



JSC «NPG Granit-Salamandra»

OPERATING MANUAL

FOR THE FIRE EXTINGUISHING
AEROSOL GENERATORS
OF OPERATIONAL USE

AGS-15

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ATTENTION!

It is forbidden to use generators AGS-15 without preliminary studying the present Operating Manual.

It is forbidden to start the generator AGS-15 in the room where people are located.

The aerosol fire extinguishing generators AGS-15 have the following modifications:

- AGS -15/1
- AGS - 15/2

The example of identification code of the generator in other documents and (or) in an order: «**AGS-15 TC 4854-052-54876390-2014**».

INTENDED USE

Generators of fire extinguishing aerosol AGS-15 of operational use are designed for localization and suppression of fires of solid combustible materials, inflammable liquids, electrical insulating materials and electrical live equipment, including equipment under voltage, in manufacturing, office and living premises and buildings.

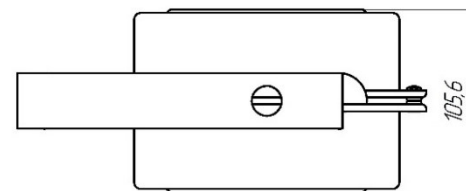
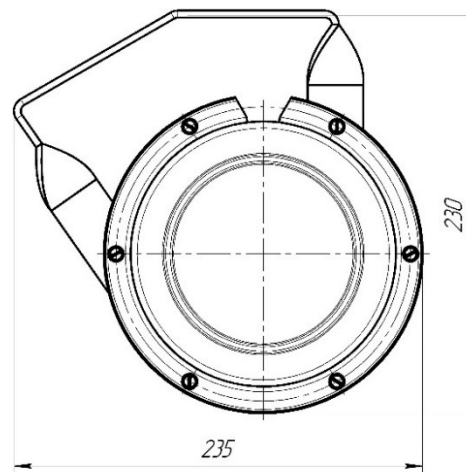
OPERATING PRINCIPLE

The operating principle of the generator is based on the inhibiting of oxidation-reduction reactions by the highly dispersed product (aerosol) of alkali metals salts and oxides. Aerosol is produced in the process of burning of the solid aerosol forming compound which is located inside the generator shell.

DESIGN

Generator AGS-15 consists of the body inside which two aerosol forming compounds are located separated from the body by the heat protection layer. The two compounds are separated from each other by the insulating element. There is a handle for carrying and throwing of the generator. There is a threaded sleeve on the side surface of the shell for binding of the starter. Aerosol comes out through the slit nozzle which is located on the whole side surface of the body.

«AGS-15/1»

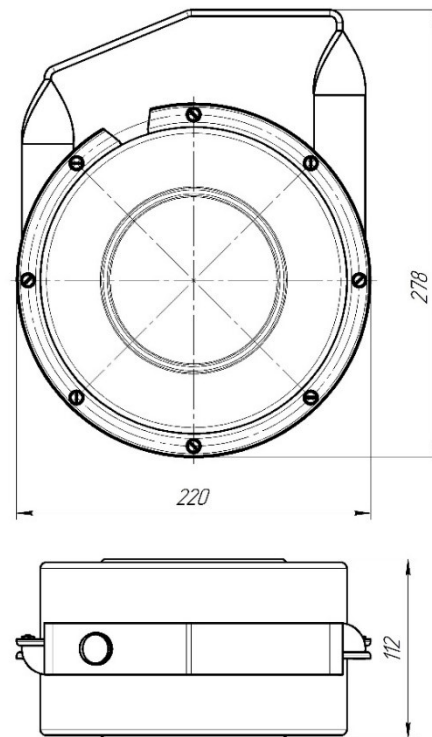


The starter consists of a metal body, capsular type initiating device, inhibiting and primary structures. Initiating device is equipped with a Safety pin.

Run the generator is sharp jerk for a safety check.

The delay composition in the starter provides actuating delay of the generator of 5-7 seconds for it safe throwing in the burning building. When the starter triggered, you hear the sound

«AGS-15/2»



TECHNICAL DATA OF THE GENERATOR AGS-15

	AGS-15/1	AGS-15/2
Mass of the equipped generator:	not more than 4,8 kg;	not more than 6,0 kg;
Semi-hermetic protected volume:	60 m ³	100 m ³
Recommended protected volume:	40 m ³	80 m ³
Delay in actuating	5 ÷ 7 sec	5 ÷ 7 sec
Operating period	25 ± 3,5 sec	40 ± 6,0 sec
Dimensions (without starter), mm	255 x 230 x 106	272 x 237 x 125
Activation	manual	manual
Zone with the temperature above 200°C	0,6 m	0,6 m
Zone with the temperature above 75°C	1,6 m	1,6 m
Flame hazard zone	0,6 m	0,6 m
Operating conditions, temperature	from - 50 to + 50°C	from - 50 to + 50°C
Operating conditions, relative humidity	up to 98%	up to 98%
Heat quantity which is distinguished during generator operation	8400 kJ	14350 kJ

PRE-STARTING PROCEDURE AND ACTIVATION

For preparation of generator for operation it is necessary to screw the starter carefully into the threaded sleeve.

For activating of generator it is necessary:

- Take the generator handle with one hand;
- To lower the generator vertically down, take off the protective cap from the starter with the free hand;
- To release the rope noose and sharply pool it;
- Throw the generator into the burning room.

USAGE RECOMENDATIONS

Generators AGS-15 are recommended for use by the fire brigades, by other persons which have been properly trained on its usage and accident prevention, as the primary fire extinguishing method, for localization and suppression of fire in the closed rooms especially which have difficult access or risk to life of staff.

For fire extinguishing in the premises of bigger volume for providing the extinguishing concentration of aerosol, the quantity of generators which have to be thrown into the room is counted under the following formula:

$$n = (V/V_1) + 1,$$

where

n – quantity of generators (units);

V – volume of the room, m³, the value rounds upwards to the nearest whole number;

V₁ – recommended room volume for protection with one generator.

If there are openings in the room, generator quantity should be increased and all doors, windows, hatches should be closed. If there are large (more than 5% from the area) openings in the ceilings or walls, and the ventilation is switched on, the effectiveness of generators AGS-15 is decreased.

All generators should be thrown into the room simultaneously or one by one without delays. They should be thrown in such a way that they are lied down on the floor flatwise, then the aerosol will be discharged freely.

Generators AGS-15 are not intended for the use in the open air.

The operating position of generator after the cast into the fire is horizontal, on the upper or lower surface of generator.

Using of AGS-15 does not exclude if necessary the additional fire extinguishing with other firefighting devices.

SAFETY MEASURES DURING OPERATION OF THE FIRE EXTINGUISHING UNIT AGS-15

Attention!

It is important to understand, that during generator operation the temperature of fire extinguishing aerosol can reach:

- 2000C, in the radius of 0,6 m;
- 750C, in the radius of 1,6 m.

The temperature of the surface of the generator where it contacts the floor does not exceed 150 0C. The presence of fire extinguishing aerosol in the air reduces the visibility in the room up to zero!

Only personnel which have been specially trained are allowed to work with generators!

Self-starting time of the generator with screwed starter does not exceed 10 minutes.

Generators without starters do not require the special security measures. The temperature of ignition of the aerosol forming compound is more than 600 °C.

During the installation of the starter it is necessary to exclude any mechanical effects which can cause its accidental activation.

When generator is activated it is necessary to make sure that the slit nozzle is not directed towards the people who are throwing the generator or standing nearby.

After the rope noose of the starter is pulled out, the generator should be thrown immediately, even if you are not sure that the starter has been actuated. At the accidental start up of the generator it should be immediately thrown away to the place which is safe for people located nearby.

The gaseous and aerosol mixture which is produced during generator operation is not toxic but can cause the irritation of the respiratory, that is why to enter the room in which generators have been operating is allowed only after its ventilation or wearing the means of respiratory protection.

IT IS FORBIDDEN!

- To use generators in the rooms where people are located or in the evacuation routes;
- To try to prevent the following activation of generator after the rope noose of the starter is pulled out.

STORAGE AND TRANSPORTATION OF FIRE EXTINGUISHING UNIT AGS-15

- Generators AGS-15 are supplied by the Manufacturer packed into the pasteboard boxes. According to GOST 19433 generators are not the hazardous cargo and should not be specially marked.
- The starters are shipped in the separate packing
- Generators should be stored in the Manufacturer packing in the closed storage rooms under the temperature from +5°C to +40°C and relative humidity up to 80% without the presence of aggressive environment.
- Generators can be stored in a pile, but no higher than 6 stages one on another (according to the Manufacturer packing).
- The starters should be stored in the Manufacturer's packing separately from the generators at the same conditions.
- Generators and starters in Manufacturer's packing can be transported by all means of transportation.
- Generators equipped with the starters should be stored separately from the other generators in a special room.
- The charged generators should be protected from the mechanical impact on the starters.
- The storage of the charged generators in piles is forbidden.
- The charged generators can be transported only in the special compartments of the vehicles which provide the protection from the accidental mechanical impact.
- The special measures on the strict registration of generators and starters should be taken, and random persons should not be allowed to work with them.
- When the starter is screwed into generator the appropriate note should be made on its label.

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AGS-15

PASSPORT

INFORMATION ON THE PRODUCT:

Generator AGS-15	batch №	
Aerosol forming compound	batch №	
Starter	Type Vud	batch №
Date of manufacturing		

MAIN TECHNICAL DATA AND CHARACTERISTICS:

Semi-hermetic protected volume	60/100 m ³
Recommended protected volume	up to 40/80 m ³

Warranty period – 18 months, after the date of product transmission to the buyer.

Operating life – 5 years, including 1 year of the storage.

Lifetime – 10 years

After expiration of the operating period the question of its prolongation can be solved by the Manufacturer. After expiration of the lifetime period the question of its utilization can be solved by the Manufacturer.

COMPLETENESS OF THE PACKAGE::

- Generator «AGS-15»
- Starter
- Manual
- Package

Generator conforms to TC 4854-052-54876390-2014.
The packing conforms to the requirements of engineering documentation





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