

# SURGE GENERATOR

## PG 2 - 750

10/160  $\mu$ s, 1.6 kV, 4 \* 100 A  
 10/560  $\mu$ s, 800 V, 2 \* 100 A

acc. to FCC, Part 68.302,  
 ANSI / TIA - 968 - A - 2002

optional:  
 10/1000 $\mu$ s, 1 kV, 2\*100 A  
 acc. to GR-1089-CORE



The surge current generator PG 2-750 delivers pulse currents with the waveform 10/160 $\mu$ s and 10/560 $\mu$ s. Optionally an additional waveform, 10/1000 $\mu$ s can be integrated. The generator has four or two surge current outputs.

The peak value of the surge current at each output can be set to (1 – 100)A by adjusting the charging voltage.

The generator features a microprocessor controlled user interface and display unit for ease of use. The microprocessor allows the user to either execute standard test routines, or a 'user defined' test sequence. The test parameters are easily adjusted by means of the rotary encoder. A standard parallel interface provides the ability to print a summary of the test parameters whilst testing is being carried out.

The PG 2-750 excels by its compact design, simple handling and precise reproducibility of test impulses. The output current- and voltage waveforms, due to built-in sensors, can be recorded via separate signal outputs for current and voltage. Moreover, all generator functions may be computer controlled via the isolated optical interface.

### Technical specification:

### PG 2-750

#### Main frame:

Microprocessor controlled LCD module	8*40 characters
Parallel printer interface for on-line documentation	25-way 'D' connector
Optical-interface for remote control of the generator	built-in
External Trigger input	10 V at 1 k $\Omega$
External Trigger output	10 V at 1 k $\Omega$
Diagnostic input for monitoring of the test device	4 channels, 5 V - Level
Connector for external safety interlock loop and external red and green warning lamps acc. to VDE 0104	24 V = 230 V, 60W
Mains power	230 V, 50/60 Hz
Dimensions: desk top case W * H * D	453*320*580 mm <sup>3</sup>
Weight	35 kg

## High-Voltage Pulse Generator:

Pulse current outputs: Safety connectors on the rear panel 4 mmØ  
 Pulse voltage divider, built-in 1000:1 ± 2%

Pulse generation: a) manual trigger push button  
 b) external trigger input 10V/1kΩ  
 c) internally, automatically test program

### PFN 1: Pulse forming network 10/160µs

#### FCC 68 / TIA 968

Charging voltage, adjustable 0 - 1.8 kV  
 Max. charging time < 10 sec  
 Polarity of pulse output current, swichable POS/NEG/ALT  
 Peak current value, adjustable via charging voltage  
 Waveform: short circuit current 4\*100 A ± 5 % 10µs -20% / 160µs +20%  
 Waveform: short circuit current 1.6 kV ± 10 % 10µs -50% / 160µs +50%

### PFN 2: Pulse forming network 10/560µs

#### FCC 68 / TIA 968

Charging voltage, adjustable 0 - 900 V  
 Max. charging time < 10 sec  
 Polarity of pulse output current, swichable POS/NEG/ALT  
 Peak current value, adjustable via charging voltage  
 Waveform: short circuit current 2\*100 A ± 5 % 10µs -20% / 560µs +20%  
 Waveform: short circuit current 800 V ± 10 % 10µs -50% / 560µs +50%

Option 2:

### PFN 3: Pulse forming network 10/1000µs

#### GR-1089-CORE

Charging voltage, adjustable 0 - 1000 V  
 Max. charging time < 20 sec  
 Polarity of pulse output current, swichable POS/NEG/ALT  
 Peak current value, adjustable via charging voltage  
 Waveform: short circuit current 2\*100 A ± 5 % 10µs -20% / 1000µs +20%  
 Waveform: open loop voltage 1000 V ± 10 % 10µs -50% / 1000µs +50%