High-Voltage Pulse Generator
PG 4-641

HV - Impulse generator PG 4-641 creates standard voltage and current pulses with waveform 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
Parallel printer interface for on-line documentation
Optical-interface for remote control of the generator

External Trigger input
External Trigger output
Diagnostic input for monitoring of the test device

Connector for external safety interlock loop
and external red and green warning lamps acc. to VDE 0104
Mains power

Dimensions: 19” desk top case W * H * D
Weight

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%