

**Electrically-ignited fire hazard protection**  
Flyer



**LiveSafe**

**Technology to protect  
what matters**

**for low voltage residential and light commercial installations**

**EATON**

*Powering Business Worldwide*

# Technology to protect what matters

What matters and needs protecting is often the same for you and your customers: lives, property, assets. But what also matters to you is your reputation and your business. So when customers rely on you for a professional installation, you need to know you are doing the best job possible.

However, the hidden hazard of an electrically-ignited fire is a significant threat to them and to you. That's why it's essential to protect against it.

- Hidden arc faults have potential to ignite fires and cause enormous damage, or even loss of life
- Small arcs can grow over time as insulation is increasingly damaged
- Faults and damage leading to arc faults can occur suddenly or over months or years, creating an undetected fire hazard



## Where?

Arc faults can occur in:

- Cables or wires
- Fixed installations
- Cables of directly connected devices or devices connected via sockets

## When?

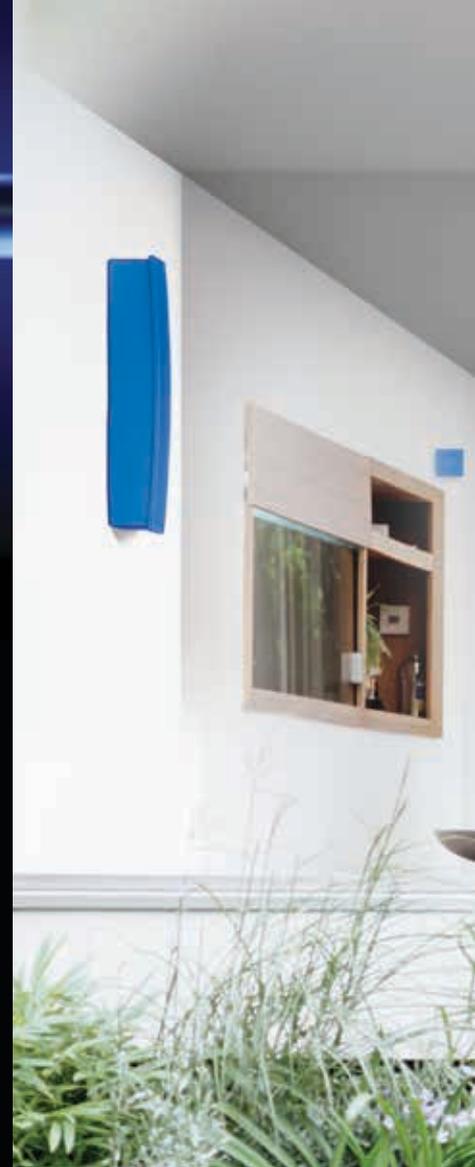
Arc faults can occur when:

- Wires are faulty or damaged, due to:
  - external influences
  - ageing
- Terminal connections are loose

## Why?

The most frequent causes of arc faults are:

- Crushed wires
- Damage to wire insulations caused by nails, screws etc
- Ageing of installations
- Broken cables or interruptions in a wire
- UV rays
- Pets and rodent bites
- Loose contacts and connections
- Bent plugs and wires
- Wires are treated carelessly or exposed to stress





## Eaton AFDD+

Incorporating the next generation of detection technology, the Eaton AFDD+ provides enhanced fire protection, what reduces the risk of electrically ignited fires, by detecting arc fault currents other protection devices can't.

3-fold protection  
in end circuits

- Arc fault protection
- + Short circuit & overcurrent protection
- + Earth fault current protection

**NEW**

Eaton's AFDD+ compliant  
to IEC 60364-4-42

|   |   |  |   |
|---|---|--|---|
|  |  |  |  |
| <b>MCB</b>  | <b>RCCB</b>   | <b>RCBO</b>  | <b>AFDD+</b>  |
| Short circuit & over current protection   | Earth fault current protection  | Earth fault current protection   | Arc fault protection  |
|   |   | Short circuit & over current protection  | Earth fault current protection  |
|   |   |  | Short circuit & over current protection   |

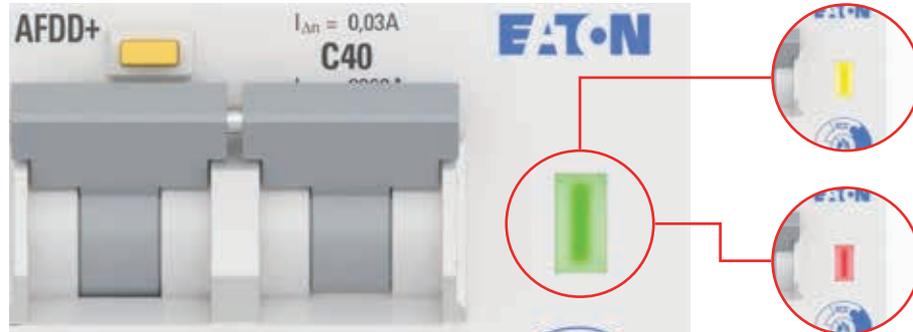
→ FUNCTIONALITY

|   |   |   |  |
|---|---|---|--|
|  Basic fire protection |  Basic fire protection |  Increased fire protection |  Enhanced fire protection |
| -   |  Shock prevention      |  Shock prevention          |  Shock prevention         |

## How it works

The EATON AFDD+ uses digital technology with embedded processing and smart evaluation of current signals, to provide sensitive detection of fault currents, combined with avoidance of nuisance tripping, by digitally monitoring the wire for specific frequencies that can indicate an arc fault.

The indicators of the EATON AFDD+ display the status and detailed fault information when the AFDD+ trips due to a fault. This makes fault-finding easier and saves time.



## No arc fault masking

Power line communication can cause intense signals that mask the noise generated by arc faults. The EATON AFDD+ has been developed to ensure this does not interfere with its detection capability.

## Eaton AFDD+

- Enhanced fire protection
- Fully integrated 3-in-1 protection device
- Time-saving, easy to install and operate technology for new builds or retro fit
- Faults only trip one circuit, tripping indicators show device status and tripping reasons:
  - Adds convenience and peace of mind for your customers
  - Saves time when tracing faults
- Sensitive digital detection of fault currents above requirements of product standard, combined with avoidance of nuisance tripping
- In accordance with IEC 60364-4-42

To find out more about how to **protect what matters**, visit [www.eaton.com/gb/livesafe](http://www.eaton.com/gb/livesafe)

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