



# **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





fault currents other protection devices can't.

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

**Eaton AFDD+** 





МСВ	RCCB
hort circuit & over	Earth fault current
current protection	protection



3-fold protection

Arc fault protection

+ Earth fault current protection

+ Short circuit & overcurrent protection

in end circuits

	AFDD
RCB0	Arc fault pro

	KCCB	protection	protection
/er )n	Earth fault current protection	Short circuit & over current protection	Short circuit & over current protection

→ FUNCTIONALITY

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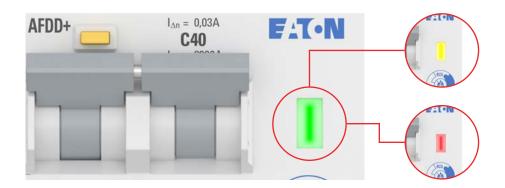
& Basic fire protection	& Basic fire protection	and lincreased fire protection	Enhanced fire protection
	Shock prevention	Shock prevention	A Shock prevention

**EATON** Fire safety **EATON** Fire safety

### 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
- builds or retro fit
- Faults only trip one circuit, tripping indicators show device status and tripping reasons:
- In accordance with IEC 60364-4-42

To find out more about how to protect what matters, visit www.eaton.com/gb/livesafe



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