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

GB 22370-2008

Fire alarm and safety system for household

家用火灾安全系统

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Foreword

The fourth through seventh chapter of this standard is mandatory, the rest are recommended. The standard proposed by the People's Republic of China Ministry of Public Security. This standard by the National Standardization Technical Committee of the Sixth Fire Technical Committee. This standard is drafted by: Ministry of Public Security Shenyang Fire Research Institute. Participated in the drafting of this standard. Qinhuangdao Fortis electronic Enterprises Ltd., Shenzhen-Anderson Electronics Co., Ltd., Gulf Security Technology Ltd., Shenzhen given the security system Limited. The main drafters of this standard. Ding Hongjun, Zhang Ying Cong, with Rui Tao, Wang Jiangang, Chen Nan, Guan Wei, Zhou, safe ice, Liu Changan, Lin Qiang. This standard is the first release. Home Fire Safety Systems

1 Scope

GB 22370-2008 is the Chinese national standard on fire alarm and safety system for household, in the field of environment and health protection, safety. 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 1 September 2008 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 May 2009. Classification: ICS 13.220.20, CCS C81. 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 home fire safety system, system components, general requirements, requirements and test methods, inspection rules and signs. This standard applies to fire safety systems for home installation.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 156 standard voltage

GB 4208-1993 enclosure class

GB 4706.1-1998 household and similar electrical appliances - Part 1. General requirements (eqv IEC 335-1.1991)

GB 4715 point-type smoke detectors

GB 4716 point type heat detectors

GB 9969.1 Instructions General Industrial Products

GB 12978 fire electronic products inspection rules

GB 14287.2 electrical fire control system - Part 2. residual current electric fire detectors

GB 16838 fire electronic products environment test methods and severities

3 System components

Home fire safety system in the practical application of the process according to the specific circumstances of the protected object can be divided into the following four types.

--- A Class. Home Fire safety system with centralized control and centralized management functions, suitable for centralized small residential property management Area. System, automatic fire alarm system at least by the general industrial and civil use of fire alarm controller, fire Detectors, manual fire alarm switch and alarm sound composition; or at least by a fire alarm controller, household fire detectors, manual Alarm switches and other equipment.

--- Class B. with a centralized regulatory functions of home fire safety systems, adapted to centralized property management of residential quarters. At least Control center monitoring equipment, home fire alarm controllers, home fire detectors, manual alarm switch composition, typically include monitoring Pipe alarm, remote control switches and other equipment.

--- Class C. no centralized regulatory functions of home fire safety systems, adapted to no centralized property management has been put into residential or Residential use. At least by the home fire alarm controller, household fire detectors, manual alarm switch composition, typically include Supervision alarm, remote control switches and other equipment.

--- Class D. no centralized regulatory functions of home fire safety systems, adapted to no centralized property management has been put into residential or Residential use. Independent smoke detection alarm, stand-combustible gas detectors and other equipment.

Note. fire detectors including smoke detectors, heat detectors, combustible gas detectors, residual current electric fire detectors.

4 General requirements

Home Fire Safety System

4.1 General Requirements

4.1.1 General Home fire safety system consisting of various types of equipment, in addition to Class A home fire safety systems fire alarm controller, fire detectors, Class D fire alarm sound and home fire safety system independent smoke detection alarm shall be otherwise provided in the relevant standards, which He Devices To comply with this standard, should first meet the relevant requirements of this chapter, then press the test specified in Chapter 5, and meet the requirements of the test.

4.1.2 The main component performance requirements

4.1.2.1 Basic requirements The main part of household fire safety systems of various types of equipment, should comply with the relevant national standards of styling products, and should meet the following Requirements.

4.1.2.2 Indicator 4.1.2.2.1 should be color-coded red to indicate an alarm signal; yellow indicates a fault, shielded, loop self-test system abnormality; green table It shows the main power supply and standby power supply is working properly. 4.1.2.2.2 indicator should be marked function. 4.1.2.2.3 In 5lx ~ 500lx ambient light conditions, in front of 22.5 ° angle range, function and power LEDs should 3m place clearly visible; the other indicators should be clearly visible at 0.8m. 4.1.2.2.4 use flashing mode indicator (device) is lit each time should not be less than 0.25s, which start signal indicator (unit) flashing frequency Rate should not be less than 1Hz, malfunction indicator lamp (device) flashing frequency should not be less than 0.2Hz. 4.1.2.2.5 An indicator light display simultaneous fault, shielding three functions and self-test, fault indication should be shiny, shield and self-test instructions It should be steady.

4.1.2.3 letter (character) - Digital Display In 5lx ~ 500lx ambient light conditions, the characters should be displayed in front of 22.5 ° viewing angle, 0.8m at readable.

4.1.2.4 Fuse For power line fuses or other overcurrent protection devices, the rated current value should generally be no more than 2 times the maximum operating current. When the maximum operating current is greater than 6A, the fuse rated current value can be

1.5 times. Close at fuse or other overcurrent protection devices It should be clearly marked its parameter values.

4.1.2.5 Terminals On each of the terminals should be clear, firmly marked number or symbol corresponding use shall be stated in the relevant documents.

4.1.2.6 Standby Power 4.1.2.6.1 The positive power supply wire connection is red, very negative black or blue. 4.1.2.6.2 Power backup battery charge and discharge times when, without exceeding the limits specified by the manufacturer of the discharge situation, should be able to Within 24h battery charge to more than 80% of rated capacity, then charge should be filled after 48h. 4.1.2.6.3 standby power lower than the over-discharge protection voltage battery voltage warning should be issued.

4.1.2.7 switches and buttons (button) Switches and buttons (button) (on which or near a position) should be clearly marked function.

4.1.2.8 wires and strips Home fire safety systems in the main circuit wiring a home fire alarm control parameter is greater than the operating temperature should be 105 °C flame guide Line (or cable), and the wires are securely; trunking should be used to connect non-combustible materials or flame retardant materials (oxygen index of not less than 28) Manufacturing.

4.1.2.9 element temperature Home fire safety systems inside various types of equipment, mainly electronic, electrical components of the maximum temperature rise should not exceed 60 °C. Ambient temperature The maximum surface temperature (25 ± 3) °C under conditions built-in transformer, ballast and other heat-generating components should not