

# Power Measuring Transducer freely configurable

## AD-LU 610 GA

### Description

The power signal transformer AD-LU 610 GA 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

construction type surface housing  
(width x height x dept / 100x70x119mm)  
power supply wide range 20-253VDC / 50-253VAC  
power consumption approx. 4,6 VA resp 2,4 W

#### input alternating current:

input circuit 1A and 5A  
power consumption  
each current circuit 1A: 0,012VA je Leiter  
5A: 0,3 VA je Leiter  
overload capacity 10 A  
shock load 100A

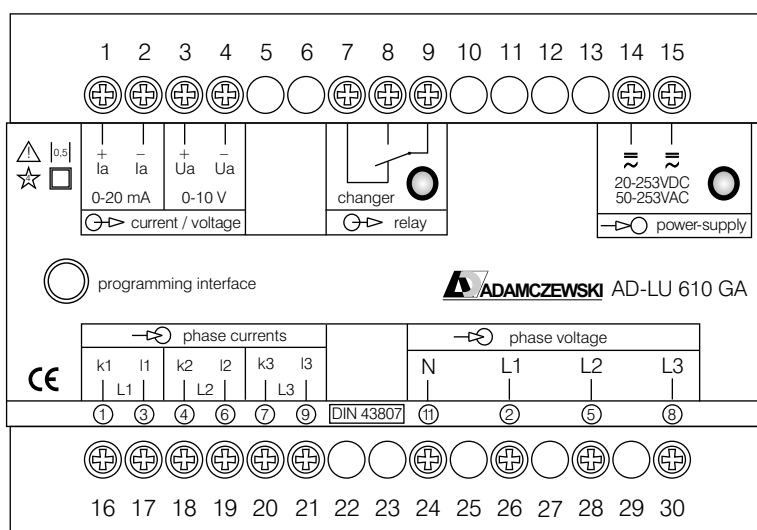
#### input alternating voltage:

input range: linkage max. 630 V  
phase voltage 630V/1,732=363V  
power consumption  
each phase 230V : 0,12 VA / 400V : 0,2 VA  
permanent load  $1,2 \times U_{\text{nenn}}$   
shock load  $2 \times U_{\text{nenn}}$



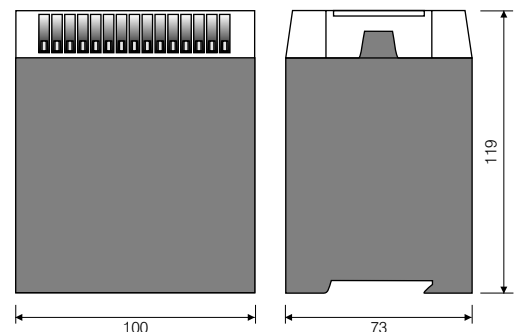
please turn over -->

### Connections and dimension: AD-LU 610 GA



weight max. 200 g  
protection: IP 20  
manner of fastening:  
attachment rail: NS35/7,5

connection data:  
fine-wire: 2,5 mm<sup>2</sup>  
single-wire: 4 mm<sup>2</sup>  
max. voltage: 250 V~



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## Description

### connection technique:

measured variables	active- reactive-, apparent power, current and voltage (rms) each phase, frequency, power factor
phases	1/3 phases
connection	2/3/4-wire system
load	symmetric-, or unsymmetric load

### analogous output current

no-load voltage	<12 V
modulation range	max. 20 mA, free adjustable
current limitation	approx. 24 mA
output load	max. 500 Ohm

### analogous output voltage

short-circuit current	max. 20 mA, permanently
modulation range	max. 10 V, freely adjustable
output load	min. 500 Ohm

### contact output (relay)

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

damping factor and pulse width	freely configurable default value 250 ms
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### errors, influence effects

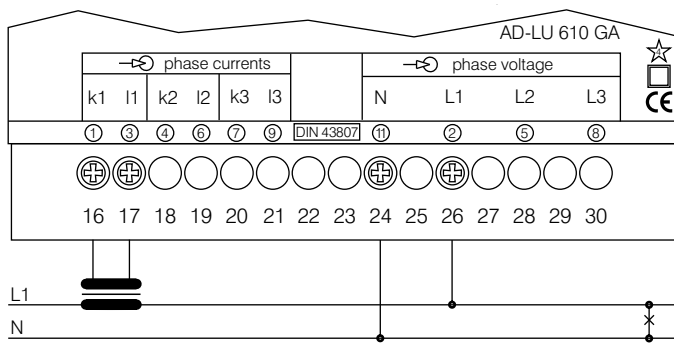
linearity error for active-, reactive- and apparent power in 3- and 4-wire systems	<0,5% (reference conditions)
influence of temperature	approx. 0,3% over 50 K
input frequency influence	approx. 0,2% with 40-60 Hz
phase angle influence of input current and voltage	approx. 0,2% $0_{(cap.)} \dots 1..0_{(ind.)}$
warming up period	15 min.

### insulation voltage

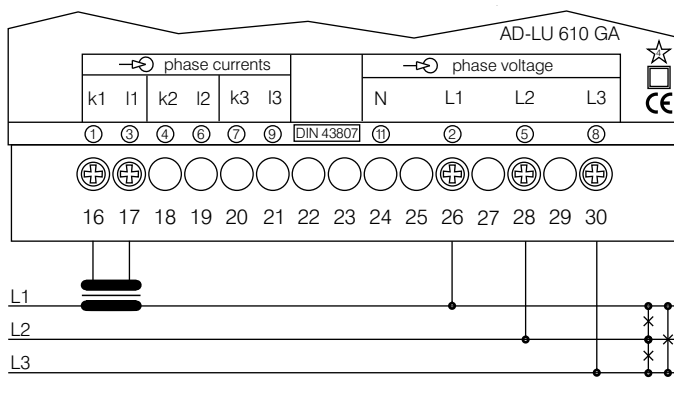
input to output	5 kV, 1 min.
in-/output to power-supply	5 kV, 1 min
EMC test	CE-conform

**operating temperature** 0-50°C

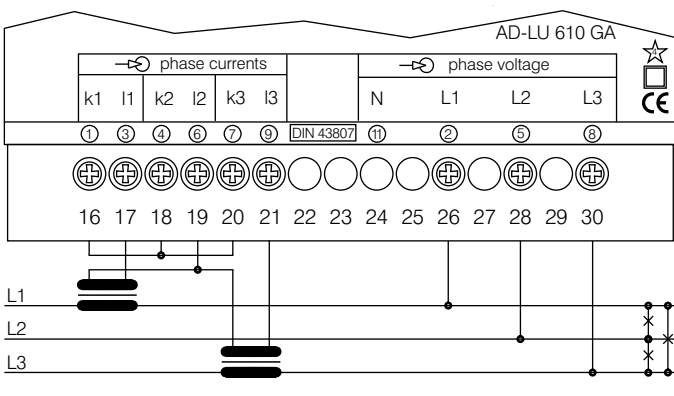
Connection for 1 current transformer (1 phase)



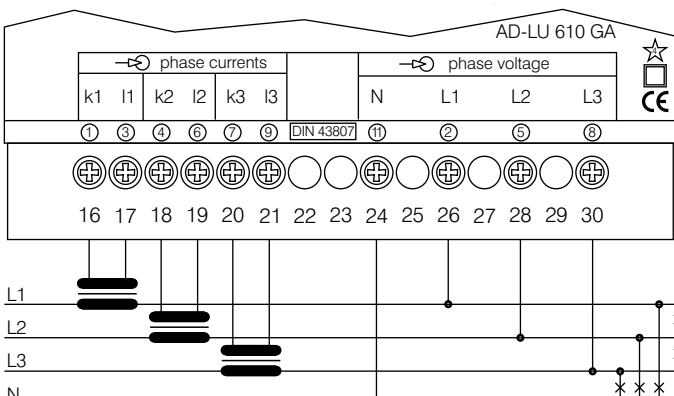
Connection for 1 current transformer in 3-wire system (symmetric load)



Connections for 2 current transformer in 3-wire system (unsymmetric load)



Connection for 3 current transformer in 4-wire system (unsymmetric load)



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