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

GB/T 1000-2016

Replacing GB 1000.2-1988

**Dimensions and characteristics of pin insulators of ceramic for
high-voltage overhead lines**

高压线路针式瓷绝缘子尺寸与特性

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard instead of GB/T 1000.2-1988 "high voltage line pin porcelain insulator size and characteristics", and GB/T 1000.2-1988 phase In addition to editorial changes, the main technical changes are as follows:

--- As the original standard GB/T 1000.1 has been incorporated into the GB/T 1001.1, and was replaced, therefore, the revision of the standard number to modify;

--- the original standard in the "technical requirements" of the content, respectively, into Chapter 4, Chapter 5, Chapter 6; - the form of "purpose and scope" of Chapter 1 has been changed;

--- Chapter 2, "normative reference documents" in the modified and added; In Chapter 3, "Terminology and Definitions", the term "bending failure of porcelain pieces" was added;

--- the "model" part into Chapter 4. structure type and model, according to JB/T 9683-2012 "insulator product model compilers Law "in the

5.5 pairs of needle insulator product model preparation method, in Table 1 and Table 2 on the insulator model was re- Prepared and compared with the original model (see Appendix A);

--- put the table in Table 2 into the table;

--- the original standard of

4.4 to Chapter 6, and the "zinc sleeve thread connection insulator steel feet screw size" to "steel feet connecting thread Size ", see Chapter 6 of the chapter title;

--- Because GB/T 1000.1 has been replaced by GB/T 1001.1, the text of the "Dimensional Tolerance" section in Chapter 6 makes the phase Should change;

--- According to the current domestic high-voltage line needle porcelain insulator products increased by two product types shown in Figure 2, Figure 7, an increase of three Specifications of the product, its size and characteristics shown in Table 1 and Table 2; -

Added Appendix A (normative) and Appendix B (informative). Please note that some of the contents of this document may involve patents. The issuer of this document does not assume responsibility for the identification of these patents. This standard is proposed by China Electrical Equipment Industry Association. This standard is nationalized by the National Insulator Standardization Technical Committee (SAC/TC80). The standard responsible for the drafting unit. Xi'an High Voltage Electric Research Institute Co., Ltd., Suzhou Electric Porcelain Co., Ltd., China Southern Power Grid Corporation, the country Home insulator arrester quality supervision and inspection center, China Electric Power Research Institute, Dalian Electric Porcelain Group Co., Ltd. This standard participates in the drafting unit. Pingxiang Huawi Electric Porcelain Electric Technology Co., Ltd., China Railway Second Hospital Engineering Group Co., Ltd., Hunan Ltd., Zibo Electric Porcelain Co., Ltd., Zigong Red Star Electric Porcelain Co., Ltd., Chongqing Pigeon Electric Porcelain Co., Ltd., Hebei Cangzhou Valin Electric Co., Ltd. The main drafters of this standard. Zhao Hui, Luzhou, Liu Pingyuan, Liu Zhiqiang, Zhang Rui, Zhang Jijun, Hu Wenhua, Deng Yunchuan, Xiao Guanghui, Wang Xingfang, Guchuanhua, Tao Shi, Bai Shujie. This standard replaced the previous version of the standard release.

--- GB/T 1000.2-1988. Size and Characteristics of Needle Insulator for High Voltage Line

1 Scope

GB/T 1000-2016 is the Chinese national standard on dimensions and characteristics of pin insulators of ceramic for high-voltage overhead lines, 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 25 April 2016 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 November 2016. Classification: ICS 29.080.10, CCS K48. 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.

This standard specifies the structure type, size, mechanical characteristics and electrical characteristics of high voltage line needle porcelain insulators. This standard applies to the nominal voltage of 10kV and below, the frequency is not higher than 100Hz AC overhead power line with the needle (Hereinafter referred to as insulator). Insulator installation location for the ambient temperature of -40 °C ~ 40 °C, the altitude of not more than 1000m area. This standard does not apply to insulators used in environments where insulator porcelain pieces, metal attachments are severely corroded or the insulator performance is reduced.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document. Common thread tolerances GB/T 197

GB/T 1001.1-2003 Overhead line insulators with nominal voltages higher than 1000 V Part 1. Porcelain or glass for AC systems Insulator elements - Definitions, test methods and determination criteria Specification for smooth limit gauges

GB/T 1957-2006 Terminology of electrical terms - Insulators GB/T

GB/T 5267.3 Fastener hot dip galvanized layer

JB/T 9683-2012 insulator product model preparation method

3 Terms and definitions

GB/T 2900.8-2009 and GB/T 1001.1-2003 and the following terms and definitions apply to this document.

3.1 Porcelain pieces bending damage load The use of reinforced steel feet on the insulator porcelain pieces (referred to as porcelain pieces) for bending test, the porcelain pieces of damage when the load.

4 Structure type and model

4.1 Structure type Insulator structure type is divided into plastic and threaded connection of two, see Figure 1 to Figure 7.

4.2 Model The design of the high-voltage line type porcelain insulator shall be in accordance with the requirements of

5.5 in JB/T 9683-2012. details as follows: (1) (2)/(3) (4) (5)/(6)