



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

GB 16915.1-2014

Replacing GB 16915.1-2003

**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

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Foreword

This document was issued on 3 September 2014 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 3 August 2015.

It is a GB standard without the /T suffix: compliance is mandatory in China.

The document runs to 65 pages in translation. The identification, the dates, the table of contents and the clauses reproduced on this page are taken from the standard itself.

It replaces GB 16915.1-2003, which is superseded.

1 Scope

GB 16915.1 is the general part of the Chinese safety standard for the switches used in fixed household wiring: the light switches, dimmers, time-delay switches and the rest, mounted in a wall and wired into the mains. It is a mandatory standard, it is the basis of CCC certification for the product, and it is one of the higher volume certification categories there is, since a Chinese apartment contains dozens of them. The standard sets the classification of the switches, the requirements on the marking, on the dimensions and the interchangeability, on the protection against electric shock, on the provision for earthing, on the terminals and their conductor capacity, on the construction and on the mechanism, on the moisture and insulation resistance and the electric strength, on the temperature rise, on the making and breaking capacity and the normal operation endurance, on the mechanical strength, on the resistance to heat, to fire and to tracking, and on the creepage distances and clearances, together with the test methods for each. It is aligned with IEC 60669-1. For a switch maker or an importer selling into China, this is the mandatory text.

This part of GB 16915 specifies the classification, marking, protection against electric shock, structural requirements, mechanical property, electrical property and other technical requirements of switches for household and similar fixed-electrical installations.

This part is applicable to manually operated general purpose switches, for a.c. only with a rated voltage not exceeding 440V and a rated current not exceeding 63A, intended for household and similar fixed electrical installations, either indoors or outdoors.

For switches provided with screwless terminals, the rated current is limited to 16A.

Switches covered by this part are intended for the control in normal use of:

- a circuit for a tungsten filament lamp load; or
- a circuit for a fluorescent lamp load (including electronic ballast); or
- a circuit for a substantially resistive load with a power factor not less than 0.95; or
- a monophasic circuit for motor load with a rated current up to 10A and a power factor not

less than 0.6; or

--a circuit for a self-ballasted ultraviolet germicidal lamp load (e.g. LEDi or CFLi); or

--a circuit for a halogen lamp load; or

--a combination of these.

Note 1: An extension of the scope to switches for rated voltages higher than 440V is under consideration.

Note 2: An increase of the rated current of 10A for motor load is under consideration.

Note 3: For the time being, switches with a rated current more than 10A are considered as a 10A current for motor load switch.

The also applies to mounting boxes for switches, with the exception of mounting boxes for flush type switches.

Note 4: General requirements for mounting boxes for flush-type switches are given in GB 17466.

It also applies to switches such as:

--switches incorporating pilot lights;

--electromagnetic remote control switches (particular requirements are given in Part 2);

--switches incorporating a time-delay device (particular requirements are given in Part 2);

--combinations of switches and other functions (with the exception of switches combined with fuses);

--electronic switches (particular requirements are given in Part 2);

--switches having facilities for the outlet and retention of flexible cables (see Annex B);

--isolating switches (particular requirements are given in Part 2).

Note 5: The minimum length of the flexible cable used with these switches may be governed by National Wiring Rules.

Switches complying with this part are suitable for use at ambient temperatures not normally exceeding 35°C, but occasionally reaching 40°C1).

Note 6: Switches complying with this part are suitable only for incorporation in equipment in such a way and in such a place that it is unlikely that the surrounding ambient temperature exceeds 40°C.

In locations where special conditions prevail, such as in ships, vehicles and the like and in hazardous locations, for example where explosions are liable to occur, special constructions may be required.