

## PG 01- 2000 Pulse Generator



- **Wave form**            **0,1 / 2000  $\mu$ s**
- **Test voltage**         **4 kV – 10 kV**

Refer to the forum “network technology / network operations in the German VDE” (FNN).  
FNN “Guide for evaluating the reliability of electricity meters and measuring stability and additional facilities”

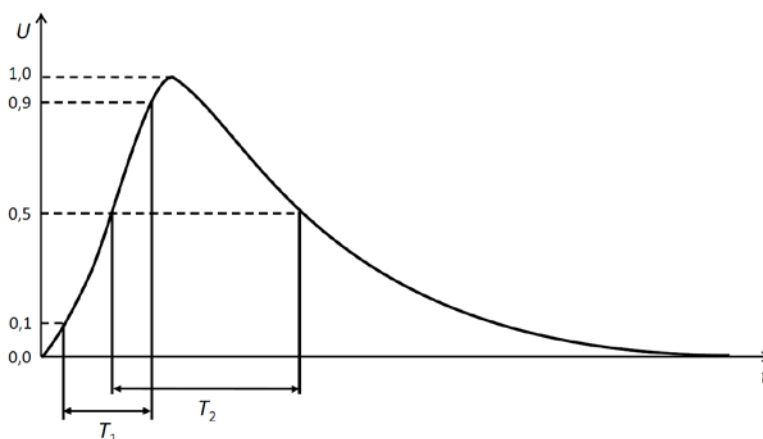
The test generator PG 01 - 2000 is suitable for insulation testing and testing the surge voltage resistance of electrical and electronic electricity meters. At idle, the generator generates a standard surge voltage with the waveform 0.1 / 2000  $\mu$ s. The built-in divider 1000: 1 makes it easy to check the pulse voltage.

The forum "Network Technology / Network Operation in the VDE (FNN)" has dealt extensively with the topic of the reliability of electricity meters and defined corresponding test procedures.

The requirements for test generator PG 01-2000 are described in chapter 3.7.1 of the FNN "Guidelines for evaluating the reliability and measurement stability of electricity meters and ancillary equipment".

An integrated memory function allows up to 25 settings to be recalled directly.

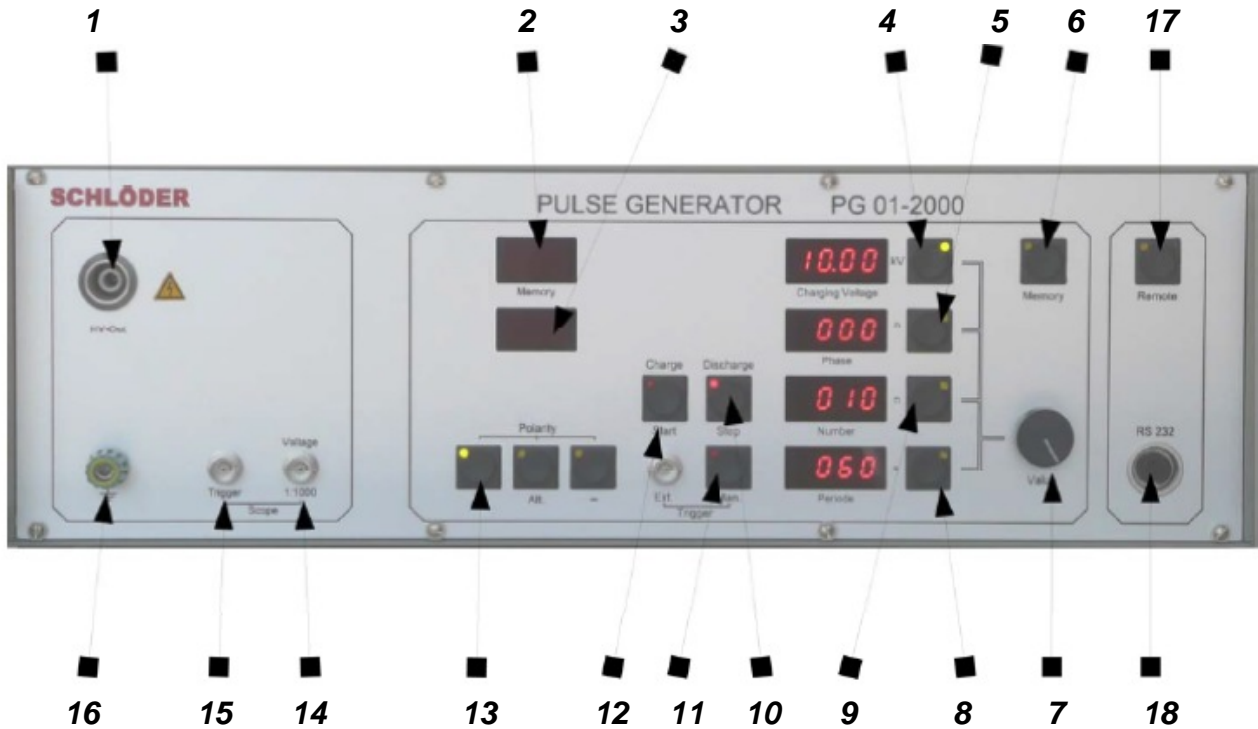
### Pulse definition



$T_1$  = Rise time    0,1  $\mu$ s  
 $T_2$  = Pulse width 2000  $\mu$ s

Technical data may be changed without notice

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## Technical Data

<p>[4] Nominal voltage      4,0 - 10,0 kV</p> <p>[4a] Pulse form          Rise time 0,1 <math>\mu</math>s Pulse width 2000 <math>\mu</math>s Load <math>\geq</math> 20 MOhm</p> <p>[4b] Pulse form          under load 50 ohms Voltage = 50% Uidle Pulse width 2.773 <math>\mu</math>s</p> <p>[13] Polarity              Positive, negative, alternating</p> <ul style="list-style-type: none"> <li>• Energy of the source      1 Joule – at 7 kV</li> <li>• Source impedance        50 Ohm</li> <li>• Charge time                <math>\leq</math> 5 seconds</li> <li>• HV- Output                [1] Reference to earth</li> <li>• Functions                  [7] Adjustment by shaft encoder:</li> <ul style="list-style-type: none"> <li>• [2] Space number</li> <li>• [4] Test voltage</li> <li>• [5] Phase angle</li> <li>• [9] Number of pulses</li> <li>• [8] Repetition frequency</li> </ul> </ul> <p>[17] Release remote control via RS 232</p> <p>[18] RS 232 – remote</p> <p>[11] Trigger                Manual or external</p> <p>[5] Phase angle for        <math>\varphi = 0 - 359^\circ</math>, step <math>1^\circ</math> main synchronization</p> <p>[9] Number of pulses      1 - 999</p> <p>[8] Repetition frequency   5 - 999 sec</p>	<p>[10] Discharge            Discharge of the storage capacitor / STOP</p> <p>[12] Charge                Charge of the storage capacitor</p> <p>[6] Memory function      Select test level with [7], max. 25 memory set up's possible. <b>&gt;rcl&lt; &gt;Sto&lt; &gt;clr&lt;</b></p> <p>[2] Display Memory        1 – 25</p> <p>[3] Display Memory        Space number:</p> <p>[14] BNC-jack for          voltage measurement 1V = 1 kV test voltage</p> <p>[15] BNC-jack for          scope trigger (TTL - level)</p> <p>[16] Ground connection    Ground jack at front and rear panel</p> <ul style="list-style-type: none"> <li>• Rear side                Short-circuit plug-in / jacks for external security circuit.</li> <li>• Electronic input        230 V / 50 Hz / 2,5 A</li> <li>• Dimension                19" - housing, 3 HE</li> <li>• Weightapp.                10 kg</li> <li>• Calibration interval:    2 years - manufacturer recommendation</li> </ul>
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