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

GB 12978-2025

Replacing GB 12978-2003

Rules for test of fire electronic products

消防电子产品检验规则

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB 12978-2003 "Inspection Rules for Fire Protection Electronic Products".

Compared with GB 12978-2003, except for structural adjustments and revisions... Aside from the logical changes, the main technical changes are as follows:

- a) The classification of tests has been changed (see Chapter 5, Chapter 3 of the.2003 edition);
- b) The requirements for test samples have been changed (see Chapter 6, 4.1 of the.2003 edition);
- c) The technical documentation requirements have been changed (see Chapter 7, 4.4 of the.2003 edition);
- d) The inspection requirements have been changed (see Chapter 8, 5.1, 6.1, 7.1, 8.1, and 9.1 of the.2003 edition);
- e) The decision-making rules have been changed (see Chapter 9, 7.3 of the.2003 edition). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the State Fire and Rescue Administration. The release history of this document and the document it replaces is as follows:

---First published as GB 12978-1991 in.1991, and revised for the first time in.2003;

---This is the second revision. Fire protection electronic product inspection rules

1 Scope

China's mandatory rules for testing fire electronic products. Fire detection and alarm equipment is unlike almost any other electronics in what is asked of it: it sits dormant for years and must then work correctly, once, in an environment that is actively destroying it. So the test regime is built around endurance and integrity rather than function alone. These rules are the common framework that the individual product standards for detectors, control panels, sounders and interfaces all reference: the climatic tests for temperature, humidity and corrosion, the mechanical tests for vibration, shock and impact, the electromagnetic compatibility that matters because a fire system sits in a building full of interference and must neither be disturbed nor disturb, the supply variation and battery endurance, and the fault conditions the equipment must detect and signal rather than fail silently.

This document defines the terminology for the inspection (including testing and experimentation) of fire protection electronic products, and specifies the general requirements for the inspection of fire protection electronic products. Inspection classification, inspection samples, documents, inspection requirements, and judgment rules. This document applies to the inspection of fire protection electronic products by

testing and inspection organizations (unless otherwise stipulated by relevant laws and regulations).

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 9969 General Rules for Instructions for Use of Industrial Products

GB/T 16838 Environmental testing methods and severity levels for fire protection electronic products

GB 22134 Compatibility requirements for components of automatic fire alarm systems

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Fire protection products include fire detection and alarm, fire-fighting linkage control, personnel evacuation and escape, electrical fire monitoring, and combustible gas detection and alarm. Electronic products with functions such as fire communication and command.

Note. This includes automatic fire alarm systems, fire-fighting linkage control systems, fire emergency lighting and evacuation guidance systems, electrical fire monitoring systems, and combustible gas detection systems. Alarm systems and fire communication command systems include various electronic products.

4.1 Inspection and testing organizations

4.1.1 Organizations undertaking the inspection of fire protection electronic products shall have the inspection and testing capabilities within the scope specified in their qualification certificates.

4.1.2 Testing and inspection organizations shall adhere to the principles of legality, science, impartiality, integrity, and independence when conducting testing of fire protection electronic products, providing services to all clients. Provide the same quality of service.

4.2 Inspection of the client

4.2.1 The client who commissions the inspection shall be responsible for the authenticity and compliance of the fire protection electronic products and related information provided for the inspection.

4.2.2 The party commissioning the inspection should not entrust an intermediary agency to submit fire protection electronic products for inspection on its behalf.

4.2.3 The party commissioning the inspection shall provide samples to the inspection and testing organization in accordance with product standards and relevant laws and regulations.

4.2.4 The samples provided by the client for type testing, type inspection, classification testing, classification verification, and change confirmation testing shall be raw samples.