Intelligent classification of airborne particles

The optical detection technology uses two wavelengths – blue and infrared. This enables FDA221 and FDA241 to detect smaller airborne particles produced in the earliest stages of overheating or as found in open fires.

By determining the size and concentration of the airborne particles, the detectors differentiate between smoke, dust and steam. This results in greater detection reliability and a high immunity to deceptive phenomena which prevents downtimes and costs caused by false alarms.

For applications from clean to harsh

FDA221 covers an area of up to 500 m^2 with a programmable sensitivity range of 0.14 – 20%/m. FDA241 covers up to 800 m^2 with a programmable sensitivity range of 0.03 – 20%/m. The detectors offer up to three modes of operation: ultrasensitive, auto-discrimination and robust. Furthermore, an alarm threshold can be defined and programmed.

FDA241 additionally offers a programmable purge functionality as well as a programmable 4 – 20 mA remote output that is able to display smoke and airflow rate. This makes the detectors ideal for challenging applications.

Easy installation and integration

FDA221 and FDA241 are designed for easy out-of-the-box installation. They can be installed directly onto the detector loop of a Cerberus PRO fire detection system from Siemens. Because all detectors and peripherals share the same loop, less cabling is needed.

Low maintenance and long product life cycle

The patented chamber inside the detectors was specially designed to keep dust ingress to an absolute minimum. The benefits include an extended product lifespan and less maintenance – even if the detectors are installed in dusty and dirty environments.

Highlights

- Highest detection reliability – immunity to deceptive phenomena prevents false alarms
- Ideal choice for difficult environments
- Direct integration into a fire detection system from Siemens
- Patented chamber design – resulting in low maintenance effort and a long product lifespan

Siemens Switzerland Ltd
Infrastructure & Cities Sector
Building Technologies Division
International Headquarters
Gubelstrasse 22
6301 Zug
Switzerland
Tel +41 41 724 24 24