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

GB/T 21711.1-2023

**Electromechanical elementary relays-Part 1: General and safety
requirements**

基础机电继电器 第1部分：总则与安全要求
(English Translation)

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Foreword

GB/T 21711 Electromechanical elementary relays consists of the following parts.

- Part 1.General and safety requirements;
- Part 2.Reliability;
- Part 7.Test and measurement procedures.

This Part is the first part of GB/T 21711 Electromechanical elementary relays.

This Part is identical with IEC 61810-1:2003 Electromechanical elementary relays - Part 1.General and safety requirements (English version). For easy of use, this Part makes the following editorial changes.

- a) deleted IEC foreword;
- b) footnotes in tables used lowercase English letters to meet writing requirements for national standards;
- c) used decimal point "." to replace the "," that acts as decimal point;
- d) used "this Part" to replace "this international standard".

Annex A, Annex B, Annex D, Annex E, Annex F, Annex H, Annex I, Annex J, Annex K of this Part are normative; Annex C, Annex G are informative.

This Part was proposed by Ministry of Information Industry of the People's Republic of China.

This Part shall be under the jurisdiction of National Technical Committee on All or Nothing Relays of Standardization Administration of China.

The drafting organization of this Part. China Electronics Standardization Institute (CESI).

Main drafters of this Part. Wang Jue, Shi Xinyuan.

Electromechanical elementary relays -

Part 1.General and safety requirements

1 Scope

This Part applies to electromechanical elementary relays (non-specified time all or-nothing relays) for incorporation. It defines the basic safety-related and

functional requirements for applications in all areas of electrical engineering or electronics, such as.

- general industrial equipment,
- electrical facilities,
- electrical machines,
- electrical appliances for household and similar use,
- information technology and business equipment,
- building automation equipment,
- automation equipment,
- electrical installation equipment,
- medical equipment,
- control equipment,
- telecommunications,
- vehicles,
- transportation,
- etc.

Compliance with the requirements of this Standard is verified by the type tests indicated.

In case the application of a relay determines additional requirements exceeding those specified in this Standard, the relay should be assessed in line with this application in accordance with the relevant IEC standard(s) (for example IEC 60730-1.1999, IEC 60335-1.1991, IEC 60950-1.2001).

2 Normative references

The following standards contain the provisions which, through reference in this Part, constitute the provisions of this Part. For dated references, subsequent amendments (excluding corrections) or revisions do not apply to this Part. However, the parties who enter into agreement based on this Part are encouraged to investigate whether the latest versions of these documents are

applicable. For undated reference documents, the latest versions apply to this Part.

GB/T 16935.1-1997 Insulation coordination for equipment within low-voltage systems. Part 1.Principles, requirements and tests (idt IEC 60664-1.1992)

Amendment 1 (2000)

Amendment 2 (2002)

GB 17196-1997 Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements (idt IEC 61210.1993)

GB/T 19405.1-2003 Surface mounting technology - Part 1.Standard method for the specification of surface mounting components (SMDs) (idt IEC 61760-1.1998)

IEC 60038.1993 IEC standard voltages

Amendment 1 (1984)

Amendment 2 (1997)

IEC 60050 International Electrotechnical Vocabulary

IEC 60068-2-17.1994 Basic environmental testing procedures - Part 2.

Tests - Test Q. Sealing

IEC 60068-2-20.1979 Basic environmental testing procedures - Part 2.

Tests - Test T. Soldering

Amendment 2 (1987)

IEC 60085.1984 Thermal evaluation and classification of electrical insulation

IEC 60112.2003 Method for the determination of the proof and the comparative tracking indices of solid insulating materials

IEC 60335-1.1991 Safety of household and similar electrical appliances - Part 1.General requirements

IEC 60364-4-44.2001 Electrical installations of buildings Part 4-44.