

<p style="font-size: 24px; font-weight: bold;">Operation Manual for Fire Extinguishing Device of Power Distribution</p> <p style="font-size: 10px; color: gray;">Please read the instruction manual before installing and using</p>	<p><b>1. Product Overview</b></p> <p>The fire extinguishing device for distribution cabinets adopts gas fire extinguishing technology. According to national and industry standards, and based on the internal environmental characteristics of high and low voltage distribution cabinets, bank cash machines, computer cases, charging piles, wind turbine nacelles, etc., products with strong automatic fire extinguishing effects and effective control of fires in relatively enclosed spaces have been developed through experiments.</p> <p><b>II. Product Features</b></p> <p>The fire extinguishing device for distribution cabinets is a new type of S-shaped aerosol fire extinguishing device. This product utilizes a PA66-20 flame-retardant plastic shell with strong thermal stability, and features compact size, pressure-free storage, no need for laying pipe networks and maintenance, efficient and rapid fire extinguishing, no residue after fire extinguishing, and safety and reliability.</p> <p>le well, distribution cabinet, switch cabinet;</p>	<p><b>III. Scope of application of fire extinguishing devices</b></p> <ol style="list-style-type: none"> <li>1. Construction industry: high-rise buildings, power transformation and distribution rooms in industrial buildings, libraries, archives, underground storage rooms, and safes;</li> <li>2. Communication industry: telecommunications equipment rooms, computer rooms, communication base stations, relay stations, data processing rooms for distribution cabinets, and precision equipment distribution cabinets in remote control rooms;</li> <li>4. Metallurgical industry: rolling mill equipment room, electrical basement of electronic instrument control room, cable interlayer, cable tunnel, transformer room;</li> <li>5. Petrochemical industry: flammable liquid storage area, power transformation (distribution) room, generator room, cable tunnel, cable well, distribution cabinet, switch cabinet;</li> <li>6. Transportation industry: train engine rooms, railway source line signal station substations, station signal towers, highway signal stations, automobile engine rooms, turbine engine rooms, and ship engine rooms;</li> <li>7. Other industries: CNC and other high-priced machin</li> </ol>	<p><b>IV. Product Fire Extinguishing Principle</b></p> <ol style="list-style-type: none"> <li>1. Operating principle of (thermal activation) type: When the protective space reaches the thermal activation temperature, the internal fire extinguishing agent will be activated, rapidly generating and spraying nano-sized aerosol fire extinguishing agent to quickly extinguish the fire.</li> <li>2. The cooling effect of aerosol fire extinguishing devices primarily relies on the endothermic cooling and fire extinguishing mechanism of metal oxides and carbonates. Metal salt particles absorb a large amount of heat at high temperatures, undergoing physical endothermic processes such as thermal melting and gasification. This reduces the flame temperature, which then radiates onto the combustible surface. The heat used to gasify combustible molecules and break down gasified combustible molecules into free radicals decreases, thereby inhibiting the combustion reaction rate to some extent.</li> <li>3. The primary method is to "extinguish the fire by suffocation" through physically diluting the oxygen in the air.</li> </ol>
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<p><b>V. Technical Parameters</b></p> <p>Product model: QRR0.01G/S-FA</p> <p>Aerosol generation dose: 10g</p> <p>Fire extinguishing density: 100g/m<sup>3</sup></p> <p>Protection space: 0.1m<sup>3</sup></p> <p>Startup mode: Hot start</p> <p>Hot start temperature: 175°C±15°C</p> <p>Operating temperature range: -50°C~+75°C</p> <p>Expiration date: 10 years</p> <p>Relative humidity of working environment: ≤90%RH</p> <p>Oxidizer and content: Sr(NO<sub>3</sub>)<sub>2</sub> 60%/KNO<sub>3</sub> 20%</p> <p>Thermal spacing of nozzle: 0.3m≤75°C, 0.12m≤200°C, 0.05m≤400°C</p> <p>European Standard: EN-15276-1:2019, EN-15276-2:2019</p> <p>Fire extinguishing category: Class A surface fire, Class B/C/E</p> <p>Installation method: 3M adhesive or embedded</p>	<p><b>VI. Installation and Debugging</b></p> <ol style="list-style-type: none"> <li>1. The product can be installed and fixed approximately 30cm above the potential fire hazard.</li> <li>2. It should not be installed near air intakes, exhaust vents, doors, windows, or other exits.</li> <li>3. It should not be installed in places that are prone to rain, watering, or flooding.</li> <li>4. Two installation methods: <ol style="list-style-type: none"> <li>4.1 Installation method 1: <ol style="list-style-type: none"> <li>1. Ensure that the surface of the installation location is clean and dry (free from moisture, oil, and wax).</li> <li>2. Peel off the adhesive isolation paper on the bottom of the product, stick it on, and press down firmly to secure it.</li> </ol> </li> <li>4.2 Installation method 2: <ol style="list-style-type: none"> <li>1. Just embed the fire extinguishing device into the guide rail of the distribution cabinet and secure it tightly.</li> <li>5. During the installation process, it is prohibited to obstruct the area within 5 centimeters directly in front of the nozzle of the fire extinguishing device. The nozzle must not be aimed at any person during installation, and the product must not be covered with any other items.</li> </ol> </li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>6. The temperature-sensitive heat-sensitive wire should be laid along the perimeter of the hidden danger area, and it is forbidden to directly attach it to the high-temperature pipeline to prevent accidental activation.</li> </ol> <p><b>VII. Precautions for Use and Operation</b></p> <ol style="list-style-type: none"> <li>1. The installation and commissioning of the hot aerosol fire extinguishing device must be carried out by professionally trained personnel.</li> <li>2. The thermal aerosol fire extinguishing device, once installed, shall not be moved arbitrarily.</li> <li>3. Personnel discovering a fire scene must evacuate immediately, and doors and windows should be closed as much as possible during evacuation.</li> <li>4. After the expiration date, the using unit should contact the supplier for replacement and recycling.</li> <li>5. After spraying, wear high-temperature resistant gloves if you need to remove it within a short period of time to avoid burns.</li> <li>6. It is strictly prohibited to disassemble the hot aerosol fire extinguishing device, whether it is within or beyond its effective period, to avoid accidents.</li> </ol>	<ol style="list-style-type: none"> <li>7. The sealing sheet inside the nozzle must not be punctured, otherwise it will affect the product's shelf life, and the customer will be responsible for any consequences. Our company will not be held liable. Before installing the aerosol series fire extinguishing device, please read the instruction manual carefully. If you have any questions, please consult our technical staff in a timely manner.</li> </ol> <p><b>VIII. Transportation and Storage</b></p> <ol style="list-style-type: none"> <li>1. During transportation, it should be protected from rain and moisture, and handled with care.</li> <li>2. The storage environment should be chosen as a ventilated and dry warehouse.</li> <li>10. Relevant Technical Standards: XF499.1-2010 "Aerosol Fire Extinguishing Systems - Part 1: Thermal Aerosol Fire Extinguishing Devices" 11. Contact Information: Company Name: Dongguan Feng'an Security Technology Co., Ltd. Company Address: No. 17, Panlong Road, Liaobu Town, Dongguan City, Guangdong Province. Service Hotline: 0769-28828182.</li> </ol>
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