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**High-voltage alternating-current automatic circuit reclosers for
rated voltages from 12 kV up to and including 40.5 kV**

12kV~40.5kV高压交流自动重合器

(English Translation)

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Foreword

All technical contents of this standard is mandatory.

This Standard is a modified IEC 62271-111:2005 (first edition) "high-voltage switchgear and control equipment --- Part 111. AC line 38kV overhead system and the type, column type, dry-room scenting, line recloser type underwater fault and breaking device. " this standard and IEC 62271-111. The main difference is reflected in 2005.

--- Scope. According to the actual situation of China's power grid, eliminating the IEC 62271-111 content related to the rated frequency of 60Hz;

Depending on the application of the recloser, the voltage applied by the "38kV and the" to "12kV ~ 40.5kV"; applicable the removed product types "underwater recloser type" content "fault breaking device" and relevant requirements.

--- normal and special conditions. According to GB/T 11022-1999 Chapter 2.

--- terms and definitions. IEC 62271-111 only given the definition of "unit operation", and this terminology given in standard references greatly increased, Increasing the terms and definitions C1, C2, E1, E2, M1, M2, S1, S2 stage recloser.

--- rating. IEC 62271-111 in "the highest rated voltage" to "rated voltage" in this standard.

--- rated voltage. Removed and the rated voltage value independent of the power grid, as listed in 11022-1999 GB/T voltage Given.

--- IEC 62271-111 given only "Lightning impulse withstand voltage", this standard is given "Rated insulation level."

--- This standard also given a "short time withstand current rating", "rated peak withstand current", "rated short duration", "rated operation for order ", " rated time parameters "and other ratings.

--- value of rated current, rated short-circuit breaking current and the like were normalized to R10 coefficient.

- "limit temperature" employed GB/T 11022-1999 Table 3.
- ", sub-gate means, and an auxiliary power supply voltage control loop rated" by GB/T 11022-1999 predetermined.
- according to the provisions of GB/T 11022-1999 of Chapter 5, "Design and Structure" adds content from 5.1 to 5.20 parts. increased "Indicated position", "shell protection", "creepage distances", "gas and vacuum seal", "seal liquid," "Electromagnetic and Capacitive "and other requirements to include part of IEC 62271-111 in Chapter 9.
- according to the provisions of GB/T 11022-1999, and Chapter 6, "type test" add content "Overview" section.
- according to GB/T 11022-1999 and GB 1984-2003 6.2 rewritten insulation test.
- deleted the "Radio interference test."
- "Switching Test" deleted "load current switching test" content, and GB 1984 with reference to lines and cable charging current to open and close Tests were carried out a comprehensive revision, given the provisions of Class C1 and C2 level.
- additional type tests are. the main circuit resistance measurement, insulation test extended mechanical life test, and the auxiliary control loop, EARTH fault current breaking test, short time withstand current and peak current withstand test, the EMC test, stress tolerance test, Degree of protection inspection.
- increase the "test group" and "confirmation test" and "type test report contains information" and so on.
- increase "describes a class M1 recloser test."
- increase "prolong mechanical life of the recloser (M2)" for the number of operating requirements and test methods.
- increase "reference mechanical stroke characteristic (6.101.1.1)" requirements.
- increase "environmental testing" content.
- modification and increased content 6.109.1 and fast transient surge oscillation tests.
- Chapter 7, "factory test" adds detailed requirements for "no-load mechanical operation test". Increasing the "main circuit resistance measurement."
- deleted the IEC 62271-111 Chapter 8, "live test" content.
- according to GB/T 11022-1999 increase in Chapter 8, Chapter 9, Chapter 10, Chapter 11.
- deleted the IEC 62271-111 Annex C, Appendix D, Appendix E, Appendix F.
- adds new appendix C, IEC 62271-111 rated current oil recloser, the rated current and

the short-circuit breaking performance characteristics Preferably the coefficient normalized by the value of R10 included.

--- increased references.

The contents of most of the provisions of this standard and IEC 62271-111:2005 same, except that the main difference has been given instructions.

This should be used with standard GB/T 11022-1999 together, unless otherwise specified in the present standard, the reference standard GB/T 11022-1999. To simplify the representation of the same requirements, this standard reg same number and GB/T 11022-1999 used. Of these clauses Yung supplement given under the same title references, and additional terms are numbered starting from 101.

Appendix C of this standard is normative, Annex A, Annex B is an informative Annex.

The standard proposed by China Electrical Equipment Industrial Association.

This high voltage standard by the National Standardization Technical Committee (SAC/TC65) switching devices.

This standard was drafted. Xi'an High Voltage Apparatus Research Institute, China Electric Power Research Institute switches, Beijing Huayuan limited electric power technology research the company (Rural Power of the Electric Power Research Institute), high-voltage electrical machinery industry product quality inspection center (Shenyang), Huayi Electric Group Co., Ltd., Cooper Nike (Ningbo) Electric Co., Ltd., Ningbo Tianan Group Co., Ltd., Zhejiang Switchgear Factory Co., Shi Naide (Beijing) medium voltage electrical Co., Ltd., Beijing Career Distribution Automation Co., Ltd., the Quartet Huaneng Power Control System Co., Ltd., Ningbo Nature Nova automation Equipment Co., Ltd.

1.1 Scope

This standard applies to the rated voltage of 12kV ~ 40.5kV, the frequencies of all the column-type, dry cellar-chamber unipolar or multipolar 50Hz high voltage AC Autorecloser flow.

Note: Dry refers to a cellar ventilation chamber is not flooded enclosed site.

Possible to simplify the present standard, the term "reclosers" instead of "high-voltage AC recloser."

1.2 Normative References

Terms of the following documents become provisions of this standard by reference in this standard. For dated reference documents, all later Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to agreements based on this standard Whether the latest versions of these documents. For