

ICS 01.080.01

CCS A 22



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 16901.2-2013

Replacing GB/T 16901.2-2000

**Rules for design of graphical symbols for use in the technical documentation -- Part 2:
Specification for graphical symbols in a computer sensible form, including graphical
symbols for a reference library, and requirements for their interchange**

Issued on: December 17, 2013

Implemented on: April 9, 2014

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Mark	6
4.1 mark reference point and the connection point	6
4.2 text alignment marks	6
Reference numeral 7	5
6 symbols (including a reference library of symbols) regulations	7
6.1 General	7
6.2 Graphical symbols for variant	7
6.3 Example	10
6.4 reference library, modulus size	10
6.5 Application Layer	11
6.6 Create graphic symbols structure	11
6.7 Text	13
6.8 connection point	15
6.9 reference symbol reference point	17
6.10 schematic connection point identification	18
6.11 symbol arrangements with the arrangement	19
6.12 identification Block	20
6.13 description DB	21
The default position of 6.14 identify and describe the block	22
6.15 are not included in GB/T 4728 and ISO 14617 in the production of the reference symbol	22
6.16 graphic symbol classification	23

Foreword

GB/T 16901 "technical document indicates that the rule of graphical symbols" is divided into three parts.

--- Part 1. Basic rules;

--- Part 2. Graphical symbols (including the reference library of graphic symbols) in a

computer file format specification and exchange requirements;

--- Part 3. connection point, the network classification and coding.

This section GB/T 16901 Part 2.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method to revise the use of IEC 81714-2.2006 "Technical document represents Part 2 of the rules of graphical symbols

Score. Graphical symbols computer electronic document format specification includes a reference library of graphical symbols and exchange requirements. "

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 1988-1998 Technical information interchange bit coded character set (ISO /IEC 646.1991, eqv)

--- GB/T 2659-2000 world countries and regions name Code (ISO 3166-1.1997, eqv)

--- GB/T 4880.1-2005 Language Name Code Part 1. 2-letter code (ISO 639-1.2002, MOD)

--- GB/T 14691-1993 Technical drawings font (ISO 3098-1. 1974, eqv)

--- GB/T 17151.1-1997 Information processing systems - Computer graphics - Programmer's Hierarchical Interactive Graphics System - Part 1. Functional

Description (ISO /IEC 9592-1. 1989, eqv)

--- GB/T 16901.1-2008 technical document represents Part 1 Basic Rules Rules (ISO 81714-1 Graphical symbols.

1999, MOD)

--- GB/T 17564.1-2011 electrical project standard data element types with associated classification scheme - Part 1. Definition of original

And the methods (IEC 61360-1.2009, IDT)

This Part replaces GB/T 16901.2-2000 "rules of graphical symbols Graphical symbols for technical documentation of products - Part 2. FIG.

Symbol (including a reference library of graphic symbols) in a computer file format specification, and require. "

This section also made editorial changes, in particular the following changes.

--- Preface to remove a series of standard description;

--- Preface to increase with the changes in the standard version;

- Remove the IEC foreword;
- Define the term 3.1.2 Added Note;
- Adjust the terms of the order, delete the 2000 version of the 3.4 term, followed by the sort;
- 3.4.1 The term "original diagram" was changed to "primitive";
- 6.2.2 and 6.2.3 of the "note" has been modified;
- Content --- 6.4 has major changes;
- 6.6 The title changed to "create a graphical symbol Structure";
- Figure 12 --- change the title of "the general graphical symbol marking their arrangement";
- Content of 6.16, 6.17 and 6.18 were major changes;
- Appendix D content greater changes.

This information structure in part by the National Electrical documentation and graphical symbols Standardization Technical Committee and the National Standardization Technical Committee of graphic symbols

Members will (SAC/TC27 and SAC/TC59) and focal points.

This section is responsible for drafting units. the machine Productivity Promotion Center, Mechanical Science Research Institute, Chinese Academy of standards, China Electronics Technology Standard

Quasi-based research institute.

1 Scope

This section GB /16901 provides for graphical symbols for a reference library described in the computer and electronic file format requirements in terms

Computer-aided exchange requirements between tools.

This section applies to a reference library can be used as the basis of the exchange of technical documentation, and graphics files between computer-aided tools symbol library.

This section does not contain a physical file format specification required for exchange.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein

Member. For undated references, the latest edition (including any amendments) applies to

this document.

GB/T 4728 (all parts), Graphical symbols for diagrams [IEC 60617 (alpants)]

GB/T 5094.1-2002 Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1. Basic

Rules (IEC 61346-1.1996, IDT)

GB/T 5094.2-2003 Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2. Key

Object classification and classification codes (IEC 61346-2.2000, IDT)

GB/T 6988.1 Preparation of documents used in electrical technology - Part 1. Rules (IEC 61082-1, IDT)

GB/T 10609.4-2009 Technical drawings on microfilm copy of the original requirements (ISO 6428. 1982, IDT)

GB/T 16656.201-1998 Industrial automation systems and integration - Product data representation and exchange Part 201. Application Assist

Recommendation. Explicit draughting (ISO 10303-201.1994, IDT)

GB/T 16901.3-2009 Graphical symbols for technical documentation - Part 3 represents a rule. the connection point, the network classification and coding

(IEC 81714-3.2004, IDT)

GB/T 17450-1998 Technical drawings Chart (ISO 128-20.1996, IDT)

GB/T 17564.1-2005 electrical components Standard data element types with associated classification scheme - Part 1. Principles and definitions party

Method (IEC 61360-1.2004, IDT)

Standard data element types GB/T 17564.4 electrical components and associated classification scheme - Part 4. IEC standard data elements

Type and reference collection of component classes (IEC 61360-4, IDT)

GB/T 18594-2001 Technical product documentation Font Latin alphabet, numbers, and symbols of CAD font (ISO 3098-5.

1997, IDT)

GB/T 18656-2002 Industrial systems, installations and equipment and industrial product identification system terminals (IEC 61666.1997,

IDT)

GB/T 18686-2002 Technical drawings CAD systems lines by (ISO 128-21.1997, IDT)