

## Description

The electrodes are supplied with alternating voltage. If a conduction liquid i.e. water, bridges the mass and the max-electrode, the output relay responds, the transmitter power monitor lights up. Furthermore an internal, commutator ensures that the min-electrode becomes effective. The relay de-energize, if the mass and the min-electrode are not conductive connected. The sensitivity can be adjusted to the given circumstances via an integral trimmer.

## Application

Monitoring and regulating levels of conductive liquids, especially water.



## Specific characteristics

- 3 input electrodes
- AC current measurement
- universal wide range power supply

## Business data

### Order number

AD-ER 01 GS

## Information

### Downloads

## Technical specifications

### Electrodes

Voltage	< 10 V~
Current	< 1 mA
Frequency	~ 45 Hz
Sensitivity	0 ... 60 kOhm
Response time	~ 10 ms

### Relay output

Maximum switching load AC	250 V, 2 A
Maximum switching load DC	50 V, 2 A
Contact construction	potential-free changeover
Switching operations mechanical	10000000
At 230V/2A AC, cos(phi)=1	600000
At 230V/2A AC, cos(phi)=0,4	200000
At 24V/1 A DC	200000

### Supply

Voltage range AC	50 ... 253 V AC, 50/60 Hz
Nominal voltage AC	230 V AC
Power consumption AC	3 VA
Voltage range DC	20 ... 253 V DC
Nominal voltage DC	24 V DC
Power consumption DC	1,4 W

### Housing

Dimensions (WxHxD)	23x78x103 mm <sup>3</sup>
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)

### EMC

Product family standard	EN 61326-1 <sup>1)</sup>
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

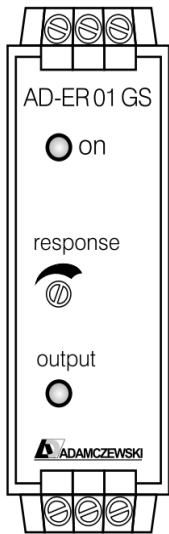
Input / output	3 kV, 50 Hz (1 min.)
Signal / supply unit	3 kV, 50 Hz (1 min.)

### Protection circuits

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

<sup>1)</sup>During electromagnetic disturbance minor changes in output signal are possible.

### Display and operating elements



Front view

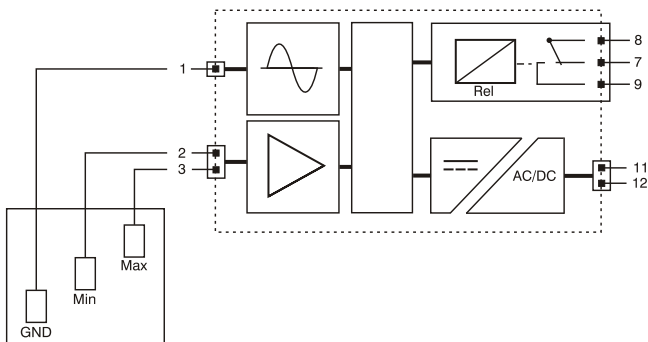
#### Front

On  
response  
Output

#### Meaning

LED green, Power supply  
Sensitivity: 0 ... 60 kOhm  
LED red, Output state

### Block and wiring diagram



### Dimensions

