

OVERVIEW – AFE-20 AEROSOL AUTOMATIC FIRE EXTINGUISHER

Ideal for consumer units, distribution boards, EV charging equipment, and electrical control panels, the AFE20G continuously stands guard against dangerous thermal events. Once internal temperatures reach critical levels of approximately 170°C, the unit automatically activates, deploying a powerful fire-suppressing aerosol in under 6 seconds to rapidly contain and suppress the fire before it escalates.

By attacking the fire at source within the enclosure, the AFE20G helps minimise smoke contamination, reduce costly equipment damage, and limit the spread of fire to surrounding areas. This proactive approach can significantly reduce downtime, repair costs, and the wider impact of electrical failures.

Designed with simplicity in mind, the unit is completely self-powered with no external wiring or additional power supply required. Its compact footprint makes installation straightforward even within confined spaces, while both DIN rail and adhesive mounting options provide total flexibility for new projects or retrofit upgrades.

Manufactured to meet BS EN 15276-1 and BS EN 15276-2 standards, the AFE20G provides a modern, reliable solution for enhancing electrical fire safety across residential, commercial, and industrial installations.

Key Advantages

- Automatic heat-activated operation
- Fast aerosol discharge in ≤ 6 seconds
- Designed specifically for enclosed electrical equipment
- Helps contain fires before major escalation occurs
- No external power or wiring required
- Compact design ideal for modern consumer units
- Quick installation via DIN rail or adhesive fixing
- Suitable for retrofit and new-build projects
- Equipment-friendly fire suppression technology
- Certified to BS EN 15276-1 & BS EN 15276-2

Common Applications

- Consumer units
- Distribution boards
- Electrical switchgear
- EV charger enclosures
- Control panels
- Small electrical cabinets

Technical Overview

- Product Reference: LFE20G
- Activation Temperature: Approx. 170°C
- Suppression Release Time: ≤ 6 seconds
- Maximum Protected Volume: Up to 0.4m³
- Extinguishing Density: 100g/m³
- Mounting Options: 35mm DIN rail or adhesive fixing
- Power Requirement: None – fully self-contained

Physical Dimensions

Width: 19mm
Height: 77mm
Depth: 65mm

Compliance Standards

- BS EN 15276-1
- BS EN 15276-2

Service & Safety Information

The AFE20G has an operational life expectancy of up to 10 years under normal conditions. Following activation, all associated electrical equipment should be inspected and tested by a qualified electrician before being returned to service.

A Small Device That Can Prevent Major Losses

Electrical fires can lead to devastating consequences, including property damage, operational downtime, and risk to life. Compared to the cost of replacing electrical equipment or repairing fire damage, the installation of an AFE20G provides a highly cost-effective additional layer of protection designed to intervene at the earliest possible stage.

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DEFINITIONS AND STANDARDS – PRODUCT PART FPSP A-AFE-20

BS EN 15276-1 and BS EN 15276-2 are the recognised European standards covering condensed aerosol fire extinguishing systems. These standards define the performance, testing, reliability, installation, and safety requirements for aerosol-based fire suppression products used to protect enclosed spaces and electrical equipment.

BS EN 15276-1 – Requirements and Test Methods

BS EN 15276-1 focuses on the design, performance, and testing of condensed aerosol fire extinguishing components and systems. The standard ensures that aerosol fire suppression devices can operate safely and effectively under defined fire conditions.

This part of the standard covers areas including:

- Fire extinguishing performance testing
- Reliability and operational consistency
- Aerosol discharge characteristics
- Environmental and temperature testing
- Electrical safety and activation performance
- Mechanical durability and integrity
- Manufacturer testing procedures and quality control
- Suitability for use in protected enclosures and risk areas

Compliance with BS EN 15276-1 demonstrates that the product has been independently assessed to verify its ability to suppress fires effectively while operating safely within its intended application.

BS EN 15276-2 – Design, Installation and Maintenance Guidance

BS EN 15276-2 provides guidance on the correct application, installation, commissioning, servicing, and maintenance of aerosol fire extinguishing systems.

This section of the standard covers:

- Correct system selection and application
- Protected enclosure sizing and design considerations
- Installation positioning requirements
- Safety distances and discharge considerations
- Inspection and maintenance procedures
- Service life requirements
- Operational limitations and user responsibilities
- Post-activation safety procedures

Compliance with BS EN 15276-2 confirms that the system can be correctly installed and maintained in accordance with recognised fire protection engineering practices.

Why These Standards Matter

For electrical fire protection products such as the AFE-20 compliance with BS EN 15276-1 & 2 provides assurance that the device has been designed, tested, and certified in line with recognised European fire suppression standards.

This gives installers, consultants, contractors, insurers, and end users confidence that the product:

- Has undergone recognised fire performance testing
- Meets established safety requirements
- Is suitable for protecting enclosed electrical equipment
- Can be installed using recognised engineering guidance
- Delivers a professionally certified level of fire suppression performance

In practical terms, these standards help ensure that the fire suppression device will operate reliably during a thermal event and provide an additional layer of protection against escalation of electrical fires. Protecting modern electrical installations from fire has never been more important. The LFE20G Automatic Aerosol Fire Suppression Unit has been developed to deliver fast-reacting, self-contained fire protection directly where electrical fires are most likely to start — inside the enclosure itself.