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

GB/T 26869-2011

**Insulator-test on indoor post insulator of organic material for
systems with nominal voltages greater than 1 000 V up to but
not including 300 kV**

标称电压高于1000V低于300kV系统用户内有机材料支柱绝缘子的试验

(English Translation)

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Foreword

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

This standard uses redrafted law revision adopted IEC 60660:1999 "nominal voltage above

1000V below the 300kV system users within Post insulators of organic material "(English version).

This standard and IEC 60660:1999 in the structure compared to, in addition to increasing the "References", the other are the same.

This standard and IEC 60660:1999 technical differences and the reasons are as follows.

--- On normative references, this standard has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Situation is reflected in the 1.2 "Normative references", the specific adjustments are as follows.

- non-equivalent (neq) the adoption of international standards of GB 311.1 instead of IEC 60071-1 (see 1.1);
- equivalents adoption of international standards GB/T 2900.8 instead of IEC 60050-471 (see 1.3);
- equivalents adoption of international standards GB/T 5169.16 instead of IEC 60695-11-10 (see 3.12);
- equivalents adoption of international standards GB/T 7354 instead of IEC 60270 (see 3.5,5.4);
- Modify with international standards of GB/T 8287.2 instead of IEC 60273 (see 1.1);
- use equivalent to international standards of GB/T 16927.1 replaced by IEC 60060-1 (see 2.3 to 2.7,3.3,3.4);
- increased references GB 3906 (IEC 60932. 1988 as the content included in Appendix C GB 3906-2006, see 3.11);
- Remove the IEC 60660:1999 references IEC 60932 (see IEC 60660:1999 1.2 and 3.11).

--- Added "mechanical type test report is valid for 10 years, long-term effective electrical type test", which is based 2.1a) in China's actual situation and with reference to the relevant standard porcelain and glass insulators added.

--- Increased in 4.3 "If we can clearly identify the cause of product failure, producing the insulator can be excluded in this batch have all insulators "This defect, so repeating the test program further examination to implement more explicit.

This standard made the following editorial changes.

- Use the "standard" instead of "this International Standard";
- With a decimal symbol instead of the symbol " , " , " ;
- The first stage will be changed to the lettered column items in a numbered;
- The suspension of 3.5,3.7 segment added two section heading, section heading and the

subsequent two extended;

--- The suspension of 3.6,3.12 paragraph to note;

--- Delete foreword international standards;

--- Added "References." Note. IEC 60660:1999 1.2 "Normative references" in the IEC 60587 and ISO 9000-1, ISO 9002 (now part of both ISO standards ISO 9001) in the provisions of the document are referred to in footnote, it is informative references. According to GB/T 1.1-2009 provides informative references should Included in the "Normative references", and can be included in the "References." Increased "References" lists the correspondence between its consistency of standard.

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. Xi'an High Voltage Apparatus Research Institute Co., Ltd., New Northeast (Shenyang) High Voltage Switchgear Co., Ltd.

1.1 Scope and purpose

This standard applies to nominal voltage above 1000V lower than 300kV (GB 311.1 scope defined I), the frequency is not greater than 100Hz Use the AC system using the electrical device or apparatus under atmospheric conditions, indoor post insulators of organic material (hereinafter referred to simply strut insulator). This standard does not include composite insulators.

The purpose of this standard are.

--- Definitions of the terms used;

--- Provisions electrical and mechanical characteristics of post insulators of organic material, and a predetermined condition to test these characteristics predetermined value;

--- Specified test methods;

--- Specified acceptance criteria.

This standard does not give numerical characteristics of post insulators not involve Pillar Insulator under specific operating conditions. GB/T 8287.2 it specifies the value of the electrical and mechanical characteristics and give the post insulators interchangeability desired size.

1.2 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 311.1 insulation with high-voltage power transmission equipment (GB 311.1-1997, neq IEC 60071-1:1993) GB/T 2900.8-2009 Electrotechnical terminology insulator (IEC 60050-471:2007, IDT) GB 3906-2006 3.6kV ~ 40.5kV AC metal-enclosed switchgear and control equipment (IEC 62271-200:2003, MOD) GB/T 5169.16-2008 Fire hazard testing for electric and electronic products - Part 16. 50W horizontal and vertical flame test methods (IEC 60695-11-10:2003, IDT) GB/T 7354 partial discharge measurements (GB/T 7354-2003, IEC 60270:2000, IDT) GB/T 8287.2 nominal voltage greater than 1000V system and outdoor post insulators - Part 2. Dimensions and characteristics (GB/T 8287.2-2008, IEC 60273:1990, MOD) GB/T 16927.1 High-voltage test techniques - Part 1. General test requirements (GB/T 16927.1-1997, eqv IEC 60060-1: 1989)

1.3 Terms and Definitions

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

Note: For convenience, the definition of the test voltage, as described in GB/T 16927.1.

1.3.1

Post insulators of organic material postinsulator of organic material Post insulators are used to live rigid support member, and one kind of insulator or other live parts of the insulation. Constitute support Wholly or partly of an organic material, i.e., a carbon compound or a compound produced by the carbon and silicon generated by the post insulators composed of the material.

These organic materials may be used alone, or in combination with other as fillers, reinforcing materials (mineral or organic) used in combination.