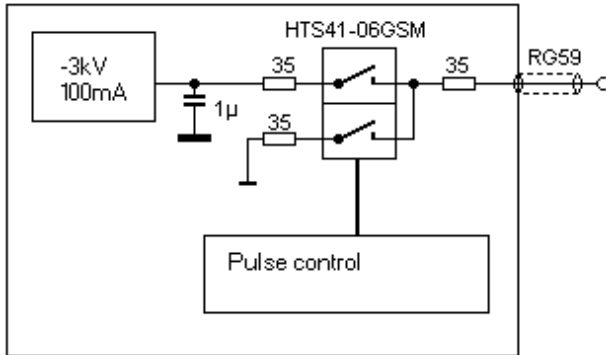


# RUP3-3A

## High voltage pulse generator for capacitive and resistive loads

The pulse generator RUP3-3A is a small-scale high voltage pulse generator for various applications. It features very fast rise and fall times, a voltage up to -3kV and frequencies up to 10 kHz.

### Technical Data



Principal schematics

### Voltage and current

- Voltage 0.... -3000V, adjustable
- average current 100 mA max.
- output impedance 75 Ohm,
- peak current around 40 A (short circuit), practical values are up to 5A
- maximum output power 300W

### Waveform and frequency

- square wave, rise and fall time 50-100 ns, depending on voltage and load.
- pulse width 0.2  $\mu$ s -  $\infty$  (useful maximum pulse width with currents > 100 mA is determined by the discharge of the internal pulse capacitor of 1 $\mu$ F)
- duty cycle up to 100% possible.
- maximum frequency 10 kHz.
- the output signal is either determined by a TTL-Signal at the input or alternatively frequency (0-10 kHz) and duty cycle (0-100%) can be adjusted by knobs on the front plate.

### Mechanical, included items

- 19" rack insert, 5U (520\*222 mm)
- display for voltage and average current
- 10-turn potentiometers on front plate for adjustment of voltage, frequency and duty cycle
- control input 3.3...5V signal, TTL compatible.
- switch for internal / external control
- voltage monitor output 1:1000
- current monitor output 100 mV/A
- output with SHV connector, 1.5m output cable RG59 included.
- manual

A digital oscilloscope and a signal generator for eventual external control are not included but recommended.

### Environmental conditions, supply

- environmental temperature 5-35°C
- humidity 0-80%, the pulse generator is intended for the use in dry rooms.
- protection class I, IP20
- supply voltage 220V-240V~, 2A max.

### Safety

- external Interlock
- the pulse generator is protected by series resistors from destruction by short circuit or flashover in the load.
- peak short circuit current 50A.
- The pulse generator, correctly connected, is conformal to EMC standards.

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