

• **Process inputs**  
*(volt, mA, sensor power supply, potentiometer)*

• **CAL23:** *Standard width 35 mm*

• **CAL23L:** *Small size version 23 mm  
 (SMPS power supply)*

• **SVL23:** *Maximum value selector version  
 (between 2 similar inputs)*

• **Triple galvanic insulation**

• **Up to 10 kHz bandwidth**



**CAL23L**



**CAL23**

The converter CAL23 allows for adaptation and insulation of a wide variety of electrical process signals. The triple galvanic insulation (Input/Output/Power supply) ensures optimum safety regardless of the use of the converter.

**- Inputs:**

- Symmetrical voltage, direct mV, V.
- Symmetrical current, direct mA, A.
- 3-wire potentiometer (5 V potentiometer reference).
- Sensor power supply,  
 4/20 mA transmitter in loop powered,  
 do not short-circuit the sensor power supply  
 otherwise you will damage the converter.

**- Special inputs:**

- Sum of 2 non-insulated inputs (mA, V).
- Difference of 2 non-insulated inputs (mA, V).
- Mean of 2 non-insulated inputs (mA, V).
- Max value selector: 2 non-insulated inputs (mA, V).

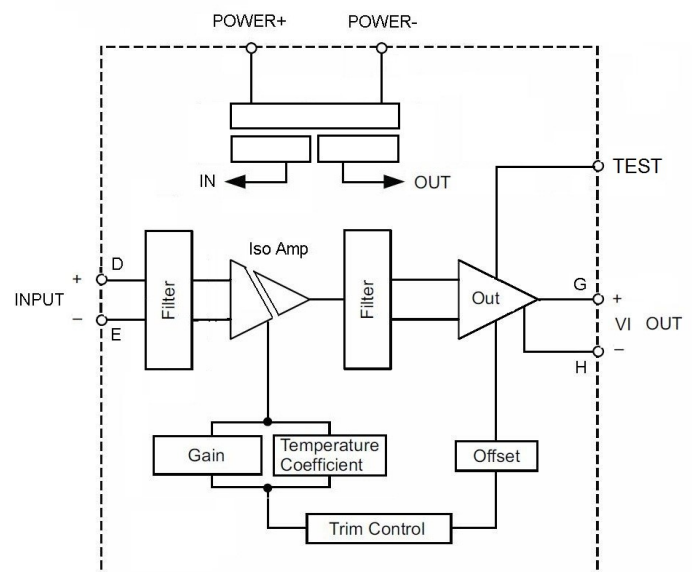
**- Outputs:**

- Voltage output: 0...1...5...10V.
- Current output: 0...4...20mA.
- Up to 10 kHz bandwidth (option).

**- General characteristics:**

- DIN rail mounting plastic enclosure, IP20 protection.
- Extended electromagnetic compatibility,
- Control of power supply voltage presence by green LED,
- Adjustments of start and end of scale with potentiometers,
- Protected against reverse polarity,
- Symmetrical and asymmetrical DIN rail mounting,
- Connection with screw-terminals  
 (section of the wires up to 4 mm<sup>2</sup>).
- Conformal coating.

**Bloc diagram:**



Version and order code :

<b>CAL23D</b>	All signal low noise version Linear power supply 35 mm width
<b>CAL23L</b>	All signal standard version Wide range switching power supply 23 mm width
<b>SVL23</b>	Max value selector
option:	/DP (dual power) two redundant power supply inputs.

INPUT RANGE	
TYPE	
Voltage mV, V dc	+/- 100 mV to +/- 1000 V
Impedance	> 200 kOhms (0...1 V) > 1 MOhms (1... 1000 V)
Current mA, A dc	+/- 500 µA / +/- 5 A
Input impedance	6.5 Ohms (mA) 0.25 Ohms (1 A) 0.05 Ohms (5 A)
Potentiometer	10 kOhms maximum
Accuracy	+/- 0.25 %
Response time	< 200 ms
optional pass-band	100 Hz (-3 dB)
AUXILIARY	
Sensor power supply	19 V (smoothed)
for power supply voltage rating	
Potentiometer reference	5 V (regulated)
OUTPUT RANGE	
TYPE	
Current	0 ... 4 ... 20 mA
Load	0 - 700 Ohms
(for rating power supply voltage)	
Voltage	0 ... 10 V
Impedance	500 Ohms
(Other output ranges on request)	

POWER SUPPLY	
(to be specified at the order)	
CAL23:	
230 Vac	50-60 Hz +/- 10 %, 2 VA
115 Vac	50-60 Hz +/- 10 %, 2 VA
CAL23L:	
20 to 70 Vac / Vdc	2 VA
80 to 265 Vac / Vdc	2 VA
9 to 30 Vdc	2 W
RECOMMENDED OPERATING CONDITIONS	
Temperature	
Operating	-10 °C to 60 °C
Storage	-20 °C to +85 °C
Influence	~ 0.015 % / °C
Relative humidity	85 % non condensed
Weight	~ 110 g
Protection	IP 20
Dielectric strength	1500 Vac continuous (Inputs/Pwr.supply/Outputs)

Electromagnetic compatibility			
Generic standards: NFEN50081-2 / NFEN50082-2			
EN55011	meet	group 1 / class A	
EN61000-4-2	no influence	B	ENV50140 < +/- 5 % A
EN61000-4-4	< +/- 5 %	B	ENV50141 < +/- 10 % A
EN61000-4-5	< +/- 5 %	B	ENV50204 no influence A
EN61000-4-8	no influence	A	
EN61000-4-11	< +/- 5 %	B	DBT 73/23/CEE



**WIRING AND OUTLINE DIMENSIONS:**

