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

GB/T 27747-2011

**High-voltage alternating current disconnecting circuit-breakers
for rated voltages of 72.5 kV and above**

额定电压72.5 kV及以上交流隔离断路器

(English Translation)

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Appendix A (informative) isolation breaker explanatory notes and examples

Foreword

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

This standard and GB/T 11022, GB 1984, GB 1985 together. To simplify the representation of the same requirements, this standard reg number 11022 consistent with GB/T . Supplementary content of these clauses are given in the same reference under the heading, and additional terms numbered starting from 101.

This standard uses redrafted law revision using IEC 62271-108:2005 "Part 108 high-voltage switchgear and control equipment. the amount 72.5kV and above constant voltage AC high voltage isolation breaker. " this standard and IEC 62271-108:2005 main difference is reflected in.

--- Rated frequency.

According to the actual situation of China's power grid, removing the IEC 62271-108:2005 rated frequency of 60Hz;

--- Rated voltage.

According to China's power grid, the voltage range is divided into.

72.5kV, 126kV, 252kV, 363kV, 550kV, 800kV;

--- Terminals static load rating.

According to the level of the voltage level of the IEC 62271-108:2005 in Table 1 and the terminal rated current range of static load value Modify considered in a multi-column isolation breaker situation, circuit breakers and disconnectors side terminal side terminal static load value;

--- Increased Chapter 12. Effect of the relevant requirements of the product on the environment;

--- Appendix A Figure A.3 increase the circuit breaker and isolating switch interlock mechanism Fig.

The chapters in this standard, the order of the arrangement with the IEC 62271-108:2005 agreement, the contents of most of the provisions of IEC 62271-108.

2005 same, except that the main difference has been given instructions.

The standard proposed by China Electrical Equipment Industrial Association.

This standard by the national high-voltage switch equipment Standardization Technical Committee (SAC/TC65) centralized.

This standard was drafted. Xi'an High Voltage Apparatus Research Institute Co., Ltd., Sunrise Holdings Limited, China Electric Power Research Institute High Voltage switchgear Institute, Henan high level of electrical Co., Ltd., Xi'an high-voltage electrical Co., Ltd., Xi'an High Voltage Switch Co.

Ltd., New Northeast Electric (Shenyang) High Voltage Switchgear Co. Institute, high-voltage electrical machinery industry product quality inspection center (Shenyang), Ltd. Hangzhou Gaudet high voltage electrical equipment, ABB (China) Co., Ltd. High Pressure Technology Center, Ningbo Tianan (Group) Co., Ltd., Chint Electric Co., Ltd., Zhejiang Switch Factory Co., Ltd., Shaanxi Electric Power Research Institute, Shandong Taikai high voltage switch Ltd., Hebei Provincial Electric Power Research Institute, Shanghai Electric Power Transmission and Distribution Limited testing center.

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Rated voltage of 72.5kV and above AC isolation breaker

1.1 Scope

This standard applies to the design and installation indoors or outdoors and run at a frequency of 50Hz system rated voltage 72.5kV and above AC isolation circuit breaker.

Note 1: The rated voltage 72.5kV AC isolation breaker may refer to this standard.

This standard was confirmed GB/T 11022, GB 1984 GB 1985 and applicable sections of the requirements, but also gives a unique kind of attachment means Canadian requirements.

This standard covers the OFF position while meeting the requirements of the circuit breakers and disconnectors devices.

This standard describes in detail the requirements for isolation breaker function independent interaction and clear these requirements with the circuit breaker and the separate compartment Leaving the independent claim related to the difference between.

Note 2: The isolation breaker explanatory notes and illustrated in Appendix A.

1.2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this file. For undated references, the latest edition (including any amendments) applies to this document.

GB 1984 high voltage AC circuit breaker (IEC 62271-100:2001, MOD) GB 1985 high-voltage AC disconnectors and earthing switches (IEC 62271-102:2002, MOD) GB/T 2900.19-1994 Electrotechnical term high voltage test technique and insulation coordination (neqIEC 60071-1.1993) GB/T 2900.20-1994 Electrotechnical terminology voltage switchgear (neqIEC 60050-441. 1984) GB/T 2900.57-2008 Electrotechnical terminology Generation, transmission and distribution operations (IEC 60050-604. 1987, MOD) GB/T 11022 high-voltage switchgear and control equipment standard common technical requirements (IEC 62271-1:2007, MOD) IEC/T S60815-1. under the 2008 definition of pollution conditions, information and general principles with high-voltage insulators and choose the size

Selection and dimensioning of high-voltage insulators intended for use in polluted conditions-Definitions, information and general principles IEC/T R62271-310.2008 high-voltage switchgear and controllers - Part 310. Electrical circuit breakers rated voltage 52kV Durability Test High-voltage switchgear and control gear-Part 310. Electrical endurance testing for circuit-breakers at rated voltage 52kV

2 Normal and special service conditions

GB/T 11022 Chapter 2 apply.

3 Terms and Definitions

The following terms and definitions apply to this document.

Note 1: For ease of reference, GB/T 2900.19, GB/T 2900.20, part of the definition GB/T 2900.57 and GB/T 11022 in this re-listed.