

**REL5..Y**  
Pass-through video letter box front 2-wire

Operating and assembly instructions

**Safety instructions**

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country.

When installing and laying cables, always comply with the applicable regulations and standards for SELV electrical circuits.

These instructions are an integral component of the product and must be retained by the end user.

**Design and layout of the device**

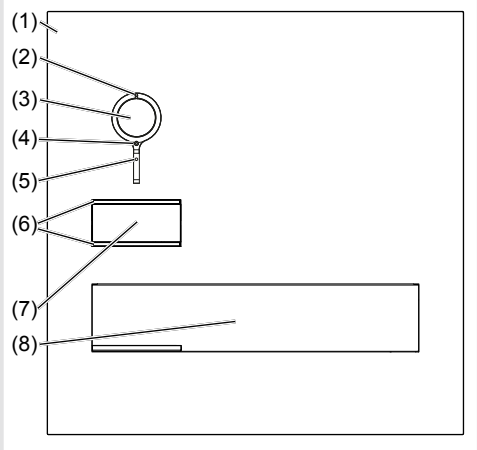


Figure 1: Front

- (1) Front plate stainless steel
- (2) Microphone
- (3) Camera

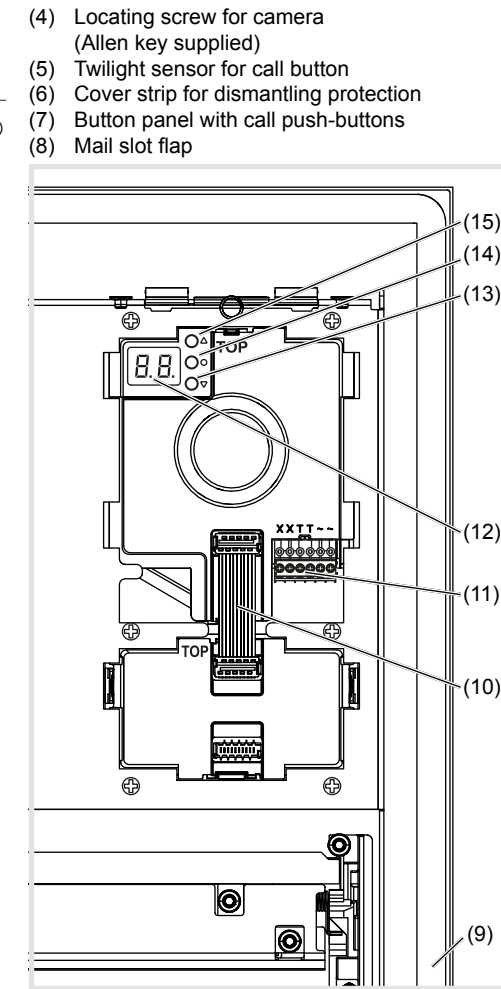


Figure 2: Back  
Peripheral wall sealing

- (9) Connecting cable module
- (10) Connection terminal block
- (11) 7-segment display
- (12) Adjustment button downwards ▼
- (13) Selection button ○
- (14) Adjustment button Upwards ▲

**Function**

The video letter box front works in the 2-wire bus system and enables communication via sound and image.

**Correct use**

- For assembly in pass-through letter boxes
- Not compatible with intercom systems and pass-through letter boxes of other manufacturers
- suitable for use exterior applications

**Product characteristics**

- completely pre-assembled
- protected against vandalism
- with brushed 2 mm stainless steel front plate
- Letter box according to DIN EN 13724
- Name plate can be changed from the front without any special tools
- Call push-button with acknowledge tone (can be switched off) and tactile feedback
- Call button, light release or door release can be adjusted even without any function
- Durable, homogeneous, white LED call push-button backlighting
- Twilight controlled call push-button backlighting with adjustable switch-on brightness level
- Opening of letter box front only with enclosed opening tool
- break-proof flush-mounted call buttons
- Colour camera
- invisible, glare-free IR LED night lighting
- temperature controlled camera heating for clear view

- scratch-proof camera cover (Allen key supplied)
- Loudspeaker and microphone protected against sabotage
- Volume and microphone sensitivity settable
- Door release contact on 1 ... 10 s adjustable
- Door release without previous call adjustable in single door systems
- One-man commissioning
- Safety rope as installation aid

**Operation**

**Establish call (ringing)**

- Press the call push-button assigned to the desired subscriber.
- If configured, the call push-button activation is confirmed by an acknowledge tone. Addressed indoor stations are called.

**Switch-on lights**

- A call push-button is configured and labelled for lighting control (light insert supplied).
- Press the call push-button for lighting.
- If configured, the call push-button activation is confirmed by an acknowledge tone. The light contact of a line power supply is closed for the set time.

**Labelling the call push-button / name plate**

- Keep call push-button / name plate pressed on one side.
- On the opposite side, the lever opening (16) is accessible for a screwdriver.
- Position the screwdriver in the lever opening (16) and release the interlock (Figure 3).
- Remove cover with name plate insert.

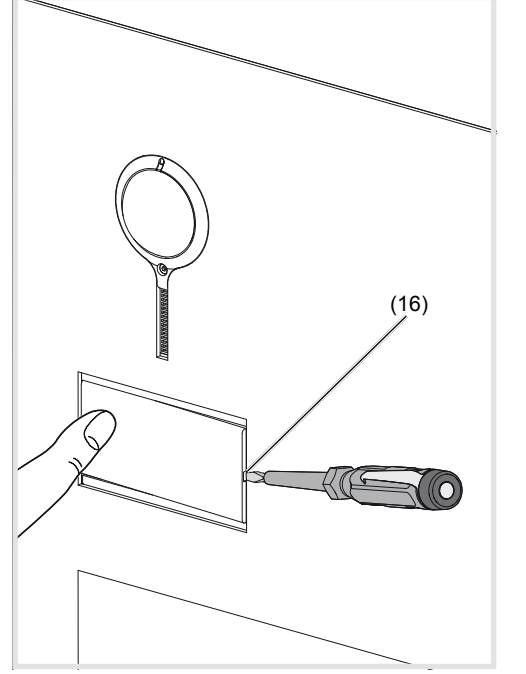


Figure 3: Removing name plate cover

- (15) Lever opening
- Label name plate insert if required.
- Insert name plate insert, prepared foil or prepared labelling strip into the cover and press on cover.

- ⓘ Do not use any paper for the name plate insert, since moisture and UV light will damage the paper and labelling.
- ⓘ UV-resistant foil with laser printing is suitable for labelling as well as labelling devices for labelling strip:
  - small buttons - 12 mm
  - medium buttons - 30 mm

**Cleaning and care**

Commercially available products for stainless steel and car paintwork care containing a wax component for conservation are recommended for cleaning and care.

ⓘ Do not use wire wool, wire brushes or any similar products for cleaning. This will prevent damage to the surface and accumulation of flash rust.

**Information for electricians**

**Installation and electrical connection**

**DANGER!**

Touching live parts in the installation environment can result in an electric shock!

An electric shock can be lethal!

Before working on the device or load, disconnect all associated circuit breakers. Cover all live parts in the area!

When installing door communication systems, comply with the general safety regulations for telecommunications systems according to VDE 0800:

- Separate routing of power and door communication cables with a minimum spacing of 10 cm
- Partitions between power and door communication cables in shared cable ducts
- Use of standard telecommunications' cables, e. g. J-Y (St) Y with 0.8 mm diameter

**Bus cables**

- J-Y(ST)Y or A-2Y(L)2Y
- Use wrapped wire pair
- Recommendation: white/yellow
- CAT
- Use wrapped wire pair
- Recommendation: orange/white

- ⓘ **Avoid interference!**
- The 13-MHz video carrier frequency used for two-wire video door communication systems can cause reciprocal interference with other devices, such as radios, routers and WLAN devices.
- Only use shielded cables corresponding to the qualities recommended in this manual.
- It is essential to comply with the applicable regulations during planning and installation.
- Route cables, wire the devices, and in particular implement shielding and earthing measures as described below.

**Assembling the letter box front**

The pass-through letter box is assembled (see assembly instructions of pass-through letter box). The connection cables and indoor stations are connected to the line power supply while taking the maximum cable lengths and attenuations into account (see operating instructions of the line power supply).

- Assemble the fastening elements (18) supplied with the pass-through letter box. To do this, loosen the nuts on the threaded bolts, slide the 4 elements onto the bolts over the 2 nuts and then tighten.

- ⓘ Use the socket wrench supplied (17). Tighten the bolts underneath through the openings at the edge of the pass-through letter box.

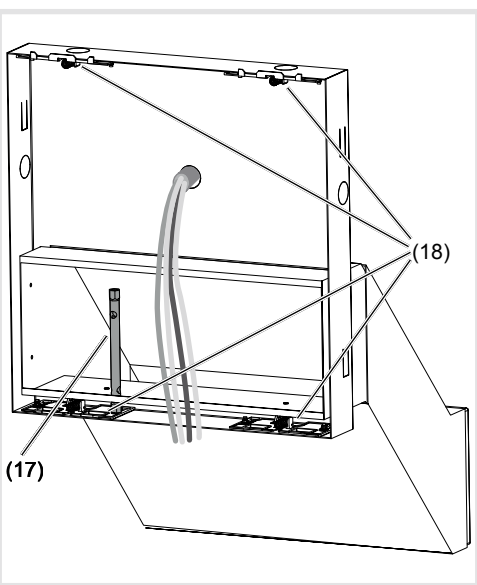


Figure 4: Assembly of the fastening elements

- (16) 5.5 mm socket wrench
- (17) Fastening elements
- ⓘ The support bracket (19) of the fastening elements (18) must be located on the wall surface (Figure 5).

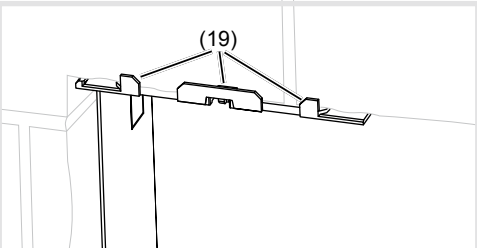


Figure 5: Installation position of fastening elements

- (18) Support bracket of the fastening elements
- Insert both opening tools (20) into the mounting device of the lower fastening elements (21) on the housing (Figure 6).

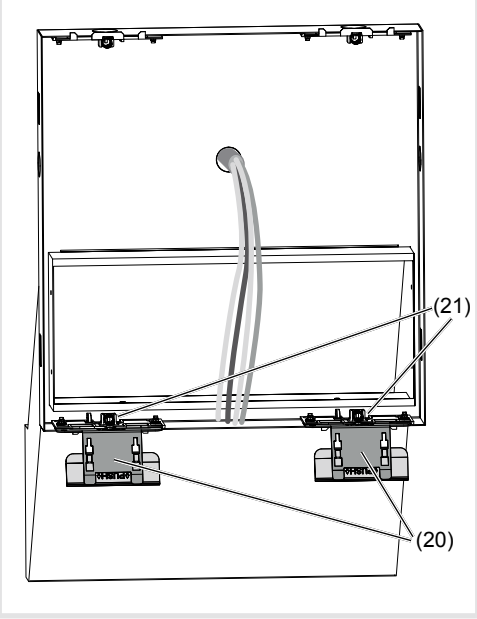


Figure 6: Inserted opening tools

- (19) Opening tools
- (20) Lower fastening elements
- Attach the loops of the safety rope (22) between the centre upper suspension of the letter box front and right upper fastening element (23) in the housing. Position the video letter box front to install on the opening tools (Figure 7).

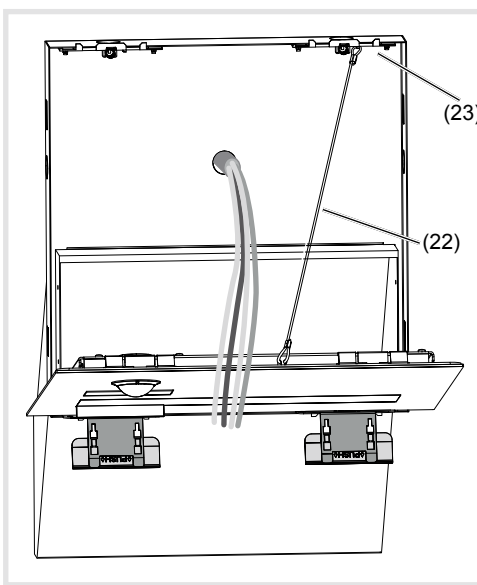


Figure 7: Installation position of video letter box front

- (21) Safety rope
- (22) Upper fastening element

**Connecting the letter box front**

- Shorten connection cable of the letter box front as required and strip the required wires.
- Pull off connection terminal block (11) from the video insert.
- Connect the 2-wire bus cable to the terminals XX of the connection terminal block (Figure 8).
- Connect door release to the terminals TT of the connection terminal block (figure 8 and 9) if required.

or:

- For manipulation-protected installation, connect the door release to the contact □ of the line power supply (Figure 10).
- ⓘ The door release lead must not be inserted through the letter box door station in order to protect against manipulation.
- For call push-button backlighting and camera heating connect 12 V~ lead from the power transformer to the terminals ~ of the connection terminal block (Figure 8).

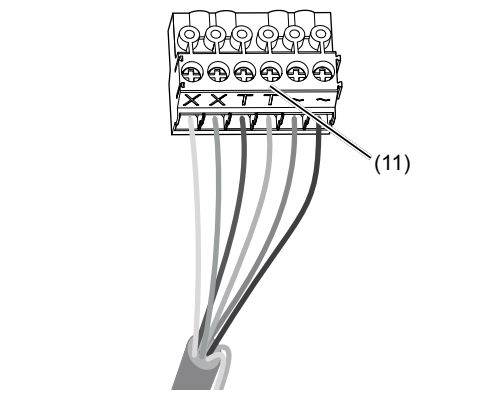


Figure 8: wired connection terminal block

- Attach connection terminal block to video insert.

**Circuit symbols and elements of the circuit diagrams**

- Line power supply RMD
- Power transformer
- Door release
- Inserting the video letter box front
- Wrapped wire pair for 2D video devices (recommendation: white/yellow wire pair)
- Unwrapped wire pair, for e.g. for door release

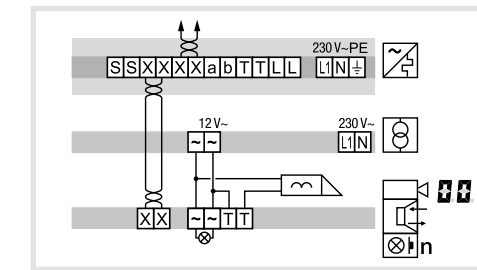


Figure 9: Connection of video letter box front

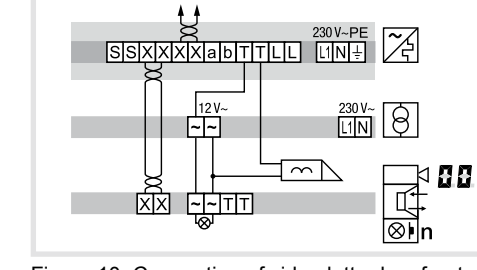


Figure 10: Connection of video letter box front with manipulation-protected door release

If interference occurs in telecommunications systems, radio services or other systems during the operation of existing video door communication systems, measures for shielding and earthing the cables and for filtering must be implemented.

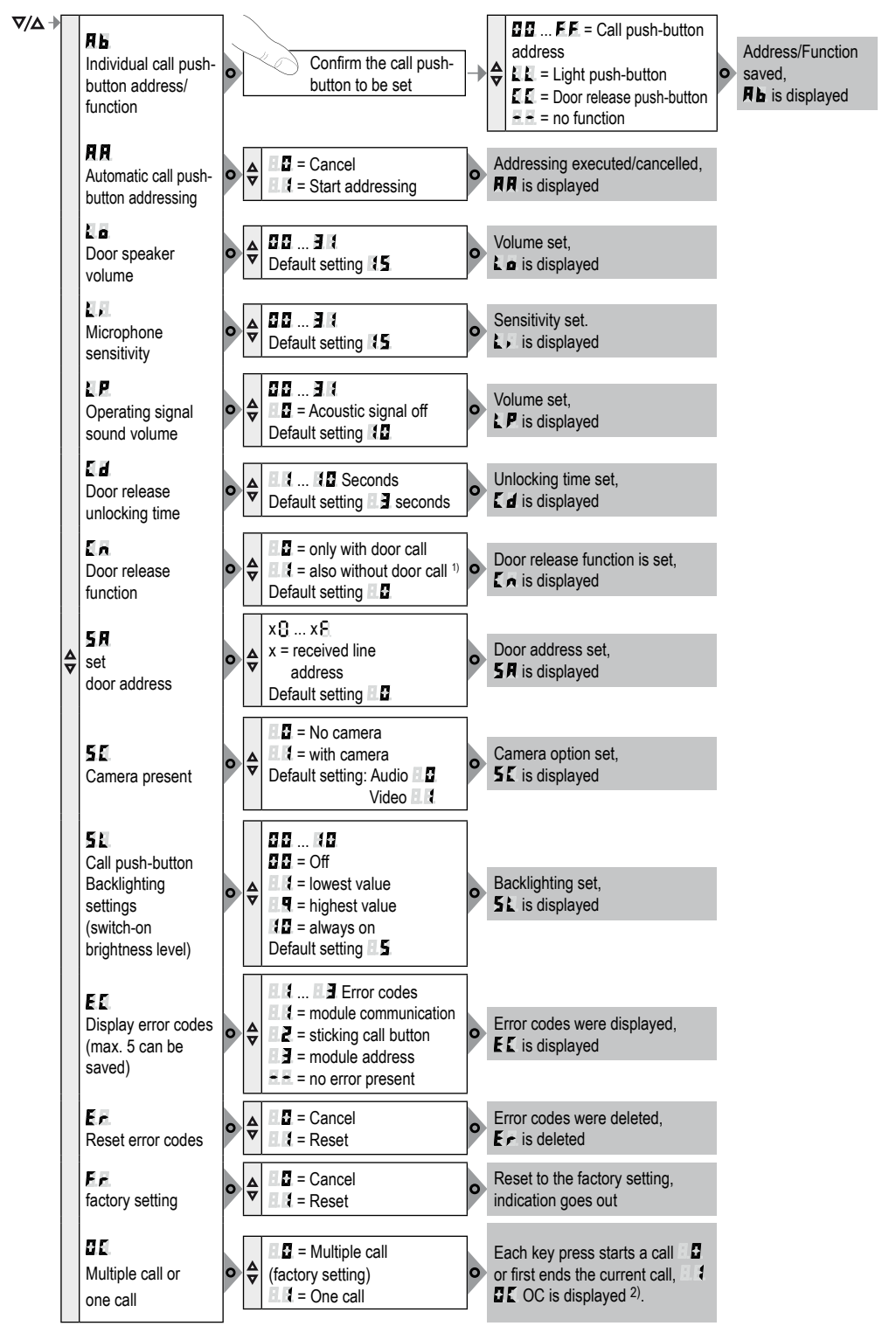
- For this purpose, connect all of the drain wires of the cables in a star shape using a terminal.
- Connect all drain wires to the PE rail in the distribution box.

**Calling up and changing of system settings**

On the back of the video insert, there are 3 operating buttons and a 2-digit 7-segment display (Figure 2, 12 - 15).

- Press ▼ / ▲ button.
- Device turns to setting mode. The first menu entry **Rb** is displayed.
- ⓘ The reading directions of the 7-segment display varies by 180° depending on which button ▼ / ▲ you start with.

- Select the desired menu entry with ▼ / ▲ (Figure 11).
- Confirm the selection with ○.
- ⓘ The 7 segments display goes dark if there is no actuation for 5 seconds. Settings are applied. The device returns to normal operation.



<sup>1)</sup> Door release functions without door call only possible single door systems  
<sup>2)</sup> OC „one call“, software version 2.0 or higher

Figure 11: Overview of system settings

- ⓘ For installations using RTQ52xx, TJA510N, TJA470 or multiple door stations, multiple call **Gc** must be used.



## Setting the values

The menu entry to be set is confirmed and flashes alternately with the value to be set.

- Press **▼ / ▲** button.
  - Short button-press: change the value by one step.
  - Long button-press: run through values. Scrolling stops when the button is released.
- Confirm set value with **○**.
  - The device applies the setting and returns to the previous menu entry.

## Address call push-button automatically **RR**

The call push-button and connector on the back are addressed by the automatic call push-button addressing as follows. The addressing takes place starting from the top downwards (Figure 12).

The menu entry **RR** is selected. **RR** flashes alternately with the entry **00** for cancel.

- With **▼ / ▲** select the entry **00** for automatic addressing.
- Confirm with **○**.
  - During the addressing, the display flickers.
  - Afterwards the display returns to the previous menu entry **RR**.

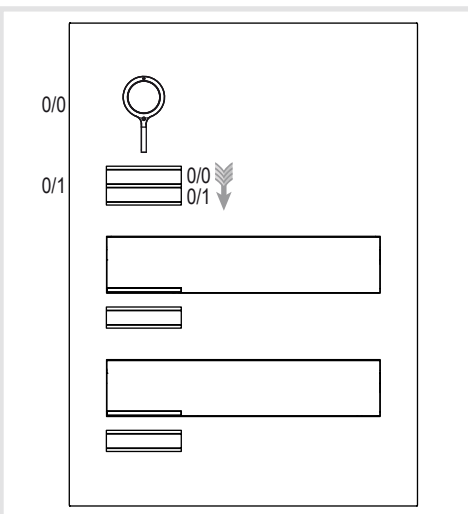


Figure 12: Module address and automatic call push-button addressing

## Set individual call push-button address/function **Rb**

The menu entry **Rb** Set individual call push-button address/function is selected and flashes.

- Confirm the call push-button to be set.
  - The menu entry **Rb** flashes alternately with the current address/function.
- With **▼ / ▲** select the required address **00** ... **Ff** or function **ll** for light push-button, **EE** for door release push-button or **---** for no function.
- Confirm set address/function with **○**.
  - The device applies the setting and returns to the previous menu entry. **Rb**.

## Display saved error codes **EE**

Video insert and call-button module errors that occur during operation are stored in the error memory of the video insert for diagnosis.

- Select menu entry **EE** with button **▼ / ▲** and confirm with **○**.
  - If no error code exists **---** is displayed for 2 seconds and afterwards **EE**.
  - If error codes are saved **EE** flashes followed by the module address and the error code.
- Press button **▼ / ▲**, to call up further error codes if necessary.
- Press button **○** to return to menu entry **EE**.

Error code	Error cause	Counter actions
<b>1</b>	Communication error between video insert and call push-button module. Once the error has occurred 3 times, the system is reset automatically and the error code is generated.	If the error persists, the call push-button module must be replaced and addressed.
<b>2</b>	sticking call button	Check call push-button module, and if there is a defect, replace and address.
<b>3</b>	Writing of the call push-button address in the call push-button module fails.	If the error persists, the call push-button module must be replaced and addressed.

Table 1: Error codes and counter actions

**i** Identical error codes are only saved once.

## Multiple call/one call

Multiple call, value **00** (factory setting): Each key press on the outdoor station starts a call. These calls can be answered one after the other.

One call, value **01**: Pressing a button on the outdoor station starts a call. Each additional key press ends the previous call and connects the new call. Only one call can be present in the system at any time.

## Inserting the video letter box front

The system settings are complete.

- Remove opening tool from housing.
- Insert the letter box front and press down until it clicks audibly into place simultaneously at the top and bottom if possible (Figure 13).

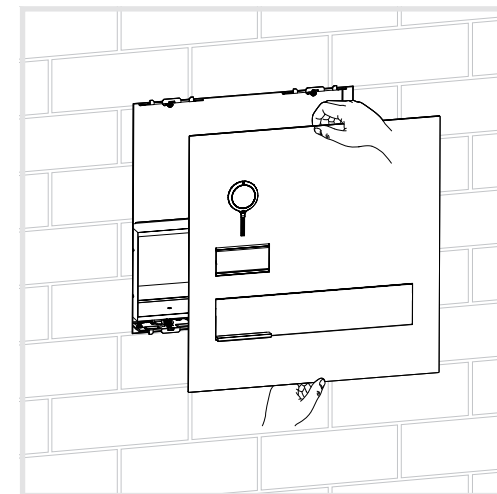


Figure 13: Inserting the letter box front

## Aligning the camera

The camera can be aligned in order to adapt the camera picture to the local circumstances (Figure 15 and 16).

The letter box front has been installed.

- Loosen the locating screw (4) for the camera with the 1.5 mm Allen key supplied (Figure 14).
- Call an indoor station video from the door station by call push-button.

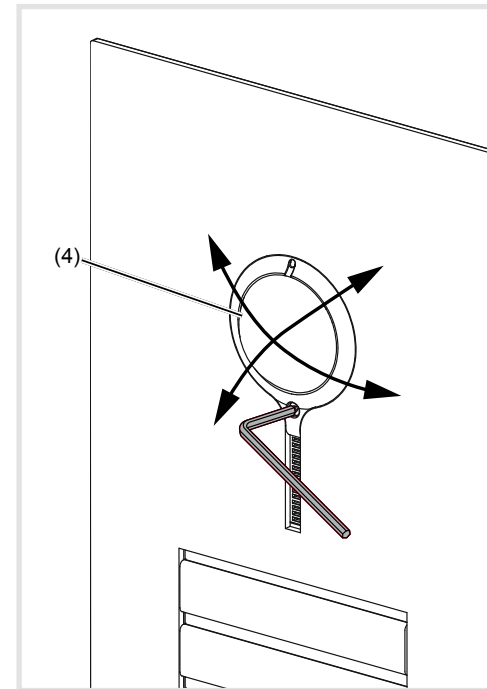


Figure 14: Alignment of the camera

- Align camera (Figures 14/15/16).

The entrance area is clearly visible on the display of the indoor station.

- Fix camera again with screw (4).

**i** Choose the installation location so that direct sunlight and back light are avoided, and bright lights or other light sources do not interfere with camera transmission.

**i** Backgrounds with a high level of brightness, extreme contrasts or reflections reduce the image quality.

**i** If it is dark and the camera-infrared visual field illumination is on, black and white images at a range of approx. 0.7 m are transmitted. Entrance lighting above the camera enables colour images during darkness.

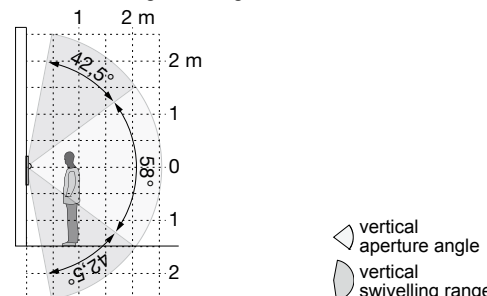


Figure 15: Vertical camera orientation

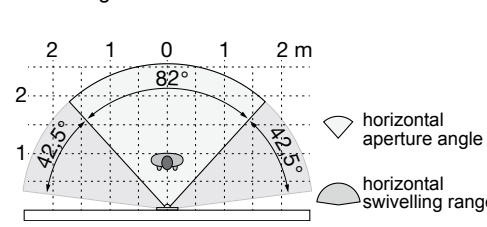


Figure 16: Horizontal camera orientation

## Dismantle call push-button module cover

During cleaning or replacement, the call push-button module cover can be dismantled from the front.

- Lever up the interlocking cover strips (6) at the top and bottom using the screwdriver and remove (Figure 17).

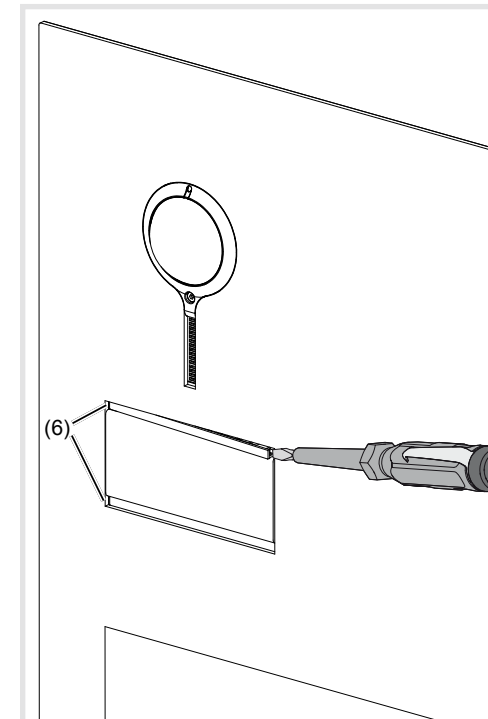


Figure 17: Removal of cover strips

- Press up the call push-button module cover in the bottom lever opening with the screwdriver and guide it forwards (Figure 18).

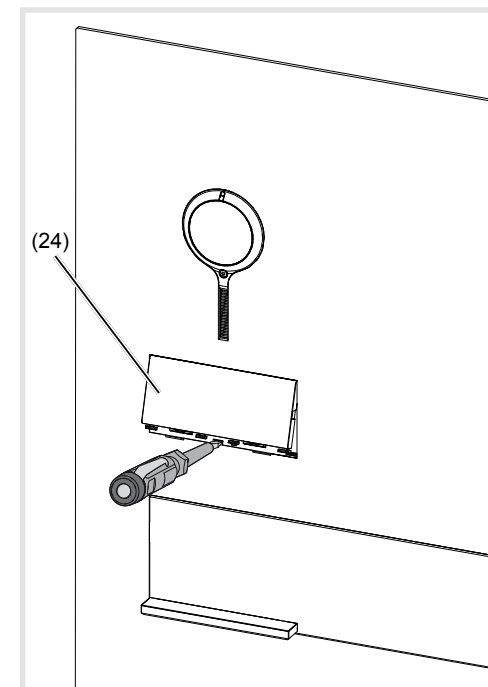


Figure 18: Dismantling the call push-button module cover

(23) Call push-button module cover

**i** Defective covers can only be replaced by covers with the same number of push-buttons.

- Remove the module to be replaced and install the new module in reverse order.

## Opening the letter box door station

Attach opening tools (20) in accordance with Figure 19 with a spacing of 38 mm to the sides and press upwards (Figure 19).

The letter box front will spring out of the bottom interlocking mechanism forwards and can be opened.

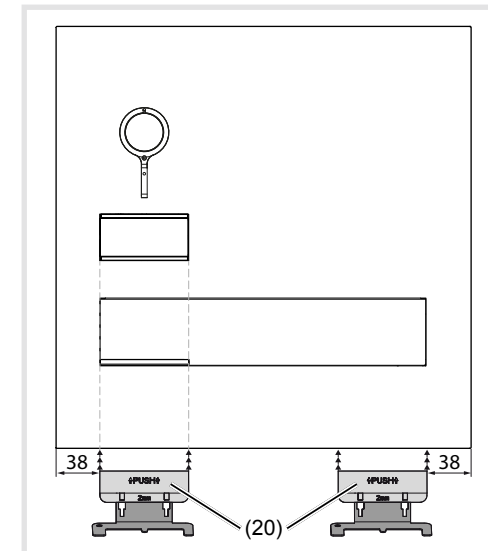


Figure 19: Opening the letter box front

**i** To open the letter box front 2/1, first move the opening tools from the upper (25) to the lower positions (26) (Figure 20).

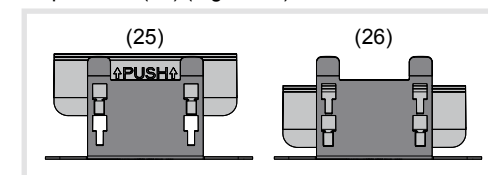


Figure 20: Moving the opening tool

(24) Opening tool for letter box front 1/1

(25) Opening tool for letter box front 2/1

## Exchange module/insert

Letter box front is disassembled.

- Pull off connection terminal block (11) on the video insert.
- Pull off connector of the connection cable to the module to be exchanged.
- Loosen screws (27) of the module mounting at the back (28) using a screwdriver and remove the module mounting (Figure 21).

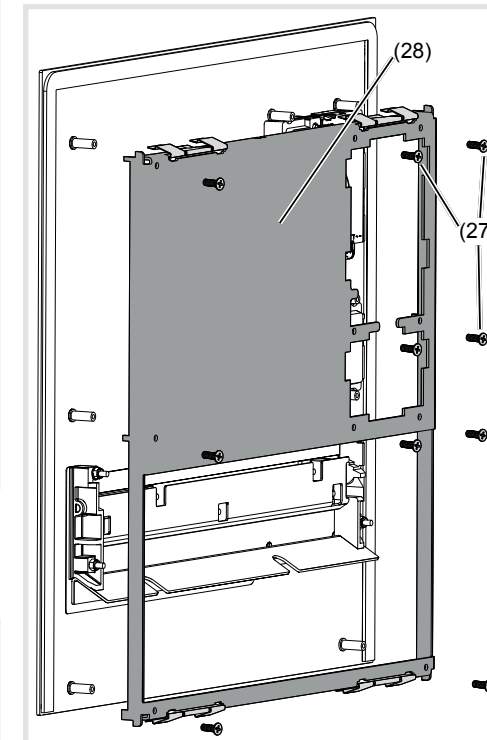


Figure 21: Dismantling module mounting

(26) Screws

(27) Module mounting

The video insert can now be removed.

- To remove the call push-button module, unlatch the side retaining brackets (29) of the module mounting by carefully lifting up with a screwdriver (Figure 22).

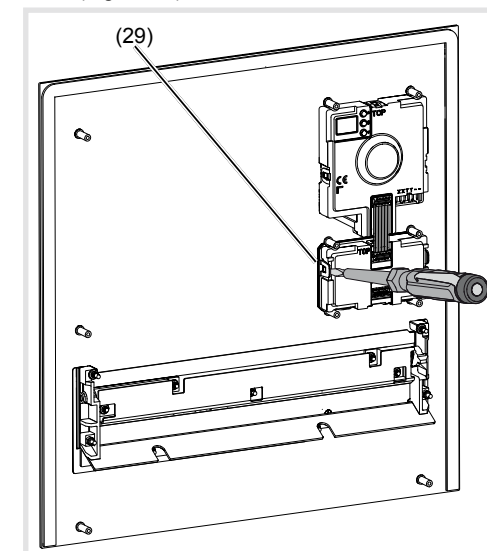


Figure 22: Unlatching the call push-button module insert

(28) Retaining brackets module mounting

After unlatching the module's retaining bracket (29) the call push-button module detaches itself from the anchoring.

- Remove the module to be replaced and install the new module in reverse order.

**i** Automatic or manual addressing of the module is required to operate the door station.

## Appendix

### Technical data

Operating voltage	22 ... 24 V=
Camera current consumption (standby)	approx. 8 mA
Camera current consumption (operation)	max. 240 mA
Camera heating current consumption (operation)	100 mA
Current name plate lighting per call push-button module	45 mA

Menu setting	Backlighting On	Backlighting Off
0	Permanent Off	
1	≈ 750 lx	≈ 1600 lx
2	.	.
3	.	.
4	.	.
5	.	.
6	.	.
7	.	.
8	.	.
9	≈ 60 lx	≈ 110 lx
10	Permanent On	

Table 2: Switch-on brightness level name plate-lighting

Door release contact **T/T** potential-free

max. 24 V/1 A

Door release unlocking time

1 ... 10 s

Camera aperture angle hor./vertical

82°/58°

Aperture angle swivelling range horizontal/vertical

42.5°

Camera resolution

500 x 582 px

Recommended camera installation height

1.5 m

Hexagon 1.5 mm camera locating screw

M2 x 10 mm

Degree of protection

IP 44

Degree of protection (degree of impact resistance)

IK07

Relative humidity

0 ... 65 % (no condensation)

Operating temperature

-20 °C ... +55 °C

Switch on temperature camera heating

ca. 20 °C

Storage/transport temperature

-30 °C ... +80 °C

Connecting terminals for conductor diameter

0.5 ... 0.8 mm

Dimensions:

Call push-button small

75.8 x 14.5 mm

Name plate insert small

72.1 x 12 mm

Call push-button medium-seize

75.8 x 32.6 mm

Name plate insert medium-sized

72.1 x 30.1 mm

Width of name plate insert

max. 0.5 mm

Surface compensation

max. 17 mm

Dimensions of video letter box front (W x H x D):

1/1 135 x 242 x 2 mm

2/1 135 x 295.8 x 2 mm

### Warranty

We reserve the right to realise technical and formal changes to the product in the interest of technical progress.

Our products are under guarantee within the scope of the statutory provisions.

In case of service issues, please contact your systems' engineer.