

ICS 29.130.20

CCS K 32



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

GB/T 14048.20-2013

**Low-voltage switchgear and controlgear -- Part 5-8: Control
circuit devices and switching elements -- Three-position
enabling switches**

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

Foreword

1 Basic Requirements

1.1 Scope and purpose

1.2 Normative references

Foreword

GB 14048 "Low-voltage switchgear and control equipment" is currently divided into 21 sections.

--- GB 14048.1 low-voltage switchgear and control equipment Part 1. General;

--- GB 14048.2 low-voltage switchgear and control equipment Part 2. Circuit Breaker;

--- GB 14048.3 low-voltage switchgear and control equipment - Part 3. Switches, disconnectors, switch and fuse combination

Appliances;

--- GB 14048.4 low-voltage switchgear and control equipment - Part 4-1. Contactors and motor starters - Electromechanical contactors

And motor starters;

--- GB 14048.5 low-voltage switchgear and control equipment Part 5-1. Control circuit devices and switching elements - Electromechanical control

Electrical circuit;

--- GB 14048.6 low-voltage switchgear and control equipment Part 4-2. Contactors and motor starters - AC semiconductor

Motor controllers and starters (including soft starter);

--- GB/T 14048.7 low-voltage switchgear and control equipment Part 7-1. Ancillary copper conductor terminal blocks;

--- GB/T 14048.8 low-voltage switchgear and control equipment Part 7-2. Protection of the auxiliary conductor wiring copper conductors

Terminal block;

--- GB 14048.9 low-voltage switchgear and control equipment Part 6-2. Multiple function equipment (equipment) control and protection switch

Electric (equipment) (CPS);

--- GB/T 14048.10 voltage switchgear and control equipment Part 5-2. Control circuit devices and switching elements proximity

switch;

--- GB/T 14048.11 voltage switchgear and control equipment Part 6-1. Multiple function equipment - Transfer switching equipment;

--- GB/T 14048.12 voltage switchgear and control equipment Part 4-3. Contactors and motor starters - Non-Motor

Load AC semiconductor controllers and contactors;

--- GB/T 14048.13 voltage switchgear and control equipment Part 5-3. Control circuit devices and switching elements - Fault

Proximity Switch (PDF) to determine the conditions required to have the function;

--- GB/T 14048.14 voltage switchgear and control equipment Part 5-5. Control circuit devices and switching elements - with a machine

Mechanical latching function electrical emergency braking device;

--- GB/T 14048.15 voltage switchgear and control equipment Part 5-6. Control circuit devices and switching elements - proximity Biography

Sensors and switching amplifiers DC Interface (NAMUR);

--- GB/T 14048.16 voltage switchgear and control equipment - Part 8. rotary motor control with built - in thermal protection (PTC)

Unit;

--- GB/T 14048.17 voltage switchgear and control equipment Part 5-4. Control circuit devices and switching elements of small capacity

The method of evaluating the performance of special test contacts;

--- GB/T 14048.18 voltage switchgear and control equipment Part 7-3. Ancillary safety fuse terminal blocks

Wide requirements;

--- GB/T 14048.19 voltage switchgear and control equipment Part 5-7. Control circuit devices and switching elements for band

Analog output proximity equipment requirements;

--- GB/T 14048.20 voltage switchgear and control equipment Part 5-8. Control circuit devices and switching elements make three

You can switch;

--- GB/T 14048.21 voltage switchgear and control equipment Part 5-9. Control circuit devices and switching elements flow

switch.

This section GB 14048 "Low-voltage switchgear and control equipment" in Section 20.

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

This section uses the translation method identical with IEC 60947-5-8:2007 "low-voltage switchgear and control equipment Part 5-8. control circuit

Three-way devices and switching elements enable switch. "

This part made the following editorial changes.

--- Remove the IEC foreword;

--- Chapter 2 by deleting the definition of the alphabetical index.

Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB 14048.1-2012 Low-voltage switchgear and control equipment Part 1. General (IEC 60947-1:2011, MOD);

--- GB 14048.5-2008 Low-voltage switchgear and control equipment - Part 5-1. Control circuit devices and switching elements Machine

Electrical control circuit devices (IEC 60947-5-1:2003, MOD).

This part is proposed by the China Electrical Equipment Industrial Association.

The low-voltage electrical part by the National Standardization Technical Committee (SAC/TC189) centralized.

This section is responsible for drafting unit. Shanghai Electric Apparatus Research Institute, Shanghai Electric Technology Co., Ltd. Electric Division.

Participated in the drafting of this section. Yuyao Goodwin Electronics Co., Ltd. JU Bang Electric Co., Ltd., Chang An Group Co., Ltd., Shanghai

Detecting electrical equipment.

1.1 Scope and purpose

This section provides three enable switch requirements.

This section applies to the switch as an enabling device (see 10.9 GB 5226.1-2008 provisions) components used in the following cases

Provide signals.

1) is energized, allowing the mechanical operation initiated by a separate start control, and

2) de-energized when.

a) initiation stop function, and

b) to prevent mechanical operation.

Note 1. The control function is enabled in GB 5226.1-2008 is described in 9.2.6.3.

Note 2. This section does not involve enabled device.

This section does not apply to.

--- Three for non-electrical control circuit enabling switch, for example, hydraulic, pneumatic;

--- Not so with three mechanical devices can switch;

--- Emergency brake (see GB/T 14048.14).

1.2 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 2423.1-2008 Environmental testing for electric and electronic products Part 2. Test methods Test A. Cold (IEC 60068-2-

1.2007, IDT)

GB/T 2423.2-2008 Environmental testing for electric and electronic products Part 2. Test methods Test B. Dry heat (IEC 60068-2-

2.2007, IDT)

GB/T 2423.10-2008 Environmental testing for electric and electronic products Part 2. Test methods Test Fc. Vibration (sinusoidal)

(IEC 60068-2-6.1995, IDT)

GB/T 2423.5-1995 Environmental testing for electric and electronic products Part 2. Test methods Test Ea and guidance. Shock

(IEC 60068-2-27. 1987, IDT)

GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part

1. General requirements (IEC 60204-1.2005,