

High Current Pulse Generator

PG 10-7k

Surge Current

10 / 350 μ s

Surge Voltage

1,2 μ s

**For surge current testing of lightning
protection components**



The High Current Pulse Generator type PG 10-7k generates lightning surge currents with the waveform 10 / 350 μ s according to IEC, VDE etc.

The peak value of the surge current can be continuously adjusted by varying the charging voltage up to the maximum value. The generators are used for shock testing of electrical components, surge arresters and electronic circuits.

The pulse current output is located on the top side and has high-current sockets to accommodate a pluggable test adapter. The pulse-forming network contains a broadband current measuring resistor for monitoring the pulse current.

With the help of the microprocessor-controlled operating and display unit, the user can define test sequences, store them in the device and execute them. The test parameters: charging voltage, polarity, number of pulses and repetition rate are set via a digital rotary encoder and shown in the display.

The test parameters can be logged on a printer during the test.

| Technical specifications: | PG10-7k |
|--|---|
| Basic device, control | |
| Microprocessor control, display with LCD module | 8*40 Character |
| Optically isolated interface for remote control of the generator | built-in |
| Parallel printer interface for online logging | D 25 pol |
| External trigger input | 10 V an 1 kEII |
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| Connections for external safety circuit | 24 V = |
| as well as external red and green warning lamps according to VDE 0104 | 230 V, 60W |
| mains connection | 230 V , 50/60 Hz |
| Construction: 19 "small cabinet, on driving base, B * H * T | ca. 553*800*1250 mm ³ |
| Weight | 240 kg |
| High-voltage charger | |
| Charging voltage adjustable | 0.2 - 10 kV ± 2 % |
| charging capacitor | 140uF |
| Max. Energy Content | 7000 Ws |
| Max. Charging time | < 60 sec |
| Max. Repetition | 1/80 sec |
| Pulse shaping network | |
| Curve shape of the short-circuit current, according to IEC 60060-2 | 10 / 350 μs ±20 % |
| Current peak value, adjustable via charging voltage | 50 - 2500 A ±10 % |
| Voltage rise idle | 1.2 μs ±30 % |
| Polarity of the pulse output variable, switchable | POS/NEG/ALT |
| High current output, sockets rear device | 12 mm Ø |
| Ground connection for grounding the device | 12 mm Screw. |
| Impulse current measuring resistor, built-in | 2 mΩ, 1.0 MHz |
| Option: Remote control | |
| Remote control PC software incl. 5 m long fiber optic cable and USB-PC interface. | |
| Option: test chamber | |
| Test chamber in 19 "cabinet, with safety glass door and safety switch, protects against HV output terminals. When the test chamber door is opened, the generator is switched off, or the mains voltage fails, the earthing switch closes and discharges the test object and the internal storage capacitor. | Testing Room ca. W*H*D 470*530*490 mm ³ |
| Option: Synchronization | |
| Current pulse trigger synchronization 0-360 ° to the zero crossing of the sinusoidal AC voltage, phase angle adjustable in increments of 1 ° Supply voltage (E.U.T. power supply) 400Veff / 50Hz Without decoupling from HV - AC power supply. | |
| Option: Pearson Coil | |
| Galvanically isolated measurement of the current pulse with a Pierson coil. | |
| Option: Security Door | |
| Polycarbonate security door with solid stainless-steel closures. | |