

## FIXED EXTINGUISHING SYSTEM

with NOVEC™ 1230 (FK 5-1-12) EXTINGUISHING AGENT

FIRE PROTECTION

# PROTECTION THAT MAKES A DIFFERENCE



Rooms that house goods of special importance, value or with a key role in a continuous protection system need to be effectively and respectfully protected. Protection should be even more effective when it is a room used by staff.

There is an increasingly frequent use of sophisticated electronic equipment in many industries. This equipment needs to remain operational or at least be protected very effectively in the event of a fire, minimizing action times and possible damage. Damage affecting critical equipment has dire consequences and may lead to service

interruptions, delays, loss of data or clients, legal problems and, in short, difficulties or obstacles that lead to a cessation of activity and economic losses

Fire protection is an industry in constant development, continually proposing new technical solutions and adaptations to design constraints.

SIEX-NC<sup>TM</sup> 1230 fixed extinguishing installations work quickly on valuable hazards where other agents are not suitable and could affect the integrity of the content.

## SAFETY AND EFFICIENCY FOR PEOPLE, PROPERTY AND THE ENVIRONMENT

SIEX-NC<sup>™</sup> 1230 uses the 3M<sup>™</sup> NOVEC<sup>™</sup> 1230 (FK 5-1-12) extinguishing agent to set up a system of rapid and effective release to protect equipment and people at the first signs of danger.

It is an agent which RESPECTS delicate goods, documents and electronic equipment in the room. Due to its physical and chemical characteristics, it does not wet or soak. It is very suitable for protecting valuable items (historical objects, paintings, electronics, etc.).

It does not damage paper, ink, circuits, etc. or interfere with the operation of electrical devices, since it is electrically non-conductive.

At ambient pressure and temperature, it is liquid. Storage space is minimal; it is very compact and easy to handle.

Pressurization is carried out with nitrogen, an inexpensive and easy-topurchase gas. Finally, it is a clean and environmentally friendly compound. It has zero ozone depletion potential (ODP), low global-warming potential (GWP) and a minimum atmospheric half-life of only five days. It leaves no residue after discharge and produces no significant overpressure in the enclosure.



It is designed to protect very delicate and important risks, such as: data processing and telecommunication centres, banks, museums, libraries, clean rooms, etc., where water would not be viable.

SIEX meets ISO 14520, NFPA 2001 and UNE 15004 standards, which serve as a basis for the documentation required for protection.



## SYSTEM THAT MEETS MAXIMUM EXPECTATIONS

OPTIMIZATION

OF EACH COMPONENT

SIEX-NC™ 1230 cylinders are marketed for both modular and bank systems. We have the largest range of capabilities to offer complete protection regardless of the size of the hazard.

All systems are pressurized with dry nitrogen (at 25 or 42 bar). Storage pressure allows the use of conventional pipes and fittings, reducing overall installation costs.

This pressure variability allows moving storage away from risks and handling complex circuits.

CYLINDERS CAPACITY (L)									
6.7	13.4	25	26.8	40	67	80	100	120	150

#### NOZZLES

The design ensures that the agent is discharged in exact proportion to each area (main room, false floor or ceiling, etc.). Accuracy is achieved using the calibration of the holes in each nozzle. They have been optimized to ensure 100% effective discharge.

The nozzles are selected specifically for each application. We have wall models (180° discharge) and ceiling models (360° discharge).

## HOW DOES IT WORK?

FK 5-1-12 is an extinguishing compound similar to water in appearance, with special properties that make it suitable for the protection of sensitive property. Its use is limited to combustible solid, flammable liquid and energized electrical fires.

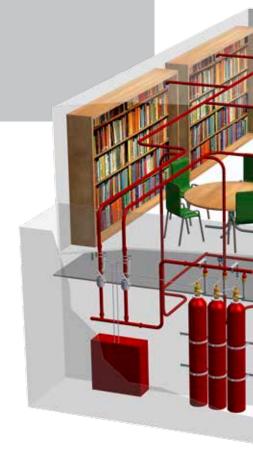
Installation is conventional at low pressure and with little need for storage space. Pressurization with dry nitrogen, coupled with low-power of vaporization, ensures very fast change of phase in the nozzles and discharge in the premises, with a low design concentration (% vol.) required for total extinguishing.

With respect to user protection, it is worth noting that the FK 5-1-12 agent has a high safety margin due to its low design concentration as compared to the maximum no-observed adverse effect level (NOAEL) for occupants.

## EXTINGUISHING AGENT

FK 5-1-12

It does not reduce oxygen in the room or affect visibility, so evacuation is safe.



### OPERATION

SIEX-NC<sup>™</sup> 1230 acts in the early stages of a fire. Its early detection and immediate, safe and low-noise 10-second discharge results in minimal impact on the room and does not generate waste or overpressure.

It extinguishes mainly by cooling as it vaporizes at the nozzle during discharge and absorbs the energy required to do so from the environment.

THE DISCHARGE

OCCURS WITHIN A

MAXIMUM OF

10 SECONDS



- MUSEUMS AND ART GALLERIES
- ARCHIVES AND LIBRARIES
- TELECOMMUNICATION SYSTEMS
- COMPUTER ROOMS
- DPC'S
- CLEAN ROOMS



