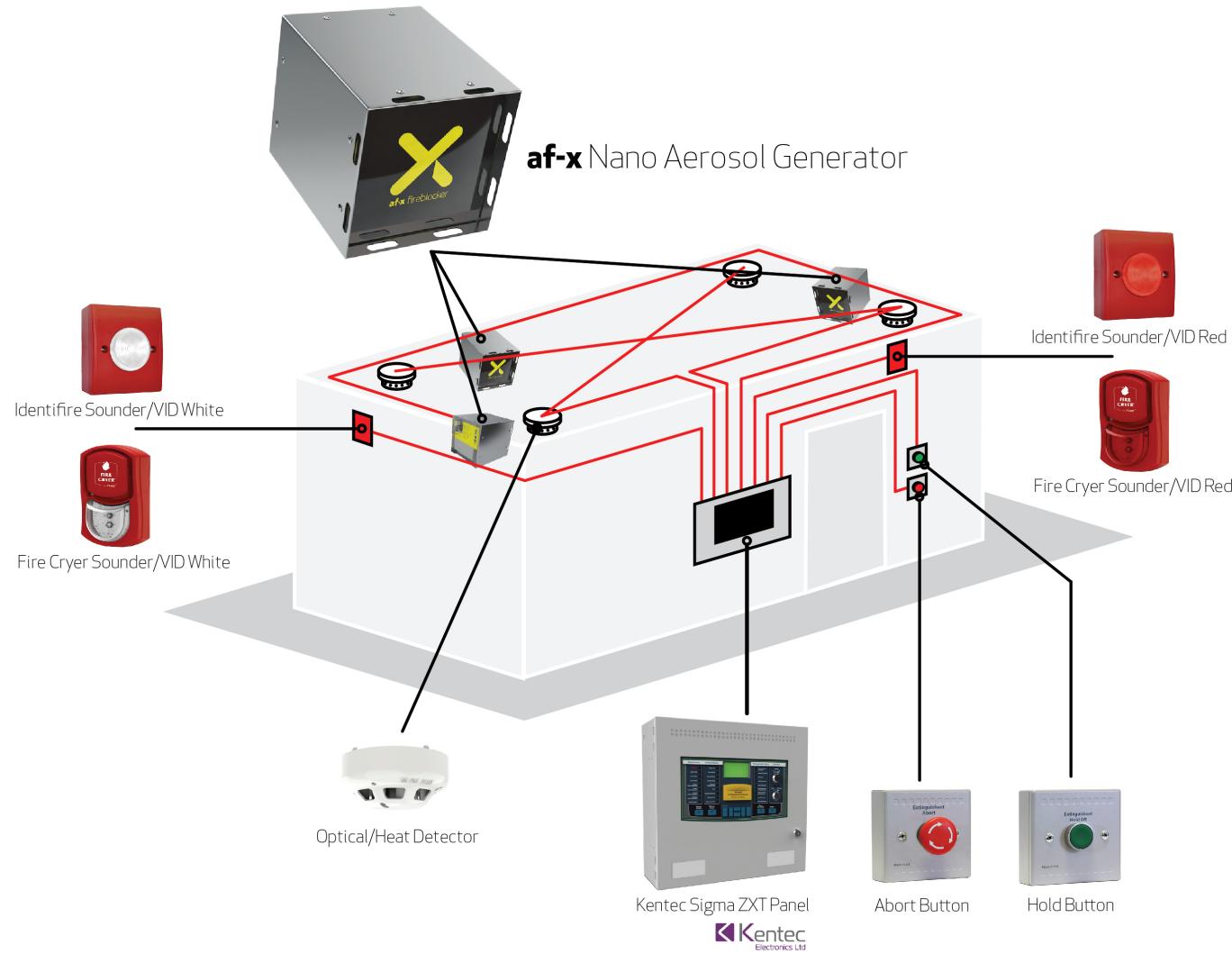




system brochure

af-x fireblocker | aerosol fire suppression

X | af-x fireblocker | visual system schematic



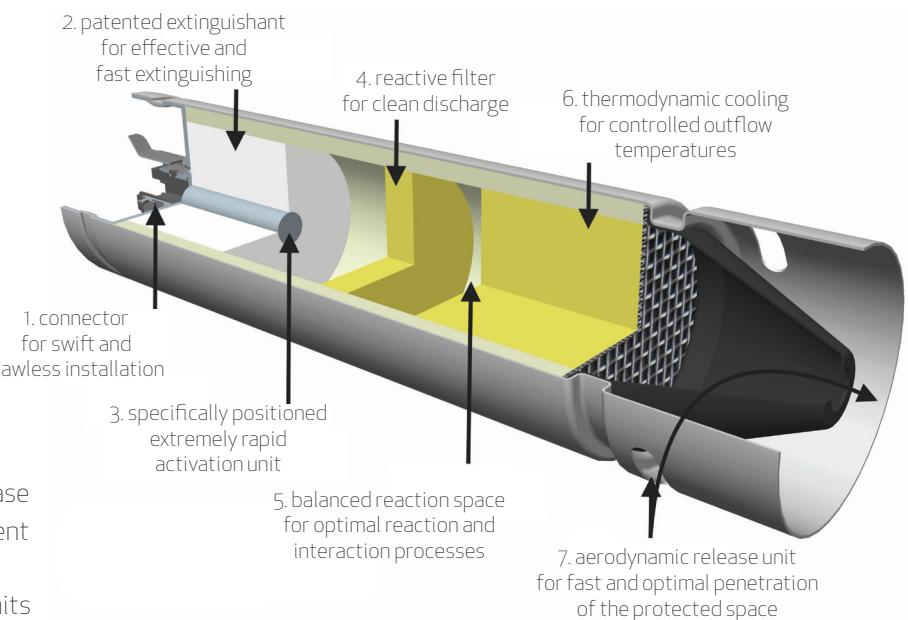
X | af-x fireblocker | faster than fire!

An environmentally friendly, socially responsible, automatic fire suppression system that uses aerosol technology to rapidly suppress fire. Patented af-x fireblocker Nano & Carbon aerosol fire suppression systems rapidly extinguish fire with a dry compound mist. Harmless to man, animals and the environment. This compact, simple to install, simple to maintain system offers a greener and safer solution to fire suppression.

Significant User Advantages

- Environmentally Friendly - Zero Ozone Depletion Potential (ODP) Low Global Warming Potential (GWP)
- Modular - Simple to add or amend when adapting room space or relocating
- Compact - Space saving footprint, no pipes, no cylinders, no pumps, no pressure vents
- Low TCO - Simplified installation and reduced maintenance regime for low total cost of ownership
- Safe - Non harmful to humans, animals or machinery at design application rates
- Time Saving - Quick and easy to vent after discharge

faster than fire thanks to seven special virtues



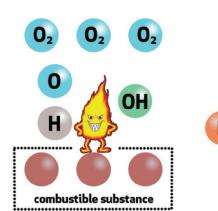
Significant Product Advantages

- Hold Time - Nano particles suspend in the air for extended suppression hold time
- Faster Extinguishing - Enhanced more effective conversion of solid to quenching phase
- Aerodynamic Nozzle - Faster homogeneous distribution of aerosol extinguishing agent
- Lower Outflow Temperature - More effective aerosol projection
- Safer Healthier - The only aerosol in the quenching phase that falls below all IDLH limits
- Negligible Residue - After Nano discharge residue is barely visible to the human eye
- Integrated Connector - For simpler, quicker installation and aids reduced maintenance time

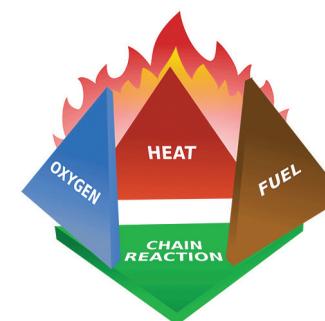
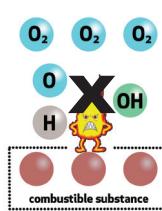
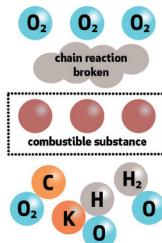
 af-x fireblocker | how does it work?

Aerosol Fire Technology

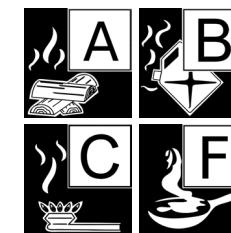
af-x fireblocker aerosol suppression agent extinguishes fire by stopping the combustion reaction at a molecular level, without affecting the oxygen content. In conventional suppression systems, an element is removed from the fire triangle. The extinguishing effect of an aerosol suppression agent is more intelligent, as underlying the fire triangle is a fire tetrahedron. At the molecular level, fire is nothing more than a chemical reaction and unstable molecules float around within that chemical reaction.



BLOCKING THE CHAIN REACTION



FIRE TETRAHEDRON



FIRE CLASS

Upon activation, the af-x fireblocker dry extinguishing agent converts to an aerosol cloud of nanoparticles and these particles immediately block the chain reaction at a molecular level. Very little extinguishing agent is needed for this, with the added benefit that fire stops immediately. All af-x fireblocker potassium based aerosol suppression systems have a life span of up to 15 years and af-x fireblocker are suitable for extinguishing fire in classes A, B, C and F and are suitable for the protection of electrical installations up to 75,000 volts.

Aerosol Fire Suppression & Lithium-Ion

The first tests with af-x fireblocker Nano condensed aerosol as a lithium-ion extinguishing agent show that if the risk area remains closed, the aerosol controls the fire. A benefit of extinguishing with af-x fireblocker Nano aerosol is a rapid decrease in temperature in the room with lithium-ion fires. During testing the enclosure temperature dropped from almost 1000 degrees Celsius to 80 degrees Celsius in a very short time.

 | af-x fireblocker | benefits & applications**Small Spaces Source Protection**

From 1 to 15sq m, af-x fireblocker aerosol generators are activated by an integral Bimetal switch (65°C), these self-activating units do not require a control panel and can be mounted directly inside the protected space. Ideal for, electrical distribution cabinets, CNC machines, switch gear housings, transformer cabinets, compressor rooms, IT cabinets, the list is almost endless.

Larger Room Spaces Automatic Activation

Wall mounted af-x fireblocker aerosol generators operate with several manufacturers control panels and choice of fire detection type, examples include; optical and heat point detectors, aspiration, liner heat cable, IR & UV flame detection and video fire detection.

Compact and Lightweight

Aerosol technology offers tremendous economy of space, plus the subsequent savings with installation, shipping and transport all assist with lowering the carbon footprint.

Simple Installation

Protected spaces do not need to be fully air-tight and there is no need for pressure-relief venting. Next to these installation advantages, aerosol units are easy to demount should the protected area need to be renovated or amended for change of use.

Long Service Life

Aerosol generators are based on a solid compound. By consequence the service life stated for aerosol is usually 15 years, which is in accordance with most international regulations (product life is 15 years).

Suitable for Source Protection

Most fires start small, go unnoticed and are discovered too late. All af-x fireblocker extinguishing generators can be equipped with a Bimetal thermal switch for stand alone activation of aerosol extinguishant when the temperature exceeds 65°C.

Non Pressurized

Upon activation the solid compound is converted to a cloud of nanoparticles. A slight overpressure develops inside the generator steel housing, so the cloud of fire suppressant can rapidly mix with the atmosphere, without any over-pressure build-up.

 | af-x fireblocker Nano

Nano Series

The **af-x** fireblocker Nano product uses nanoparticles for a faster homogeneous distribution of aerosol, providing a more efficient fire suppression process.



Model: af-x fireblocker Nano CS

Article: 10-15-130-03-02

net m³: 2.6

weight extinguishing agent: 150g



Model: af-x fireblocker Nano CM

Article: 10-15-150-03-02

net m³: 7.2

weight extinguishing agent: 450g



Model: af-x fireblocker Nano BM

Article: 10-15-350-03-02

net m³: 42

weight extinguishing agent: 2,550g



Model: af-x fireblocker Nano BL

Article: 10-15-370-03-02

net m³: 72

weight extinguishing agent: 3,900g

Carbon Series

The **af-x** fireblocker Carbon product range is a dry aerosol fire extinguishing system, blocking the fire reaction at a molecular level.



Model: af-x fireblocker Carbon CS

Article: 10-18-130-03-05

net m³: 5.5

weight extinguishing agent: 720g



Model: af-x fireblocker Carbon CM

Article: 10-18-150-03-05

net m³: 11

weight extinguishing agent: 1,420g



Model: af-x fireblocker Carbon BS

Article: 10-18-330-03-05

net m³: 36.8

weight extinguishing agent: 4,800g



Model: af-x fireblocker Carbon BM

Article: 10-18-350-03-05

net m³: 73.6

weight extinguishing agent: 9,600g



Model: af-x fireblocker Carbon BL

Article: 10-18-370-03-05

net m³: 110

weight extinguishing agent: 14,400g

Control Applications



Model: af-x MCU (Monitoring & Control Unit)

Article: 21-10-361-00-01

capacity: Up to 2 generators per MCU

Up to 8 MCU per extinguishing line



Model: af-x Bimetal Switch

Article: 23-30-843-00-00

capacity: 1 generator (CS /CM)

detection: 65°C activation 1 generator

operating temperature: -40 ~ +85°C



Model: af-x TEC Linear Heat

Detection Controller

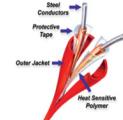
Article: 21-10-598-00-00

power: 2x1.5vdc AA battery

control and alarm: fire, fault, low battery

capacity: 1 generator

detection: max cable length 10 m



Model: Protectowire Linear Heat Cable

Article: 23-40-415-00-00 / 416 / 418

cable: 68°C / 88°C / 108°C



Model: af-x Test Lamp Connector Hood

Article: 30-30-310-00-00

capacity: generator simulator test

Control Panels

Extinguishing control panels compatible with af-x fireblocker Nano and Carbon generators.



Model: DECU3 Control Panel

Article: 21-10-450-00-01

ext power supply: 11 to 32v dc

capacity: up to 3 generators with 24v

alarm: fault, fire detection and extinguishing

environmental: IP65 rated



Model: Micro-FEP Control Panel

Article: 21-10-460-00-01

ext power supply: 6 to 28v dc

capacity: up to 5 generators in series
(with ETB)

alarm: fault, fire detection and extinguishing

environmental: IP66 rated



Model: Kentec Sigma XT

Article: K11031M2

battery capacity: 2x12v 7amh max

capacity: up to 16 generators in series
(with MCU)

alarm: fault, fire detection and extinguishing

detection: 3 detection zones



Model: Kentec Sigma ZXT

Article: K19231XM2

battery capacity: 2x12v 7amh max

capacity: up to 16 generators in series
(with MCU)

alarm: fault, fire detection and extinguishing

detection: 3 detection zones

memory: 1000 event log



Model: Kentec Synchro XT

Article: A31161M3

battery capacity: 2x12v 12amh max

capacity: up to 16 generators in series
(with MCU)

alarm: fault, fire detection and extinguishing

detection: Up to 16 zones of addressable
detection (Hochiki / Apollo)

memory: 500 event log



Model: af-x Maintenance Keyswitch

Article: 25-10-621-00-00

capacity: isolate 1 extinguishing line

ON = system in maintenance

OFF = system active



Accessories

Model: Sigma Hold Off Button Red

Article: KB901000M10

mount: surface



Model: Sigma Abort Button Green

Article: KB13470M10

mount: surface



Model: Detection

Article: Hochiki & Apollo

type: optical, thermal, CO multi-sensor,
aspiration, linear heat cable, wireless



Model: Sounder/Strobe

Article: Vimpex & Hochiki

type: sounder, strobe, sounder/strobe



Model: Voice Sounder

Article: Vimpex Fire Cryer

type: voice sounder, voice sounder/strobe



Model: Call Point

Article: Hochiki & Apollo

mount: surface

type: yellow, blue, red



af-x fireblocker

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The Netherlands

POWERED by



Exclusively designed, developed and manufactured for AF-X Systems by Aerospace Propulsion Products, The Netherlands, part of ArianeGroup
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