

Data Sheet 3.32/3

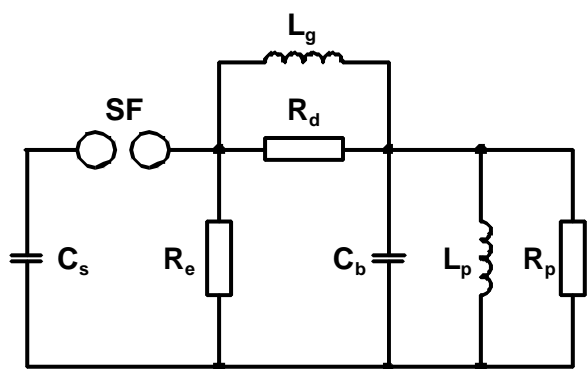
Glaninger Circuit

Application

The Glaninger Circuit is an optional extension for impulse voltage test generators using Marx multistage generation. It consists of the inductance (L_g), the resistor (R_p) and an isolated resistor mounting rack (Fig. 1). The resistor R_p has to be adapted to the test object inductance.

The inductive load range of an impulse voltage test generator is significantly extended towards lower inductive load values by applying the Glaninger Circuit. Thus it allows the impulse voltage test of high rated medium-voltage windings according to IEC Standard 60076 with normal impulse voltage test generators. The standard impulse voltage generation circuit consists of the following components:

- Impulse capacitance C_s
- Tail resistor R_e
- Front resistor R_d
- Load capacitance C_b (capacitive impulse voltage measuring divider, test object capacitance etc.)



- C_s Impulse capacitance
- C_b Load capacitance (capacitance of measuring divider, control divider of chopping gap, test object, test circuit capacitance to earth)
- R_e Tail resistor
- R_d Front resistor
- R_p Parallel resistor
- L_g Glaninger inductance
- L_p Test object inductance
- SF Switching spark gap

Figure 1: Circuit diagram of Glaninger circuit

Table 1: Technical data

Inductance (L_g)	100 μ H, 100 kV (2 pieces)
Resistor (R_p)	25 Ω
Resistor (R_p)	50 Ω
Resistor (R_p)	100 Ω
Resistor (R_p)	200 Ω
Resistor (R_p)	400 Ω