



# Product information

## Communication posts K30001 to K30004



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## Scope of delivery

1 x communication post

Material to install the device:

4 x heavy duty anchor W-SAi M10,

4 x cylinder screw with hexagon shape DIN 912 M10 x75 (to fix the post)

1 x clamp for strain relief (only a pluggable part)

1 x key for hexagon socket screws DIN 911, SW 2.5 (for the screws in the roof of the post)

1 x screwdriver with round handle

Product information

Product information *Modules of the series AMI in front-door stations*



To set and programm the device, a standard PC keypad with **PS/2 connection** is needed (not included in the delivery)!

## Safety instructions

### General safety regulations

**!** Attention! Mounting, installation, commissioning and repair of electronic devices have to be carried out only by qualified electricians. Thus, the standards and instructions for the installation of systems have to be observed.

For working on systems with main connection of 230 V alternating voltage, the safety requirements according to DIN VDE 0100 must be observed.

When installing TCS:BUS systems, the general safety regulations for telecommunication systems according to VDE 0800 must be observed. Inter alia:

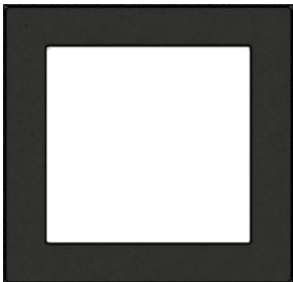
- separated conduit of heavy and low current lines,
- minimum distance of 10 cm in case of a common conduit,
- use of separators between heavy and low current lines within shared cable ducts,
- use of standard communication lines, e.g. J-Y (St) Y with 0.8 mm diameter,
- existing lines (modernisation) with deviating cross-sections can be used in compliance with the loop resistance.

### Installation – protective measures

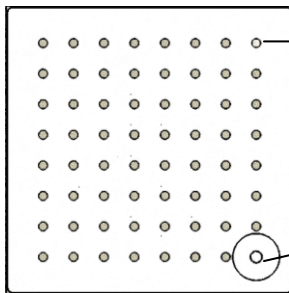
**!** With suitable measures to protect against lightning, it has to be ensured that a voltage of each 32 V DC is not exceeded at the connections a, b, P, R, S (V1, V2).

**!** The communication posts and modules are permitted exclusively for safety extra low voltage (SELV) and protective extra low voltage (PELV).

## Overview of the modules

<b>Functional group with display module</b>	<b>operating elements</b>	
<b>Display module AMI1010x-00000</b> 	AMI10100-0000 AMI10103-0000 AMI10105-0000	display module LCD graphic, 100 flats display module LCD graphic, 200 flats display module LCD graphic, 1000 flats

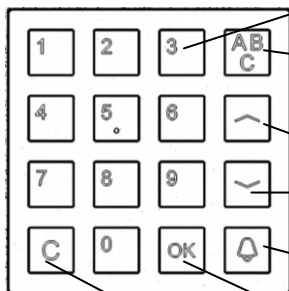
**Loudspeaker module  
AMI10200-0057**



microphone

connection for keypad with cover cap:  
*To remove the cap use a key for hexagon screw sockets, SW3!  
Not included in the scope of delivery!*

**Keypad module AMI10300-0057**



number keys

ABC-button

navigation buttons UP, DOWN

bell button

OK-button

C-button

Each resident can be called by directly entering the flat number.  
Number entry when using the code lock function.

Return to the first letter drop-down menu.  
Confirming the selected letter.  
When in start screen, pressing the ABC-button leads to help menu.

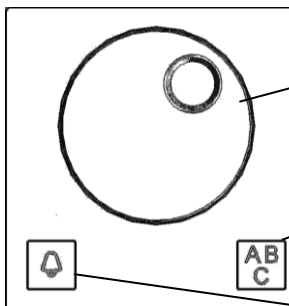
Browse in the resident list or in the menu.

Pressing the button triggers the call of the selected resident.

Confirming the entry or the menu request.

Code lock function: initiating the code entry.

**Jogwheel module AMI10400-0057**



jog wheel

ABC-button

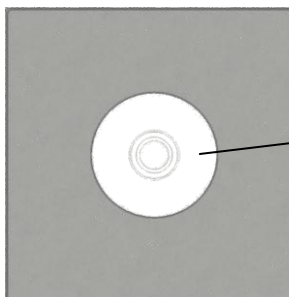
bell button

Select help menu or resident list.  
By turning the wheel you get to help menu first, when further turning the wheel to the resident list.

Return to the first letter drop-down menu.  
Confirming the selected letter.  
When in start screen, pressing the ABC-button leads to help menu.

Pressing the button triggers the call of the selected resident.

**Camera module AMI10500-0080**



viewing window  
camera

## Optimal modules

Optionally, further modules (in total 6) can be installed in the communication posts K3000x.  
For information on the optional modules see the enclosed product information *Modules of the series AMI in front-door stations*.

## Intended use

- Types  
K30001: post audio display jogwheel 100 flats,  
K30002: post video display jogwheel 100 flats,  
K30003: post audio display keypad 100 flats,  
K30004: post video display keypad 100 flats.
- The communication posts K30001-K30004 are front-door stations constructed as posts, stand-alone with display module. They can be individually extended with functional modules according to customer's specifications.
- The posts are suitable for vertical installation outdoors and need to be installed on flat, massive grounds (e.g. concrete).
- The communication posts and modules are permitted exclusively for safety extra low voltages (SELV) and protective extra low voltage (PELV).

Attention when using the display module!

Avoid direct solar radiation (ambient temperature of max. 50 °C)!

Direct solar radiation (UV component) reduces the durability of the liquid crystals within the display.

### Warning!

The operating elements of the modules can become very hot when under direct solar radiation (more than 50 °C). When selecting the mounting site, please observe to avoid direct solar radiation on the installation location.


## Short description

### **Display modules LCD graphic AMI1010x-0000**

Display modules for front-door stations in individualised assembly

- for up to 100 flats (optionally 200 or 1000 flats)
- graphic LC display, 160 x 160 points with white backlight
- jogwheel or keypad module necessary to select the name for the call destination
- codelock function (number of codes: 3)
- call destination selection via an alphabetical sorted resident list or by entering the target number (flat number) as quick selection
- adjustable (rotation)direction in the name list, name list is endless as of 6 datasets
- name pre-selection can be realised via the initial letter
- start screen can be configured by a qualified electrician

- multi-lingual user guidance (can be programmed during the installation; German, English, French, Danish, Dutch, Turkish, Serbian, Italian, Spanish, Portuguese, Swedish, Slovak, Slovene, Czech)
- date and time indication
- automatic switch-over between summer and winter time
- optional indication for outdoor temperature
- import function for old databanks from previous models
- acknowledgement tone when pressing the bell buttons
- acknowledgement tone when the voice connections starts
- output of voice messages for user guidance
- communication time ex works: 56 seconds / adjustable with PC keypad (not included in the delivery) or ADx configurator (part of the maintenance package, not included in the delivery)
- volume and microphone sensitivity can be adjusted with PC keypad (not included in the delivery)
- S-terminal to trigger door release, control or door call function or to switch lights (max. length of the input connection line: 2 m)
- R-terminal to connect an extended function - door release
- door release time at R-terminal ex works: 3 seconds /can be adjusted with PC keypad or ADx-configurator
- door release when in door standby time / can be adjusted with PC keypad or ADx configurator
- door standby time (to control the short-term storage in indoor stations) ex works: 56 seconds / can be adjusted with PC keypad or ADx configurator
- voice connection when in door standby time / can be adjusted with PC keypad or ADx configurator
- resident datasets and parameter can be programmed with PC keypad or ADx configurator
- USB-B connection (PC / Laptop) for remote maintenance
- RS485 connection for remote maintenance
- connection for keypad module
- connection for jogwheel module or PC keypad
- connection for loudspeaker module and separately for microphone (loudspeaker module)
- connection for Service Device TCSK-01
- per resident dataset, 2 serial numbers can be stored

 The module is permitted exclusively for safety extra low voltage (SELV) and protective extra low voltage (PELV).

### **Loudspeaker module AMI10200-0057**

Loudspeaker module for front-door stations in individualised assembly

- for connection to the display module
- integrated microphone for connection to the display module
- PS/2 connection for PC keypad behind cover cap

**Keypad module AMI10300-0057**

Keypad module for front-door stations in individualised assembly

- for connection to the display module
- keypad with 16 keys to select the name resp. the call destination and to use the codelock function (number of codes: 3)

**Jogwheel module AMI10400-0057**

Jogwheel module for front-door stations in individualised assembly

- for connection to the display module
- jogwheel to select the name (call destination)

**Camera module AMI10500-0080**

Color camera module for front-door stations in individualised assembly

- recommended installation height for the camera position: 1.60 m.

Technical data	
supply voltage:	+24 V $\pm$ 8 % (power supply and control unit)
housing:	aluminium profile, power-coated grey
front panel:	aluminium, anodised nature
modules:	aluminium, anodised black resp. plastics
dimension (in mm):	H 1700 x W 225 x D 225, optionally H 1300 or 2600
dimension module, visible on the front (in mm)	H 82 x W 82
module grid spacing	120 mm
weight	ca. 20 kg
acceptable ambient temperature:	-20 °C to 50 °C
degree of protection for the front panel, when the module is installed correctly	IP44 (please observe other information for the specific module as well)

Audio: 3-wire technique necessary! Video: 6-wire technique necessary!

**Display module LCD graphic AMI1010x-0000**

display	160 x 160 pixel, white-blue
housing	plastic and aluminium, anodised black
dimensions (in mm)	H 131 x W 111 x D 45
weight	560 g
acceptable ambient temperature	-20 °C to 50 °C <b>Attention, the device must not be exposed to direct solar radiation!</b>
input current, standby	I(a) = 0.4 mA, I(P) = 140 mA
max. input current	I(Pmax) = 245 mA

RS485 interface matching resistor transmission	120 Ohm (is plugged in delivery state) half duplex, 9600 Baud can be used only with ADx configurator, use only RS485-PC-Interface with galvanic isolation!
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3-wire technique necessary!

### **Loudspeaker module AMI10200-0057**

housing	front panel aluminium, anodised black
dimensions (in mm)	H 105 x W 105 x D 27
weight	235 g

### **Keypad module AMI10300-0057**

housing	aluminium, anodised black
dimensions (in mm)	H 105 x W 105 x D 15
weight	130 g

### **Jogwheel module AMI10400-0057**

housing	aluminium, anodised black
dimensions (in mm)	H 105 x W 105 x D 52
weight	265 g

### **Camera module AMI10500-0080**

supply voltage	+24 V $\pm$ 8 % (power supply and control unit)
housing	plastic and aluminium, anodised black
dimensions (in mm)	H 105 x W 105 x D 43
weight	305 g
acceptable ambient temperature	- 20 °C ... + 50 °C
input current, standby	I(a) = 0 mA I(P) = 90 mA
max. input current	I(Pmax) = 90 mA
video output	symmetric 1 Vss FBAS
camera	
CCD sensor	0.8 mm (1/3 inch), Sony Super HAD
resoltuion	420 lines (TVL)
light sensitivity	0.2 Lux at F2.0
focal lens	F 2.0, Board Lens
focal length	• f = 3.6 mm,
detection angle	• around 90 ° diagonal

6-wire technique necessary!

## Mounting and installation

The installation is realised on a concrete foundation provided by customer with heavy load anchors (included in the delivery).

- Appropriate space for installation (back of the post) must be guaranteed at the installation site!
- We recommend a provided cable length of 1 m.

### ***Please observe when using front-door stations with camera module or dome camera module***

Requirements for the installation site:

- Harmful environmental conditions can reduce the durability or can cause malfunctions.
- Do not install the camera module on sites, where it is directly exposed to rain. Water droplets on the dome or the viewing window can impair the image quality.

Do not install and operate the camera module on sites with:

- strong dust and dirt formation,
- water vapour or oil clouds (e.g. kitchen),
- direct solar radiation,
- unsuitable ambient temperatures (see technical data),
- strong sources of radiation (e.g. x-ray radiation, radio stations or magnetic fields),
- corrosive gases or salt water.

### ***Install the post***

- Use the base of the post as stencil.  
Place the heavy duty anchor (included in the delivery).
- Insert the connection cable provided by customer through the base plate.

**!** Observe that one line must be available for the functional earth.

- Tighten the post with the 4 cylinder screws with hexagon socket screw M10 x 75 (included in the delivery).

**!** Ensure that the connection line provided by customer is not clamped or damaged!

### Open and install the post

1. Remove the 4 screws in the post roof with the included allen key.
2. Put down the post roof on a clean ground.

**Ensure that the screws and the rubber rings below the screws are not getting lost!**

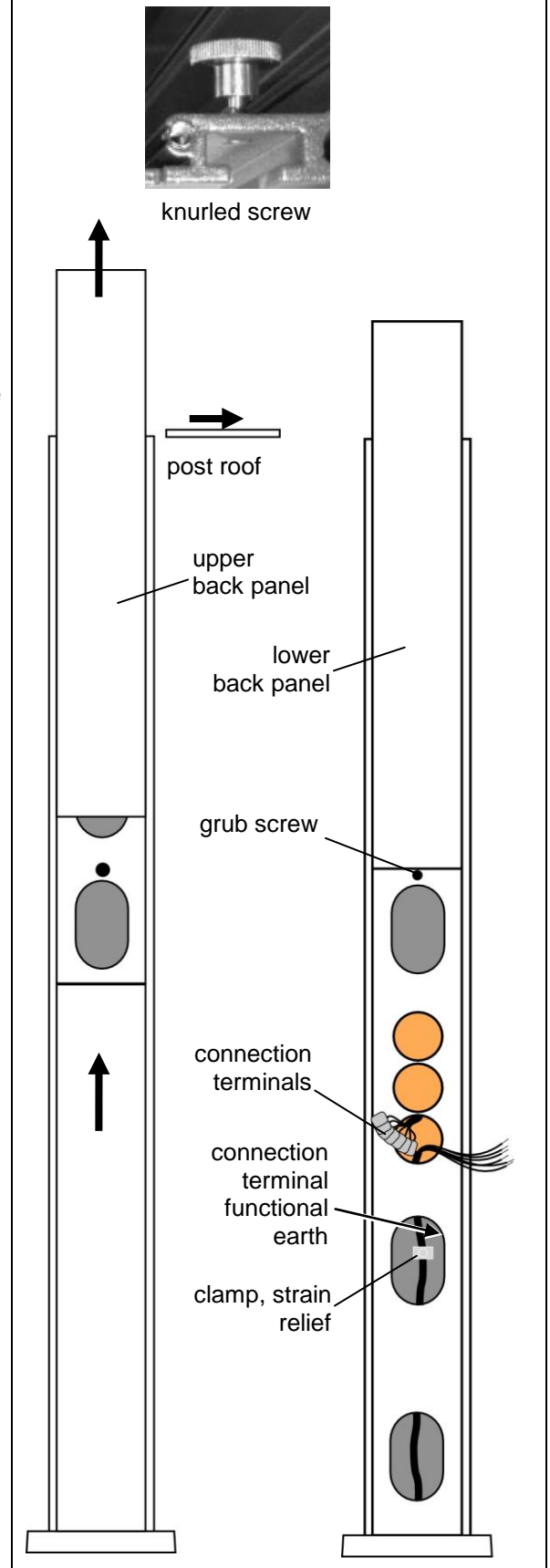
3. Loosen both knurled screws, which are located in the inside at the post edge to free the upper back panel <sup>1)</sup>.
4. Push the back panel upwards out of the post. Put it down on clean ground.
5. Loosen both knurled screws which are located inside at the level of the upper edge of the lower back panel. To do this, you have to grab through the oval hole.
6. Push the lower back panel upwards until a small grub screw can be seen above the oval hole.

**!** Secure this back panel.  
Turn out the grub screw with a small screwdriver until the back panel cannot slide down!

7. Break out an opening in one of the connection cavity wall boxes for the connection cable which is provided by the customer. Guide the connection cable through the opening in the cavity wall box to the connection terminals.
8. Fix the cable with the clamp (pluggable part, enclosed).
9. Connect the wires to the connection terminals according to type label. Connect the provided cable with the connection terminal functional earth.

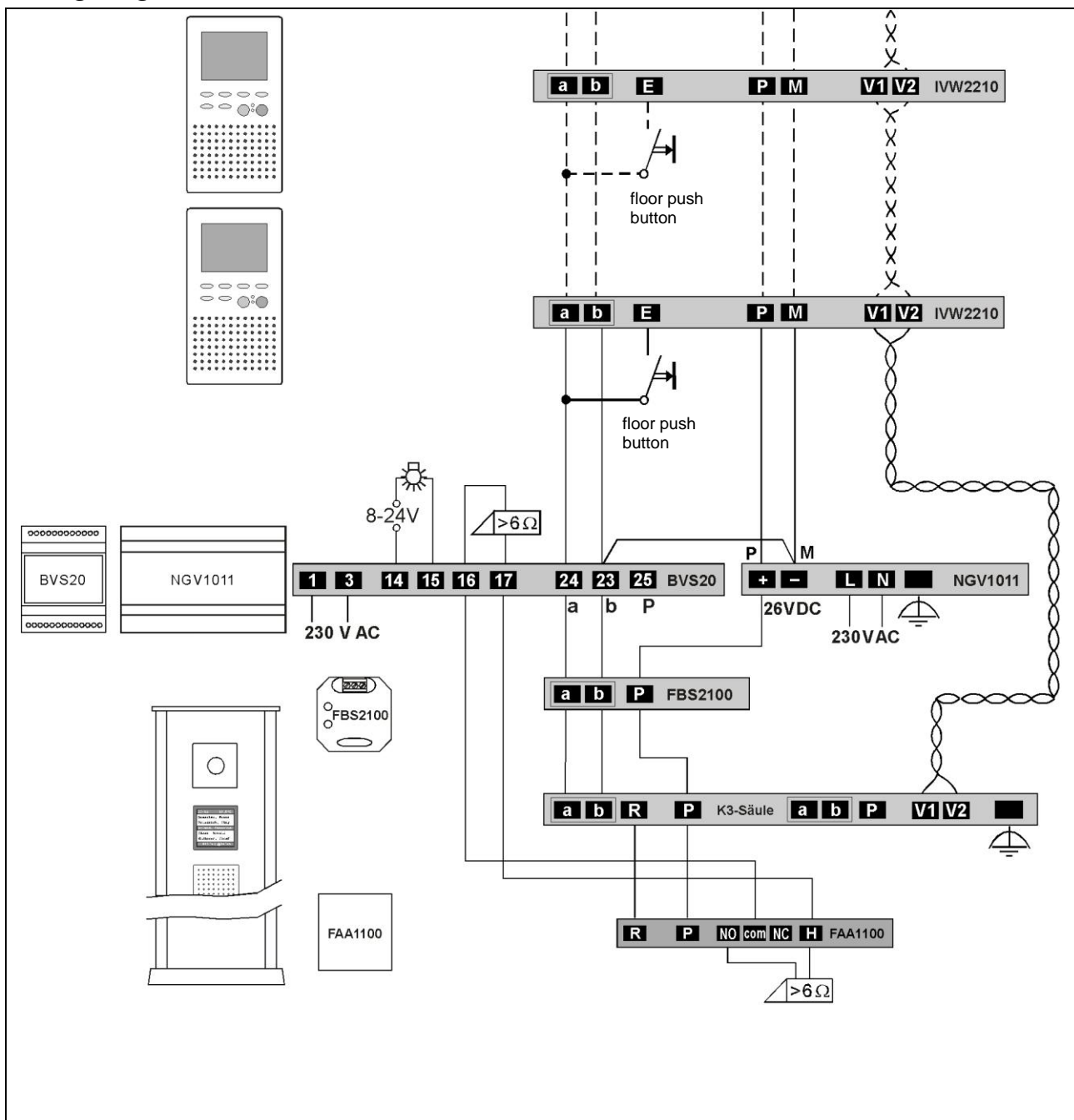
1) The communication posts with a length of 1300 mm are equipped with a back panel made of one part. The steps 5. and 6. can be omitted.

Shown is the K3000x, 1700 mm

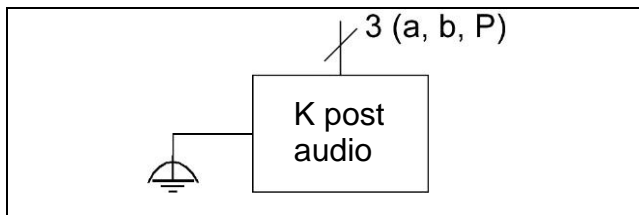
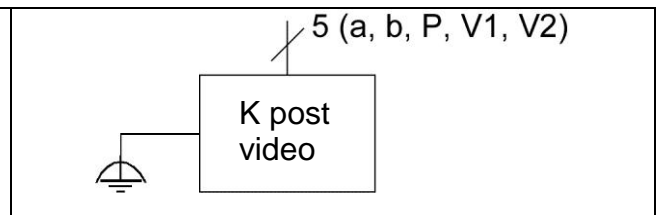


**Note**

! All modules are permitted exclusively for safety extra low voltage (SELV) and protective extra low voltage (PELV).

**Wiring diagram**

FBS2100: Temperature sensor for temperature indication in the display. Please order separately.

**Connection diagram K30001/K30003****Connection diagram K30002/K30004****2-wire special operation**

**!** It is not permitted to form a P-wire with a bridge between the terminals a and P!

**Close the post**

1. Screw in the grub screw until it is flush with the surface and push the back panel downwards until stop.  
Fix the back panel with both knurled screws.
2. Insert the upper back panel and push it downwards until it is flush with lower back panel.  
Fix the back panel with both knurled screws.
3. Fix the roof of the post with the 4 screws.

**It is absolutely necessary to insert the rubber rings again to prevent water from entering the post here!**

**Commissioning**

**First install the system completely, than connect it to the mains voltage!**

**!** Please observe when using front-door stations with camera or dome camera module:

- V1 and V2 must not be connected with P-, a- or b-wire.
- When connecting the video wires V1 (+) and V2 (-) please observe the polarity.

- Check the a-, b- and P-wire against each other for short circuits.
- Switch ON the mains voltage.

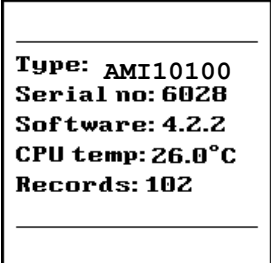


### Notes to connect more than one front-door station

- In a system with a voltage supply, realised by a single NGV1011, max. 5 front-door stations (or communication posts) with AMI modules can be connected.
- If a front-door station with AMI modules is operated parallel to other front-door stations with AMI modules or front-door stations of the series PES, the AS-addresses of these stations have to be set fix. Usually, the PES stations agree among themselves automatically regarding their AS-addresses. This mechanism does not work in combination with a front-door station with modules.

Setting the AS-address in the PES, is only possible with the Service Device TCSK-01 or the configuration software configo™.

- Setting the AS-address of a front-door station with AMI modules is realised with the PC keypad via the menu navigation (see programming manual *Functional group with display modules AMI1010x*), with the Service Device TCSK-01 or the software ADx configurator.

### Device start-up


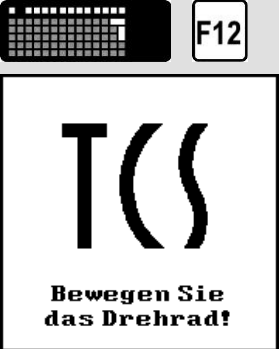
<p><b>Device start-up</b></p>	<p>After switching ON the device, the system screen appears for around 5 sec.</p>	
	<p>The resident list appears. 30 sec after switching ON the device, the start screen appears. (delivery state: TCS-Logo)</p> <p>The device is in standby mode.</p> <p><b>Start screen on customers request</b> <i>A different start screen can be set or a different image can be loaded (see programming manual Modules in front-door stations). The image has to be uploaded into the memory of the front-door station via the software ADx configurator.</i></p>	 <p><i>Examples for the start screen</i></p> 

## Settings

### Connect the PC keypad

- To loosen the covering you need an allen key SW 3 (not included in the delivery).

### Set the display contrast






	<p>With the buttons F11/F12 the contrast of the display can be set in 48 steps:</p>
	<p><b>Reduce the contrast</b></p> <ul style="list-style-type: none"> <li>Repeat pressing the F11 button on the PC keypad until the required contrast is adjusted. The font appears brighter.</li> </ul>
	<p><b>Increase the contrast</b></p> <ul style="list-style-type: none"> <li>Repeat pressing the F12 button on the PC keypad until the required contrast is adjusted. The font appears darker.</li> </ul>
	<p>ex works: middle position</p>

### Set the volume

- This function can only be used when a voice connection is already established. It is used to set the volume of microphone and loudspeaker.
- The volumes should be set only after you have entered the resident data.

**!** For setting and programming you need a standard PC keypad with PS/2 connection (not enclosed in the delivery)!









The volumes are set on an average value ex works. A modification is not always necessary. Please ensure when setting the volumes: The enhancement of loudspeaker and microphone cannot be set independently from each other. If the volumes are too high, a feedback effect appears (whistling).

<p>17:19 15,6°C  <b>Adler-Apotheke</b>  <b>Arnold</b>  <b>Baumgarten, E.</b>  <b>Dombrowski, Alf</b>  <b>Frey</b>  <b>OK Hilfe    Rufen</b></p> <hr/> <p><b>Klingeln bei...</b></p> <p><b>Baumgarten, E.</b>  <b>Wohnung: 79</b></p> <p><b> Rufen</b></p> <hr/> <p><b>Sprechen mit...</b></p> <p><b>Baumgarten, E.</b>  <b>Wohnung: 79</b></p> <p><b>Bitte sprechen!</b></p>	<ul style="list-style-type: none"> <li>Establish a voice connection between the display front-door station and an indoor station.</li> </ul>
<p> <b>F5</b></p> <p><b>Volume Sprache:</b></p> <p><b>Lautsprecher</b>  <b>F1  F2</b></p> <p><b>Mikrofon</b>  <b>F3  F4</b></p> <p><b>ESC = Abbrechen</b></p>	<ul style="list-style-type: none"> <li>Press the F5 button on the PC keypad.</li> <li>With the buttons F1/F2 the volume at the front-door station</li> <li>With the buttons F3/F4 the volume at the indoor station can be adjusted.</li> </ul> <p>ex works: middle position</p>

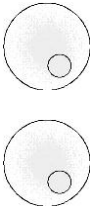
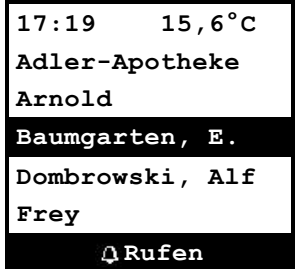


## Operation communication post with jogwheel module

### Call a resident

#### ... via the selection of the initial letter

<p>Start</p>		<p>Turn the jogwheel carefully. The help menu appears.</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Hilfe:</b></p> <p> <b>Bewohner auswählen</b></p> <p> <b>Bewohner anrufen</b></p> <p><b>AB</b> <b>Gehe zu Anfangsbst.</b></p> <p><b>C</b></p> </div>
<p>Select initial letter</p>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">             AB C         </div>	<p>or</p> <p>Press the ABC button. The entry with first initial letter of the resident list appears.</p>	
<p>Browse through the initial letters</p>		<p>Browse:</p> <p>Turn the jogwheel until the required initial letter appears. *</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Anfangsbuchstabe mit ( ) auswählen!</b></p> <hr/> <p style="text-align: center;"><b>B</b></p> <hr/> <p style="text-align: center;"><b>Auswahl mit <sup>AB</sup><sub>C</sub> bestätigen</b></p> </div>
<p>Select a name</p>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">             AB C         </div>	<p>Confirm the selection by pressing the ABC button. The first resident with the selected initial letter is displayed. **</p> <p>Browse:</p> <p>Turn the jogwheel until the required name with the selected initial letter appears.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>17:19      15,6°C</p> <p><b>Adler-Apotheke</b></p> <p><b>Arnold</b></p> <p><b>Baumgarten, E.</b></p> <p><b>Dombrowski, Alf</b></p> <p><b>Frey</b></p> <p style="text-align: center;"><b> Rufen</b></p> </div>
<p>Call a resident</p>		<ul style="list-style-type: none"> <li>Press the bell button. The entered number is confirmed by an acknowledgement tone (or a voice output) and the display appears:</li> </ul> <p>If the telephone does not respond resp. the front-door station does not acknowledge, the following note appears on the display:</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Klingeln bei...</b></p> <hr/> <p style="text-align: center;"><b>Baumgarten, E.</b></p> <p style="text-align: center;"><b>Wohnung: 79</b></p> <p style="text-align: center;"><b> Rufen</b></p> </div>
			<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Klingeln bei...</b></p> <hr/> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>Telefon antwortet nicht!</b></p> </div> <p style="text-align: center;"><b>Erdgeschoss</b></p> <p style="text-align: center;"><b> Rufen</b></p> </div>

### ... via the selection in the resident list


<p>Start, name selection mode</p> <p>Browse in the resident list</p>		<ul style="list-style-type: none"> <li>Turn the jogwheel carefully. The help menu appears.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>Browse: Turn the jogwheel until the required name is marked.</li> </ul>	
<p>Call a resident</p>		<ul style="list-style-type: none"> <li>Press the bell button. The entered number is confirmed by an acknowledgement tone (or voice output) and the following display:</li> </ul> <p><i>If the telephone does not respond resp. the front-door station does not acknowledge, the following note appears on the display:</i></p>	

## Operation communication post via keypad module






### Call a resident

#### ... by selecting the initial letter



Start	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">             AB C           </div>	<p>Press the ABC button (or another button, but not C or number). The help menu appears.</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;"><b>Hilfe:</b></p> <p>↑↓ <b>Bewohner auswählen</b></p> <p>⏏ <b>Bewohner anrufen</b></p> <p><b>AB</b> <b>Gehe zu</b></p> <p><b>C</b> <b>Anfangsbst.</b></p> <p><b>0..9</b> <b>Wohnungsnr. eingeben</b></p> </div>
Select initial letters  Browse through the initial letters	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">             AB C           </div> <div style="margin: 5px 0;"> <span style="font-size: 2em;">^</span> </div> <div style="margin: 5px 0;"> <span style="font-size: 2em;">v</span> </div>	<p>Press the ABC button.</p> <p>Browse: Press the UP or DOWN button (or keep it pressed) until the required initial letter appears. Confirm the selection with the OK button. The first resident with the selected initial letter is displayed.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>Anfangsbuchstabe mit ↑↓ auswählen!</b></p> <hr/> <p style="font-size: 1.5em; margin: 0;"><b>A</b></p> <hr/> <p><b>Auswahl mit OK bestätigen</b></p> </div>
Select a name	<div style="margin: 5px 0;"> <span style="font-size: 2em;">^</span> </div> <div style="margin: 5px 0;"> <span style="font-size: 2em;">v</span> </div>	<p>Browse: Press the UP or DOWN button (or keep it pressed) until the required name is marked.</p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: right; margin: 0;">17:19    15,6°C</p> <p style="background-color: black; color: white; padding: 2px;"><b>Adler-Apotheke</b></p> <p>Arnold</p> <p>Baumgarten, E.</p> <p>Dombrowski, Alf</p> <p>Frey</p> <p style="background-color: black; color: white; padding: 2px;">OK Hilfe   ⏏ Rufen</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: right; margin: 0;">17:19    15,6°C</p> <p style="background-color: black; color: white; padding: 2px;"><b>Adler-Apotheke</b></p> <p style="background-color: black; color: white; padding: 2px;"><b>Arnold</b></p> <p>Baumgarten, E.</p> <p>Dombrowski, Alf</p> <p>Frey</p> <p style="background-color: black; color: white; padding: 2px;">OK Hilfe   ⏏ Rufen</p> </div>

Call a resident		<ul style="list-style-type: none"> <li>Press the bell button. The entered number is confirmed by an acknowledgement tone (or voice output) and the display appears:</li> </ul> <p>If the telephone does not respond resp. the front-door station does not acknowledge, the following note appears:</p>	<div data-bbox="1050 203 1345 495"> <p><b>Klingeln bei...</b></p> <p><b>Baumgarten, E.</b></p> <p><b>Wohnung: 79</b></p> <p><b>Rufen</b></p> </div> <div data-bbox="1050 528 1345 808"> <p><b>Klingeln bei...</b></p> <p><b>Telefon antwortet nicht!</b></p> <p><b>Erdgeschoss</b></p> <p><b>Rufen</b></p> </div>
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### ... by selecting in the resident list

Start name selection mode  Browse through the resident list	   	<ul style="list-style-type: none"> <li>Press the UP or DOWN button twice. The resident list appears.</li> <li>Browse: Press the UP or DOWN button until (or keep it pressed until) the required name is marked.</li> </ul>	<div data-bbox="1050 1043 1345 1301"> <p>17:19 15,6°C</p> <p>Adler-Apotheke</p> <p><b>Arnold</b></p> <p>Baumgarten, E.</p> <p>Dombrowski, Alf</p> <p>Frey</p> <p>OK Hilfe   Rufen</p> </div>
Call a resident		<ul style="list-style-type: none"> <li>Press the bell button. The entered number is confirmed by an acknowledgement tone (or voice output) and the display:</li> </ul> <p>If the telephone does not respond resp. the front-door station does not acknowledge, the following note appears:</p>	<div data-bbox="1050 1402 1345 1693"> <p><b>Klingeln bei...</b></p> <p><b>Baumgarten, E.</b></p> <p><b>Wohnung: 79</b></p> <p><b>Rufen</b></p> </div> <div data-bbox="1050 1727 1345 2007"> <p><b>Klingeln bei...</b></p> <p><b>Telefon antwortet nicht!</b></p> <p><b>Erdgeschoss</b></p> <p><b>Rufen</b></p> </div>

**... by entering the flat number**

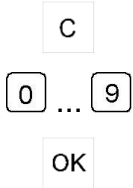



<p>Enter the flat number</p>		<p>If the flat number of the resident is known, it can be entered directly.</p> <ul style="list-style-type: none"> <li>• Enter the flat number with the keypad module.</li> <li>• Confirm with the OK button.</li> </ul>	<div style="border: 1px solid black; padding: 5px;"> <p align="center"><b>Bitte Wohnung-Nr. eingeben:</b></p> <hr/> <p align="center"><b>123</b></p> <hr/> <p align="center"><b>Eingabe mit OK bestätigen</b></p> </div>
<p>Call a resident</p>		<ul style="list-style-type: none"> <li>• Press the bell button. The entered number is confirmed.</li> <li>• The following display appears and a door call is signaled at the front-door station.</li> </ul> <p><i>If the telephone does not respond resp. the front-door station does not acknowledge, the following note appears:</i></p>	<div style="border: 1px solid black; padding: 5px;"> <p align="center"><b>Klingeln bei...</b></p> <hr/> <p align="center"><b>Baumgarten, E.</b></p> <p align="center"><b>Wohnung: 79</b></p> <p align="center"><b>Rufen</b></p> </div> <div style="border: 1px solid black; padding: 5px;"> <p align="center"><b>Klingeln bei...</b></p> <hr/> <p align="center"><b>Telefon antwortet nicht!</b></p> <p align="center"><b>Wohnung: 79</b></p> <p align="center"><b>Erdgeschoss</b></p> <p align="center"><b>Rufen</b></p> </div>

**Voice connection**

<p>Establish a voice connection</p>		<p>After accepting the door call at the called indoor station, a voice connection is established. the following display appears:</p>	<div style="border: 1px solid black; padding: 5px;"> <p align="center"><b>Sprechen mit...</b></p> <hr/> <p align="center"><b>Baumgarten, E.</b></p> <p align="center"><b>Wohnung: 79</b></p> <p align="center"><b>Bitte sprechen!</b></p> </div>
<p>End the voice connection</p>		<p>By replacing the handset at the indoor station or after the timeout of the set communication time, the voice connection ends. The resident list is displayed again.</p>	<div style="border: 1px solid black; padding: 5px;"> <p align="center">17:19    15,6°C</p> <p align="center"><b>Adler-Apotheke</b></p> <p align="center"><b>Arnold</b></p> <p align="center"><b>Baumgarten, E.</b></p> <p align="center"><b>Dombrowski, Alf</b></p> <p align="center"><b>Frey</b></p> <p align="center"><b>Rufen</b></p> </div>

### **Door release via codelock (only K30003 and K30004, with keypad module)**

When using K3 posts with keypad module, three access codes can be determined. These can be used for the door release by all authorised persons.

<p><b>Enter the access code</b></p>		<p>The input menu can only be called up from the start screen.</p> <ul style="list-style-type: none"> <li>• Press the C button. The following display appears:</li> <li>• Enter the code with 1 up to 4 digits.</li> <li>• Confirm the entry with the OK button.</li> </ul>	
<p>Correct entry</p>		<ul style="list-style-type: none"> <li>• A positive acknowledgement tone (beep, or voice output) sounds.</li> <li>• The door opener is triggered.</li> </ul>	
<p>Unknown access code</p>		<p>A negative acknowledgement tone (3x beep, or voice output) sounds when pressing the OK button. The resident list is displayed.</p> <p>If the code is entered incorrectly 3 times, the code input is blocked for 180 sec.</p>	

## General information on the conduit in TCS systems

### TCS audio systems

The conduit is determined by structural conditions and only limited by its length.

- Observe when selecting the cable length: the loop resistance must not exceed 20  $\Omega$  (table).
- To keep the max. permitted loop resistance, the cross-section of the wire can be doubled, that means, for one wire two lines are used (illustration). The lines must be twisted.
- When using shielded lines: connect the shields with each other and connect one side to ground (b-wire) at the power supply.
- Optional star or strand shaped wiring.

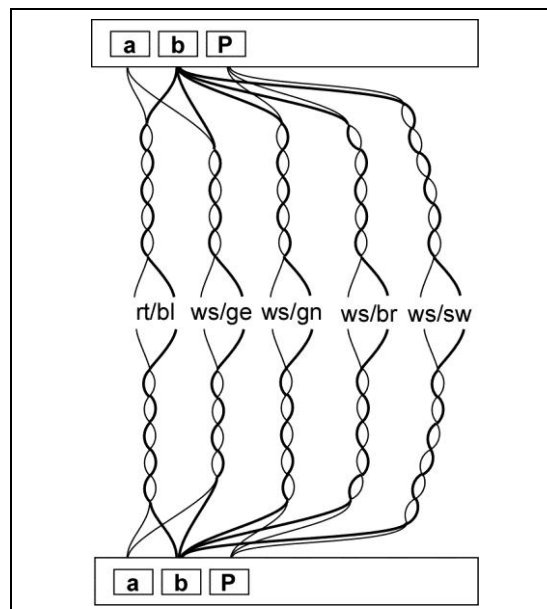


Table: loop resistances

cable length in m	cable diameter	
	0.6 mm	0.8 mm
	loop resistance in $\Omega$	
10	1.28	0.71
20	2.55	1.43
30	3.83	2.14
40	5.10	2.86
50	6.38	3.57
60	7.65	4.29
70	8.93	5.00
80	10.20	5.71
90	11.48	6.43
100	12.76	7.14
150	19.13	10.71
200	25.51	14.29
250		17.86
300		21.43

### TCS video systems

#### 6-wire operation

The 6-wire operation is the standard operation mode. Video operation, where two separated masses (b and M) are used.

The conduit of the lines is defined by the structural conditions and is only limited by length.

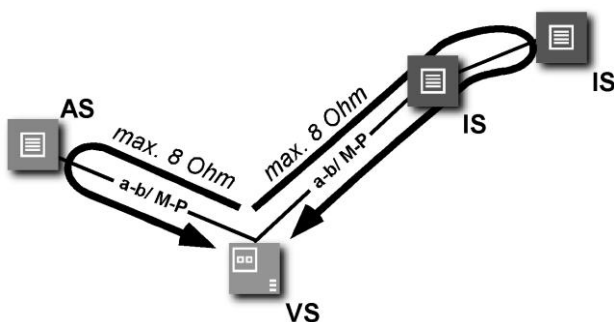
- Please observe when selecting the length of the lines: the loop resistance a-b and M-P must not exceed 8 Ω (table 1).
- Loop resistance > 8 Ω: plan multiple wiring of the strands (double twisted lines).
- Optional strand or star shaped wiring
- Do not use more than 20 video indoor stations per strand. For systems with more video indoor stations, plan to use video distributors (FVY1200, FVY1400).
- Up to 64 front-door stations (16 of them video front-door stations) and almost an unlimited number of indoor stations can be connected within one system polarity-free (a/b | polarity-free only in 6-wire operation). Thus, a suitable power supply and control unit is to be used.

Table 1: loop resistances

Length of the line a-b/ M-P in m	Line diameter	
	0.6 mm	0.8 mm
	Loop resistance in Ω	
10	1.28	0.71
20	2.55	1.43
30	3.83	2.14
40	5.10	2.86
50	6.38	3.57
60	7.65	4.29
70		5.00
80		5.71
90		6.43
100		7.14

## Principle loop resistance

None of the devices (AS, IS or FE) should be further than 20 Ohm away from the power supply and control unit (VS).



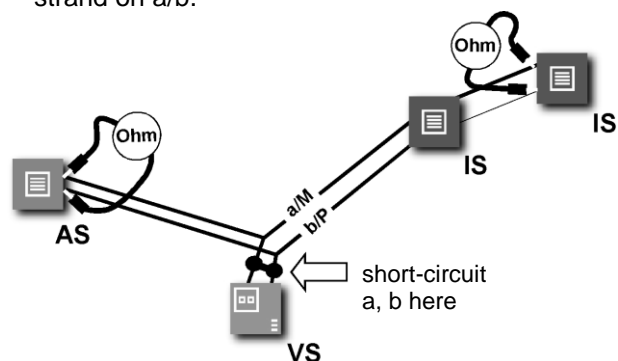
8 Ohm:

max. 65 m distance AS-VS by 0.6 mm diameter  
max. 115 m distance AS-VS by 0.8 mm diameter

## Measurement loop resistance

Rule:

- Switch off the 230 V / 50 Hz of the VS.
- Install a-b short-circuit at the VS.
- All other devices are not disturbing the measurement and can stay connected.
- Measure the resistance at the last IS or AS at the strand on a/b.



AS	front-door station
VS	power supply and control unit
IS	indoor station
FE	extended function

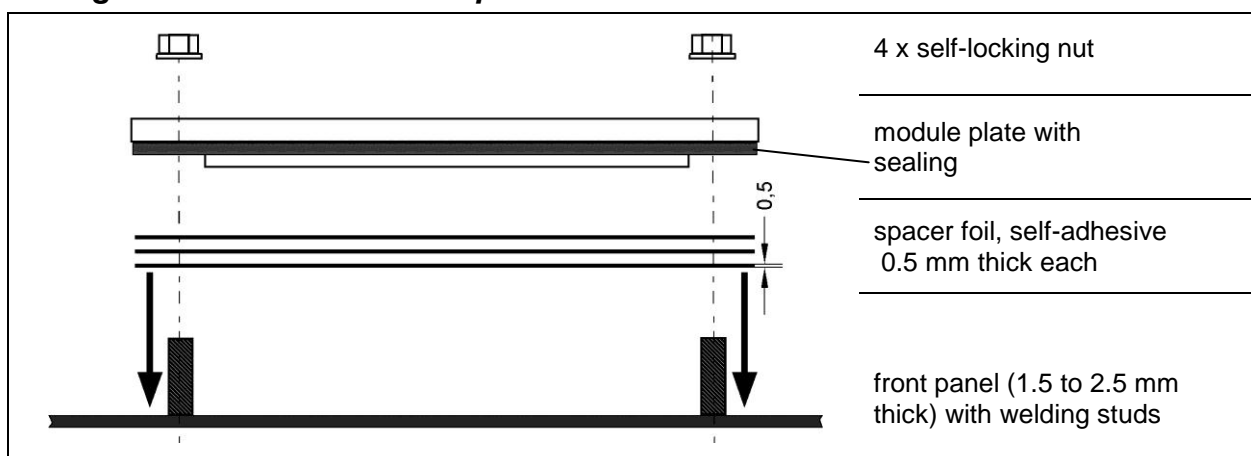
## Repair

### ***Dismount front panel with modules***

(see also *Open and install the post*, page 10)

1. Dismount the roof of the post.
2. Loosen the two knurled screws, which are located inside at the upper edge of the post to free the upper front panel with the modules.
3. Push out the front panel upwards.

### ***Installing a module into the front panel***



1. Stick 1 to 3 spacer foils on top of another from behind at the front panel cutouts.
2. Put on the module with sealing.
3. Fix the module with 4 self-locking nuts (enclosed in the delivery).


### ***Display module AMI1010x-0000: Replace the EEPROM storage***

- ! • Changes in datasets and parameter are not stored automatically.
- ! • After all modifications, carry out the following steps *Various configurations > Safe storage* to transfer the changes on the EEPROM (see manual *Modules in front-door stations*).

All programmed data such as serial numbers and parameter are stored within the EEPROM. If the front-door station needs to be replaced, the EEPROM storage can be removed from the programmed front-door station and installed into the new, **comparable** front-door station.

1. Eventually safe the data of the display (*Various configurations > Safe storage*).
2. Open the housing.
3. Disconnect the display from the power supply: pull of the connecting plug.
4. The EEPROM storage is positioned in the electronic part (similar to the display module). Pull off the EEPROM storage.


5. Plug the EEPROM storage into the new, unprogrammed display module on the pins.

 Observe the orientation of the EEPROM storage: the component side should face you.

6. Connect the front-door station to the power supply again.


7. Execute the loading of the storage. Observe the software version (Various configuration > loading storage) to transfer the data into the electronic module.

## Cleaning

 Avoid water from entering the device!  
Do not use any abrasive detergents!

Clean the device with a dry or slightly wet cloth.  
Remove stronger stains with a standard plastic cleaner.

## Conformity

 The declarations of conformity are available under [www.tcsag.de](http://www.tcsag.de), downloads, trade information.

## Information on disposal



The adjoining symbol shows, that the device has to be disposed separately from domestic waste. The materials used are recyclable. Please do help protecting our environment and dispose the device via a collection point for electronic scrap.



Dispose the parts of the packaging in collecting tanks for cardboard and paper resp. plastics.

## Warranty

We offer a **simplified processing** in case of warranty for electricians.

- Please note our **conditions of sale and delivery**, download from [www.tcsag.de](http://www.tcsag.de), downloads, trade information.
- Please contact the **TCS HOTLINE**.

## Accessory

<i>short text</i>	<i>article number</i>
Temperature sensor for flush-mount, single	FBS2100

## Service

Please send your questions and inquiries to  
**hotline@tcsag.de**

### Headquarters

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