

ICS 29.120.70

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

GB/T 14598.14-2010

Replacing GB/T 14598.14-1998

**Measuring relays and protection equipment -- Part 22-2:
Electrical disturbance tests -- Electrostatic discharge tests
(English Translation)**

Issued on: November 10, 2010

Implemented on: May 1, 2011

Issued by: Standardization Administration of China

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Foreword

GB/T 14598 "for measuring relays and protection equipment" for the multi-part series of standards, including the following sections.

--- GB/T 14598.1 Electrical relays - Part 23. Contact performance;

--- GB/T 14598.3 relays - Part 5. Measuring relays and protection equipment insulation coordination requirements and tests;

--- GB/T 14598.4 Electrical relays Part XIV. Endurance test for electrical relay contacts - contact loads excellent First value;

--- GB/T 14598.5 Electrical relays Part XV. characteristic electrical relay contacts life test test equipment specification;

--- GB/T 14598.6 Electrical relays - Part 18. There are no size or generic relay;

--- GB/T 14598.7 Electrical relays - Part 3. Single input dependent or independent time energizing quantity measuring relays;

--- GB/T 14598.8 Electrical relays - Part 20. Protection System;

--- GB/T 14598.9 metric Part 22-3 relays and protection equipment. Electrical disturbance tests - Radiated electromagnetic field disturbance test;

--- GB/T 14598.10 Electrical relays - Part 22-4. Electrical disturbance tests for measuring relays and protection equipment --- electrical Fast transient/burst immunity test;

--- GB/T 14598.13 Electrical relays - Part 22-1. Electrical measuring relays and protection equipment disturbance tests ---1MHz burst immunity test;

--- GB/T 14598.14 measuring relays and protection equipment - Part 22-2. Electrical disturbance tests - Electrostatic discharge tests;

--- GB/T 14598.15 Electrical relays - Part 8. Thermal electrical relays;

--- GB/T 14598.16 Electrical relays - Part 25. Electromagnetic emission tests measure

relays and protection equipment;

--- GB/T 14598.17 Electrical relays - Part 22-6. Measuring relays and protection equipment
- Electrical disturbance tests --- radio Immunity to conducted disturbances induced frequency field;

--- GB/T 14598.18 Electrical relays - Part 22-5. Measuring relays and protection equipment
- Electrical disturbance tests --- Wave Surge immunity test;

--- GB/T 14598.19 Electrical relays - Part 22-7. Measuring relays and protection equipment
- Electrical disturbance tests --- Workers Frequency immunity tests;

--- Part 26 GB/T 14598.20 Electrical relays. measurement of electromagnetic relays and protection equipment compatibility requirements;

--- GB 14598.27 metric Part 27 relays and protection devices. product safety requirements;

--- GB/T 14598.300 microprocessor transformer protection equipment requirements;

--- GB/T 14598.301 microprocessor-based generator and transformer fault recorder technology requirements;

--- GB/Z14598.302 $\pm 800\text{kV}$ UHVDC Control and protection equipment technology guidance.

This section GB/T 14598.14 "metric Part 22-2 relays and protection equipment. Electrical disturbance tests - Electrostatic discharge tests." this section Press GB/T 1.1-2009 given rule drafting.

This Part replaces GB/T 14598.14-1998 "electrical interference measuring relays and protection equipment - Part 2. Electrostatic discharge test".

This portion of the GB/T 14598.14-1998 main changes are as follows.

Name --- in this section to "Section 22-2 for measuring relays and protection equipment. Electrical disturbance tests --- electrostatic discharge test";

--- Detailed description of the test configuration;

--- According to different functions of the device specified acceptance criteria;

--- Appendix B becomes Appendix A, delete Appendix B.

GB/T 14598 in this part of the translation method is equivalent to using IEC 60255-22-2:2008 "Measuring relays and protection equipment - Section 22-Part 2. Electrical disturbance tests - Electrostatic discharge tests "(in English).

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

a) 'this International Standard' to replace the word 'this section';

- b) use a decimal point instead of a decimal point, " ";
- c) Remove the preface to international standards.

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

This part of the National measuring relays and protection equipment Standardization Technical Committee (SAC/TC154) centralized.

This part mainly drafted by. XJ Electric Co., Ltd., Beijing Sifang Automation Co., Ltd., Nanjing NARI-RELAYS Electric Co., Ltd., Guodian Nanjing Automation Co., Ltd., the national relay protection and automation equipment for Quality Supervision and Inspection Center, Zhuhai Wan Lida Electric Co., Ltd., Beijing Purple Control Co., Ltd., Dongfang Electronics Co., Ltd., integrated into an electronic Co., Xuchang Relay Research Institute, Shanghai Relay Co., Ltd., Hebei North Heng Electric Co., Ltd., Shanghai Electric Power Automation Tianzheng tomorrow Limited, ABB (China) Co., Ltd., Schneider Electric (China) Investment Co., Ltd., Siemens Power Automation Ltd., Jiang Su Jinzhi technology stocks Limited copies.

Drafters of this section. Jinquan Ren, Fan Wei, Xia Yu, Wangyou Long, Liquan Xi, Wang Lei, Hu is the right constitutional army, Du Sheng-yun, YANG Hui-xia, Wang Jiemin, Tian Jianjun, Mao Yasheng, Li Yan, Li Yao, Marsh die, Shen Jun, Deng Yingjun.

This part of the standard replaces the previous editions are.

--- GB/T 14598.14-1998.

Part 22-2 metric relays and protection equipment.

Electrical disturbance tests --- electrostatic discharge test

1 Scope

GB/T 14598 in this section to GB/T 17626.2 basis, refer to the appropriate part of this publication, provides for electrostatic discharge test General Requirements for inspection. The test is applicable to measuring relays and protection equipment used in electric power systems, including for use with these devices Control, monitoring and process interface equipment.

Trial is to be verified in the pilot plant and are motivated not by the malfunction of electrostatic discharge harassment.

The requirements of this section apply to new measuring relays and protection equipment, all the tests prescribed only for type testing.

The purpose of this section is to provide.

--- The definitions of terms used;

- Test severity;
- Test equipment;
- Test configuration;
- Test procedures;
- Acceptance criteria;
- experiment report.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the edition are not applicable to the present file. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2900.17 Electrotechnical terminology measuring relays GB/T 2900.49
Electrotechnical terminology - Power System Protection (GB/T 2900.49-2004, IEC
60050-448:1995, IDT) GB/T 4365 Electrotechnical terminology Electromagnetic
compatibility (GB/T 4365-2003, IEC 60050-161:1990, IDT) GB/T 14047 for measuring
relays and protection equipment (GB/T 14047-1993, idt IEC 60255-6. 1988) GB/T
17626.2-2006 Electromagnetic compatibility - Testing and measurement techniques -
Electrostatic discharge immunity test (IEC 61000-4-2:2001, IDT)

3 Terms and Definitions

GB/T 2900.17, GB/T 2900.49, GB/T 4365 and defined in GB/T 17626.2, special terms and these terms and definitions apply to this document.

Subjects means equipmentundertest; EUT the device being tested, can be a measure of the relay or a protection device.

Contact discharge method the electrode of the test generator and test equipment are kept in contact by the discharge switch within the generator to be triggered discharge a pilot plant