

fire  
kloud AEROSOL  
REVOLUTION  
TECHNOLOGY



# PRODUCT CATALOGUE



## AEROSOL EXTINGUISHING AGENT

Fire Kloud aerosol systems use the latest generation of solid FKC compound formed from very small particles of natural potassium salts. Once activated, it transforms into a rapidly expanding condensed aerosol, this aerosol is made up of micro particles of potassium salts suspended in a mixture of inert gases (nitrogen, carbon dioxide and water vapour).

## FIRE KLOUD TECHNOLOGY

The exclusive technology of the Fire Kloud aerosol generators is the result of an advanced design and engineering process aimed at creating innovative aerosol generators with a cutting-edge design, compact and robust, with high performance that combines extinguishing efficiency with functional efficiency.

Fire Kloud brings a revolution in the aerosol extinguishing agent market by adopting, across its entire range of aerosol generators, an innovative mechanical-physical cooling technology that provides maximum performance on fire by increasing the efficiency of the FKC solid compound transformation process and producing a clean, dry, non-aggressive aerosol with particle sizes down to 0,2 microns.

Thanks to the greater dispersion of the microscopic particles Fire Kloud extinguishes the fire more effectively and protects the assets without leaving any residue.

**FIRE KLOUD.**  
THE FIRST AND ONLY  
ITALIAN AEROSOL  
SYSTEM TO HAVE  
OBTAINED THE  
UNI EN 15276  
CERTIFICATION.

## ENVIRONMENTAL RESPECT

The Fire Kloud aerosol extinguishing agent is environment friendly. The FKC extinguishing compound consists of natural potassium salts without the use of pyrotechnic materials and contains no harmful chemicals. Laboratory tests have shown that Fire Kloud extinguishing agent is not harmful to humans or animals. We are constantly researching and developing our products to pursue green technology.

## FEATURES AND BENEFITS

All Fire Kloud aerosol generators are certified by RINA Services in accordance with EN 15276 and ISO 15779 standards. With a compact and robust construction, Fire Kloud generators are safe, flexible and modular, fitting even the most complex conditions. The installation is simple, fast and does not discharge nozzles, but only an electrical connection.

## FIRE KLOUD

IS A COMPLETE, MODULAR AND FLEXIBLE PRODUCT RANGE.

### Equipment Friendly

The extinguishing agent is a dielectric, non-acidic, non-corrosive vapour and does not damage live electronic apparatus and equipment.

### Environment Friendly Technology

Fire Kloud aerosol generators are manufactured with a certified 15-year lifespan, are environment friendly, have zero ozone depletion potential and do not cause global warming.

Also available in a stand-alone version, it provides a 24-hour active protection of electrical equipment. It detects, signals and extinguishes the start of a fire in few seconds, reducing costs and restoration time.

**FIRE KLOUD**  
 OFFERS SPECIFIC  
 SOLUTIONS FOR EVERY  
 SINGLE APPLICATION,  
 EVEN THE MOST  
 DIFFICULT AND  
 DELICATE ONES.



REQUIRES ONLY  
 AN ELECTRICAL  
 CONNECTION



DETECTS AND  
 EXTINGUISHES THE  
 FIRE IN SECONDS



DOES NOT DAMAGE  
 OBJECTS AND  
 SPACES



COMPACT AND  
 MODULAR DESIGN



NOT PRESSURISED



COST EFFECTIVE

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BCX 01  
LTL1G  
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# FKa 20 / FKa 100



# FKa 20

Fire extinguishing aerosol generator

 P0019412/1		 UNI 11565		
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## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 20 R / FKa 20 RQ / FKa 20 RT / FKa 20 RF</b>
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)
EXTINGUISHING MASS	20 g
GROSS WEIGHT	520 ± 50 g (without bracket)

DIMENSIONS	45x45x129 mm (activator included) 45x45x141 mm (RT model / activator included)
TYPE OF DIFFUSION	adjustable lamellar
FIRE CLASS	A, B, C
COLOUR	RAL 3001 (other colours available on request)
OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 20 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 20 RQ

Aerosol generator with electrical activation and short bracket ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 20 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a short bracket, it is ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 20 RF

Aerosol generator with electrical activation and short bracket ideal for volumetric and object protection of technical compartments containing electrical and electronic equipment such as auxiliary and traction converters, AT/MT compartments, battery compartments, engine compartments and hydraulic power packs installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**

# FKa 50

Fire extinguishing aerosol generator



## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT



## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 50 R / FKa 50 RQ / FKa 50 RT / FKa 50 RF</b>
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)
EXTINGUISHING MASS	50 g
GROSS WEIGHT	780 ± 50 g (without bracket)

DIMENSIONS	45x45x190 mm (activator included) 45x45x202 mm (RT model / activator included)
TYPE OF DIFFUSION	adjustable lamellar
FIRE CLASS	A, B, C
COLOUR	RAL 3001 (other colours available on request)
OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 50 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 50 RQ

Aerosol generator with electrical activation and short bracket ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 50 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a short bracket, it is ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 50 RF

Aerosol generator with electrical activation and short bracket ideal for volumetric and object protection of technical compartments containing electrical and electronic equipment such as auxiliary and traction converters, AT/MT compartments, battery compartments, engine compartments and hydraulic power packs installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**

# FKa 100

Fire extinguishing aerosol generator









## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 100 R / FKa 100 RQ / FKa 100 RT / FKa 100 RF</b>	DIMENSIONS	45x45x291 mm (activator included) 45x45x302 mm (RT model / activator included)
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)	TYPE OF DIFFUSION	adjustable lamellar
EXTINGUISHING MASS	100 g	FIRE CLASS	A, B, C
GROSS WEIGHT	1110 ± 50 g (without bracket)	COLOUR	RAL 3001 (other colours available on request)
		OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 100 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 100 RQ

Aerosol generator with electrical activation and short bracket ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 100 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a short bracket, it is ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 100 RF

Aerosol generator with electrical activation and short bracket ideal for volumetric and object protection of technical compartments containing electrical and electronic equipment such as auxiliary and traction converters, AT/MT compartments, battery compartments, engine compartments and hydraulic power packs installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**

**fire  
kloud** AEROSOL  
REVOLUTION  
TECHNOLOGY

# FKa 200 / FKa 800



**RINA**  
P0019412/1

**UNI EN  
15276**  
**ISO  
15779**

**RINA**  
**UNI 11565**

**SIL 3**  
**IEC 61508**

**15** \*\*\*\*\*  
**YEARS** \*\*\*\*\*  
Certified  
product life

# FKa 200

Fire extinguishing aerosol generator









## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 200 R / FKa 200 RQ / FKa 200 RT / FKa 200 RF</b>	DIMENSIONS	85x85x211 mm (activator included) 85x85x223 mm (RT model / activator included)
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)	TYPE OF DIFFUSION	adjustable lamellar
EXTINGUISHING MASS	200 g	FIRE CLASS	A, B, C
GROSS WEIGHT	1970 ± 100 g (without bracket)	COLOUR	RAL 3001 (other colours available on request)
		OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 200 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 200 RQ

Aerosol generator with electrical activation and short bracket ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 200 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a short bracket, it is ideal for the protection of electrical and electronic equipment such as MV/LV switchboards, UPS, inverters, command and control panels, battery panels, power centres, telephone equipment, etc.



### FKa 200 RF

Aerosol generator with electrical activation and short bracket ideal for volumetric and object protection of technical compartments containing electrical and electronic equipment such as auxiliary and traction converters, AT/MT compartments, battery compartments, engine compartments and hydraulic power packs installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**

# FKa 400

Fire extinguishing aerosol generator









## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 400 R / FKa 400 RQ / FKa 400 RT / FKa 400 RF</b>	DIMENSIONS	85x85x335 mm (activator included) 85x85x347 mm (RT model / activator included)
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)	TYPE OF DIFFUSION	adjustable lamellar
EXTINGUISHING MASS	400 g	FIRE CLASS	A, B, C
GROSS WEIGHT	3080 ± 100 g (without bracket)	COLOUR	RAL 3001 (other colours available on request)
		OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 400 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 400 RQ

Aerosol generator with electrical activation and bracket ideal for volumetric protection of machinery, engine compartments and generator sets, etc. Can be combined with the T-Start stand-alone system for modular apparatus or command and control units.



### FKa 400 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a bracket, it is ideal for protecting machinery, engine compartments and generator sets, etc.



### FKa 400 RF

Aerosol generator with electrical activation and bracket ideal for volumetric and object protection of engine compartments and technical rooms installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**



# FKa 800

Fire extinguishing aerosol generator









## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



SUITABLE FOR  
LIVE ELECTRICAL  
EQUIPMENT



RAILWAY  
TRANSPORT



MARITIME  
TRANSPORT

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets with adjustable inclination.

MODELS	<b>FKa 800 R / FKa 800 RQ / FKa 800 RT / FKa 800 RF</b>	DIMENSIONS	150x150x343 mm (activator included) 150x150x357 mm (RT model / activator included)
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the RT model)	TYPE OF DIFFUSION	adjustable lamellar
EXTINGUISHING MASS	800 g	FIRE CLASS	A, B, C
GROSS WEIGHT	6470 ± 100 g (without bracket)	COLOUR	RAL 3001 (other colours available on request)
		OPERATING CONDITIONS	-50 °C +95 °C      RH<95%

## AVAILABLE VERSIONS



### FKa 800 R

Aerosol generator with electrical activation and long bracket ideal for volumetric protection of concealed volumes such as false ceilings, underfloors, cavities and cable ducts. It is typically applied in the tertiary, commercial and industrial sectors.



### FKa 800 RQ

Aerosol generator with electrical activation and bracket ideal for volumetric protection of machinery, engine compartments and generator sets, etc. Can be combined with the T-Start stand-alone system for modular apparatus or command and control units.



### FKa 800 RT

Stand-alone aerosol generator equipped **with thermo-mechanical activation complete with a fusible detector with a choice of different activation temperatures** and a bracket, it is ideal for protecting machinery, engine compartments and generator sets, etc.



### FKa 800 RF

Aerosol generator with electrical activation and bracket ideal for volumetric and object protection of engine compartments and technical rooms installed on railway rolling stock.

**UNI 11565 certified aerosol generator for railway applications with guaranteed operating reliability certified SIL 3 by TÜV Austria.**

# FKa 1000 / FKa 3000



# FKa 1000

Fire extinguishing aerosol generator

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## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION TECHNOLOGY AND DATA



INDUSTRY



PUBLIC ADMINISTRATION AND UTILITIES



CULTURAL HERITAGE

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets.

MODELS	<b>FKa 1000 E / FKa 1000 ET</b>	DIMENSIONS	322x174x220 mm (measurements do not include the size of the activators)	
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the ET model)	TYPE OF DIFFUSION	adjustable lamellar	
EXTINGUISHING MASS	1000 g	FIRE CLASS	A, B, C	
GROSS WEIGHT	11800 ± 350 g	COLOUR	RAL 3001 (other colours available on request)	
		OPERATING CONDITIONS	-50 °C +95 °C	RH<95%

## AVAILABLE VERSIONS



### FKa 1000 E

Aerosol generator with electrical activation and fixing bracket ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.



### FKa 1000 ET

Aerosol generator equipped with dual activation, electrical and **thermo-mechanical complete with a fusible detector with a choice of different activation temperatures** and a specific short bracket, ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.

# FKa 2000

Fire extinguishing aerosol generator



## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



INDUSTRY



PUBLIC  
ADMINISTRATION  
AND UTILITIES



CULTURAL HERITAGE

## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets.

MODELS	<b>FKa 2000 E / FKa 2000 ET</b>
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the ET model)
EXTINGUISHING MASS	2000 g
GROSS WEIGHT	18400 ± 350 g

DIMENSIONS	322x320x220 mm (measurements do not include the size of the activators)	
TYPE OF DIFFUSION	adjustable lamellar	
FIRE CLASS	A, B, C	
COLOUR	RAL 3001 (other colours available on request)	
OPERATING CONDITIONS	-50 °C +95 °C	RH<95%

## AVAILABLE VERSIONS



### FKa 2000 E

Aerosol generator with electrical activation and fixing bracket ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.



### FKa 2000 ET

Aerosol generator equipped with dual activation, electrical and **thermo-mechanical complete with a fusible detector with a choice of different activation temperatures** and a specific short bracket, ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.

# FKa 3000

Fire extinguishing aerosol generator



## FIELDS OF APPLICATION



POWER ENERGY



INFORMATION  
TECHNOLOGY  
AND DATA



INDUSTRY



PUBLIC  
ADMINISTRATION  
AND UTILITIES



CULTURAL HERITAGE



## TECHNICAL FEATURES

The generator is composed of a galvanised steel casing powder-coated with RAL colour 3001, it includes an interchangeable activator and fixing brackets.

MODELS	<b>FKa 3000 E / FKa 3000 ET</b>	DIMENSIONS	384x343x255 mm (measurements do not include the size of the activators)
ACTIVATION MODE	electrical absorption 0,7 A / min. 500 ms thermo-mechanical, choice between 72 °C, 94 °C, 105 °C, 124 °C (only for the ET model)	TYPE OF DIFFUSION	adjustable lamellar
EXTINGUISHING MASS	3000 g	FIRE CLASS	A, B, C
GROSS WEIGHT	24900 ± 350 g	COLOUR	RAL 3001 (other colours available on request)
		OPERATING CONDITIONS	-50 °C +95 °C RH<95%

## AVAILABLE VERSIONS



### FKa 3000 E

Aerosol generator with electrical activation and fixing bracket ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.



### FKa 3000 ET

Aerosol generator equipped with dual activation, electrical and **thermo-mechanical complete with a fusible detector with a choice of different activation temperatures** and a specific short bracket, ideal for volumetric protection of paper archives, historical libraries, data centres, depots, GE rooms, technical rooms, transformer rooms.

# Systems

ELECTRICAL CABINET PROTECTION

MODULAR DEVICES PROTECTION

RACK SERVER PROTECTION - FIRE FIGHTER



# Electrical cabinet protection

Fire extinguishing aerosol generator

UNI EN  
 15276  
 ISO  
 15779

**15** YEARS  
 Certified  
 product life



DETECTS AND  
 EXTINGUISHES THE  
 FIRE IN SECONDS



DOES NOT DAMAGE  
 OBJECTS AND  
 SPACES



NOT PRESSURISED



COST EFFECTIVE



IT REQUIRES ONLY  
 AN ELECTRICAL  
 CONNECTION

## SYSTEM CONFIGURATION

The single device system is entirely stand-alone and consists of a small aerosol generator complete with a thermo-mechanical igniter and a thermal detection device with a choice of 4 different temperatures. If a fire breaks out inside the device, the system will discharge the aerosol extinguishing agent in a few seconds after detecting the temperature rise.

Each aerosol generator is also equipped with a thermostat which, in the event of activation, reports a fire and discharge alarm.

## SYSTEM DESCRIPTION

Fire Kloud is an automatic fire extinguishing system designed and developed to protect electrical cabinets, electrical and electronic live equipment. It acts directly on the sources of the potential risk, limiting damage only to the point of ignition.

The Fire Kloud system is ideal for object-oriented protection of electrical panels, power centres, UPS, motor control centres, inverters, battery cabinets, control panels, etc.

Fire Kloud detects, signals and extinguishes the fire start within seconds. In the event of a fire inside the equipment, the Fire Kloud device detects the temperature rise, activates the extinguishing agent discharge and extinguishes the fire, limiting the damage to the point of ignition.

Fire Kloud is a clean extinguishing agent, environment friendly and non-toxic to humans.

**Fire Kloud provides 24-hour active protection of electrical equipment.**

## ADVANTAGES

<b>RAPID</b>	Reduction of downtime in the event of a fire to a minimum. Recovery is extremely fast
<b>FAST</b>	By placing the Fire Kloud system inside the equipment, it guarantees a rapid intervention as soon as the fire starts
<b>FLEXIBLE AND MODULAR</b>	Fire Kloud can protect one or more devices allowing activations on a single device or simultaneously on several devices
<b>NON-INVASIVE</b>	The installation of the generator will not alter the construction and certification aspects of the protected equipment
<b>EQUIPMENT FRIENDLY</b>	No damage after the discharge, Fire Kloud is a dielectric, non-acidic, non-corrosive fume and does not damage live equipment and/or electronic devices
<b>RELIABLE</b>	No maintenance and no dependence on electronic parts. No false alarms

# Modular devices protection

Fire extinguishing aerosol generator

UNI EN  
15276  
ISO  
15779

**RINA**  
UNI 11565

**SIL 3**  
IEC 61508

**15 YEARS**  
\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*  
Certified product life



DETECTS AND  
EXTINGUISHES THE  
FIRE IN SECONDS



DOES NOT DAMAGE  
OBJECTS AND  
SPACES



NOT PRESSURISED



COST EFFECTIVE



IT REQUIRES ONLY  
AN ELECTRICAL  
CONNECTION

## SYSTEM CONFIGURATION

The system for modular devices, in stand-alone version, is composed of one or more aerosol generators with electrical activation and one or more thermo-mechanical detection and activation devices named T-Start. In the event of a fire inside the equipment, the T-Start device, detects the increase in temperature and generates an electrical impulse that can control the discharge of up to 5 Fire Kloud aerosol generators. Available in 2 versions, depending on the type of equipment protected, the T-Start has 4 different activation temperatures and is equipped with a thermostat that reports a fire and discharge alarm in the event of activation. All Fire Kloud aerosol generators equipped with electrical activation can also be connected to a fire detection system with different types of sensors, increasing the performance of the system to meet any specific need.

## SYSTEM DESCRIPTION

Fire Kloud is an automatic fire extinguishing system designed and developed to protect electrical cabinets, electrical and electronic live equipment. It acts directly on the sources of the possible risk, limiting damage to the ignition point only.

The Fire Kloud system is ideal for object-oriented protection of electrical cabinets, electrical panels, power centres, UPS, motor control centres, inverters, battery cabinets, control panels, etc.

Fire Kloud detects, reports and extinguishes the fire in seconds. In the event of a fire inside the equipment, the Fire Kloud device detects the temperature rise, activates the extinguishing agent discharge and extinguishes the fire, limiting the damage to the ignition point only.

Fire Kloud is a clean extinguishing agent, environment friendly and non-toxic to humans.

## ADVANTAGES

<b>RAPID</b>	Reduction of downtime in the event of a fire to a minimum. Recovery is extremely fast
<b>FAST</b>	By placing the Fire Kloud system inside the equipment, it guarantees a rapid intervention as soon as the fire starts
<b>FLEXIBLE AND MODULAR</b>	Fire Kloud can protect one or more devices allowing activations on a single device or simultaneously on several devices
<b>NON-INVASIVE</b>	The installation of the generator will not alter the construction and certification aspects of the protected equipment
<b>EQUIPMENT FRIENDLY</b>	No damage after the discharge, Fire Kloud is a dielectric, non-acidic, non-corrosive fume and does not damage live equipment and/or electronic devices
<b>RELIABLE</b>	No maintenance and dependence on electronic parts. No false alarms

# Rack server protection

Fire extinguishing aerosol generator

**UNI EN 15276**  
**ISO 15779**

**15 YEARS** \*\*\*\*\*  
 Certified product life



DETECTS AND  
 EXTINGUISHES THE  
 FIRE IN SECONDS



DOES NOT DAMAGE  
 OBJECTS AND  
 SPACES



NOT PRESSURISED



COST EFFECTIVE



SUITABLE FOR  
 LIVE ELECTRICAL  
 EQUIPMENT

## SYSTEM DESCRIPTION

Fire Fighter is an independent fire detection and extinguishing unit for server rack cabinets. It is ideal for a modular protection of one or more Rack cabinets and/or telecommunications cabinets. The system consists of a **Master** control and command device and a **Slave** detection/extinguishing unit.

Fire Fighter features two fire detection technologies and a Fire Kloud condensed aerosol extinguishing system.

## SYSTEM CONFIGURATION

The Master module is a complete interface, in a 3U high 19" rack drawer, it includes a control logic, a power supply unit, buffer batteries and a display/control panel.

The Detection and Extinguishing Slave module is equipped with 2 sensors capable of detecting smoke, a temperature-sensitive cable, a Fire Kloud aerosol generator and Inputs/Outputs for the management of commands and remote controlling.

Secondary Slave modules with master/slave logic for subsequent cabinets and optional aerosol generators for the protection of cold/hot aisles in Data Centres are also available.

## ADVANTAGES

<b>19" RACK</b>	Solution with total fire detection and suppression for 19" racks
<b>EQUIPMENT FRIENDLY</b>	The extinguishing agent is a dielectric, non-acidic, non-corrosive fume and does not damage live electronic apparatus and equipment
<b>EASY TO INSTALL</b>	No engineering design required and simple to install
<b>SMALL AND COMPACT</b>	Fire Fighter is small and compact, the module is only 3U high
<b>2 m<sup>3</sup> PROTECTION</b>	Fire Fighter can provide a maximum protection of 2 m <sup>3</sup> in a standard 19" rack
<b>SLAVE UNITS</b>	Fire Fighter can control remote slave units for detection and aerosol suppression



# System components

UGA 8/1 - UGA 8/2

BCX 01

LTL1G

KT8L12G



# UGA 8/1 - UGA 8/2

Aerosol control panel



QUICK AND EASY  
 INSTALLATION



TESTED AND  
 CERTIFIED



IT REQUIRES ONLY  
 AN ELECTRICAL  
 CONNECTION

## SYSTEM DESCRIPTION

The UGA 8 Aerosol Control Panel is a complete interface for the management of aerosol extinguishing units. It can be powered by, and is capable of working with, any fire detection and firefighting control panel as well as an auxiliary power supply unit, providing an input for the 'discharge activation' command.

UGA 8 has a microprocessor for the sequential activation of 8/16 output lines and a control panel for the Power Supply Status ( Power and Fault LEDs), System Status (Unit OK LEDs, General Fault, Alarm, Discharge occurred, Deactivation/Test) and Activation Line Status (L1-L8 LEDs).

The UGA 8 Aerosol Control Panel is available in two variants:

- **UGA 8/1** unit in plastic casing for the control of 1 extinguishing zone (max. 8 activation lines);
- **UGA 8/2** unit in plastic casing for the control of 1/2 extinguishing zones (max. 8 activation lines per zone).

## TECHNICAL FEATURES

DIMENSIONS	300x260x120 mm
OPERATING TEMPERATURE	from -5 °C to +40 °C
DEGREE OF PROTECTION	IP 30
EXTINGUISHING ZONES	UGA 8/1: 1 zone; UGA 8/2: 2 zones
ACTIVATION LINES	UGA 8/1: 8 lines; UGA 8/2: 16 lines
GENERATORS PER LINE	max 12

# BCX 01

Junction box



P0019412/1

UNI EN  
15276

ISO  
15779



QUICK AND EASY  
INSTALLATION



TESTED AND  
CERTIFIED



IT REQUIRES ONLY  
AN ELECTRICAL  
CONNECTION

## SYSTEM DESCRIPTION

The BCX01 junction box is a line continuity connection interface for multiple connections of aerosol generators to the control line. With the BCX01 module, up to 12 generators can be connected to each output line of the UGA 8 aerosol control panel.

## TECHNICAL FEATURES

DIMENSIONS	100x100x50 mm (inner dimensions)
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DEGREE OF PROTECTION	IP 55
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# LTL 1G

Led test



QUICK AND EASY  
INSTALLATION



TESTED AND  
CERTIFIED



IT REQUIRES ONLY  
AN ELECTRICAL  
CONNECTION

## SYSTEM DESCRIPTION

LTL1G is a led test that permits a blank discharge test of a single aerosol generator, either during the initial commissioning or during the regular scheduled maintenance.

# KT 8L12G

Testing kit



QUICK AND EASY  
INSTALLATION



TESTED AND  
CERTIFIED



IT REQUIRES ONLY  
AN ELECTRICAL  
CONNECTION

## SYSTEM DESCRIPTION

The KT 8L12G kit is used to test an aerosol extinguishing system during the initial start-up or during the regular scheduled maintenance. In particular, the KT 8L12G kit can be used to test the individual aerosol line without running the risk of activating the generators connected to it.

For each output line of the UGA 8 Aerosol Control Panel, with up to 12 generators connected in series, the continuity, the passage of the current necessary for the activation of all the connected generators, as well as the signaling of line failure can be tested.

The KT 8L12G Kit includes:

- No. 11 PVC caps for aerosol line closure
- No. 1 LED line control terminal



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