



# Supply Isolation Amplifier

## AD-STVEX 710 GVD

### Description

The AD-STVEX 710 GVD supply isolating amplifier is used for the intrinsically safe supply of a transmitter installed in the hazardous area. The supply isolation amplifier itself is installed as associated electrical equipment in the non-hazardous area, i.e. the safe area. The signal is galvanically isolated and transmitted to the non-hazardous area. The passive input also allows active signals from the hazardous area. The active current output, the current sink output and the voltage output facilitate the adaptation to the following signal input. The device can be operated at 24 V DC or 230 V AC.

### Application

Supply of a transmitter in the hazardous area and galvanic isolation of the signal.



### Specific characteristics

- Supply of a transmitter up to zone 0 (gas) or 20 (dust)
- Active current sink output or current output and voltage output
- Open-circuit detection according to Namur recommendation NE43
- Further parameters configurable via configuration software AD-Studio
- Detachable, coded connection terminals
- Zero and full scale adjustment possible via front panel keys

### Business data

#### Order number

AD-STVEX 710 GVD	Ex input top
AD-STVEX 710 GVD S-388	Ex input bottom

### Information

#### Downloads

Instruction manual	<a href="#">man-stvex710gvd-ad-en.pdf</a>
Tender text	<a href="#">stvex710gvd.zip</a>

### Technical specifications

#### Transmitter input, intrinsically safe

Feeding voltage	23V @ 4mA ... 16V @ 20mA
Maximum measuring range	0 ... 22 mA
Maximum short circuit current	68 mA

#### Current input, intrinsically safe

Maximum measuring range	0 ... 22 mA
Input resistance	50 Ohm

#### Current output, active

Maximum output range	0 ... 22 mA
Max. burden	500 Ohm

#### Current sink output, passive

Maximum output range	0 ... 22 mA
Max. external supply voltage	25 V DC
Max. burden	$(U_{\text{extern}} - 2V) / 20\text{mA}$

#### Output voltage

Maximum output range	0 ... 11 V
Min. burden	2 kOhm

#### Transmission behaviour

Resolution input	~ 20 µA/LSB
Resolution current output	~ 20 µA/LSB
Resolution voltage output	~ 10 mV/LSB
Maximum error	0,2 % of full scale
Temperature influence	~ 50 ppm/K
Response time	~ 100 ms (10 ... 90 %)

#### Auxiliary voltage

Range	20 ... 120 V DC / 50 ... 250 V AC
Power consumption	1,8 W / 3,5 VA

#### Environmental conditions

Ambient temperature	-20 ... +60 °C
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#### Approval

ATEX	II (1) G [Ex ia Ga] IIC II (1) D [Ex ia Da] IIIC
Type examination certificate	BVS 11 ATEX E 013 X
Standards	EN 60079-0, EN 60079-11 EN 60079-26, EN 61241-11

#### EMC

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

#### Electrical safety requirements

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



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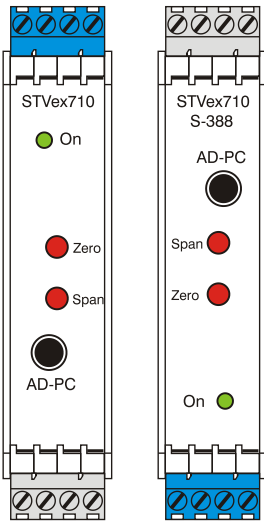
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# Supply Isolation Amplifier

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## Display and operating elements



Standard

S-388

### On: Operation LED

Steady light: Ready to operate  
Flashing 2x: Keystroke  
Flashing 1Hz: Invalid measured value according to NE43

### Zero: Pushbutton zero

Set start of measuring range

### Full: Pushbutton full point

Set end of measuring range

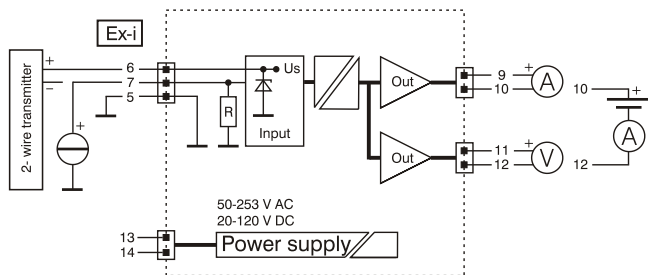
### Zero & Full

Set measuring range to factory values

### AD-PC: Configuration

Jack socket for communication with PC configuration software.

## Block and wiring diagram



## Dimensions

