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

**GB 4793.2-2008**

Replacing GB 4793.2-2001

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**Safety requirements for electrical equipment for measurement, control,  
and laboratory use -- Part 2: Particular requirements for hand-held and  
hand-manipulated current sensors for electrical test and measurement**

**(English Translation)**

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## Foreword

All technical contents of this section is mandatory.

GB 4793 "measurement, control and laboratory safety requirements for electrical equipment" is currently divided into seven parts.

--- Part 1. General requirements (IEC 61010-1);

--- Part 2. Particular electrical measurement and test requirements held and hand operated current sensors (IEC 61010-2-032);

--- Part 3. laboratory mixing and stirring equipment Particular requirements (IEC 61010-2-051);

--- Part 4. Particular requirements for laboratory use (IEC 61010-2-041) Autoclave treatment of medical material;

--- Part 5. Safety electrical measurement and test requirements of the handheld probe assembly (IEC 61010-031);

--- Part 6. Laboratory Particular requirements (IEC 61010-2-010) heating of materials;

--- part 7. Particular requirements for laboratory centrifuges (IEC 61010-2-020).

**Note:** The name of the section will change with changes in IEC standard names.

This is Part 2 GB 4793's.

This section is equivalent to using 61010-2-032 IEC .2002 "2-032 portion of measurement, control and laboratory safety requirements for electrical equipment for

Point. Electrical measurement and test operations held and hand the special requirements of the current sensor "(in English). Its technical content, text structure and expression

Form and IEC 61010-2-032.2002 exactly the same.

For ease of use, the present editorial changes made the following section.

"," --- replaced by a decimal comma ",";

--- omitted IEC 61010-2-032.2002 Contents Introduction and "Appendix H (informative) defined Index";

--- For IEC 61010-2-032.2002 references other international standards have been adopted as identical or modified our standards, this

Partially replaced with corresponding international standards of national standards or industry standards; the rest No equivalent or modify adopted as our standard

Quasi-international standards, are directly referenced in this section.

This section is GB 4793.2-2001 "measurement, control and laboratory safety for electrical measurement and test of electrical equipment with hand-held electric

Specific requirements tongs "(IEC 61010-2-032.1994, IDT) revision.

This section must be combined GB 4793.1 "measurement, control and laboratory safety requirements for electrical equipment with Part 1. General Requirements"

use together. Stated in this section "applicable" section, showing the corresponding GB article suitable for use in the present section 4793.1; this standard states "instead of"

Or "modify" part, this strip section to indicate prevail; in this section indicate the "increase" portion, indicated that in addition to comply with the GB 4793.1

Should article, must also comply with the section bar increased. In order to distinguish the bar GB 4793.1, this part of the increase in the number of bars

### **101 starts, for example, 3.101.**

This portion of the major changes are more GB 4793.2-2001. Article many modifications made in the text, with the structure of the standard

GB 4793.1-2007 were adjusted for a number of test methods were more detailed explanation.

--- increased Type A, B, C define current transducer;

--- increase of anti-shock test method section increases protection against electric shock and short-circuiting prevention of structural requirements;

--- increases the dynamic test methods in mechanical shock resistance and impact requirements.

Appendix D of this section is normative.

This section was proposed by China Machinery Industry Federation.

This part of the jurisdiction of the National measurement, control and electrical equipment

Safety Laboratory Standardization Technical Committee (SAC/TC338).

This section was drafted. of Instrumentation Comprehensive Economic Institute of Technology.

## 1 Scope and Purpose

Except as follows, GB 4793.1 Chapter 1 apply.

### 1.1 Scope

instead.

GB 4793 apply to this portion of the hand-held communicator and a current sensor. Such current sensors are not used to electrically disconnect circuit circulation

In the case of the measured current path. The current sensor may be independent, or may be of other accessory devices.

The current sensor before or after measuring and testing, manual operation is required, but not necessarily required, and during the measurement the test handset.

A current sensor. should be interposed in the removal or uninsulated hazardous live conductors. A current sensor of the hand held or

Operating section should provide protection against electric shock of the conductor under test, in the clamping state, it should be provided to prevent a short circuit between the wires and the busbar

protection.

B current sensor. should provide protection against a short circuit between the wires or busbars in the clamping state, the hand-held or hand operating portion

Points do not provide protection against electric shock. To avoid the risk of electric shock during use or movement sensor for measuring a current uninterruptible power hazardous live conductors, to be put

For additional protective measures.

**Note:** B-type current sensor comprises a flexible current sensor.

C current sensor. in the clamping state, do not provide protection against a short circuit between the wires or bus bars. Only in uninsulated

When hazardous live conductors off, or removed in order to use C-type current sensor.

**NOTE:** C type current sensors include some split core transmitter.

## 2 Normative references

Terms of the following documents constitute provisions of this section by reference in this section 4793 of the GB . For dated references,

All subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encouraged to reach an agreement under this section

Whether the parties to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB 4793.1 measurement, control and laboratory use Part 1 safety requirements for electrical equipment. General requirements (GB 4793.1-

2007, IEC 61010-1.2001, IDT)

Except as follows, GB 4793.1 Chapter 2 apply.

increase.

GB 4793.5 measurement, control, and laboratory safety requirements for electrical equipment with Part 5. Electrical handheld test and measurement probes

Safety requirements for the components (GB 4793.5-2008, IEC 61010-2-031.2002, IDT)

## 3 Terms and Definitions

Except as follows, GB 4793.1 Chapter 3 are applicable.

increase.

GB 4793.2-2008/IEC 61010-2-032.2002

### 3.101 current sensor and its components (see FIG. 101)

legend.

### 3 --- pliers.

FIG example of the current sensor 101 and its parts

#### 3.101.1

A method for the circuit without cutting the current path, measurement, detection or injection current, or a current waveform indicating the portable device

Or handheld device.

**Note 1:** a current sensor, also referred to in some current clamp and current probes.

**NOTE 2:** Some are designed to be portable for fixing the current sensor may also be installed.