

ARGON & CO₂

Automatic Fire Extinguishing Systems

Mikro-Pulssi supplies versatile automatic fire detection, alarm & extinguishing systems designed to meet different types of local and total fire protection needs in buildings and industrial applications.

Special attention in the system design has been paid on reliability, safety and applicability for versatile applications. Depending on the application CO₂ or Argon gas is usually used as extinguishing agent.

FEATURES

Both CO₂ and Argon are very effective and widely used extinguishants for many fire hazard environments.

Both gases are colourless, odourless, tasteless and electrically nonconductive in normal conditions.

Their extinguishing effect is based on smothering the fire and in addition they cool down the protected space. Great advantage is also that there are no harmful residuals left after the extinguishing event and no water damage as in sprinkler systems.

STRUCTURE

The automatic fire extinguishing system consists of: bottle rack, release piping, nozzles, fire detectors, alarm devices, release buttons, cables and control panel.

CO₂ systems are usually of high-pressure type when the extinguishant is stored as liquid in 50 kg bottles. When released from the bottles the CO₂ gasifies through nozzles spreading evenly to the protected space and also into the equipment cabinets. Low-pressure CO₂ systems are used only in extensive total flooding protections.

Argon is already in gas form in 28 kg bottles.

APPLICATIONS

Fixed automatic fire extinguishing system guarantees reliable fire protection and cost effective solution for both small local applications and large total flooding applications.

Typical applications: Computer rooms, painting facilities, transformer rooms, archives, art galleries, power stations, engine rooms, varnishing lines, spark erosion machines, welding machines, ...



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design - manufacturing - sales - installation - service

VERSATILE FEATURES

- 1...3 pcs of detector loops.
- Smoke, heat, DM, flame, spark and beam fire detectors & aspirating devices.
- 1...2 pcs of release circuits.
- Programmable release delay.
- Programmable release time.
- Equipment stop relay outputs.
- Remote alarm device outputs.
- Silencing of acoustic alarm.
- Extinguishant released light.
- Remote outputs for fire alarm & fault.
- Power supply monitoring.
- Battery back-up > 72 h in normal mode and 0,5 h in alarm mode.

RELIABLE OPERATION

- System design and commissioning according to the valid regulations.
- Manufactured of high-quality components.
- Complete system is monitored by micro-processor based control panel.
- Certified ISO 9001:2000 company quality system guarantees high-quality operation from design to commissioning.

MIKRO-PULSSI OY is an approved gas extinguishing system supplier by Federation of Finnish Insurance Companies and Safety Technology Authority.

OPERATION AT FIRE

Protected space is usually equipped with smoke detectors. The Smoke detectors are connected to two separate loops to avoid accidental release caused by sudden smoke puff to one detector.

Alarm devices activate when any of the detectors react to a fire. Fire alarm message transmits to a fire brigade. Control panel stops air-conditioning and other necessary equipment.

When any of detectors also in the other loop react to the fire releases extinguishant immediately or after a pretermind delay time to the protected space. Pneumatic fire dampers and siren is activated. All system functions also operate whenever released manually by yellow release manual call point.

PRINCIPLE STRUCTURE OF THE CO₂ AUTOMATIC GAS EXTINGUISHING SYSTEM:

