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

GB/T 5465.2-2023

Replacing GB/T 5465.2-2008

**Graphical symbols for use on equipment - Part 2: Graphical
symbols**

电气设备用图形符号 第2部分：图形符号

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Foreword

This document was issued on 28 December 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 July 2024.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies.

The document runs to 383 pages in translation. The identification, the dates, the table of contents and the clauses reproduced on this page are taken from the standard itself.

Graphical symbols for use on electrical equipment - Part 2 : Graphical symbols

It replaces GB/T 5465.2-2008, which is superseded.

1 Scope

GB/T 5465.2-2023 is the Chinese register of the graphical symbols used on equipment, and at 230,000 words of translation it is one of the largest documents in the whole national standards system. It is the register the symbols on a control panel, an appliance, a machine tool, a vehicle dashboard or a medical device are taken from: the power symbol, the earth symbols, the warning triangles, the symbols for a function, a state, a hazard or an instruction. Each entry carries the symbol number, the drawing with its construction geometry, the title, the description of what it means and the note on how it may be used, and the register runs to several thousand entries. It is the Chinese adoption of the IEC 60417 register. A symbol used on equipment sold in China is expected to be one of these, drawn as this document draws it, and where a product standard calls for a symbol it does so by referring to a number in this register. The 2023 edition replaces GB/T 5465.2-2008. For a manufacturer, an industrial designer or a certification body, this is the source the marking is taken from.

This document specifies 1406 graphical symbols for electrical equipment and their names, meanings and application scope.

The graphic symbols in this document are applicable to the following purposes:

- identifying devices or their components (such as controllers or displays);
- indicating function status or function (such as on, off, alarming):
- marking connections (such as terminals and connectors);
- providing packaging information (such as the identification of the package, loading and unloading instructions);
- provide operating instructions for the equipment (e.g. use restrictions).

The graphical symbols in this document are not applicable to the following:

- safety marking;
- public information;
- drawings and sketches;
- product technical documentation.

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.

ISO 3166-1 Codes for the representation of names of countries and their subdivisions - Part 1: Country code

Note: GB/T 2659-2000 Codes for the representation of names of countries and regions (ISO31661997, IDT)

GB/T 2659.1-2022 Codes for the representation of names of countries and their subdivisions - Part 1 : Country code (ISO 3166-1: 2020, MOD)

ISO3864 (all parts) Safety colours and safety signs

ISO 3864-1 Graphical symbols- Safety colours and safety signs - Part 1 : Design principles for safety signs and safety markings

Note: GB/T 2893.1-2013 Graphical symbols - Safety colours and safety signs - Part 1 : Design principles for safety signs and safety markings (ISO 3864-1:2011, MOD);

GB 2893-2008 Safety colours (ISO 3864-1 :2002, MOD)

ISO 7010 Graphical symbols- Safety colours and safety signs- Registered safety signs

Note: GB/T 31523.1-2015 Safety information identification systems - Part 1 : Signs (ISO 7010: 2011, MOD)

ISO/IEC10646 Information technology- Universal coded character set (UCS)

Note: GB/T 13000-2010 Information technology - Universal multiple-octet coded character set (UCS) (ISO/IEC 10646:2003, IDT)

IEC 60601-1 (all parts) Medical electrical equipment

Note: GB 9706 (all parts) Medical electrical equipment [IEC 60601-1 (all parts)]

IEC 60900:2018 Live working- Hand tools for use up to 1000 V AC and 1500 V DC

Note: GB/T18269-2008 Live working-Hand tools for use up to 1kV a.c. and 1.5kV d.c. (IEC 60900:2004, MOD)

IEC 61140 Protection against electric shock - Common aspects for installation and equipment)

IEC 62056 (all parts) Electricity metering - Data exchange for meter reading, tariff and load control

IEC 62056-21 Electricity metering - Data exchange for meter reading, tariff and load control - Part 21 : Direct local data exchange

Note: GB/T 19897.1-2005 Automatic meter reading system lower layer communication protocol-Part 1:direct local data exchange (IEC 62056-21; 2002, MOD)

IEC 62626-1 Low-voltage switchgear and controlgear enclosed equipment - Part 1 : Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work

Note: GB/T35685.1-2017 Low-voltage switchgear and controlgear enclosed equipment - Part 1 : Enclosed switch-disconnectors to provide isolation during repair and maintenance work (IEC 62626-1 : 2014, IDT)

3 Terms and definitions

There are no terms and definitions to be defined in this document.

4 Graphical symbols

5001A

Battery, general

On battery powered equipment.

To identify a device related to the power supply by primary or secondary battery, for instance a cover for the battery compartment, or the connector terminals.

Notes:

1. This symbol is not intended to be used to indicate polarity.

2. To indicate the cell orientation, the symbol 5002 should be used.

5001B

Battery, general

On battery powered equipment.

Alternative graphical representation of "Battery, general". Same meaning as 5001A.

5002

Positioning of cell

On and in battery holders.

To identify the battery holder itself and to identify the positioning of the cell(s) inside the battery holder.

5003

AC/DC-converter; rectifier; substitute power supply

To identify an AC/DC-converter and, in case of plug-in devices, to identify the relevant receptacles.

Note: See also symbols 5186, 5194, 5284 and 5302.

5004

Variability

To identify the control device by means of which a quantity is controlled. The controlled quantity increases with the figure width.

Notes:

1. Only the linear version is given since the radius of the base of the curved version depends on the diameter of the control concerned. The curved version is shown in symbol 1364 of ISO 7000.

2. See also symbols 5181 and 5183.