

**Description**

The separation amplifier of type family AD-TV 810 serves the galvanic separation, conversion and amplification of bipolar signal sizes. The very high frequency range allows direct current as well as alternating current transfers. Input, output and the supply voltage are galvanically separated from each other. The output signal is independent of the connected load up to a maximum value. The limit frequency of the amplifier can be set at the front as an option.

**Application**

Recording, galvanic 3-way separation, conversion and amplification of bipolar measuring sizes (voltage or current).

**Specific characteristics**

- 3dB bandwidth switch (0,1 / 0,5 / 1 / 2 / 20 kHz) are optionally available.

**Business data**

**Order number**  
AD-TV 810 GS

**Technical specifications****Input current**

Measuring range -20 ... 20 mA <sup>1)</sup>  
Input resistance 25 Ohm

**Input voltage**

Measuring range -10 ... 10 V <sup>1)</sup> (max. +/- 250V)  
Input resistance 100 kOhm (10 kOhm / Volt)

**Output current**

Output range -20 ... 20 mA <sup>1)</sup>  
Max. burden 500 Ohm  
Max. residual ripple 40 µAss

**Output voltage**

Output range -10 ... 10 V <sup>1)</sup>  
Min. burden 1 kOhm  
Max. residual ripple 20 mVss

**Supply**

Voltage range AC 50 ... 253 V AC, 50/60 Hz  
Nominal voltage AC 230 V AC  
Voltage range DC 20 ... 253 V DC  
Nominal voltage DC 24 V DC  
Input power AC/DC 3,5 VA / 1,7 W

**Transmission behaviour**

Basic accuracy < 0,2 %  
Temperature influence 100 ppm/K  
Frequency range 0...20 kHz (-3dB)

**Housing**

Dimensions (WxHxD) 23x78x103 mm  
Type of protection IP 20  
Connection method screw clamp  
Terminals, wire cross section 2,5 mm<sup>2</sup> flex wire / 4 mm<sup>2</sup> one wire  
Bolting torque terminals 0,5 Nm  
Weight ~ 100 g  
Manner of fastening 35 mm DIN rail 35mm

**Environmental conditions**

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

### Technical specifications

#### EMC

Product family standard	EN 61326-1 <sup>2)</sup>
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1

#### Electrical safety requirements

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

#### Galvanic isolation, working voltage

Input / output	250 V DC or ACeff
Input / supply unit	300 V DC or ACeff
Output / supply unit	300 V DC or ACeff

#### Galvanic isolation, test voltages

Input / output	3 kV, 50 Hz (1 min.)
Input / supply unit	3 kV, 50 Hz (1 min.)
Output / supply unit	3 kV, 50 Hz (1 min.)

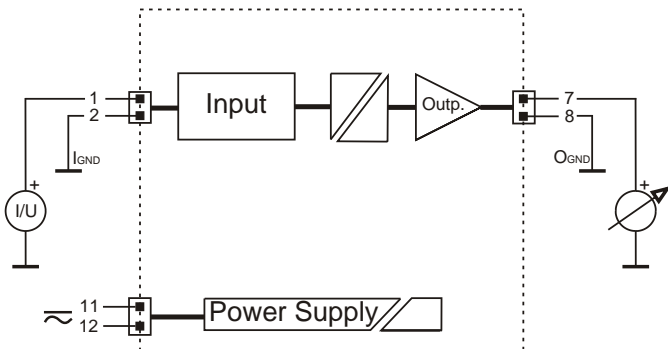
#### Protection circuits

Input	electrical surge protection
Output	electrical surge protection
Power supply	Protection against overvoltage reverse polarity

1) Values must be advised by order.

2) During checking, slight signal deviations are possible.

### Block and wiring diagram



### Dimensions

