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

GB/T 12944-2011

Replacing GB 12944.2-1991

High-voltage ceramic wall bushings

高压穿墙瓷套管

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 12944.2-1991 "high voltage ceramic wall bushings - Dimensions and characteristics", and GB/T 12944.2-1991 phase Ratio, in addition to editorial changes outside the main technical changes are as follows:

- Increased "operating conditions, ordering information and identification" section (see Chapter 4);
- Increased "technical requirements" chapter, in addition to the technical conditions GB/T 4109-2008 regulations, the increase in the visible corona voltages and tolerances And other requirements (see Chapter 6);
- Added "Test Requirements" chapter, in addition to the test requirements GB/T 4109-2008 the provisions in the type test increased visibility electricity Halo voltage test requirements, and provides a number of samples for type test (see Chapter 7);
- Press highest voltage for equipment GB 311.1 is revised draft of the provisions of the revised standard rated voltage value (see Tables 2 and 3);
- According to a unified concept creepage distance (USCD) dressing each grade bushing creepage distance, and adds some creepage distance rating And rated current of the

product (see Tables 2 and 3);

--- Cancel the original structure 8 (see GB/T 12944.2-1991 Figure 8);

--- Increased when the maximum ambient temperature is above or below 40 °C sleeve use provisions (see Appendix A). Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. The standard proposed by China Electrical Equipment Industrial Association. This standard by the National Standardization Technical Committee Insulators (SAC/TC80) centralized. This standard was drafted. Suzhou Electric Porcelain Co., Ltd., Xi'an High Voltage Apparatus Research Institute Co., Ltd., the National Insulator arrester Quality Supervision, Inspection Center, State Grid Electric Power Research Institute, Nanjing Electric (Group) Co., Ltd. Tangshan high-voltage porcelain, China Electric Power Division Graduate School. Drafters of this standard. Miss Chau, Yao Junrui, Daiyu Jun, Zhao Hui, Wei Peng, Zhang Rui, Gurui Yun, Yang Ming, TRANSACTIONS OF THE. This standard replaces the standards previously issued as follows:

--- GB/T 12944.2-1991;

--- GB 1247-1977, GB 770-1988, GB 771-1988. High voltage ceramic wall bushings

1 Scope

GB/T 12944-2011 is the Chinese national standard on high-voltage ceramic wall bushings, 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 29 July 2011 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 December 2011. 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 high-voltage ceramic wall bushings - the technical requirements, testing requirements, structure type, size and characteristics. This standard applies to nominal voltage 6kV ~ 35kV, frequency 15Hz ~ 60Hz three-phase AC system in the power station and substation power distribution Within the means used indoor, outdoor - indoor wall bushings (hereinafter referred to as the casing). Sleeve for horizontal installation, the indoor casing can be installed vertically. This standard does not apply under conditions sufficient to reduce the performance of the sleeve and the sleeve at the casing surface condensation client situations.

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.

GB/T 197-2003 common thread tolerance

GB 311.1 insulation with high-voltage power transmission equipment

GB/T 1804-2000 General tolerances Tolerances for linear and angular dimensions without individual tolerance

GB/T 2900.8-2009 Electrical insulators term

GB/T 4109-2008 AC voltage greater than 1000V insulating sleeve

GB/T 5273-1985 transformers, high-voltage electrical terminals and casing

GB/T 5585.1-2005 electrician with copper, aluminum and its alloy bus - Part 1. Copper and copper alloy bus

GB/T 5585.2-2005 electrician with copper, aluminum and its alloy bus - Part 2. Aluminium and aluminum busbars

GB/T 23752-2009 rated voltages greater than 1000V electrical equipment with pressurized and non-pressurized hollow porcelain and glass insulators

JB/T 4307-2004 insulators fitted with rubber cement glue

3 Terms and Definitions

Terms and definitions GB/T 2900.8-2009 and GB/T 4109-2008 defined apply to this document. 4 operating conditions, ordering information and identification Operating conditions and ordering information should be consistent with the provisions of GB/T 4109-2008 in Chapter 5 and 6.1, the logo should comply with 10.3. The ambient temperature exceeds or falls below 40 °C when the cannula used in Appendix A.

5 structure type

5.1 The basic structure of the sleeve type The basic structure of the sleeve type shown in Figure 1 to 9.

5.2 sleeve models Model

a) with conductor ceramic wall bushings are shown below.