

ICS 29.080.10

CCS K 48



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

GB/T 25084-2010

**Insulator strings and sets for overhead lines with a nominal
voltage greater than 1000 V -- AC power arc tests**

标称电压高于1000V的架空线路用绝缘子串和绝缘子串组 交流工频电弧试验

(English Translation)

Issued on: September 2, 2010

Implemented on: February 1, 2011

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People 's Republic of China**

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Foreword

This standard is modified using IEC 61467.:2008 "overhead lines with insulators nominal voltage higher than 1000V overhead lines with insulation Sub - string and insulator string AC frequency arc test "(English version).

This standard makes some technical changes compared to IEC 61467.:2008, with the vertical single line (I) in the chapter and the description of the changes and their reasons in Appendix G.

This standard refers to the adoption of international standards of national standards.

For ease of use, this standard has been modified as follows.

- a) Replace the comma as a decimal point with the decimal point ".".
- b) delete the preamble of IEC 61467.:2008;
- c) the word "international standard" is changed to "this standard".

Taking into account the applicability of the text, this standard removes Appendix G and Appendix H of IEC 61467.:2008. The standard section number of this standard IEC 61467.:2008.

Appendix A and Appendix B of this standard are normative, Appendix C, Appendix D, Appendix E, Appendix F and Appendix G are informative appendix.

This standard is proposed by China Electrical Equipment Industry Association.

This standard is nationalized by the National Insulator Standardization Technical Committee (SAC/TC80).

The drafting unit of this standard. China Electric Power Research Institute, Xi'an High Voltage Electric Appliance Research Institute Co., Ltd. Xi'an Electric Porcelain Research Institute, State Grid Wuhan High Voltage Research Institute, National Insulator Surge Arrester Quality Supervision and Inspection Center, Dalian Electric Porcelain Co., Ltd., Guangzhou Maike Lin Electric Power Co., Ltd.

Division, Xiangfan State Grid Synthetic Insulator Co., Ltd., Dongguan City High Energy Electric Co., Ltd., Xinjiang Xinneng Tianning electrical insulation materials Limited company, Hebei Xinhua High Voltage Electric Co., Ltd., Shandong Thai Light Electric Co., Ltd., Jiangsu Xiangyuan Electric Equipment Co., Ltd.

1 Scope

This standard specifies the insulator string of the frequency of the arc test standard test procedures, but also proposed a short string of the frequency of arc test standard test program.

This standard applies to the nominal voltage higher than 1000V, frequency 15Hz ~ 100Hz AC overhead lines and traction lines with porcelain, glass or composite insulator string components of the insulator string and insulator string group.

This standard also applies to substructural insulator strings and insulator strings of similar structures.

This standard does not apply to insulator strings installed on non-metallic poles or towers.

This standard can not be directly used for line column insulators and their insulator groups, nor can they be used for pendulum type column insulators, due to the installation arrangement described in this standard does not reproduce its installation. However, the basic principles of this standard can be used for the testing of these insulators and its installation layout.

The purpose of this standard is.

Define the terminology used;

- standard test procedures;
- Criteria for the evaluation of test results.

The arc test is not a mandatory item in the line insulator specification. The standard test procedures and evaluation criteria set forth in this standard are for the purpose of being available it is necessary to carry out the arc test to provide guidance, not to arc test as a common test items must be done.

2 Normative reference documents

The terms of the following documents are hereby incorporated by reference into this standard. Whichever is the date of the reference file, which is followed by all (Excluding corrigenda) or revisions do not apply to this standard, however, encourage the parties to reach an agreement under this standard Whether you can use the latest version of these files. For undated references, the latest edition applies to this standard.

GB/T 22709-2008 Porcelain or glass insulator string for overhead lines Insulator mechanical residual strength after damage (IEC 60797. 1984, MOD) Code for design of IEC 60862 overhead transmission lines

3 Terms and definitions

The following terms and definitions apply to this standard.

Note: Other terms and definitions used in this standard can be found in GB/T 2900.8, GB/T 1001.1-2003 and IEC 60383-2.:1993.

Test test

A specified test current is applied to the insulator string or string for a specified duration.

Test sequence Three consecutive tests on the same insulator string or string.