

# Isolation Amplifier "Vario"

AD-TV 33 GL

## Description

The vario-separation amplifier AD-TV 33 GL serves the galvanic separation and amplification of standard DC analogue signals.

The standard signals 0-20 mA, 4-20 mA and 0-10 V are freely selectable at the front via switches at the input as well as at the output. All measuring ranges are permanent calibrated, however, they can still be adjusted via potentiometer at the front, which can be switched on. The selected output signal follows linear the input magnitude and is independent from the connected load up to a limiting value.

Input, output and the supply voltage are galvanically separated from each other with a high insulation. An integral electronic wide range power pack with high efficiency prevents strong increases in temperature and allows high output loads. A high pack density is achieved in combination with the narrow type of construction. The universality saves storage costs, a diversity of types is therefore eliminated.



## Application

For load amplification, galvanic decoupling and conversion of impressed standard signal measuring magnitudes.

## Specification

- all standard signals at input and output are freely selectable
- switchable zero point trimmer and final value trimmer
- high output load
- 18 mm narrow housing

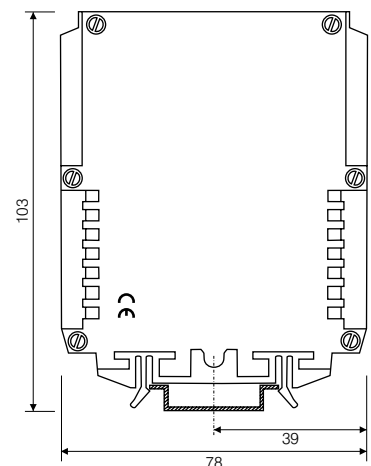
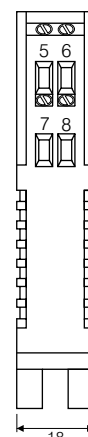
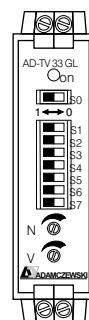
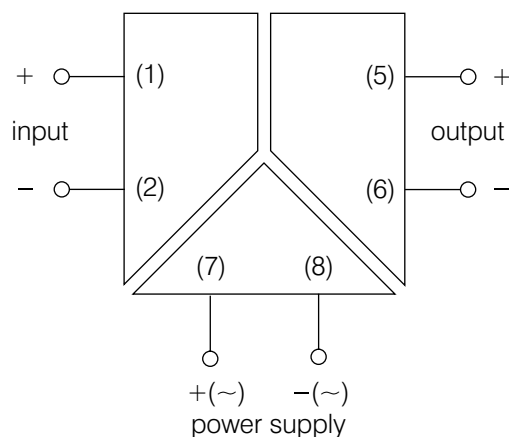
## Specification

Construction	1-channel switchboard housing
Power-supply	wide-range power supply 20-253 VDC / 50-253 VAC (50-60Hz)
Power-consumption	approx. 2,8 VA resp. 1,5 W
Input	0-20mA; 4-20mA or 0-10V freely selectable on the front panel
Input impedance	50 Ohm (current) , 200 kOhm (voltage)
Output	0-20 mA; 4-20mA or 0-10V freely selectable on the front panel
Output load	max. 500 Ohm (current) min. 500 Ohm (voltage)
linearity error	< 0,2%
Effect of temperature	< 100 ppm/K
Insulation test voltage	input/output: 3,75 kV RMS signal/power-supply: 4 kV RMS
Protective systems	input/output: against over-voltage, polarity reversal, over-current power-rack: against over-voltage, over-current, over-temperature
EMC	
Product family standard	EN 61326
Emitted interference	EN 55011, CISPR11 Cl. B
Electrical safety requirements	
Product family standard	EN 61010-1
Ambient temperature	0...+50°C

## Connections and dimensions: AD-TV 33 GL

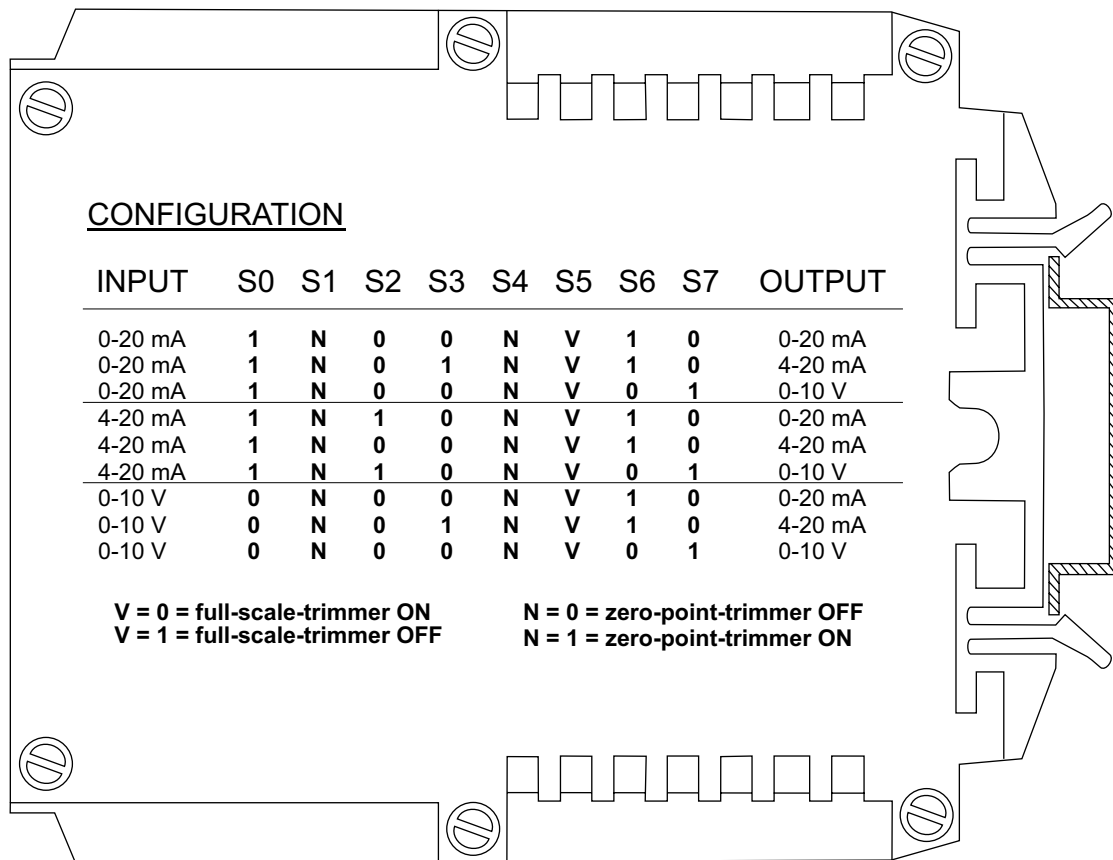
weight max. 200 g  
protection: IP 20  
manner of fastening:  
attachment rail: NS35/7,5

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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## Input and output settings:



### DIP switch function:

- S0: input (current or voltage)
- S1: zero-point-trimmer enabling
- S2: input signal 4...20 mA
- S3: output signal 4...20 mA
- S4: zero-point-trimmer enabling
- S5: full-scale-trimmer enabling
- S6: output signal (current)
- S7: output signal (voltage)

Enabling the trimmer allows to modify the calibrated values.  
Placing back the trimmer, reset the signals to the default.

