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

GB 14102.3-2024

**Fire shutter assembly - Part 3: Control unit for fire shutter
assembly**

防火卷帘 第3部分：防火卷帘控制器

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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 Part 3 of GB 14102 Fireproof Roller Shutters: GB 14102 has been published in the following parts:

- Part 1: General technical requirements;
- Part 2: Rolling door machines for fireproof rolling shutters;
- Part 3: Fire shutter controllers: 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 Emergency Management of the People's Republic of China:

Fireproof rolling shutter is a rolling shutter door component with certain fire resistance, which is mainly used to separate adjacent fire partitions in buildings: It has the function of opening and closing, making the division of fire partitions more flexible, and is an important part of the building fire separation system: "Fireproof Roller Shutters" is the basic standard guiding the production, inspection and use of fireproof roller shutter products in my country, and consists of three parts:

- Part 1: General technical requirements: The purpose is to standardize the general technical requirements of fire-resistant roller shutter products and improve the quality of products:
- Part 2: Rolling door machines for fireproof rolling shutters: The purpose is to standardize the technical requirements for rolling door machines for fireproof rolling shutters and improve the driving performance of the products: reliability:

--- Part 3: Fire shutter controller: The purpose is to standardize the technical requirements of fire shutter controllers and improve the control reliability of products: Reliability: my country first issued GB 14102 in:1993, mainly for steel fireproof roller shutter products: It was revised for the first time in:2005, adding In order to enhance the overall reliability of fireproof roller shutter products and the applicability of this document, After this revision, GB 14102 has changed from an overall standard to a partial standard: Part 1 is about the general technical requirements for fireproof roller shutters: Part 2 is for the main components of fire-resistant rolling shutters and rolling door machines for fire-resistant rolling shutters: Part 3 is for the main components of fire-resistant rolling shutters and rolling door machines for fire-resistant rolling shutters: Controller: Fire shutters: Part 3: Fire shutter controllers

1 Scope

Part 3 of GB 14102 covers the controller of a fire shutter: the unit that receives the signal from the fire detection system, drives the motor, manages the two-stage descent used where the shutter serves as a fire compartment boundary, monitors faults and reports its state to the fire alarm control panel. It sets the functional requirements, the power supply and standby power, the electrical safety, the environmental and electromagnetic compatibility requirements, and the test methods, inspection rules and marking. It is a new part of the series that in 2024 replaced the single standard GB 14102-2005. Issued on 29 April 2024, in force since 1 May 2025. 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 terms and definitions of fire shutter controllers, specifies the classification and model compilation, requirements, inspection rules, and markings: Corresponding test methods: This document applies to the design, manufacture and use of fire shutter controllers (hereinafter referred to as controllers) used in industrial and civil buildings: test:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 4208 Enclosure protection grade (IP code)

GB 4717-2024 Fire alarm controller

GB/T 9969 General principles for instructions for use of industrial products

GB 12978 Inspection Rules for Fire Protection Electronic Products GB 14102:

1 Fire shutters Part 1: General technical requirements GB 14102:

2 Fireproof rolling shutters Part 2: Rolling door machines for fireproof rolling shutters

GB/T 16838 Environmental test methods and severity levels for fire protection electronic products GB/T 17626:

2 Electromagnetic compatibility test and measurement technology Electrostatic discharge immunity test GB/T 17626:

3 Electromagnetic compatibility test and measurement technology Radio frequency electromagnetic field radiation immunity test GB/T 17626:

4 Electromagnetic compatibility test and measurement technology Electrical fast transient pulse group immunity test GB/T 17626:

5 Electromagnetic compatibility test and measurement technology Surge (impact) immunity test GB/T 17626:

6 Electromagnetic compatibility test and measurement technology - Immunity to conducted disturbances induced by radio frequency fields GB/T 17626:

11 Electromagnetic compatibility test and measurement technology Part 11: For each phase input current less than or equal to 16A Voltage dips, short interruptions and voltage variations immunity test for equipment

3 Terms and definitions

The terms and definitions defined in GB 14102:1 and GB 14102:2 and the following apply to this document: 3:

1 It is composed of a main unit and a manual control device, and is a control device that controls the rolling door machine to open, stop and close the fireproof rolling curtain: 3:

2 It is connected to the host computer via a cable and installed at the use location: It is a device used to manually control the opening, stopping and closing of the fireproof roller shutter: 3:

3 Over-roll lifting The phenomenon that the fire shutter cannot stop after reaching the upper limit caused by a malfunction: