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

GB/T 21711.7-2018

**Electromechanical elementary relays -- Part 7: Test and
measurement procedures**

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Foreword

GB/T 21711 "Basic Electromechanical Relay" is currently divided into the following sections.

--- Part 1. General and safety requirements;

--- Part 2. Reliability;

--- Part 7. Test and measurement procedures.

This part is the seventh part of GB/T 21711.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the translation method equivalent to IEC 61810-7:2006 "Basic Electromechanical Relays Part 7. Test and Measurement Procedures".

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

--- GB/T 2423.30-2013 Environmental testing - Part 2. Test methods Tests XA and guides. impregnation in cleaning agents

(IEC 60068-2-45. 1980/Amd 1..1993, MOD);

--- GB/T 17627.1-1998 High voltage test technology for low voltage electrical equipment Part 1. Definitions and test requirements

(eqvIEC 61180-1.1992);

--- GB/T 17627.2-1998 High voltage test technology for low voltage electrical equipment
Part 2. Measuring systems and test equipment

(equiv IEC 61180-2:1994).

This section has made the following editorial changes.

--- Corrected the clerical error in the expression 1 of 4.4 of IEC 61810-7:2006, modified
from "(maximum-minimum) x 10" to

"(Maximum - Minimum) x 100".

1 Scope

This part of GB/T 21711 specifies the test and measurement procedures for basic
electromechanical relays. This section includes various basic electromechanical

The basic procedure for general use of electrical appliances. Additional requirements may
be added for a particular design or application.

The various test and measurement procedures specified in this section are for a single
program with a specific requirement. When these are in the test outline

In the case of test combinations, such as the corresponding grouping of relay tests, care
must be taken to ensure that the tests performed first shall not invalidate subsequent tests.

The term "regulations" used in this section refers to the provisions in the corresponding
documents of the relay, such as the manufacturer's data sheet, test specifications, user
details.

Fine specification. For the International Electrotechnical Commission's Electronic
Component Quality Assessment System (IEC Q), this provision is included in A.7 of
QC001001.

In the detailed specification defined.

Note 1. In order to improve the readability of this section, the term "relay" is often used
instead of "basic electromechanical relay".

Note 2. The requirements and test items related to the basic electromechanical relay
finalization test are specified in GB/T 21711.1-2008, but the provisions specified in this
section

The test and measurement procedures are more binding and more stringent than those
specified in GB/T 21711.1-2008.

Note 3. The standards involved in relays for quality assessment in accordance with the IEC
Q system are compiled in GB/T 16608 (IEC 61811).

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

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

GB/T 2423.1-2001 Environmental testing of electrical and electronic products - Part 2. Test methods Test A. Low temperature (IEC 60068-2-

1.1990, IDT)

GB/T 2423.2-2001 Environmental testing of electric and electronic products - Part 2. Test methods Test B. High temperature (IEC 60068-2-

2.1974, IDT)

GB/T 2423.3-2006 Environmental testing for electric and electronic products - Part 2. Test method test Cab. constant damp heat test

(IEC 60068-2-78.2001, IDT)

GB/T 2423.4-2008 Environmental testing of electrical and electronic products - Part 2. Test methods Test Db. alternating heat (12h

12h cycle) (IEC 60068-2-30.2005, IDT)

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

(IEC 60068-2-27.1987, IDT)

GB/T 2423.6-1995 Environmental testing of electric and electronic products - Part 2. Test methods Test Eb and guide. Collision

(IEC 60068-2-29.1987, IDT)

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

(IEC 60068-2-6.1995, IDT)

GB/T 2423.15-1995 Environmental testing of electric and electronic products - Part 2. Test methods Tests Ga and guidance. Steady-state acceleration

Degree (IEC 60068-2-7.1986, IDT)

GB/T 2423.16-2008 Environmental testing for electric and electronic products - Part 2. Test methods Test J and guide.

(IEC 60068-2-10.2005, IDT)

GB/T 2423.17-2008 Environmental testing of electric and electronic products - Part 2. Test method test Ka. salt spray

(IEC 60068-2-11.1981, IDT)

GB/T 2423.19-2013 Environmental testing - Part 2. Test methods Tests Kc. sulphur dioxide test for contact points and joints

Inspection (IEC 60068-2-42.2003, IDT)

GB/T 2423.20-2014 Environmental testing - Part 2. Test methods Tests Kd. Hydrogen sulfide test for contact points and joints

(IEC 60068-2-43.2003, IDT)

GB/T 2423.21-2008 Environmental testing of electric and electronic products - Part 2. Test method Test M. Low pressure

(IEC 60068-2-13.1983, IDT)

GB/T 2423.22-2002 Environmental testing of electric and electronic products - Part 2. Test method Test N. Temperature change

(IEC 60068-2-14. 1984, IDT)

GB/T 2423.23-2013 Environmental testing - Part 2. Test methods test Q. Seals (IEC 60068-2-17.1994,

IDT)

GB/T 2423.28-2005 Environmental testing of electrical and electronic products - Part 2. Test methods Test T. Soldering (IEC 60068-

2-20. 1979, IDT)

GB/T 2423.37-2006 Environmental testing for electric and electronic products - Part 2. Test methods Test L. Dust test

(IEC 60068-2-68.1994, IDT)

GB/T 2423.56-2006 Environmental testing of electric and electronic products - Part 2. Test method test Fh.

Word control) and guidelines (IEC 60068-2-64.1993, IDT)

GB/T 3785.1-2010 Electroacoustic sound level meters - Part 1. Specification (IEC 61672-1.2002, IDT)

GB/T 5095.7-1997 Basic test procedures and methods of measurement for electromechanical components - Part 7