

# Power Measuring Transducer freely configurable

AD-LU 310 GVC

## Description

The power signal transformer AD-LU 310 GVC is a programmable transformer for all displays in the power area. All known measuring tasks such as active power, reactive power, apparent power, voltages, currents, frequency and power factors can be freely defined onto the outputs. The measuring ranges are also programmable in a wide scaling. Filter functions, which can be individually parameterized, complete the adjusting possibilities of the measuring task.

The measuring transformer is programmed comfortably via PC or laptop. The relevant parameterization software AD-Studio and the programming interface cable are available as option.

Customer specific works settings are possible on request.



## Application

Acquisition, transformation and display of all measuring tasks in the power range. Instantaneous power and energy meter united in one freely programmable device.

## Specification

### input alternating current

input circuit	1A and 5A
input resistance	10 mOhm
continuous capacity	10A
shock load	100A

### input alternating voltage

input range	max. 250V
power consumption	0,5 mA
permanent load	1,2x U <sub>nenn</sub>
shock load	2x U <sub>nenn</sub>

### connection technique

#### measured variables

active-, reactive-, apparent power, frequency, current and voltage, power factor  
1-phase  
2/4-wire system  
unsymmetric load

#### analogous output current

output range  
no load voltage  
current limiting  
output load

max. 20mA, freely configurable  
<12V  
ca. 24mA  
max. 500 Ohm

#### analogous output voltage

output range  
output load

max. 10V, freely configurable  
>2 kOhm

#### accuracy

linearity error for active-, reactive- and apparent power  
in 3- and 4-wire system

<0,5% (reference conditions)

influence of temperature

ca. 0,3% over 50K

input frequency influence

ca. 0,2%, 40-60Hz

phase angle influence of input current and voltage

ca. 0,2% O<sub>(cap)</sub>..1..0<sub>(ind)</sub>

warming up period

ca. 15 min.

#### supply

power-supply  
power consumption

20-253 VDC or 50-253 VAC  
ca. 4,6VA or 2,4W

#### housing

dimension (WxHxD)  
type of protection  
terminal cross-section  
connection method  
manner of fastening  
weight

18x110x128mm  
IP 20 (EN 60529)  
max. 2,5 mm<sup>2</sup>  
terminal block for easy wiring  
DIN rail 35mm (EN 50022)  
ca. 110 gr.

#### environmental conditions

ambient temperature

0...+50°C

#### galvanic separation, test voltage

input/output  
input/output/supply

4 kV RMS, 1 Min.  
4 kV RMS, 1Min,

#### EMC

product family standard  
emitted interference

EN 61326  
EN 55011, CISPR11 Cl. B

#### electrical safety requirements

product family standard

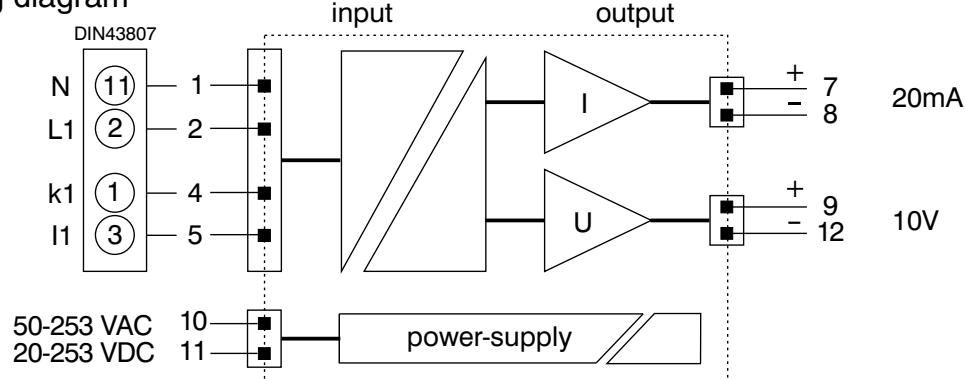
EN 61010-1

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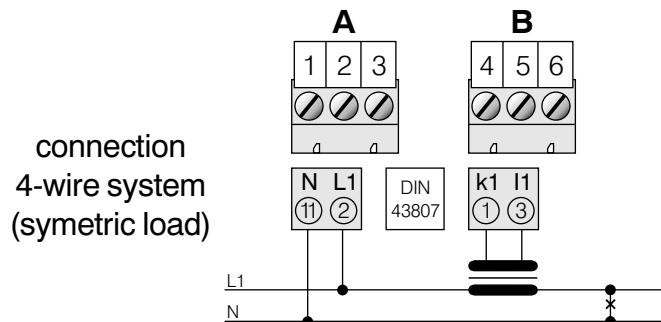
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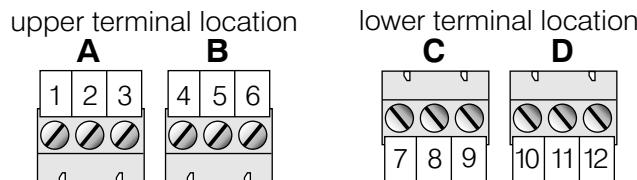
Block and wiring diagram



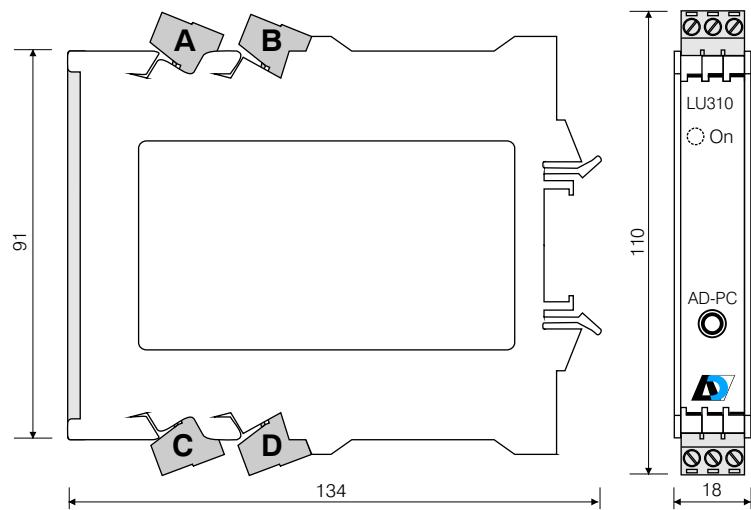
Wiring diagram



Terminal location



Dimensions



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