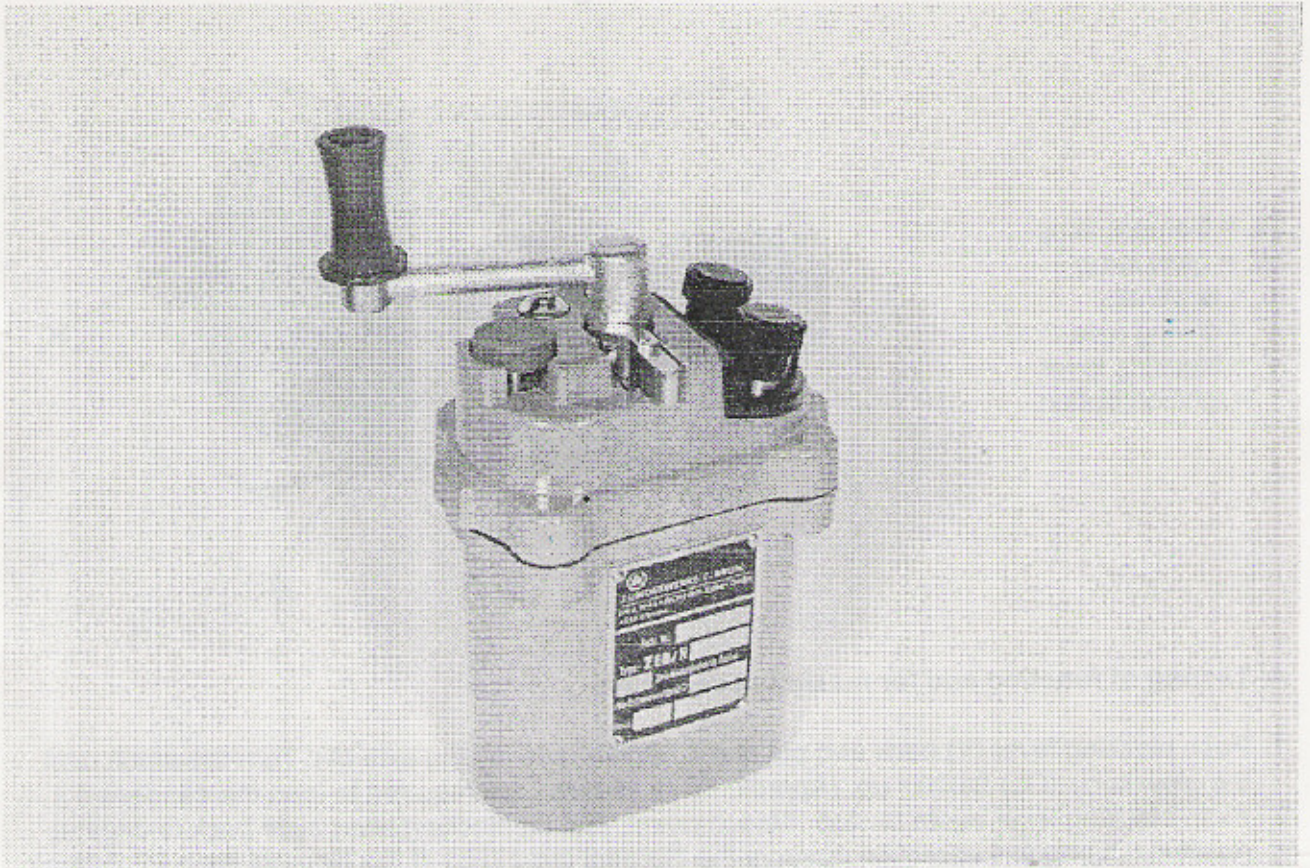


## Exploder ECA 300A



The exploder ECA300A is an extremely reliable crank charged condenser blasting machine developed for using under rough conditions. It is suited for firing series of about 300 A - bridge detonators (4 mJ/ohm) with 3,5 m copper wires respectively 100 U - bridge detonators (16 mJ/ohm).

The exploder is equipped with an optical indicator of the loading state of the ignition condenser as well as a push-button for releasing the ignition. Additionally a testing unit is build in.

The ECA/300A exploder is watertight (1 m / 1 hour). Outer parts such as driving axle, ignition button and terminals are made from stainless steel for an optimum protection against corrosion. The housing is made from aluminum die casting.

### Technical data:

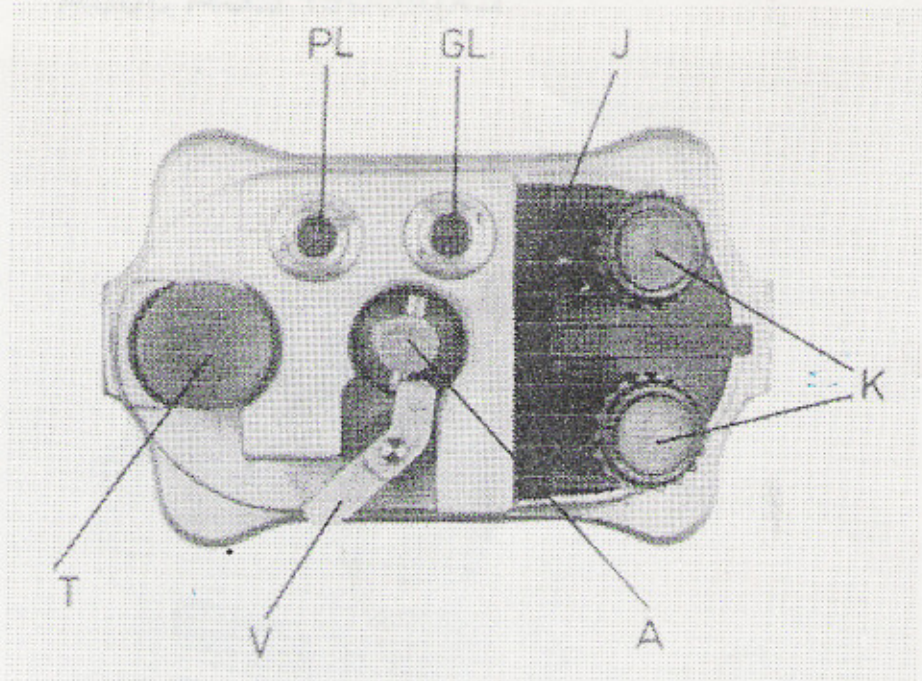
dimensions :	120 x 77 x 155 mm <sup>3</sup>
weight :	approx. 2 kg
condenser capacity :	30 $\mu$ F
tension at terminals :	1160 volts
working temperature range :	- 30°... + 71 °C

### Absolute maximum of load resistance:

- 950 ohms for moderately intensive detonators (IDL 4 mJ/ohm / 0.5 A)
- 340 ohms for medium intensive detonators (IDL 34 mJ/ohm / 1A)
- 510 ohms for U-Type detonators (16 mJ/ohm / 1.5 A)

## Operating instructions:

- PL = filament lamp
- GL = glow lamp
- K = terminals
- A = driving axle
- V = blocking lever
- T = ignition button



### A. Testing of function and for maximum capacity:

1. Push blocking lever (V) back and put crank handle onto driving axle (A). Turn the crank until the glow lamp (GL) flashes up. (Approx. 10 to 15 turns are required to load the condenser.)
2. Push blocking lever again to stop, detach crank, and let blocking lever slide back to original position. During this operation observe the filament lamp (PL). If the filament lamp PL flashes up brightly for a short time, this indicates that the exploder has delivered its required impulse. When the energy of the exploder decreases to approx. 80 percent, the filament lamp will not glow up.  
Through detaching the crank and releasing the lever, the exploder is totally discharged.

### B. Ignition

1. Exploder is to be charged as described under A.1.
2. Connect firing cable to the terminals (K).  
(Caution: Check resistance of the firing circuit before!)
3. Push ignition button (T) down for firing.
4. Remove firing cable from the terminals.
5. Push blocking lever back to stop and detach crank.
6. If a generated charge has not been fired, first remove the firing cable from the terminals then remove the crank for discharging the exploder internally.

### C. Replacement of the filament lamp

1. Open sight glass (PL) anticlockwise by means of a special provided key.
2. Slip the slotted handle end of the key onto the filament lamp, press slightly, and take off the lamp without turning.
3. Insert replacement lamp in the slotted end of the key handle and place lamp into the socket.
4. Screw in the sight glass (with gasket ring).

### D. Maintenance

The condenser exploder ECA 300A doesn't require any special maintenance. To safeguard a satisfactory contact at the terminals, same should always kept clean.