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PEOPLE'S REPUBLIC OF CHINA**

GB/T 45384-2025

**Safety and control devices for gas burners and gas-burning
appliances - Particular requirements - Pneumatic gas/air ratio
pressure regulator**

燃气燃烧器和燃烧器具用安全和控制装置 特殊要求 气动式燃气与空气比例调节
装置

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is consistent with GB 16914-2023 "Safety Technical Conditions for Gas Burning Appliances". Appendix A of this document provides Clause correspondence table supporting the basic requirements of GB 16914-2023.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

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Safety and control for gas burners and burning appliances Special requirements for equipment. pneumatic gas and air Proportional adjustment device

1 Scope

This document specifies the pneumatic gas-air ratio regulator for burners and combustion appliances using town gas specified in GB/T 13611.

The classification and grouping, structure and materials, requirements, test methods, inspection rules, marking, installation and Operating instructions, packaging, transportation and storage.

This document is applicable to gas water heaters and gas heating systems with a nominal size not exceeding DN250 and a maximum inlet pressure not exceeding 500kPa.

Gas burning appliances or combustion equipment such as water heaters, gas stoves, gas burners/machines, gas heaters, gas steamers, gas boilers, etc.

A proportional regulating device that changes the gas pressure and can be tested independently.

This document does not apply to mechanically linked gas/air ratio control devices and electronic gas/air ratio control devices specified in GB/T 39488. Example control system.

2 Normative references

GB/T 2423.10

GB 3836.4

GB/T 30597-2014

3 Terms and definitions

The terms and definitions defined in GB/T 30597-2014 and the following apply to this document.

3.1

A device that adjusts the gas output pressure and maintains a certain ratio with air by responding to the signal pressure.

Note. See Appendix B for application examples.

3.2 Gas/air ratio

The linear ratio of the signal pressure applied to the proportional regulating device to the gas outlet pressure.

3.3 signal pressure

The air pressure, differential pressure and/or combustion chamber pressure applied to the ratio regulator to provide a specific gas outlet pressure.

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