

Surge Current Generators PG **_****

Waveform
8/20 μ s

Surge
current:

40 kA -
100 kA



The surge current generators PG **_**** generate standard impulse currents with waveform 8/20 μ s according to IEC, EN, VDE. Pulse current output amplitude is controlled by preset charging voltage and can be adjusted up to the maximum value of the special type of generator. The generators are designed for testing electrical components, over-voltage protectors and electronic circuits. They possess an electronically regulated high-voltage power supply, which allows an excellent reproducibility of the pulse output amplitude.

The pulse-forming network contains a pulse-fidelity current viewing resistor for monitoring the output waveform. The impulse current output is located at the top of the equipment and provides high-current connectors for a plug-in test adapter.

All generators feature 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, which are shown on the built in display, 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.

Technical specification:

Mainframe:

Micro-processor controlled LCD display	8*40 characters
Remote control via optically isolated computer interface	5 m fibre optic cable
Parallel printer interface for on-line documentation	25-way 'D' connector
External Trigger input	10 V at 1 k Ω
External Trigger output	10 V at 1 k Ω
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

OPTION 1: PG **_*** software test package, for the external control of the device includes 5 m long fibre optic cable and PC Interface.

OPTION 2: Protective cover on the top of the equipment, similar to PA 502.
A dielectric cover with safety interlock protects the high-voltage output terminals. Upon lifting of the cover, switching-off of the generator or mains blackout a built-in high-voltage grounding switch, discharges the test object and the internal energy storage capacitor.

Different types with output currents 40 kA up to 100 kA are available

Technical Specifications:

Surge Current Generator

PG 12-3600

Peak value of charging voltage, adjustable	0 - 12 000 V, \pm 2%
Max. stored energy	3600 Ws
Charging time for max. charging voltage	< 60 sec
Waveform of impulse output current acc. to IEC 60-2	8 / 20 μ s \pm 20 %
Impulse output current, adjustable via charging voltage	2 - 40 kA \pm 5 %
Output pulse polarity, switchable	POS/NEG/ALT
HV output: high current terminals on the top of the equipment	
Current viewing resistor, built-in	0.5 m Ω , 10 MHz
Max. pulse repetition rate	1/60 sec
Dimensions: 19"-cabinet	W * H * D
Weight	ca. 553*1600*600 mm ³ 95 kg

Technical data subject to change

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Surge Current Generator

PG 12-5000

Peak value of charging voltage, adjustable,
Max. stored energy
Charging time for max. charging voltage

0 - 12 500 V, $\pm 2\%$
5000 Ws
< 60 sec

Waveform of impulse output current acc. to IEC 60-2
Impulse output current, adjustable via charging voltage
Output pulse polarity, switchable
HV output: high current terminals on the top of the equipment
Current viewing resistor, built-in
Max. pulse repetition rate

8 / 20 $\mu\text{s} \pm 20\%$
2 - 50 kA $\pm 5\%$
POS/NEG/ALT
0.5 m Ω , 10 MHz
1/60 sec

Dimensions: 19"-cabinet W * H * D
Weight

ca. 553*1600*600 mm³
95 kg

Surge Current Generator

PG 15-5600

Peak value of charging voltage, adjustable,
Max. stored energy
Charging time for max. charging voltage

0 - 15 kV, $\pm 2\%$
5600 Ws
< 90 sec

Waveform of impulse output current
Impulse output current, adjustable via charging voltage
Output pulse polarity, switchable
Current viewing resistor, built-in
Max. pulse repetition rate

8 / 20 $\mu\text{s} \pm 20\%$
2 - 50 kA $\pm 5\%$
POS/NEG/ALT
0.5 m Ω , 10 MHz
1/100 sec

Dimensions: 19"-cabinet W * H * D
Weight

ca. 553*1600*600 mm³
165 kg

Surge Current Generator

PG 15-6600

Peak value of charging voltage, adjustable,
Max. stored energy
Charging time for max. charging voltage

0 - 15 kV, $\pm 2\%$
6600 Ws
< 90 sec

Waveform of impulse output current acc. to IEC 60-2
Impulse output current, adjustable via charging voltage
Output pulse polarity, switchable
HV output: high current terminals on the top of the equipment
Current viewing resistor, built-in
Max. pulse repetition rate

8 / 20 $\mu\text{s} \pm 20\%$
2 - 70 kA $\pm 5\%$
POS/NEG/ALT
0.5 m Ω , 10 MHz
1/120 sec

Dimensions: 19"-cabinet W * H * D
Weight

ca. 553*1200*600 mm³
165 kg

Technical data subject to change

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Surge Current Generator

PG 20-14000

Peak value of charging voltage, adjustable,
 Max. stored energy
 Charging time for max. charging voltage
 Waveform of impulse output current
 Impulse output current, adjustable via charging voltage
 Output pulse polarity, switchable
 Current viewing resistor, built-in
 Max. pulse repetition rate
 Dimensions: 19"-cabinet W * H * D
 Weight

0 - 20 kV, $\pm 2\%$
 14000 Ws
 < 120 sec
 8 / 20 $\mu\text{s} \pm 20\%$
2 - 100 kA $\pm 10\%$
 POS/NEG
 0.25 m Ω , 10 MHz
 1/120 sec
 ca. 553*2000*600 mm³
 265 kg



Surge Current Generator

PG 30-12 500

Charging voltage adjustable
Max. stored energy
Charging time for max. charging voltage

0.2 - 30 kV $\pm 2\%$
12 500 Ws
< 120 sec

Waveform of impulse output current acc. to IEC 60 - 2
Impulse output current, adjustable via charging voltage
Output pulse polarity, fixed
Surge current output terminal
Current viewing resistor, built-in
Max. pulse repetition rate

8/20 μ s $\pm 20\%$
1 - 60 kA $\pm 10\%$
NEG
high current plug
0.25 m Ω , 10 MHz
1/120 sec

Dimensions: : rack

ca. 1000*1100*600 mm³



Technical data subject to change

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