

ICS 290.18
CCS K 41



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

GB 20840.2-2014

Replacing GB 1208-2006; GB 16847-1997

**Instrument transformers -- Part 2: Additional requirements for
current transformers**

互感器 第2部分：电流互感器的补充技术要求

(English Translation)

Issued on: September 3, 2014

Implemented on: August 3, 2015

Issued by: Standardization Administration of China

Table of Contents

Introduction

Introduction

1 Scope

2 Normative references

3 Terms and definitions

3.1 General definitions

About 3.3 Current Rating Definition

3.4 Concerning the definition of the accuracy of

3.7 Symbol and name

5 11 ratings

Foreword

This section on recommended and mandatory provisions of the regulations and GB 20840.1-2010 "transformers - Part 1. General technical requirements" the same.

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. electronic transformer and low power independent of the sensor complement 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 merge cells.

This is Part 2 GB 20840's.

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

This Part replaces GB 1208-2006 "CT" and GB 16847-1997 "to protect the current transformers for transient performance begging".

This section needs with GB 20840.1-2010 "transformers - Part 1. General technical requirements" supporting the use of. This section follows the GB 20840.1 of the preparation of the structure, is a supplement corresponding provisions of GB 20840.1, modification or replacement. When the terms of GB 20840.1 In this Part not to mention the points in time, as long as reasonable, those terms would apply to this section. When specified in this section, "Added" when "modification" or "replacement", it means that the relevant provisions of GB 20840.1 in this section is adapted accordingly.

For Zhang, bars, graphs, tables, notes and appendix in GB 20840.1-2010 based on additions, this section uses the following forms of ID.

--- Chapter, article, figures, tables and notes are numbered from 201 starts;

--- Appendix No. 2A, 2B and the like.

This section uses redrafted law revision using IEC 61869-2:2012 "Transformers Part 2. complementary technologies to current transformer begging".

This part of IEC 61869-2:2012, compared with more adjustment in the structure, are listed in the Appendix 2A of this section with IEC 61869-2.

Chapter, article, figure, table number 2012 of the control list.

Technical differences exist compared to 2012, the terms of these differences have been involved through gaps in its outer margin. This part of IEC 61869-2 A single vertical line at position (I) have been identified in Appendix 2B are given a list of corresponding technical differences and their causes.

This section also made the following editorial changes.

--- Increasing the "Introduction";

--- The full text of the unified formula is numbered;

--- 3.4.3 and in the note of the contents of the text would read 3.4.203;

--- To rationalize the provisions with later echoed the IEC standard 5.6.201.2 of general purpose and special purpose standard current transformer Quasi accuracy classes are

predetermined;

--- 207 for table of contents made editorial adjustments;

--- Order the Appendix to be adjusted;

--- To IEC standard Figure 2B.13 and 2E.1 been adjusted.

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.

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, TBEA Kangjia (Shenyang) Transformer Co., Ltd., Dalian Northern Transformer Group Co., Ltd., Zhongshan City, Thailand-Electric have Limited, Jiangxi Power Electric Co., Ltd., Jiang Su Kexing Electric Co., Ltd., Dalian Transformer Co., Ltd., New Northeast Electric (Shenyang) High Voltage Switchgear Co., Ltd. Jingjiang, Jiangsu Transformer Co., Ltd., Baoding Tianwei Transformer Co., Ltd., Shenyang Transformer limited liability company.

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.

General part of the standard number and name Special section Standard Dedicated part of the standard name corresponding Original Standard GB 20840.1 General technical requirements GB 20840.6 Electronic transformer and low Independent power sensor Supplementary general technical requirements GB 20840.2 GB 20840.3 GB 20840.4 GB/T 20840.5 GB 20840.7 GB 20840.8 GB 20840.9 GB 20840.10 GB 20840.11 GB 20840.12 GB 20840.13 Additional technical requirements for current transformers Supplementary technical requirements Electromagnetic Voltage Transformer Additional technical

requirements Combined Transformer Additional technical requirements for capacitor voltage transformers Additional technical requirements for electronic voltage transformer Additional technical requirements for electronic current transformer Transformer Digital Interface Independent supplementary low power current sensor technology requirements Independent supplementary low power voltage sensor technology requirements A combination of electronic transformer and combinations of independent sensors Additional technical requirements Independent merging unit GB 1208 GB 16847 GB 1207 GB 17201 GB/T 4703 GB/T 20840.7 GB/T 20840.8 GB/T 20840.7 Transformers Part 2. Supplementary requirements for current transformer technology

1 Scope

GB 20840 for this section applies to electrical measuring instruments and/or electrical protection devices use a frequency of 15Hz ~ 100Hz new Manufacture of electromagnetic current transformer.

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.

Chapter 2 GB 20840.1-2010 content with the following additions apply.

GB/T 156 standard voltage (GB/T 156-2007, IEC 60038:2002, MOD) GB 311.1 insulation coordination - Part 1. Definitions, principles and rules (GB 311.1-2012, IEC 60071-1:2006, MOD) GB/T 3954 Electrical Pole GB/T 5585.1 electrician with copper, aluminum and its alloy bus - Part 1. Copper and copper alloy bus GB/T 7252 transformer oil dissolved gas analysis and judgment guidelines (GB/T 7252-2001, IEC 60599:1999, NEQ) Transformer oil quality GB/T 7595 running GB 20840.1-2010 transformers - Part 1. General Requirements (IEC 61869-1:2007, MOD)

3 Terms and Definitions

Terms and definitions defined in GB 20840.1-2010 and the following additions apply to this document.

3.1 General definitions

3.1.201

Current Transformer Under normal conditions, the secondary current is proportional to the primary current reality, and in the right way when the coupling phase difference close to zero Transformers.