

# Power Measuring Transducer freely configurable

## AD-LU 610 GVF

### Description

The power signal transformer AD-LU 610 GVF 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. 500 V/ $\sqrt{3}$
power consumption	each phase 0,5 mA
permanent load	$1,2x U_{nenn}$
shock load	$2x U_{nenn}$

#### connection technique

measured variables	active-, reactive-, apparent
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phases  
connection  
load

power, frequency, current and voltage each phase,  
power factor  
1/3 phases  
2/3/4-wire system  
symmetric or 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

#### contact output (relay)

contact rating  
operating principle

max. 250VAC. 2A, 100VA  
freely configurable  
normally open- or  
normally closed contact  
- as limiting value, 1 min, 1 max  
- as S0-interface  
- as energy flow direction  
freely configurable  
(default value 250 ms)

damping factor and  
pulse width

#### 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%  $O_{(cap.)} \cdot 1 \dots 0_{(ind.)}$   
warming up period ca. 15 min.

#### supply

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

#### housing

dimension (WxHxD) 33x110x128mm  
type of protection IP 20 (EN 60529)  
terminal cross-section max. 2,5 mm<sup>2</sup>  
connection method terminal block for easy wiring  
manner of fastening DIN rail 35mm (EN 50022)  
weight ca. 200 gr.

#### environmental conditions

ambient temperature 0...+50°C

#### galvanic separation, test voltage

input/output 4 kV RMS, 1 Min.  
input/output/supply 4 kV RMS, 1Min,

#### EMC

product family standard EN 61326  
emitted interference EN 55011, CISPR11 Cl. B

#### electrical safety requirements

product family standard EN 61010-1

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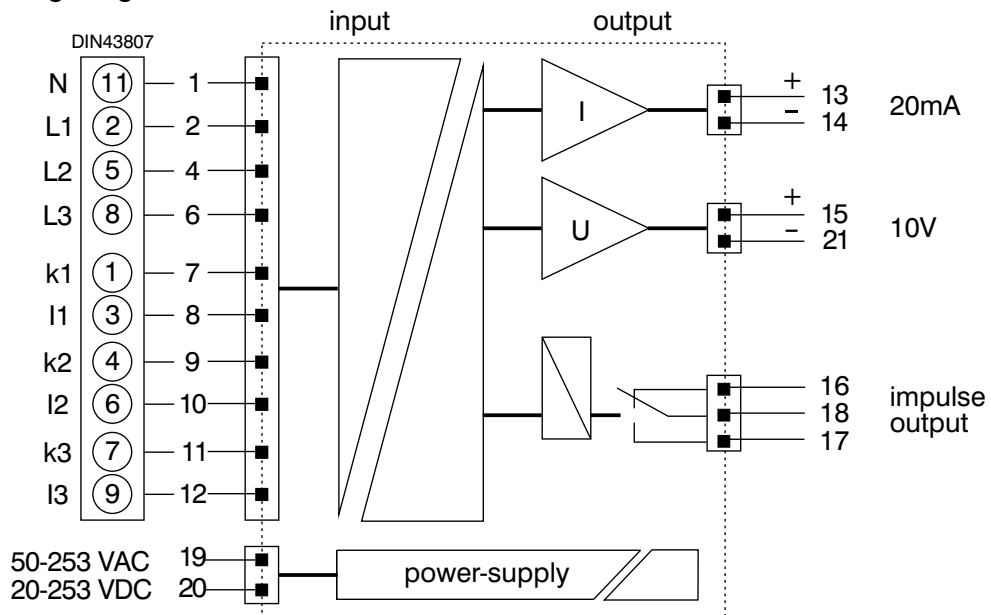
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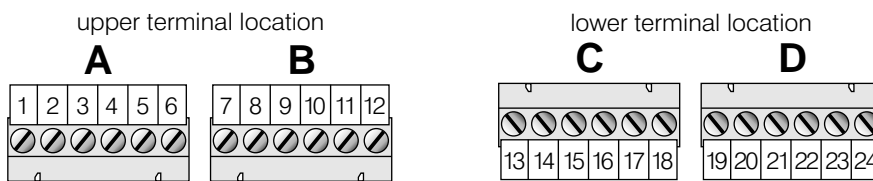
freely configurable

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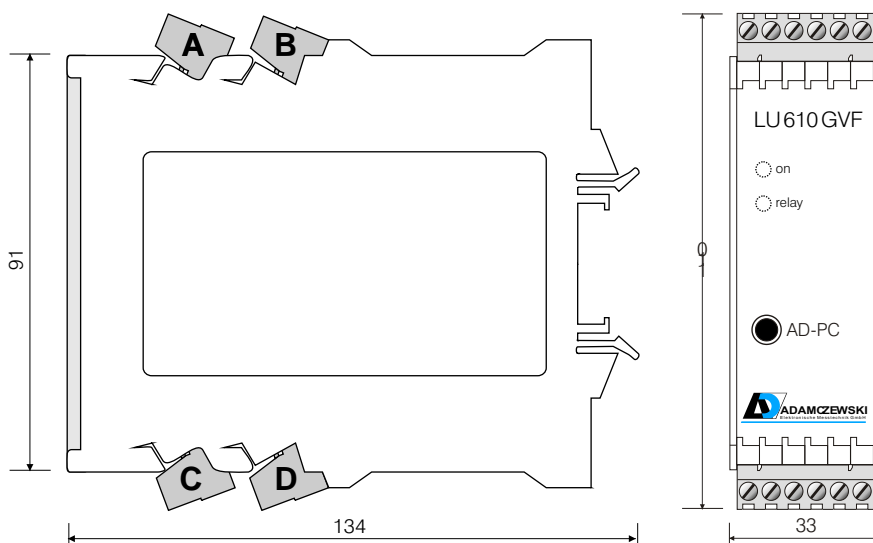
## Block and wiring diagram



## Terminal location



## Dimensions



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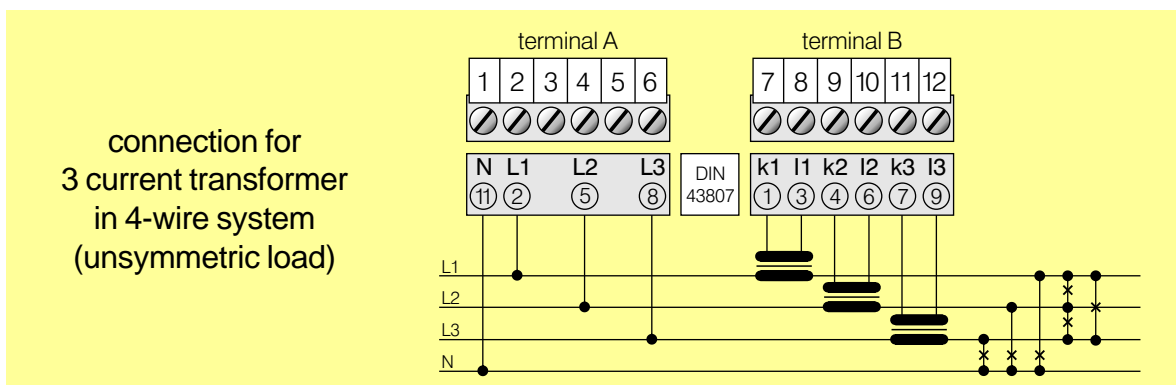
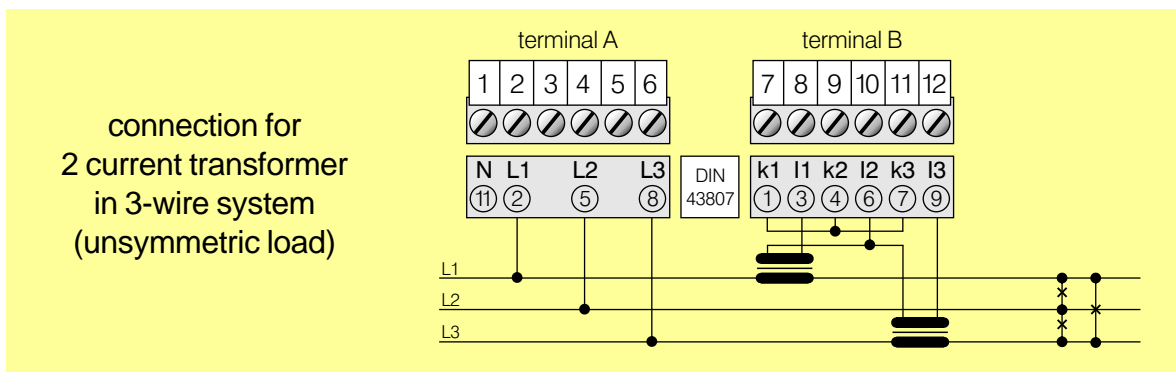
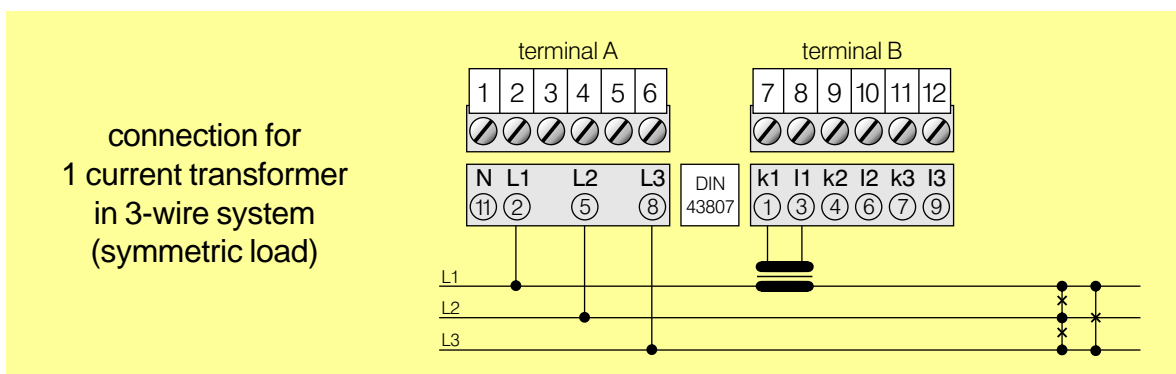
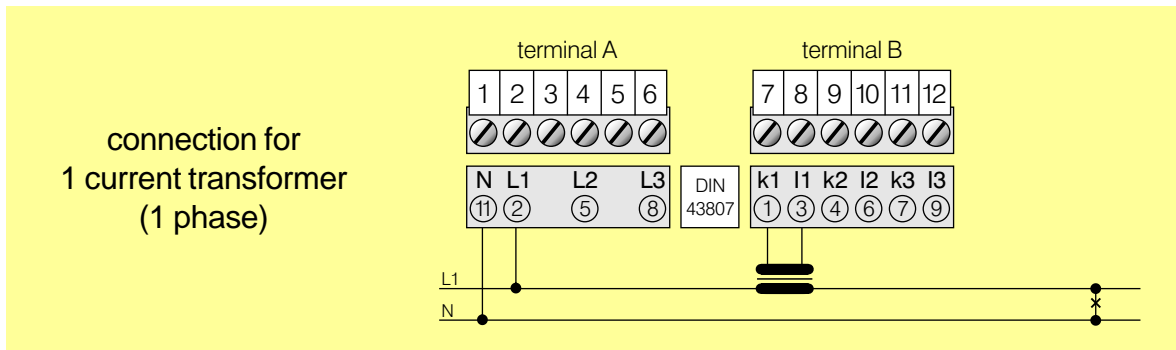
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## Wiring diagram



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