

Special Functions

Power Supply

AD-SV 20 GS

AD-SV 40 GS

Description

With the power supplies AD-SV 20 GS (1-channel) and AD-SV 40 GS (2-channel), external sensors and devices with a filtered DC voltage of about 24 V DC with max. 50 mA can be supplied. The output voltage is electrically isolated from the supply voltage and the second channel. For each channel, two different electronic current limiters are available, which can be alternatively selected via terminals. Due to the highly efficient integrated electronic wide range power supply high output loads are achieved with low power consumption and heating.

Application

For an isolated power supply of external sensors etc. Devices with a DC separation, eg. 2- or 3-wire transmitter



Specific characteristics

- Wide range power supply: 90 ... 253 V AC or DC
- galvanically isolated output voltages
- Two different current limits per channel
- Current limit selectable via terminals
- Single-channel (AD-SV 20 GS) and two channels (AD-SV 40 GS) available

Business data

Order number

AD-SV 20 GS	1-channel
AD-SV 40 GS	2-channel

Information

Downloads

Technical specifications

Output 1

Nominal voltage	24 V DC
Open-circuit voltage	ca. 27 V DC
Full load voltage	ca. 21 V DC
Current limit	25 mA / 50 mA (can be alternatively selected via terminals)
Residual ripple	max. 50 mVss

Output 2

Nominal voltage	24 V DC
Open-circuit voltage	ca. 27 V DC
Full load voltage	ca. 21 V DC
Current limit	25 mA / 50 mA (can be alternatively selected via terminals)
Residual ripple	max. 50 mVss

Supply

Voltage range AC	90 ... 253 V AC, 50/60 Hz
Nominal voltage AC	110 V AC / 230 V AC
Voltage range DC	90 ... 253 V DC
Nominal voltage DC	110 V DC / 230 V DC
Power consumption AC / DC	6 VA / 4 W (two channels, full load)

Transmission behaviour

Temperature influence	100 ppm/K
-----------------------	-----------

Housing

Dimensions (WxHxD)	23x78x103 mm
Type of protection	IP 20
Connection method	screw clamp
Terminals, wire cross section	2,5 mm ² flex wire / 4 mm ² one wire
Bolting torque terminals	0,5 Nm
Weight	~ 120 g
Manner of fastening	35 mm DIN rail 35mm

Environmental conditions

Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)

EMC

Product family standard	EN 61326-1 ¹⁾
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1

Electrical safety requirements

Product family standard	EN 61010-1
Overvoltage category	II
Pollution degree	2

Galvanic isolation, test voltages

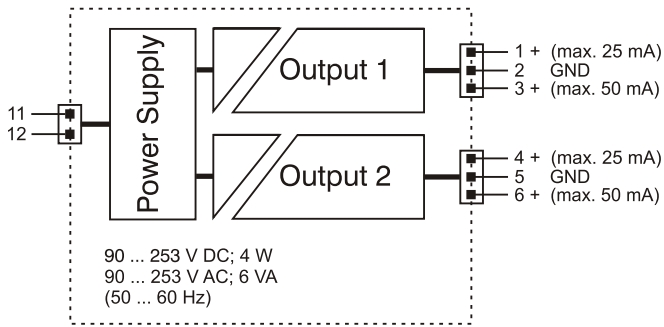
Output 1 / output 2	2 kV (1 min.)
Outputs / power supply	4 kV (1 min.)

Protection circuits

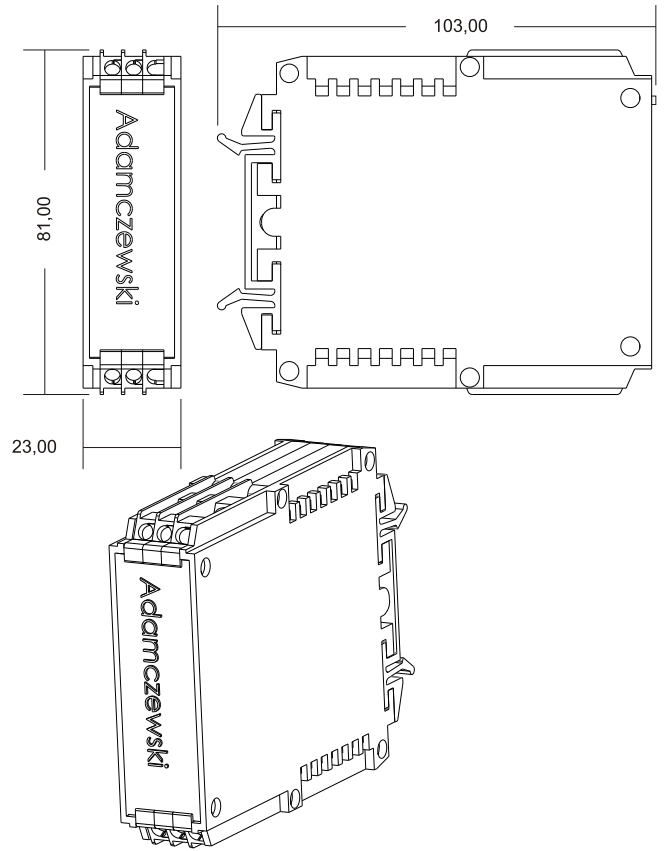
Output	protection against overvoltage and short circuit
Power supply	protection against over voltage, over temperature and reverse polarity

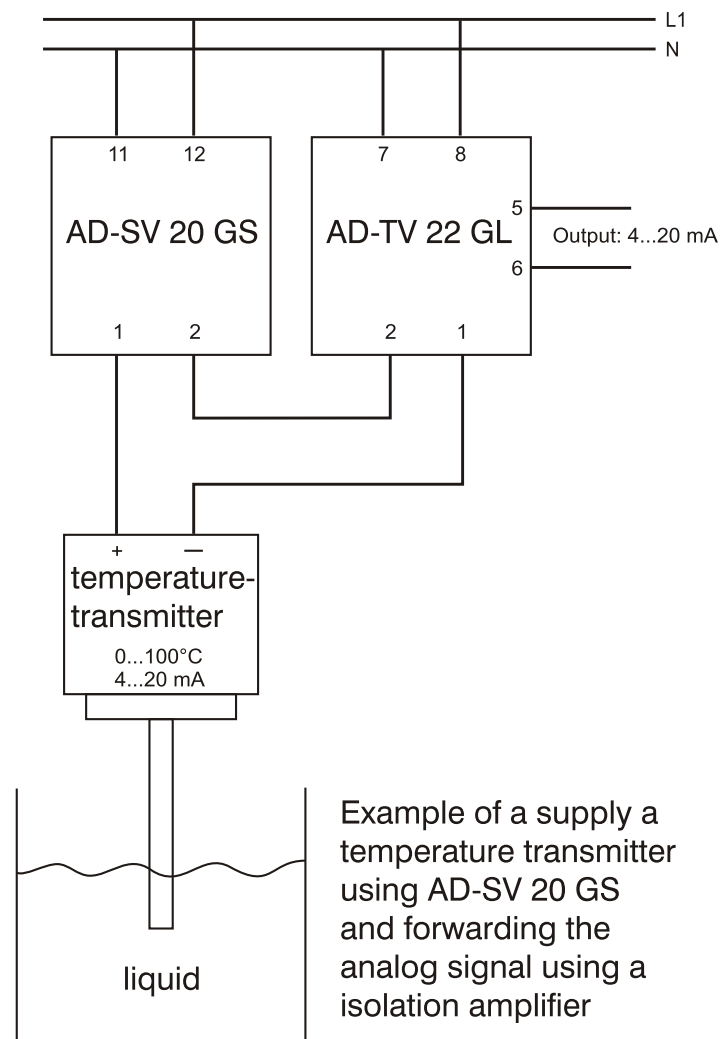
¹⁾During electromagnetic disturbance minor changes in output signal are possible.

Block and wiring diagram



Dimensions



Circuit examples

Example of a supply a temperature transmitter using AD-SV 20 GS and forwarding the analog signal using a isolation amplifier