



Safety Precautions

- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to power which complies with the specifications included in the technical data and on the serial plate!
- The device must be disconnected from all sources of power during installation and maintenance work!
- The device may only be operated under the conditions specified in these operating instructions!

Functions Description

The MAXIMAT CX compact overfill sensor is used as a fill-level limit switch for permanently installed containers for the storage of non-flammable, water endangering liquids.

Applications

The fill-level sensor is suitable for liquids with an impedance of less than 5k Ω , or a mutual capacitance to earth of greater than 50pF. Stored liquids may not tend to precipitate insulating or conductive sediments.

Technical Data

| | |
|------------------------------|--------------------------------------|
| Functional principal: | Capacitive high-frequency, fail-safe |
| Ambient temperature: | -20 to +60°C |
| Operating pressure: | Atmospheric, 0.8 to 1.1bar |
| Terminal housing: | PBT, IP65 protection per EN 60 529 |
| Process connection: | See order information |
| Supply power: | 15 to 27V DC |
| Power consumption: | <1W |

Technical Data (continued):

Outputs:

- **Floating reed relay contact** (contact opens in case of alarm)
 for extra-low voltage, max. 50V AC / DC, max. 0.5A, max. 10VA
 e.g. for operating coupling relays or PLC, TC4 signalling device or CST supply power isolator
Observe protective measures for reed relay contacts (see instruction leaflet SU3104)
- **2-wire alarm evaluation** with MAXIMAT SHR C measuring transducer
Note: Simultaneous use of both outputs is not possible.

Terminals: Screw terminal for wire cross-sections of up to 2.5mm²
Input: For external test button (connection to terminals T and C)
 Test button contact closed = test alarm is triggered

Note: The function test executed with the test button does not replace the operating test specified in ZG-ÜS, section 6.2, which must be conducted for all probes on a regular basis at least once a year.

Indication:

LED (green) on the connector PCB (variant KL only):

- Run: LED illuminated
- Alarm / error: LED off

Measuring circuit cable length:

Max. 300m, min. wire cross-section: 0.5mm²

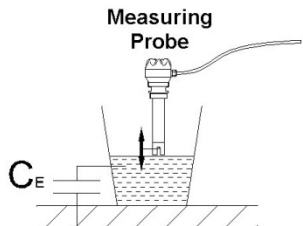
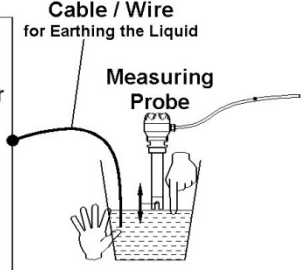
CE Mark

In accordance with low-voltage directive RL 2006/95/EC and EMC directive 2004/108/EC

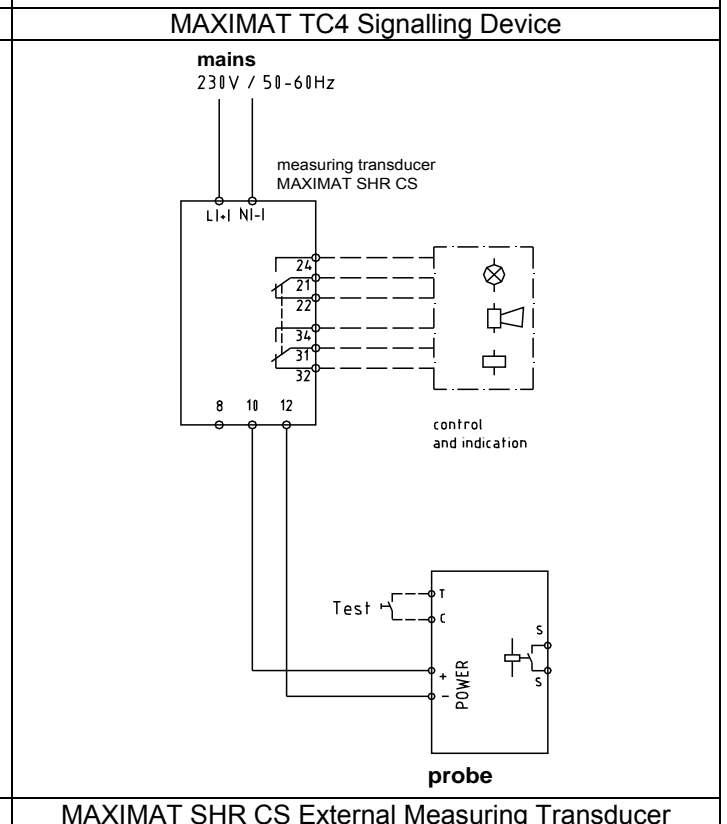
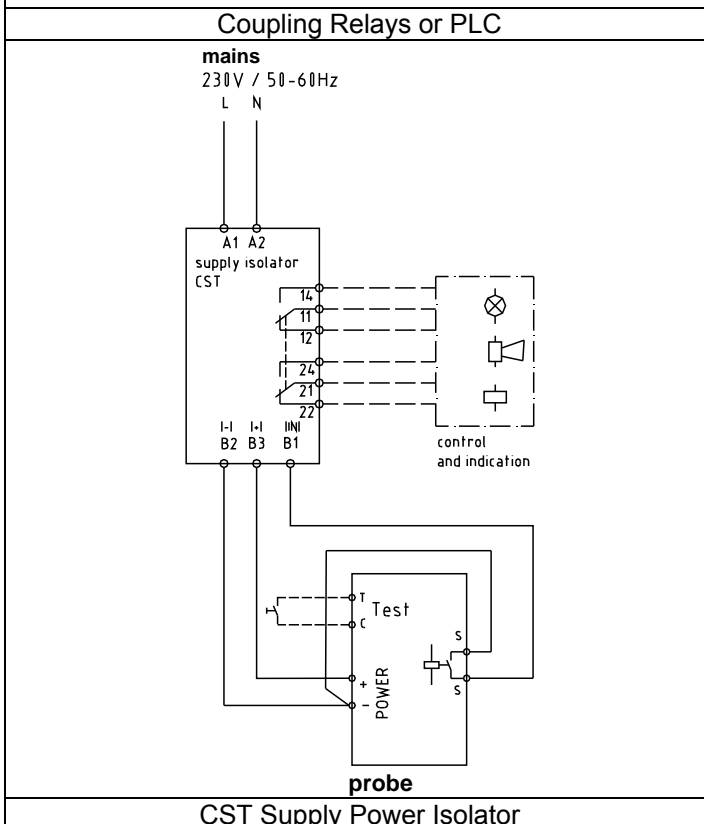
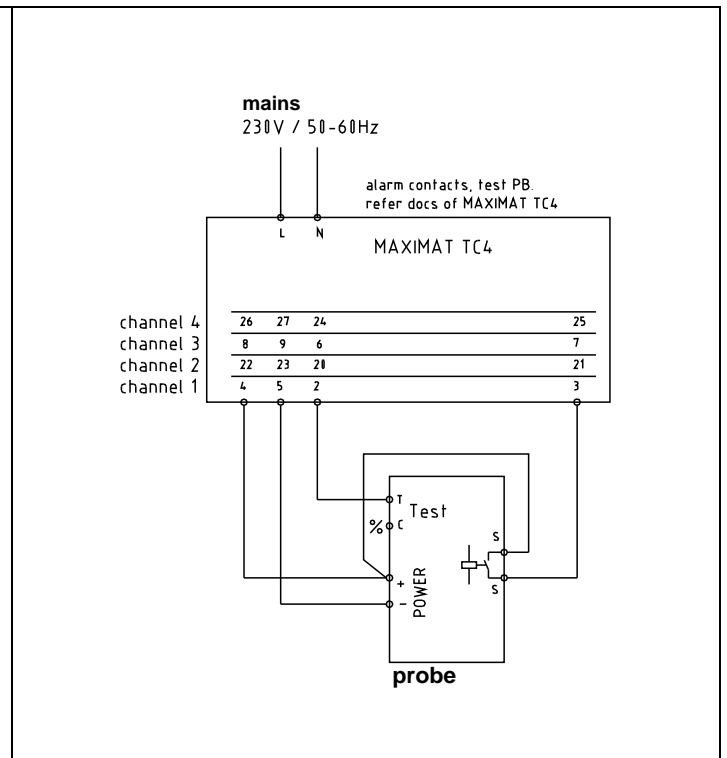
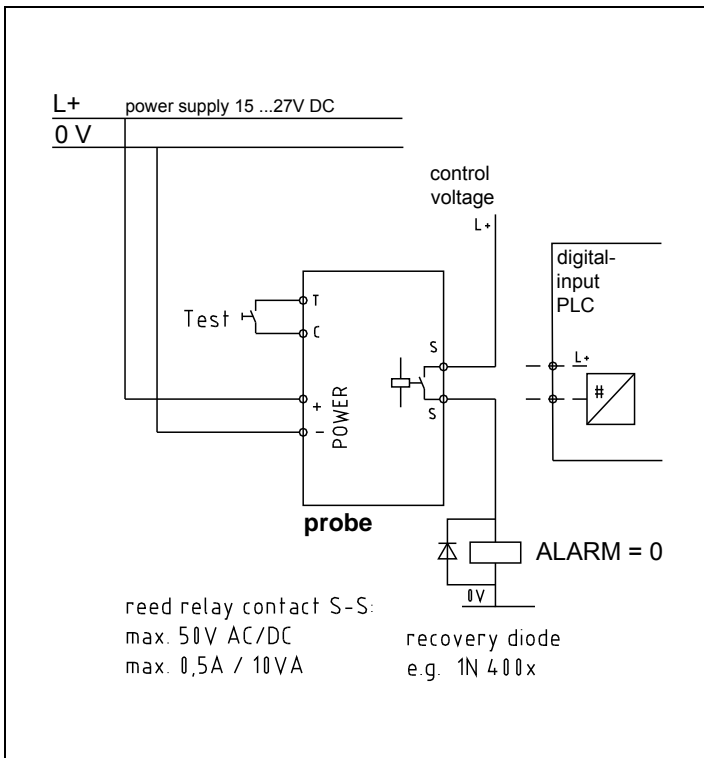
DIBT Approval

Approval no. **Z-65.13.494** for overfill inhibitors and leakage sensors in accordance with WHG §19
Note: The accompanying "General Building Supervisory Approval no. Z-65.13.494" is an integral part of the operating instructions and all stipulations contained therein must be adhered to!

Function Test: Before Installation and Initial Start-Up, and During Inspection

| <p>Method 1</p>  <p>Bucket is on the floor.</p> | <p>Method 2</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Earth Connection For example:</p> <ul style="list-style-type: none"> - Protective conductor - Foundation earth electrode - Metal water pipe - Metal guard rail - Metal buttress etc. </div>  <p>Bucket is not on the floor.</p> |
|---|--|
| <ul style="list-style-type: none"> ○ Fill a bucket (plastic or metal) with original liquid or water (at least 5 litres) and set it onto the floor. ○ Immerse and remove the measuring probe several times. ○ Examine the switching status of the measuring circuit | <ul style="list-style-type: none"> ○ Fill a bucket (plastic or metal) with original liquid or water (at least 5 litres). ○ Earth the liquid in the bucket with a cable/wire. or Grasp the bucket with your hand from the outside. or Immerse a finger into the liquid. ○ At the same time, immerse and remove the measuring probe several times. ○ Examine the switching status of the measuring circuit (refer to the respective operating instructions to this end). |

Electrical Connection



CST Supply Power Isolator

MAXIMAT SHR CS External Measuring Transducer

Dimensions:

| Trigger Point, Non-Adjustable | Trigger Point, Adjustable |
|--|--|
| <p>Technical drawing of MAXIMAT CX40 K... N sensor, non-adjustable. Dimensions: $\phi 93$, ca. 118, 1x M20x1,5, G2", L, $\phi 40$.</p> | <p>Technical drawing of MAXIMAT CX40 K... V sensor, adjustable. Dimensions: $\phi 93$, 1x M20x1,5, fixing screw and lead seal, cap nut G2", double nipple G2", L, 50, $\phi 40$.</p> |
| MAXIMAT CX40 K ... N | MAXIMAT CX40 K ... V |
| <p>Technical drawing of MAXIMAT CX20 K... N sensor, non-adjustable. Dimensions: $\phi 93$, ca. 128, 1x M20x1,5, G1", L, $\phi 20$.</p> | <p>Technical drawing of MAXIMAT CX20 K... V sensor, adjustable. Dimensions: $\phi 93$, 1x M20x1,5, fixing screw and lead seal, cap nut G1", double nipple G1", L, 50, $\phi 20$.</p> |
| MAXIMAT CX20 K ... N | MAXIMAT CX20 K ... V |