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

GB/T 14808-2016

Replacing GB/T 14808-2001

**High-voltage alternating current contactors, contactor-based
controllers and motor starters
(English Translation)**

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Foreword

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

This standard replaces GB/T 14808-2001 "AC high voltage contactor and contactor based motor starter".

This standard compared with GB/T 14808-2001, the main technical changes are as follows.

- 3 Terms and Definitions. Increased definition of capacitor opening and closing grades;
- 4.2 Rated voltage. the standard voltage increased by 24kV;
- 4.109.2 Start-up operation of the decompression starter. Increases the rating of the auto-decompression starter and reactor starter;
- 4.112 rated capacitive opening and closing current. an increase in the capacitor switching current rating;
- 5.3.101 main circuit ground. increase the grounding switch requirements;
- 5.19 increased the relevant requirements of X-ray emission;
- 5.101 protection relay. canceled the overload relay and release of the specific requirements;
- 6.1 type test in the general increase in the normal production of contactors, starters and controllers should be carried out every eight years of the test items Purpose;
- 6.4.1 stipulates that the test current shall be any convenient current value between 100A and the rated operating current. If the sample Rated current is less than 100A, the main circuit resistance measurement should be rated current;
- 6.4.2 Auxiliary circuit. Removed the auxiliary circuit resistance check requirements;
- 6.5.2 Equipment layout. the provisions of the test with the copper wire specifications;
- 6.5.5.104 Temperature rise of autotransformer or reactor of two-stage autotransformer or reactor starting device. After re-wording Transfer the rating to 4.109.2;
- 6.10 Additional tests for auxiliary and control loops. additional requirements for additional tests for auxiliary and control loops have been added;

- 6.11 X-ray test procedure for vacuum interrupter. X-ray test procedure for vacuum interrupter increased;
 - 6.102.9 State after closing and breaking test. A special explanation of the tolerance based on the resistance check is given;
 - 6.104 Short-circuit current closing and breaking test. clear the short-circuit test test conditions, test methods;
 - 6.106 Verification with SCPD. Added an alternative to the test method;
 - 6.106.2.4 The test circuit is arranged using the test circuit in GB 16926-2009;
 - 6.109 Capacitive current opening and closing test. increase the capacitive current opening and closing test;
 - 8.102.8.4 Fuse action. the three-phase fuse action after the impactor action phase from the "two-phase" to "one phase", and in the
 - e) the contents of the fuse availability check;
 - A.2.5 f) "expected transient recovery voltage". canceled the 126kV ~ 1000kV products related to the provisions;
 - A.2.8 Capacitive current opening and closing test. The contents of the capacitive current opening and closing test were added to the test record and report.
 - to cancel the GB/T 14808-2001 in the four parameters related to Figure 7, Figure 8 and the relevant provisions;
 - Appendix B adds the test parameter tolerances for Table B.1 type tests.
- This standard adopts the re-drafting method to modify IEC 62271-106.:2011 "High Voltage Switchgear and Controlgear Part 106.
- Flow contactors, contactor-based controllers and motor starters. " the technical differences between this standard and IEC 62271-106.:2011 are as follows.
- on the normative reference documents, this standard has made a technical differences in the adjustment to meet China's technical conditions, adjust the situation the situation is reflected in the 1.2 "normative reference document", the specific adjustments are as follows.
- Replace IEC 62271-100.:2008 with modified GB 1984-2014 with international standard;
- Replace IEC 62271-102 with modified GB 1985 with international standard;
- Replacement of IEC 62271-200.:2003 with GB 3906-2006 with international standard modification;
- Replace IEC 60417DB with GB/T 5465.2-2008 equivalent to international standard;

Replace IEC 62271-1.:2007 with GB/T 11022-2011 with international standard modification;

Replace IEC 60282-1 with GB/T 15166.2-2008 with international standard modification;

Replace IEC 60644 with GB/T 15166.5 with international standard modification;

- Added references to GB 1094.2, GB 1094.11, GB 14048.4-2010, GB 14048.5, GB 16926-2009, GB/T 18908.1, GB/T 29489-2013, IEC 61230;

--- Scope. IEC 62271-106. 1.1 in 1.1 provides 1kV and above but not more than 24kV, according to China's actual electricity Network conditions, changed to. 3.6kV ~ 24kV; IEC 62271-106.:2011 in the 1.1 specified frequency of 60Hz and below, the standard Quasi-change to 50Hz and below;

Insulation test. IEC 62271-106.:2011 6.2.5 provides that "contactor does not require impact test between cross-section breakage", this standard According to GB/T 11022-2011 provides the corresponding test requirements;

--- Loop resistance measurement. IEC 62271-106. Regulation 6.4.1 "The test current shall be 50A and the rated operating current Between any one of the convenient current values. If the rated working current of the test piece is less than 50A, the measurement of the main circuit resistance shall be rated Working current ", the standard will be 50A to 100A;

--- before and after the mechanical life test, increase 6.101.1 "mechanical properties measurement";

Records and reports of type, breaking and short-time current performance type tests. A.2.5 "in IEC 62271-106.:2011 and breaking test "f)" expected transient recovery voltage "provides a record of 100kV ~ 800kV product information, not applicable to the Standard, this standard canceled the part of the content;

--- This standard eliminates Figure 4 of the IEC 62271-106.:2011 related to the four-parameter method;

Due to the national standard and the international standard structural differences, in the drafting of this standard for the international standard part of the original suspension section added Section number, resulting in the subsequent part of the article number changes.

This standard is proposed by China Electrical Equipment Industry Association.

This standard by the National High Voltage Switchgear Standardization Technical Committee (SAC/TC65) centralized.

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