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

GB 19212.21-2014

Replacing GB 19212.21-2007

**Safety of power transformers, power supply units and similar
devices -- Part 21: Particular requirements for small reactors**

变压器、电抗器、电源装置及其组合的安全 第21部分：小型电抗器的特殊要求和
试验

(English Translation)

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Table of Contents

Introduction	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 3 General requirements	
5 General notes	
Rating 4	
7 Category	
8 Marking and other information	
9 Protection against electric shock	
Changing the input voltage setpoint 10	
11 Load output voltage and output current	
12 No-load output voltage	
13 Short-circuit voltage	
7 14 Fever	
15 Short-circuit and overload protection	
16 Mechanical strength	
17 To prevent dust, solid objects and moisture into the protection of hazardous	
18 Insulation resistance, dielectric strength and leakage current	
19 Structure	
20 Component	
21 Internal wiring	
22 Supply connection and other external flexible cable or cord	
23 Terminals for external conductors	
24 Protection grounding device	
25 Screws and connections	
26 Creepage distances, clearances and distances through insulation	
27 Heat, fire and electrical resistance to tracking	
28 Rust	
Appendix	
Reference	

Foreword

All technical content in this Part of GB 19212 is mandatory.

GB 19212 "of power transformers, power supplies, reactors and similar products -" 1) now includes the following sections.

1) This series of standards, some parts are under "Safety of power transformers, power supply units and similar products," the title, some parts in the "power transformers, Power supplies, reactors and similar products" under the heading, some parts in the "power supply voltage 1100kV and below transformers, reactors, power supply Units and similar products" under the heading, some parts are "under transformers, reactors, power supply units and combinations of security" of the title, the next release the title of this series of standards may be modified.

--- Part 1. General requirements and tests;

--- Part 2. Particular requirements and general purpose test transformer isolated and built separate transformer power supply;

--- Part 3. Specific requirements and test control and built-in control transformer power supply;

--- Part 4. Gas and oil burner ignition transformers for special requirements;

--- Part 5. Particular requirements and tests and built-in isolation transformer isolation transformer power supply device;

--- Part 6. shaver transformer, and shaver supply units power supply unit Particular requirements and tests;

--- Part 7. Particular requirements and tests for safety isolating transformers and built-in safety isolating transformer power supply device;

--- Part 8. Particular requirements for transformers for toys and power supplies and test;

--- Part 9. Particular requirements for bell and bell transformers;

--- Part 10. Class III portable Particular requirements for filament transformers and power supply unit and test;

--- Part 13. Particular requirements for constant voltage transformers;

--- Part 14. Particular requirements for auto and test transformers and autotransformers built power supply device;

--- Part 16. supply of medical locations Particular requirements for isolating transformers;

--- Part 17. switched-mode power supply units and switch-mode power supply unit with the special requirements for transformers and tests;

--- Part 20. Particular requirements for interference attenuation transformers;

--- Part 21. Small reactors Particular requirements and tests;

--- Part 24. Particular requirements for transformers for construction sites.

Other parts are under consideration.

This is Part 21 GB 19212's. This is part of the GB 19212.1-2008 developed on the basis of this part of the need and GB 19212.1-2008 and IEC 61558-1:2005 No. 1 in conjunction with amendments. This is part of GB 19212.1-2008 Corresponding chapter, shall be supplemented and modified so that the content of GB 19212.1-2008 conversion based content portions. For this section GB 19212.1-2008 new additions numbered starting from 101.

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

This Part replaces GB 19212.21-2007 "Safety - Part 21 power transformers, power supply units and similar products. small reactors Particular requirements. " Compared with GB 19212.21-2007, the main technical changes are as follows.

--- Standard name changed to "Part 21 safety transformers, reactors, power supply units and combinations thereof. small reactors to special Sum Test ";

--- Amend Chapter 1, "scope" (see Chapter 1);

--- Marked increase in the reactor contents (see 8.1);

--- Modify the overload test voltage (see 15.2 and 15.5.1);

--- Modify the "structure" (see Chapter 19);

--- Modify the indirect heating type PTC resistors test requirements (see 20.7.3);

--- Removed reactor heat, fire and resistance to tracking the provisions of section (see 2007 edition 27.3).

This section uses the translation method identical with IEC 61558-2-20:2010 "transformers, reactors, power supply units and combinations Safety Part 2-20. Particular requirements for small reactors and testing. " this part made the following editorial changes.

--- Standard name changed to "Part 21 safety transformers, reactors, power supply units and combinations thereof. small reactors to special Sum Test. "

--- Chapter 2, "Normative references" with "GB 19212.1-2008" instead of "IEC 61558-1:2005".

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 Small power transformers, reactors, power supply units and similar products Standardization Technical Committee (SAC/TC418) Centralized.

This section is drafted. Shenyang Transformer Research Institute Co., Ltd., Shanghai Quality Supervision, Inspection Technology Research Institute, National Broadcasting electricity Depending on the product quality supervision and inspection center, the Ministry of Industry and Information Technology Institute of Electronics V ceprei quality and safety testing center, Pearl Electric Co.

Secretary high Electronics Co., Ltd. Tianjin Optical benefits.

1 Scope

GB 19212.1-2008 this chapter is replaced by the following.

This part of GB 19212 specifies the safety requirements for general-purpose small reactors.

Note 1: Safety requirements including electrical, thermal and mechanical aspects.

Unless otherwise specified, the following "Transformers" or "reactor" includes small reactors.

This section applies to Stationary or mobile, single-phase or multi-phase, air-cooled (self-cooled or air-cooled), with independent or supporting the use of generic reactor, Including the exchange of pre-excitation and current compensation reactor.

Rated supply voltage not exceeding 1000V AC or ripple-free DC 1500V, rated supply frequency and internal operating frequency not exceeding 1MHz.

Rated capacity does not exceed.

--- Single-phase reactor, AC 25kvar (DC 25kW);

--- Multiphase reactors, AC 50kvar (DC 50kW).

When the purchaser in consultation with the manufacture consent, this section also applies to non-rated capacity limit reactor.

This section applies to a dry reactor. Windings may be encapsulated or non-encapsulated type.

This section does not apply to.

--- IEC 60289 comprises a reactor;

--- IEC 61347-2-8 including tubular fluorescent lamp ballasts;

--- IEC 61347-2-9 including discharge lamps (excluding tubular fluorescent lamps) ballasts.