

## Automotive - High Speed - Power

Electronic Switch for micro interruptions



# MICRO INTERRUPTIONS

Micro-Switch **TOE 9261**

# Micro-Switch TOE 9261

## Electronic switch for micro interruptions in supply and ground lines up to 100 A

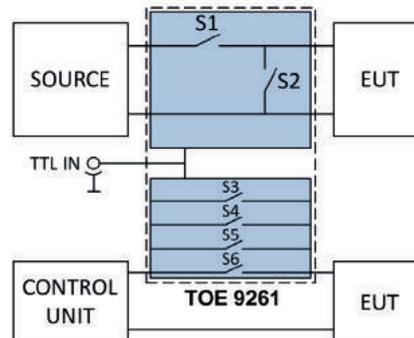
The Micro-Switch TOE 9261 is the first choice for generating short interruptions in supply voltages and therefore ideally suitable for testing vehicle electrics according to standards.

Depending on the model, currents up to 100 A can be switched at a rated voltage of up to 60 V.

### Special features

- Input voltage max. 60 V
- Output current TOE 9261-50 max. 50 A
- Output current TOE 9261-100 max. 100 A
- Rise / fall time < 500 ns
- Short-circuit-proof
- Temperature monitored
- Switchable discharge of load circuit
- Interruption in supply and ground lines up to 50 A or 100 A
- Switchable buffering of input circuit
- 4 signal line switches
- Control with any signal generators (TTL level)

While testing vehicle electric power systems according to standards, it is necessary to momentarily interrupt supply voltages. Using the Micro-Switch TOE 9261, switching operations between < 10  $\mu$ s and nearly unlimited duration are possible without problem.



Any voltage source of up to 60 V with appropriate current rating provides the supply voltage.

By triggering via an external signal source, the current flow is interrupted with switch S1. Discharging the load circuit is possible during the interruption of the load current by using another internal switch (S2).

In addition, a configuration can be selected for interrupting the negative return line of the load (ground interruptions).

Four signal line switches (S3–S6) additionally enable precise switching and interruption of signal and control lines in any current flow direction. Control of these switches is synchronous with S1.

### Covered test standards

12 V vehicle electrics
BMW GS 95024-2-1
LV 124
Mercedes-Benz MBN 10615
Mercedes-Benz MBN LV 124-1
VW 80000-1
48 V vehicle electrics
BMW GS 95026
LV 148
VDA 320
VW 82148

### Technical specifications

	TOE 9261-50	TOE 9261-100
Power switch		
Input voltage	max. 60 V	max. 60 V
Output current	max. 50 A	max. 100 A
Switch-on peak current	max. 300 A	max. 300 A
Rise time / fall time		
$t_r / t_f @ 1 \Omega - 1 \text{ k}\Omega$	< 0.5 $\mu$ s / < 0.5 $\mu$ s	< 0.5 $\mu$ s / < 0.5 $\mu$ s
Signal line switches		
Input voltage	max. $\pm 60$ V	max. $\pm 60$ V
Output current	max. $\pm 2$ A	max. $\pm 2$ A
Rise time / fall time		
$t_r / t_f @ 1 \Omega (V = 2 \text{ V})$	< 2.5 $\mu$ s / < 1.5 $\mu$ s	< 2.5 $\mu$ s / < 1.5 $\mu$ s
$t_r / t_f @ 1 \text{ k}\Omega$	< 0.1 $\mu$ s / < 6.5 $\mu$ s	< 0.1 $\mu$ s / < 6.5 $\mu$ s
Control voltage (trigger)	TTL level, max. $\pm 20$ V	TTL level, max. $\pm 20$ V

# Micro-Switch TOE 9261

## General data

Mains voltage	100 V – 240 V, 47 Hz – 63 Hz
Power consumption	max. 35 VA
Operating temperature	0 °C to 40 °C
Storage temperature	-20 °C to 70 °C
Reference temperature	23 °C ± 1 °C
Cooling	Thermostatically controlled fan
Overall dimensions (W x H x D)	224 mm x 103 mm x 348 mm
Rack mounting dimensions (W x H x D)	224 mm x 88 mm x 325 mm
19" system	½ 19", 2 HU
Weight	Approx. 4 kg
Enclosure	Aluminum / steel

## Ordering data

Micro-Switch	
TOE 9261-50	60 V / 50 A
TOE 9261-100	60 V / 100 A



## Options / accessories

Micro-Switch	
TOE 9260/22	0.50 m cable with 1 safety socket, red
TOE 9260/23	0.50 m cable with 1 safety socket, blue
TOE 9260/24	1.20 m cable with 1 safety socket, red
TOE 9260/25	1.20 m cable with 1 safety socket, blue
TOE 9521	19" adapter 2 HU, for single installation
TOE 9522	19" adapter 2 HU, parallel installation set for 2 units
TOE 9260/100	Reference resistor kit 1 Ω, 100 Ω, 1k Ω
TOE 9260/110	Reference resistor kit 1 Ω, 10 Ω, 100 Ω, 1 k Ω
TOE 9260/120	Reference resistor kit 1 Ω, 10 Ω

## Supplied accessories

- 1 Instruction manual
- 2 Connector sockets for S3–S6
- 1 Power cord



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