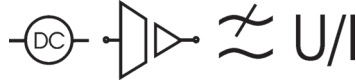
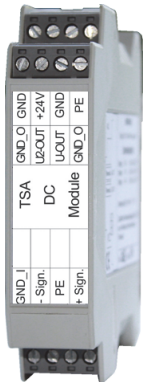


TSA-DC



Characteristics

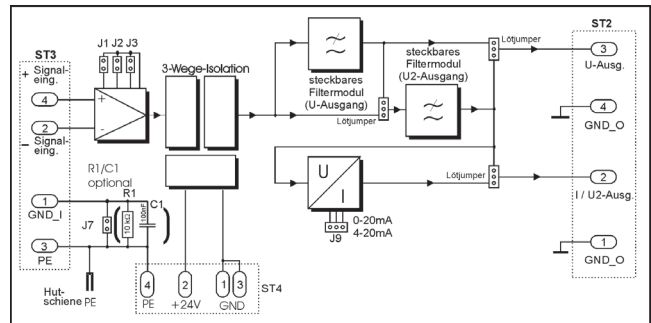
The **TSA-DC Module** offers signal conditioning of Shunt sensors or other arbitrary DC and AC sources. Switchable standard ranges are 150 mV, 500 mV, 1 V and 10 V. The input is differential. Depending on the base configuration the module has voltage and current outputs.

Technical Data

Supply voltage	24 V DC \pm 10 %
Power consumption at nominal voltage (without sensor / without load)	50 mA
Electrical isolation (3-way isolation)	1000 V DC
Accuracy	0.1 %
AC coupling at input	min. appr. 1 Hz
Cut-off frequency (standard / maximum)	5 kHz / 10 kHz
Linearity (typical)	0,02 %
Input Sensor Input resistance	DC or AC source 10 M Ω
Output – Voltage Output range (V1 / V2)	\pm 10 V / 0..10 V
Output – Current Output range (A1 / A2 / A3)	\pm 20 mA / 0..20 mA / 4..20 mA
Max. load current (U output)	\pm 12 mA
Residual ripple @ $f_g = 5$ kHz $f_g = 10$ kHz	Gain=1: typ. 2 mV _{pp} typ. 5 mV _{pp} Gain>500: 3 mV _{pp} x Gain/500
Measurement range / Gain	150 mV V = 66,66 500 mV V = 20 1,0 V V = 10 10 V V = 1 switchable
Environmental temperature	0..50 °C
Plug-in filter Standard frequencies in Hz	10, 30, 50, 100, 300, 500, 1 k, 3 k, 5 k, 10 k

Block Diagram

Differential input



Optional AC coupling at input

Dimensions

Housing ME 22.5:
 22.5 x 99 x 114.5 mm (WxHxD)

Ordering Code

TSA-DC - - - -

1. Model	
1	1 output
2	2 outputs
2. Measuring ranges in V (switchable)	
VX	Enter calibrated value: 0.15, 0.5, 1, 10 Enter non- standard value: 0.1..10
3. Output filter frequencies (Hz)	
XXX	Enter standard values: 10, 30, 50, 100, 300, 500, 1k, 3k, 5k, 10k Enter non- standard value: 1..30k
4. Filter characteristics	
BW	Butterworth 4th order
BS	Bessel 4th order
BW8	Butterworth 8th order (for 1 output only)
BS8	Bessel 8th order (for 1 output only)
5. Output (not all combinations feasible)	
V1	\pm 10 V
V2	0..10 V
A1	\pm 20 mA
A2	0..20 mA
A3	4..20 mA

Example: TSA-DC1-10-3k-BS-V1