

UW 13.01

AC Voltage UW 13.01 Transducer

Features:

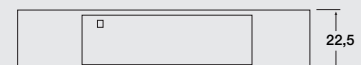
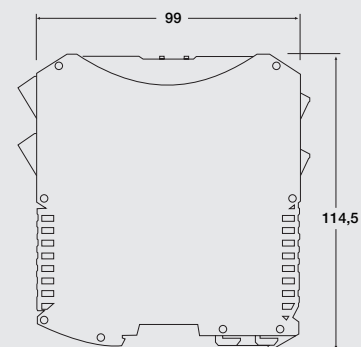
- Operating range up to 500V AC*
- accurate measurement of true RMS value*
- high galvanic decoupling, safe 4kV isolation*
- indication of operating state by LED*
- removable and encoded terminal blocks*
- 3-way isolation*
- analog output for standard signals current, voltage*
- compact design, top hat rail housing 22,5 mm*
- auxiliary power 230VAC or 24V AC/DC*
- wide range power 20...253V AC/DC*



Application and function

The UW 13.01 is designed to convert AC voltage into a standard signal. High galvanic decoupling of AC voltage is guaranteed, also standard signals current and voltage at the output.

The output signals are 0...10 V, 4...20 mA and 0...20 mA. The input signal can also be configured for different ranges such as 0...20 V, 0...30 V AC, 0...60 V, 0...100 V, 0...110 V, 0...250 V, 0...400 V AC etc. The narrow design (22,5 mm) allows maximum use of available space. Indication of operating state is displayed by LED on front side.





UW 13.01

Input:

Measured quantity: alternating current
 Measuring range: 0...500 V AC
 Operating range: factory setting as per customer's specification.

Output:

Current: 0...20 mA, load \leq 500 Ω
 Standard 4...20mA, load \leq 500 Ω

Additionally for type UW 13.01 GUC, UW 13.01 GW:

Voltage: 0...10 V, load \geq 5 k Ω
 2...10 V, load \geq 5 k Ω
 Resolution: 0,1 %

Special function:

Optional T-Bus with line control and supply by bus (only 24V).

Electromagnetic compatibility law

Germany in accordance with
 EMC Directive: 2004/18/EG*, LVD: 2006/95/EG

Terminals:

1	U _h \simeq	supply	10	~	voltage input
2	U _h \simeq	supply	11	-	free -
5	-I	output I	12	-	free -
6	+I	output I	13	-	free -
7	-U	output U	14	-	free -
8	+U	output U	15	-	free -
9	~	voltage input	16	-	free -

Environmental conditions:

Storage temperature: -20...+70°C
 Operating temperature: 0...55°C
 Isolation voltage: 4kV eff. (1 min.)
 input-output
 4kV auxiliary voltage

Characteristics of transmission:

Linearity error: \pm 0,1%
 Temperature error: < 100 ppm/K
 Load influence : < 50 ppm of final value
 U: < 0,2% at 1 k Ω
 Internal resistance: at 500 V AC approx. 2 M Ω ,
 at 250V AC approx. 1 M Ω
 Setting time: output filter with 0,5 sec.

Auxiliary power:

D.C. voltage: 24V DC (20...30V)
 consumption approx.
 50mA
 Influence of auxiliary power: < 0,05 %

Ordering information:

Type: **UW 13.01 G**

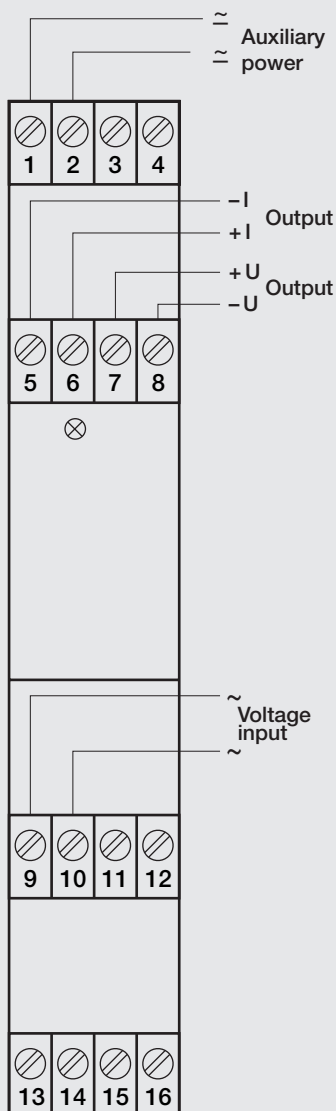
Input: according to customer's specification V AC
 Output 0(4)...20 mA, according to customer's specification
 Auxiliary power 230V AC (200...250V AC)

Type: **UW 13.01 GUC**

Input: according to customer's specification V AC
 Output 0(4)...20 mA, 0...10V according to customer's specification
 Auxiliary power 24V UC (20...40V AC/DC)

Type: **UW13.01GW**

Input: according to customer's specification V AC
 Output 0(4)...20 mA, 0...10V according to customer's specification
 Wide range power (20...253 V AC/DC)

**Mounting details:****Housing with acrylic plate**

Dimensions: 22,5 x 100 x 110 mm
 Type of protection: IP 40 housing / IP 10 clamps
 Rail-mounting fixed according to
 EN 50022-35 x 7,5 mm
 Connection: pluggable and encoded screw
 clamps
 (optional spring tension
 clamps)
 Weight: 170 gm

For safety reasons we recommend to mount the top-hat rail housing with a distance of 1 mm to each other.