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

GB/T 19212.15-2016

**Safety of transformers, reactors, power supply units and combinations thereof --
Part 15: Particular requirements and tests for variable transformers and power
supply units incorporating variable transformers**

变压器、电抗器、电源装置及其组合的安全 第15部分：调压器和内装调压器的电
源装置的特殊要求和试验

(English Translation)

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Foreword

GB/T 19212 "Safety of transformers, reactors, power supply units and their combinations"

1) The following sections are included.

1) Some of the series of standards are under the heading "Safety of power transformers, power supply units and similar products", and some are in the "power supply voltage 1100V and below the safety of transformers, reactors, power supply units and similar products "under the heading, some of which are in the" Transformer, Reactor, Power Devices and their combinations ", the title of this series of standards that may be released in the future may also be modified.

- Part 1. General requirements and testing;

- Part 2. Particular requirements and tests for the general purpose separation transformer and the power supply for the separation transformer;

Part 3. special requirements and tests for controlling the power supply of transformers and built-in transformers;

- Part 4. Particular requirements for ignition transformers for gas and fuel burners;

- Part 5. Particular requirements and tests for power supply units for isolation transformers and internal isolation transformers;

- Part 6. Particular requirements and tests for power supply units for razor transformers, razors and shaver power supply units;

- Part 7. Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers;

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

- Part 9. Particular requirements for bells and bells;

Part 10. Particular requirements and tests for transformers and power supply units for Class III portable tungsten filament lamps;

- Part 13. Particular requirements for constant voltage transformers;

- Part 14. Particular requirements for power supply units for autotransformers and autotransformers;

- Part 15. Particular requirements and tests for power supply units for regulators and internal regulators;

- Part 16. Particular requirements for isolating transformers for power supply in medical places;

- Part 17. Particular requirements and tests for transformers for switchgear and switching power supply units;

- Part 20. Particular requirements for interference attenuating transformers;

- Part 21. Particular requirements and tests for small reactors;

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

This part is part 15 of GB/T 19212. This part is in GB/T 19212.1-2016 (IEC 61558-1.:2009, MOD) based on the development of this part with the use of GB/T 19212.1-2016. This section is for GB/T 19212.1-

2016 The newly added content starts with number 101.

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

This part uses the re-drafting method to modify the use of IEC 61558-2-14.:2012

"Transformers, reactors, power supply units and their combinations Part 2-14. Particular requirements and tests for power supply units for regulators and internal regulators ".

The technical differences between this section and IEC 61558-2-14.:2012 are as follows.

Replace IEC 61558-1.:2009 with GB/T 19212.1-2016 with international standard.

This part is made by China Electrical Equipment Industry Association.

This part of the national small power transformers, reactors, power supply and similar products Standardization Technical Committee (SAC/TC418) centralized.

This part of the drafting unit. Shenyang Transformer Research Institute Co., Ltd., National Radio and Television Product Quality Supervision and Inspection Center, Shanghai Quality Supervision and Inspection Technology Research Institute, Ministry of Industry and Information Technology Electronics Fifth Institute treasure quality and safety testing center, the Ministry of Industry and Information Technology Sub-Industrial Standardization Research Institute, Tianjin Optoelectronics Huigao Electronics Co., Ltd., Shanghai Entry-Exit Inspection and Quarantine Bureau Electromechanical Product Testing Technology Center, Hill City Poly gold Electronics Co., Ltd., Pearl Electric Co., Ltd., Dongguan City surplus Poly Electronics Co., Ltd., Dongguan City Dazhong Electronics Co.,

1 Scope

This clause of GB/T 19212.1-2016 is replaced by the following.

This part of GB/T 19212 specifies the safety of general purpose voltage regulators and power supply units incorporating general purpose voltage regulators.

Transformers with built-in electronic circuits are also included in this section.

Note 1: Safety requirements include electrical, temperature, mechanical and chemical aspects.

Unless otherwise specified, the following "transformers" include general purpose voltage regulators and power supply units with built-in general purpose voltage regulators.

Rated power supply voltage does not exceed AC 1000V, rated power frequency does not exceed 500Hz.

This section applies to "transformers" and power supply units (linear) where the internal operating frequency does not exceed 500 Hz.

This part is used in conjunction with GB 19212.17 switch type power supply unit. It is also suitable for power supply with internal operating frequency exceeding 500Hz.

Set. When the requirements of the two standards are inconsistent, the more stringent standards are preferred.

This part does not apply to transformers included in GB 1094.11.

This part applies to standing or mobile, single or multi-phase, air cooling (self-cooling or air-cooled), independent or matching with dry "change Pressure device ".

- Autotransformer and built-in autotransformer power supply device;
- Separate voltage regulator and built-in separate power supply device;
- isolation regulator and built-in isolation regulator power supply device;
- Safe isolation regulator and power supply unit with built-in safety isolating voltage regulator.

Windings may be enclosed or non-encapsulated.

Rated output no more than.

- 40kVA, single-phase autotransformer and built-in single-phase autotransformer power supply device;
- .200kVA, multi-phase autotransformer and built-in multi-phase autotransformer power supply device;
- 1kVA, single-phase separation regulator and built-in single-phase separation of the power supply device;
- 5kVA, multi-phase separation regulator and built-in multi-phase separation of the power supply device;
- 25kVA, single-phase isolation regulator and built-in single-phase isolation regulator power supply device;
- 40kVA, multi-phase isolation voltage regulator and built-in multi-phase isolation regulator power supply device;
- 10kVA, single-phase safe isolation regulator and built-in single-phase safe isolation regulator power supply device;
- 16kVA, multi-phase safe isolation regulator and built-in multi-phase safe isolation regulator power supply device.