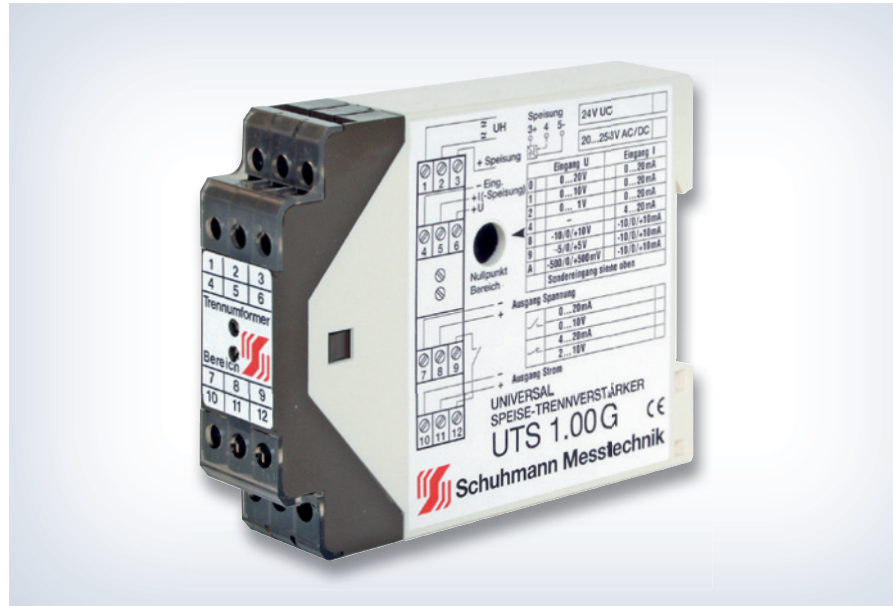


FEATURES

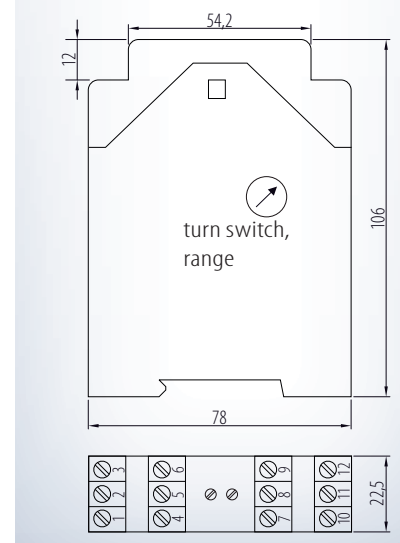
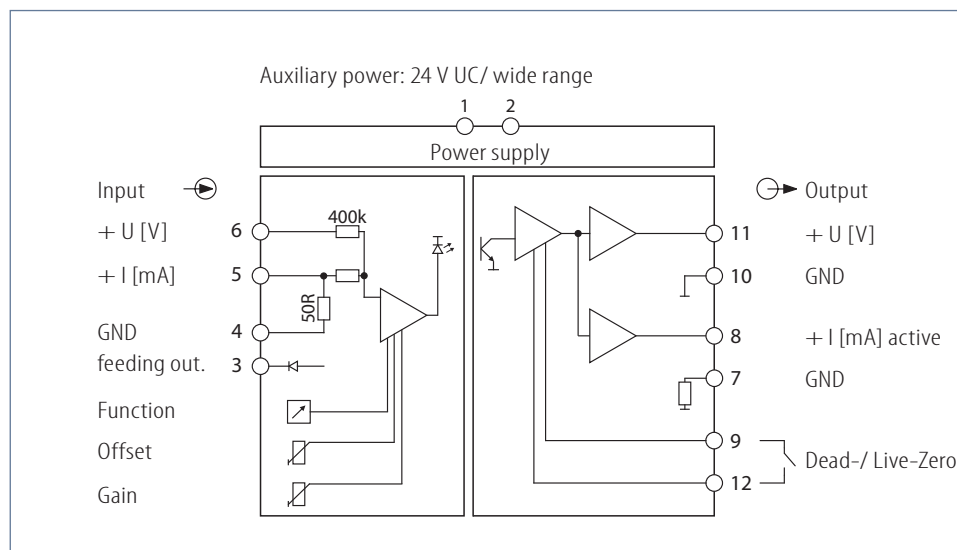
- **Input, switchable:**
Current 0(4)...20 mA, ± 10 mA or
Voltage 0(2)...10 V, ± 10 V
- **Output, simultaneous:**
Current 0(4)...20 mA and
Voltage 0(2)...10 V
- **Integrated transmitter feeding**
- **Fine-adjustment of offset and gain by trimmer**
- **Galvanic 3-way isolation of 4 kV**



FUNCTION

Isolating amplifiers are mainly used for the galvanic isolation or conversion of analog signals. The UTS 1.00 G is used for the connection of 2- and 3-wire transmitters. This guarantees a safe decoupling between sensor and evaluation circuit and any influence of sensor circuits among each other is absolutely impossible. It has one input for current or voltage and one output which can do current and voltage simultaneous. Fine-adjustment of offset and gain is being made by trimmer.

The desired input range can be chosen from the table on the side, the adjustment is carried out by turn switch. The output ranges are switchable. The integrated protective switching with suppressor diode protects the secondary circuit from peaks and transient excess voltage. **An adjustment of the device is not necessary any longer!**



UTS 1.00 GUC UTS 1.00 GW

Input:

I: DC current:	0(4)...20 mA	input resistance approx. 50 Ω
connection:	terminal 4 -, 5 +	
U: DC voltage:	0...1/ 5/ 10/ 20 V	input resistance approx. 40 kΩ/ V
connection:	terminal 4 -, 6 +	
transmitter feeding:	approx. 22...28 V, max. 20 mA/ 22 V	

Input ranges selectable by turn switch (UTS 1.00 G):

Position	Input U	Input I
0	0...20 V	0...20 mA
1*	0...10 V	0...20 mA
2	0... 1 V	0...20 mA
4	-	4...20 mA
8	-10...0...+10 V	-10...0...+10 mA
9	-5...0...+5 V	-10...0...+10 mA
A	-500...0...+500 mV	-10...0...+10 mA

UTS 1.14 GW:

Pos.	Input I
7	4... 7,5 / 10,5 mA
6	4... 8,3 / 12,1 mA
5	4...10,7 / 16,3 mA
4	4...13,7 / 22,3 mA

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

Output:

I: load-independent DC current:	0(4)...20 mA	permissible load max. 500 Ω
connection:	terminal 10 -, 11 +	
U: load-independent DC voltage:	0(2)...10 V	permissible load ≥ 5 kΩ simultan. permissible load ≥ 1 kΩ exclusive
Gain adjustment:	trimmer ± 5 %	
Offset adjustment	trimmer ± 7 %	
connection:	terminal 7 -, 8 +	

Output ranges switchable by connection of terminal 9+12 (Dead-/ Live-Zero):

Clamp 9/ 12	Output U	Output I
open*	0...10 V	0...20 mA
closed	2...10 V	4...20 mA

* Factory setting: transmission 1:1, with Live-Zero transmission

Position	Input I	Output I	Clamp 9/ 12	Remark
1*	0...20 mA	0...20 mA	open*	transmission 1:1 with Live-Zero transmission
1*	4...20 mA	4...20 mA	open*	
1	0...20 mA	4...20 mA	closed	basic offset at output 4 mA

Environmental conditions:

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

input-output-auxiliary power

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. 60 mA
wide range:	20...253 V DC 90...253 V AC

Influence of auxiliary power: < 0,1 %

Characteristics of transmission:

Transmission error:	< 0,12 %
Linearity error:	< 0,15 %
Temperature error:	< 100 ppm/K
Load influence I:	< 50 ppm of final value
Load influence U:	< 0,5 % at 1 kΩ load
Setting time:	< 100 msec.

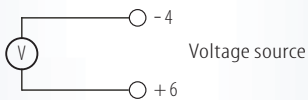
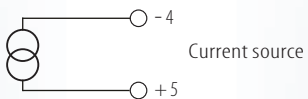
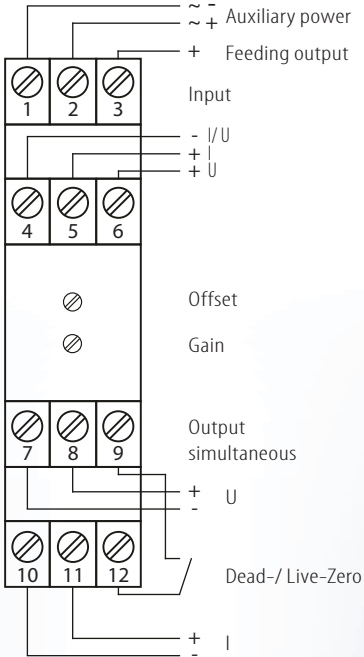
Mounting details:

Housing for top hat rail	
Type of protection:	IP 20
Rail-mounting fixed according to	EN 50022-35 x 6,2 mm
Width:	22,5 mm
Weight:	190 g
Material:	Noryl V0 150/ ABS
Flammability class:	ISO R75A 147°C/ 90°C
Approval:	CE
Connection:	screw clamps ≤ 2 x 2,5 mm ²

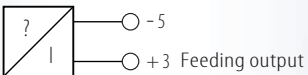
For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other. Please check switch position before initial operation !

Ordering information:

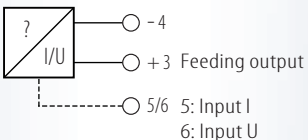
Type:	UTS 1.00 GUC	24 V UC
	UTS 1.00 GW	wide range
	UTS 1.14 GW	wide range



2-wire feeding



3-wire feeding



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