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

GB/T 14598.11-2011

Replacing GB/T 8367-1987

**Measuring relays and protection equipment -- Part 11: Voltage
dips, short interruptions, variations and ripple on auxiliary
power supply port**

(English Translation)

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Foreword

GB/T 14598 "for measuring relays and protection equipment" is divided into several parts.

- 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 testing";
- GB/T 14598.4 "Electrical relays - Part 14. Preferred values \u200b\u200bfor electrical relay contacts Contact load life test";
- GB/T 14598.5 "Electrical relays - Part 15. Electrical characteristics of relay contacts life testing of test equipment";
- GB/T 14598.6 "Electrical relays - Part 18. There are no size or universal relay";
- GB/T 14598.7 "Electrical relays - Part 3. dependent or single input energizing quantity measuring relays with independent time";
- GB/T 14598.8 "Electrical relays - Part 20. Protection System";
- GB/T 14598.9 "measure 22-3 Part relays and protection equipment. Electrical disturbance tests - Radiated electromagnetic field disturbance tests";
- GB/T 14598.10 "Section 22-4 for measuring relays and protection equipment. Electrical disturbance tests - Electrical fast transient/burst Immunity test ";
- GB/T 14598.13 "Electrical relays - Part 22-1. Electrical disturbance tests measure relays and protection equipment 1MHz burst immunity test ";
- GB/T 14598.14 "measuring relays and protection equipment division 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 for measurement relays and protection devices";
- GB/T 14598.17 "Electrical relays - Part 22-6. Electrical disturbance tests for RF relays

and protection equipment Field-induced immunity to conducted disturbances ";

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

--- GB/T 14598.19 "Electrical relays - Part 22-7. Electrical disturbance tests for measurement and protection relay station frequency Immunity test ";

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

--- GB 14598.27 "measuring relays and protection equipment - Part 27. Product safety requirements";

--- GB/T 14598.300 "microcomputer transformer protection devices General requirements";

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

--- GB/Z14598.302 "±800kV special HVDC control and protection equipment technology guidance. " this section GB/T 14598 Part 11.

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

Section compared with GB/T 8367-1987, major changes in the following.

--- Standard name becomes "Part 11 for measuring relays and protection equipment. Auxiliary power port voltage dips, short interruptions and voltage Changes and Ripple ";

--- Increased IEC 61000-4-11, IEC 61000-4-17, the requirements of IEC 61000-4-29;

--- The corresponding increase test severity and acceptance criteria.

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

--- GB/T 17626.11-2008 Electromagnetic compatibility Testing and measurement techniques - Voltage dips, short interruptions and voltage variations resistance Interference Test (IEC 61000-4-11:2004, IDT)

--- GB/T 17626.17-2005 electromagnetic compatibility test and measurement technology dc input power port immunity test ripple (IEC 61000-4-17:2002, IDT)

--- GB/T 17626.29-2006 electromagnetic compatibility test and measurement technology dc input power port voltage dips, short of Off and voltage variations immunity tests (IEC 61000-4-29:2000, IDT) this section identical with IEC 60255-11:2008 "Part 11 for measuring relays and protection equipment. Auxiliary power port voltage sags Drop, short interruptions, variations and ripple voltage "(in English).

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

--- International Standard for Table 1, footnote "a" and "b" of the order have been adjusted.

This Part replaces GB/T 8367-1987 "dc auxiliary energizing quantity measuring relays interrupt and alternating component (ripple)." 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 section is drafted. Jicheng Electronics Co., Xuchang Relay Research Institute, XJ Electric Co., Ltd., Nanjing NARI-RELAYS Bao Electric Co., Ltd., Beijing Sifang Automation Co., Ltd., Xuchang Cape Electrical Testing Institute, China Electric Power Research Institute, Zhuhai Wanlida Electric Co., Ltd., violet and Control (Tianjin) Co., Ltd., Dongfang Electronics Co., Ltd., Hebei North Heng Electrical Technology Co., Ltd., Shanghai Electric Power Automation Tianzheng tomorrow Limited, Schneider Electric (China) Investment Co., Ltd., ABB (China) Limited Secretary Jiang Su Jinzhi Technology Co., Schneider Electric (China) Investment Co., Ltd. Shanghai Branch, Siemens (China) Co., Ltd.

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1 Scope

This section provides for measuring relays and protection equipment for power system protection used, including the control and use of these devices together, monitoring General requirements depending on the equipment and process interface AC and DC power.

Based on this section.

- IEC 61000-4-11 AC voltage dips, short interruptions and voltage variation;
- IEC 61000-4-17 voltage ripple;
- IEC 61000-4-29 DC voltage dips, short interruptions and voltage variation.

Purpose of the test is to verify that the pilot plant is being excited and being made, such as voltage dips, short interruptions, variations and ripple voltage at whether positive Indeed work.

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

The purpose of this section is to provide.

- The definitions of terms used;
- test severity;
- test equipment;

- Test configurations;
- test procedures;
- acceptance criteria;
- test report.

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.

IEC 60255-1 Part 1 measurement relays and protection equipment. General requirements (Measuring relays and protection equipment-Part 1. Common requirements) 1) IEC

61000-4-11 electromagnetic compatibility (EMC) - Part 4-11. Testing and measurement techniques - Voltage dips, short interruptions and voltage Variations immunity tests (Electromagnetic compatibility (EMC) -Part 4-11.

Testing and measurement techniques-Voltage dips,

short interruptions and voltage variations immunity tests) IEC 61000-4-17 Electromagnetic compatibility (EMC) - Part 4-17. Testing and measurement techniques ripple dc input power port immunity Test (Electromagnetic compatibility (EMC) -Part 4-17.

Testing and measurement techniques-Ripple d.c. input power port immunity test)

1) IEC original mistaken for IEC 60255-6, shall IEC 60255-1.