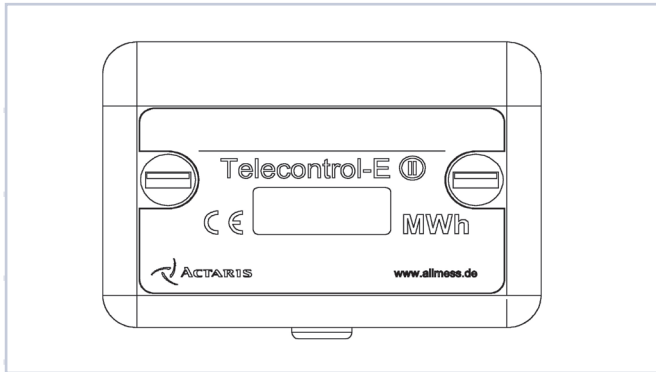




Installation Guide

Telecontrol – remote Display TC-E



Picture 1

1. Packaging includes

- TC-E with battery, label versions for energy and volume
- Installation accessories (screws, peg, user seal)
- Installation Manual

2. Generics

TC-E is a remote display for indexes of meters equipped with repetition output (e.g. reed-switch or open collector). The pulse weight of TC-E and connected meter must fit together (adjustment see 4.3).

In order to avoid any malfunction due to EMC the TC-E should not be installed beside fluorescent lamps, electric motors, switch boxes or other sources of electromagnetic influences. Don't install signal lines in parallel to power lines. Recommended minimum distance app. 0,5m.

3. CE sign

This product conforms to CE regulations (environmental class A according to EN 1434).

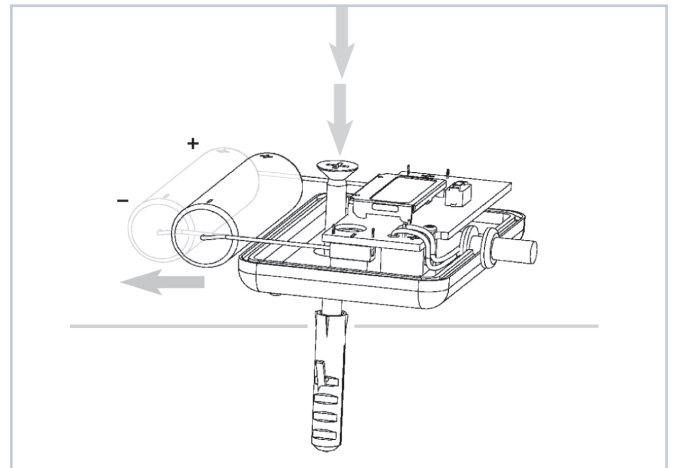
4. Installation

Tools: screwdriver (type PZ1), approx. drill $\varnothing 6\text{mm}$

4.1 Wall mounting (Picture 2)

The installation on the wall can be done by using a screw and wall plug ($\varnothing 6\text{mm}$, L=30mm) or as an alternative by sticking (e.g. using double-sided tape).

- Remove front cover screws and front cover
- Remove battery (in case of using screws and wall plug)
- Install back cover on the wall



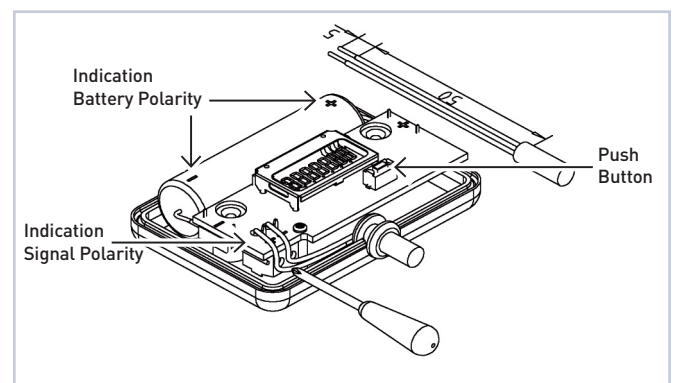
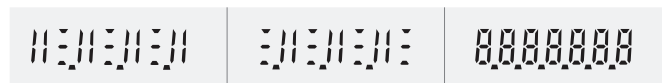
Picture 2

4.2 Connecting the wires (Picture 3)

Cable diameters: Cable $\varnothing 4-5,5\text{mm}$: pull the cable through the cable insert (rubber part). Cable $\varnothing 6,3\text{mm}$: don't use the cable insert.

- Remove cable sleeve app. 55mm
- Strip insulation of single wires app. 5mm
- Insert wires into holes inside PCB (terminals)
- Respect the polarity (e.g. in case of open collector!)
- Fix the terminal screws
- Place cable inside the TC-E
- Replace the battery. Respect the polarity!

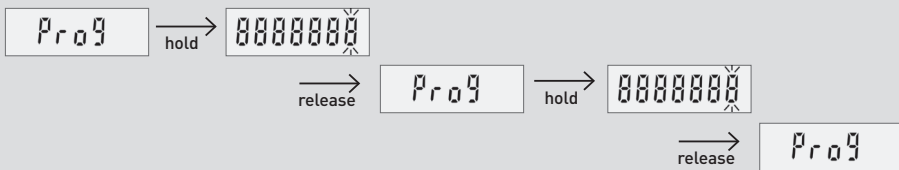
A display test starts. During the test 3 different pictures are displayed (each picture displayed for 3s).



Picture 3

4.3 Programming of pulse value and reset of the index.

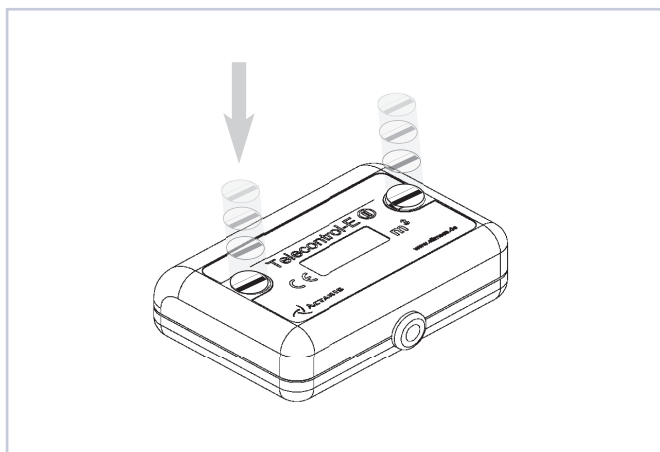
Press push-button (picture 3) for more than 2s and keep it pressed. A display loop will start (each display appr. 2s). An action (programming) will occur, if the push button is released during the actual display.

Display	Display description / programming action	Pulse value version for volume	Pulse value version for energy
Error P	Battery exchange (only available in case of battery disconnection)		
colon 0	Comma position: 0 digits	1m ³ (= 1000 l)	1 MWh (= 1000kWh)
colon 1	Comma position: 1 digit	0,1m ³ (= 100 l)	0,1 MWh (= 100kWh)
colon 2	Comma position: 2 digits	0,01m ³ (= 10 l)	0,01 MWh (= 10kWh)
colon 3	Comma position: 3 digits	0,001m ³ (= 1 l)	0,001 MWh (= 1kWh)
Prog	Programming the meter offset. Flashing digits can be modified by keeping the push button pressed. The selected value will be memorised by releasing the push button. Repeat pressing the push button to return to the programming modus and select the next value on second position or leave the programming modus, as shown in example: 		
wndo	Restore last index before reset. (Only available 5 min after reset!)		

4.4 Finishing the installation

- Close the box cover and fix the front cover with screws to back cover. Stick the needed label version on the box cover. (Take attention to the chosen unit!)
- Protect the screws by user seals.
- Use the inscription field to indicate the meter point (e.g. name of tenant, flat number etc.)

- TC-E without power < 30s:** Index and pulse value will be kept, TC-E will start counting with old settings.
- TC-E without power > 30s but < 600s:** Index and pulse value will be kept, TC-E will start with a display test (see 4.2) and starts counting with old settings.
- TC-E without power > 600s:** Index and pulse value will be reset to default values, the pulse value has to be programmed.



5. Reset and battery exchange

- Value-Setting:** the index of the TC-E can be adjusted to any value (see 4.3)
- Battery exchange (see 4.1):** after removing the battery the TC-E will switch to following states:

6. Technical Data

Dimensions	width = 64mm length = 44,5mm height = 20mm
Battery type	Lithium SL-360 / P-3,6 V-2,3 Ah Art.-Nr. 10128
Battery lifetime	app. 10 years (at 20°C environmental temperature)
Protection class	IP64
Environment temperature	-15-55°C (Inside installation)

Characteristic of pulse emitter	
Pulse/pause duration	100ms/100ms (minimal)
Max. pulse frequency	5Hz
Ron	≤200MΩ (resistance during pulse)
Roff	≥1MΩ (resistance during intervall)
Max. bounce time	15ms
Max. cable length	30m