

### **Emergency call complete**

Order no.: 5200 xx

Consisting of:

# Pilot lamp with frame

Order no.: 5203 xx

#### Pullcord push-button with frame Order no.: 5202 xx

# Shut-off push-button with frame

Order no.: 5201 xx

# Power supply with frame

Order no.: 5204 xx

Supplementary products (not included in the scope of delivery):

# Call push-button with frame

Order no.: 5206 xx

### Shut-off/presence push-button with frame

Order no.: 5205 xx

### **Operation and installation instructions**

### 1 Safety instructions

Electrical equipment must only be installed and assembled by qualified electricians. Always follow the relevant accident prevention regulations.

Failure to comply with these instructions may result in damage to the device, fire or other hazards.

During the installation of the emergency call systems, the general safety regulations for telecommunication equipment according to DIN VDE 0800 must be complied with.

# 2 Design and layout of the device

The emergency call system is a wired call system consisting of the following devices:

Pilot lamp (LS)

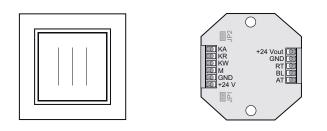


Figure 1: Pilot lamp cover with frame (left), rear view insert (right)

### Connections:

+24 Vout/GND	Supply voltage (fused)
RT	Call push-button
BL	Reassurance light
AT	Shut-off push-button
KA	Relay normally open contact
KR	Normally closed relay contact > potential-free contact
KW	Relay group contact
Μ	Signalling line (to the service room)
GND/+24 V	Supply voltage

#### Pullcord push-buttons (ZT)

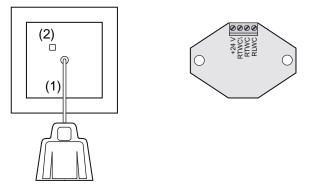


Figure 2: Pullcord push-button cover with frame (left), rear view insert (right)

- (1) Pull cord
- (2) Reassurance light

Connections:

age

- RTWC\ call push-button OUT
- RTWC call push-button IN
- RLWC call lamp (pilot lamp)

#### Shut-off push-button (AT)

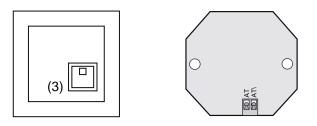


Figure 3: Shut-off push-button cover with frame (left), rear view insert (right)

(3) Shut-off button (green)



Connections:

AT Shut-off push-be	utton IN
---------------------	----------

AT\ Shut-off push-button OUT

Power supply (NT)

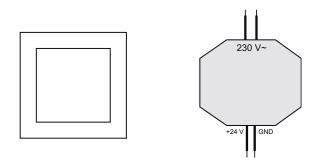


Figure 4: Blind covering with supporting ring and frame (left), power supply (right)

Connections:

230 V~ Primary voltage - connecting cables: brown, blue

+24 V/GND Secondary voltage - connecting cables: red, black

Supplementary products (not included in the scope of delivery) Call push-button (RT)

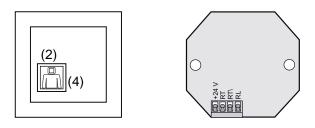


Figure 5: Call push-button cover with frame (left), rear view insert (right)

- (2) Reassurance light
- (4) Call push-button (red)

Connections:

- +24 V Supply voltage
- RT call push-button IN
- RT call push-button OUT
- RL call lamp (pilot lamp)



#### Shut-off/presence push-button (AT/AN)

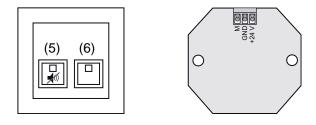


Figure 6: Shut-off/presence push-button cover with frame (left), rear view insert (right)

- (5) Shut-off button (yellow)
- (6) Presence-button (green)

Connections:

M Signalling line to the pilot lamp

GND/+24 V Supply voltage

### **3** Function

#### Proper use

The emergency call system is suitable for all applications in which the installation of an emergency call system according to DIN VDE 0834 is not expressly stipulated but is always advisable owing to sufficient risk potential.

This applies particularly to toilet facilities in publically accessible buildings such as administrative offices, restaurants and department stores or in medical facilities such as doctors surgeries and nursing homes as well as public toilet facilities in swimming pools. Wherever people without visual or acoustic contact to the environment might get into emergency situations, it is advisable to install the emergency call system.

- Flush-mounting in appliance socket according to DIN 49073, a deep appliance socket is recommendable for pilot lamp and power supply
- Emergency call system for disabled-friendly toilet facilities in public buildings according to DIN VDE 0834

#### **Product characteristics**

- Switching of an acoustic ringing sound on the pilot lamp
- Setting of a call signal as continuous signal or pulsating via jumper (Figure 1, JP1/JP2)
- Potential-free relay contact for forwarding the emergency call to a telephone dialler (not included in the scope of delivery)
- Receipt of an activated call or the presence confirmation during voltage failure and voltage return
- Monitoring of call-triggering devices for wire breakage, indication by means of red continuous light, and if set, by means of a continuous acoustic signal as well



#### Functionality of the system components

Alarms can be triggered and displayed with the emergency call system in order to get help in case of an emergency.

When the pullcord push-button is pressed during an emergency, the red pilot lamp lights up outside the room. The call for help can be supported acoustically by a buzzer.

The emergency call set is optionally extendable by additional call push-buttons or shut-off/ presence push-buttons that can receive an emergency call and indicate it acoustically, e.g. in a service room. The buzzer sound can be suppressed there by pressing the yellow shut-off button for approx. 20 seconds and cancelled using the green shut-off push-button at the emergency scene.

# 4 Operation

#### Using the emergency call system

 In an emergency situation, pull on the cord of the pullcord push-button (Figure 2, 1) or press the red push-button of the optional call push-button (Figure 5, 4).
 The reassurance light (Figure 2/5, 2) will light up.

The pilot lamp will light up outside the room, possibly supported by a buzzer sound. And what is more:

Once installed, the help call is signalled in the service room or a central unit by the red LED in the yellow push-button and by a buzzer sound on the shut-off/presence push-button.

- Press the yellow shut-off button in the service room (Figure 6, 5). The call signal is suppressed for approx. 20 seconds.
- On arrival at the emergency scene, press the green shut-off button (Figure 3, 3).
  The emergency call is shut off.
- i The buzzer sound on the shut-off/presence push-button will only sound in an emergency if the green push-button has been pressed before to mark presence.

# **5** Information for electricians

### 5.1 Assembly and electrical connection

Mounting heights according to DIN VDE 0834 (call systems in hospitals, nursing homes and similar facilities) must be complied with.

Pullcord push-buttons:

- at least 20 cm above the maximum shower head height
- Hang the pull cord a max. of 10 cm above the floor so it is accessible when lying

Operating points (call, shut-off/presence push-button):

0.7 ... 1.5 m above the floor

Signal lights (pilot lamp):

- 1.5 ... 2.2 m above the floor
- i Please comply as required with the mounting height of the operating points of 0.85 m for wheelchair users according to DIN 18024-2 **barrier-free design**.
- i The knob at the end of the pullcord push-button must be secured with a double knot.



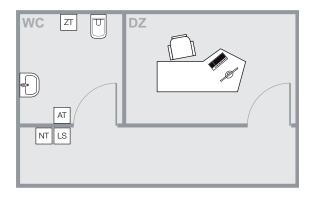
#### DANGER!

Touching live parts can result in an electric shock. An electric shock can lead to death. Disconnect before working on the device. Cover all live parts in the area!

#### Connecting emergency call set

The basic equipment of the emergency call system must be installed in the toilet and in front of the toilet door.

- Select mounting height as needed.
- i Make sure that the pilot lamp is placed outside the toilet and is well visible for other people.



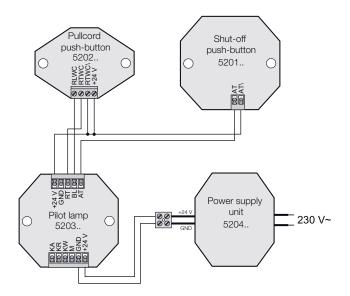


Figure 7: Wiring of standard system for a toilet

- Connect equipment according to wiring diagram (Figure 7).
- Insert the power supply into the appliance socket so that the connection of 230 V is kept separate from the 24 V wires. For this purpose, use the power supply for sealing off.

#### Extending the emergency call system

The installation can, for instance, be extended by means of additional pullcord push-buttons or call push-buttons at the emergency-prone location in order to place an emergency triggering operating point in the shower area as well as in the toilet or washstand area. Adjacent toilets and shower rooms (DU), for example, can also be connected to an emergency call system in this way. A shut-off push-button must be provided in each room.



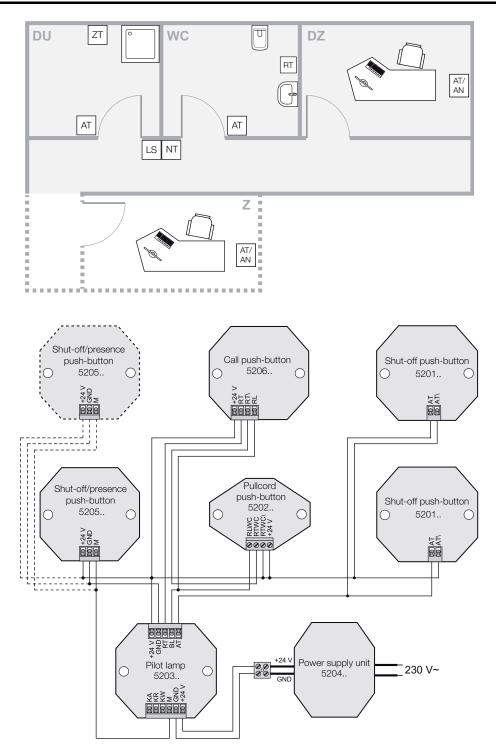


Figure 8: Installation with additional call, shut-off push-button and call forwarding to service room

 Connect additional equipment according to wiring diagram (Figure 8). Several pullcord/ call push-buttons are wired in series, several shut-off push-buttons are wired in parallel.

If an emergency signal should not only be displayed in the hallway but also in a more remote central unit (Z) or service room (DZ), one or more shut-off/presence push-buttons can also be connected in addition.

 Connect one or more (Figure 8, displayed in dotted lines) shut-off/presence push-buttons according to wiring diagram.



i The distance between the pilot lamp and shut-off/presence push-button must not exceed 500 m.

#### Assembly of the device

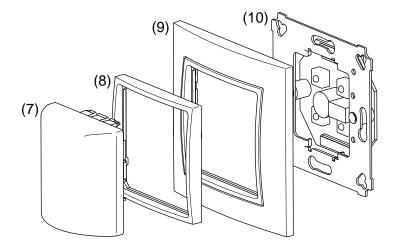


Figure 9: Assembly, illustrated using the example of the pilot lamp

- (7) Central plate pilot lamp
- (8) Adapter ring
- (9) Frame
- (10) Insert
- Screw insert (Figure 9, 10) of the device on the supporting ring to the wall box.
- Pull the frame and adapter ring over the supporting ring and attach the central plate (Figure 9, 7 9).

# 5.2 Commissioning

#### Setting the call signals

On the circuit board of the pilot lamp are two jumpers for switching the acoustic signal and changing the pilot lamp and buzzer sound.

Jumper 1 (Figure 1, JP1):

- closed: Buzzer activated
- open: Buzzer deactivated (factory settings)

Jumper 2 (Figure 1, JP2):

- closed: Pilot lamp/buzzer with continuous signal (factory settings)
  - also in the service room
- open: Pilot lamp/buzzer pulsating also in the service room

#### Carrying out a functional test

 Before commissioning, activate and check all functions and displays (please see Using the emergency call system).



# 6 Appendix

# 6.1 Accessories

All devices of the emergency call system can be purchased individually for extending the installation or for replacement needs.

Pilot lamp with frame	5203 xx
Pullcord push-button with frame	5202 xx
Shut-off push-button with frame	5201 xx
Power supply with frame	5204 xx
Call push-button with frame	5206 xx
Shut-off/presence push-button with frame	5205 xx

# 6.2 Technical data

Ambient temperature	-5 … +40 °C
Storage temperature	-25 +70 °C
Distance of pilot lamp to shut-off/presence push-button	max. 500 m
Supply voltage	DC 24 V=
Connection 24 V, single stranded	0.3 1.4 mm
Terminals	Screw terminals
Wire 24 V	J-Y(St)Y, 2 x 2 x 0.6 mm

#### **Power supply**

Input voltage	AC 100 240 V~
Mains frequency	50/60 Hz
Input current	180 mA
Output voltage	DC 24 V=
Output current	250 mA
EU Certifications	EN 60950, EN 60335

### 6.3 Warranty

We reserve the right to make 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.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

# 6.4 Address of manufacturer

#### Berker GmbH & Co. KG Klagebach 38 58579 Schalksmühle/Germany Phone: + 49 (0) 23 55/90 5-0

Fax: + 49 (0) 23 55/90 5-111 www.berker.com