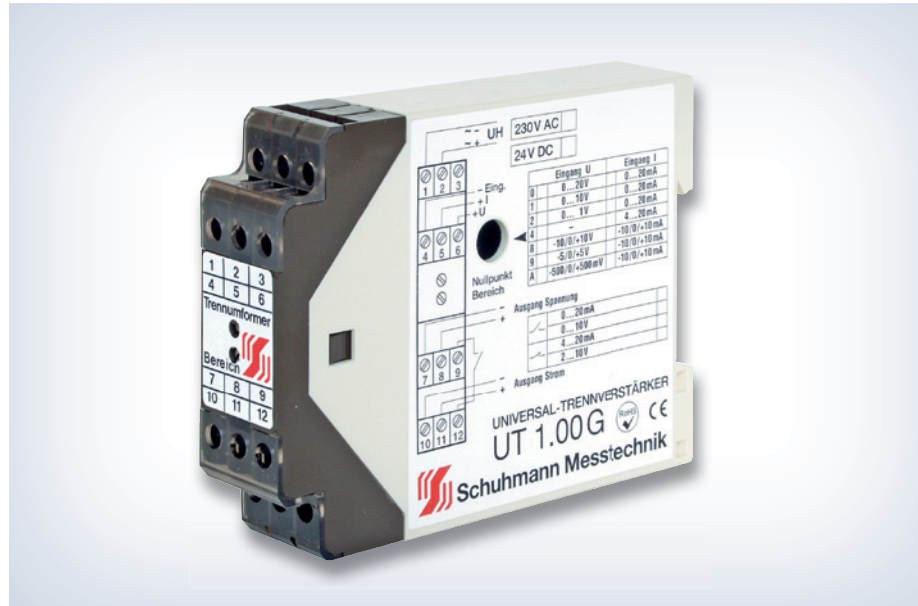




FEATURES

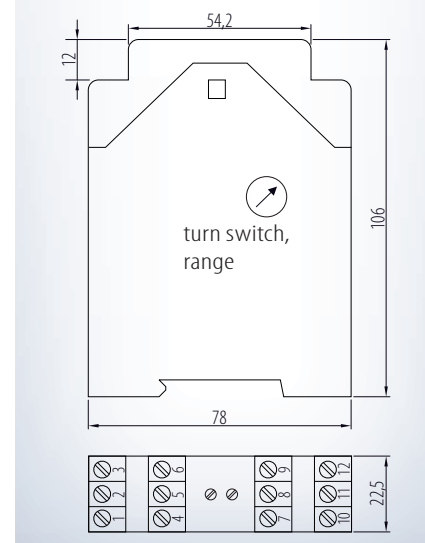
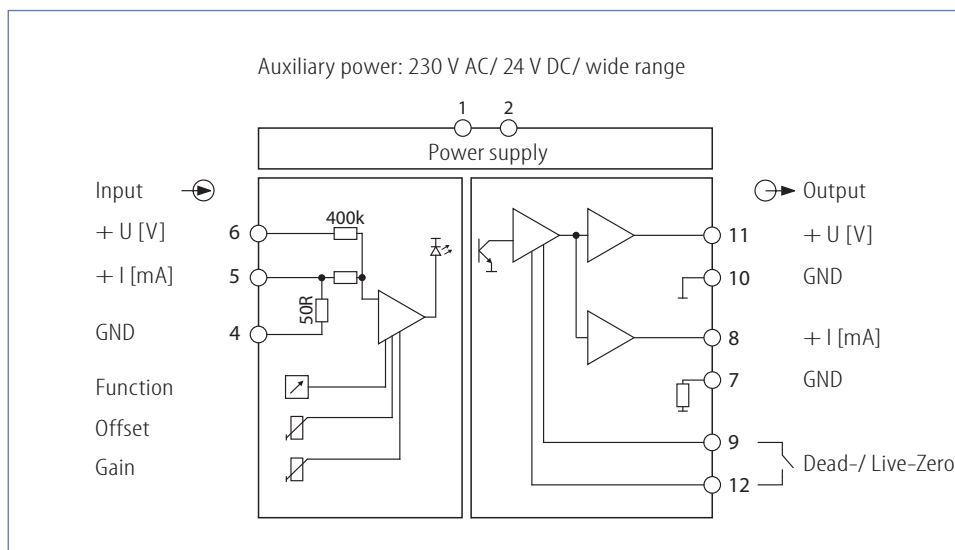
- **Input, switchable:**
Current 0(4)...20 mA, ± 10 mA or
Voltage 0(2)...10 V, ± 10 V
- **Output, simultaneous:**
Current 0(4)...20 mA and
Voltage 0(2)...10 V
- **Fine adjustment of
offset and gain by trimmer**
- **Galvanic 3-way isolation
of 4 kV**



FUNCTION

Isolating amplifiers are mainly used for the galvanic isolation or conversion of analog signals. This guarantees a safe decoupling between sensor and evaluation circuit and any influence of sensor circuits among each other is absolutely impossible. The UT 1.00 G has one input for current or voltage and one output which can do current and voltage simultaneously. 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!**



UT 1.00 G

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 +	

Input ranges selectable by turn switch:

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

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 at simultaneous operation
		permissible load ≥ 1 kΩ exclusive

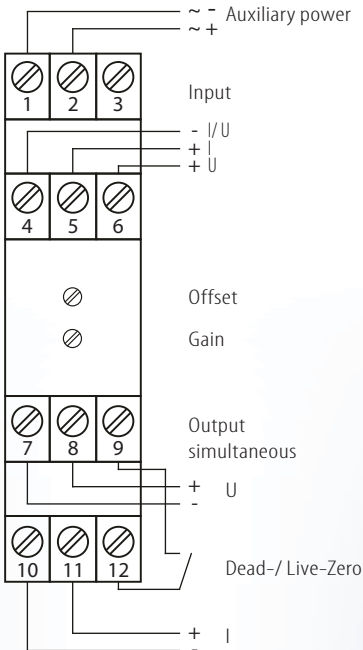
Gain adjustment: trimmer ± 5 %
 Offset adjustment: trimmer ± 7 %
 connection: terminal 7 -, 8 +

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

Terminal 9/ 12	Output voltage	Output current
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

Auxiliary power:

230 V AC: 200...250 V AC
 ca. 9 mA
 24 V DC: 20...30 V DC
 ca. 60 mA
 Wide range: 20...253 V AC/ DC
 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.

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
 Mounting rail 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 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 switch position before initial operation !

Ordering information:

Please specify special signals in clear text:
UT 1.04 special input
UT 1.05 special output

Type: **UT 1.00 G** 230 V AC
UT 1.00 GDC 24 V DC
UT 1.00 GW wide range

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