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

GB/T 15092.102-2020

**Switches for appliances - Part 1-2: Requirements for electronic
switches**

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Foreword

GB/T 15092 "Appliance Switch" is divided into the following parts:

---Part 1: General requirements;

---Part 1-1: Mechanical switch requirements;

---Part 1-2: Requirements for electronic switches;

---Part 2: Special requirements;

* Special requirements for soft cord switches;

* Special requirements for conversion selector;

* Special requirements for independent installation switches;

* Special requirements for hand-held and portable power tools and garden machinery switches:

This part is Part 1-2 of GB/T 15092:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

This part uses the redrafting law to amend and adopt IEC 61058-1-2:2016 "Appliance Switch Part 1-2: Requirements for Electronic Switches", and

The technical differences of IEC 61058-1-2:2016 and their reasons are as follows:

---IEC 61058-1-2:2016 marked m in Table 101 stipulates: "This test is part of a sequence test, unless 5:1:2

Allowed, otherwise a new set of 3 samples shall not be used", and 5:1:2 is: "In all tests, measuring instruments or measuring devices

It should not significantly affect the measured value", which is obviously wrong, so the mark m in Table 101 of this part stipulates: "This test is a sequence

As part of the test, unless permitted by 5:1, a new set of 3 samples shall not be used:" This provision is also consistent with IEC 61058-1-

1:2016 The marked m in Table 101 is consistent:

---IEC 61058-1-2:2016's 14:3 stipulates: "The humidity treatment is carried out in a humid chamber, and the relative humidity of the air in the chamber is 91%~

Between 95%: In all places where the sample is placed, the air temperature is maintained at any suitable temperature (t) between 20°C and 30°C",

Considering that some areas of our country have a humid tropical climate, and all electrical and electronic products in our country use (40+/-2) degrees C for moisture-proof test,

According to the provisions of this part in conjunction with GB/T 15092:1: "The humidity treatment is carried out in a humid chamber, and the relative humidity of the air in the

chamber is

Between 91% and 95%: Keep the air temperature at any suitable temperature between 30 degrees C~40 degrees C in all places where the sample is placed

Value (t)", this provision is consistent with the severity level adopted by GB/T 2423:4, which is equivalent to IEC 60068-2-30:

---IEC 61058-1-2:2016 Chapter 16 stipulates: "GB/T 15092:1-2020 is applicable to this chapter", considering that the switch is in progress

16:4 During the heating test, the heating temperature when the switch contacts are closed is not necessarily the highest temperature of the switch, and the switch electronic components are ignored

The heat is generated at the maximum operating point of the component, so this section adds supplementary test conditions for electronic switches and test voltage selection in 16:4:

This chapter of GB/T 15092:1-2020 is only applicable after the application requirements, load conditions for heat test, and electronic switch setting points are specified:

This section has made the following editorial changes:

--- In Chapter 1 "Scope", "This part of GB/T 15092 specifies the classification, marking and Technical requirements for documents, protection against electric shock, structure, electrical performance, and mechanical performance: "" This section applies to actuation or control of household or

The electronic switch (hereinafter referred to as the switch) in the appliance switch of similar electrical appliances and other equipment has a rated voltage not higher than 480V, rated current is not more than 63A":

This part was proposed by China Electrical Equipment Industry Association:

This part is under the jurisdiction of the National Electrical Accessories Standardization Technical Committee (SAC/TC67):

Drafting organizations of this section: Shanghai Electric Tool Research Institute (Group) Co., Ltd., Zhongzheng Shangdong (Shanghai) Testing Technology Co., Ltd., Suzhou

Huazhijie Telecommunications Co., Ltd., Zhejiang Jiaben Electronics Co., Ltd., Zhejiang Zhongxun Electronics Co., Ltd., Changzhou Yunjie Electric Co., Ltd., Le

Qingshi Huiyang Electromechanical Co., Ltd., Zhejiang Guanbao Electronics Co., Ltd., Zhejiang Changlong Electric Co., Ltd., Fa-De Electric Co., Ltd., Suzhou Nuo

Fu Electric Co., Ltd., Southeast Electronics Co., Ltd., Zhongshan Yonglian Electrical

Products Co., Ltd., Weikai Testing Technology Co., Ltd., Zhejiang

Heling Electric Co., Ltd:

1 Scope

This part of GB/T 15092 specifies the classification, marking and documentation, protection against electric shock, structure, and electrical properties of electronic switches in appliance switches:

Technical requirements such as energy and mechanical properties:

This section applies to electronic switches in appliance switches that actuate or control household or similar electrical appliances and other equipment (hereinafter referred to as Switch), the rated voltage is not higher than 480V, and the rated current is not higher than 63A:

This chapter of GB/T 15092:1-2020 is applicable:

Add at the end of this chapter in GB/T 15092:1-2020:

This part of GB/T 15092 applies to electronic switching appliances and is used in conjunction with GB/T 15092:1-2020:

Note: Additional requirements for special switches can refer to GB/T 15092:2, GB/T 15092:3 and GB/T 15092:4:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

This chapter of GB/T 15092:1-2020 is applicable:

3 Terms and definitions

The terms and definitions defined in GB/T 15092:1-2020 apply to this document:

4 General requirements

This chapter of GB/T 15092:1-2020 is applicable:

5 General considerations for the test

After adding the following requirements, GB/T 15092:1-2020 this chapter applies: