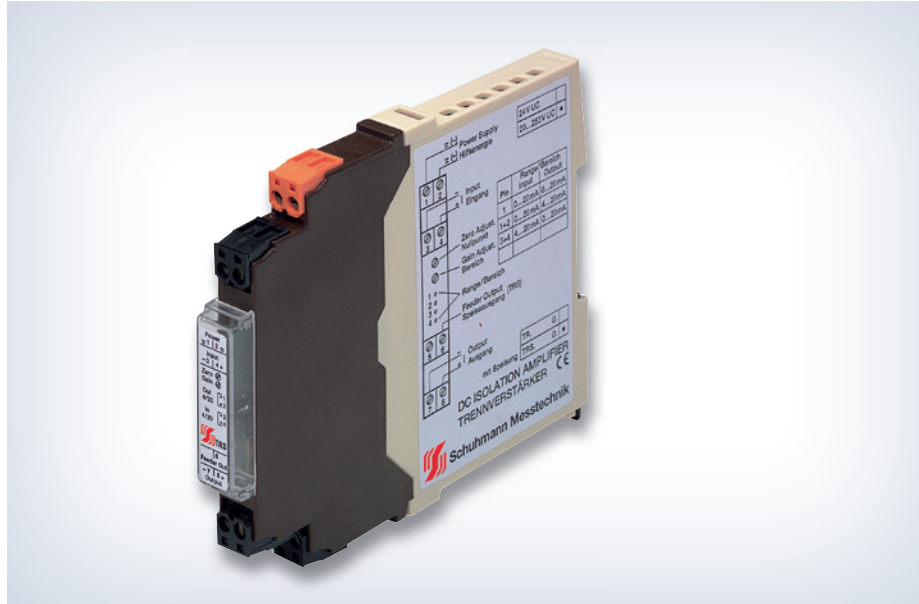




FEATURES

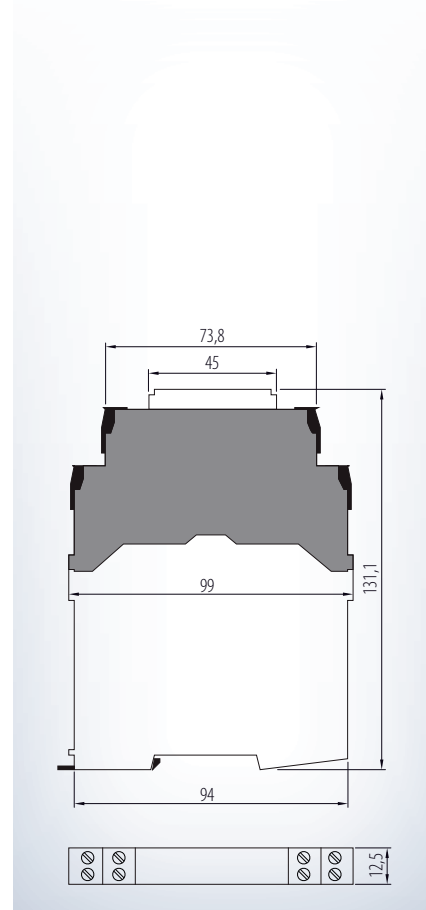
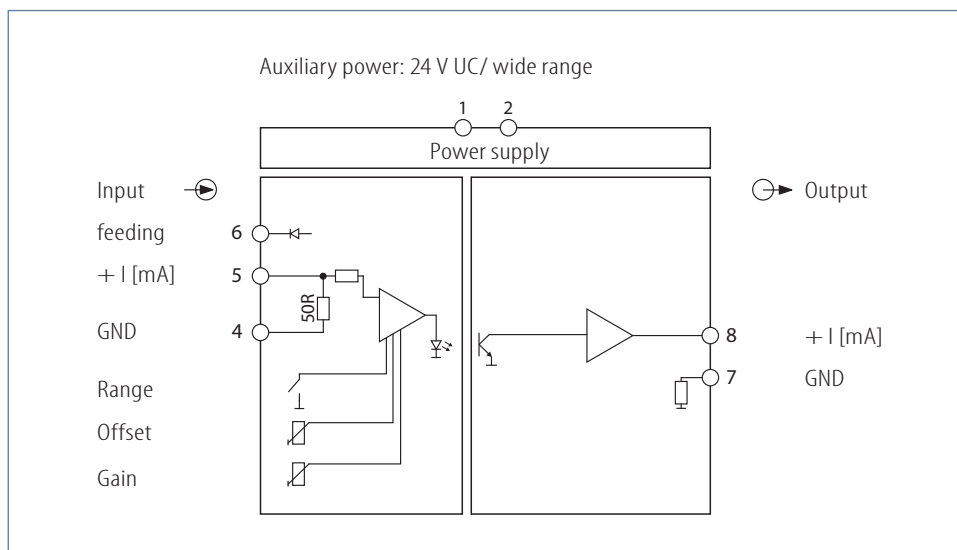
- **Input:**
Current 0(4)...20 mA
- **Output:**
Current 0(4)...20 mA
- **Integrated transmitter feeding**
- **Fine-adjustment of offset and gain by trimmer**
- **Pluggable screw-clamps**
- **Galvanic 3-way isolation of 4 kV**



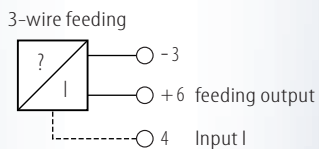
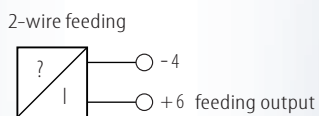
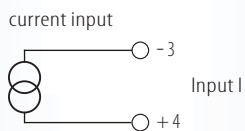
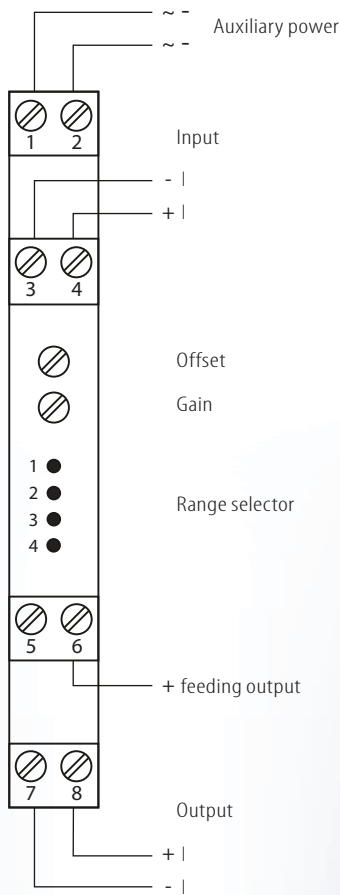
FUNCTION

The TRS.00 is used for the precise potential isolation of different measuring signal. It can process different input and output signals. The fine adjustment for the zero point and final value alignment is being made by trimmer. The transmission of the ranges can be selected with the front sided jumper. Due to the integrated possibility of supply of 2- and 3-wire transmitters this device is suitable for many applications, such as pressure sensors, level sensors, temperature measurement etc.

The galvanic 3-way isolation protect against faulty measurement or damage of the following instruments such as e.g. analog control devices, control rooms, guidance systems and PLC units. The integrated protective switching with suppressor diode protects the secondary circuit from voltage peaks and transient excess voltage.



TRS.00 UC TRS.00 W



Input:

I: DC current: 0(4)...20 mA input resistance approx. 50 Ω
 connection: terminal 3 -, 4 +

transmitter feeding: approx. 20 V
 connection 2-wire feeding: terminal 4 -, 6 +
 connection 3-wire feeding: terminal 3 -, 6 +, 4 Input I

Output:

I: load-independent DC current: 0(4)...20 mA permissible load max. 600 Ω

Gain adjustment: trimmer ± 5 %
 Offset adjustment: trimmer ± 7 %

connection: terminal 7 -, 8 +

Adjustment:

Range connector	Input	Output	Remarks
1	0...20 mA	0...20 mA	1:1 transmission with 4...20 mA transmission
1	4...20 mA	4...20 mA	
1-2	0...20 mA	4...20 mA	signal transformation: basic offset at output: 4 mA
3-4	4...20 mA	0...20 mA	signal transformation: basic offset at input: 4 mA

Measuring range errors at change-over of the individual measuring ranges ≤ 0,5 %.

Environmental conditions:

Storage temperature: -40...+70 °C
 Operating temperature: 0...55 °C
 Isolation voltage: 4 kV eff. 1 sec.
 input-output-auxiliary voltage

Directive:

EMC Directive: 2004/108/EC*
 Low Voltage Directive: 2006/95/EC
 *minimum deviations possible during
 HF-radiation influence

Auxiliary power:

24 V UC: 20...30 V AC/ DC
 ca. 50 mA
 wide range: 20...253 V AC/ DC
 Influence of auxiliary power: < 0,1 %

Mounting details:

Housing for top hat rail
 Type of protection: IP 40 housing
 IP 10 clamps
 Rail-mounting fixed according to
 EN 50022-35 x 6,2 mm
 Width: 12,5 mm
 Weight: 190 g
 Material: Polycarbonate (PC)
 Flammability class: V0 (UL94)
 Approval: CE
 Connection: pluggable
 screw clamps
 0,2...2,5 mm²

Characteristics of transmission:

Transmission error: < 0,12 %
 Linearity error: < 0,15 %
 Temperature error: < 100 ppm/ K
 Load influence I: < 50 ppm
 of final value
 Setting time: < 200 msec.

For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other. Please check Range connector before initial operation!

Schuhmann GmbH & Co. KG
 Kleingartacher Str. 21
 D-74363 Güglingen
 Tel. + 49 71 35 50 56
 Fax + 49 71 35 53 55
 www.schuhmann-messtechnik.de

Ordering information:

Type: TRS.00 UC 24 V UC
 TRS.00 W wide range