PG 6-364

High voltage pulse generator

Lightning Surge	**1.2 / 50 µs**	
Switching Surge	**10 / 700 µs**	
	0.5 / 700 µs	**(optional)**
	1.0 / 700 µs	**(optional)**
	0.5 / 1000 µs	**(optional)**
	1.0 / 1000 µs	**(optional)**
	100 / 700 µs	**(optional)**

According to
CCITT-K17/K20/K22
ITU-T/K44
IEC 61000-4-5
VDE 0847

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.

The generator excels by its compact design, simple handling and precise reproducibility of test impulses. The generator uses maintenance-free semiconductor switches. It features a microprocessor controlled user interface and a 7” touch screen unit for ease of use. The microprocessor allows the user to execute either standard test routines or a “user defined” test sequence. A standard USB port provides the ability to print a summary of the test parameters as well as the results to an 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)

External coupling networks designed for testing telecom equipment with up to 8 ports are available.

Options	**PG6-364**
PC software for remote control	**PG-REMOTE**
PG Remote software test package, running under Microsoft Windows, for the external control of the device	
(XP, WIN7, WIN10) includes 5 m long fibre optic cable and Ethernet PC Interface	
External coupling/ decoupling network	**CDN**
4 wire/ 8 wire; 5kV acc. IEC 61000-4-5	CDN 504/ CDN 508
4 * 100 Ω	KN100-4
PROTECTIVE COVER ON THE EQUIPMENT TOP	**PA**
With safety interlock switch, connected to the safety interlock loop, red and green warning lamps installed acc. VDE 0104	
Type PA 503, Dimensions W * H * D	400 * 140 * 300 mm³
Type PA 505, Dimensions W * H * D	400 * 250 * 400 mm³
Version without protective cover	
ADDITIONAL WAVEFORMS, SEE DATASHEET	**PFN xx**
0,5/700 µs	
1,0/700 µs	
0,5/1000 µs	
1,0/1000 µs	
100/700 µs	

TECHNICAL SPECIFICATIONS		PG 6-364	
Mainframe			
Microprocessor controlled touch panel		7”, capacitive	
Optical Ethernet Interface for remote control of the generator		optional	
Interface for saving reports		USB	
External Trigger input / output		Switch / 10 V	
Connector for external safety interlock loop		24 V =	
and external red and green warning lamps acc. to VDE 0104		24 V=, 40 mA	
Mains power		230V, 50/60 Hz	
Dimensions: desk top case W * H * D		450 * 330 * 500 mm^3	
Weight		35kg	
High- Voltage Pulse Generator:			
Impulse output voltage, adjustable ± 10%		0.2 – 6.3 kV	
Output polarity, selectable		pos / neg /alt	
Charging time		< 15 sec	
Impulse voltage outputs of the rear panel		coaxial	
Resistor in series to the output	R_S	0 Ω / 25 Ω / 25 Ω	
Impulse voltage divider, built-in		v= 1000:1 ± 2 %, 50 W	
Trigger: a) manual		push button	
b) external Trigger input		switch	
c) internal		automatic	
Waveform of impulse output voltage		Selectable	
Surge waveform, acc. CCITT / ITU-T K22, IEC		1.2/50µs	10/700µs
Energy storage capacitor	C_S	1.0 µF	20 µF
Max. stored energy	W_E	20 J	400 J
Discharging resistor	R_E	76 Ω	50 Ω
Damping Resistor	R_D	13 Ω	15 Ω
Load capacitance	C_B	0.03 µF	0.2 µF
Optional built-in Waveforms			
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	
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	
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	

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
Impulse voltage **100/700 µs** acc. to CCITT/ITU-T K17	PFN 100/700
Impulse output voltage, adjustable	0.2-5.0 kV
Discharging resistor	50 Ω
Series resistor	15 Ω
Load capacitance	2.0 µF
Wave form front time/tail time	100 / 700 µs
Accessories	
Mains cable, key, operation instructions	