

PROTECTING

YOUR

MICRO-ENVIRONMENT

ELECTRICAL ENCLOSURE FIRE PROTECTION SOLUTIONS





A small fire in a single cabinet, unchecked, can easily grow to consume adjacent cabinets - or even spread throughout a facility.





🕀 The problem

Electrical enclosures can be found in virtually any industrial or commercial space. In some cases the enclosure might be a single small panel while in others it may involve a large room filled with electrical boxes. Should a fire occur in one of these cabinets, it would typically destroy the contents, but unchecked the fire could take the room or even the building, costing money and downtime.

Regardless of the number of enclosures, Firetrace[®] offers a reliable, cost-effective method to increase the fire protection of these areas by detecting and suppressing the fire in the cabinet itself. Typical enclosures include:

- Motor control centers
 Cable trays
- Electrical panels
- Power vault
- Control closets

• Wiring carnesses

- UPS
- Transformer

Below are the most common sources of fire in electrical enclosures:

- Wire fatigue
- Improper installation
- Overloaded circuits
- Equipment failures
- Other environmental causes

igoplus The Firetrace solution

Because Firetrace takes the fire detection and suppression inside of the hazard, a growing fire can be caught quickly, preventing the spread of fire to other parts of the building that would require firefighters or water sprinklers to extinguish.

By containing the fire to the individual enclosure damage is limited to that enclosure and the collateral damage often caused by traditional fire suppression is avoided.

How it works

Firetrace offers two distinct fire suppression systems to suit the needs of the environment.

Firetrace Direct System

The Firetrace Direct Low-Pressure System provides simple, reliable protection for critical assets. During the installation, the red Firetrace Detection Tubing (FDT) is run into and throughout the cabinet, ensuring that detection is close at hand should a fire start.

Should a fire break out, the point on the pressurized FDT nearest the heat source will burst, allowing the fire suppression agent to flow from the Firetrace cylinder through the tubing, and out of the rupture hole directly at the source of the fire. The result is a long discharge of agent in the immediate vicinity of the fire, suppressing the fire where it starts.

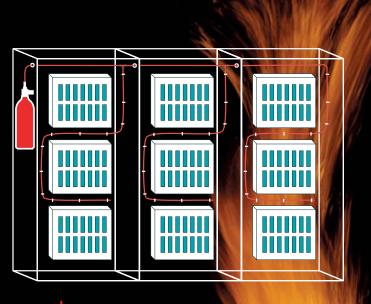
Firetrace Direct Systems can also be used in cable runs and trays. Direct systems are fully automatic and cannot be manually activated.

Firetrace Indirect System

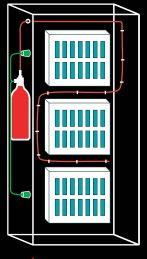
The Firetrace Indirect Low-Pressure System uses the same red Firetrace Detection Tubing run throughout the cabinet's components to quickly detect a fire. When the tubing ruptures, the system activates and delivers the agent through a separate piping set, quickly filling the cabinet enclosure with agent and suppressing the fire.

Firetrace Indirect Systems also offer the option to activate via a smoke detector or external alarm system (using the Firetrace Solenoid Valve) or via a manual release.

Regardless of the system selected, the Firetrace Detection Tubing is the reliable solution for detecting fire at its source quickly, before adjacent equipment can be damaged. Either Firetrace system can utilize one of a variety of clean fire suppressing agents, selected specifically to suit the environment.



Firetrace Detection Tubing





Indirect systems can also be manually activated or activated through external detection

Firetrace's Electrical Enclosure Applications

Firetrace has more than 50,000 systems installed protecting critical equipment worldwide. Firetrace has its origins in the late 1980's in the United Kingdom as a special hazard fire suppression system. Through the 1990's applications expanded to include enclosures such as machines, fume hoods, data centers and electrical cabinets as distribution increased in Europe.

In 2001, the worldwide rights to Firetrace were purchased by Firetrace USA, a group of fire suppression industry veterans who saw the value in creating fire suppression systems for "microenvironments". This concept is simply providing supplemental protection that suppresses fire quickly within the protected space before larger room or building systems would activate. As a result of this supplemental protection, fire damage, both direct and collateral, and costs associated with cleanup and downtime are significantly reduced or eliminated. Available in multiple system sizes (ranging from one pound systems to 50 pound systems) utilizing a variety of fire suppressing agent options, Firetrace is now the choice fire suppressing system for virtually any enclosed application, including electrical cabinets.

Firetrace can be fitted in virtually any cabinet, new or existing.



- Fast, reliable fire detection
- Clean agents that are safe for people, equipment and the environment — no cleanup required
- Installs in new or existing cabinet
- Doesn't interfere with installation or maintenance of equipment
- Firetrace systems do not affect IP ratings
- Firetrace Detection Tubing is electrically non-conductive.
- Firetrace Detection Tubing can use existing cable routes to reach internal cabinets (don't need to drill holes internally).
- In-cabinet detection and suppression decreases extinguishing time unlike other systems where the extinguishing agent must penetrate from outside the cabinet.

- Firetrace Detection Tubing allows gas suppression directly at source of fire unlike other systems that have to build up an extinguishing concentration - can be difficult with internal airtight sub enclosures.
- Firetrace can be integrated with Scada and other fire control systems
- Firetrace requires no power and is completely self contained
- Firetrace systems can be installed on, in or close to the cabinet.
- Firetrace is accepted / endorsed by leading MCC and VFD panel manufacturers.



Distributor:

Firetrace is available exclusively through our worldwide distributors, each of which has been properly trained in the installation and maintenance of Firetrace systems. To locate the Firetrace distributor nearest you please contact us at:

Firetrace International

15690 N. 83rd Way, Suite B Scottsdale, AZ 85260

1-866-607-1218 (US and Canada) 1-480-607-1218 (Elsewhere) 1-480-315-1316 (Fax)

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www.firetrace.com

Firetrace has more than 20 international approvals and listings including:



Approvals and listings vary by system type and agent.