



Universal Isolating Amplifier with Special Input

UT 19.04 GW

FEATURES

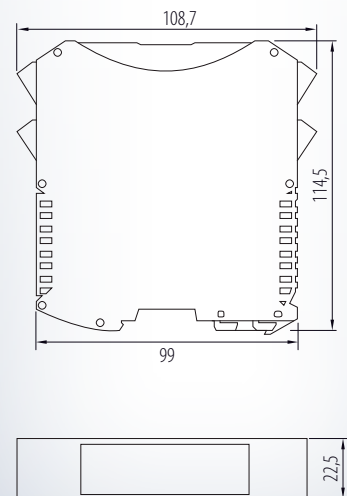
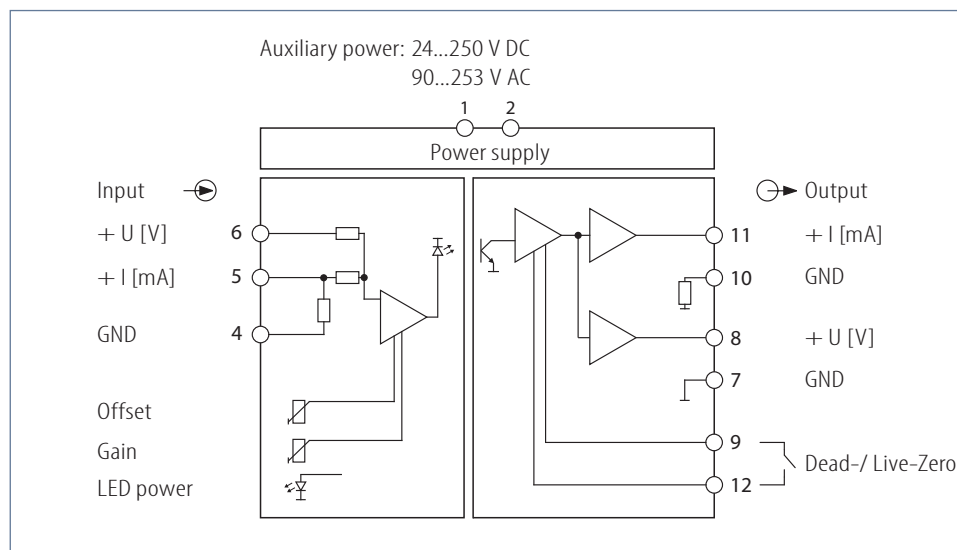
- **Input:**
Current up to 5 A DC or
Voltage up to 1000 V DC
according to customer specification
- **Output, simultaneous:**
Current 0(4)...20 mA and
Voltage 0(2)...10 V
- **Fine adjustment of
offset and gain by trimmer**
- **Galvanic 3-way isolation
of 4 kV**



FUNCTION

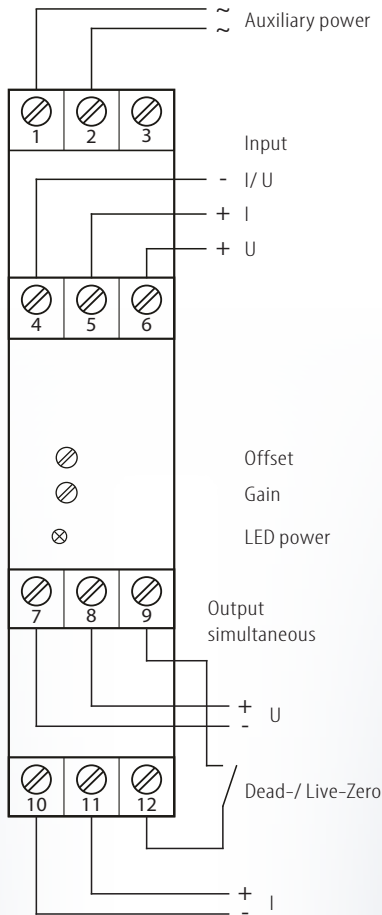
Isolating amplifiers are mainly used for the galvanic isolation or conversion of analog signals. This guarantees a safe decoupling between sensor and evaluation circuit and any influence of sensor circuits among each other is absolutely impossible. The UT 19.04 GW has one input for current or voltage and one output which can do current and voltage simultaneous. Fine adjustment of offset and gain is being made by trimmer.

The desired input ranges must be specified by customer. The output ranges are switchable. An integrated protective switching with suppressor diode protects the secondary circuit from peaks and transient excess voltage.



UT 19.04 GW

Connection diagram:



Input:

I: DC current:	up to 5A DC
connection:	terminal 4 -, 5 +
U: DC voltage:	up to 1000 V DC
connection:	terminal 4 -, 6 +

Customer specification and calibration of the input, e.g.

input:	0...100 mV DC
or input:	0...200 V DC
or input:	10...20 mA DC
or input:	0...250 mA DC

Output:

I: load-independent DC current:	0(4)...20 mA	permissible load max. 600 Ω
connection:	terminal 10 -, 11 +	
U: load-independent DC voltage:	0(2)...10 V	perm. load ≥ 5 kΩ simult. operation perm. 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

Display:

LED power	green, active	device active
-----------	---------------	---------------

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:

Wide range:	24...250 V DC 90...253 V AC < 3 W
-------------	---

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:	< 200 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 housing IP 20 clamps
Rail-mounting fixed according to	EN 50022-35 x 7,5 mm
Width:	22,5 mm
Weight:	140 g
Material:	Polyamide PA
Flammability class:	V0 (UL94)
Approval:	CE
Connection:	screw clamps ≤ 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: UT 19.04 GW wide range

Schuhmann GmbH & Co. KG
Römerstraße 2
D-74363 Güglingen
Tel. +49 71 35 50 56
E-mail: info@schuhmann-messtechnik.de
www.schuhmann-messtechnik.de