

Compact overfill sensor MAXIMAT CX



SAFETY INSTRUCTIONS

- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to supply power compliant to 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 the operating instructions!

DESCRIPTION

MAXIMAT CX compact overfill sensors are level limit switches designed to prevent overfilling of tanks containing media hazardous to water. When the probe comes into contact with an electrically conductive medium, the integrated electronics react and the continuous output signal is interrupted. This can be output by the system control unit as an audible or visual alarm signal and, if necessary, used to trigger an emergency shutdown of the filling process.

APPLICATION

The level sensor is suitable for conductive media with a resistance of $<5 \text{ k}\Omega$ or a coupling capacitance to earth of $>50 \text{ pF}$. The media must not form insulating or conductive deposits.

TECHNICAL DATA

Operating principle	Capacitive high frequency, fail-safe
Operating/ambient temperature	$-20\dots+60^\circ\text{C}$
Operating pressure	atmospheric, $0.8\dots1.1 \text{ bar}$
Connection head	PBT glass fiber reinforced
Protection class	IP65 according to EN 60 529
Supply voltage	$15\dots27 \text{ V DC}$
Connected load	$<1 \text{ W}$
Cable length measuring circuit	Max. 300m, min. wire cross-section 0.5 mm^2
Outputs	Potential-free reed relay contact for low voltage (contact opens on alarm) Max. 50V AC/DC, max. 0.5A, max. 10VA, e.g. for operating coupling relays or PLCs, MAXIMAT TC4 signalling unit or CST supply isolator Two-wire alarm evaluation with transducer MAXIMAT SHR CS / MAXIMAT TC1

Important: Simultaneous operation of both outputs is not intended!

Terminals	Screw connection, cable cross-section max. 2.5 mm^2
Additional function	Connection of an external test button (potential-free contact) which can be used to check the entire MAXIMAT CX electronics, wiring and signalling/control equipment.
Input	For external test button (connection to terminal T and terminal C) Test button contact closed: Test alarm is triggered

Note: The function check by the external test button is no substitute for the regular function checks required by the country!

CE mark: The device fulfills the legal requirements of applicable EU-guidelines.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact overfill sensor
MAXIMAT CX

10-09-2026

M-556.06-EN-AL

LEV

556-06 /1

MATERIALS

During operation, the level switch comes into contact with the stored medium, its vapours or condensate.
The materials used in the device must therefore be selected so that they are sufficiently resistant to the medium being monitored.

Component	Material
Sensor and sensor tube	PVC, PE
Connection head / housing	PBT
Fitting parts (mounting brackets / pipe caps)	PVC (Polyvinyl chloride) or PE (Polyethylene)
Cable glands (connection heads & adjustment glands)	PA (Polyamide)*
Sealing of cable glands (connection head & adjustment glands)	NBR*
Cable gland (probe)	PE / PVDF
Seal for the cable gland (probe)	TPR
Connection cable	PVC

* Other materials available on request

COUNTRY-SPECIFIC CERTIFICATIONS

- GERMANY - General technical approval in accordance with the Water Resources Law (WHG)
- SWITZERLAND - Type examination certificate for water protection suitability according to the Conference of Heads of Environmental Protection Offices (KvU)
- BELGIUM - Model certificate of approval according to Flemish environmental authorisation regulations (VLAREM II)

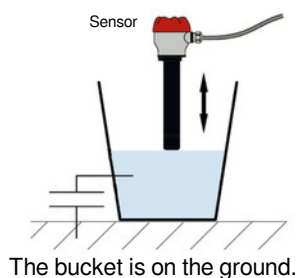
SIGNALING

LED (green) on the connection board (only for version with connection head):

Operation	LED ON
Alarm / Fault	LED OFF

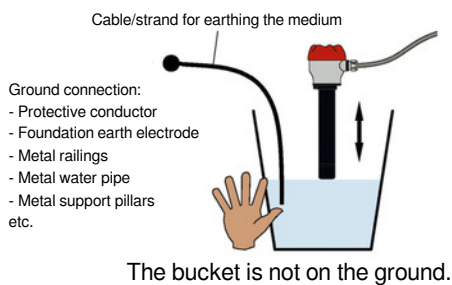
FUNCTION TEST: before installation / during commissioning / during revisions

Method 1



- Fill a bucket (plastic or metal) with the process medium or water (at least 5 litres) and place it on the ground!
- Dip the sensor in and out several times!
- Check the switching status of the measuring circuit!

Method 2



- Fill a bucket (plastic or metal) with the process medium or water (at least 5 litres)!
- Earthing the filled medium using a cable or stranded wire!
- Or touch the bucket on the outside
- If the process medium is not harmful to health, you can also dip a finger into it. To do this, dip the probe in and out several times!
- Check the operating status of the measuring circuit (according to the LED status).

MAINTENANCE

When used as intended, the device is maintenance-free.

Please note: In the event of overfilling, the probe must be removed from the medium as soon as possible.

It must be thoroughly cleaned (rinsed) and may only be returned to the dry collection device after a full functional test has been carried out.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact overfill sensor
MAXIMAT CX

10-09-2026

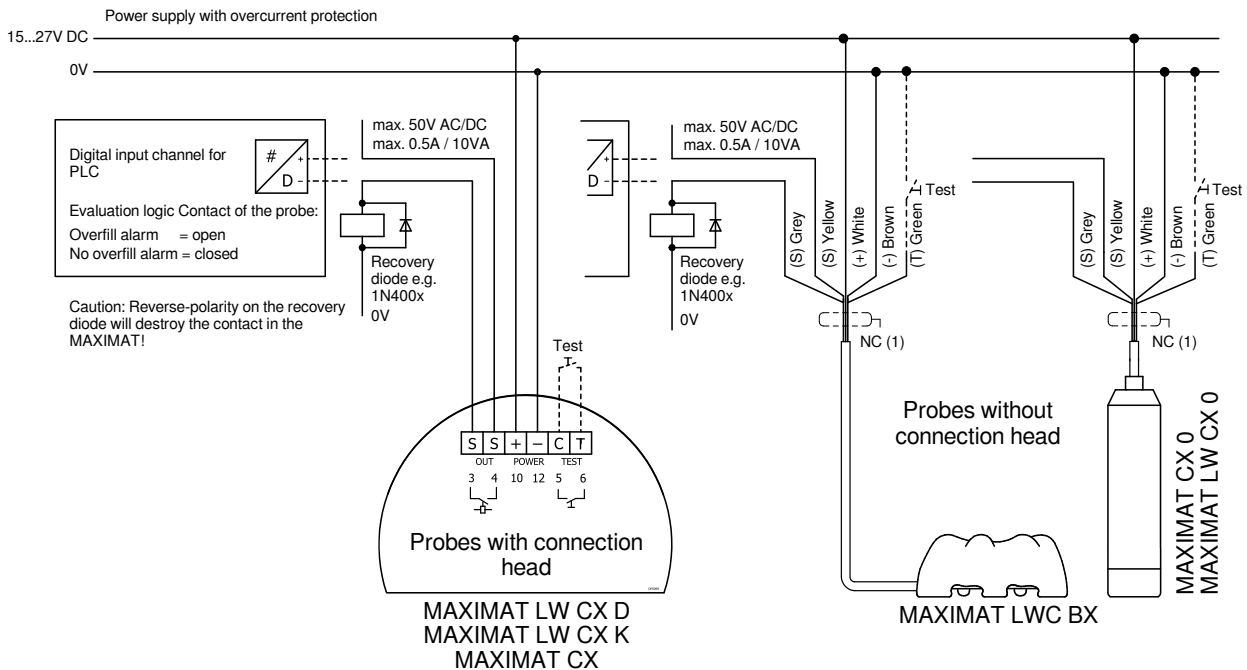
M-556.06-EN-AL

LEV

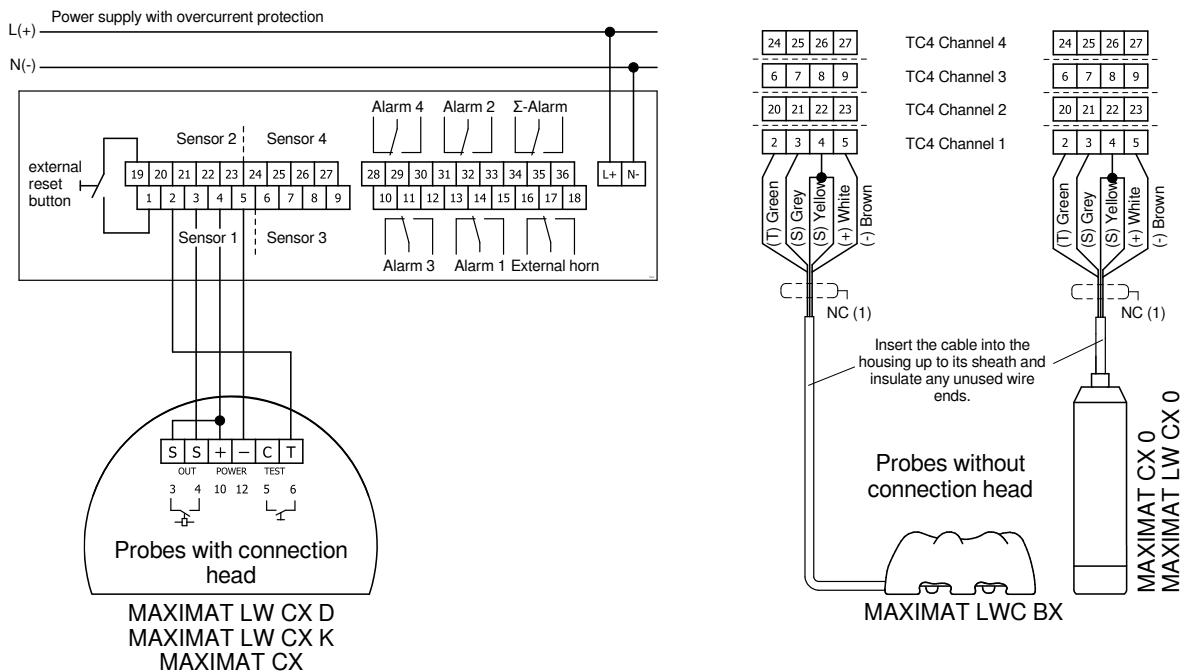
556-06 /2

ELECTRICAL CONNECTION

Coupling relay or PLC



Signalling device MAXIMAT TC4



(1) The cable shield must only be connected to a low-interference operational earth if increased levels of EMC interference are to be expected.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact overfill sensor
MAXIMAT CX

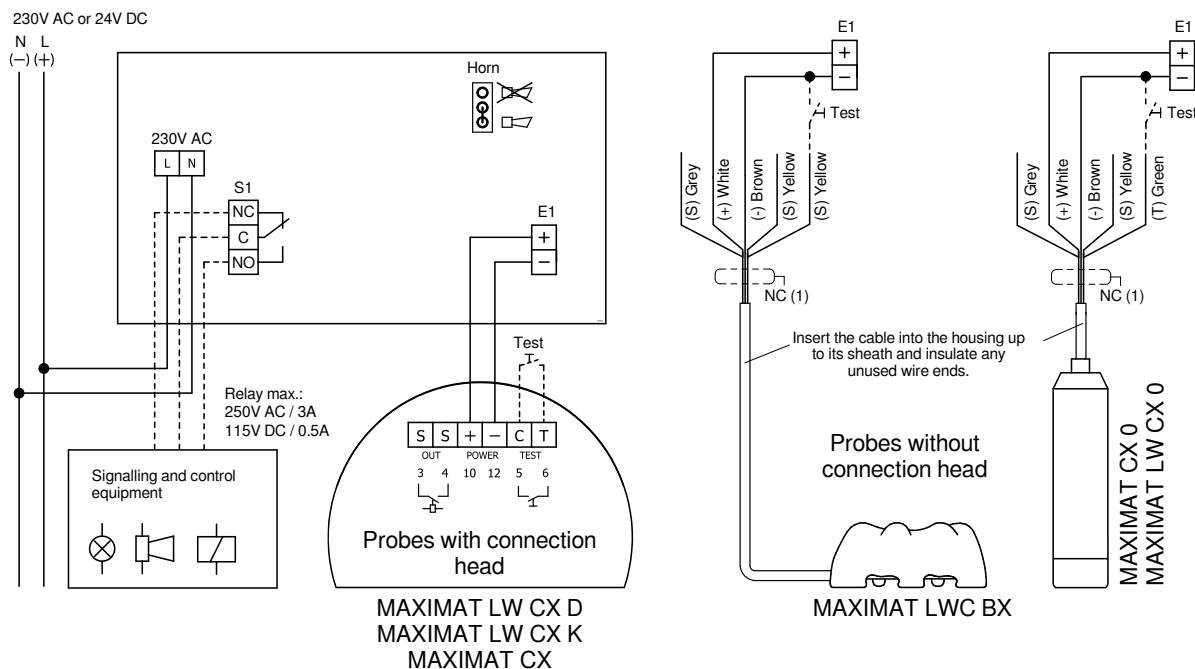
10-09-2026

M-556.06-EN-AL

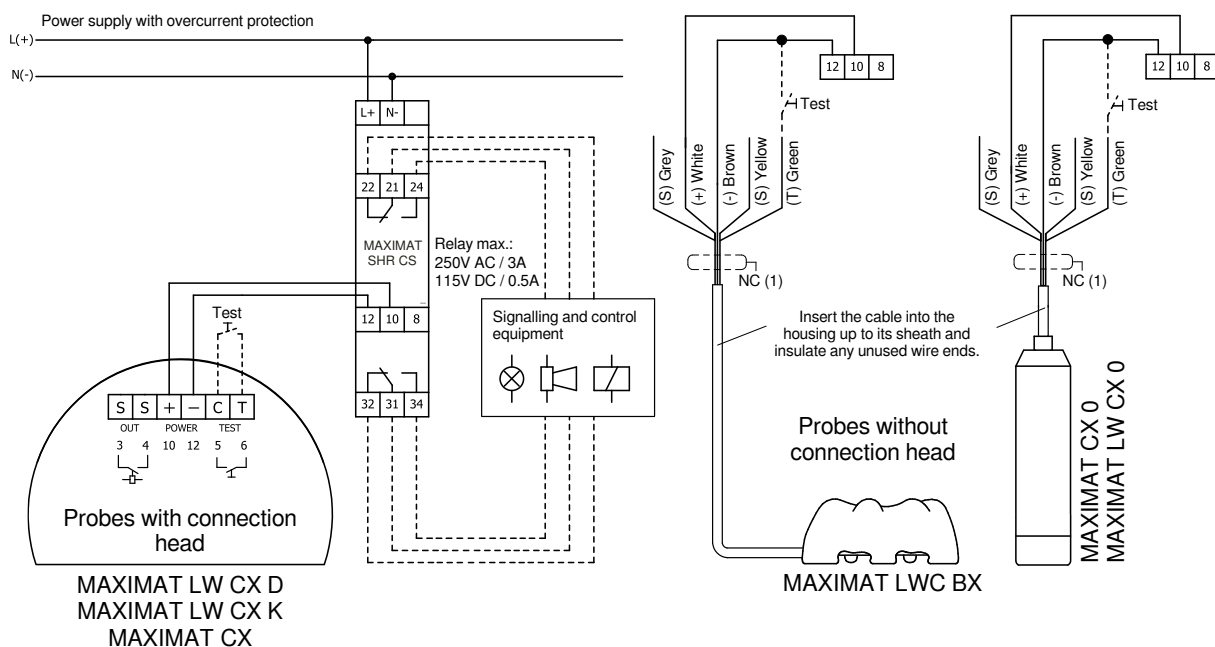
LEV

556-06/3

Signalling device MAXIMAT TC1



Transducer SHR CS



(1) The cable shield must only be connected to a low-interference operational earth if increased levels of EMC interference are to be expected.