



Fill level measurement



Conductive electrode relay:
ExSRA-100-U0

Amplifiers to connect on conductive probes
for Ex-area

Description

The electrode relay ExSRA-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.

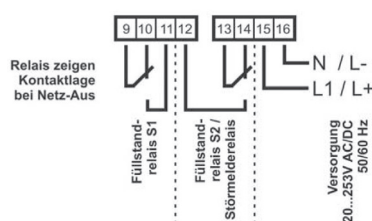
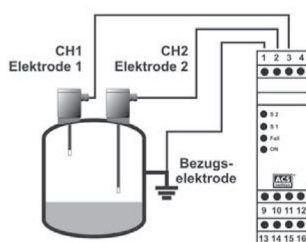
As a result, the number of applications, such as overflow, dry run protection, two-point control, moisture detection, etc. can be realized.

Via a coarse and fine tuning the 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

ExSRA-100-U0/20...253 V AC/DC

Electrode relay, 22,5 mm, 2 Wechsler,
ATEX II (1) G [Ex ia Ga] IIB/IIC resp.
ATEX II (1) D [Ex ia Da] IIIB/IIIC

Special measuring range
Special measuring range

0-1 MegaOhm
0-8 MegaOhm

Technical data

Technical data	
Permitted supply voltage:	20...253 V AC / 20...125V DC 48...62 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:	≤ 1kΩ resp. ≥ 1mS/cm / ≤ 10kΩ resp. ≥ 100μS/cm / ≤ 200kΩ resp. ≥ 5μS/cm
Line monitoring:	only with level sensor with built-in modul LBM
Housing:	modular housing, 22,5mm wide

Specials



Line break
detection



AC/DC



adjustable
sensitivity



multifunction



certification