HIGH-VOLTAGE IMPULSE GENERATOR
PG 6 - 364

Lightning surge:
1.2 / 50 µs

Switching surge:
10 / 700 µs

0.5 / 700 µs
1.0 / 700 µs
0.5 / 1000 µs
1.0 / 1000 µs

CCITT, ITU-T, IEC, VDE

The high-voltage impulse generator PG 6-364 generates standard impulse voltages with waveforms 1.2/50 µs and 10/700 µs. Output voltage is adjustable between 0.2 kV and 6 kV. The polarity of the output voltage is selectable. Positive, negative or alternating polarity of the output voltage can be preselected.

The generator is designed for dielectric testing of components and systems as well as testing of the electromagnetic compatibility of electronic systems and devices acc. to CCITT K17/K20/K22, ITU-T/K44, IEC 61000-4-5, VDE 0847.

The PG 6-364 excels by its compact design, simple handling and precise reproducibility of test impulses. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing.

PG 10-504 features a microprocessor controlled user interface and a 5” touch screen unit for ease of use. The microprocessor allows the user to execute either standard test routines or a “user defined ” test sequence. The test parameters and even the settings of an external CDN, which are shown on the built in display, are easily adjusted by means of touch screen.
A standard USB port provides the ability to print a summary of the test parameters to a USB stick.

Moreover, all generator functions may be computer controlled. The software program PG-REMOTE allows full remote control of the test generator via fiber optic Ethernet interface as well as documentation and evaluation of test results, accordingly to the IEC 17025. To record definite impulses, it is equipped with an Impulse Recording Function (IRF)

TECHNICAL SPECIFICATIONS	PG 6-364
Mainframe	
Microprocessor controlled touch panel	5”, 800X480, 24 bit
Optical Ethernet Interface for remote control of the generator	optional
Interface for saving reports	USB
External Trigger input	switch
External Trigger output	10 V an 1 kΩ
Connector for external safety interlock loop	24 V =
External red and green warning lamps acc. to VDE 0104	230 V, 60W
Mains power	230 V, 50/60 Hz
Dimensions desk top case W * H * D	453*320*520 mm^3
Weight	35 kg
Pulse forming networks	
Charging voltage, adjustable	0 - 6.3 kV
Polarity of the output pulse voltage selectable	pos/neg/alt
Charging time	< 15 sec
Impulse voltage outputs of the rear panel	coaxial
Current limiting resistors	0 Ω / 25 Ω / 25 Ω
Impulse voltage divider integrated	ratio = 1000:1 ± 2%
Impulse voltage 1.2/50µs	acc. to CCITT / ITU-T K22, IEC
Energy storage capacitor	1.0 µF / 6.3 kV
Max. stored energy	20 J
Discharging resistor	75 Ω
Series resistor	13 Ω
Load capacitor	0.03 µF
Wave form front time/tail time	1.2 / 50 µs ± 20%
Impulse voltage 10/700µs	acc. to CCITT / ITU-T K17/K20, IEC
Energy storage capacitor	20 µF / 6.3 kV
Max. stored energy	400 J
Discharging resistor	50 Ω
Series resistor	15 Ω
Load capacitance	0.2 µF
Wave form front time/tail time	10 / 700 µs ± 20%
Option: PG Remote	
The software test package, running under Microsoft Windows, for the external control of the device includes 5 m long fibre optic cable and Ethernet PC Interface	
Option	
One additional wave form, alternative	built-in
Impulse voltage 0.5/700 µs acc. to CNET	PFN 0.5/700
Discharging resistor	50 Ω
Series resistor	15 Ω
Load capacitance	0.007 µF
Wave form front time/tail time	0.5 / 700 µs ± 30/20%
Impulse voltage 1/700 µs	PFN 1/700
Discharging resistor	50 Ω
Series resistor	15 Ω
Load capacitance	0.015 µF
Wave form front time/tail time	1 / 700 µs ± 30/20%

Impulse voltage 0.5/1000 µs acc. to CNET	PFN 0.5/1000
Discharging resistor	75 Ω
Series resistor	15 Ω
Load capacitance	0.007 µF
Wave form front time/tail time	0.5 / 1000 µs ± 30/20%
Impulse voltage 1/1000 µs	PFN 1/1000
Discharging resistor	75 Ω
Series resistor	15 Ω
Load capacitance	0.015 µF
Wave form front time/tail time	1 / 1000 µs ± 30/20%
Option	
Impulse voltage 100/700 µs acc. to CCITT/ITU-T K17	PFN 100/700
Impulse output voltage, adjustable	0.2-5.0 kV ± 10%
Discharging resistor	50 Ω
Series resistor	15 Ω
Load capacitance	2.0 µF
Wave form front time/tail time	100 / 700 µs ± 30/20%
Additional accessories	
Coupling network 4 * 100 Ω	KN 100-4
Test cabinet	PA 503 / PA505