RCM .....	95
Figure A.12 – Symbols for a PLC .....	96
Figure A.13 – A circuit diagram with a symbol of a PLC .....	97
Figure B.1 – Example of the arrangement of information in a title block .....	99
Figure B.2 – Example of a filled-in title block .....	99
Figure B.3 – Examples of locations of identification areas and possible title blocks.....	100
Table 1 – Possible distributed logic connections .....	70
Table B.1 – Metadata element names .....	98
Table C.1 – Recommended document kind designations.....	102
Table C.2 – Current document kind designations and replacements.....	104

IEC 61082-1:2014

<https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1-2e90fd482ca2/iec-61082-1-2014>

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PREPARATION OF DOCUMENTS USED  
IN ELECTROTECHNOLOGY –****Part 1: Rules****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.  
<https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1->
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 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 61082-1 has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols.

It has the status of a horizontal standard in accordance with IEC Guide 108.

This third edition cancels and replaces the second edition published in 2006. This edition constitutes a technical revision and includes the following main technical changes:

- a) inclusion of presentation rules for wireless interconnections
- b) description of exceptional cases for the application of rules for positioning of reference designations in diagrams
- c) correction of errors and update of the normative references
- d) harmonization of definitions with respect to referenced publications.

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

FDIS	Report on voting
3/1189/FDIS	3/1196/RVD

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

A list of all the parts in the IEC 61082 series, under the general title *Preparation of documents used in electrotechnology*, can be found on the IEC website.

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 stability 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.

## iTeh STANDARD PREVIEW

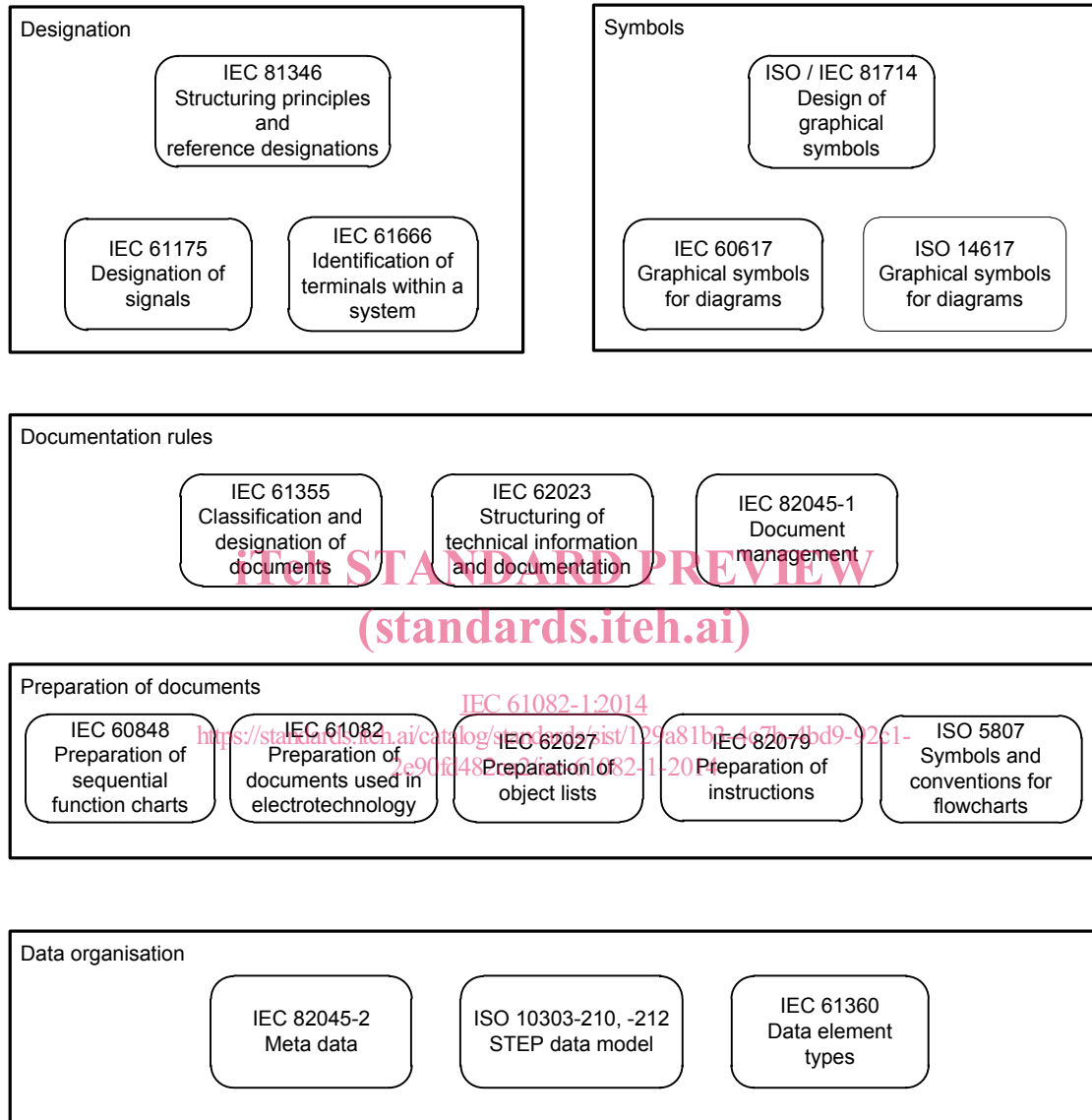
**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

IEC 61082-1:2014

<https://standards.iteh.ai/catalog/standards/sist/129a81b3-4c7b-4bd9-92c1-2e90fd482ca2/iec-61082-1-2014>

## INTRODUCTION

IEC 61082-1 deals with the presentation of information in documents. Part of this information is described in other International Standards. Figure 1 provides an overview on the interrelation between some of these standards.



IEC

**Figure 1 – Overview of standards related to the presentation of information in documents**

Examples in this part of IEC 61082 are intended to illustrate a given rule and are not necessarily representative of complete documents.

# PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY –

## Part 1: Rules

### 1 Scope

This part of IEC 61082 establishes general rules and guidelines for the presentation of information in documents, and specific rules for diagrams, drawings and tables used in electrotechnology.

Excluded from this part of IEC 61082 are rules and guidelines for all kind of audio or video or tactile presentations.

This horizontal standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

One of the responsibilities of a technical committee is, wherever applicable, to make use of horizontal standards in the preparation of its publications. The contents of this horizontal standard will not apply unless specifically referred to or included in the relevant publications.

### 2 Normative references (standards.iteh.ai)

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60375, *Conventions concerning electric and magnetic circuits*

IEC 60757, *Code for designation of colours*

IEC 60617, *Graphical symbols for diagrams*. Available from: <<http://std.iec.ch/iec60617>>

IEC 60848, *GRAFSET specification language for sequential function charts*

IEC 61175, *Industrial systems, installations and equipment and industrial products- Designation of signals*

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

IEC 61293, *Marking of electrical equipment with ratings related to electrical supply – Safety requirements*

IEC 61355-1:2008, *Classification and designation of documents for plants, systems and equipment – Part 1: Rules and classification tables*

IEC 61666, *Industrial systems, installations and equipment and industrial products – Identification of terminals within a system*

IEC 62023, *Structuring of technical information and documentation*

IEC 62027, *Preparation of object lists, including parts lists*

IEC 62491, *Industrial systems, installations and equipment and industrial products – Labelling of cables and cores*

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

IEC 81714-2:2006, *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*

IEC 82045-1:2001, *Document management – Part 1: Principles and methods*

IEC 82045-2, *Document management – Part 2: Metadata elements and information reference model*

IEC 82079-1, *Preparation of instructions for use – Structuring, content and presentation – Part 1: General principles and detailed requirements*

ISO 128-22, *Technical drawings – General principles of presentation – Part 22: Basic conventions and applications for leader lines and reference lines*

ISO 128-30, *Technical drawings – General principles of presentation – Part 30: Basic conventions for views*

ISO 2594, *Building drawings – Projection methods*

ISO 3098-5, *Technical product documentation – Lettering – Part 5: CAD- lettering of the Latin alphabet, numerals and marks*

ISO 5455, *Technical drawings – Scales*

ISO 5456-2, *Technical drawings – Projection methods – Part 2: Orthographic representations*

ISO 5457:1999, *Technical product documentation – Sizes and layout of technical drawing sheets*

ISO 80000 (all parts), *Quantities and units*

ISO 81714-1, *Design of graphical symbols for use in the technical documentation of products – Part 1: Basic rules*

### **3 Terms and definitions**

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

NOTE Annex C provides further information on different document kinds.

### 3.1 Basic terms

#### 3.1.1

##### **document**

fixed and structured amount of information intended for human perception that can be managed and interchanged as a unit between users and systems

Note 1 to entry: The term document is not restricted to its meaning in a legal sense.

Note 2 to entry: A document can be designated in accordance with the type of information and the form of presentation, for example overview diagram, connection table, function chart.

[SOURCE: ISO/IEC 8613-1:1994, 3.58, modified – Notes 1 and 2 to entry have been added.]

#### 3.1.2

##### **document kind**

type of document defined with respect to its specified content of information and form of presentation

Note 1 to entry: Sometimes the term document type is used for the same concept.

[SOURCE: IEC 61355-1:2008, 3.6]

#### 3.1.3

##### **documentation**

collection of documents related to a given subject

Note 1 to entry: This may include technical, commercial and/or other documents.

Note 2 to entry: The term subject may refer to objects in the sense of IEC 81346 or to other things to be addressed.

Note 3 to entry: A documentation can consist of documents, composite documents and document sets.

Note 4 to entry: The number and kinds of documents in a documentation can differ according to purpose.

[SOURCE: IEC 61355-1:2008, 3.5]

#### 3.1.4

##### **database**

collection of data organized according to a conceptual structure describing the characteristics of the data and the relationships among their corresponding entities, supporting one or more application areas

[SOURCE: ISO/IEC 2382-1:1993, 01.08.05]

#### 3.1.5

##### **hyperlink**

active link from one place in a presentation to another place in the same presentation or in another presentation

Note 1 to entry: A hyperlink is only active when the presentation of the document is managed by a computer.

Note 2 to entry: The hyperlink implies that a user can activate the link in order to get to the other point.

#### 3.1.6

##### **object**

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

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

Note 2 to entry: The object has information associated to it.