

ICS 13.220.50

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

GB 14102.2-2024

Fire shutter assembly - Part 2: Motor for fire shutter assembly

防火卷帘 第2部分：防火卷帘用卷门机

Issued on: April 29, 2024

Implemented on: May 1, 2025

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

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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 2 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 fire 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-resistant rolling shutters - Part 2: Rolling door machines for fire-resistant rolling shutters

1 Scope

Part 2 of GB 14102 covers the roller door machine that drives a fire shutter: the motor, gearbox, brake and manual release that raise and lower the curtain and, above all, hold it and let it descend under control when the power fails during a fire. It sets the classification and designation, the construction and performance requirements, the operating torque and speed, the endurance, the behaviour of the brake and of the manual and gravity descent devices, 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, splitting it into assembly, motor and control unit. 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 roller shutter machines for fireproof roller shutters, and specifies the models, technical requirements, inspection rules, marking, packaging, transportation and storage, and describes the corresponding test methods: This document applies to the design, manufacture and inspection of rolling door machines for fire-resistant roller shutters used in industrial and civil buildings:

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 191 Pictorial markings for packaging, storage and transportation

GB/T 2423:1-2008 Environmental testing for electric and electronic products Part 2: Test methods Test A: Low temperature

GB/T 2423:2-2008 Environmental testing for electric and electronic products Part 2: Test methods Test B: High temperature

GB/T 2423:3-2016 Environmental testing Part 2: Test method Test Cab: Steady state damp heat test

GB 4706:1-2005 Safety of household and similar electrical appliances Part 1: General requirements GB/T 5907:

3 Terms and definitions

The terms and definitions defined in GB/T 5907:5, GB 14102:1 and GB 14102:3 and the following apply to this document: 3:1 A power device used in conjunction with a fireproof rolling shutter controller that can drive the fireproof rolling shutter surface to complete opening, positioning, and closing functions:

Note: The rolling door machine for fireproof rolling shutter is generally composed of a motor, a temperature control release device, a limit assembly, a gearbox assembly, a brake and manual operation assembly, and an electrical assembly: Partial composition: [Source: GB/T 5907:5-2015, 2:14:4:5, modified] 3:

2 It is connected to the clutch release rod in the brake and manual operation assembly of the fireproof rolling shutter door machine, and is driven by its own temperature sensing element: A mechanical device that can release the brake of the rolling door mechanism:

5 Fire protection vocabulary Part 5: Fire protection products

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

GB/T 12350 Safety requirements for small power motors GB 14102:

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