Supply Isolation Amplifier

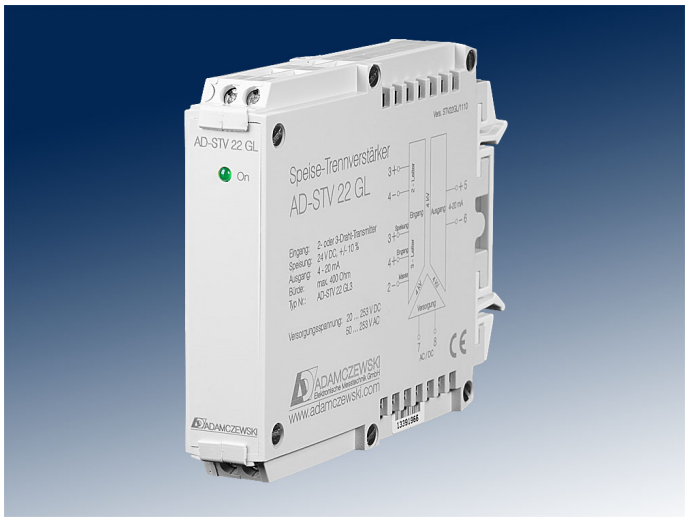
AD-STV 22 GL

Description

The supply isolation amplifier AD-STV 22 GL serves the galvanic isolation and amplification of current signals in the range 0/4...20 mA. The transmitter is supplied by an isolated and limited supply voltage. Input, output and power supply are galvanically isolated. The electronic wide range power supply avoids an excessive heating. In combination with the small shape, high packing densities can be achieved.

Application

Supply of 2-wire transmitters like pressure or temperature transmitters and galvanic signal isolation.



Specific characteristics

- 3-way isolation of input, outtput and supply
- Current transfer ratio 1:1, input = output
- Integrated current-limited power supply

Business data

Order number

AD-STV 22 GL

Technical specifications

Input current	
Measuring range	0 ... 20 mA; 4 ... 20 mA
Input resistance	50 Ohm
Transmitter supply	
Open-circuit voltage	< 24 V
At 20 mA	> 17 V
Current limit	< 30 mA
Output current	
Output range	0 ... 20 mA; 4 ... 20 mA
Max. burden	< 400 Ohm
Transmission behaviour	
Linearity error	< 0,3 %
Temperature influence	< +/-100 ppm/K
Supply	
Voltage range	20 ... 253 V DC; 50 ... 253 V AC
Power consumption	1,5 W, 3 VA
Housing	
Manner of fastening	DIN rail 35mm EN 50022
Type of protection	IP 20
Connector cross section	2,5 mm^2 flex wire, 4 mm^2 one wire
Weight	ca. 90 g
Bolting torque terminals	0,5 Nm
Environmental conditions	
Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)
EMC	
Product family standard	EN 61326-1
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1
During electromagnetic disturbance minor changes in output signal are possible.	
Electrical safety requirements	
Product family standard	EN 61010-1
Overvoltage category	II
Pollution degree	2
Functional safety	
Safety Integrity Level (SIL) according to IEC 61508	SIL 2
Galvanic isolation, test voltages	
Input/output	3,75 kV, 1 min
Signal/auxiliary voltage	3 kV, 1 min

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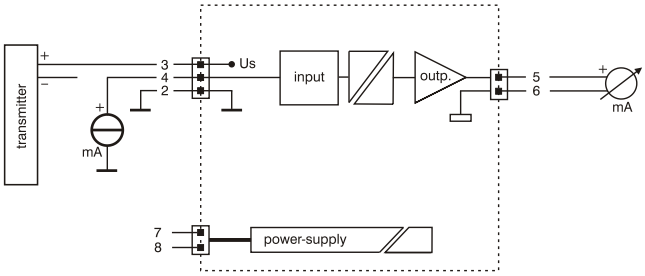
Block and wiring diagram



Dimensions