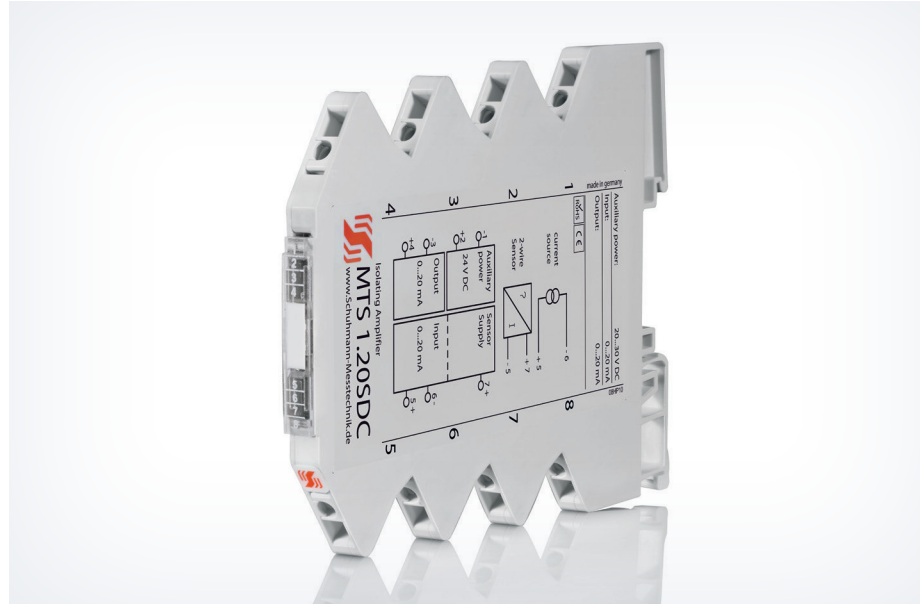


### FEATURES

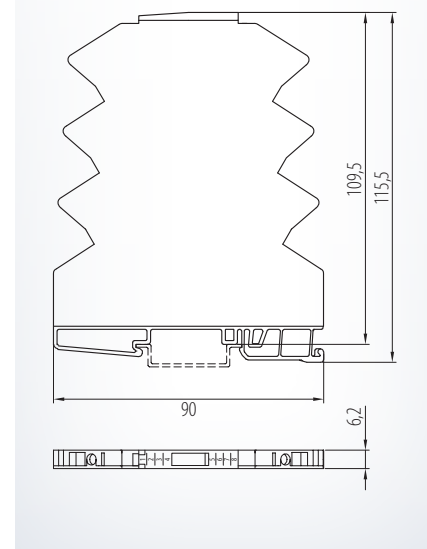
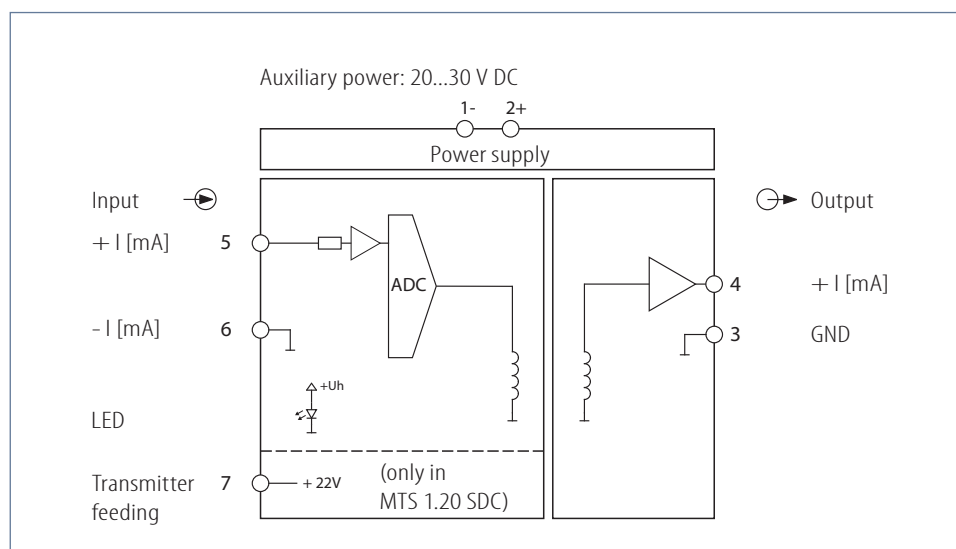
- **Input:**  
current 0(4)...20 mA
- **Output:**  
current 0(4)...20 mA
- **MTS 1.20 SDC:**  
integrated 2-wire transmitter feeding
- **Galvanic 3-way isolation**  
of 500 V
- **Low internal consumption**



### FUNCTION

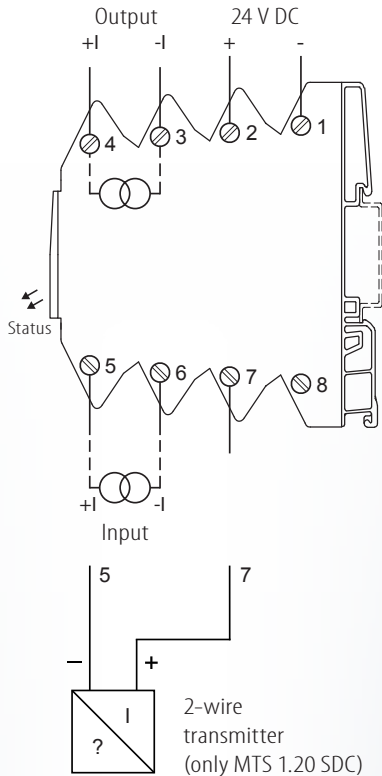
The MT 1.20 SDC is used for the exact potential isolation of different measuring signals. The galvanic 3-way isolation protects against mismeasurement or damage of the following instruments, such as analog control devices, control rooms, guidance systems, PLC units. The transmission of input and output is 1:1. It is possible to transmit Live-Zero.

The integrated protective switching with suppressor diode protects the secondary circuit from voltage peaks and transient excess voltage. The **MTS 1.20 SDC** possesses a 2-wire transmitter feeding.



# MT 1.20 SDC MTS 1.20 SDC

Connection diagram:



## Input:

I: load-independent DC current: 0(4)...20 mA input resistance approx. 20 Ω  
connection: terminal 6 -, 5 +

additional in MTS 1.20 SDC:

transmitter feeding: max. 22 V  
max. 26 mA  
connection: terminal 5 -, 7 +

Type	Input I	loop-powered	Output I	Remark
MT 1.20 SDC	0...20 mA	no	0...20 mA	transmission 1:1
MT 1.20 SDC	4...20 mA	no	4...20 mA	with Live-Zero transmission
MTS 1.20 SDC	4...20 mA	yes	4...20 mA	with Live-Zero transmission

## Output:

I: load-independent DC current: 0(4)...20 mA permissible load max. 400 Ω  
connection: terminal 3 -, 4 +

## Display:

LED status: green, active device ready for use

## Environmental conditions:

Storage temperature: -40...+70 °C  
Operating temperature: 0...55 °C  
Isolation voltage:  
500 V eff. 2 sec. inp./ auxiliary power  
500 V eff. 2 sec. outp./ auxiliary power  
500 V eff. 2 sec. output/ input

## Auxiliary power:

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

## Characteristics of transmission:

Transmission error: < 0,12 %  
Linearity error: < 0,1 %  
Temperature error: < 100 ppm/ K  
Load influence I: < 0,4 %  
of final value  
Setting time: < 50 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>

**For safety reasons we recommend to mount the housing for top hat rail with a distance > 1 mm to each other.**

## Ordering information:

Type: **MT 1.20 SDC** 24 V DC  
**MTS 1.20 SDC** 24 V DC transmitter feeding

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