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

GB/T 19212.24-2020

Replacing GB/T 19212.24-2005

**Safety of transformers, reactors, power supply units and
combinations thereof - Part 24: Particular requirements and test
for transformers and power supply units for construction sites**

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Foreword

GB/T 19212 "Safety of Transformers, Reactors, Power Supply Devices and Their Combinations" 1) consists of the following parts:

1) In GB/T 19212, some parts are under the heading "Safety of power transformers, power supplies, reactors and similar products", and some parts are

Under the heading of 1100V and below the safety of transformers, reactors, power supply units and similar products, some parts are

Under the heading of "Safety of Source Device and Its Combination", the title of GB/T 19212 may be revised in the future:

---Part 1: General requirements and tests;

---Part 2: Special requirements and tests for general purpose separating transformers and power supplies with built-in separating transformers;

---Part 3: Special requirements and tests for control transformers and power supplies with built-in control transformers;

---Part 4: Special requirements and tests for ignition transformers for gas and oil burners;

---Part 5: Special requirements and tests for isolation transformers and power supply devices with built-in isolation transformers;

---Part 6: Special requirements and tests for transformers for shavers, power supply devices for shavers, and power supply devices for shavers;

---Part 7: Special requirements and tests for safety isolating transformers and power supply devices with built-in safety isolating transformers;

---Part 8: Special requirements and tests for transformers and power supplies for toys;

---Part 9: Special requirements and tests for transformers and power supply devices for electric bells and electric clocks;

---Part 10: Special requirements and tests for transformers and power supply devices for class III portable tungsten filament lamps;

---Part 11: Special requirements and special requirements for high-insulation level separation transformers and separation transformers with an output voltage exceeding 1000V

test;

---Part 13: Special requirements and tests for constant voltage transformers and power supply devices;

---Part 14: Special requirements and tests for autotransformers and power supply devices with built-in autotransformers;

--- Part 15: Special requirements and tests for voltage regulators and power supply devices with built-in voltage regulators;

---Part 16: Special requirements and tests for isolation transformers for power supply in medical places;

---Part 17: Special requirements and tests for switching power supply devices and transformers for switching power supply devices;

---Part 20: Special requirements for interference attenuation transformers;

---Part 21: Special requirements and tests for small reactors;

---Part 24: Special requirements and tests for transformers and power supply devices for construction sites;

--- Part 27: Special requirements and tests for transformers and power supply devices for energy saving and other purposes:

This part is Part 24 of GB/T 19212:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

This part replaces GB/T 19212:24-2005 "Safety of power transformers, power supply units and similar products Part 24: Construction workers

Compared with GB/T 19212:24-2005, the main technical changes are as follows:

---Modified the scope of regulations (see Chapter 1, Chapter 1 of the:2005 edition);

---Modified the normative references (see Chapter 2, Chapter 2 of the:2005 edition);

---Modified terms and definitions (see Chapter 3, Chapter 3 of the:2005 edition);

---Modified the provisions of the rated value (see Chapter 6, Chapter 6 of the:2005 edition);

---Modified the graphic symbols of the logo and added the provisions of the identification code (see Chapter 8, Chapter 8 of the:2005 edition);

---Modified the change of the input voltage setting value (see Chapter 10, Chapter 10 of the:2005 edition);

---Modified the no-load output voltage regulations (see Chapter 12, Chapter 12 of the:2005 edition);

---Modified the regulations on the structure of Class I transformers, and added the structural requirements for transformers for non-independent use (see Chapter 19, 2005 Chapter 19 of the edition);

--- Deleted Appendix C and Appendix D (see Appendix C and Appendix D of the 2005 edition);

This part uses the redrafting law to amend and adopt IEC 61558-2-23:2010 "Safety of transformers, reactors, power supply devices and their combinations"

Part 2-23: Special requirements and tests for transformers and power supply devices for construction sites:

The technical differences between this part and IEC 61558-2-23:2010 and the reasons are as follows:

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments:

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows:

* The technical differences between GB/T 19212:1-2016 and IEC 61558-1:2009 in Chapter 2 are retained to facilitate the

GB/T 19212:1-2016 supporting use;

* Replace IEC 61558-1:2005 with GB/T 19212:1-2016 which is modified to adopt international standards;

* IEC 60439-4 in the original text has been replaced by IEC 61439-4, and the corresponding reference document is changed to GB/T 7251:4

(GB/T 7251:4-2017, IEC 61439:2012, IDT);

* Added reference to IEC 60417-DB (see Chapter 8):

---In the priority value of rated output voltage in Chapter 6 of the original text, for mobile single-phase isolation transformers and other isolation transformers, added

"220V", "36V" is added to the safety isolation transformer, in order to meet the actual situation of our country:

This section also made the following editorial changes:

---In order to meet the uniform numbering of the GB/T 19212 series of standards, the standard name is changed to "Transformers, reactors, power supply devices and their groups

Integrated Safety Part 24: Special Requirements and Tests for Transformers and Power