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

GB/T 19212.4-2016

Replacing GB 19212.4-2005

**Safety of transformers, reactors, power supply units and
combinations thereof -- Part 4: Particular requirements and
tests for ignition transformers for gas and oil burners**

变压器、电抗器、电源装置及其组合的安全 第4部分：燃气和燃油燃烧器点火变
压器的特殊要求和试验

(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.

- 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 and tests for gas and fuel burner ignition transformers;
- 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 and tests for bells and bells and transformers and power supply units;

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;
- Particular requirements and tests for power supply units for autotransformers and autotransformers - Part 14.
- 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. Special tests and requirements 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 4 of GB/T 19212. This part is based on GB/T 19212.1-2016, which is required Used in conjunction with GB/T 19212.1-2016. This part is the GB/T 19212.1-2016 the corresponding chapter, the article to add and modify to the contents of GB/T 19212.1-2016 are converted into the contents of this section. This section is for the new

additions to GB/T 19212.1-2016 Capacity 101 starts.

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

This part replaces GB 19212.4-2005 "Safety of power transformers, power supply units and similar products Part 4. Gas and fuel Burner ignition transformer special requirements ". Compared with GB 19212.4-2005, the main technical changes are as follows.

- Standard name changed to "Safety of transformers, reactors, power supply units and their combinations Part 4. Gas and fuel burners Special requirements and tests for fire transformers;
- Added terms and definitions of "rated short-circuit output current" and "rated no-load output voltage" (see 3.5.101 and 3.5.102);
- the terms and definitions of "functional insulation", "rated output current" and "rated output voltage" are removed (see Edition.2005 3.1.103, 3.5.4 and 3.5.5);
- amended by means of work (see 7.5);
- modified the power supply voltage in the test (see 14.1);
- Amend the provisions for short circuit and overload protection tests (see 15.1);
- 1) Some of the series of standards are under the heading "Safety of power transformers, power supplies, reactors and similar products", and some are in the "supply voltage for 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, Source device and its combination ", the title of this series of standards that may be released in the future may be modified.
- amended the structure (see 19.101);
- Increases the creepage distance and clearances of the output terminals of the output winding midpoint protection ground (see Table 103).

This part uses the re-drafting method to modify the safety of IEC 61558-2-3.:2010 "transformers, reactors, power supply units and their combinations Part 2-3. Particular requirements and tests for ignition transformers for gas and fuel burners ".

There are technical differences between this part and IEC 61558-2-3.:2010, all of which are due to the supporting standards in this section GB/T 19212.1-2016 and IEC 61558-1.:2009 in Chapter 2 of the technical differences arising there.

1 Scope

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

This part of GB/T 19212 specifies the safety requirements for gas and fuel burner ignition

transformers. With the electronic circuit of the ignition change the press is also included in this section.

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

Unless otherwise specified, the following "transformers" include gas and fuel burner ignition transformers.

This part is suitable for fixed, single-phase, air-cooled (self-cooled or air-cooled), for gas and fuel burner ignition system supporting the dry Type transformer. The windings may be enclosed or non-encapsulated.

Rated power supply voltage does not exceed 1000V AC, rated power frequency and internal operating frequency of not more than 500Hz.

Rated short-circuit output current does not exceed 500mA AC.

No-load output voltage or rated output voltage does not exceed 15000V AC.

This part does not apply to external circuits and their components intended to be connected to the input terminals and output terminals or output sockets of the transformer.

When the installation procedure or the final product standard does not require double insulation or reinforced insulation between the circuits, the use of this section Pressure device.

Note 2: The following should be noted.

- Additional requirements (other applicable standards, national procedures, etc.) may be required for transformers intended for use on vehicles, ships or aircraft;
- to avoid the shell and the shell components such as mold, pests, termites, daily radiation and ice and other external protective measures should also be considered;
- Transformer transport, storage and work of the different conditions should also be considered;
- Additional requirements for other transformers that are intended for use in special environments may be subject to other applicable standards and national regulations.

Note 3: With the development of transformer technology in the future, it may be necessary to raise the upper limit of the frequency. By that time, this part can be used as a guide.

2 Normative reference documents

The clause of GB/T 19212.1-2016 applies except for the following referenced documents.

The following additions are added to this chapter.

GB/T 19212.1-2016 Safety of transformers, reactors, power supply units and their