

Description

The supply isolation amplifier AD-STV 24 GVB 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. An integral, electronic power pack is designed with a voltage range of 11 to 30 VDC, also for 12V battery voltage. 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, output and supply
- Current transfer ratio 1:1, input = output
- Integrated current-limited power supply
- Suitable for battery voltage of 12VDC

Business data

Order number
AD-STV 24 GVB

Information

Downloads
Tender text

[stv24gvb.zip](#)

Technical specifications

Input current

Measuring range 0 ... 20 mA; 4 ... 20 mA
Input resistance 50 Ohm

Transmitter supply

Open-circuit voltage < 23 V
At 20 mA > 17 V
Current limit < 30 mA

Output current

Output range 0 ... 20 mA; 4 ... 20 mA
Max. burden < 300 Ohm

Transmission behaviour

Basic accuracy < 0,2 %
Linearity error < 0,2 %
Temperature influence < +/-100 ppm/K
Response time < 1 ms

Supply

Voltage range 11 ... 30 V DC
Power consumption 1,4 W

Housing

Dimensions (WxHxD) 13x110x134 mm
Type of protection IP 20
Connection method detachable terminal clamp (2,5 mm² flex wire / 4 mm² one wire)
Bolting torque terminals 0,5 Nm
Manner of fastening DIN rail 35mm (EN 50022)
Weight ca. 100 g

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

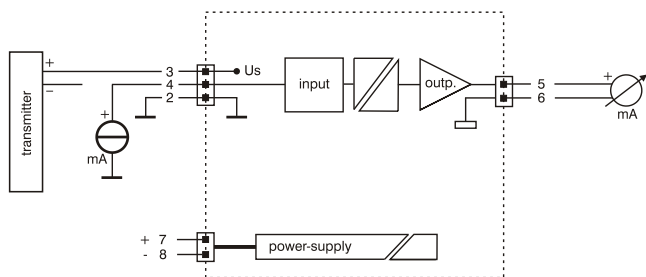
Galvanic isolation, test voltages

Input/output 3,75 kV, 1 min
Signal/auxiliary voltage 3 kV, 1 min

Supply Isolation Amplifier

AD-STV 24 GVB

Block and wiring diagram



Dimensions

