



A life saver when there's danger in the air

Smoke switches

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The problem-solver for universal applications.

Detecting fires instantly and preventing them from spreading

Toxic gases that are lethal to humans are formed during the first ten minutes of any open fire, meaning it spreads silently, treacherously, and often unnoticed. Smoke switch installations from Securiton detect these hazardous fires instantly, effectively preventing them from spreading.

Smoke switches detect fires as they develop. In the event of a fire, they automatically switch off machinery and installations, thus preventing consequential damage on a massive scale.

They also automatically and immediately close open doors, stopping the smoke from spreading and keeping vital emergency exit and rescue routes free of dangerous gases.

The LRS ventilation smoke switch system detects smoke in ventilation systems. It prevents smoke and soot from being transported through these installations to parts of the building that are not directly affected by the fire.

Smoke switches – because human life and assets are precious:

- Immediate detection of incipient fires
- Spread of smoke and soot halted immediately
- People's lives and valuable assets are saved
- The right solution for every requirement
- Fully compliant with standard EN 54-5/7 and VdS-approved

Smoke switches: timely activation for safe escape

Smoke switches are designed to protect your business from financial loss. In the event of a fire or overheating they automatically switch off machinery and installations, for example in combined heat-and-power stations, wind power plants, switch cabinets, and also in UMTS antennas, vending machines, and ticket dispensers.

Fire sections are a key element of any effective structural fire protection. By law, doors which demarcate fire sections must be kept closed at all times. However, in practice this can be detrimental to efficient operations within a business, company or plant. With smoke switch installations, these doors can be kept open without compromising people's safety. This involves the use of magnetic clamps, which keep the doors open in normal operations.

The instant an installation's smoke switches or heat switches detect a fire, they interrupt the power supply to the magnets, causing the fire doors to close immediately. The deadly smoke is halted and the emergency exits and rescue routes can be used without risk.

Smoke switches – convincing arguments:

- The right smoke and heat switches for every application
- Reliable fire detection, lightning-fast response
- Preventing fire and smoke from spreading
- Escape routes kept safe for people to use, and minimum damage to installations and machinery
- Stand-alone (also without fire alarm control panel)
- EN-54-5/7 and ATEX approved



Smoke switches – the right model for every requirement.

ORS 142, ORS 142 W, ORS 142 Ex: intelligent smoke switches

The ORS-142 models detect incipient smouldering and open fires that generate smoke, then actuate the trigger devices. The active contamination compensation feature also means that they have a service life 2.5 times longer than comparable products. False alarms are ruled out thanks to the additional temperature analysis, and with their intelligent software algorithms the smoke switches operate perfectly even under the most challenging conditions. As an aesthetically convincing design smoke switch, the ORS 142 W is ideally suited for lintel installation. The ORS 142 Ex is used in areas subject to explosion hazards (ATEX-compliant).

TDS 247 – the heat-seeker

The TDS 247 thermo-differential switch detects open fires with and without smoke. It responds to sudden temperature increases or whenever maximum temperatures are exceeded. It is ideal for work processes that generate smoke and/or dust.

Accessories – a complete range

With accessories including mounting bases for all sorts of different applications, magnetic door clamps and anchor plates, power supply units and triggers, Securiton has everything you need for a fully customised installation.

Smoke switches – guaranteed safety whatever the environment:

- Smoke switches with sensing chamber monitoring, active contamination compensation and visible operation indicator
- Smoke switches for areas subject to explosion hazards
- Heat switches for contaminated environments
- Complete solutions from a single source

LRS ventilation smoke switch system: checks for danger in the ducts

The LRS ventilation smoke switch system provides maximum detection reliability in ventilation ducts of all types. With a double-tube optimised air-flow system, it uses the Venturi principle to continuously suck air from the duct into its sensing chamber. Inside the chamber, the intelligent smoke switch checks the air for smoke particles. The instant the particles exceed a defined limit, the LRS automatically actuates the ambient ventilation systems (e.g. ventilators) and/or fire and smoke protection dampers, instantly preventing the smoke from spreading.

With its active contamination compensation, the service life of the LRS from Securiton is 2.5 times longer than that of other systems. The smoke switch continuously monitors its contamination level and adapts its measuring range accordingly. Mounting, maintaining and replacing the smoke switches could not be simpler. All it takes is a few simple steps to mount the switches to the outside of the duct, and with the practical clip fastening no tools are needed to open the housing.

LRS – convincing arguments:

- Multifunctional: for round and rectangular ducts
- Swifter and more reliable smoke detection thanks to the double-tube airflow system
- Flow rates of up to 20 m/s
- Reliable with tried-and-tested smoke switch technology
- Long service life and sturdy thanks to active contamination compensation feature
- User friendly: easy installation and maintenance



LRS models for conventional applications.

Basic models: LRS 01 and LRS 02

The two basic smoke switch models continuously monitor the air circulating in ventilation systems. The instant they detect smoke, they control the fire and smoke protection dampers inside the ventilation systems to prevent the smoke from spreading. The LRS 01 is powered with 24 VDC; the LRS 02 with 24 VDC and AC.

LRS 03 – pre-assembled and wired

The LRS 03 performs the same tasks as the basic models, but also features a pre-mounted test button.

LRS 230 V – the complete solution

The LRS 230 V is a smoke switch and power supply unit in one and stands out by virtue of its particularly simple and practical handling.

LRS – the complete package:

- Range of models
- Intelligent evaluation electronics
- Automatic sensing chamber monitoring
- Pre-wired terminals

Smoke switch models for special applications

LRS 04 Ex – for premises subject to explosion hazards

The LRS 04 Ex combines the ventilation smoke switch system and the ex-connection box in a single device which is absolutely unique! This means it is ideally suited for use on premises and parts of buildings that are subject to explosion hazards, including in chemical, pharmaceutical and industrial plants, power plants, and similar installations. The LRS 04 Ex is approved for use in explosion zones 1 and 2, where it is responsible for early smoke detection and actuating ventilation systems as well as fire and smoke protection dampers.



ORS 142 K and ORS 144 K – for special duct applications

These two smoke switches safely and reliably monitor ventilation ducts and overflow openings. Securiton has the appropriate mounting base for each application – including wet rooms and installation in ducts/conduits.

Smoke switch special applications – the complete solution:

- Can be used in explosion zones 1 and 2
- Approved according to ATEX guidelines
- Can be used in overflow openings and in ducts / conduits