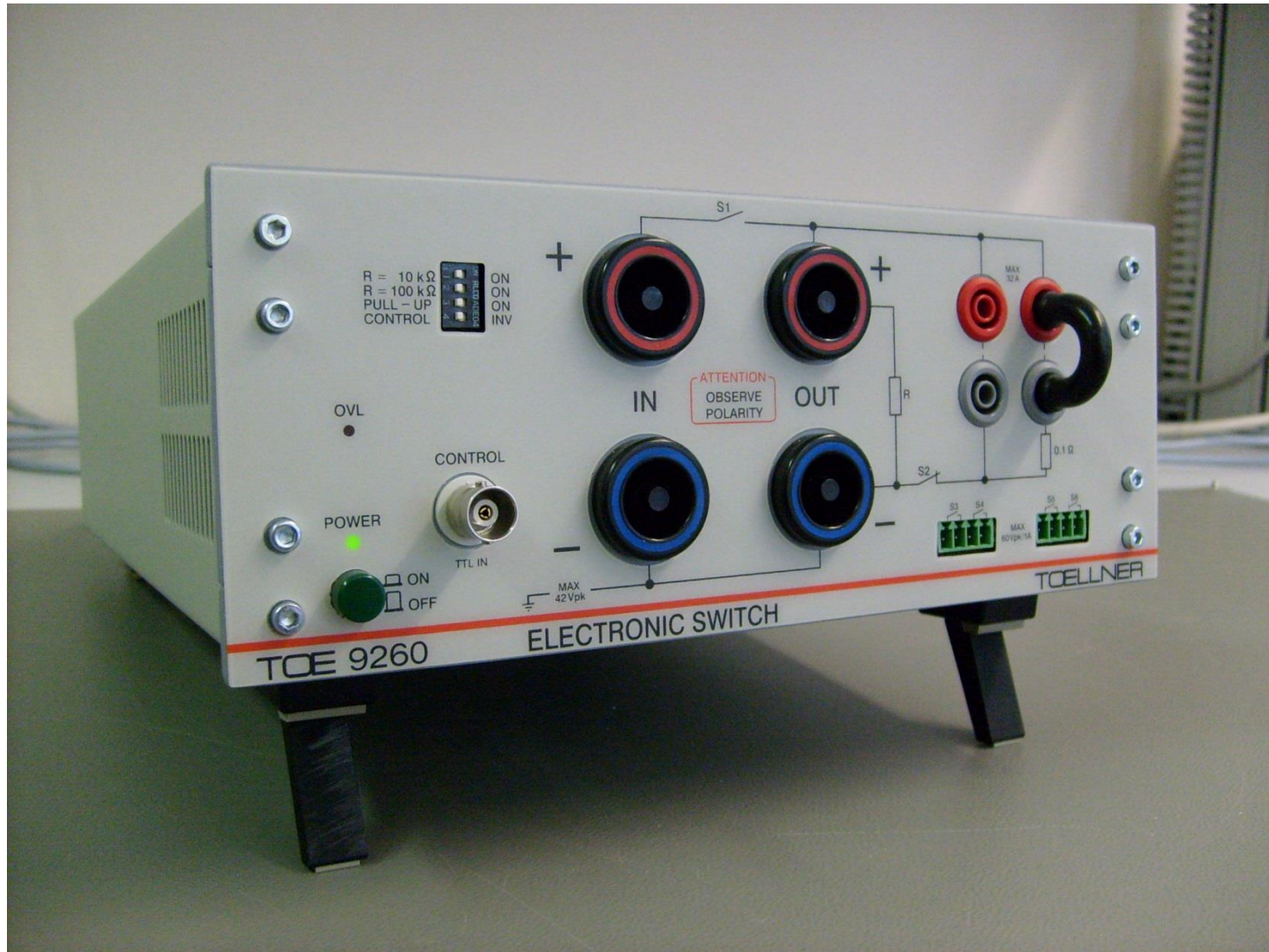


TOE 9260, Electronic Switch



TOE 9260, Electronic Switch

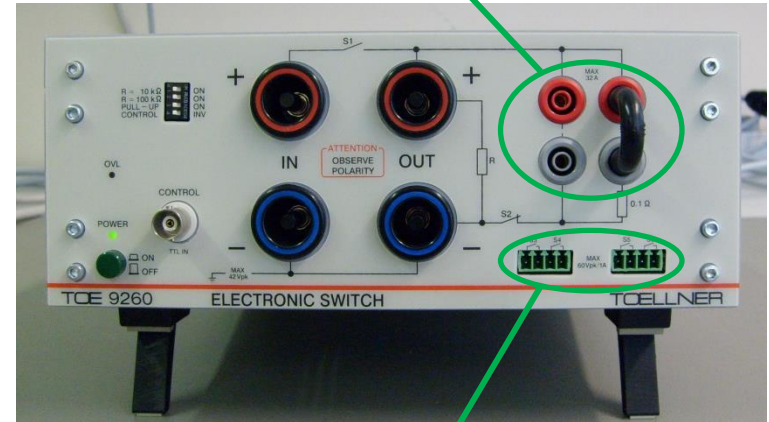
Features

- Electronic Switch for short interruptions / micro interruptions
- Applicable both for supply line and signal line interruptions
- Used for tests of automotive components according to LV 124 standard / VW 80 000 and comparable:
 - LV124 E-10: Short interruptions on supply lines
 - LV124 E-13: Short interruptions on signal lines

TOE 9260, Electronic Switch

Technical Data

- Rise time, fall time $< 1 \mu\text{s}$
- Rated voltage 60 V
- Rated current 50 A resp. 100 A
- Branch path for discharge of load available
- 4 additional bidirectional switches for signal lines of up to 1 A current
- Short circuit / over current and over temperature protection



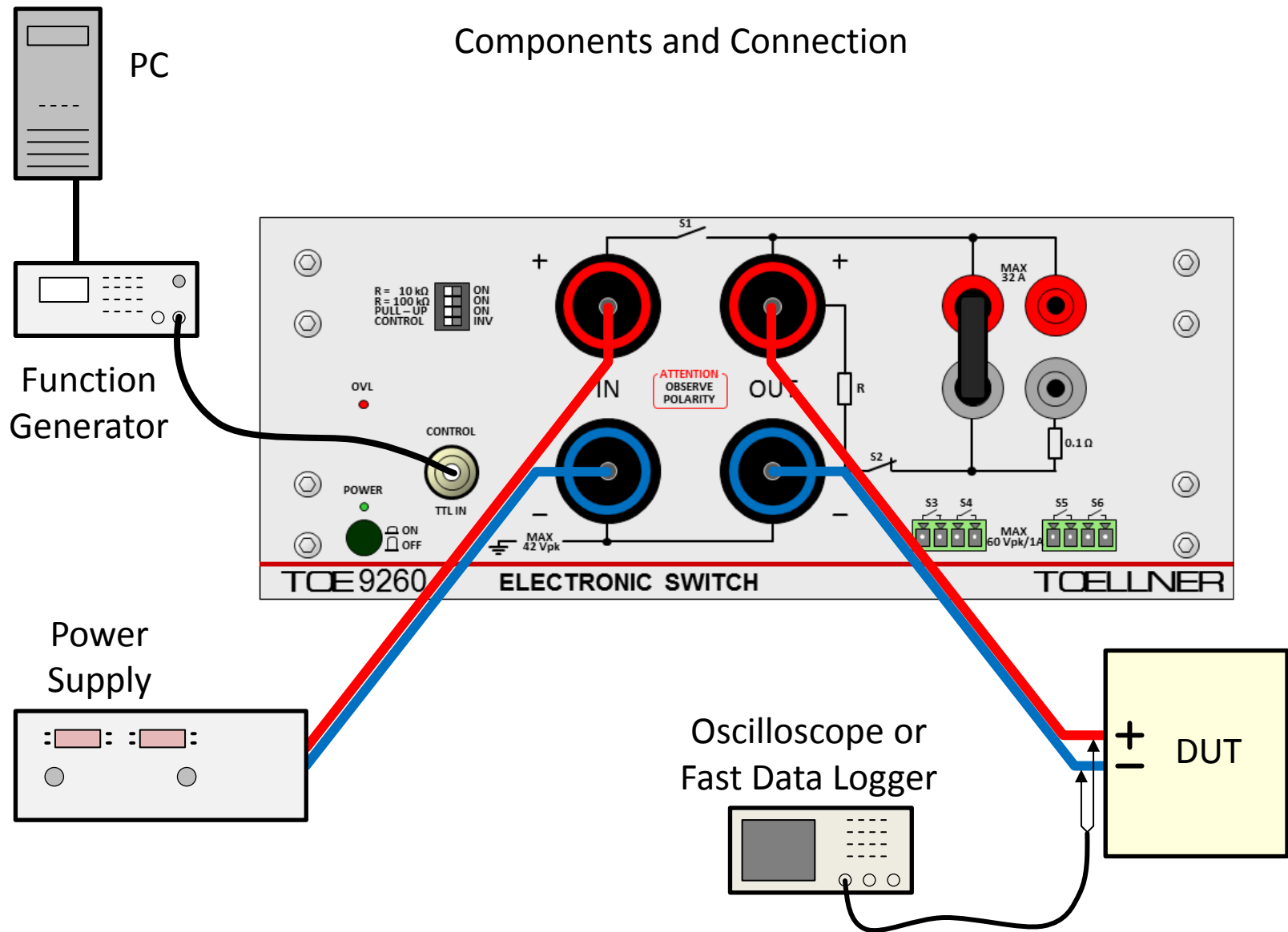
TOE 9260, Electronic Switch

Needed Equipment

- Power supply according to requirements of DUT
 - Timing control of the switching states:
 - Function generator
 - PC
 - Software
- } **mandatory for LV 124, E-10**
otherwise optional
- Oscilloscope resp. fast data logger

TOE 9260, Electronic Switch

Components and Connection

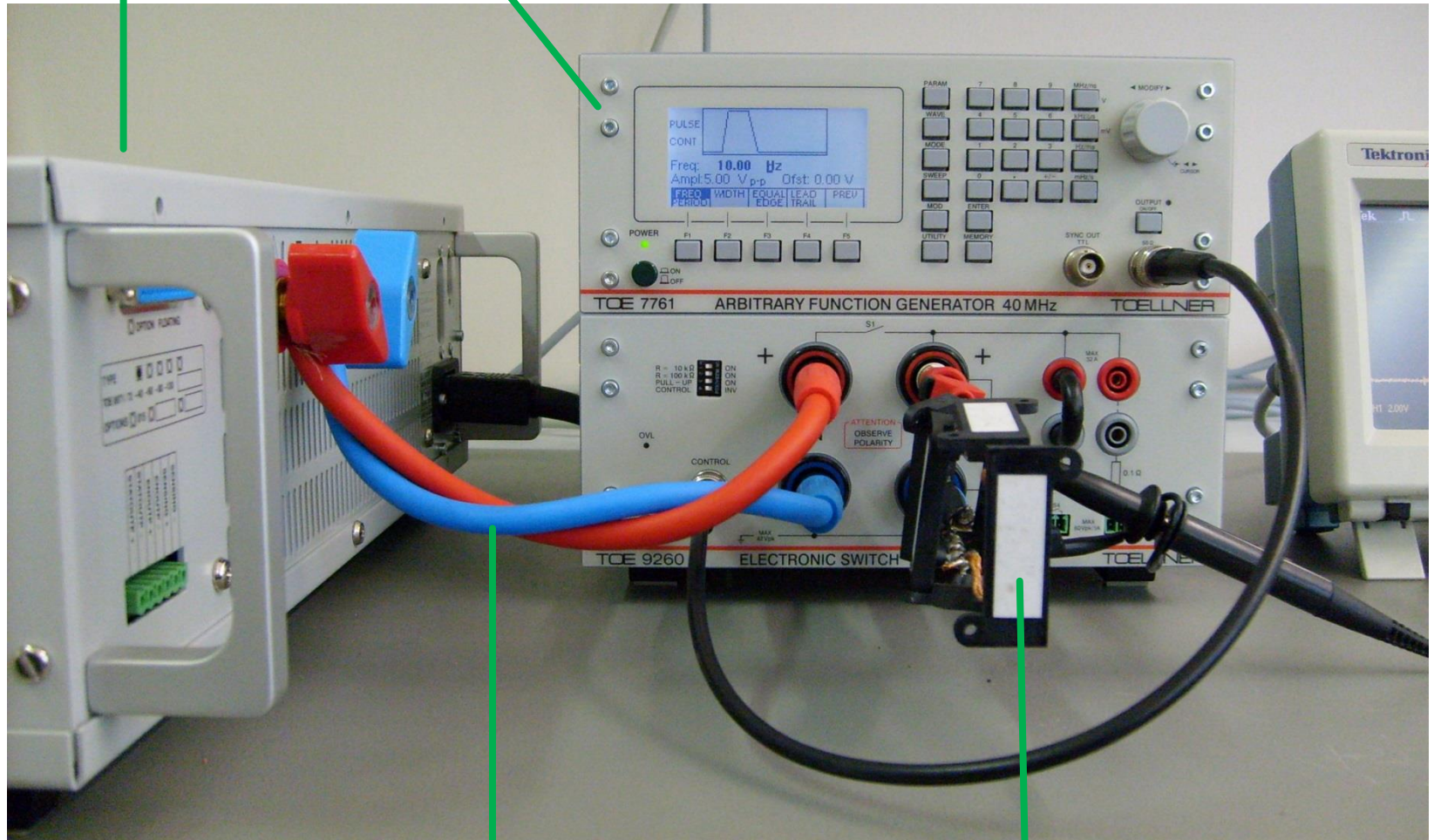


TOE 9260, Electronic Switch

Real Assembly

Power Supply

Function Generator



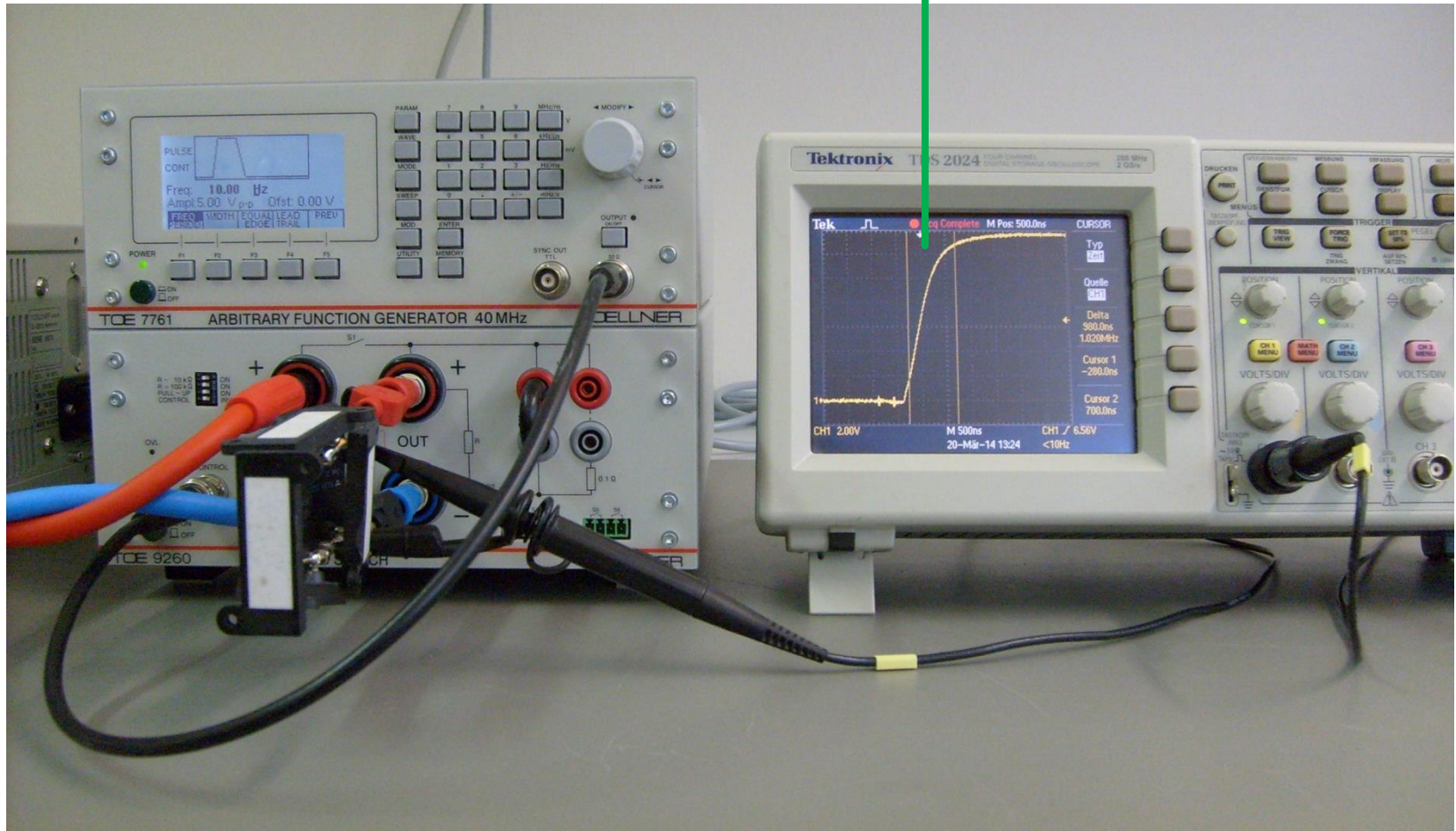
Short, Low Inductance Wiring

Test Load

TOE 9260, Electronic Switch

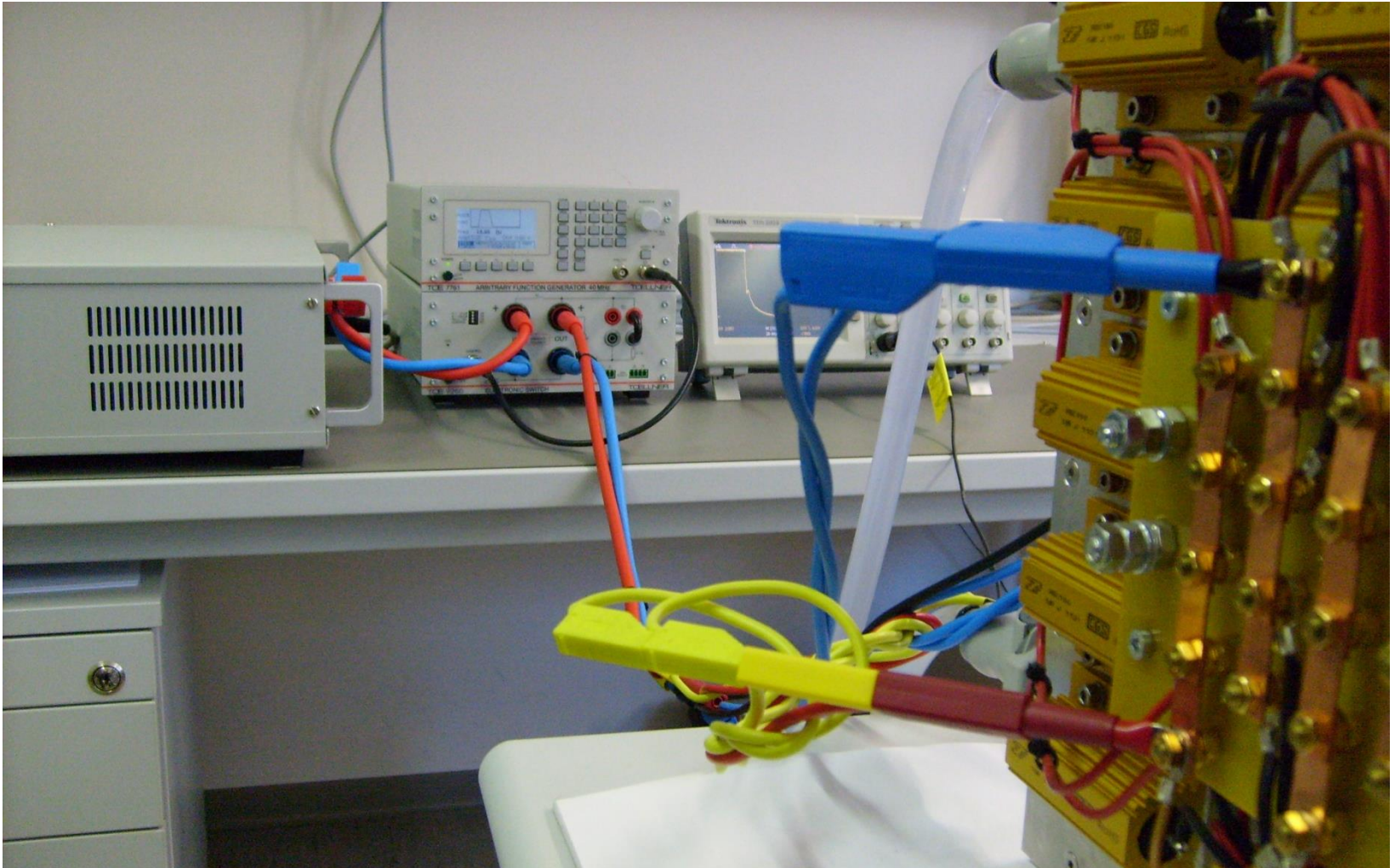
Measurement

$tr < 1\mu s$



TOE 9260, Electronic Switch

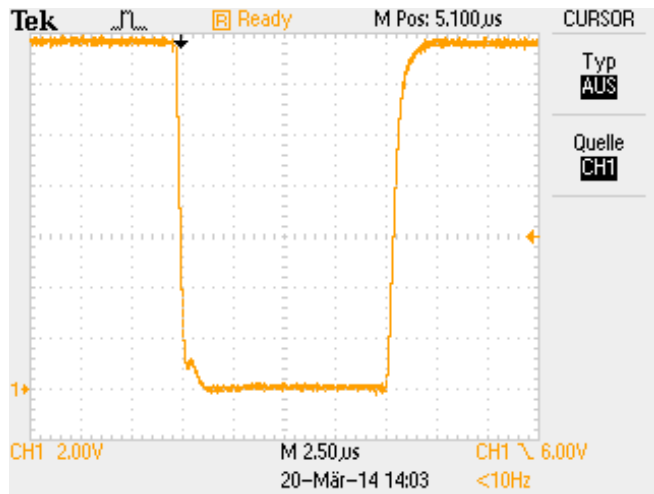
Connection to real load



TOE 9260, Electronic Switch

Measurement Results

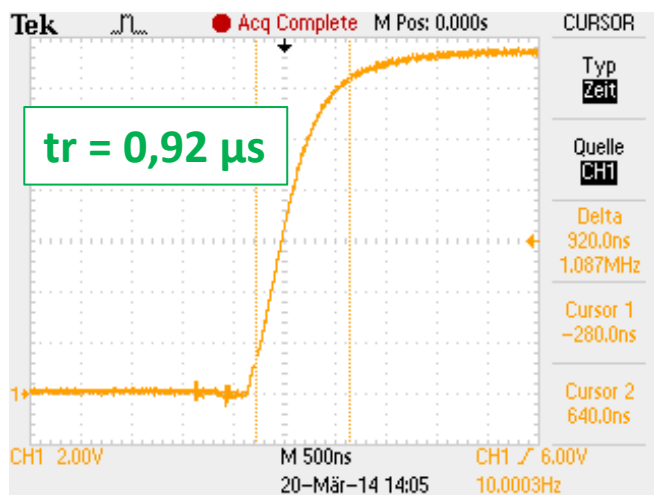
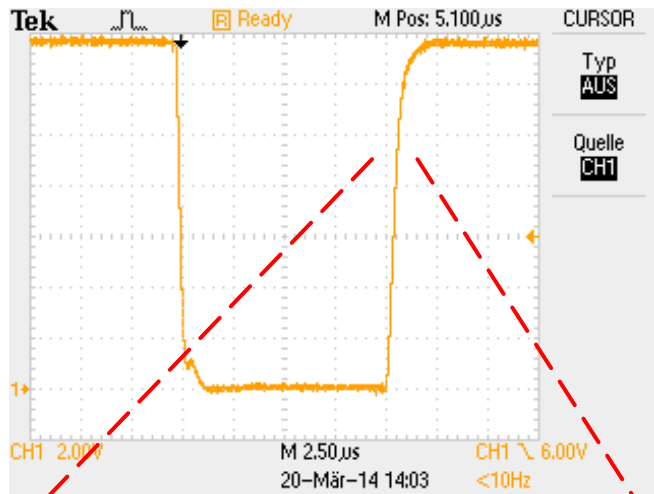
Test Load (= Reference Load)
thick-film resistor 1 Ohm, no cable



TOE 9260, Electronic Switch

Measurement Results

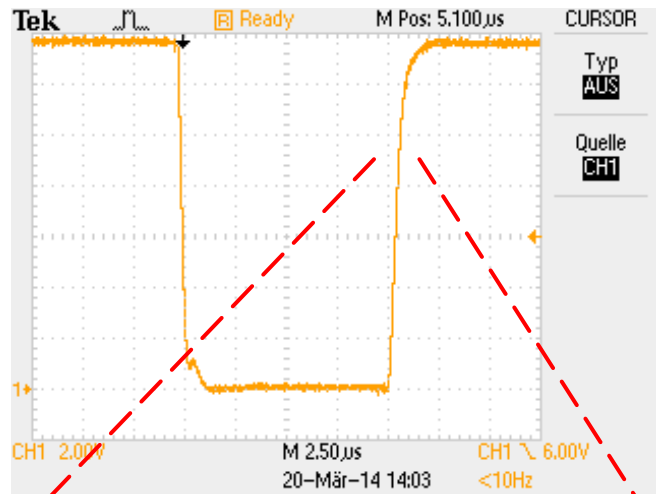
Test Load (= Reference Load)
thick-film resistor 1 Ohm, no cable



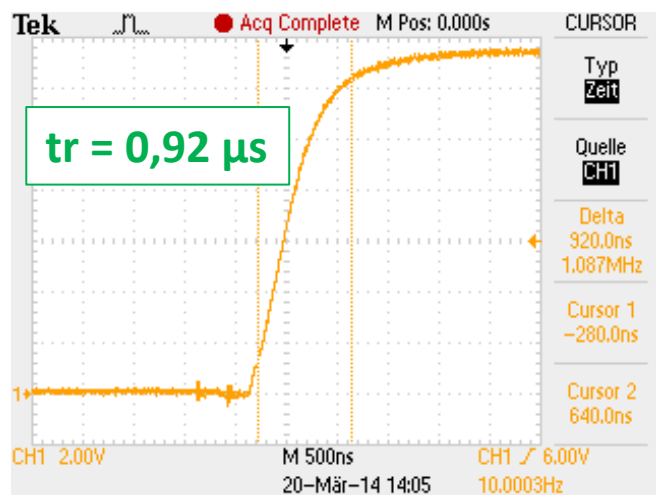
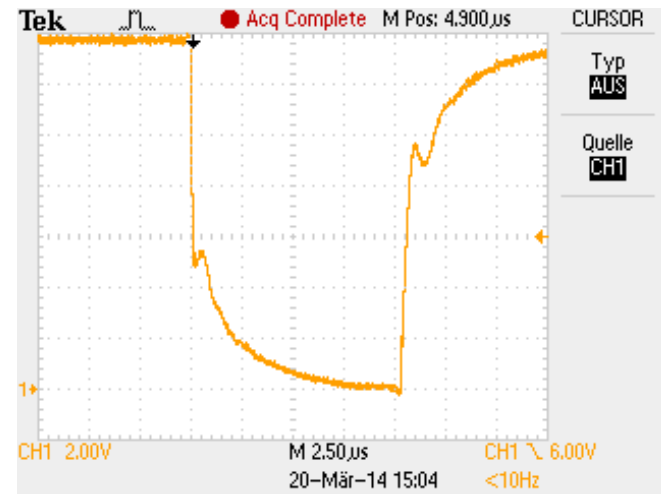
TOE 9260, Electronic Switch

Measurement Results

Test Load (= Reference Load)
thick-film resistor 1 Ohm, no cable



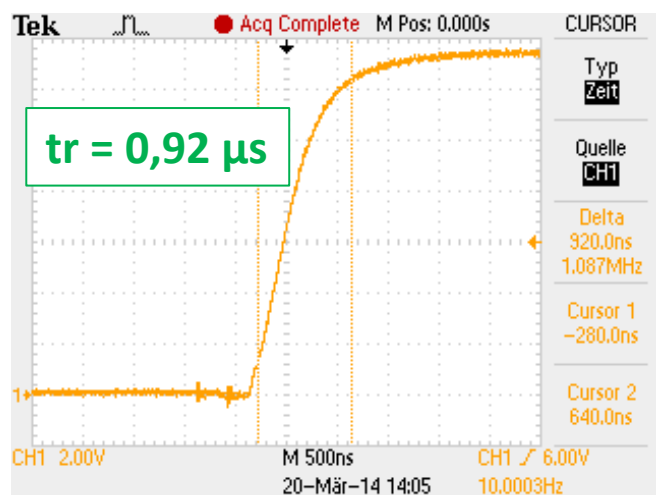
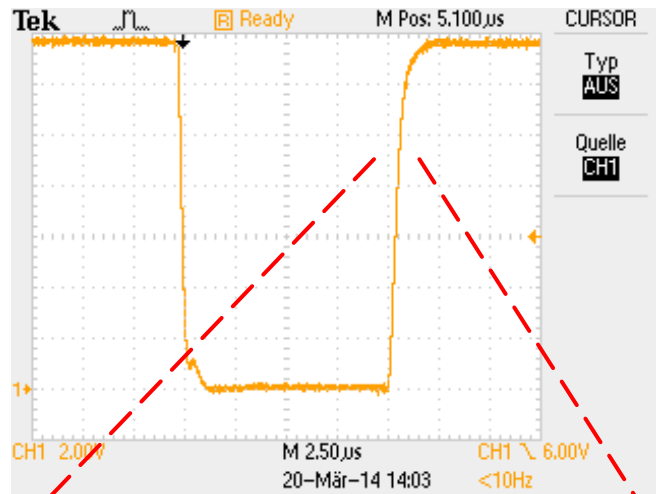
Real Load
wire resistor 1 Ohm with 1m cable



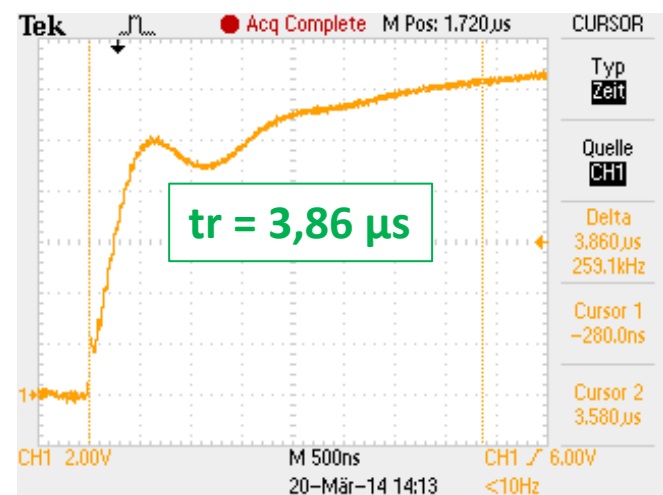
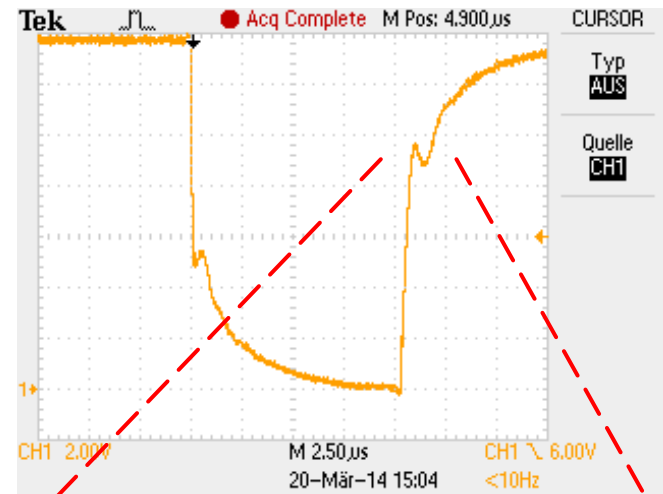
TOE 9260, Electronic Switch

Measurement Results

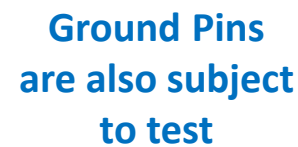
Test Load (= Reference Load)
thick-film resistor 1 Ohm, no cable



Real Load
wire resistor 1 Ohm with 1m cable



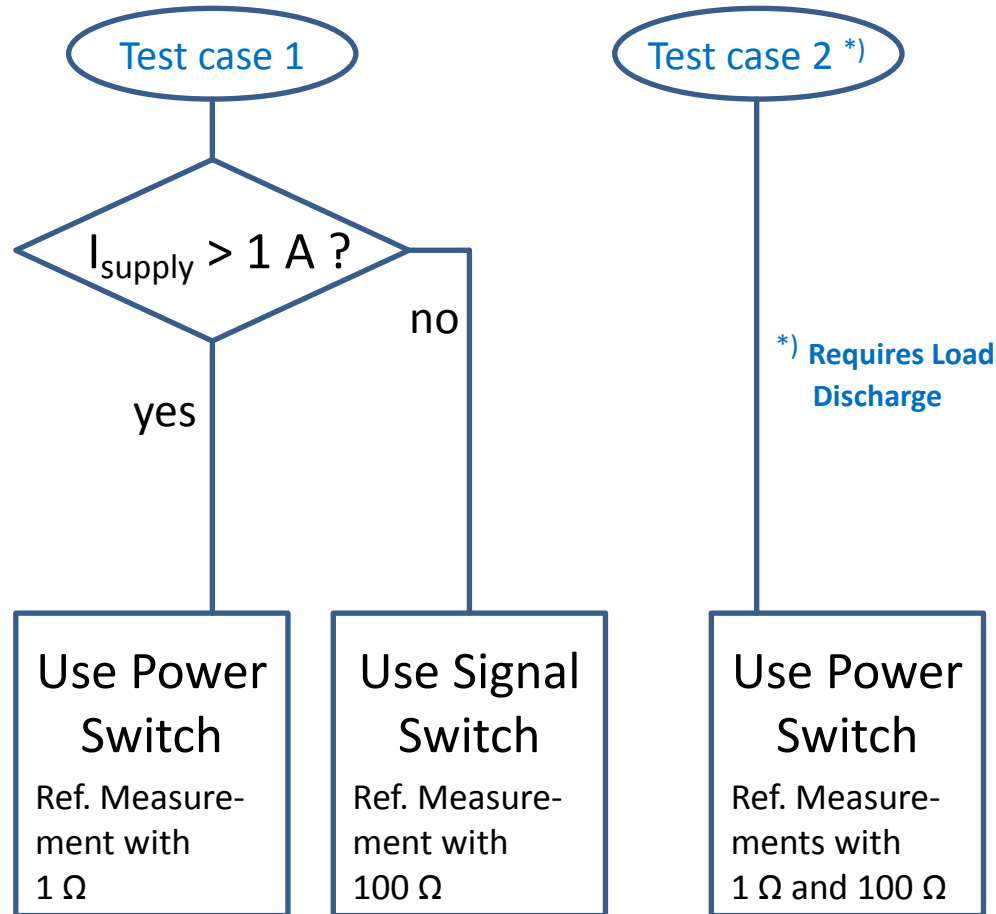
Use of the signal line switches



TOE 9260, Electronic Switch

Choosing the right switch for LV 124 testing

LV124 E-10: Short interruptions on supply lines



LV124 E-13: Short interruptions on signal lines

