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

GB/T 22071.1-2018

Replacing GB/T 22071.1-2008

**Test guide for instrument transformers - Part 1: Current
transformers**

互感器试验导则 第1部分：电流互感器

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1 Scope

GB/T 22071.1-2018 is the Chinese national standard on test guide for instrument transformers - part 1: current transformers, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 28 December 2018 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2019. Classification: ICS 29.180, CCS K41. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

2 Determine the resistance R_0 value of the moment when the power is cut off. Figure

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article. Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 2421.1 Overview and Guide for Environmental Testing of Electrical and Electronic Products

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

GB/T 2423.23 Environmental testing - Part 2. Test method test Q. Sealing

GB/T 4208 enclosure protection grade (IP code)

GB/T 4756 petroleum liquid manual sampling method

GB/T 5169.2 Fire hazard testing for electric and electronic products - Part 2. General guide to fire hazard assessment

GB/T 5169.9 Fire hazard testing for electric and electronic products - Part 9. Guidelines for pre-selection of fire hazard assessment General

GB/T 5169.18 Fire hazard testing for electric and electronic products - Part 18. General

GB/T 5585.1 Copper, aluminium and alloy alloys for electric purposes - Part 1 . Copper and copper alloy bus

GB/T 7354 partial discharge measurement

GB/T 7674 gas insulated metal-enclosed switchgear with rated voltage of 72.5kV and above

GB/T 11604 high-voltage electrical equipment radio interference test method

GB/T 16927.1 High Voltage Test Technique Part 1. General Definitions and Test Requirements

3 Table

3 Temperature rise limits for various components, materials and media of transformers

6 Ratio difference and phase difference limits for measuring transformers (

0.1 to 1.0)

7 Special test

46 Supplementary requirements for Type 8 tests

11 Permissible partial discharge levels

12 Dielectric loss factor allowable value of 32 for various oil immersed transformers Table

12 Non-capacitive transformer dielectric loss factor measurement

13 Capacitance type transformer partial capacitance and dielectric loss factor measurement (positive connection method)

14 Capacitance transformer overall capacitance and dielectric loss factor measurement

15 Ground-screen (last screen) dielectric loss factor measurement for capacitive transformers

13 Table

7 Ratio difference and phase difference limits for measuring transformers for special purposes (0.2S and 0.5S)

14 Insulation oil breakdown voltage requirements

44 Table 15 dielectric oil loss factor (tan delta) requirements

20 Application of test load on primary terminal

21 Temporary leakage rates allowed for gas systems

22 Fire hazard of electrical products 54

GB/T 22071 "Guidelines for Testing of Transformers" is divided into the following sections.

--- Part 1. Current transformers;

--- Part 2. Electromagnetic voltage transformers. This part is the first part of GB/T 22071. This part is drafted in accordance with the rules given in GB/T 1.1-2009. This part replaces GB/T 22071.1-2008 "Guidelines for Testing of Transformers Part 1. Current Transformers", and GB/T 22071.1- Compared to.2008, the main technical changes are as follows:

--- Revised the normative reference documents (see Chapter 2 and Chapter 2 of GB/T 22071.1-2008);

--- Listed specific test items (see Table 1);

--- Improve the test sequence and give a test sequence diagram (see Figure 1 and

3.2 of GB/T 22071.1-2008);

--- Re-improved and supplemented the relevant test items and test methods (see

3.1 and Chapter 5, Chapter 6, Chapter 7);

--- Increased the relevant test requirements for equipment with maximum voltage of 750kV and 1000kV transformers (see Table 4). This part was proposed by China Electrical Equipment Industry Association. This part is under the jurisdiction of the National Instrument Standardization Technical Committee (SAC/TC222). This section drafted by: Shenyang Transformer Research Institute Co., Ltd., China Electric Power Research Institute, Dalian North Transformer Group Company, Dalian First Transformer Co., Ltd., Zhejiang Skyline Transformer Co., Ltd., Jiangsu Jingjiang Transformer Co., Ltd., special change Electric Power Kangjia (Shenyang) Transformer Co., Ltd., Hengyang Huarui Electric Co., Ltd., State Grid Jilin Electric Power Co., Ltd. Research Institute. The main drafters of this section. Zhang Xianzhong, Liu Yong, Wang Wei, Wang Renqi, Sha Yuzhou, Xu Wen, Li Taochang, Xiong Jiangyi, Wang Jiyuan, Liu Yufeng, Zeng Xiangshun, Tang Fuxin, Deng Xiaozhe, Huang Hua, Zhao Shixiang. The previous versions of the standards replaced by this section are.

---GB/T 22071.1-2008. Transformer test guidelines Part 1. Current transformers