





Innovating Aerosol Fire Suppression Systems Sican La Coche

Application & Scope

DSPA.nl develops, produces and supplies a wide range of multipurpose extinguishing systems. A DSPA Aerosol Generator is not pressurized and is installed inside the compartment or room that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA family of products consists of many different models which differ mainly in size and capacity. This way, we can always offer our customers the best solution for their unique situation.

DSPA Aerosol Generators are used in the following sectors:

- Industry
- Offshore
- Government
- Transport
- Healthcare
- Energy
- Telecommunication
- Aviation

Typical Applications:

- Computer & Server Rooms
- Archives
- 🛑 Storage Rooms
- 🛑 Generator & Engine Rooms
- Electrical Cabinets
- Transport & Construction Vehicles
- Compressor Rooms
- Wind Turbines
- Battery Storage



The Advantages

DSPA fixed systems are ...

- 15 years serviceable
- Operational between -40°C and +75°C
- Very easy to install and maintain
- Applicable to numerous situations
- Very efficient (only a small amount of aerosol is needed)
- Very safe (DSPA units are not pressurized or toxic)
- Very cost efficient (DSPA requires no expensive pipe work)

FIXED

Innovating Aerosol Fire Suppression Systems

5 Quick, easy & safe deployment for indoor fires

DSPA Aerosol

- Does not affect oxygen levels
- Is non corrosive and non conductive
- Does not cause any overpressure
- Is friendly to the environment
- Is not harmful to humans or animals





Stop fire before it's too late!

The consequences of a fire can be a true nightmare for every owner, manager or operator:

Replacement costs, consequential damage and an interruption of processes can lead to endangering a company's business continuity. Looking back, much damage and problems often could have been prevented. DSPA offers detection and extinguishing systems which can detect a fire at a very **early stage** and extinguish the fire in just a few **seconds**.

What does it look like?

DSPA, a solution to every problem



DSPA offers complete detection and extinguishing systems, applicable to any fire panel. The above schematic shows an example of a typical DSPA extinguishing system.

Depending on each unique situation a combination of sensors, DSPA generators and other components will be calculated by our highly trained engineers.

Aerosol how does it work?



DSPA Aerosol was originally developed as an alternative to Halon. Unlike Halon, DSPA is environmentally friendly. The active substances of the DSPA Aerosol are solid micro particles that fill the compartment completely and attack the combustion process at a chemical level. As a result, the flames are instantly knocked down and the energy removed from the fire.

Certification

DSPA Aerosol generators are CE-marked and fully certified according to the highest and most stringent international standards for condensed aerosol extinguishing systems:

- EN 15276-1
- · ISO 15779
- · KIWA Certification Scheme BRL K23001/06
- UL 2775

Additionally DSPA Aerosol generators are listed under the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Program (SNAP) as approved substitutes for Halon or other Ozone-depleting substances.

DSPA.nl is constantly investing in its quality and certification program, having our production facility audited yearly under KIWA & BSI Kitemark. Please visit our website for the latest updates about testing and certification on new products and applications.





NOTES



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"New firefighting tool saves Cornwall home"

"The mini-home would not be standing if it wasn't for DSPA. I'm not going to put my fellas into something that's going to be too dangerous for them to deal with. We'd only be fighting from the outside."



"DSPA.nl knocks down 40-foot flames in Pennsylvania home fire"

"The extra minutes made a substantial impact, as the home was located in a rural area where access to water supply was limited."



"DSPA-5 continues to impress firefighters"

"The trucks were still enroute so they deployed a DSPA and within a few minutes the flames were knocked down, saving the first floor with minimal effort and water."

"New technology to help Grey-Bruce firefighters"

"Once it got thrown in, the agent was released and in about 15-20 seconds it cooled off. It was amazing."



The DSPA-5 offers a solution for those fires that happen every day in places that are difficult to access. For example, to attack a basement fire means descending through the hottest air layers from the fire. Flashovers and Backdrafts are real dangers to every fire fighter. The DSPA-5 will knock the flames down in seconds and significantly reduce the temperature.

A shortage of water often causes difficult logistical problems, especially when fighting large fires. Crucial time is often lost. The DSPA-5 knocks down the fire, flames are gone and only a small quantity of water is needed to extinguish even a fully developed fire.



The usage of DSPA-5 step by step...



Size

The DSPA-5 is small, light and fits perfectly on any intervention vehicle.

Assess and decide...

Make sure you have a clear picture of the situation and decide, based upon the given criteria, to deploy the DSPA-5.

Activation of the DSPA-5

Pull the pin out and throw the DSPA-5 directly inside. The DSPA-5 doesn't have to be deployed into the seat of the fire.

Aerosol

The extinguishing substance of DSPA is aerosol. Aerosol acts similar to gas, so it will expand volumetrically and reach even the most difficult places.

Close the compartment

Close the fire room, so the aerosol is contained. If the room is properly closed, the aerosol will be more effective.

Effect & Aftermath

After 30 to 60 seconds the fire is knocked down. The flames are gone and it's safe to enter the room. Overhaul and look for hot spots with a thermal imaging camera. Extinguish these with water or foam.





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2





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Million-dollar vessel up and running in 4 hours.

"The skipper saw smoke billowing out of the engine room, and he threw the suppression device down there. When the smoke had cleared, they went down, replaced the broken hydraulic hose that had caused the fire, cleaned up, and four hours later they were fishing again."

"Successfull suppression of wind turbine fire"

"Upon arrival at the scene, two units were thrown in at the entrance level to prevent the event to further develop. As expected the DSPA worked as intended. "

Water damage is often a big part of the total costs following a fire. When using the DSPA-5, even large fully developed fires are knocked down, so that only a small quantity of water is necessary to extinguish the fire.

Fire can have an enormous impact on any institution or company. Schools may need to be closed indefinitely or companies suffering high costs for business continuity. Many problems can be prevented by a quick and effective intervention. But what if the fire is difficult to reach? What if a common fire extinguisher won't do the job? In such cases, the DSPA-5 offers a solution.

Time is of the essence during a fire. Not just the time that is necessary to evacuate residents or personnel, but also the time that is needed for fire fighters to arrive onscene can be critical to a successful ending. The DSPA-5 ensures that a fire no longer spreads and that valuable time is gained.

The applicability of aerosol is not only proven by success stories or references, but also backed up by tests, research and certificates by many institutes. Available on request.





The advantages

DSPA-5...

- Can be deployed quickly and easily
- Knocks the fire down, flames are gone within seconds
- Prevents flashovers and backdrafts
- Saves crucial time & money
- Increases the safety of fire fighters considerably



DSPA-5...

- Does not deplete oxygen levels
- Is friendly to the environment
- Is harmless to humans and animals
- Does not cause any overpressure

Exploding

Although the DSPA-5 is activated and deployed similar to that of a grenade, the product does not explode. In fact it doesn't add any significant pressure to the room.





"As soon as we popped the DSPA-5 in there, we saw the aerosol fill the room and the visible flames ceased" Chief DiCola, Neshannock Fire Department

"After minutes the temperature had reduced quite considerably and the fire itself was just about extinguished" Firefighter Gordon, Staffordshire Fire and Rescue Service (UK)





- Protect Key Assets.
- Reduce Operational Costs.
- Reduce Annual Site Inspection Costs.
- Reduce Staff Safety Risk.
- Reduce Your Carbon Footprint.

How do you protect key assets, reduce overall operational costs, and in today's ever-changing climate reduce your Carbon Footprint all at the same time?

Replace your existing standard fire extinguishers with DSPA 5 series range handheld devices.

Unlike older traditional fire extinguishers, the DSPA 5 series are a non pressurised unit, they require little to no ongoing maintenance over their 15-year operational life, which removes the need for annual ongoing pressure tests, tagging that will significantly reduce site costs and reduce the need for site visits and possible shutdowns, all the while reducing your carbon footprint.

DSPA handheld are standalone fire suppression units ideal for placing inside / outside substations, MCC rooms, switch rooms, server rooms, and control rooms.

Replacing the need for staff on site to be actively trained and intervene if a fire occurs.

Activation is as simple as pulling the retaining pin and tossing the unit in the general direction of the event, closing the door, and exiting the area. Your staff can stay out of harms way, they are not there to fight a fire, with DSPA units you release and leave the area.

25+

DSPA's certified leading hold times will assist in protecting the asset and site until fire crews intervene, allowing staff safe passage away from the area of risk.

DSPA handheld units are used in international navy's, fire services around the world, through to several large wind farms where the DSPA 5 has proved itself time and time again to name just a few.

The DSPA 5 range will not only add saving to the bottom line, but reduce asset costs, reduce site downtime, reduce staff risk, give extra protection to the asset, all while reducing your carbon footprint.

Talk to us today to discover more about how DSPA fire suppression can protect your critical infrastructure while reducing operating costs making savings to the bottom line.



UNITS PRODUCED

Fully certified systems locally installed protecting over 30+ substations, MCC rooms, wind farm and server sites, with over 100+ vehicles from EV's, HV equipment through to locomotives both here in New Zealand and Australia.

PRODUCTION FACILITY

DSPA 5 Series Hand Held Aerosol Generator

Features:

- No Annual On Site Tagging
- Not Pressurised unlike traditional extinguishers
- No need to actively engage the fire
- Does not deplete oxygen levels
- Exceptional effective non-toxic fire suppressing agent
- SNAP listing by EPA
- Ecologically safe and environmentally friendly (ODP=0, No GWP)
- Is harmless to humans and animals
- Does not cause any overpressure
- Can be deployed quickly and easily
- Knocks the fire down, flames are gone within seconds
- Reduce your company carbon foot print
- Reduce your company annual inspection costs
- 15-year operational life

The DSPA 5 series aerosol generator can be used by fire fighters and professional first responders and as a replacement of the traditional fire powder fire extinguisher inside buildings. They are a highly effective knock down tool against fires. The DSPA 5 series generator is non-pressurised and is deployed manually into a room or compartment that requires firefighting. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and knocking down the flames. The DSPA series generator is mainly designed to use on class A, B, C and F(K) fires.

Application:

The DSPA 5 series generator is recommended for firefighting in buildings and other structures. It can be used in every fire stage, but its value is best displayed during fully developed fires.





DSPA 5-1 - 110m³



DSPA 5M - 150m³



DSPA 5-2 - 180m³

Model	5-1	5M	5-2
Dimensions	255 x 230 x 106 mm	278 x 220 x 102,6 mm	272 x 237 x 125 mm
Total weight	4800 g	5500 g	6000 g
Compound weight	2300 g	3300 g	3700 g
Volume coverage	Up to 110 m ³	Up to 150 m ³	Up to 180 m ³
Discharge time	25 sec	35 sec	40 sec
Activation, current	Manual Screw-in starter with pin	Manual Screw-in starter with pin	Manual Screw-in starter with pin
Operation conditions	-45°C to 75°C/ Up to 95% RH	-40°C to 75°C/ Up to 95% RH	-45°C to 75°C/ Up to 95% RH
Colour	Standard RAL 3000, other colours upon request		

CE







DSPA 5-3 | DSPA 5-4

FEATURES:

- Exceptional effective non-toxic fire suppressing agent
- Does not deplete oxygen levels
- SNAP listing by EPA
- Ecologically safe and environmentally friendly (ODP=0, No GWP)
- Is harmless to humans and animals
- Does not cause any overpressure

Description

The DSPA 5-3 and DSPA 5-4 aerosol generators can be used by fire fighters and professional first responders as a highly effective knock down tool against fires. The DSPA 5-3/5-4 generators are non-pressurized and are deployed manually into a room or compartment that require firefighting. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and knocking down the flames. The DSPA 5-3 and DSPA 5-4 generators are mainly designed to use on class A, B, C and F(K) fires.

Application

The DSPA 5-3 and DSPA 5-4 generators recommended for firefighting in buildings and other structures. They can be used in every fire stage, but their value is best displayed during fully developed fires.

5-4 Model 5-3 100006 100007 Part Number 135 x 72 mm 165 x 94 mm Dimensions Total weight 1650 g 2100 g 300 g 900 g Compound weight Up to 15 m³ Up to 45 m³ Volume coverage 14-26 sec 19-31 sec Discharge time Activation, current Manual Screw-in starter with pin or Manual Screw-in starter with pin or cord cord **Operation conditions** -45°C to 75°C/ Up to 95% RH -45°C to 75°C/ Up to 95% RH Standard RAL 3000, other colours upon Colour Standard RAL 3000, other colours upon request request Min. distance for persons(75°C) 75 from discharge outlet Min. distance for combustible material(200°C) from discharge 2 outlet Min. distance for construction structures(400°C) from 50 150 500 150 500 1000 discharge outlet

Specifications

More information:

DSPA nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl

www.dspa.nl



Datasheet: DSPA GENERATOR Serie: 5-3/5-4 Version. 2.2 Date: 20-04-2020



DSPA 5M



FEATURES:

- Exceptional effective non-toxic fire suppressing agent
- Does not deplete oxygen levels
- SNAP listing by EPA
- Ecologically safe and environmentally friendly (ODP=0, No GWP)
- Is harmless to humans and animals
- Does not cause any overpressure
- Especially designed for marine applications

Description

The DSPA 5M aerosol generator can be used by fire fighters and professional first responders as a highly effective knock down tool against fires. The DSPA 5M generator is non-pressurized and is deployed manually into a room or compartment that requires firefighting. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and knocking down the flames. The DSPA 5M generator is mainly designed to use on class A, B, C and F(K) fires.

Application

The DSPA 5M generator is recommended for firefighting on board of ships, in buildings and other structures. It can be used in every fire stage, but its value is best displayed during fully developed fires.

Model 5M Part Number 100018 Dimensions 278 x 220 x 102,6 mm Total weight 5500 g 3300 g Compound weight Up to 150 m³ Volume coverage Discharge time 35 sec Activation, current Manual Screw-in starter with pin or cord -40°C to 75°C/ Up to 95% RH **Operation conditions** Colour Standard RAL 3000, other colours upon request Min. distance for persons(75°C) from discharge outlet 300 Min. distance for combustible material(200°C) from discharge outlet Min. distance for construction structures(400°C) 600 om discharge outlet[n from discharge outlet and the NFPA EN2 Datasheet: DSPA GENERATOR Serie: 5M Version: 1.5 Date: 20-04-2020

Specifications

More information: DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl www.dspa.nl



DSPA 5-1



FEATURES:

- Exceptional effective non-toxic fire suppressing agent
- Does not deplete oxygen levels
- SNAP listing by EPA
- Ecologically safe and environmentally friendly (ODP=0, No GWP)
- Is harmless to humans and animals
- Does not cause any overpressure

Description

The DSPA 5-1 aerosol generator can be used by fire fighters and professional first responders as a highly effective knock down tool against fires. The DSPA 5-1 generator is non-pressurized and is deployed manually into a room or compartment that requires firefighting. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and knocking down the flames. The DSPA 5-1 generator is mainly designed to use on class A, B, C and F(K) fires.

Application

The DSPA 5-1 generator is recommended for firefighting in buildings and other structures. It can be used in every fire stage, but its value is best displayed during fully developed fires.

Model	5-1		
Part Number	100030		
Dimensions	255 x 230 x 106 mm		
Total weight	4800 g		
Compound weight	2300 g		
Volume coverage	Up to 110 m ³		
Discharge time	25 sec		
Activation, current	Manual Screw-in starter with pin or cord		
Operation conditions	-45°C to 75°C/ Up to 95% RH		
Colour	Standard RAL 3000, other colours upon request		
Min. distance for persons(75°C) from discharge outlet	75 200		
Min. distance for combustible material(200°C) from discharge outlet	400 150 600 Distance from discharge outlet[wm]		
Min. distance for construction structures(400°C) from discharge outlet			

Specifications

More information: DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl www.dspa.nl





Datasheet: DSPA GENERATOR Serie: 5-1

Version: 1.4 Date: 20-04-2020



DSPA 5-2



FEATURES:

- Exceptional effective non-toxic fire suppressing agent
- Does not deplete oxygen levels
- SNAP listing by EPA
- Ecologically safe and environmentally friendly (ODP=0, No GWP)
- Is harmless to humans and animals
- Does not cause any overpressure

Description

The DSPA 5-2 aerosol generator can be used by fire fighters and professional first responders as a highly effective knock down tool against fires. The DSPA 5-2 generator is non-pressurized and is deployed manually into a room or compartment that requires firefighting. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and knocking down the flames. The DSPA 5-2 generator is mainly designed to use on class A, B, C and F(K) fires.

Application

The DSPA 5-2 generator is recommended for firefighting in buildings and other structures. It can be used in every fire stage, but its value is best displayed during fully developed fires.

Model	5-2	
Part Number	100031	
Dimensions	272 x 237 x 125 mm	
Total weight	6000 g	
Compound weight	3700 g	
Volume coverage	Up to 180 m ³	
Discharge time	40 sec	
Activation, current	Manual Screw-in starter with pin or cord	
Operation conditions	-45°C to 75°C/ Up to 95% RH	
Colour	Standard RAL 3000, other colours upon request	
Min. distance for persons(75°C) from discharge outlet Min. distance for combustible material(200°C) from discharge outlet Min. distance for construction structures(400°C) from discharge outlet	Tangeoretice [7]	
NFPA	EN2 EN2 EN2 EN2 EN2 EN2 EN2 Datasheet: DSPA GENERA Serie: 5-2 Version: 1.4	

Specifications

More information: DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl www.dspa.nl

20-04-2020

Date:



NOTES



STANDARDS Australia

K.4.A

TEST

AFP-3615 | AFP-3616 | AFP-3617 AFP-3069 | AFP-3070

DSPA aerosol generating fire extinguishing system units has been evaluated and verified as conforming with the

Australian Standard AS 4487-2013, 'Condensed aerosol fire extinguishing systems.



Innovating Aerosol FIXED Fire Suppression Systems

WEIN DECK

Mailin

2K15

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2K12

DSPA[®]

DSPA Aerosol fire extinguishing systems for electrical cabinets, MCC cabinets and switchgear.

Protect these cabinets and panels in the best way possible: from within the object itself!

Electrical cabinets, switchgear cabinets and transformer cabinets are used in many different industries and sectors. They all have one thing in common: the loss of an electrical cabinet or switchgear is devastating to the production process and a direct threat to your business continuity. It is therefore not a surprise that more and more companies decide to protect these cabinets and panels in the best way possible: from within the object itself with a DSPA extinguishing system.

Switchgear panels or cabinets can be protected with an innovate cost effective range of stand-alone DSPA devices, through to a highly sophisticated fire detection and activation system, assuring the customer to be notified in the most early developing phase of the fire, thus giving the customer the chance to prevent many unnecessary damages.

DSPA offers a highly effective, non-pressurised, non-conductive, non-corrosive, non-oxygen depleting, environmental friendly range of exceptional fire extinguishing aerosol devices.

We can provide smaller standalone, simple set and forget units to protect individual cabinets, and compartments, larger set and forget units for IT racks to more sophisticated installations with the NOFIQ controller activity working to detect the very onset of issues, right through to AON Certified full site installations.

Passive DSPA units with thermocord are a very quick and easy installation process that site electrician can perform. With a 15-year operational life they are virtually set and forget, idea for larger multi-cabinet systems.

Talk to us about the full range of cost effective cabinet, EV charger, EV home charger and battery storage solutions as well as low cost golf kart options.



Carl Region

DSPA 12-5 Standalone Unit With Thermocord



DSPA 12 Series Standalone Units With Thermocord 15 years of maintenance free protection









Fully certified systems locally installed protecting over 30+ substations, MCC rooms, wind farm and server sites, with over 100+ vehicles from EV's, HV equipment through to locomotives both here in New Zealand and Australia.



NOFIQ FMD Controller:

DSPA

The NOFIQ FMD is a standalone fire management device that combines a multi sensor detector with the basic features of a conventional fire panel. The multi sensor (CO & Heat) will ensure detection in the very early stage of fire (Incipient), making quick and tailor-made intervention possible. The FMD unit can activate any size of DSPA generator, making it applicable for the protection of a myriad of objects, enclosures and small-sized rooms. Especially for the FMD, DSPA developed the FE-100 generator to make a compact detection and extinguishing unit. This generator can be mounted directly onto the management device.

The Nofiq FMD was developed with the purpose to fulfill the need for a standalone, simple to install solution for object-based protection and to protect small-sized rooms.

Features:

- High-end detection method based on CO and heat (Max & RoR).
- Communication to other systems using the potential-free-output.
- \cdot 24/7 fault monitoring communication with the aerosol generator
- Easy to install, easy to maintain.
- Detects in a very early stage: pre-alarm will give the customer the opportunity to respond.
- Lowers the costs for object-based protection.





Easy Installation Installed easily and guickly into almost any environment.

Low-maintenance

DSPA non-pressurized aerosol generators are 15 years maintenance free.



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DSPA 12 Series:

Standalone aerosol fire extinguishing units with a thermal starter from the DSPA 12 series (DSPA 12-1, 12-2, 12-3, 12-4, 12-5) are intended to control and extinguish fires of flammable and combustible liquids, solid fuels and electrical equipment, including energized ones. The DSPA 12-1, 12-2, 12-3, 12-4 are also available with an electrical starter that can be connected to a control module.

Application:

The generators are used for fire protection of small volumes (electric cabinets, engine compartments, etc.) and vehicles.

Features:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
 - Tested as per EN 15276-1, NEN-ISO 15779, UL 2775 and BRL K23001
 - · Approved by EPA for SNAP listing
 - Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
 - Very cost efficient





Cost-efficient

Highly effective

There is no need for any expensive pipe-work or tank storage.

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DSPA systems are more effective than any other suppression medium.

DSPA | PRODUCT OVERVIEW 21





DSPA 0.45-2 & 0.90-2 Series:

The specialty DSPA generators are effective on class A, B, C and F fires. Mounting by means of 2 magnets with 90N pulling force which can stand up to 3G vibration, therefore they are suitable for use in heavy industrial circumstances. They can even be mounted externally where space is at a premium and the outlet can be ducted into the cabinet.

Application:

The DSPA generators 0.45-2 and 0.90-2 are recommended for the protection of very small objects, such as small electrical equipment, aircon's, ventilation, small electrical cabinets and computers. When calculating the volume, the dimensions of the present materials can be deducted.

Features:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient
- Available with built-in thermocord and electrical activator.



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Eco-friendly

DSPA systems are environmentally friendly and not harmful to humans or animals.

Fully Certified

DSPA is certified according to numerous international standards.

DSPA for EV and Battery Storage:

A Lithium-Ion battery is difficult to extinguish. Normal extinguishers, which are based upon oxygen reduction, will not be able to extinguish a Lithium-Ion fire. Nor can it be easily extinguished with water based extinguishing systems.

DSPA aerosol intervenes with the gases released during a fire and will not reduce the oxygen level. They interrupt the burning process in the chain reaction with radicals like Halon did. Therefore, DSPA aerosol fire suppression is particularly suitable to fight Lithium-Ion battery fires. As stated by KIWA: "In general Condensed aerosol technology, has the ability to control Li-ion battery fires where other well-known technologies fail to do so under standard conditions."

DSPA aerosol has the unique characteristic to have a EN-15276-1 and ISO-15779 certified hold-time of at least 30 minutes, which is the certifiable maximum. Tests done even exceeded

these 30 minutes. This time refers to the time it takes for the agent concentration to drop below a specified concentration at a designated height, preventing re-ignition. Where other suppression solutions will not exceed 10 minutes.

Compared to other suppression media, DSPA has little to no pressure built up. eliminating the need for pressure relieve valves, hence no major alterations need to be made to storage or housing containers.

Availability of a large range of non-pressurized aerosol fire suppression generators that can be ceiling-mounted and require no separate storage. Due to the large range, the smallest generators can be fitted in each compartment, even protecting individual electrical or HVAC compartments.

DSPA is the perfect solution for the home EV charger, battery storage and garage protection.



DSPA 12 Series Aerosol Generator

Standalone aerosol fire extinguishing units with a thermal starter from the DSPA 12 series (DSPA 12-1, 12-2, 12-3, 12-4, 12-5) are intended to control and extinguish fires of flammable and combustible liquids, solid fuels and electrical equipment, including energized ones. The DSPA 12-1, 12-2, 12-3, 12-4 are also available with an electrical starter that can be connected to a control module.

Application:

The DSPA generators 12-5, 12-1 and 12-2 are recommended for the protection of small objects, such as electrical cabinets and panels. When calculating the volume, the dimensions of the present materials can be deducted.

DSPA 0.45-2 & 0.90-2

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are effective on class A, B, C and F fires. Mounting by means of 2 magnets with 90N pulling force which can stand up to 3G vibration, therefore they are suitable for use in heavy industrial circumstances.

Application:

The DSPA generators 0.45-2 and 0.90-2 are recommended for the protection of very small objects, such as small electrical equipment, aircon's, ventilation, small electrical cabinets and computers. When calculating the volume, the dimensions of the present materials can be deducted.

DSPA 11-1, 11-2, 11-3 Aerosol Generator

DSPA aerosol generators 11-1, 11-2 and 11-3 can be used as a part of a highly effective fire extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires. Application.

Application:

The DSPA generators 11-1, 11-2 and 11-3 are recommended for the protection of narrow compartments or objects, such as suspended ceilings, raised floors, cable ducts, transport vehicles, switch-gears etc.





Innovating Aerosol Fire Suppression Systems

0.45-2 | 0.90-2



FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient
- Available with built-in thermocord and electrical activator.

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are effective on class A, B, C and F fires. Mounting by means of 2 magnets with 90N pulling force which can stand up to 3G vibration, therefore they are suitable for use in heavy industrial circumstances.

Application

The DSPA generators 0.45-2 and 0.90-2 are recommended for the protection of very small objects, such as small electrical equipment, airco's, ventilation, small electrical cabinets and computers. When calculating the volume, the dimensions of the present materials can be deducted.

Model	0.45-2	0.90-2
Part Number Build-in Thermocord	100902	100904
Part Number Electrical Activation	100901	100903
Dimensions	95 x 36 (x 90) mm	150 x 36 (x 90)mm
Total weight	155 gr	285 g
Compound weight	45 gr	90 g
Volume coverage A(CW) + 30% safety	0,44 m³	0,88 m³
Discharge time	27-28 sec	53-57 sec
Activation	Thermocord and	electric activator
Operation conditions	-40°C to 75°C/ Up to 95% RH	
Colour	Red	
Min. distance for persons(75°C) from discharge outlet: 150 mm	17 20	
Min. distance for combustible material(200°C) from discharge outlet– Not applicable	200 n/w 400 n/w 50 300 150 Dotance from discharge outlet(nom)	
Min. distance for construction structures(400°C) from discharge outlet – Not applicable		

Specifications

More Ηu 6534 Th T. +31 (0) Ε



Datasheet: DSPA GENERATOR Serie: 0.45-2 and 0.90-2 Version: 1.5 Date: 20-04-2021

Innovating Aerosol Fire Suppression Systems



12-1 | 12-2 | 12-5

FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient
- Available with electric starter (e) or built-in thermocord (t) (DSPA 12-5 only with thermocord)

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 12-5, 12-1 and 12-2 are recommended for the protection of small objects, such as electrical cabinets and panels. When calculating the volume, the dimensions of the present materials can be deducted.

Model	12-5	12-1	12-2
Part Number	100029 (t)	100020 (e) 100025 (t)	100021 (e) 100026 (t)
Dimensions	80x16 mm	100x20 mm	100x28 mm
Total weight	70 g	100 g	150 g
Compound weight	5 g	15 g	30 g
Volume coverage A(CW) + 30% safety	0,05 m³	0,15 m³	0,29 m³
Discharge time	5-7 sec	9-11 sec	13-15 sec
Activation, current	Built-in starter, 1.3A (e) or built-in thermocord (t)		
Operation conditions	-40°C to 75°C/ Up to 95% RH		
Colour	Standard RAL 3000, other colou		urs upon request
Min. distance for persons(75°C) from discharge outlet 250 mm	T III		R II
Min. distance for combustible material(200°C) from discharge outlet 100 mm			⁴ / ₂ and 150
Min. distance for construction structures(400°C) from discharge outlet 50 mm	20 30 m Distance from d	uturge-outlet(mm)	Detailor from discharge autiedpan)

More information:

DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E <u>info@dspa.nl</u>

www.dspa.nl



 Datasheet:
 DSPA GENERATOR

 Serie:
 12-5, 12-1. 12-2

 Version:
 2.0

 Date:
 20-04-2021

Innovating Aerosol Fire Suppression Systems

12-3 | 12-4



FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient
- Available with electric starter (e) or built-in thermocord (t)

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 12-3 and 12-4 are recommended for the protection of small objects, such as electrical cabinets, panels, motor compartments and cupboards. When calculating the volume, the dimensions of the present materials can be deducted.

Model 12-3 12-4 Part Number 100022 (e) 100023 (e) 100027 (t) 100028 (t) Dimensions 120x20 mm 120x30 mm Total weight 500 g 650 g Compound weight 55 g 110 g Volume coverage A(CW) + 30% safety 0,54 m³ 1,07 m³ Discharge time 9-11 sec 11-14 sec Activation, current Built-in starter, 1.3A (e) or built-in thermocord (t) **Operation conditions** -40°C to 75°C/ Up to 95% RH Colour Standard RAL 3000, other colours upon request More information: Min. distance for persons(75°C) from discharge outlet DSPA.nl Min. distance for combustible material(200°C) from discharge outlet 2 Min. distance for construction 30 200 250 Distance from discharge outle 50 150 300 Initiance from disch structures(400°C) from discharge outlet E info@dspa.nl Datasheet: DSPA GENERATOR www.dspa.nl Serie: 12-3, 12-4

Specifications

Hulzenseweg 20 6534 AN Nijmegen The Netherlands

T. +31 (0) 24 35 22 573

Version: 2.0 Date: 20-04-2021

Innovating Aerosol Fire Suppression Systems



11-1 | 11-2 | 11-3

FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 11-1, 11-2 and 11-3 are recommended for the protection of narrow compartments, such as suspended ceilings, raised floors, cable ducts, transport vehicles etc.

Model	11-1	11-2	11-3
Part Number	100011	100012	100013
Dimensions	122x22 mm	124x34 mm	133x54 mm
Total weight	550 g	800 g	1300 g
Compound weight	110 g	170 g	300 g
Volume coverage A(CW) + 30% safety	1,07 m³	1,66 m³	2,92 m ³
Discharge time	6-10 sec	9-15 sec	14-26 sec
Activation, current	Built-in starter, 1.3A		
Operation conditions	-40°C to 75°C/ Up to 95% RH		
Colour	Standard RAL 3000, other colours upon request		
Min. distance for persons(75°C) from discharge outlet	1 Sundar		
Min. distance for combustible material(200°C) from discharge outlet			
Min. distance for construction structures(400°C) from discharge outlet			

Specifications

More information:

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 Datasheet:
 DSPA GENERATOR

 Serie:
 11-1, 11-2, 11-3

 Version:
 2.0

 Date:
 20-04-2021



Innovating Aerosol Fire Suppression Systems

11-4 | 11-7



FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 11-4 and 11-7 are recommended for the protection of semi large compartments such as storage rooms, archives, technical rooms and server rooms.

Specifications

Model	11-4	11-7	
Part Number	100014	100017	
Dimensions	165 x 72 mm	165 x 72 mm	
Total weight	2000 g	2000 g	
Compound weight	900 g	520 g	
Volume coverage A(CW) + 30% safety	8,76 m³	5,06 m ³	
Discharge time	19-31 sec	30-50 sec	
Activation, current	Built-in starter, 1.3A		
Operation conditions	-40°C to 75°C/ Up to 95% RH		
Colour	Standard RAL 3000, other colours upon request		
Min. distance for persons(75°C) from discharge outlet	i n	77 Turque	
Min. distance for combustible material(200°C) from discharge outlet	th leave	20 KW	
Min. distance for construction structures(400°C) from discharge outlet	150 250 500 Distance from discharge outlet[imm]	100 500 1300 Distance from discharge outlet[mm]	

More information: DSPA.nl

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 Datasheet:
 DSPA GENERATOR

 Serie:
 11-4 / 11-7

 Version:
 2.0

 Date:
 20-04-2021



Innovating Aerosol Fire Suppression Systems

11-5 | 11-6



FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 11-5 and 11-6 are recommended for the protection of semi large compartments such as storage rooms, archives, technical rooms and server rooms.

Model	11-5	11-6	
Part Number	100015	100016	
Dimensions	217 x 99 mm	217 x 99 mm	
Total weight	4000 g	4500 g	
Compound weight	1400 g	2300 g	
Volume coverage A(CW) + 30% safety	13,63 m³	22,40 m ³	
Discharge time	40-60 sec	30-50 sec	
Activation, current	Screw-in starter, 1.3A		
Operation conditions	-40°C to 75°C/ Up to 95% RH		
Colour	Standard RAL 3000, other colours upon request		
Min. distance for persons(75°C) from discharge outlet	10 JB	The second se	
Min. distance for combustible material(200°C) from discharge outlet	Diameter Diameter	20 Products	
Min. distance for construction structures(400°C) from discharge outlet	150 250 Dolance from Bocharge-outliet(mm)	150 190 Distance from discharge outlet/nml	

Specifications

More information:

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 Datasheet:
 DSPA GENERATOR

 Serie:
 11-5 / 11-6

 Version:
 2.0

 Date:
 20-04-2021

Innovating Aerosol Fire Suppression Systems

11 SERIES FLOW GASKET

Flow Control Gasket

With the flow control gasket the outflow of the DSPA 11 series of aerosol generators can be controlled and directed.

The gasket is easely mounted between the upper and lower part of the generator.

Gaskets are available with an opening of 150 degrees and can be sized to a maximum of 260 degrees.

Applicable for: 11-1, 11-2, 11-3, 11-4, 11-5 and 11-6.







Innovating Aerosol FIXED Fire Suppression Systems

THERMOCORD WATER RESISTANT



FEATURES:

maintain

- Exceptional effective fire detection cable
- 100% Water resistant (except ends) Uniquely easy to install and
- Compatible with all DSPA Generator types

Description

The DSPA Thermocord PIC can be used as part of a highly effective fixed extinguishing system. A thermocord PIC is installed to a DSPA Generator and can be used for the detection of fire and the activation of the DSPA generator. The DSPA Thermocord PIC in combination with a DSPA generator are effective on class A, B, C fires.

Application

The DSPA Thermocord PIC is recommended for the protection of objects and narrow compartments under moisture conditions, such as engine compartments, electrical cabinets, switchgears and cable ducts.

Model	Thermocord
Part Number	100175
Colour	Light Grey
Length	Per meter
Diameter	2 mm
Burning time	1.4 m/sec.
Ignition temperature	165 °C
Shelflife	10 Years
Dangerous goods classification	1.4 G / UN nr. 0066 / Cord, igniter
Storage	The storage needs to be approved according national legislation. The thermocord PIC must only be stored in its original packing in a dry and cool environment.
Notes for secure handling	The product can be activated by open fire, a spark, or by temperature. Protect from heat sources and direct sunlight. Open the packaging with care. Don't use any machinery nearby that may create sparks. Keep away from heat sources — don't smoke. Report

Specifications

Datasheet: THERMOCORD PIC Version: 1.0 Date: 01-02-2019



NOTES





AFP-3615 | AFP-3616 | AFP-3617 AFP-3069 | AFP-3070

DSPA aerosol generating fire extinguishing system units has been evaluated and verified as conforming with the

Australian Standard AS 4487-2013, 'Condensed aerosol fire extinguishing systems.



Innovating Aerosol Fire Suppression Systems

DSPA

DSPA Building Aerosol Flood Fire Suppression Systems.

Server Rooms, MCC Rooms, Switch and Control Rooms, Energy Storage, Archives.

DSPA is a dry powder aerosol product, extremely effective, clean, non-conductive, non-corrosive, non-pressurised solution, and when it comes to buildings works out to an extremely cost effective solution when compared to Inergen gas / FM200 gas type systems. Not only in annual ongoing costs, but in life cycle with an extremely small footprint, DSPA solutions are a very effective option.

Unlike gas solutions, DSPA is not oxygen depleting, it does not try to suffocate a fire, rather the release of the dry powder (mainly potassium based) free radical's breakdown the fire process, allowing for a safe activation.

DSPA has achieved a certified hold time for KIWA certification of 30 minutes that gas flood systems cannot maintain. Gas / Stat-X achieve 10 minutes, FirePro do not have this hold time certification.

With more and more sites featuring battery and energy storage systems it is important to point out that DSPA is an ideal medium for this new technology. Not only does DSPA not add pressure to the area once activated but it is also recognised by KIWA certification in this medium.

A Lithium-Ion battery fire is hard to extinguish. Normal extinguishers, which are based upon oxygen reduction, will not be able to extinguish a Lithium-Ion fire. Neither can it be extinguished with water based extinguishing systems.

DSPA aerosol intervenes with the gases released during a fire and will not reduce the oxygen level. They interrupt the burning process in the chain reaction with radicals like Halon did. Therefore, DSPA aerosol fire suppression is particularly suitable to fight Lithium-Ion battery fires.

DSPA PROVIDING THE BEST FIRE SUPPRESSION SYSTEMS

For over 25 years DSPA have offered exceptional fire extinguishing aerosol generators. Accepted in over 100 countries around the world, and in almost every industry where effective protection of important assets or data is required.

Easy Installation

Can be installed easily and quickly into any environment.

Low-maintenance

DSPA non-pressurized aerosol generators are 15 years maintenance free.

Cost-efficient

There is no need for any expensive pipe-work or tank storage.

Highly effective

DSPA systems are more effective than any other suppression medium.

Eco-friendly

DSPA systems are environmentally friendly and not harmful to humans or animals.

Fully Certified

DSPA is certified according to numerous international standards.









Fully certified systems locally installed protecting over 30+ substations, MCC rooms, wind farm and server sites, with over 100+ vehicles from EV's, HV equipment through to locomotives both here in New Zealand and Australia.



As stated by KIWA: "In general Condensed aerosol technology, has the ability to control Li-ion battery fires were other wellknown technologies fail to do so under standard conditions."

Not only is DSPA safe, clean, environmentally friendly, but it comes with a very low maintenance cost when you compare it with a gas flood alternative, and can be reinstalled quickly after an activation, meaning there is little to no downtime if a system has been activated, something competitor products struggle to meet.

We are currently aligned with strategic installation partners, to offer complete turnkey solutions, utilising compatible fire panels from the likes of Ampac and Pertronic, VESDA detection systems etc.

We can also offer a retrofit option when existing gas flood systems are ether activated, or at their 10-year services to update and utilising installed hardware to a new DSPA system. On larger sites the complete update will often come in below the gas refit and service.



Below is a small list of some of the reference sites we have installed, projects Include:

- Manapouri Substation Transpower / Downer
- Tui Substation Transpower
- Wellington Electricity Substation
- The Lines Company 12 Substations
- Fontera TeRau Fontera Large MCC room
- Winstone Aggregates 18 MCC Rooms
- King Country Pet Foods 4 Large MCC Rooms
- Southern Farms Switchboard and MCC rooms
- Bortana EV OEM EV fleet fire suppression system
- · Locomotive Diesel KiwiRail Certified
- Komatsu AU OEM approved WX07 Loaders
- Sanford's DSPA 5 Series and Fixed units for fishing fleet
- Siemens Gamesa DSPA 5 Series Service vehicles and sites





Innovating Aerosol Fire Suppression Systems



2-4-1-1 | 2-4-1-4

FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- Certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

The DSPA generators 2-4-1-1 (Built-in) and 2-4-1-4 (Built-up) are recommended for the protection of semi large compartments such storage rooms, archives, technical rooms and server rooms.

Model	2-4-1-1	2-4-1-4
Part Number	100001 (axial) (Built in)	100002 (axial) (bracket)
Dimensions	172x179 mm	
Total weight	4600 g	
Compound weight	1600	0 g
Volume coverage A(CW) + 30% safety	15,85	5 m ³
Discharge time	48-53 sec	
Activation, current	Built-in starter, 1.3A	
Operation conditions	-40°C to 75°C/ Up to 95% RH	
Colour	Standard RAL 3000, other colours upon request	
Min. distance for persons(75°C) from discharge outlet: 1150 mm	75 Trenge 200	
Min. distance for combustible material(200°C) from discharge outlet: 600 mm		
Min. distance for construction structures(400°C) from discharge outlet: Not applicable		

Specifications

More information: DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl www.dspa.nl



 Datasheet
 DSPA GENERATOR

 Serie:
 2-4-1

 Version:
 2.2

 Date:
 20-04-2021
Innovating Aerosol Fire Suppression Systems

8-1 | 8-2



FEATURES:

- Exceptional effective non-toxic fire extinguishing agent
- Uniquely easy to install and Maintain
- DSPA 8-1 certified according to EN 15276-1, ISO 15779, UL 2775 and BRL K23001
- Approved by EPA for SNAP listing
- Ecologically safe and environmentally friendly (O.D.P.=0, G.W.P.=0)
- Very cost efficient
- 15 years serviceable life time

Description

DSPA aerosol generators can be used as a part of a highly effective fixed extinguishing system. A DSPA generator is non-pressurized and is installed inside a room or compartment that requires protection. After activation, an aerosol cloud is generated, which expands volumetrically, flooding the space and extinguishing the fire. The DSPA generators are mainly designed to use in normally unoccupied and unoccupied areas and are effective on class A, B, C and F fires.

Application

Specifications

The DSPA generators 8-1 and 8-2 are recommended for the protection of large compartments, such as storage rooms, archives, technical rooms and server rooms.

Model 8-1 8-2 Part Number 100009 100010 Dimensions 220 x 220 mm 350 x 220 mm 12000 g Total weight 18000 g Compound weight 3250 g 6700 g Volume coverage A(CW) + 30% safety 31,65 m³ 65,24 m³ 140 sec Discharge time 67-89 sec Activation, current Screw-in starter, 1.3A **Operation conditions** -40°C to 75°C/ Up to 95% RH Standard RAL 3000, other colours upon request Colour Min. distance for persons(75°C) from discharge outlet 200 Min. distance for combustible material(200°C) from discharge outlet Min. distance for construction structures(400°C) from discharge outlet 150 750 Distance from discharge outletin

More information:

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www.dspa.nl



 Datasheet
 DSPA GENERATOR

 Serie:
 8-1 & 8-2

 Version:
 2.0

 Date:
 20-04-2020

Innovating Aerosol Fire Suppression Systems

UAS / UAF DSPA SYSTEM

(Fire Management Devices Add DSPA to Almost Any Fire Panel)

Features:

- Applicable to any panel
- Up to 400 generators
- Line monitoring
- System test mode
- -40 to +85°C
- IP65 & IP67

Panel independent secure activation

There is nothing an installer is more familiar with than his own extinguishing control panels. DSPA has developed the unique, easy to integrate DSPA Universal Activation System. Capable of controlling, monitoring and activating up to 400 DSPA condensed aerosol generators <u>simultaneously</u>, no matter which control panel is connected.

Aerosol suppression systems need to activate each DSPA condensed aerosol generator separately. The specific characteristics of extinguishing control panels worldwide require custom solutions to achieve reliable activation.

The DSPA Universal Activation System is designed to provide a seamless integration between DSPA condensed aerosol generators and fire control panels. Building reliable and efficient DSPA condensed aerosol suppression systems by any extinguishing control panel, independent of its manufacturer. This enables you to use your locally known and familiar equipment to engineer a complete suppression system, increasing the reliability and quality of the final build fire suppression system.

The DSPA Universal Activation System is built with 1 or 2 DSPA UAS Controllers (**100850**) and a DSPA UAS Forwarder (**100851**) for each 2 connected DSPA condensed aerosol generators. The units are standard mounted in IP65 (Controller) and IP67(Forwarder) enclosures. The DSPA UAS Controller is connected directly to the Fire Alarm and Suppression Panel. The DSPA UAS Forwarders activate and monitor the DSPA condensed aerosol generators. The DSPA Universal Activation System has advanced features to monitor all connections for wire break and circuit shortcut. A Test Mode supports installation, commissioning and maintenance. Actual status is signalled by led indicators and reported to the release panel.

More information: DSPA.nl Hulzenseweg 20 6534 AN Nijmegen The Netherlands T. +31 (0) 24 35 22 573 E info@dspa.nl www.dspa.nl

The DSPA Universal Activation System comes with its own EN-54 power supply with battery backup, but can also be powered from the Auxiliary power output of the release panel. In case of the latter, the maximum number of DSPA Aerosol generators which can be connected to the DSPA Universal Activation System depend on the current rating of the Auxiliary power output.

Innovating Aerosol Fire Suppression Systems

NOFIQ ® FMD

(Fire Management Device)

Features and benefits

- Integrable solutions with all the detection and management systems of buildings
- Highly sensitive detection and extinguishing system in a single device
- Monitoring 24 hours per day, 7 days a week
- Extremely compact
- Units installed completely inside the cabinet
- Minimal investment
- Reduced installation costs (plug&play and wireless)
- Low maintenance costs
- Extinction guaranteed
- Limited damage and loss



Detection and control

Thermal

Carbon Monoxide





The detection follows by default the AND logic with the parameters as set in the table above. It is possible, only on request, to have the OR logic and set different parameters.



ACTIVA® continuously monitors both the levels of carbon monoxide and the absolute and differential temperature inside the electrical panel. As soon as an increase of the concentration of carbon monoxide and/or the temperature in a critical range, an alarm is generated.

In the electrical panels and rack cabinets, in the control units and in the technical rooms there are potential fire risks. **ACTIVA®** provides an innovative and effective solution for the protection of these spaces to ensure the business continuity and cancel the technical downtime.

ACTIVA® prevents and extinguishes fires even before the traditional fire protection systems are activated. Therefore **ACTIVA®** can be used as an alternative to traditional solutions in the electrical panels in some areas. With the installation of **ACTIVA®**, fire damages are significantly reduced, while ensuring the continuity of the site.

Innovating Aerosol Fire Suppression Systems

*u***-FEP CONTROLLER**

The μ -FEP system

The μ -FEP fire alarm and extinguishing control system is specifically developed for an aerosol extinguishing system in relation to our firefighting concept: 'Fire detection & suppression at the source'.

- Versatile
- Compact
- Easy operation
- Easy programming
- Remote control panel
- Logical system structure
- Extinguishing at the source
- Input and output monitoring
- Redundant extinguishing output
- FCC, CE, ESD, EMC, BRL23003/2, IP66

The μ -FEP system consist the following:

- μ -FEP Fire & Extinguishing Panel
- µ-ETB Extinguishers Terminal Box

The μ -FEP Fire & Extinguishing alarm panel is a compact panel 80 x 151 x 60 mm (h x w x d), and can therefore protect locations where a standard fire alarm / extinguishing panel is not applicable.

The μ -FEP is designed to be a stand-alone fire detection-extinguishant release panel used in systems for e.g. electrical cabinets, CNC machines, engine rooms, small area's or other equipment in which the user should be able to extinguish a fire rapidly and effective.

This is e.g. done by pressing simultaneously the two extinguishing activation buttons or by means of a fire alarm from the automatic fire detectors programmed in single or double zone fire detection. In the event of a fire alarm, the system activates the connected electrically activatable aerosol extinguishing units.

The μ -FEP operation is simple and designed in accordance with the EN54-2 requirements for fire alarms and alarm systems, as well the EN12094-1 meant for fixed firefighting systems. The μ -FEP extinguishant release panel offers outstanding value and performance for all small and compact fixed firefighting systems.



The most important characteristics of the μ -FEP fire alarm / extinguishing panel:

The μ -FEP fire alarm / extinguishing panel:

- is able to activate a fire extinguishing either manually or after one or two fire alarms
- Separate outputs for fire, fault, extinguishing release, ventilation off and optical/acoustical alarm
 Operates on an input voltage 6 to 28 Volt dc
- Is equipped with a 4-hours emergency power in the event of a main power failure
- Is equipped with a 4-hours emergency power in the event of a main
 Is IP66 protected , reverse polarity, transient and EMC protected
- Is provide with 9 prepared cable gland holes
- is provide with 9 prepared cable gland noies

The μ -FEP fire alarm / extinguishing panel has:

- Able to set to manual, single stage or double stage detection, alarm and extinguishing
- Outputs for fire, fault, extinguishing released, ventilation off and visual & acoustic alarm device
- A full monitored output for the aerosol fire extinguishing generators
- Two full monitored fire alarm input groups (zones) for linear heat and / or point detectors
- Two full monitored alarm input groups for external extinguishing release and hold function
- Double extinguisher release buttons to prevent unwanted releases
- Extinguisher hold release button to postpone releases
- Extinguisher release delay to prevent unwanted releases
- A test mode that allows to test the detection, signaling and controls without a release
- Watchdog timer will for additional safety
- Fault monitoring and fault identifying
- Fault monitoring extinguishing output
- Fault monitoring fire detection input
- Additional option to override the release extinguishing delay after manual release
- Additional functionality regarding separated external hold-off functions
- Additional functionality regarding separated external release extinguishing functions
- Historic event log memory readable from a mini USB port
- The μ -FEP works on input voltage 6 to 28 Volt DC
- Modbus RS485 communication port
- The unit is water proof IP66 and surge, transient, ESD and EMC protected
- FCC, CE mark and BRL 23003/2-2019 par 5 attest



*u***-FEP CONTROLLER**

The μ -FEP fire alarm / extinguishing panel consists of two parts. The rear connection part and the front part with the control electronics. Both can be separated from each other, making simple assembly and efficient installation work possible. The two parts are connected with a flat cable.





The μ -FEP fire alarm / extinguisher control panel is easy to program with DIP switches and has the following programming options:

- DP 1/3 for the delay timer settings, which can be set between 0 and 30 seconds
- DP 4 the acoustic signal can be temporarily switched off.
- DP 5 renders the alarm zone self-resetting when the cause of the fire alarm has vanished.
- DP 6 extinguishing release with a single, instead of a double stage automatic fire detection
- DP 7 overrides the extinguishing delay timer when using the manual release buttons
- DP 8 only the extinguishing release buttons can release the fire-extinguishers







DOMINO SAS CU_MZ

SAS CU MULTIZONE

ECOFRIENDLY EFFICIENT EFFICIENT

The innovative system SAS CU_MZ allows to detect and extinguish a fire from 1 to 4 zones, through a single control unit.

ONE SYSTEM, MORE APPLICATIONS

Hybrid Buses

Gnc Bus

Bus Diesel

Hydrogen Buses

- Electric Buses
- for Buses
 - Charging StationShelter
 - Wind Turbines

E-Charger

HOW DOES IT WORK

The central unit is connected to two sensors, which detect the fire with the double consent logic. The pre-alarm is signalled by the first sensor and once confirmed by the second, the signal reaches the control unit which activates the discharge of the aerosol generators.



42 DSPA | AUSTRALIA | NEW ZEALAND

heat sensors.



DOMINO SAS CU_MZ





AEROSOL CHARACTERISTICS

The aerosol acts with non-toxic active substances that saturate the environment by attacking the chemical-physical combustion process by acting as an anti-catalytic agent on the flames.

This process acts in a wide range of temperatures while maintaining the oxygen levels intact and guaranteeing the extinction of the fire in respect of people, goods and the environment.

- No corrosive No <u>toxic</u>
- No conductive



VEHICLE SYSTEMS

DSPA offer range of custom designed vehicle fire suppression systems.

Our DSPA systems are readily installed in Australian and New Zealand Industrial, Mining, Road and Civil Fleet vehicles, and are the perfect solution for generators, engine bays, truck and trailers, cab / sleeper units, mining, road working and forestry machinery, long haul freight-liners, farming machinery, marine, buses, trains and transporters. DSPA Systems are designed to keep you safe.





VEHICLE INSTALLATIONS





BUILDING INSTALLATIONS

























FOOTPRINT | COMPARISON

DSPA aerosol generators offer substantial savings in numerous areas. The footprint of the product is extremely small in comparison with other systems. No longer do you have to find extra space to store a large array of gas cylinders, rely on annual pressure testing and with the ongoing cost saving in annual maintenance, certification tests will bring a large reduction in costs over the life of the asset.

DSPA		HALON 1301	C02	INERT GAS	DSPA
DS	ENVIRONMENTAL Damage	VERY HIGH	AVERAGE	LOW	NONE
HALON 1301	TOXICITY Evacuations	LOW NO	HIGH Yes	LOW — HIGH Yes	NONE NO
	CORROSION	ABOVE AVERAGE	LOW	LOW	NONE
FM-200 GAS	FOOTPRINT	GREEN MEDIUM	YELLOW LARGE	PURPLE Very Large	RED VERY SMALL
	CONCENTRATION	200 — 350 GR/M ³	700-1500GR/M ³	550-950 GR/M ³	50 GR/M ³



CO2 GAS





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- News articles
- Testimonials
- Test reports

Background information



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