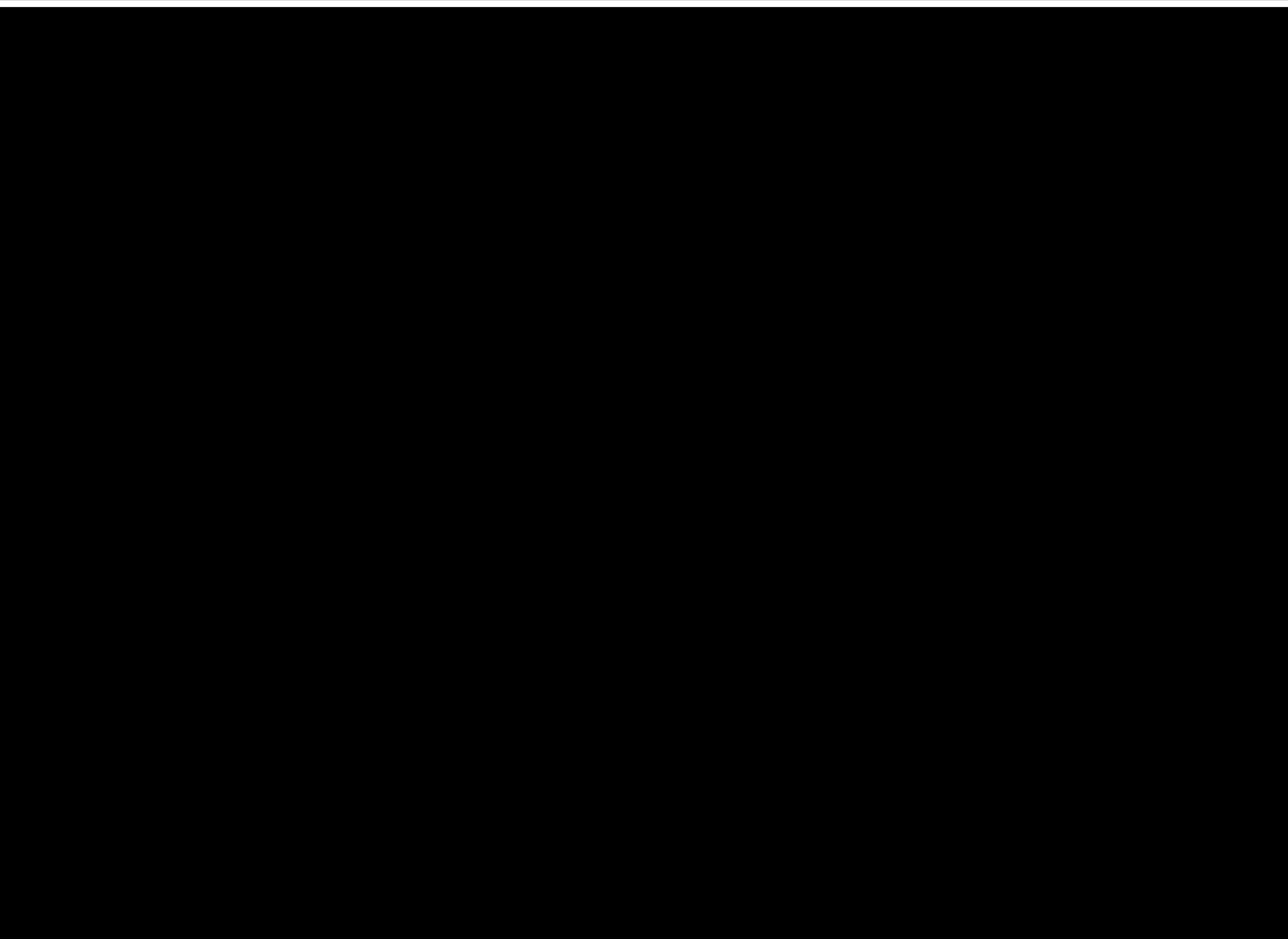


PRESENTATION



CORPORATE VIDEO



AUTOMATIC EXTINGUISHING SYSTEM FIDIAS



AQAP
2110:2009



SOLID
FUEL



LIQUID
FUEL



GASEUS
FIRES



ELECTRICAL
CURRENT

- High flexibility tube. Capable to extinguish A,B,C and electrical type of fires and can protect almost any space.
- High cost-effectivity: zero maintenance, long working life, automatic activation beats the competition in cost-effectivity.
- No cylinder for storage of extinguishing agent needed: the whole system can be placed inside the protected enclosure.
- Option to connect pressure switch and other additional components like signaling unit to perform further functions.
- Clean and effective extinguishing agent: world-wide known and accepted HFC gases (HFC-227ea and HFC-236fa).
- Automatic operation based on increased temperature:
Ideal for non-occupied spaces or spaces out of sight.
- Fully independent: system is operational 24/7 without any power supply.
- No maintenance during entire working life = zero maintenance costs.
- Long working life: 5 – 10 years depending on the type of application.
- No harm to protected enclosure and people when discharged.
- Very simple installation: no training required for installation.
- Pressure gauge to monitor the pressure at any time.
- Low operation temperatures: up to -40°C.
- Activation temperature: 100°C or 120°C.

AUTOMATIC EXTINGUISHING SYSTEM FIDIAS



Type of system	Extinguishing Agent	Amount of extinguishing agent (kg)	Length of the system (cm)	Outside diameter of the tube (mm)	Max. volume of the protected enclosure (m³)	Operation Temperature (°C)
TD100EA	HFC-227ea	0,25	110	18	0,20-0,30	-40°C to +60°C
TV100FA	HFC-236fa				0,22-0,35	-40°C to +80°C
TD200EA	HFC-227ea	0,50	212		0,40-0,60	-40°C to +60°C
TV200FA	HFC-236fa				0,43-0,70	-40°C to +80°C
TD300EA	HFC-227ea	0,75	316		0,60-0,87	-40°C to +60°C
TV300FA	HFC-236fa				0,65-1,04	-40°C to +80°C
TD400EA	HFC-227ea	1,00	419		0,78-1,16	-40°C to +60°C
TV400FA	HFC-236fa				0,86-1,40	-40°C to +80°C



AUTOMATIC EXTINGUISHING SYSTEM FIDIAS

AYTOMATIC FIRE BALL



AUTOMATIC FIRE BALL 1.3KG DRY POWDER

Automatic Fire extinguisher 1.3kg of Dry Powder ABC90% In a ball shape is an innovative product that is used for extinguishing initial stage fires.

It is a lightweight product easy to use even from childrens and old age people.

Extinguisher is easily activated either automatic with installation close to the equipment that should be protected (when temperature reaches 70°C) or by throwing that in fire.

This product can be used for the protection of electrical cabinets, servers, flammable material, etc.

There is a sound during activation that can be considered as an alarm for fire.

Technical Specifications

Extinguishing fires of initial stage
automatic activation in 70°C
Dry powder ABC90%
Fire Agent: A, B, C
Activation time: 3-5 seconds
Covered Area: 3-5m²
Product Weight: 1.3+- 0.2kg
Diameter: 15cm

Activation sound: 120db
Recommended Lifetime: 5 years
Installation: In stable position on the special bracket near equipment to be protected
Expanded polystyrene of high density with PVC film.

AUTOMATIC FIRE BALL

WATER VS WATER MIST

WATER MIST TECHNOLOGY

Fire Extinguisher, **WATER MIST Type**, is an innovation and **NEW Technology** that uses as extinguishing Agent **Water**. It is capable of extinguishing fire types A, B (with 0.5% Foam), type C, type E (presence of electrical current) and type F.

Small Water Droplets (50-60 microns) are released through the specially designed nozzle, increasing the active surface of water that comes in contact with Fire and therefore increasing the fire rate ability of Water and making this type of extinguisher superior comparing with regular types of Water extinguishers. Moreover it offers **high efficiency in de-electric test**, smooth cooling of burning surface, that decreases the danger of destroying equipment.

Advantages

- Extinguishing agent non toxic - non harmful or skin irritating
- Environmentally friendly
- Without Global Warming Potential (GWP)
- Capable to extinguish all fire categories
- No dirt after extinguishing
- Smooth cooling of burning surface decreasing danger of destroying equipment
- Water mist makes a Water curtain that protects from fire radiation.
- High visibility during extinguishing comparing with CO₂ and powder extinguishers
- Low Cost extinguishing agent comparing with regular extinguishers



SMART FIRE FIGHTING FLOWER

code 0135207

MBK09 - 15 FLOWER - F - CLASS



The Smart Fire Fighting Flower is used for extinguishing initial stage household cooking oil fires. During storage it can also be used as a kitchen decoration item by affixing it on the metallic part of a refrigerator or inside a vase. It is suitable for professional or domestic use. It is also ideal as a gift.



Test Certificate for Fire Extinguishing Capacity



CARTON BOX PER PIECE



SMART FIRE FIGHTING FLOWER



FIRE SUPPRESSION SYSTEM CO2

FIRE SUPPRESSION SYSTEM CO₂

CO₂ B

Carbon Dioxide constitutes a colourless, odorless and inert gas. During usage, no damage is provoked (contrary to Water or Dry Powder, the use of which can cause important damage to equipment). It is a safe agent for the majority of materials, non - hazardous for food, non - corrosive and non - conductive.

It evaporates completely in a few seconds after the extinguishing procedure and leaves no traces. Consequently, it can be used with no risk to various spaces containing electrical and electronic devices, precious artworks, paintings or manuscripts, flammable liquid warehouses, electric substations, kilns and ovens.

The use of CO₂ must be avoided in spaces where humans or animals are, because of its provoking suffocating conditions.

The three - dimension use of CO₂ means that it can extinguish fires in vertical and horizontal direction. Its fast diffusion constitutes the key to a successful extinguishment, since it can penetrate through a break on a wall to all secret and remote places regardless of the obstacles that may exist. Carbon Dioxide constitutes a stable commercial product with many other applications and it is widely used all over the world. CO₂

Fire Suppression Systems can be automatically or manually activated, while the activation can be effected mechanically, pneumatically or electrically or from another combination of the above depending on existing conditions. CO₂ is stored in normal temperature conditions in steel cylinders. Multiple Cylinder Batteries can be applied to specific under protection areas.

A Common System Consists of:

Steel High Pressure Cylinders, seamless and of various capacities, electrostatically painted in red colour with grey neck. Cylinders are certified according 99/36/EC and EN 1964-1 (m).

System Valves pneumatically - manually or electrically activated with potential use of a fuse. An electrically activated solenoid valve can be used, depending on the needs of the user.

Steel Pilot Cylinder 3Lt capacity, containing Nitrogen, with manually fuse activated valve or electrically activated valve depending on the requirements of the user (Pilot Cylinder is used in case of a battery of more than two cylinders). Cylinder is CE Certified according 97/23/EC by TUV (CE0034).

High Pressure Collector, 300bar, Galvanized, its diameter varies from 1 1/2" to 3", with 1/2" inlet and outlet varying from 1/2" to 3". Non-return valves 1/2" - 1/2".

Also provided: Cylinder Bracket, High Pressure Flexible Hoses for connecting the cylinders to each other and to the collector, various types of Nozzles.

Cylinders

- Certified Carbon Dioxide Cylinders 16Lt (12Kg), 40Lt (30Kg), 50Lt (35Kg), 67.5Lt (45Kg), 80Lt (60Kg), 80Lt (60Kg) with Valve for Manual or pneumatic activation, Disk Protection and Brackets.
- Certified Cylinder iFibre 3Lt (2Kg) with Valve for Manual Electrical or Pneumatic Activation and Bracket.

Collector Components

- Collector's Pipe section from 1 1/2" to 3"
- Collector's Tee Cross Section from 1 1/2" to 3"
- Collector's Cap from 1 1/2" to 3"
- Collector's Reducing Coupling 1/2" = > 1/2", 2" = > 1 1/2", 3" = > 2",
- Non-Return Valve 1/2"



EPDM Hose

- EPDM High Pressure Flexible Hose for Connection of Pilot Cylinder with rest System cylinders.
- EPDM High Pressure Flexible Hose for Connection of the System Cylinders.
- EPDM High Pressure Flexible Hose for Connection of the System Cylinders with the collector.
- EPDM High Pressure Flexible Hose for Connection of a Single Cylinder system with Nozzle's Network.

Other Accessories

- Coupling (3/8" - 3/8") for System Valves
- Discharge Nozzles Local Application
- Discharge Nozzles Total Flooding

Fire Detection

- 4-zone Control Panel
- Optical - Acoustic Seen
- Manual Activation Mechanisms
- Extinguish Cancel button
- Heat Detectors (Thermal or Rate-of-Rise)
- Smoke Detectors
- Remote Electrical Extinguish Button

CERTIFICATES

ISO 9001 - 1 EN 1964 - 1, n° 99/36/EC
CE CYLINDER 97/23/EC (TUV)
COLLECTOR TESTED AT 300 BAR FROM MBTSC SA
CE VALVE (BV) 0052

FIRE SUPPRESSION SYSTEM CO₂



Projects



Projects



Projects



FIRE SUPPRESSION SYSTEM IG 541

FIRE SUPPRESSION SYSTEM IG-541

IG-541

IG-541 is used as agent for extinguishing fires in sensitive areas e.g. computer rooms, machinery storage facilities sensitive devices, storage facilities, etc.

IG-541 consists of Nitrogen (52%), Argon(40%) and Carbon Dioxide (8%). It is odourless, colourless, non - corrosive and because of the fact that consists of gases that exist in the atmosphere, it has no effect on the ozone layer and has zero effect on the rising of the atmospheric temperature.

IG-541 extinguishes the fire by decreasing the existing oxygen levels of the area below 13% (most common materials stop burning at this level). In the same time, the Nitrogen of the mixture protects any human being trapped in the area from a low oxygen level.

IG-541 is stored in High Pressure cylinders of various capacities.

A Common System Consists of:

Steel High Pressure Cylinders, seamless and of various capacities, electrostatically painted in red with black - grey - green colour neck. Cylinders are certified according 99/36/EC and EN 1964 - 1 (m).

System Valves pneumatically-manually or electrically activated with potential use of a fuse. An electrically activated solenoid valve can be used, depending on the needs of the user.

Steel Pilot Cylinder 3lt capacity, containing Nitrogen, with manually, fuse activated valve or electrically activated valve depending on the requirements of the user (Pilot Cylinder is used in case of a battery of more than two cylinders). Cylinder is CE certified according 97/23/EC by (TUV) [CE 0036].

High Pressure Collector, 300bar, Galvanized, its diameter varies from 1 1/2" to 3", with 1/2" inlet and outlet varying from 1/2" to 3". Non-return valves 1/2" - 1/2".

Also provided: Cylinder Bracket, High Pressure Flexible Hoses for connecting the cylinders to each other and to the collector, various types of Nozzles.

THE SYSTEM INCLUDES

Cylinders

- Certified Carbon Dioxide Cylinders 16Lt (12Kg), 40Lt (30Kg), 50Lt (35Kg), 67,5Lt (45Kg), 67,5Lt (50Kg), 80Lt (60Kg) with Valve for Manual or pneumatic activation, Disk Protection and Brackets
- Certified Cylinder (Pilot) 3Lt (2Kg) with Valve for Manual, Electrical or Pneumatic Activation and Bracket.

Components Collector

- Collector's Pipe section from 1 1/2" to 3"
- Collector's Tee Cross Section from 1 1/2" to 3"
- Collector's Cap from 1 1/2" to 3"
- Collector's Reducing Coupling 1/2" = 1/2", 2" = 2" 2 1/2" = 1 1/2", 3" = 2"
- Non-return valve 1/2"

CE

TÜV

π



EPDM hose

- EPDM High Pressure Flexible Hose for Connection of Pilot Cylinder with rest System Cylinders
- EPDM High Pressure Flexible Hose for Connection of the System cylinders with the collector
- EPDM High Pressure Flexible Hose for Connection of the System Cylinders with the collector
- EPDM High Pressure Flexible Hose for Connection of a Single Cylinder system with Nozzle's Network

Other Accessories

- Coupling (3/8" - 3/8") for System Valves
- Discharge Nozzles Local Application
- Discharge Nozzles Total Flooding

Fire Detection

- 4-zone Control Panel
- Optical - Acoustic Siren
- Manual Activation Mechanisms
- Extinguish Cancel button
- Heat Detectors (Thermal or Rate-of-Rise)
- Smoke Detectors
- Remote Electrical Extinguish Button

CERTIFICATES

ISO 9809 - 1 EN 1964 - 1 m 99/36/EC
CE CYLINDER PILOT 97/23/EC (TUV) - CE
VALVE (BAM) 0589

FIRE SUPPRESSION SYSTEM IG 541



Projects



Projects



Projects



Projects



FIRE SUPPRESSION SYSTEM ZEUS ABF – WET CHEMICAL

FIRE SUPPRESSION SYSTEMS



ZEUS

In both professional and domestic kitchens the equipment functions with the use of Electrical Power and/or of Gas-Propane. In these areas, large quantities of flammable materials are used, such as cooking oils and fats, which are dangerous to ignite. Based on the relevant legislation, the appropriate extinguishing agent used for such fires has to be of category (F) - Cooking Oils & Fats.

The fire extinguishing agent MOBIAK uses, commercially named as ABF-Wet Chemical, is approved by the Fire Brigade Headquarters for Suppression of Class (A), (B) and (F) Fire - Solid and Liquid Fuels, Cooking Oils & Fats.

This fire extinguishing agent (ABF-Wet Chemical) is a Carboxylic Acid Salt which suppresses fires by creating a saponified layer (crust) that prevents Oxygen from interacting with the burning surface, cools down the area and eliminates the possibilities for re-ignition. The low acidity level (PH:9 at 20°C) prevents any damage caused to surfaces made of stainless steel.

The Electromechanical Fire Suppression System with the commercial name "ZEUS" uses the ABF-Wet Chemical extinguishing agent and the most Advanced, Efficient, Reliable & Certified Fire Detection Solution method in the direct & effective (F) category fire suppression for Professional Kitchens. Fire is detected by an approved (UL/FM) Linear Heat Detection Cable of activation temperatures 138°C, 180°C or 251°C, the installation of which is particularly quick & simple. This Cable is connected with a Control Panel that controls the Automatic Operation of the System.

In Automatic Operation, in case of fire the Detection Cable is activated and transmits a Signal to the Control Panel of the System that executes constant Visual-Acoustic Alarm through a built-in Siren with Beacon. After the pre-configured Time Delay (can be set from 0-80sec) the Control Panel transmits a Signal to the fuse of the Fire Extinguisher Valve resulting the Activation of the Valve and the flow of the Agent through the Pipe Network to Special Discharge Nozzles.

In Manual Operation, the system can be activated by Electrical Means by a) an Extinguish Button that is built-in to the Control Panel or b) an Electrical Remote Call Point that must be installed near to the Kitchen Exit or by Mechanical Means by a) a Metal Wire Pull-Handle Mechanism that must be also installed near to the Kitchen Exit or b) by pulling the Valve Rod of the Fire Extinguisher Valve.

The System can be designed as Total or Local Flooding.



FIRE SUPPRESSION SYSTEM ZEUS ABF – WET CHEMICAL



Projects



Projects



Projects



Projects



MOBIAK AEROSOL GENERATORS



MOBIAK Aerosol Generators are innovative products, designed for extinguishing in total flooding, indoors. The extinguishing agent is environmentally friendly and it is a substitute of Halon gas and other extinguishing materials.

A system with Aerosol Generators is used for extinguishing Class A fires (Solid Surface), B (Liquid) and C (Gas) and prevents re-ignition.

Aerosol Generators are aimed primarily for protecting areas defined and closed, to allow the retention of the required amount of aerosol for the required period in order to ensure effective firefighting.

The material contained in the Aerosol Generator, determines the concentration of the extinguishing agent, which is required for each Class of fire (depends on the volume that is protected).

The aerosol is generated inside the container through the combustion of material that contains, which is cooled by a special designed output that absorbs heat. The aerosol is generated in situ by the chemical reaction that takes place, it is not pressurized, producing micro-particles inert Dry Powder which extinguishes fire by physical and chemical means.

When a fire is detected, fire detection Sensor - Activator transmits an electrical signal in the unit which afterwards activates the electric igniter. Then, it releases the extinguishing agent in aerosol form, which overwhelms (total) area, extinguishing the fire.

Team1-DA



Sensor - Activator

Main Features

- Approved as a Halon alternative for non-Occupied Spaces
- No Ozone Depletion - Zero Ozone Depletion Potential (ODP)
- No Global Warming - Does not contribute to the Global Warming effect (GWP)
- Low Toxicity
- High Efficient
- No pressurized Containers
- No Piping and no Nozzles
- No connection with Detection Panel
- Effective at very Low Design Concentrations
- Maintenance Free
- Small-Safe-Simple
- Effective Cost
- Total Flooding
- Listed on the EPA-SNAP list as Powdered Aerosol A (SFE)
- Designed to meet NFPA 2010 and PrEN15276

Environmentally Responsible Choice!

Product:

- Non Corrosive
- Non Toxic
- Non Harmful or Irritant
- With no mutagenic effects on the environment & the human health
- Without Global Warming Potential (GWP)



MOBIAK AEROSOL GENERATORS



Model	A50	A100	A200	A500	A1000	A5000
Quantity of the rating [gr]	50	100	200	500	1000	5000
Evacuation time [sec]	15	17	27	48	65	70
Dimensions [mm]						
Width	50	60	80	120	120	190
Height	50	60	80	120	120	445
Length	135	170	210	345	320	390
Total weight [Kg]	0.6	1.2	2.2	11.6	12.5	45
Activation system			1.2 A			
Extinguishing volume [m³]	0.5	1.0	2.0	5.0	10	50
Operating conditions	-40°C until +50°C (-40°F until +122°F) 98% RH Max					
Storage conditions	25°C ± 15°C					
Functionality (after installation)	12 Years					
Activation mode	BackHaul					
Toxicity	No					
Environmentally friendly	no ozone effect and greenhouse effect (No ODP & GWP)					
Hazard class	UN1679 Class 5.1					

code 0135245

MBK12 - A50

code 0135248

MBK12 - A500

code 0135246

MBK12 - A100

code 0135249

MBK12 - A1000

code 0135247

MBK12 - A200

code 0135293

MBK13 - A5000



Projects



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QUESTIONS

