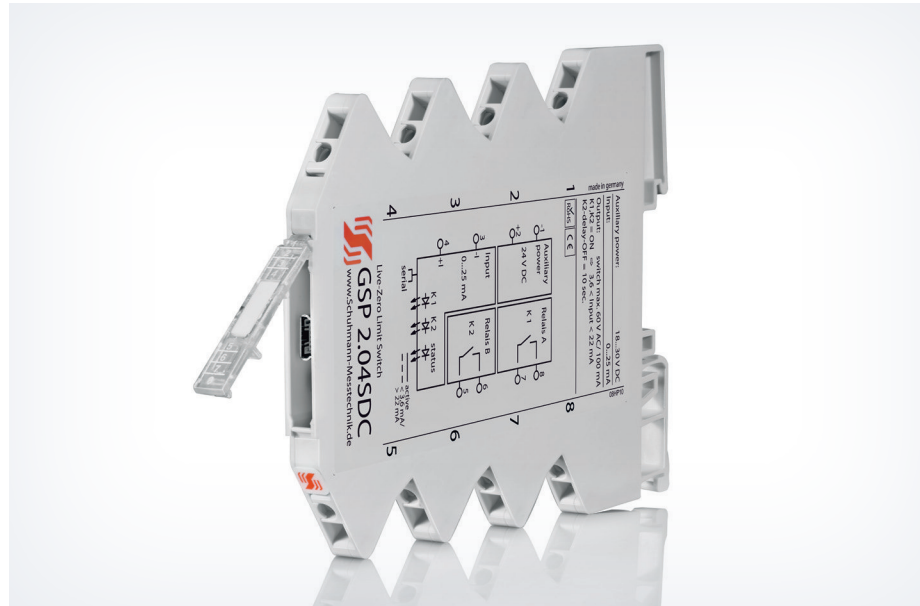


### FEATURES

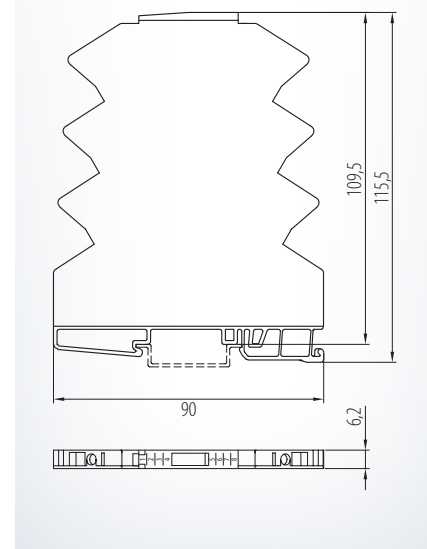
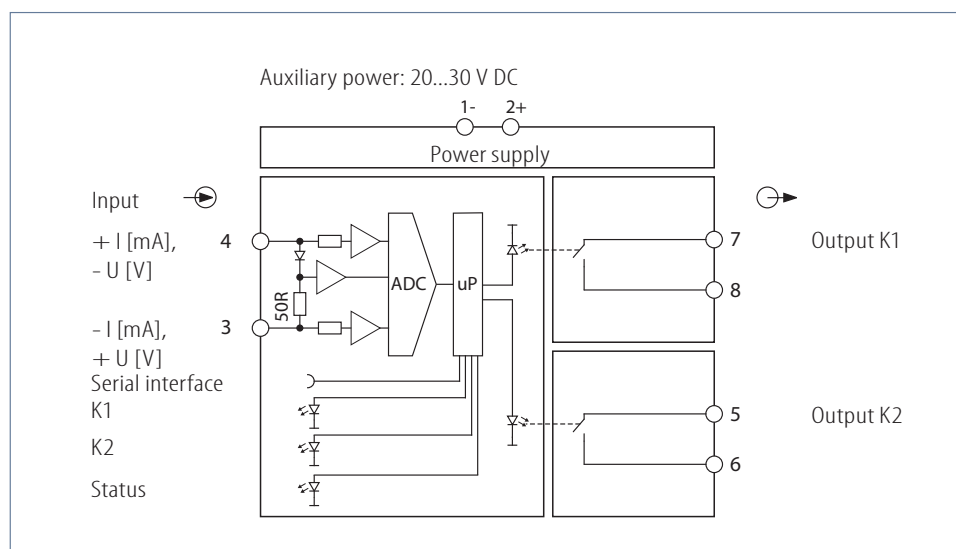
- *Indication of contact state by LED*
- *Control of 4...20 mA current loops*
- *Response time:  
at K1 < 10 msec.  
at K2 ~ 10 sec.*
- *Parameterization without  
auxiliary power via PC-interface*
- *Galvanic 3-way isolation  
of 2,5 kV*
- *Low internal consumption*



### FUNCTION

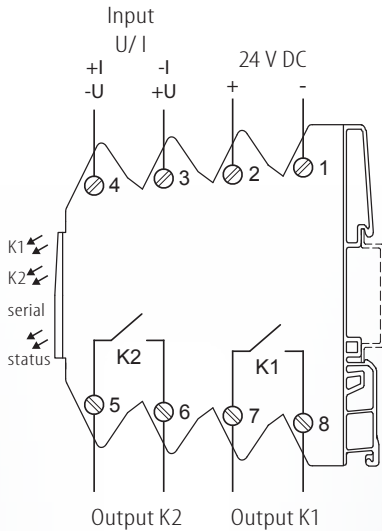
The Live-Zero Monitoring Device GSP 2.04 SDC is used for the protection and control of process engineering facilities. Hereby the 4...20 mA current loop is controlled against overload and wire break. In the range of 3,6 mA and 22,0 mA the switch K1 is closed at applied supply voltage.

In case of the loop current is falling below 3,6 mA or the value exceeds 22,0 mA, the potential free switch K1 is opening immediately. The switch K2 operates in the same way as K1 but with a turn-off delay of 10 sec. Those values are set ex work and can be changed by the USB2 adapter in connection with the KALIB-Software.



# GSP 2.04 SDC

Connection diagram:



## Input:

I: load-independent DC current:	0(4)...20 mA	input resistance approx. 100 Ω
connection:	terminal 3 -, 4 +	
U: load-independent DC voltage:	0(2)...10 V	input resistance approx. 100 kΩ
connection:	terminal 4 -, 3 +	

## Output:

2 transistor outputs:	
Load:	max. 30 V AC/ DC, max. 100 mA AC/ DC
connection K1:	terminal 7, 8
connection K2:	terminal 5, 6
Module for heavy loads:	Relay interface module, 2 relays with 6 A, 250 V Type: RE 2.00 S

## Adjustment:

Measuring ranges, switching points and parameterization are adjustable in parameter data by KALIB-Software. For this you need a PC as well as the interface adapter **USB2/ USB-Simulator** with **KALIB-Software**.

### Parameterization for each channel:

Limit value adjustment:	0,0...110,0 %	adjustable in 0,1 % steps
Hysteresis:	0,1...90,0 %	adjustable in 0,1 % steps
ON/ OFF-delay:	0,0...999,0 sec.	adjustable in 0,1 sec. steps
Functions:	limit value, limit value range, tendency, inverse function, alarm function, start state, start time	

### Preset parameterization (change possible):

Fixed inrush current at:	3,6 mA < I < 22,0 mA
Fixed breaking current at:	I < 3,6 mA and I > 22,0 mA
Switching delay at K1:	approx. 10 msec.
Turn-off delay at K2:	10 sec.

## Display:

LED status:	green, active	input signals are in standard range, device ready for use
	green, flashing	input out of predetermined limits or exceeding of measuring range
LED K1:	green, active	K1 closed
LED K2:	green, active	K2 closed

## Environmental conditions:

Storage temperature:	-40...+70 °C
Operating temperature:	0...55 °C
Isolation voltage:	2,5 kV eff. 1 sec. input-output 2,5 kV eff. 1 sec. auxiliary voltage

## Auxiliary power:

24 V DC:	20...30 V DC < 1,5 W
Influence of auxiliary power:	< 0,1 %

## Characteristics of transmission:

Resolution:	10 bit
Linearity error:	< 0,5 % of final value
Temperature error:	< 30 ppm/ K
Response time:	< 10 msec.

## Directive:

EMC Directive:	2014/30/EU*
Low Voltage Directive:	2014/35/EU
*minimum deviations possible during HF-radiation influence	

## Mounting details:

Housing for top hat rail	
Type of protection:	IP 20
Mounting rail fixed according to	EN 50022-35 x 6,2 mm
Width:	6,2 mm
Weight:	52 g
Material:	Polyamide PA
Flammability class:	V0 (UL 94)
Approval:	CE
Connection:	screw clamps 0,14...2,5 mm <sup>2</sup>

**Please check parameterization before initial operation!**

## Ordering information:

Type:	<b>GSP 2.04 SDC</b>	24 V DC
Accessories:	USB2/ USB-Simulator with KALIB-Software, manual	

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