SIEX TK SIMPLEX

AUTONOMOUS
DETECTION SYSTEM

using termal / mechanical
release

FIRE
DETECTION

Maximum detection safety

In fire protection, the highest priority is to have a system that ensures the greatest safety and is guaranteed to work in any circumstance and in any unforeseen circumstance.

For this reason, in its ongoing quest to provide the most complete equipment, SIEX has developed SIEX™ TK-SIMPLEX, an innovative automatic detection system.
It is designed to be installed as primary detection system or as an additional backup system for cases in which fire circumstances could affect conventional electrical detection systems.

Its fully standalone and automatic release ensures the activation of the firefighting system before any adversity, providing maximum safety when it comes to protecting spaces with important equipment and personnel.

When is a mechanical detection system important?

Installing this type of system can be very valuable and sometimes indispensable. Its automatic operation without the need for electrical power ensures that it will work in complicated situations.

In many hazards, an electrical system is not recommended for detection and in other cases it is not feasible if the power supply cannot be guaranteed.

In protected areas where there is a high probability of electrical fault or explosion, it is important to have backup systems because sometimes the electrical detection and release system of a protected hazard may be rendered unusable by a fire.
For other types of protected areas where a simple and easily maintained installation is necessary (such as small enclosures) it is also very advisable to have autonomous and highly reliable units to ensure rapid detection and actuation.

Whether you need to control large hazards in large areas or small spaces, as well as isolated hazards or those requiring backup detection, our SIEX™ TK-SIMPLEX system adapts to any situation.

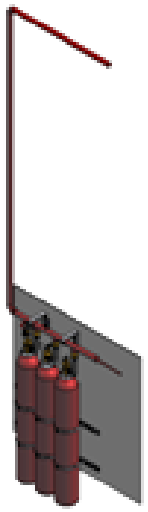
AUTONOMOUS DETECTION SYSTEM

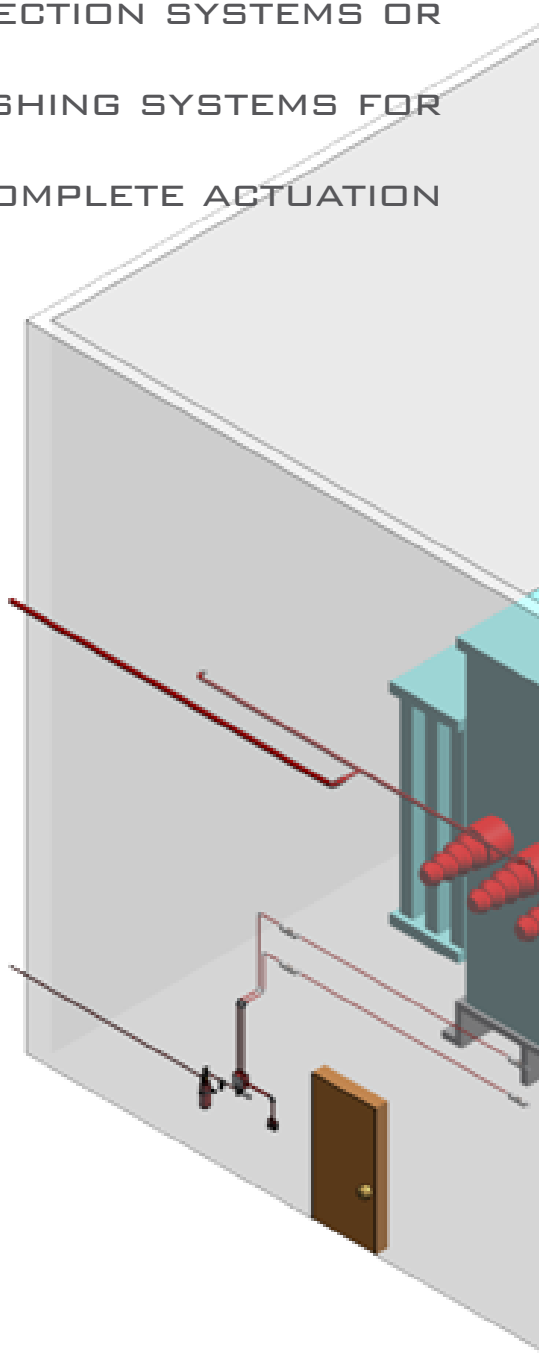
SIEX DEVELOPS AUTONOMOUS DETECTION SYSTEMS OR SYSTEMS THAT SUPPLEMENT EXTINGUISHING SYSTEMS FOR RELIABLE AND COMPLETE ACTUATION

The SIEX™ TK-SIMPLEX mechanical detection system stands out for its extreme reliability. It is triggered directly by the heat of the fire and the simplicity of its design prevents false alarms.

A line detection, which works by thermal fuses or heat-sensitive bulbs calibrated to rupture at various temperatures, depending on the hazard to be protected. Its mechanism activates a nitrogen bottle that actuates the cylinder banks storing the extinguishing agent, or directly triggering the main or modular cylinder.

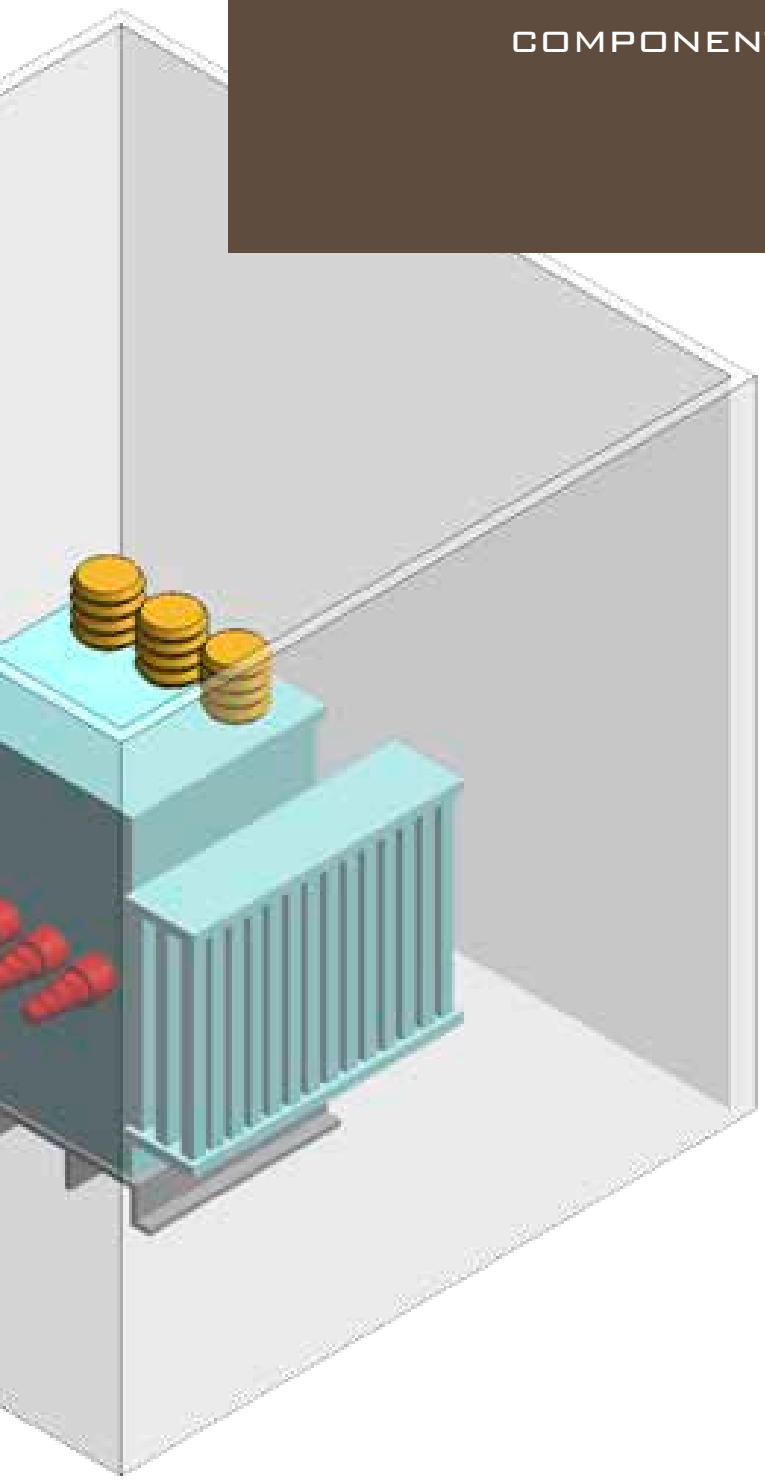
The fire is controlled immediately after detection completely autonomously.





Large areas can be protected by up to 41 detectors in a single 62-metre line which can change its course via up to 42 pulley elbows.

The detection systems developed by SIEX are EXCLUSIVE for tailoring each component to the protection needs:



THE PATH OF THE DETECTION LINE.

Thanks to pulley elbows along the detection line, the route can turn in any direction to cover different spaces.

THE MOST APPROPRIATE DETECTION KIT FOR EACH HAZARD.

Systems with fast or normal response bulbs are available, as well as thermal fuses, depending on the most suitable temperature range in the protected area.

MANUAL ACTIVATION.

The manual cable-pull release can be installed connected to the detection line itself or directly to the mechanical control panel. The cable can be installed more than 62 metres away, allowing total installation flexibility.

ACTIVATION OF NITROGEN FIRE PROTECTION SYSTEM

The system can be activated by a nitrogen cartridge or bottle of the right size according to the fixed extinguishing system.

BENEFITS:

FULL AUTONOMY

Needs no type of energy for release, except the heat produced by the fire itself, so it can be installed anywhere and its operation will not be compromised. It provides safety even in an explosion that would disable conventional detection.

INCREASED SAFETY

Reacts in case of failure of the electronic detection elements or together with them. Avoids false alarms and the untimely activation of the extinguishing system.

FULLY CUSTOMIZABLE

Its components are chosen based on the characteristics of fire, being completely adaptable to any project, regardless of the potential nature of the fire.

INSTALLATION FLEXIBILITY

Installation is very simple. The system can be installed in any room arrangement, thanks to the use of pulley elbows which allow avoiding obstacles.

MONITORING OPTION

By using a supervisory switch, the status of the mechanical control unit can be monitored for greater safety and continuous monitoring of the hazard. Allows remote electric control of any device.

REMOTE ACTIVATION

The manual release can be located at a great distance from the control panel. Staff can access it without ever being in danger.

ROBUST

The quality of components ensures resistance to vibrations and other disturbances, ensuring total reliability.

DOES NOT REQUIRE THE USE OF AN EXPENSIVE ELECTRICAL CONTROL PANEL

The mechanical control unit may be sufficient for full control of the extinguishing system with total reliability.

WIDER RANGE OF COMPONENTS

The SIEX™ TK-SIMPLEX system can be installed with some of the smallest market constraints, allowing maximum design flexibility.

QUALITY GUARANTEE

The components and assembly are approved and by the UL international organization in the U.S..

INSTALLATION & MAINTENANCE

Another reason to use this type of detection is ease of installation and minimal maintenance.

It is easy to install the control panel and detection lines, adapting them to the extinguishing system. Its simple mechanism allows straightforward installation and with very little training.

The SIEX™ TK-SIMPLEX detection system requires minimal maintenance, and checking its proper operation is very easy. Maintaining the fixed extinguishing system to which it is connected is minimal, since it streamlines all necessary tasks.

Its installation in industrial kitchens stands out as one of its most demanding applications. Its use in kitchen hoods and other appliances ensures the detection of uncontrolled fire that can occur due to oils and grease.

widely used for APPLICATION in industrial kitchens. Installed in hoods and other kitchen appliances, it detects the uncontrolled fire produced by oils and fats faster and more effectively than any other system.

APPLICATIONS:

Its features and release method make it ideal for installation in a wide variety of hazards, either as the principal detection system or as a supplementary system, ensuring activation of the extinguishing equipment.

The most common are:

- TRANSFORMERS
- INDUSTRIAL KITCHENS
- ELECTRIC GENERATORS
- SMALL FUEL TANKS
- PAINT SPRAY BOOTHS
- STORAGE OF HAZARDOUS MATERIAL AND EXPLOSIVES
- PETROL STATIONS
- ALL TYPES OF ISOLATED HAZARDS
- SMALL ENCLOSURES
- HAZARDS WHERE POWER SUPPLY IS A PROBLEM
- ETC.

SIEX 2001 S.L.
C. Merindad de Montija nº 6
P.I. Villalonquéjar 09001
Burgos (SPAIN)

TLFNO: +34 947 28 11 08
WEB: WWW.SIEX2001.COM