ICS 91.140.90
CCS Q78

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 24479-2023

Replacing GB/T 24479-2009

Behaviour of lifts in the event of fire

火灾情况下的电梯特性

Issued on: May 23, 2023 **Implemented on: December 1, 2023**

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Standardization Administration of the PRC

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Foreword

This document was issued on 23 May 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 December 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 91.140.90, Chinese classification Q78.

It replaces GB/T 24479-2009, which is superseded.

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 replaces GB/T 24479-2009 "Elevator Characteristics under Fire Conditions". Compared with GB/T 24479-2009, except for structural

In addition to rectification and editorial changes, the main technical changes are as follows.

a) Added references to relevant terms and definitions of GB/T 7024 (see Chapter 3);

b) Deleted references to relevant terms and definitions of ISO 8421-3.1989, EN54-1.1996, EN54-2.1997 (see.2009

Chapter 3 of the edition);

c) Deleted definitions such as "evacuation plan for buildings" (see 3.2, 3.3, 3.4, 3.5, 3.6,

3.9, 3.10 of the.2009 edition);

d) Changed the definition of "construction equipment management system" (see 3.2, 3.7 of the.2009 edition);

e) Changed the requirements for recalled device interfaces and specified layers (see 5.1.2, 5.2, 5.2, 5.4 of the.2009 edition);

f) Change "automatic fire detection and alarm system" to "recall device", use "recall method" to indicate manual recall device or automatic

recalled devices (see 5.1.3, 5.1.1 of the.2009 edition);

g) Added labeling requirements for manual recall devices (see 5.1.4);

h) Changed the relevant requirements for prohibited signs (see 5.1.6, 5.1.3 of the.2009 edition);

i) The requirement that the fire recall signal should not cancel the maintenance control is added (see 5.3.2);

j) Changed the relevant requirements for door protection devices (see 5.3.2, 5.3.2 of the.2009 edition);

k) Changed the operation requirements of the elevator after receiving the fire recall signal (see 5.3.2, 5.3.1, 5.3.2 of the.2009 edition);

l) Changed the behavior of elevators after reaching a designated floor, including the requirement for audible and/or visual signals and the opening of doors when the elevator stops

or closed requirements (see 5.3.5, 5.3.6, 5.3.5, 5.3.6 of the.2009 edition);

m) Changed the requirements for the reset signal (see 5.3.7, 5.3.7 of the.2009 edition);

n) Removed the requirement for "No Entry" indicator (see 5.3.8 of the.2009 edition).

This document is proposed and managed by the National Elevator Standardization Technical Committee (SAC/TC196).

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This document was first published in.2009, and this is the first revision.

Introduction

0.1 According to the classification of GB/T 15706, this document belongs to the category C standard.

This document is particularly relevant to the following stakeholders related to machinery safety.

---equipment manufactory;

---Health and safety agencies.

Other stakeholders affected by the level of machinery safety are.

---Equipment users;

---Equipment owner;

--- service provider;

---Consumer (when the machine is intended to be used by the consumer).

All of the above stakeholders are likely to participate in the drafting of this document.

The machinery covered by this document and the range of hazards, hazardous states and hazardous events covered are given in the scope of this document.

When the requirements of this Category C standard are different from those in Category A or B standards, the

Manufactured machines, the requirements in this Category C standard take precedence over those in other standards.

0.2 This document indicates the degree of hazards, dangerous states and events involved in elevators in case of fire.

0.3 The functions described in this document involve the automatic return of the car to the designated floor and the exit of the elevator from service.

0.4 The purpose of this document is to.

a) reduce the risk of passengers being trapped in the car in the event of a building fire;

b) After the elevator finally stops at the designated landing, it is convenient for firefighters or rescuers to confirm that no passengers are trapped in the car;

c) reduce the risk of fire or smoke exposure to passengers in the car.

0.5 This document is based on the following assumptions.

a) The recall device generates a signal that triggers specific actions of the elevator;

b) The architectural design unit and construction unit have considered the fire recall function of the elevator according to this document;

c) a clear separation between the recall device and the lift control system;

d) The recalled device works as intended.

0.6 This document assumes that the architectural design unit and the elevator supplier have negotiated on the following matters.

a) The type of recalled device and its interface (see 0.4.2 of GB/T 7588.1-2020);

b) If it is a manual recall device, the type and protective measures of the switch;

c) Specify the number and location of layers;