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

GB 20840.4-2015

Replacing GB 17201-2007

**Instrument transformers -- Part 4: Additional requirement for
combined transformers**

互感器 第4部分：组合互感器的补充技术要求
(English Translation)

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Foreword

Part 1, Chapter 2, Section 3, Chapter 4 and 7.4, 7.5 and Chapter 8 are recommended, the rest are mandatory.

GB 20840 "transformer" intends divided into the following sections.

- Part 1. Common technical requirements;
- Part 2. additional technical requirements current transformer;
- Part 3. Supplementary technical requirements of electromagnetic voltage transformer;
- Part 4. Combined Transformer additional technical requirements;
- Part 5. additional technical requirements for capacitor voltage transformer;
- Part 6. Low-power transformers supplementary common technical requirements;
- Part 7. Electronic voltage transformers supplementary technical requirements;
- Part 8. Electronic current transformers additional technical requirements;
- Part 9. Transformer digital interface;
- Part 10. Supplementary independent current sensor technology low power requirements;
- Part 11. Low-power complementary technologies independent voltage sensor requirements;
- Part 12. Combined electronic transformer and complementary combination of technical requirements independent of the sensor;
- Part 13. Independent merging unit;
- Part 14. DC current transformer additional technical requirements;
- Part 15. DC voltage transformer of additional technical requirements.

This is Part 4 GB 20840's.

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

This Part replaces GB 17201-2007 "combined transformer." this part of GB 20840.1-2010 "transformers - Part 1. General technical requirements", GB 20840.2-2014 "first transformer Part 2. Supplementary requirements for current transformer technology "and GB 20840.3-2013" transformers - Part 3. Electromagnetic Voltage Transformer complement Charge technical requirements "supporting the use of. This section follows the structure written in GB 20840.1, GB 20840.2 and GB 20840.3, is the standard for these Quasi corresponding provisions of additions and modifications. When the terms of GB 20840.1, GB 20840.2 and GB 20840.3 in this section is not to mention timely, as long as reasonable, these provisions also apply to this section. When specified in this section, "add", "modification" or "replacement" when it means the relevant provisions of GB 20840.1, GB 20840.2 and GB 20840.3 in this section is adapted accordingly.

For GB 20840.1-2010, GB 20840.2-2014 and GB 20840.3-2013 on the basis of supplementary chapters, bar graph, Tables, notes and appendices, this section uses the following forms of ID.

--- Chapter, bar, graphs, tables, and note the number 401 from the beginning;

--- Appendix No. 4A, 4B and the like.

This section uses redrafted law revision using IEC 61869-4:2013 "Transformers - Part 4. Supplementary transformer technology portfolio to begging".

This part of IEC 61869-4:2013 compared to appropriate adjustments in the structure, are listed in the Appendix of this section 4A and IEC 61869-4.

Chapter, article, figure, table number 2013 of the control list.

Technical differences exist compared to 2013, the terms of these differences have been involved through gaps in its outer margin. This part of IEC 61869-4 A single vertical line at position (I) have been identified in Appendix 4B shows the corresponding list of technical differences and their causes.

This section also made the following editorial changes.

--- Increasing the "Introduction";

--- Deleted Chapter 4, Chapter 8, 9, and Chapter 10 of the chapter headings;

--- Remove the IEC 61869-4:2013 is 7.3.1.301 title bar, the contents of which fall under 7.3.1 (This section 7.3.2) in;

--- Increase the informative appendix 4D, the IEC 61869-4. geometric layout of the test circuit in 2013 have not been used in conductors Back away from a column in the Appendix.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee transformers (SAC/TC222) centralized.

This section is drafted. Shenyang Transformer Research Institute Co., Ltd., State Grid Electric Power Research Institute, Dalian first transformer limited liability any company, Dalian Northern Transformer Group Co., Ltd., Ningbo Huatong Transformer Manufacturing Co., Ltd., TBEA Kangjia (Shenyang) transformers have Limited liability company, State Grid Electric Power Co., Ltd. of Liaoning Province Electric Power Research Institute, Zhongshan City, Thailand Electric Co., Jiangxi Power Electric Co., Company Jiang Su Kexing Electric Co., Ltd., Dalian second transformer Group Co., Ltd. Zhejiang sky Transformer Co., Ltd., Chongqing Huahong meter Ltd., Chint Electric Co., Ltd., Hengyang Huarui Electric Co., Ltd.

Introduction

IEC/TC38 standard system has been realigned, before the upcoming IEC 60044 series of standards is now readjusted IEC 61869 series of standards. In order to better use of international standards, the National Standardization Technical Committee transformers (SAC/TC222) The study Decided to our current system of national standards Transformer

also press IEC/TC38 new standard system be realigned before the upcoming the individual transformers to national standards IEC 60044 series of standards by the corresponding relationship between IEC 61869 series of standards correspond to re Develop, constitute a "common technical requirements" general part and each "Supplementary technical requirements" section dedicated supporting new Transformers series Country standard.

New national standards for transformers intended to form the overall situation is as follows.

Standard general part and special part of the standard name special part of the standard number corresponding to the name of the original Standard GB 20840.1 General technical requirements GB/T 20840.6 Low-power transformers Supplementary general skills Requires surgery Supplementary technical requirements GB 20840.2 current transformer GB 1208 GB 16847 Complementary technology GB 20840.3 Electromagnetic Voltage Transformer requirements GB 1207 GB 20840.4 Combined Transformer supplementary technical requirements of GB 17201 GB/T 20840.5 additional technical requirements for capacitor voltage transformers GB/T 4703 GB/T 20840.7 additional technical requirements for electronic voltage transformer GB/T 20840.7 GB/T 20840.8 electronic current transformer additional technical requirements GB/T 20840.9 Transformer Digital Interface Supplementary technical requirements GB/T 20840.10 low power independent current sensor GB/T 20840.8 GB/T 20840.11 complementary technologies independent low power voltage sensor requirements GB/T 20840.7 GB/T 20840.12 A combination of electronic transformer and combinations of independent sensors Additional technical requirements GB/T 20840.13 merge independent unit -GB/T 20840.14 DC current transformer additional technical requirements -GB/T 20840.15 DC voltage transformer of additional technical requirements -Transformer Part 4. Combination transformer Additional technical requirements

1 Scope

GB 20840 for this section applies to electrical measuring instruments and electrical protective device, a frequency of 15Hz ~ 100Hz of new manufacturing Combination transformer.

Requirements and tests in this section, as well as current transformers and electromagnetic GB 20840.1, GB 20840.2 and GB 20840.3 included Voltage transformer requirements and test transformers are all necessary combinations.

401 Note. This section is based on a combination of single-phase transformer-based, but is also applicable to the relevant part of the combination of three-phase transformers.

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,