EPS 200/4-29

ELECTRONIC POWER SWITCH

Electronic Power Switch EPS 200/4-29

- ✓ Fast electronic µs-switch according to IEC/EN 61000-4-29
- ✓ Supports high impedance interruptions
- ✓ Trigger input and output
- ✓ Device control via webinterface and interface commands
- ✓ Test and evaluation software available

The relating standards:*
IEC/EN 61000-3-2
IEC/EN 61000-3-3
IEC/EN 61000-3-11
IEC/EN 61000-3-12
IEC/EN 60146-1-1
IEC/EN 61000-2-2
IEC/EN 61000-4-8
IEC/EN 61000-4-11
IEC/EN 61000-4-13
IEC/EN 61000-4-14
IEC/EN 61000-4-17
IEC/EN 61000-4-27
IEC/EN 61000-4-28
IEC/EN 61000-4-29
IEC/EN 61000-4-34
IEC/EN 61131-2
IEC/EN 61496-1
IEC/EN 61800-3
IEC/EN 62040-2
RTCA DO-160
SEMI F47-0706
IEC TR 61547-1
German. Lloyd

***** *The EPS 200/4-29 µs-switch can be used for certain tests within these standards. Additional equipment might be required. For detailed information, please contact* sales@spitzenberger.de.

FAST ELECTRONIC SWITCH
FOR SHORT VOLTAGE INTERRUPTION

EPS FUNCTIONAL PRINCIPLE

The EPS 200/4-29 µs-switch is a very fast electronic power switch for testing short interruptions with high impedance (> 100 kΩ) at the output according to IEC/EN 61000-4-29. An internal relay allows to bypass the electronic power switch.

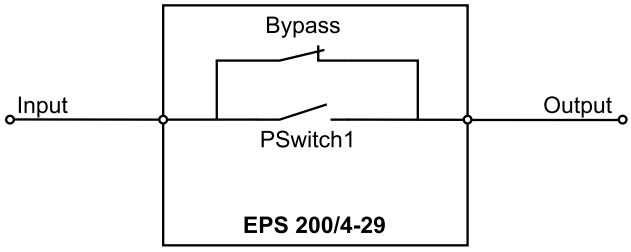

Fig. 1: EPS 200/4-29 principle schematic

The voltage drop across the electronic power switch depends on the current, as shown in the figure below.

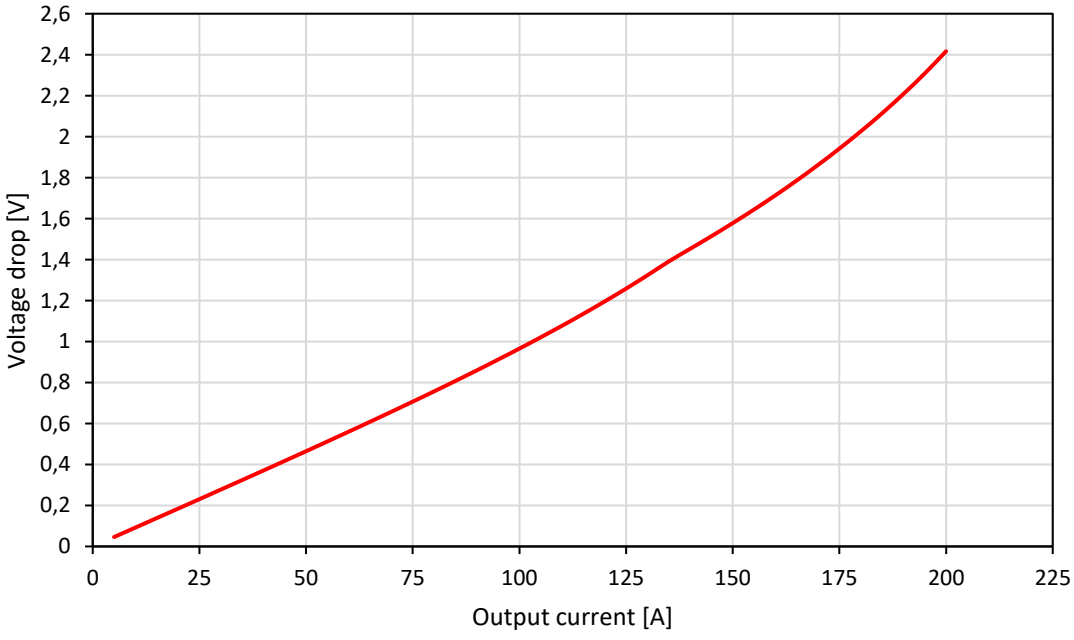

Fig. 2: EPS 200/4-29 typical voltage drop

TOUCHSCREEN USER INTERFACE

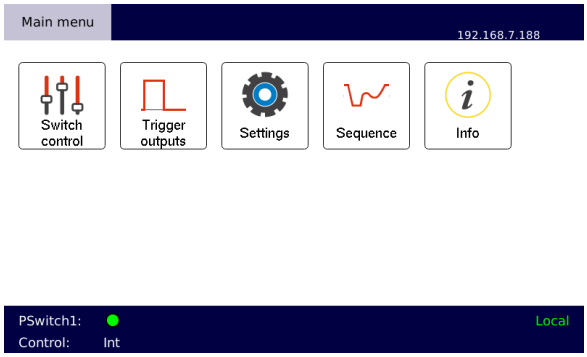

Fig. 3: Main menu

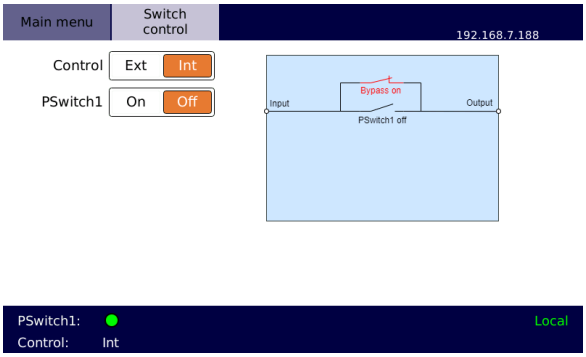

Fig. 4: Switch control

SOFTWARE CONTROL

SPS TestManager

- ✓ Test and evaluation software for fully compliant emission and immunity tests
- ✓ Automated test run of various IEC and automotive standards

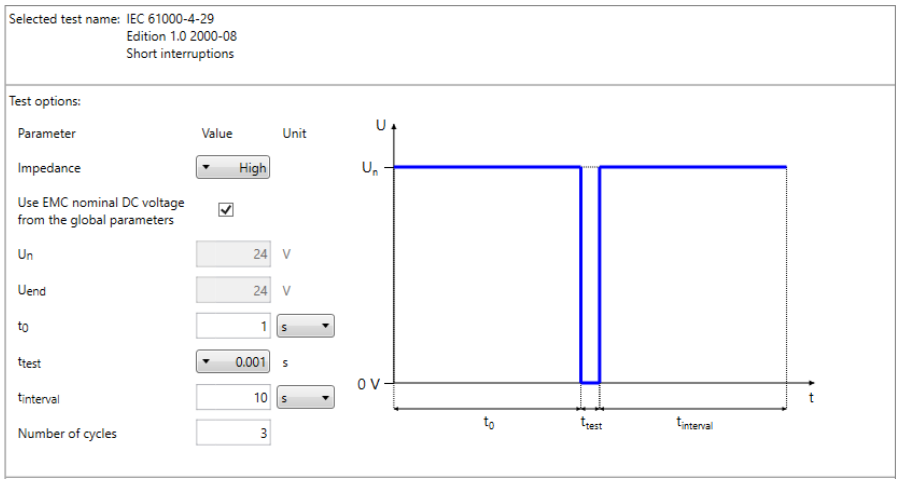

Fig. 5: SPS TestManager software

Command interface

- ✓ Easily integrate the device into your own software applications
- ✓ Remote control commands are based on the SCPI standard

Webinterface

- ✓ Monitor and control the connected device via a web browser

TECHNICAL DATA – EPS 200/4-29

		EPS 200/4-29
DC input voltage *(max.)*		400 V
DC output current *(max.)*		200 A
Voltage drop at 25 A		< 0.5 V (see Figure 2)
Impedance *(-1080 V ... +1080 V, high impedance)*		≥ 100 kΩ
Rise time t_r *(ref. load)*		< 50 µs (100 Ω)
Fall time t_f *(ref. load)*		< 50 µs (100 Ω)
Min. adjustable pulse width *(at single operation)*		< 100 µs
Trigger input *(DC)*		+5 V … +24 V
Trigger output		+5 V (TTL level)
Protection circuits		overcurrent / short circuit / overtemperature / overvoltage
Internal control unit		
	Display	7.0" touchscreen (17.8 cm, resolution 800 x 480)
	Sequencer	integrated sequence: IEC 61000-4-29 user defined sequences memory
	User interface	touchscreen / front panel button / incremental encoder webinterface
Interface		Ethernet 100 Mbit/s (HiSLIP SCPI) USB 2.0 Host
Insulation resistance		> 1 MΩ
Peak withstand voltage *(max. 10 s, output to earth)*		> 2000 V
Cooling		temperature-controlled forced air cooling
Ambient temperature		+10 °C up to +40 °C
Storage temperature		-25 °C up to +60 °C
Relative humidity		non condensing, max. 80 % for temperature < 31 °C, decreasing linearly to 50 % at 40 °C
Ingress protection		IP20
Power supply *(±10 %, 50/60 Hz)*		230 V
Line protection, connection		2 A, Schuko
Housing		plug-in unit or desktop, light grey (RAL 7035)
Switch *approx. dimensions (H x W x D)*		19", 4 U 178 x 483 x 450 mm
Weight *(approx.)*		15 kg

OPTIONS AND ACCESSORIES

OPT.01	IEEE488	Not in combination with OPT.02
OPT.02	RS232	Not in combination with OPT.01