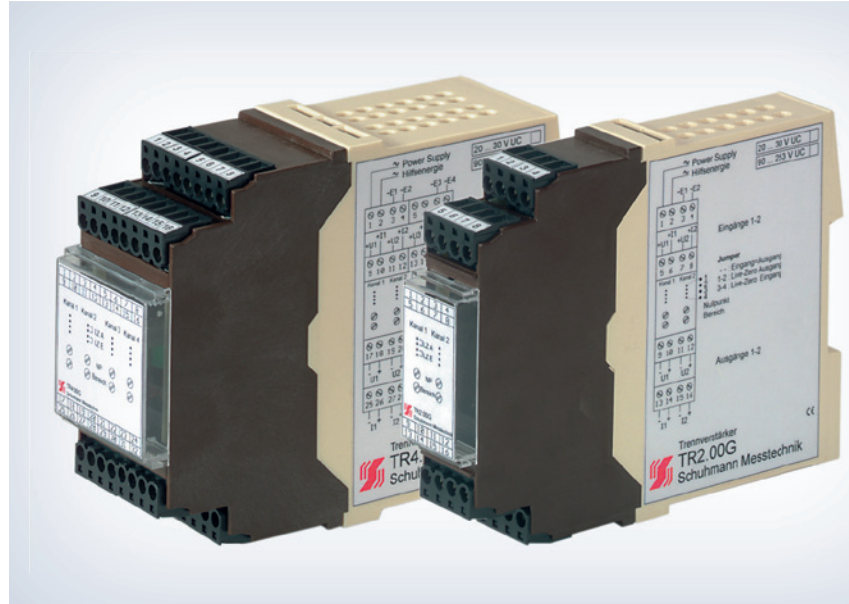


FEATURES

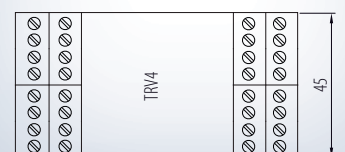
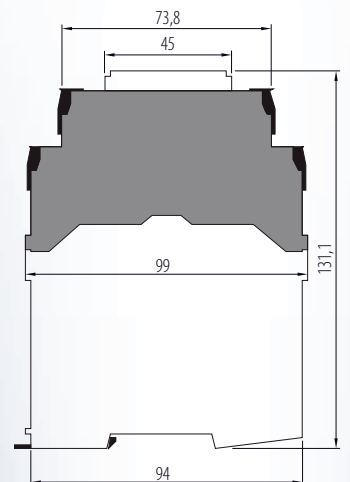
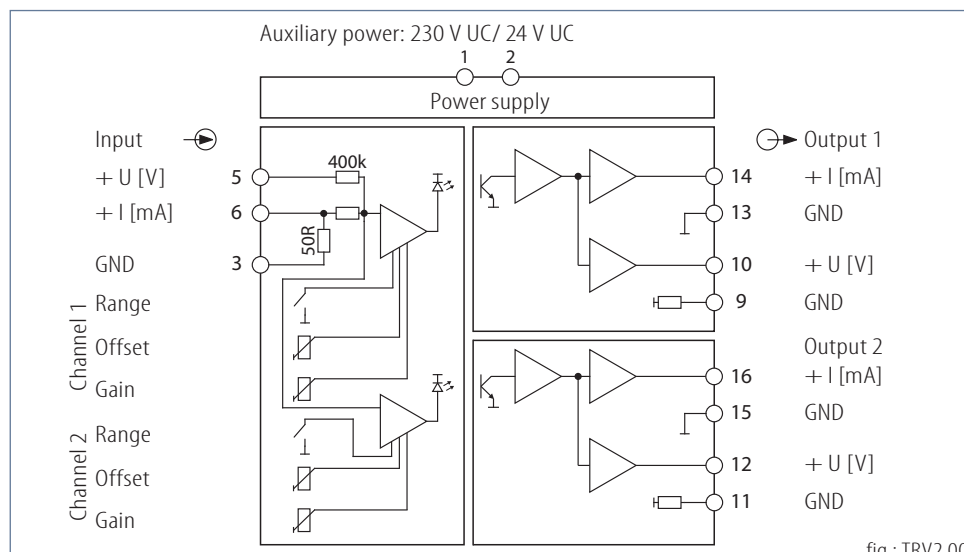
- **Input:**
Current 0(4)...20 mA or
Voltage 0(2)...10 V
- **Outputs simultaneous:**
2 or 4 x current 0(4)...20 mA and
2 or 4 x voltage 0(2)...10 V
- **2 or 4 channel distributor**
(galvanically isolated)
- **Fine-adjustment of**
offset and gain by trimmer
- **Pluggable screw-clamps**
- **Galvanic 3-way isolation**
per channel



FUNCTION

The TRV2 and TRV4 transfers the input signal to 2- or 4 galvanically isolated output channels. Each output channel can be adjusted separately and an individual range value can be set. The fine adjustment for the zero point and final value alignment is being made by trimmer. The transmission or rather the signal conversion of the ranges can be selected with the front sided jumper. **An adjustment of the device is not necessary any longer.**

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.

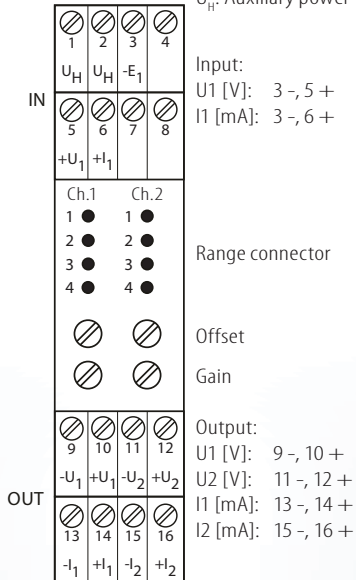


TRV 2.00 TRV 4.00

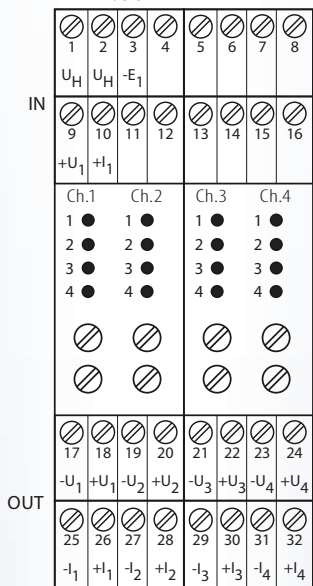
Connection diagram:

TRV 2.00

U_H : Auxiliary power



TRV 4.00



Input:

I: DC current: 0(4)...20 mA input resistance approx. 50 Ω
connection: see connection diagram

U: DC voltage: 0(2)...10 V input resistance approx. 40 k Ω
connection: see connection diagram

Output:

I: load-independent DC current: 0(4)...20 mA permissible load max. 600 Ω
Output current limiting: approx. 23mA
connection: see connection diagram

U: load-independent DC voltage: 0(2)...10 V permissible load \geq 5 k Ω simultan.
permissible load \geq 1 k Ω exclusive

Gain adjustment: trimmer \pm 5 %
Offset adjustment: trimmer \pm 7 %

connection: see connection diagram

Adjustment:

Range connector	Input	Output	Remarks
2-3	0...20 mA/ 0...10 V	0...20 mA/ 0...10 V	1:1 transmission
2-3	4...20 mA/ 2...10 V	4...20 mA/ 2...10 V	with 4...20 mA/ 2...10 V transmission
1-2	0...20 mA	4...20 mA	signal transformation:
1-2	0...10 V	2...10 V	basic offset at output 4 mA/ 2 V
3-4	4...20 mA	0...20 mA	signal transformation:
3-4	2...10 V	0...10 V	basic offset at input 4 mA/ 2 V

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

Environmental conditions:

Storage temperature: -40...+70 $^{\circ}$ C
Operating temperature: 0...55 $^{\circ}$ C
Isolation voltage:
2,5 kV eff. 1 sec. input-output
4 kV eff. 1 sec. auxiliary voltage
500 kV eff. 1 sec. channel-channel

Auxiliary power:

230 V UC 90...253 V AC/ DC
approx. 11/ 16 mA
24 V UC: 20...30 V AC/ DC
approx. 100/ 150 mA

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: < 50 ppm
of final value
Load influence U: < 0,5 % at 1 k Ω load
Setting time: < 200 msec.

Directive:

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

Mounting details:

Housing for top hat rail
Type of protection: IP 20 housing
IP 10 clamps
Rail-mounting fixed according to EN 50022-35 x 6,2 mm
Width: 22,5/ 45 mm
Weight: 160/ 320 g
Material: Polycarbonate (PC)
Flammability class: V0 (UL94)
Approval: CE
Connection: pluggable screw clamps
0,2...2,5 mm²

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!

Ordering information:

Type: 1 input - 2 outputs:
TRV 2.00 230 V UC
TRV 2.00 UC 24 V UC
1 input - 4 outputs:
TRV 4.00 230 V UC
TRV 4.00 UC 24 V UC

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