High-Voltage Pulse Generator

PG 4-641

HV - Impulse generator PG 4-641 creates standard voltage and current pulses with wave form 10 / 160 µs. Output voltage is adjustable up to 3600 V, the maximum short circuit current amplitude is 480 A peak. Positive or negative polarity of output voltage can be selected. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing. The short circuit current wave can be monitored by use of the built-in shunt.

The generator features a microprocessor controlled user interface and display for ease of use. The microprocessor allows the user to execute either 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.

The generator excels by its compact design, simple handling and precise reproducibility of test impulses.

Technical specification: **PG 4-641**

Mainframe:

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 kΩ
External Trigger output	10 V at 1 kΩ
Diagnostic input for monitoring of the test device	four 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, 60 W
Mains power	230 V, 50/60 Hz
Dimensions: 19" desk top case W * H * D	450*410*520 mm^3
Weight	28 kg

Generator section:

Peak value of impulse output voltage, adjustable,		0 - 3600 V, ± 10%
Waveform of impulse output voltage:	Front time	10 µs, + 0 / -5 µs
	Duration	160 µs, +160 / -0 µs
Peak value of impulse short circuit output current		480 A, ± 10%
Waveform of short circuit current:	Front time	10 µs, + 0 / -5 µs
	Duration	160 µs, ± 32 µs
Max. stored energy		600 Wsec
Energy storage capacitor	C_S	80 µF
Output polarity, selectable		pos./neg.
Charging time		20 sec
Trigger: a) manual		push button
b) external Trigger input		10 V / 1 kΩ
c) internal, automatic		test procedure
Impulse voltage divider, built-in		ratio 1000:1 ± 2%
Impulse current shunt, built-in		5 mΩ ± 2%