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

GB/T 30846-2014

**High-voltage alternating current circuit-breakers with
intentionally non-simultaneous pole operation**

具有预定极间不同期操作高压交流断路器

(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 Amendment uses IEC/T R62271-302.2010 "high-voltage switchgear and control equipment --- 302 Section. a predetermined operation of a very different AC circuit breaker. " this compared with standard IEC/T R62271-302, the main

differences are as follows.

- Standard name change. a very different between a predetermined operation of high-voltage AC circuit breaker;
- Scope. according to the actual situation of China's power grid, removing the rated frequency of 60Hz related content;
- Opening minimum control voltage in accordance with GB/T 11022-2011 requirements in 5.8.2, Table 4 "70%" to "65%";
- To increase the time constant $\tau = 100\text{ms}$ relevant content.

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 of high-voltage switch equipment.

Participated in the drafting of this standard. Xi'an Electric Switch Electric Co., Ltd., Xi'an High Voltage Apparatus Research Institute Co., Ltd., the high level group Ltd., New Northeast Electric Group Co., high-voltage switch, power industry electrical equipment and instrumentation quality and Testing Center, Xihua University, Shenyang Huali Energy Equipment Co., Ltd., ABB (China) Co., Ltd., Shanghai Siyuan high voltage switch Ltd., Beijing Northern Electric shares have Limited, Beijing Career Distribution Automation Co., Ltd., Sunrise Group Co., Ltd., Shenzhen Institute of Electrical Sciences, Kunming Electric SCIENCE RESEARCH the study.

1.1 Scope

GB 1984-2014 Chapter 1 apply with the following modifications.

This standard specifies a very different having a predetermined inter-operation of high-voltage AC circuit breaker design, construction, technical requirements and testing.

This standard applies to outside GB 1984 range, with very different predetermined operation of high-voltage AC circuit breakers, except that Range GB 1984 equivalents. This standard should be used in conjunction with the GB 1984.

Predetermined different poles of operation can be directly implemented by mechanical means or by electronic ways, these two methods are standard in the present Within the scope.

Having very different between a predetermined operation of the circuit breaker in most cases under the implementation phase selection for the opening and closing of this

standard to deal with such applications breaker Requirements. Phase selection on the opening and closing related information see CIGRE Technical Manual 262 [1], 263 [2], 264 [3]. This standard does not contain Related protection and/or control device requirements, unless these devices are part of the circuit breaker.

This standard recognizes that, to achieve two different basic of operating system is configured to.

--- Breaker predetermined different operating independent of a specific phase selection controller implementation and testing;

--- Breaker of predetermined different phase selection is operated by a dedicated controller (it can be integrated in the circuit breaker) to achieve the necessary sensors and auxiliary Assist devices form part of the test equipment.

Basic requirements for each configuration is the same, but the interpretation of the test results depends on whether the selected phase controller includes a test drive Preface. Details in this regard be included in Chapter 6 of this standard.

No significant phase of the standard assumptions affect the circuit breaker mechanical properties of various parameters (such as ambient air temperature, control voltage, etc.) Mutual influence. This assumption has not been verified to comply with all combinations, but in practice, with opening and closing selected operating experience shows that this hypothesis for large Most commonly used drive technology is effective. Appendix F provides an example of support for this hypothesis.

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 1984-2014 high voltage AC circuit breaker (IEC 62271-100:2008, MOD) GB/T 11022-2011 high-voltage switchgear and control equipment standard common technical requirements (IEC 62271-1:2007, MOD) Emotional GB/T 29489-2013 high-voltage AC switchgear and control equipment load opening and closing (IEC 62271-110:2009, MOD)

2 Normal and special service conditions

GB 1984-2014 Chapter 2 apply.

3 Terms and Definitions

GB 1984-2014 and the following definition of terms and definitions apply to this document.