

**Electric Condenser
Discharge Blasting Machine Type 861**
with hand-operated A.C. generator

Not for use in gassy coal-mines!

This Condenser Discharge Blasting Machine is manufactured and distributed by Messrs. VSV-Engineering Produktions- u. Handels GmbH under licence for Schaffler & Co. GmbH at the same high technical level and safety standards as the other well known *blasting machines, testing instruments and other blasting accessories.*

All products are manufactured at the highest technical level and fulfil all safety standards required by the Federal Ministry of Economics and Labour, dept. Mining Technique and Safety "Supreme Mining Authority" which is documented by the approval.

The blasting machine type is approved for the following detonator types:

Technical data:

- Voltage : 1420 V
- Firing condenser : 100 μ F
- Energy : 100 Ws
- Dimensions : 240 x 145 x 257 mm
- Weight : 9 kg

Firing capacity:

Standard sensitive electric detonators A:

(according to the Austrian regulation these detonators are not allowed any more, only igniters of this type are approved).

Firing impulse: 4 mJoule / Ohm

having 3 m tinned iron leg wires: 250 pieces

having 3 m copper leg wires: 500 pieces

Limiting resistance: 1260 Ohm

2400 pcs. in parallel series in 10 series each 240 detonators, with copper leg wires

Insensitive electric U-detonators (Fiduz):

Firing impulse: 20 mJoule / Ohm

having 3 m tinned iron leg wires: 160 pieces

having 3 m copper leg wires: 320 pieces

Limiting resistance: 580 Ohm

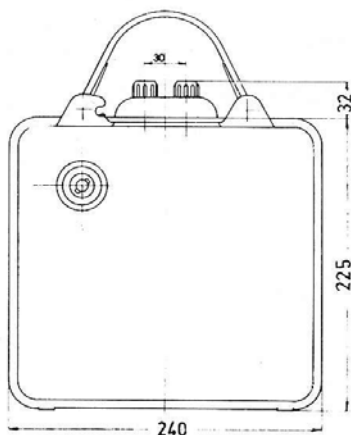
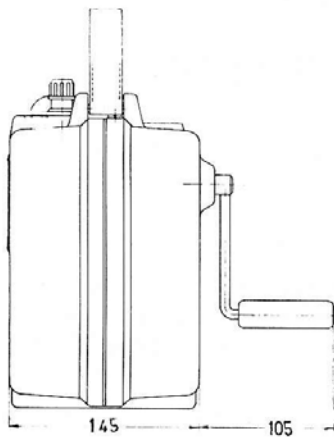
1000 pcs. in parallel series in 5 series each 100 detonators, with copper leg wires

Highly insensitive electric HU-detonators (Polex):

Firing impulse: 3300 mJoule / Ohm

having 3 m copper leg wires: 40 pieces

Limiting resistance: 25 Ohm



All electrical parts and the complete blasting machine are tested with a tension of 3000 V A.C..

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manufactured under licence for Schaffler & Co.

DESCRIPTION OF THE BLASTING MACHINE

The main parts are :

- magneto generator operated by a removable crank handle
- capacitor charged by a group of rectifiers
- thyristor acting as switching in device
- two-part housing of light metal casting which reconciles sturdiness with low weight
- strong leather carrying strap

The firing condenser is charged by the alternating current-magneto generator. The tension of the generator is duplicated and redressed by the appropriate electronic circuit. The pilot lamp lights up when the firing tension is reached. As long as the lamp is glowing (approx. 5 – 7 sec.) the electronic circuit system can be switched in by pressing down the push-button, thus circuiting the accumulated energy to the terminals.

OPERATING INSTRUCTIONS for type 861

The firing circuit is set up as usual (connection of detonators, resistance measurement, insulation test).

1. Connect leading line to terminals.
2. Operate generator with the crank clockwise until the pilot lamp glows (approx. 7 turns).
3. Press down push-button.

After the lamp has extinguished, the switch is locked again. To make the blasting machine ready to fire again, follow instruction steps 1 to 3.

TESTING OF THE BLASTING MACHINE

The blasting machine is absolutely maintenance-free. According to the Austrian regulations the effectiveness of the blasting machines have to be tested by the appropriate type of SOLUS tester once per month. Therefore the condenser discharge blasting machine type 861 has to be tested with the tester for blasting machine type Solus 861.



IMPORTANT – FOR ATTENTION

Never actuate the blasting machine with short-circuited terminals. Please return damaged or defective blasting machines to our address for repair and service. If repairs are not carried out in our premises you and your staff run the risk to be endangered.

SAFETY FIRST

OUR PRODUCTION PROGRAMME

- A full range blasting machines (to to 1500 U-detonators [Fiduz] in series)
- Testing instruments for blasting machines and ohmmeter
- Leading lines and connecting wires
- Blasting accessories

SAFETY INSTRUCTIONS

If the blasting machine is not used according to the regulations and safety instructions or when the terminals (or the connected wires) are touched this may result in severe injuries. The energy of a discharging blasting machine can be compared with a small flash. The electric shock can cause high-grade burns (burst of the skin) and may occur danger of life (e.g. cardiac arrest).

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