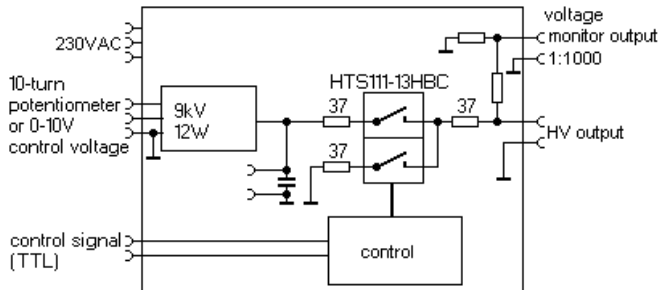


RUP3-9aoem

Pulse generator module

Technical data



principal scheme RUP3-9aoem

The pulse generator module RUP3-9aoem consists basically of small on board HV supply, a Behlke switch, enhanced by protective resistors, a voltage divider, a power supply for the Behlke switch and a small HV supply. It is designed for pulses with capacitive load and not too high frequency at voltages up to 9 kV.

Voltage and Current

- internal voltage supply 0.... 9kV, around 12W maximum.
- Power supply ripple <5V at 9kV output without external storage capacity.
- output impedance 75 Ohm.
- peak current up to 120A at short circuit.
- On board storage capacity is 20 nF, an external storage capacity of up to 1µF can be added.

Waveform and frequency

- Near square wave pulse, with ultra fast fall and rise times in the order 10-40ns.
- Pulse width can be chosen arbitrarily, minimum pulse width 220ns.
- Principally, the switch will tolerate frequencies at least up to 2 kHz, but the limited available current from internal power supply will cause maximum useful frequency to be around 500 Hz.

Size

- The module is delivered as single circuit board, size around 220*330mm, with 30mm long bolts in the edges.

Connections

- cable clamp grid supply (phase 230V~, 0V, GND)
- clamp for external potentiometer or control voltage 0-10V.
- BNC-plug monitor signal 1:1000
- BNC plug control signal TTL
- external capacitor connection 2*6.3mm plug
- Ground out 6.3mm plug
- HV out 6.3mm plug

included

- 10-turn potentiometer with 0.5m cable for voltage control
- 6 pc 6.3mm connectors for HV out cable.
- external capacitor 1µF 9kV
- documentation including complete circuit diagram.
- Packing suitable for damage protection during shipping

environmental conditions

- Temperature 5-35°C
- humidity 0-80%, the pulse generator module is intended for operation in dry rooms.
- protection class I, IP00
- supply voltage 220V-240V~, 16W max.

Safety

- The board must not be touched in operation!
- It is intended to operate in an enclosed surrounding.

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