Evaluation unit for fill level measurement to connect on conductive probes

Description

The electrode relay SRA-100-U0 works in conjunction with conductive probes as a level limit switch or a control in conductive liquids such as water, alkalis and acids. While a low voltage according to VDE 0100 Section 410 stands at the electrodes of about 9V, thereby touching the probes is completely safe.

As soon as the electrically conductive filling builds a connection between mass and eg the maximum electrode, a small alternating current flows which is implemented in the evaluation in a relay output.

As mass with metal vessel the wall of the vessel can be used, or an electrode with non-metallic container. The use of AC avoids the corrosion of the probe rods and electrolytic destruction of the product.

The device can be used with latching relay, Min and Max switching point work, as well as a double level detectors, with two separate outputs.

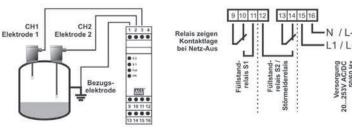
As a result, the number of applications, such as overflow, dry run protection, two-point control, moisture detection, etc. can be realized.

Via a coarse and fine tuning teh sensitivity can be adjusted on the conductivity of the liquid. With the adjustable trigger delay to approximately 8 seconds, possibly undulations in the container are hidden.

As further details the SRA-100-U0 offers a line break monitoring with fault relay and a wide range power supply of 20 ... 253V AC / DC.



Connection



Order code

SRA-100-U0/20...253 V AC/DC Electrode relay, 22,5 mm

Special measuring range 0-1 MegaOhm Special measuring range 0-8 MegaOhm

Specials









Technical data

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| Technical data | |
| Permitted supply voltage: | 20253 V AC / DC 4862 Hz |
| Power consumption: | ≤ 3,5 VA / 1,3 W |
| Isolation voltage: | 4kV~ auxiliary power against relay outputs against signal inputs |
| Contact rating: | U~ maximal 250 V AC; I~ maximal 10 A AC; P~ maximal 2500 VA |
| Level sensor: | one resp. two level electrodes with common reference electrode |
| Measurement Range: | ≤ $1k\Omega$ resp. ≥ $1mS/cm$ / ≤ $10k\Omega$ resp. ≥ $100\mu S/cm$ / ≤ $200k\Omega$ resp. ≥ $5\mu S/cm$ |
| Line monitoring: | only with level sensor with built-in modul LBM |
| Housing: | modular housing, 22,5mm wide |