



Safety Precautions:

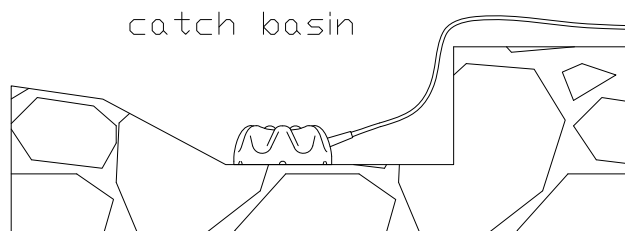
- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to power which complies with the specifications included in the technical data and on the serial plate!
- The device must be disconnected from all sources of power during installation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

Functions Description:

The MAXIMAT LWC-BX leakage sensor (bottom electrode) is used for leakage detection in catch basins and catch spaces.

Applications / Installation:

The leakage sensor is only suitable for **conductive liquids** with a reactive 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.



The leakage sensor is mounted directly at the bottom of catch basins and catch spaces. The sensor must be mounted at the bottom of the basin (e.g. at the lowest point) such that in the event of a leak even a minimal amount of escaping medium reliably covers the sensing electrodes, and thus electrically connects them.

The sensor must be secured against shifting and floating up.


The mounting components must be resistant to the media.

Technical Data:

Functional principal:	Capacitive high-frequency, fail-safe
Ambient temperature:	-20 to +60°C
Operating pressure:	Atmospheric, 0.8 to 1.1bar
Housing:	PBT, fibre-glass reinforced
Protection rate:	IP67 (not suitable for durable immersion)
Supply power:	15 to 27V DC
Connected load:	<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 connection to coupling relays or PLC, TC4 signalling device or CST supply power isolator

Observe protective measures for reed relay contacts (see instruction leaflet SU3101) 
- **2-wire alarm evaluation** with MAXIMAT SHR C measuring transducer

Note: Simultaneous use of both outputs is not possible.

Input: For external test button (*connection to green and brown wires*)
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.

Connector cable: shielded PVC cable, 5 x 0.34mm²

Measuring circuit cable length:

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

Maintenance:

The device is maintenance-free if used for its intended purpose.

Attention!

In the event of a leak, the sensor must be removed from the medium immediately.
It must be effectively cleaned (rinsed), and may not be reinstalled to the dry catch basin until after it has been subjected to a complete function test.
Continuous immersion is impermissible, because the cable may otherwise be destroyed and moisture may penetrate the sensor.

If there is any danger of conductive deposits accumulating on the sensor unit resulting from vapours, contamination or condensate, it should be cleaned at regular intervals in order to avoid false alarms.

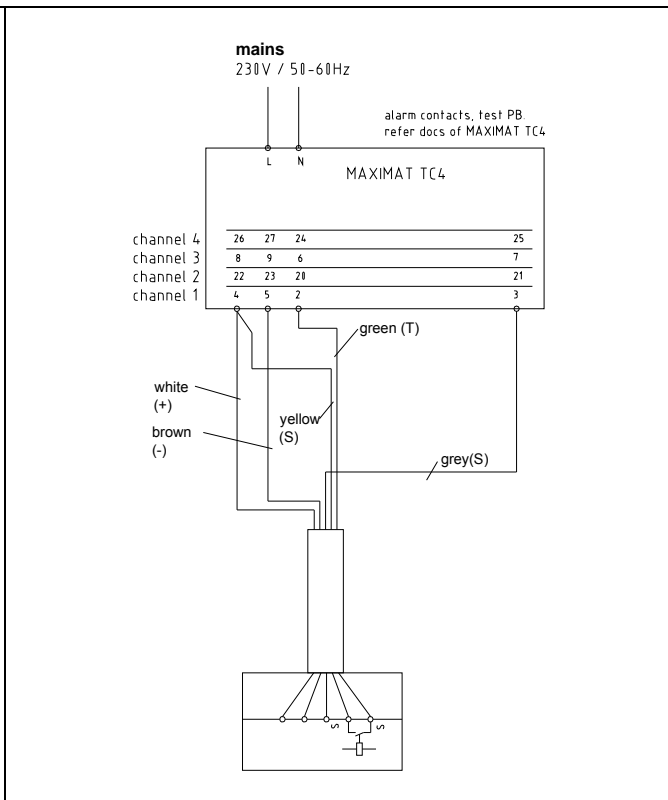
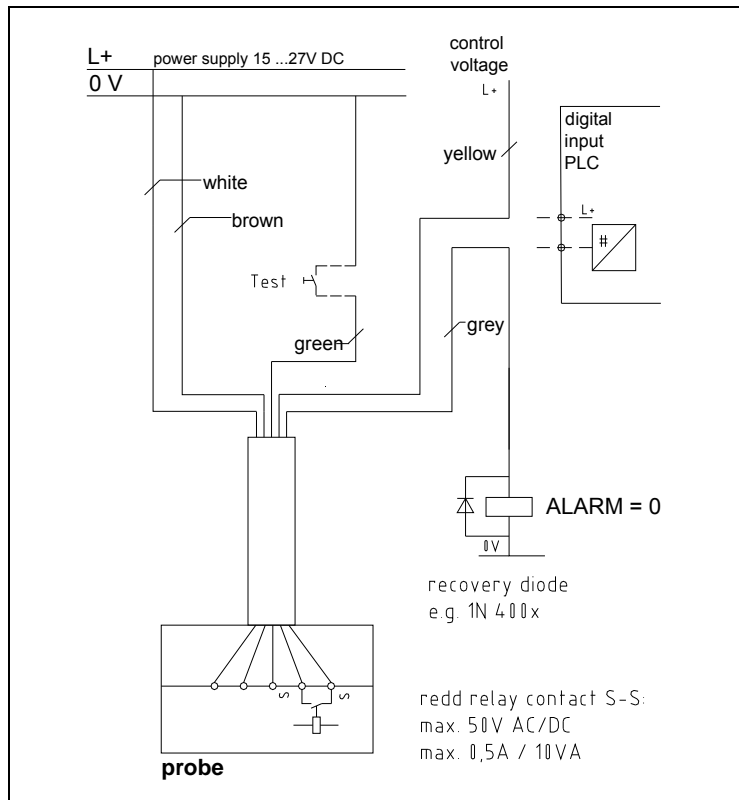
Approvals:

DIBt (Germany)-Approval no. **Z-65.40.496** for leakage sensors in accordance with WHG §19
SVTI ASIT (Switzerland)-Approval no. **KVU-No. 321.012.14** for leakage sensors in accordance with GSchG

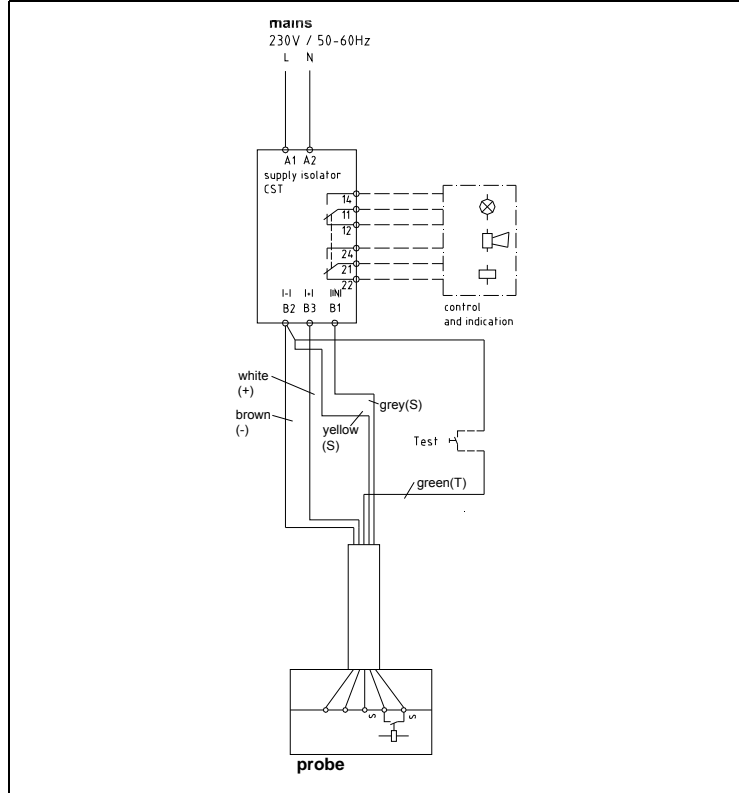
CE Mark:

The device fulfills the legal requirements of applicable EU-guidelines

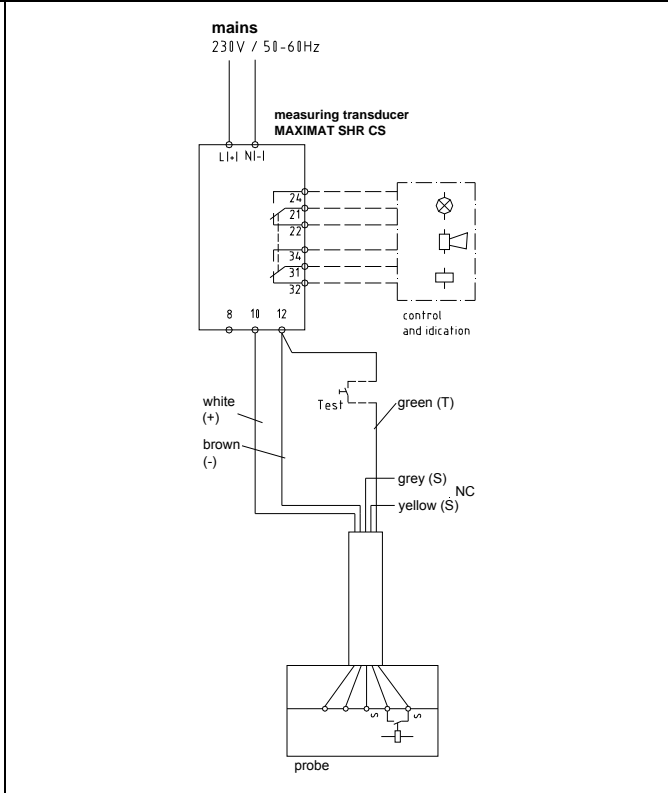
Electrical Connection:



Coupling Relays or PLC



MAXIMAT TC4 Signalling Device



CST Supply Power Isolator

MAXIMAT SHR CS External Measuring Transducer

(1) The cable shielding only needs to be connected to operational earth with minimal interference voltage if increased EMC interference can be expected.

Cable wire assignment:

