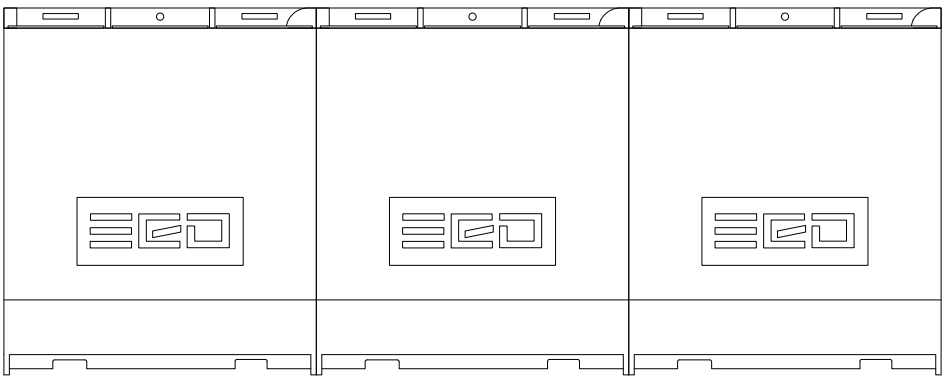
Fire Suppression System by MAUS



EGO Blast 100/150
INSTRUCTION MANUAL

— www.maussafety.com —

ABOUT THE EGO BLAST SYSTEM

1 WHAT IS THE EGO BLAST FIXED FIRE SUPPRESSION GENERATOR?

The EGO Blast Fixed Fire Suppression system is one of the most efficient Halon Alternative products available on the market today. The EGO Blast System Fixed Series method of aerosol generation provides a sufficient driving force for a rapid discharge and an efficient distribution of the extinguishing agent. No piping is required. The EGO Blast Series is specially designed to protect electrical distribution cabinets, engine rooms or similar enclosures. The activation of the generator can be both automatic and manual. All functions are possible for the EGO Blast unit. Additional accessories are however required depending on activation method. The discharge of the EGO Blast System is a whitish gas-like medium that has a similar density to air. The small particle size (0.1 micro-meters) ensures a three-dimensional distribution with long suspension times. Discharged particles do not absorb humidity and are therefor non conductive or corrosive.

2 DESIGN & OPERATION OF THE EGO BLAST SYSTEM

The EGO Blast Series contains of canisters constructed from complete sealed aluminium casings with both inner- and external cylinders. Inside the non-pressurized cylinder, the solid aerosol-generating compound, together with the solid chemical coolant and ignition devices, are contained. The cylinders vary in size depending on the mass of the solid aerosol-generating chemical compound in the generator. When a fire alarm signal or electrical input is applied to the device through either an activation generator, linear heat cable or external manual switch, it activates the solid aerosol-generating compound, which creates a chemical reaction of combustion to start to produce aerosol. The extinguishing medium is made of micro-sized dry chemical particles, mainly potassium carbonates and gases of carbon dioxide, nitrogen and water vapour. The activated aerosol particles propels itself through a solid chemical coolant for a fast and effective distribution of the aerosol within the space.

3 EGO BLAST METHODS OF ACTIVATION

- **Temperature Regulated Automatic Operation**

Connect the linear heat detecting cable to the built in Control Box on the back of the unit (see Fig 5: Connection Method). Once the surrounding temperature exceeds the activation temperature of the cable the device will immediately activate the EGO Blast unit. Read more on page 7 “Detection: Linear Heat Detection”.

- **Manual Activation**

The units can also be activated by a manual activation switch connected to the Control Box on the back of the EGO Blast units.

- **Alarm System Activation**

When connected to a fire alarm (smoke detector) the alarm will be triggered once the external fire alarm system is detecting smoke and will send a signal to the Control Box that will activate the EGO units.

Combining 3 x EGO Blast units with 8 pcs M4 x 12 screws according to the drawing below:

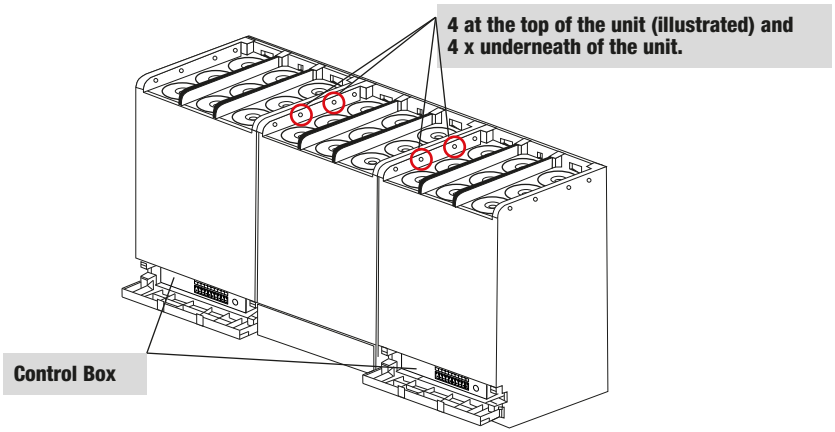


Fig 5: Combination of EGO BLAST UNITS.

INSTALLATION METHOD 1: HANGING INSTALLATION WITH EXPANSION BOLT.
Fix the combined fire extinguishing devices on the wall with 6 pcs M6 X 60 screws (Fig 6) and then connect the units through the Control Box (connection method according to Fig 9):

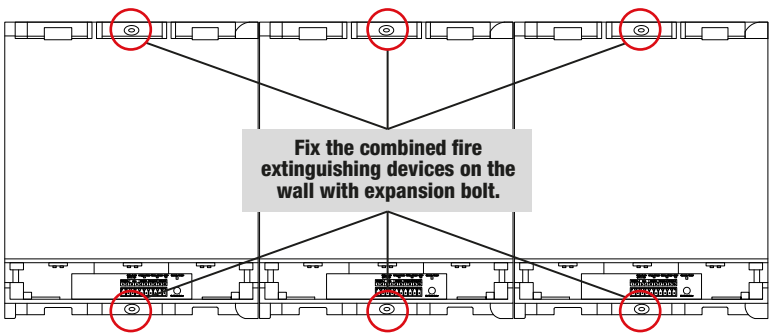


Fig 6 Combined Fire Extinguishing Devices – Installation Method 1

INSTALLATION METHOD 2: HANGING INSTALLATION WITH HOLDER.
Connect three back holders with 2 pcs M6 X 16 screws and hang the holder on the wall with 2 pcs expansion bolt. Then put the combined fire extinguishing devices on the holder.
After you have installed the devices on the holders connect the units through the Control Box (connection method according to Fig 9):

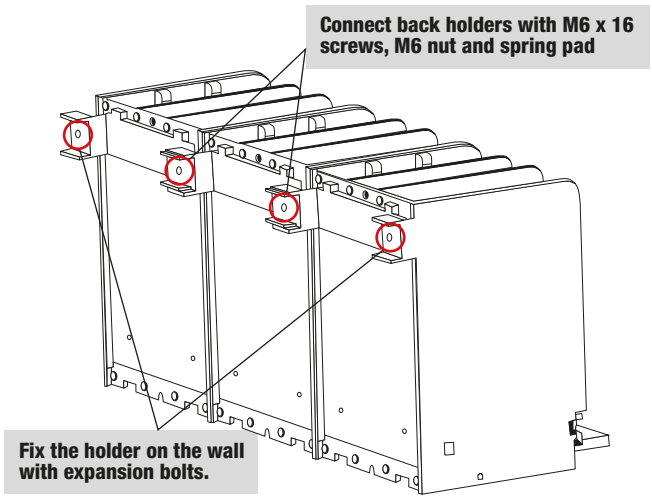
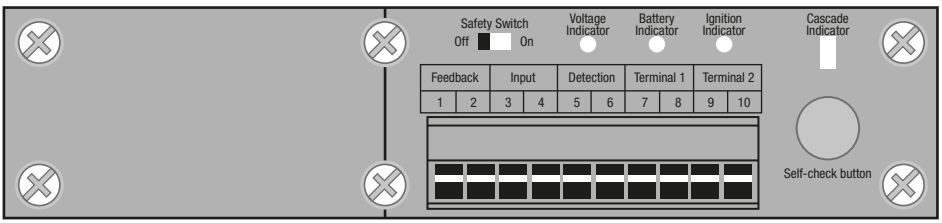


Fig 7: Combined Fire Extinguishing Devices – Installation Method 2

INSTALLATION METHOD 3: I NSTALLATION ON THE FLOOR.
Place the the EGO Blast units on the floor on an operating platform, in brackets or anywhere where there is enough space for the devices to work safely. Make sure the fire EGO Blast units are placed against the wall and fix them with 3 pcs M3X60 expansion bolts (not included) to make sure that the units will not move. After you have installed the devices on the floor connect the units through the Control Box (connection method according to Fig 9).



Control Box

CONNECTION METHOD 1

NOTE: Make sure the Safety Switch is turned "**On**" before connecting other units in case of discharge by mistake.

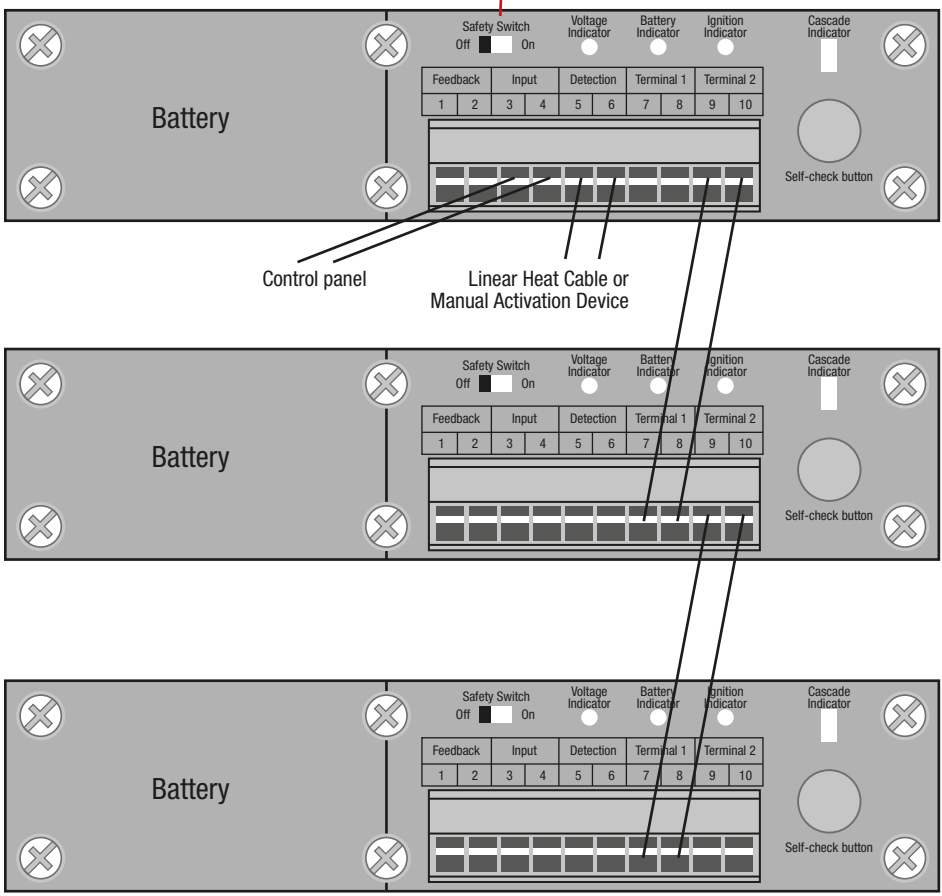


Fig 9: Connection Method 1

Connection Method 1

From the main EGO Blast device connect the other units in a chain via the Control Box. The EGO Blast devices are activated from the main unit with a chain function with Connedtion Method 1.

TROUBLESHOOTING

After you have completed the installation, turn the Safety Switch to “On”, press the “Self Check-button“ for detection, check the battery indicator, ignition indicator and Cascade Indicaton to make sure the circuit is working.

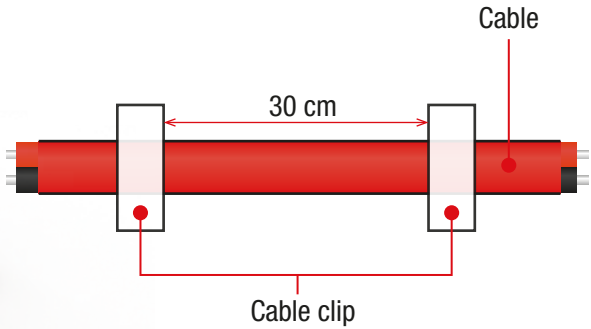
Note: Check the system every three months to make sure that the EGO Blast devices are in perfect working condition. If there is a problem please use the table below to detect what could be wrong:

Indicator lamp status	Result	Solution
Battery indicator, ignition indicator and Cascade indicator are on.	Battery full, connection good and activation circuit working.	
Battery indicator off	Battery is disconnected or battery low	Change battery
Ignition indicator off	Activation circuit fault	Detect the circuit
Cascade indicator off	Connection between multiple fire extinguishing devices fault	Check circuit connection between fire extinguishing devices

!!! Make sure that there is no barrier within 500 mm from the discharge ports on the EGO Blast devices. The devices should not be positioned close to a mechanical ventilation system.

DETECTION: LINEAR HEAT DETECTION

There are two heat detection levels: 68°C (red cable) and 105°C (black cable). When the temperature is reached, the conductors shortcircuit and activates the EGO Blast system. Every 30 cm the cable should be attached with a cable clip (3 x Staple Clips are included /1m) to ensure that the cables or stable and in place.



The cable consists of two twisted copper-clad conductors of steel wire, individually insulated with a mass of heat-sensitive polymer. When the temperature is reached, the polymer insulation melts so that the conductors short-circuit and give an alarm signal to the connected system.

IMPORTANT!

- The cable should be unrolled in a horizontal position.
- Do not bend the cable at 90°.
- Minimum bending radius: 65 mm
- Do not expose the cable to heat sources that exceed the maximum ambient temperature of the heat detecting cables:
    1. 68°C (red cable) maximum ambient temperature 40°C (do not use outside).
    2. 105°C (black cable) maximum ambient temperature: 60°C
- Do not use a nail gun.
- MAUS has suitable staples that is included in the purchase of the heat detecting cable. (included). The cable can also be attached with strips.
- Staples and strips must not tighten around the cable.
- The installation should be carried out as a normal electrical and telecommunication installation.
- Do not expose the cable to heat sources that exceed the ambient temperature of the cable:
    1. 68°C (red cable) maximum ambient temperature: 40°C (do not use outside).
    2. 105°C (black cable) maximum ambient temperature: 60°C

TRANSPORTATION & STORAGE

- Storage & transportation shall be in accordance with instructions.
- Goods should be stored in a dry and ventilated place indoors.
- Avoid any direct impact to the EGO Blast devices.
- It is prohibited to energize the outer metal canister under any circumstan ces.

LIST OF ITEMS DELIVERED IN EACH BOX

No.	Name	QNTY
1	EGO Blast 100 or EGO Blast 150	1 pc
2	Back Holder	1 pc
3	Expansion bolt M6 x 60	2 sets
4	Soket head cap screw M6 x 16	1 pc
5	Spring shim 6	1 pc
6	Screw nut M6	1 pc
7	Cross recessed screw M4 x 12	4 pcs

SPECIFICATIONS:	EGO Blast 100	EGO Blast 150
Art no:	4003-100	4003-150
Protected space:	10 m^3	15 m^3
Dimensions:	194 x 186 x H282 mm	194 x 186 x H282 mm
Weight:	7,8 kg	7,8 kg
Warranty & Service life:	8 years	8 years
Operational Temperature:	-30°C to 70°C	-30°C to 70°C
Discharge time:	14s.	14s.
Fire class:	A (limited), B, C	A (limited), B, C
Certification:	CE 1521	CE 1521