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

GB 34655-2017

Specifications for extinguishing equipment arrangement in bus

客车灭火装备配置要求

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1 Scope

GB 34655-2017 is the Chinese national standard on specifications for extinguishing equipment arrangement in bus, in the field of road vehicles engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 14 October 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2018. Classification: ICS 43.020, CCS T09. 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 issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard specifies the terms and definitions of extinguishing equipment, and the basic requirements, application requirements, and other requirements for extinguishing equipment arrangement in bus. This Standard applies to category-M2 and M3 buses, special school buses (hereinafter known as "vehicles" for short). This Standard does not apply to the extinguishing equipment arrangement in class-D fire hazard places (such as lithium-ion batteries) on electric vehicles.

2 Normative references

The following documents are indispensable for the application of this document. For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

GB 4066.2 Fire extinguishing medial - Part 2. ABC powder

GB 4351.1-2005 Portable fire extinguishers - Part 1. Performance and construction

GB 7258 Technical Specifications for Safety of Power-driven Vehicles Operating on Roads

GB 13094 Safety requirements for bus construction

GB/T 15089 Classification of power-driven vehicles and trailers

GB/T 19596-2004 Terminology of electric vehicles

GB 30678 Safety signs and information symbols for the use of bus

GB 50140-2005 Code for Design of Extinguisher Distribution in Buildings GA 578 Super fine powder fire extinguishing agent GA 602 Dry-powder fire-extinguishing device

3.9 Fire rating Indicate the efficiency of an extinguisher to extinguish different types of fires. It consists of a number indicating the extinguishing efficiency and a letter indicating the fire type. [

GB 50140-2005, Definition 2.1.4]

3.10 Total flooding extinguishing A means of extinguishing in which a certain concentration of fire extinguishing agent is sprayed into a protected area and uniformly fills the entire protected area within a specified period of time.

3.11 Local application extinguishing A means of extinguishing in which the fire extinguishing agent is sprayed directly to the protected object for a certain period of time.

3.12 Passenger and crew compartment The area used by the occupants, that is, the general term for the drive zone and the passenger zone.

4.1 Basic requirements

4.1.1 The extinguishing equipment arranged on vehicles shall be a vehicle-type product which meets the requirements of the national fire product market access system.

4.1.2 The extinguishing equipment arranged on vehicles shall be capable of fighting class-A, B, C, and E fires.

4.1.3 The fire extinguishing agent for extinguishing equipment arranged on vehicles shall not corrode parts on the vehicle.

4.2.2 Installation and identification

4.2.2.1 The height of the top of the extinguisher in passenger and crew compartment from the floor below it shall not exceed

1.5 m. The extinguisher and its bracket shall not protrude into the passage, passenger door

approach, and emergency door approach; and shall not affect the passage of emergency window.

4.2.2.2 The extinguisher shall be installed stably. During the vehicle operating, there shall be no dumping or falling.

4.2.2.3 The extinguisher shall be convenient to access; and shall be taken and used without the aid of any tools.

4.2.2.4 The location of extinguisher shall be clearly visible. The visibility shall not be affected by changes in the position of moving parts. Otherwise, the corresponding sign shall be provided near the extinguisher. The sign shall comply with the provisions of GB 30678 and shall be easy to see; and shall not be obscured by moving parts.

4.3.1 Type and function

4.3.1.1 General requirements 4.3.1.1.1 The super fine powder fire extinguishing device (hereinafter known as "fire extinguishing device" for short) arranged on vehicles shall be a special fire extinguishing device for the engine compartment in accordance with GA 602. The super fine powder fire extinguishing agent filled in the extinguishing device shall be ABC super fine powder fire extinguishing agent in accordance with GA 578. The start-up mode of the fire extinguishing device shall be automatic start-up and manual start-up (hereinafter known as "automatic-manual integration" for short). 4.3.1.1.2 When the whole vehicle is energized, and the fire extinguishing device is automatically started, it shall be able to, through the acoustic signal, alarm the driver. d "Near the rear" means that it is located at the last 40% portion along the length direction of passenger and crew compartment. e "Near the front" means that it is located at the first 30% portion along the length direction of passenger and crew compartment. 4.3.1.1.3 The fire extinguishing device, when started under any conditions, shall not pose a potential safety hazard to personnel. 4.3.1.1.4 The wire harness of the fire extinguishing device shall comply with the provisions of GB 7258.

4.3.1.2 Additional requirements for automatic-manual integration fire extinguishing device

4.3.1.2.1 The manual start-up function and the automatic start-up function shall be independent of each other. The order of implementation of the two functions shall be unlimited. 4.3.1.2.2 The manual start-up system shall have a closed loop. When the whole vehicle is powered on, and when the manual start-up function is in an abnormal state, a continuous acoustic or visual alarm signal shall be sent to the driver. 4.3.1.2.3 When the engine is in operation or stopped, the fire extinguishing device shall be able to realize manual start-up. 4.3.1.2.4 When the engine is in operation or stopped, the fire extinguishing device shall be able to realize automatic start-up. 4.3.1.2.5 When the whole vehicle and battery are powered off, the fire extinguishing device shall be able to realize automatic start-up function.

4.3.2 Location of the fire extinguishing device arrangement and applied extinguishing mode and extinguishing agent amount

4.3.2.1 The vehicle shall be equipped with fire extinguishing device in the engine compartment. If the battery compartment, fuel (or gas) heater compartment, and eddy current retarder installation locations are not equipped with a temperature alarm system, fire extinguishing devices shall be provided.

Note. If the battery is located in the engine compartment, it is considered a component of engine compartment. If the battery is not located in the compartment, it is considered that there is no battery compartment.