

ICS 29.120.40
CCS K60



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

GB/T 16915.1-2024

Replacing GB/T 16915.1-2014

**Switches for household and similar fixed electrical installations
- Part 1: General requirements**

家用和类似用途固定式电气装置的开关 第1部分：通用要求

Issued on: September 29, 2024

Implemented on: October 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	2
4 General requirements	6
5 General notes on the test	6
6 Rated value	8
7 Categories	9
8 Sign	10
9 Dimensional inspection	13
10 Protection against electric shock	13
11 Grounding measures	15
12 Terminal	16
13 Structural requirements	24
14 Switch mechanism	30
15 Aging resistance, protection provided by switch housing and moisture resistance	31
16 Insulation resistance and electrical strength	33
17 Temperature rise	36
18 Switching capacity	38
19 Normal operation	40
20 Mechanical strength	45
21 Heat resistance	49
22 Screws, current-carrying parts and connections	50
23 Creepage distance, electrical clearance and distance through sealant	51
24 Resistance of insulating materials to abnormal heat, flame and tracking	53
25 Rust-proof	55
18 Schematic diagram of the gauge application direction of FIG.	17
74 Table C.1 Light.....	87

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is Part 1 of GB/T 16915 "Switches for household and similar fixed electrical installations". GB/T 16915 has been The following parts were published.

1. General requirements (GB/T 16915.1);

1. Particular requirements for electronic control devices (GB/T 16915.2);

2. Particular requirements for electromagnetic remote control switches (RCS) (GB/T 16915.3);

3. Particular requirements for time delay switches (TDS) (GB/T 16915.4);

4. Particular requirements for disconnectors (GB/T 16915.5);

6. Particular requirements for fire switches for external or internal marking and lighting (GB/T 16915.7). This document replaces GB/T 16915.1-2014 "Switches for household and similar fixed electrical installations - Part

1. General requirements" Compared with GB/T 16915.1-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Changed the range of switch-controlled motor loads, deleted the switch-controlled halogen lamp load circuit and combination circuit (see Chapter 1, Chapter 1 of the 2014 edition);

--- Added the terms and definitions of "on/off switch", "main components", "seal", "inlet diaphragm", "protective diaphragm" and "external ballast lamp" Definitions (see 3.1.1, 3.17, 3.18, 3.19, 3.20, 3.22), deleted the term and definition of "momentary push button switch" (see 2014

3.1.3 of the new version), the definitions of "normal gap structure switch", "small gap structure switch" and "screw terminal" have been changed (see 3.1.5,

3.5.2 of the 2014 edition; 3.1.5,

3.5.2 of the 2014 edition);

1 Scope

GB/T 16915.1-2024 is the general requirements part of the Chinese standard for switches in household and similar fixed electrical installations, the wall switch standard, and it is one of the highest-volume product standards in existence: every light switch installed in China is built and tested against it. It is the Chinese adoption of IEC 60669-1, and it is structured as that family is: the ratings and classification, the marking, the dimensional check, the protection against electric shock, the earthing arrangements, the terminals, which occupy eight pages because the terminal is where a switch actually fails, the constructional requirements, the switch mechanism, the resistance to ageing and to moisture and the

protection given by the enclosure, the insulation resistance and electric strength, the temperature rise, the making and breaking capacity, the normal operation endurance test, the mechanical strength, the heat resistance, the screws and current-carrying parts, the creepage distances and clearances, the resistance to abnormal heat and to fire and to tracking, and the electromagnetic compatibility. The 2024 edition replaces GB/T 16915.1-2014, which is superseded, and takes effect on 1 October 2025.

This document specifies the classification, marking, protection against electric shock, structural requirements, mechanical properties, etc. of switches for household and similar fixed electrical installations. Energy, electrical performance and other technical requirements. This document is applicable to indoor or outdoor use, and is only used for AC power, rated voltage not exceeding 440V, rated current not exceeding 63A Manually operated general purpose switches for household and similar fixed electrical installations. Switches with screwless terminals are rated for a maximum of 16A. The switches covered by this document are intended to control all of the following loads in normal use, where applicable.

---Tungsten filament lamp load circuit.

---External ballast lamp load circuit (such as LED, CFL, fluorescent lamp load).

--- Self-ballasted lamp load circuit (such as LEDi or CFLi).

---Basic resistive load circuit with power factor not less than 0.95.

---Single-phase for motor loads with rated current not exceeding 3A (power 750VA) at 250V and power factor not less than

0.6 This applies to switches with a rated current of not less than 10A and not subject to additional tests and switches with a rated current of not less than 6A Momentary switches without additional tests. This document also applies to mounting boxes for switches, but not to mounting boxes for concealed switches. Note

1.For the requirements for installation boxes for concealed switches, see GB/T 17466.1. This document also applies to.

--- Switch equipped with indicator light;

--- Electromagnetic remote control switch (special requirements are given in GB/T 16915.3);

--- Switches equipped with time delay devices (special requirements are given in GB/T 16915.4);

--- Switches combined with other functions (but not applicable to switches combined with fuses);

--- Electronic switches (special requirements are given in GB/T 16915.2);

--- Switch with flexible cable outlet device and flexible cable retaining device (according to Appendix A);

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

chinastandards.org · PREVIEW