Product information

Fire brigade announcement unit
AFP10000-000
(Max. assembly 51 group call buttons, 2 announcements)
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Scope of delivery

1 x fire brigade announcement unit AFP10000 (incl. SD card 2 GB)
1 x cable gland M20
1 x cable gland M25
   product information

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 current standards for the installation of door communication systems must be observed.

For working on systems with main connection of 230 V alternating voltage, the safety regulations 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.

Installation – protective measures

The technical requirements regarding fire protection according to the system guideline LAR must be observed!

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.
Device overview

Complete overview

Operation field step 2 – start (automatic) announcement:
Description see below.

Operation field step 1 – select destination:
To select the alarm groups*

* Image shown is an example. (Shown is the max. number of buttons.)

cable feed-through (cable gland)

Overview operation field start (automatic) announcement

LED: green speaking

Schritt 2 - Ansage / Durchsage starten

1 2 3 4

1. Microphone for announcements
2. Loudspeaker for alarm tones and announcements
3. Reed contact and magnet
4. Cabinet door with double lock
5. Reed contact and magnet
6. Short instruction manual
7. Reed contact and magnet
8. Reed contact and magnet
9. Reed contact and magnet
10. Reed contact and magnet
11. Reed contact and magnet
12. Reed contact and magnet
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Subject to technical changes.

PI_AFP10000-1A 1A
### Indication and operating elements

<table>
<thead>
<tr>
<th>Labeling</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 push button alarm tone then announcement</td>
<td>• start live announcements with prior alarm tone</td>
</tr>
<tr>
<td>2 push button only announcement</td>
<td>• start live announcements (without alarm tone)</td>
</tr>
<tr>
<td>3 push button alarm tone then announcement 1</td>
<td>• trigger a stored automatic announcement with prior alarm tone (text 1)</td>
</tr>
<tr>
<td>4 push button alarm tone then announcement 2</td>
<td>• trigger a stored automatic announcement with prior alarm tone (text 2)</td>
</tr>
</tbody>
</table>
| 5 LED green: speaking | • ON: readiness for operation, for announcements
• flashes: error indication |
| 5 push button abort / end | • Stop a running announcement, automatic announcement or alarm tone, correction destination selection |
| Control panel | Control panel |
| step 2 - start announcement / live announcement | step 1 - select target |
| push button select destination | • to select alarm groups
• max. 51 buttons
• allocation project-dependent |

### Intended use

**Attention!**
If the firebrigade announcement unit AFP10000-000 is used as part of a safety-relevant installation of a building system, the current requirements according to building regulations must be observed.

The firebrigade announcement unit AFP10000-000 does not meet the following standards:
- for electro-acoustic emergency warning systems: DIN EN 60849, VDE 0828;
- for fire alarm systems: DIN VDE 0833, DIN 14675, EN 54;
- for speech alarm systems DIN VDE 0833-4, DIN EN 54-16 und DIN EN 54-24;
- for alarm systems: fire alarm systems, acoustic signal transmitter EN 54-3, DIN VDE 0833-2;
- as well as EN 54-4/A2, EN 12101-10, NFS 61940.

- The AFP10000-000 is a firebrigade announcement unit to trigger alarm tones, automatic announcements and announcements within a TCS door communication system. The components of the TSC system, such as power supply and control unit and (video) indoor stations must support the TCS protocols GFA.
- Authorised persons (e.g. firemen) can use to unit to inform residents (e.g. of a multi-storey building) in case of danger.
- When pressing a pushbutton, always one indoor station group at the AFP10000-000 is to put out alarm tones, an automatic announcement or an announcement.
- The firebrigade announcement unit is suitable for surface-mount indoors and outdoors (protected against rain).

![Important note]
- The country-specific system guideline (LAR) must be fulfilled. The piping of the lines for the firebrigade announcement unit must be realised in a way that the electronic function prevention according to the fire-resistance class E30 according to DIN 4102 part 12 is granted!
- The firebrigade announcement unit itself is not designed for the electronic function prevention E30.

**Technical data**

- supply voltage: U(b/P) = +15 ... +28 V DC
- housing: steel panel, powder-coated grey
- dimensions (in mm): H 600 x W 400 x D 150
- weight: 15.5 kg
- acceptable ambient temperature: -20 °C ... +40 °C
- degree of protection: IP55
- supply performance: 100 μA (above a) in standby
- input voltage: U(b/P) = +15 ... +28 V DC
- input current: I(a) = 0.15 mA, I(Pmax) = 250 mA
- Connection of a, b, P, M necessary!

**Short description**

- operation via illuminated push buttons with integrated LED
- schematic drawing of the building, push button to select the call destination for alarm groups are arranged according to the building structure (alarm group allocation)
- 2 announcements with previous alarm tone can be reproduced if necessary (max. 4 possible)
- storage of the pre-defined announcements on the MicroSD card
- manually announcement can be realised with or without previous alarm tone
- Collective announcement to all indoor stations which are connected in one system to a suitable central. No announcement / announcement in more than one system possible.
- integrated microphone for announcements
- integrated loudspeaker for control tones and monitoring of the automatic announcements and alarm tones
- device is activated only when opening the cabinet door (via Reed contact)
- optical indication of the announcement service via green LED
- protective cabinet that can be positioned freely with double lock function via 2 profile semi-cylinder

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Subject to technical changes.
• The firebrigade announcement unit is produced accordingly to the specifications of the customer. Operation field and selection field for alarm groups are designed for a special system.

**Notes on the system**

• To supply the system and the firebrigade announcement unit, a power supply and control unit must be used, which must also support protocols for the emergency call function, e.g. BVS30-SG or GAGxx with NBV32x0.
• Also, the indoor stations must be able to process the protocols for the emergency call function. Appropriative audio as well as video indoor stations can be used (e.g. ISW3230 and IVW2211).
• Collective announcements to all indoor stations within one system which are connected to a suitable central. No announcement / automatic announcement to more than one system is possible.
• Extended functions are not affected by these restrictions. Only additional chimes, which shall reproduce own announcements and alarm tones, must support the protocols.

  **Thus, the FIL1100 cannot be used in systems with the performance feature emergency call function.**

**Emergency power supply**

An emergency power supply for the TCS system can be offered within the TCS planning service. Please contact our sales department.

**Installation**

**Important notes**

• The firebrigade announcement unit is to be installed in a room, which is easy to access for the firebrigade.
• The firebrigade announcement unit is suitable for indoor surface-mount.
  The installation must be realised in consultation with the local firebrigade.

• The protective cabinet can be locked with a double cylinder swing lever. A profile semi cylinder lock is included.

  ![The second lock must be provided from the competent firebrigade: profile semi cylinder 45 mm according to DIN 18252.](image-url)
**Mounting dimension**

- Door opening to the right, 180 ° (optionally opening to the left possible). Observe the minimal wall distance of 0.55 cm!

- The installation height (*) must be selected according to the requirements of the local firebrigade!

*Recommendation:*
The installation height should be around 1.60 m (upper edge of the device) above the ground to guarantee an optimal height of the microphone.

**Preparing the device**

**Front panel, folded-out**

- Open the door of the protective cabinet of the firebrigade announcement unit: The protective cabinet can be locked via double cylinder swing lever. The key for the installed profile semi cylinder lock is part of the included package.
- Loosen the four screws in the front panel. The front panel can be removed now from the front. The front panel is connected with the protective cabinet by a retaining cord.
- Loosen the front panel from the retaining cords and put down the front panel on a clean and soft underground.
- Exchange a dummy plog by a cable fitting for the cable gland (included in the delivery).
**Installation**

- The device must be fixed with **screws of 6 mm** minimum diameter. (The attachment holes have a diameter of 8.3 mm.)

- Prepare the holes according to the illustration.

- Fix the device to the wall.

**Connect the lines**

See Connect the lines, page 10.

**Fix the front panel**

Carry out only after connecting the lines:

- Fix the retaining cords to the front panel again.

- Fix the front panel within the protective cabinet.

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### Line selection

When selecting the lines, the requirements of the country-specific system guidelines and the DIN 4102 part 12 *Function prevention of electronic systems* must be observed!

Requirements for TCS systems with a firebrigade announcement unit:

- Use fire-alarm cables JE-H(St)H E30.

- The feeding of the connection line must be realised with cable screw connections of different sizes. Use only cable with diameters 7 … 13 mm (for cable screw connection M20) resp. 9 … 17 mm (for cable screw connection M25).

**Earth the cable shield.**

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### Pluggable screw terminal: line diameter for connection lines

- **acceptable cross-section (diameter)**: 0.2 … 2.5 mm² (Ø 0.5 … 1.6 mm)

- **max. number of wires per terminal contact**: each 2 x 0.8 mm, 3 x 0.6 mm
**Connect the lines**
- Guide the connection line through one of the cable glands (cable screw connections).
- Pull off the pluggable connection terminal (at the backside of the front panel).
- Connect the lines to the connection terminal (pluggable screw terminal) according to the terminal assignment on the type label.
- Plug the connection terminal.

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**The protective cabinet must be earthed!**

Use one of the lower thread bolts at the inside of the rear wall of the cabinet door to earth the cabinet.

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**Observe when selecting the cable length:**

The loop resistance must not exceed 20 Ω!

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**Wiring diagram: door communication system**
Wiring example: emergency power supply

Wiring plan

Wiring plan: with emergency power supply

Commissioning

- Install the devices of the system completely.
- Check the a-, b-, P- and M-wire against each other for short-circuits.
- Switch ON the mains voltage.

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**Error detection and indication**

An indication is located in the service opening at the main electronic.

Errors are signaled optically and acoustically: a single error tone and permanent flashing of the indication announcement readiness. When pressing any button, the error tone sounds again. The optical error indication stays active until the error is corrected.

If the error pattern is permitting it, with each acoustic signaling, also an error protocol is sent, which indicates the type of the error.

<table>
<thead>
<tr>
<th>error cause</th>
<th>indication mode</th>
<th>error tone</th>
<th>correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>button WE is stuck (pressed longer than 15 s)</td>
<td>LED, green flashes</td>
<td></td>
<td>release button, device returns to standby mode</td>
</tr>
<tr>
<td>a-wire is not connected or not supplied</td>
<td></td>
<td>[ ]</td>
<td>connect a- resp. M-wire or set up power supply, LED goes off</td>
</tr>
<tr>
<td>a- and P-wire interchanged or short-circuited</td>
<td></td>
<td>[ ]</td>
<td>interchange a- and P-wire or remove short-circuit, LED goes off</td>
</tr>
<tr>
<td>SD-card is missing, defect or full</td>
<td></td>
<td>[ ]</td>
<td>insert or change SD card</td>
</tr>
</tbody>
</table>

**Configuration**

Usually, a configuration is not necessary, as the device is produced according to the requirements of the customer.

**Pre-set times**

- alerting time 20 s (max. 2 minutes possible)
- duration of announcements 60 s (max. 2 minutes possible)
- duration of automatic announcements max. 2 minutes (depending on the length of the wave file)

**Allocation push button destination selection – alarm groups**

- An alarm group is consecutively allocated to each push button: starting in the top left corner with 1.

- The alarm group numbers are incremented from the left to the right, then from the bottom to the top.

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Settings

⚠️ Use the included small screwdriver to adjust the settings!

- The control to set the volume is located at the main electronic, service opening.
- Open the device and fold-out the front panel to adjust the volumes.
- The volumes are set to a middle value ex works.

Save a text for an automatic announcement on the SD card

- Open the firebrigade announcement unit, loosen the front panel and fold it out. Remove the MicroSD card out of the main electronic.
- Save your required text.WAV file on the MicroSD card.
  - WAV file: The text for an automatic announcement must meet the requirements of the local firebrigade.
- Put the SD card back into the main electronic and close the firebrigade announcement unit.

Save automatic announcement texts

- Format SD card with FAT16.
- Save automatic announcement texts on the SD card as Wave file 01.wav and 02.wav: uncompressed, 8 kHz Samplingrate.
- The allocation to the buttons automatic announcement text 1 and automatic announcement text 2 is realised automatically via the file names.

Operation

Activate the device

The door of the protective cabinet of the firebrigade announcement unit can be opened with the key of the firebrigade or with the included one (double lock).

- Open the door of the protective cabinet.
- The proper operational readiness of the system is signaled:
  All bush buttons destination selection are blinking.

In case of an error, the LED flashes green: speaking.
Step 1 – select a destination

- Press one of the blinking push buttons Destination selection.
- The pressed push button Destination selection is ON permanently. The other push buttons Destination selection expires.
- The push buttons in the operation field Automatic announcement / Announcement (as far as available) start blinking.

Only one alarm group can be selected as destination.
If a wrong destination was selected, another push button Destination selection can be pressed. The previously selected button expires and the selected push button lights up.
Press the push button cancel/end.

Step 2 – start alarm tone then automatic announcement

(two texts)

- Press the push button Alarm tone then Automatic announcement 1 (or Automatic announcement 2).
  The alerting is started:
  The selected push button lights up.
  The push button cancel / end blinks.
  For 20 s, the alarm tone and then the stored announcement are reproduced at all indoor stations, which are allocated to the in step 1 selected alarm group.
- In the loudspeaker of the firebrigade announcement unit, the alarm tone and the automatic announcement also sound for controlling too.
  If the announcement is finished, all push buttons Destination selection blink again. All other push buttons and the green LED: Speaking are OFF.

The process can be stopped by pressing the push buttons cancel / end.

or

- Press the push button Alarm tone then Announcement.
  The alerting is started:
  The selected push button lights up.
  The push button cancel/ end blinks.
  For 20 s, the alarm tone and then the stored announcement are reproduced at all indoor stations, which are allocated to the in step 1 selected alarm group.
- In the loudspeaker of the firebrigade announcement unit, the alarm tone and the automatic announcement sound for controlling too.
  Then the announcement and the integrated microphone are activated at all indoor stations, which are allocated to the in step 1 selected alarm groups.
  The LED green: Speaking lights up.
  The push button cancel / end still blinks.
  Speak into the microphone.
  - After the preset time of 60 s, the announcement must be finished. A prematurely termination is realised by pressing the push button cancel / end.
  - If the announcement is finished (automatically after 60 s or by pressing the button cancel/ end), all push buttons Destination selection blink again.
    All other push buttons and the LED green: Speaking are OFF.
or

start only announcement

- Press the push button *Only announcement.*
  The alerting is started:
  The selected push button lights up.
  The push button *cancel/end* blinks.

- The announcement and the integrated microphone are activated at all indoor stations, which are allocated to the in step 1 selected alarm groups.
  The LED *green: Speaking* lights up.
  The push button *cancel/ end* still blinks.

- Speak into the microphone.

- After the preset time period of 60 s, the announcement must be finished. A prematurely termination can be realised by pressing the push button *cancel/ end.*

- If the announcement is finished (automatically after 60 s or by pressing the push button *cancel/ end*), all push buttons *Destination selection* blink again.
  All other push buttons and the *LED green: Speaking* are OFF.

End

- Close the door of the protective cabinet.

cancel

The alerting and automatic announcement or announcement can be cancelled any time:

- Press the push button *cancel/ end.*
- The firebrigade announcement unit is back in initial state again, the push buttons *Destination selection* blink.
  All other push buttons and the LED green are OFF.
- Start again with the selection of the alarm group (step 1).

Conformity

The device meets the requirements of the EU directive 2004/108/EG by respecting the standards: EN 61000-6-3, EN 61000-6-1 as well as EN60065, EN60950.

The declarations of conformity are available under 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, download from www.tcsag.de, Downloads, trade information and also included in our current product catalogue.
- Please contact the TCS HOTLINE.

Service

Please send your questions and inquiries hotline@tcsag.de

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