



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

**GB 14287.2-2026**

Replacing GB 14287.2-2014

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**Electrical fire monitoring system - Part 2: Residual current  
electrical fire monitoring detector**

电气火灾监控系统 第2部分：剩余电流式电气火灾监控探测器

**Issued on: January 28, 2026**

**Implemented on: August 1, 2027**

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**Issued by: State Administration for Market Regulation;  
Standardization Administration of the PRC**

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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 is Part 2 of GB 14287 "Electrical Fire Monitoring Systems". GB 14287 has the following parts published.

1. Electrical Fire Monitoring Equipment;
2. Residual Current Type Electrical Fire Monitoring Detector;
3. Temperature-measuring electrical fire monitoring detectors;
4. Fault Arc Detectors;
5. Measurement of Pyrolytic Particle Electrical Fire Monitoring Detectors;
6. Harmonic Suppression Electrical Fire Monitoring Devices;
7. Electrical Fire-Resistant Current-Limiting Protective Devices;
9. Electrical fire monitoring detectors that detect insulation performance. This document replaces GB 14287.2-2014 "Electrical Fire Monitoring Systems - Part

2. Residual Current Type Electrical Fire Monitoring and Detection". Compared with GB 14287.2-2014, the main technical changes in the "Apparatus" standard, apart from structural adjustments and editorial modifications, are as follows:

a) Added the terms "residual current", "AC residual current", "resistive residual current", "capacitive residual current", "DC residual current", and "stable" "Static residual current", "Dynamic residual current", "Split-type residual current electrical fire monitoring detector", "Integrated residual current electrical fire detector" "Gas fire monitoring detector", "AC type residual current type electrical fire monitoring detector", "DC type residual current type electrical fire monitoring detector" "Controlled detector", "single-sensor electrical fire monitoring detector", "system leakage capacitance" and their definitions (see 3.1, 3.1.1, 3.1.1.1, ...). 3.1.1.2, 3.1.2, 3.1.2.1, 3.1.2.2, 3.4.3, 3.4.4~3.4.6, 3.5, 3.7); the residual current sensor and signal processing were modified. Unit-type residual current electrical fire monitoring detector, stand-alone residual current electrical fire monitoring detector, non-stand-alone Definitions of residual current type electrical fire monitoring detectors and multi-sensor combination type electrical fire monitoring detectors (see 3.2~3.4). 3.4.1,

3.4.2, 3.6 (and 3.5, 3.6, 3.1~

3.4 in the 2014 edition);

b) Added classification requirements based on the connection method between the sensing element and the signal processing unit, and based on the type of monitored current (see 4.3, 4.4);

## 1 Scope

The 2026 edition of Part 2 of GB 14287 rewrites the standard for residual current electrical fire monitoring detectors and roughly triples its length: twenty-four clauses of technical requirements and thirty-one test methods against the eight-clause structure of the 2014 text. It covers the classification, the alarm and monitoring functions, the communication with the control unit, the electrical safety and electromagnetic compatibility, the mechanical and climatic endurance, and adds normative annexes on the burning behaviour of the enclosure and on the residual current sensor. It replaces GB 14287.2-2014 from 1 August 2027, which is the date by which a manufacturer has to have requalified the product. Issued on 28 January 2026. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the edition it replaces are taken from there. The clause text, the tables and the numeric limits are not reproduced on this page - they are in the document itself, which is delivered in full in English translation.

This document defines the terminology for residual current type electrical fire monitoring detectors, and specifies their classification, technical requirements, inspection rules, marking, and packaging. The description of the corresponding experimental methods is as follows: This document applies to residual current type electrical fire monitoring detectors (hereinafter referred to as "detectors") in electrical fire monitoring systems. Design, manufacturing, and inspection.

## 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 12978 Inspection Rules for Fire Protection Electronic Products

GB 14287 (all parts) Electrical fire monitoring systems

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