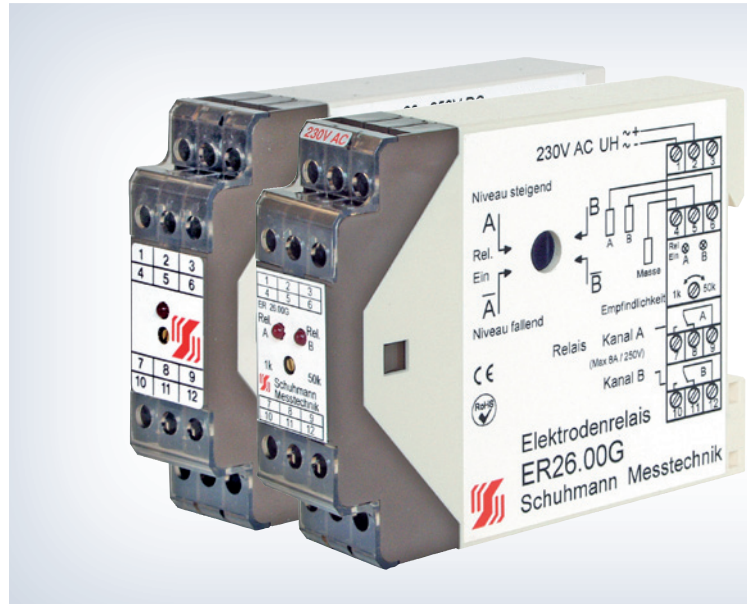


Electrode relay for conductive liquids

ER 16.00 GW
ER 26.00 G

FEATURES

- **Input:**
Feeding of electrodes
Current max. 0,8 mA
Voltage max. 8 V AC
- **Output:**
Potential free output contact
ER 16.00 GW: 1 changer
ER 26.00 G: 2 changer
- **Adjustment of conductivity**
by trimmer 1...50 kΩ
- **Selection of minimum-/ maximal**
function by sliding switch
- **Galvanic 3-way isolation**



FUNCTION

The electrode relay is a conductive, compact and good value filling-level limit switch, which can be applied for the control of minimum or maximum levels as well as for two-point detection of tanks, vessels or containers with electrically conducting liquids.

Internally in the Electrode Relay a AC voltage rectangular is generated.

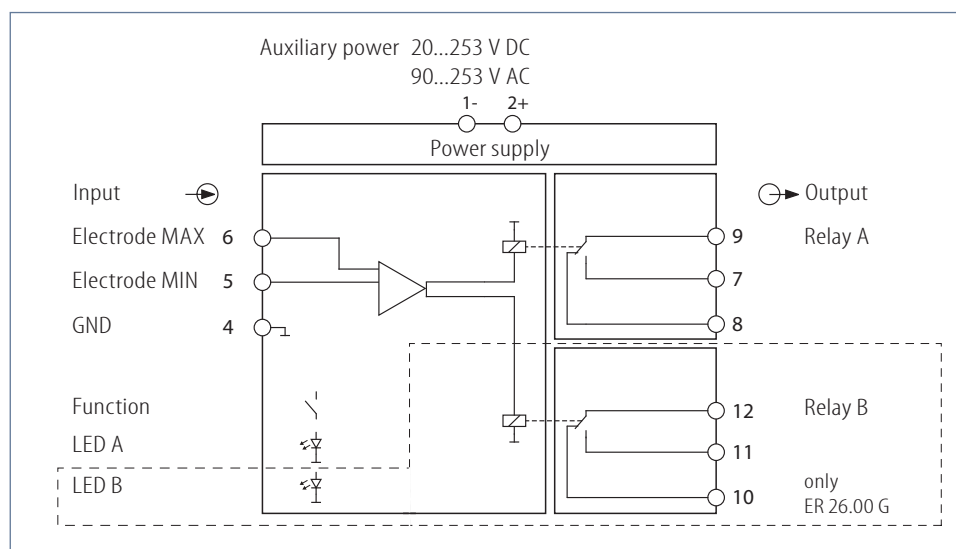
This signal is being compared with the conductivity signal adjusted by front side trimmer conducted to a switching amplifier.

To program the relay for rising level or a falling level use the sliding switch.

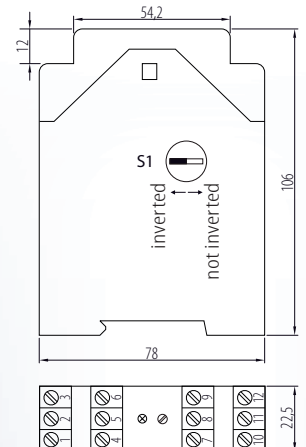
The relay status is displayed by LED display on front side.

By using an AC voltage corrosion of the probe rods and electrolytic decomposition of the medium can be avoided in almost all cases of the application.

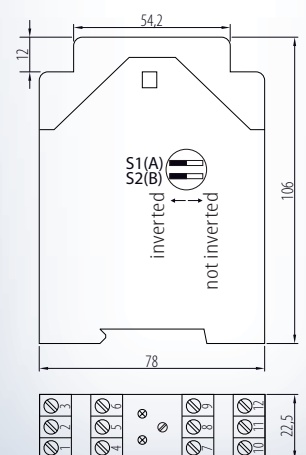
The ER 26.00 G has 2 separate switching points with 2 potential free contact outputs (changer).



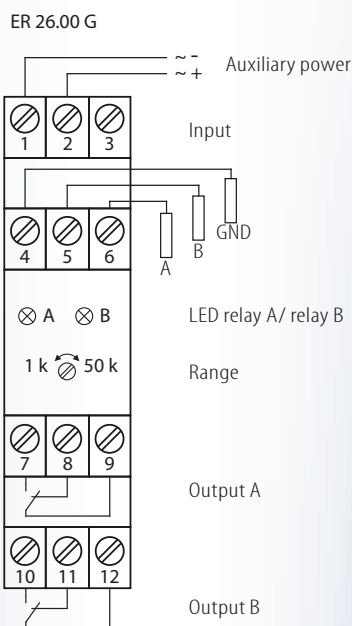
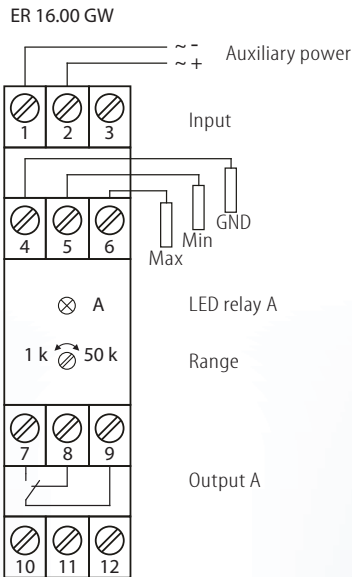
ER 16.00 GW



ER 26.00 G



ER 16.00 GW ER 26.00 G



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Input:

Minimal, maximal and ground electrode

maximal electrode current: $I_{\max} = 0,8 \text{ mA}$
maximal electrode voltage: $U_0 = 8 \text{ V AC}$
Adjustment of conductivity: $1...50 \text{ k}\Omega$

Output:

Relay output:

ER 16.00 GW: 1 changer
ER 26.00 G: 2 changer
max. switching current: 8 A
max. switching voltage: 250 V AC
mechanical life cycle: 30×10^6 cycles
contact life cycle: 10^5 cycles
connection: see connection diagram

Adjustment:

Minimal-/ maximal function:

ER 16.00 GW: S1 switching function between electrode minimal and maximal, invertible
ER 26.00 G: S1 (A)/ S2 (B) separate minimal and maximal function, separately invertible

Display:

LED relay A: red, active relay A tightened

additional at ER 26.00 G:

LED relay B: red, active relay B tightened

Environmental conditions:

Storage temperature: $-40...+70 \text{ }^\circ\text{C}$

Operating temperature: $0...55 \text{ }^\circ\text{C}$

Isolation voltage:

ER 16.00 GW:
1 kV eff. 1 sec. input-output
3,75 kV eff. 1 sec. auxiliary power

ER 26.00 G:
1 kV eff. 1 sec. input-output
4 kV eff. 1 sec. auxiliary power AC
500 V eff. 1 sec. auxiliary power DC

Auxiliary power:

ER 16.00 GW:
Wide range: 20...253 V DC
approx. 5...35 mA
90...253 V AC
approx. 3...9 mA

ER 26.00 G:
230 V AC: 230 V AC
approx. 10 mA
24 V DC: 20...30 V DC
approx. 50 mA

Characteristics of transmission:

Setting time: approx. 5 sec.

Directive:

EMC Directive: 2004/108/EC*

Low Voltage Directive: 2006/95/EC

*minimum deviations possible during HF-radiation influence

Mounting details:

Housing for top hat rail

Type of protection: IP 20 housing
IP 10 clamps

Mounting rail fixed according to
EN 50022-35 x 6,2 mm

Width: 22,5 mm

Weight: 190 g

Material: Noryl V0 150/ ABS

Flammability class: ISO R75A 147°C/ 90°C

Approval: CE

Connection: screw clamps
 $\leq 2 \times 2,5 \text{ mm}^2$

For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other.

Ordering information:

Type: **ER 16.00 GW** wide range
ER 26.00 G 230 V AC
ER 26.00 GDC 24 V DC

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