

# Summation Amplifier

AD-SMV 310 GS  
AD-SMV 310 GB  
AD-SMV 310 EV

## Description

The summation amplifier adds or subtracts a maximum of 4-6 currents or voltages (terms of a sum), each signal can be individually evaluated. The output signal (Current or voltage) is proportional to the summation. signals, which have to be subtracted, have to be connected interchanged. The output signal (current or voltage) is stable up to the maximum load.

Important: Input and output must be galvanically separated.

## Application

Analogue summation of single data. For example: flow-data, levels, oxygen.



## Ordering information

Following details are necessary for ordering:

- arithmetical function  
for example:  $\text{Output} = \text{Input 1} + \text{Input 2} - \text{Input 3}$
- Input definition (order example):  
Input E1 = 0-20 mA = 0-500 cbm/h  
Input E2 = 0-5 mA = 0-100 cbm/h  
Input E3 = 0-20 mA = 0-150 cbm/h  
Output A = 4-20 mA = 0-550 cbm/h  
Power supply = 220 VAC

## Specification

Power supply: GB : ALLPOWER 20-253V AC/DC  
EV(\*) : 230 V, 50-60 Hz or 20-30 VDC

Power consumption: approx. 2,5 VA or 2 W

Input: current or voltage  
SMV 310 GB or GS: max 4 Inputs  
SMV 310 EV: max 6 Inputs

Output: Current or voltage impressed  
for example: 0-20mA, 4-20mA or 0-10V

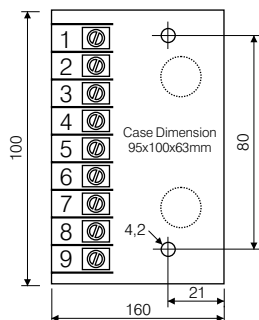
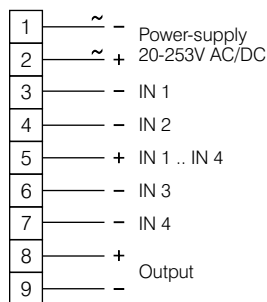
Max load: max. 800 Ohm at 20 mA  
min. 500 Ohm at 10V

Linearity: < 0,5 %

Ambient temperature: 0 to + 50 °C

### Connections and dimensions: AD-SMV 310 GB

weight max. 300 g  
protection: IP 30

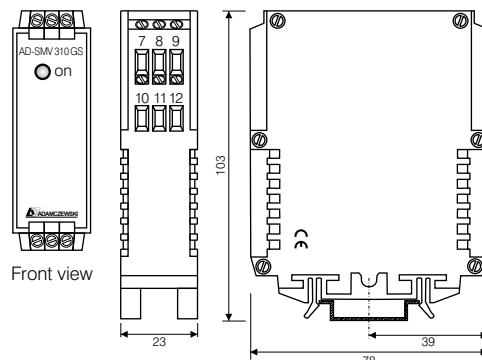


### Connections and dimensions: AD-SMV 310 GS

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~

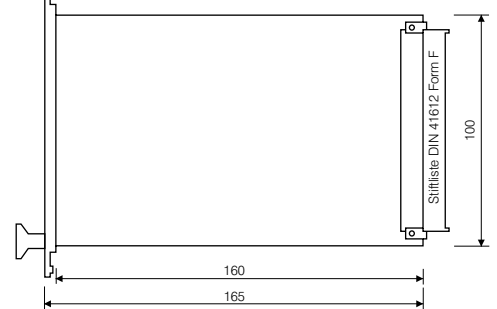
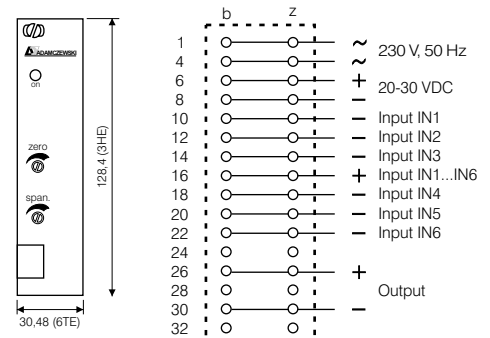
E = Input, A = Output, Uh = power supply

6	-E3	+E2	3	9	+A	-Uh	12
5	+E3	-E1	2	8	-E4	+Uh	11
4	-E2	+E1	1	7	+E4	-A	10



### Connections and dimensions: AD-SMV 310 EV

weight max. 300 g  
protection: IP 30



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