1510 UC
Handicapped WC signal set
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1 Safety

Warning

**Electric voltage!**
Risk of death and fire due to electrical voltage of 230 V.
– Work on the 230V supply system may only be performed by authorised electricians!
– Disconnect the mains power supply prior to installation and/or disassembly!

Warning

**High sound pressure level!**
High sound pressure level of 70 dB at a distance of 1 m. Problems with concentration are possible in this area.
- Safety distance must be adhered to!

2 Intended use

The device is to be used exclusively with the components that are supplied and licensed as described in chapter "Setup and function".

3 Environment

Consider the protection of the environment!
Used electric and electronic devices must not be disposed of with domestic waste.
– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.
The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.
(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)
4 Operation

Triggering an emergency call
1. With the button
   - By pressing the emergency call button an alarm message is triggered in the form of a continuous audible signal and a flashing signal light outside the toilet.
2. With the pullcord
   – By pulling the pullcord in the toilet the same alarm message is triggered outside.

   The LED (comforting light) integrated in the signal button indicates to the person needing help that her/his call has been recognized and that help is on the way.

Acknowledging the alarm message
By pressing the cancel button the alarm is acknowledged and the comforting light as well as the acoustic and optical signal go out.
## Technical data

### General

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>230 V AC, ±10%, 50 / 60 Hz</td>
</tr>
<tr>
<td>Nominal current</td>
<td>110 mA AC / 60 mA DC</td>
</tr>
<tr>
<td>Output current</td>
<td>15 V AC (SELV) / 150 mA DC</td>
</tr>
<tr>
<td>Power loss</td>
<td>2000 mW</td>
</tr>
<tr>
<td>Loop current</td>
<td>5 mA</td>
</tr>
<tr>
<td>Tripping delay</td>
<td>0.1 s</td>
</tr>
<tr>
<td>Sound frequency</td>
<td>2300 Hz</td>
</tr>
<tr>
<td>Sound pressure</td>
<td>70 dB / 1 m</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 20</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>5 ... 40 °C</td>
</tr>
</tbody>
</table>

### Switching contacts

<table>
<thead>
<tr>
<th>Contact Type</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normally open contact</td>
<td>1 A, 30 VA / W, potential-bound</td>
</tr>
<tr>
<td>Changeover contact</td>
<td>40 V AC / 60 V DC, 30 VA / W, floating</td>
</tr>
</tbody>
</table>
6  Setup and function

6.1  Features of function and equipment
The call set serves for setting up an emergency call system in WCs for the handicapped.
The set consists of a power supply insert, alarm signal insert, signal button insert with pullcord, and cancel-button insert.

**Power supply insert**
Serves for the short-circuit proof power supply of call and alarm systems.

**Alarm signal insert**
Serves for setting up call and alarm systems and for monitoring a current loop for interruption or short-circuit. The insert additionally offers an alarm status storage with a switch-off function. Once an alarm has been triggered, there is a continuous acoustic alarm and a pulsating optical alarm.

**Signal button insert with pullcord**
Used for activating alarm signals with a pullcord, e.g. in a WC for the handicapped.

**Cancel button insert**
Used for deactivating signal / alarm messages of various types via a pilot LED.
## 6.2 Possible combinations

<table>
<thead>
<tr>
<th>Call set</th>
<th>1510 UC</th>
<th>1511 U</th>
<th>1539 U</th>
<th>1563 U-12</th>
<th>1561 U</th>
<th>1564 U-1X</th>
<th>1566 U</th>
<th>1520/1 UK</th>
<th>1520/1 UKZ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
7 Installation and electrical connection

**Warning**

**Electric voltage!**

Risk of death due to electrical voltage of 230 V during short-circuit in the low-voltage line.
- Low-voltage and 230 V lines must not be installed together in a flush-mounted socket!

7.1 Requirements for the electrician

**Warning**

**Electric voltage!**

Install the device only if you have the necessary electrical engineering knowledge and experience.
- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:
- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
  1. Disconnect from power;
  2. Secure against being re-connected;
  3. Ensure there is no voltage;
  4. Connect to earth and short-circuit;
  5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the supply network type (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
7.2 Electrical connection

Connection diagram

Fig. 1: Circuit diagram

1 Separate installation box | 2 Protective insulation | 3 Power supply insert | 4 Alarm message insert |
5 Cancel button insert | 6 Signal button insert with pullcord | 7 terminal resistor

Terminal assignment

1518 U power supply insert

<table>
<thead>
<tr>
<th>Terminal designation</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>230 V AC, ±10%, 50 / 60 Hz</td>
</tr>
<tr>
<td>N</td>
<td>AC 15 V AC</td>
</tr>
</tbody>
</table>

1515 U-12 Alarm indicator insert

<table>
<thead>
<tr>
<th>Terminal designation</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;-</td>
<td>15 V AC power supply</td>
</tr>
<tr>
<td>&lt;-</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Changeover contact, floating, 42 V AC / 60 V DC, 30 W / VA</td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Normally open contact, potential-bound</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Signal input</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Reset input</td>
</tr>
</tbody>
</table>
1520/1 UK / 1520/1 UKZ
Signal / cancel button insert / signal button insert with pullcord

<table>
<thead>
<tr>
<th>Terminal designation</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Normally open contact, floating, 30 V AC / 35 V DC, 100 mA</td>
</tr>
<tr>
<td>2</td>
<td>Signal / control display via LED (UK)</td>
</tr>
<tr>
<td>3</td>
<td>Comforting light and control display via LED (UKZ)</td>
</tr>
</tbody>
</table>

**Note**
The call system can easily be extended by further signal buttons if required.
7.3 Mounting of device inserts

It should preferably be mounted next to the door of the WC.

1. Mount the devices in a flush-mounted box according to DIN 049073-1.
2. Fix the devices in the flush-mounted box with screws.
3. Bundle the wires of the mains cable (230 V) with the cable binders included in the scope of supply (Fig. 2: b).
4. Push the low-voltage lines through the insulating tube included in the scope of supply (Fig. 2: a).
5. Connect the terminal resistor to terminals 1 and 2 of the signal button insert that is installed furthest from the alarm signal insert.
6. Mount the elements of the cover plate in the sequence shown in the illustration.
7.4 Setting alarm behaviour with jumper

![Fig. 5: 1515 U-12 Alarm indicator insert](image)

<table>
<thead>
<tr>
<th>Position</th>
<th>Alarm behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Without storage of the alarm status</td>
</tr>
<tr>
<td>M</td>
<td>With storage of the alarm status</td>
</tr>
</tbody>
</table>

7.5 Setting confirmation feedback signal with jumper

![Fig. 6: 1520/1 UKZ signal / cancel button insert](image)

![Fig. 7: 1520/1 UKZ signal button insert with pullcord](image)

<table>
<thead>
<tr>
<th>Position</th>
<th>Confirmation feedback signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Group triggering</td>
</tr>
<tr>
<td>A</td>
<td>Single triggering</td>
</tr>
</tbody>
</table>
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