

Audio signalling device

Series YA60/2



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1 General information

1.1 Manufacturer

R. STAHL Schaltgeräte GmbH R. STAHL Schaltgeräte GmbH

Business Unit Lighting & Signalling

Nordstr. 10 Am Bahnhof 30 99427 Weimar 74638 Waldenburg Germany Germany

Tel.: +49 3643 4324 Tel.: +49 7942 943-0 Fax: +49 3643 4221-76 Fax: +49 7942 943-4333

Internet: r-stahl.com Internet: r-stahl.com
E-mail: info@r-stahl.com E-mail: info@r-stahl.com

1.2 Information regarding the operating instructions

ID no.: 276787 / YA6060300110 Publication code: 2022-03-17·BA00·III·en·02

The original instructions are the English version. They are legally binding in all legal affairs.

1.3 Further documents

Data sheet

For documents in other languages, see r-stahl.com.

1.4 Conformity with standards and regulations

IECEx, ATEX, EU Declaration of Conformity and further national certificates can be downloaded via the following link: https://r-stahl.com/en/global/support/downloads/. IECEx is also available at: http://iecex.iec.ch/

2 Explanation of symbols

2.1 Symbols used in these operating instructions

| Symbol | Meaning |
|--------|---|
| i | Tips and recommendations on the use of the device |
| | General danger |
| EX | Danger due to explosive atmosphere |

2.2 Warning notes

Warning notes must be observed under all circumstances, in order to minimise the risk resulting from design engineering and operation. The warning notes have the following structure:

- Signalling word: DANGER, WARNING, CAUTION, NOTE
- Type and source of danger/damage
- · Consequences of hazard
- Taking countermeasures to avoid the danger or damage



DANGER

Danger to persons

Non-compliance with the instruction results in severe or fatal injuries to persons.



WARNING

Danger to persons Non-compliance with the instruction can result in severe or fatal injuries to persons.



CAUTION

Danger to persons

Non-compliance with the instruction can result in light injuries to persons.

NOTE

Avoiding material damage

Non-compliance with these instructions can result in material damage to the device and/or its surroundings.



2.3 Symbols on the device

| Symbol | Meaning |
|-----------------|---|
| C € 0158 | CE marking according to the current applicable directive. |
| (Ex) 02198E00 | Device certified for hazardous areas according to the marking. |
| 15649E00 | Input |
| 15648E00 | Output |
| 11048E00 | Safety notes that must always be observed: The corresponding data and/or safety-related instructions contained in the operating instructions must be followed for devices with this symbol! |
| 20990E00 | Marking according to WEEE directive 2012/19/EU |

3 Safety notes

3.1 Operating instructions storage

- · Carefully read the operating instructions.
- Store the operating instructions at the mounting location of the device.
- Observe applicable documents and operating instructions of the devices to be connected.

3.2 Personnel qualification

Qualified specialist personnel is required to perform the activities described in these operating instructions. This primarily applies to work in the following areas:

- Project engineering
- · Mounting/dismounting the device
- (Electrical) Installation
- Commissioning
- · Maintenance, repair, cleaning

Specialists who perform these activities must have a level of knowledge that meets applicable national standards and regulations.

Additional knowledge is required for any activity in hazardous areas!

R. STAHL recommends having a level of knowledge equal to that described in the following standards:

- IEC/EN 60079-14 (Project engineering, selection and construction of electrical systems)
- IEC/EN 60079-17 (Inspection and maintenance of electrical systems)
- IEC/EN 60079-19 (Equipment repair, overhaul and reclamation)

3.3 Safe use

Before installation

- Read and observe the safety notes in these operating instructions!
- Ensure that the contents of these operating instructions are fully understood by the personnel in charge.
- Use the device in accordance with its intended and approved purpose only.
- Always consult R. STAHL Schaltgeräte GmbH if using the device under operating conditions which are not covered by the technical data.
- Make sure that the device is not damaged.
- We cannot be held liable for damage to the device caused by incorrect or unauthorised use or non-compliance with these operating instructions.

For mounting and installation

- Have mounting and installation performed only by qualified and authorised persons (see chapter "Personnel qualification").
- The device is only to be installed in areas for which it is suited based on its marking.
- During installation and operation, observe the information (characteristic values and rated operating conditions) on the rating, data and information plates located on the device.
- Before installation, make sure that the device is not damaged.



Commissioning, maintenance, repair

- Only have commissioning and repairs performed by qualified and authorised persons (see "Personnel qualification" chapter).
- · Before commissioning, make sure that the device is not damaged.
- Perform only maintenance work described in these operating instructions.

3.4 Modifications and alterations



DANGER

Explosion hazard due to modifications and alterations to the device! Non-compliance results in severe or fatal injuries.

• Do not modify or change the device.



No liability or warranty for damage resulting from modifications and alterations.

4 Function and device design



DANGER

Explosion hazard due to improper use!

Non-compliance results in severe or fatal injuries.

- Use the device only according to the operating conditions described in these operating instructions.
- Use the device only for the intended purpose specified in these operating instructions.

4.1 Function

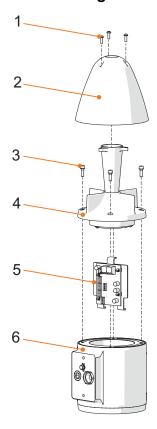
Application range

The series YA60/2 signalling device is intended for use in explosive or harsh environments. It is used in gas hazardous areas in Zones 1 and 2, as well as in dust hazardous areas in Zones 21 and 22.

Mode of operation

When activated, the signalling device emits an audible signal, depending on the configuration and device version.

4.2 Device design



2

22730E00

1 Screws 4 Horn flange

Enclosure

- Horn cover 5 PCB
- 3 Cheese head screws 6

5 Technical data

Explosion protection

Global (IECEx)

Gas and dust

IECEx EPS 20.0037X Ex db IIC T.*) Gb

Ex tb IIIC T... °C*) Db

Europe (ATEX)

Gas and dust

EPS 20 ATEX 1 077 X

II 2 D Ex tb IIIC T... °C^{*)} Db

| Temperature class | Т6 | T4 |
|--------------------------------|-----------------------------|-----------------------------|
| Max. surface temperature (tb) | T80 °C | T100 °C |
| Ambient temperature range (db) | -45 to +50 °C ¹⁾ | -45 to +70 °C ²⁾ |
| Ambient temperature range (tb) | -35 to +50 °C ¹⁾ | -35 to +70 °C ²⁾ |

¹⁾ Loop in/loop out wiring up to max. 10 A

Special conditions "X"

Repair work on flameproof joints is only permissible in accordance with the values specified by the manufacturer.

The protective covers and loudspeaker trumpets must be installed so that they are protected against electrostatic charge.

The ambient temperature range for dust applications is max. -35 to +50 °C or +70 °C.

For gas Ex applications, the ambient temperature can be as low as -45 $^{\circ}\text{C}$.

The strength class of the screws used must be at least A2-70.

Certifications and certificates

Certificates

IECEx, ATEX



²⁾ Loop in/loop out wiring up to max. 10 A, connection line and cable entries with permissible operating temperature ≥ +90 °C required

Technical data

| Technical data | | | |
|---|---|-------------------------------|-------------------------|
| Product weight | 5.4 kg | | |
| Electrical data | | | |
| Rated operational voltage | 12 to 24 V DC | | |
| Average input power/ max. current consumption | | Max. current consumption [mA] | Average power [W] |
| | Horn | 300 | 6 |
| Class | I (PE connection) (internal + external) | • | • |

Ambient conditions

Functional ambient min. -40 °C

temperature range max. ambient temperature see certificate

Mechanical data

Degree of protection IP66 (IEC/EN 60529)

Material

Enclosure Aluminium 6005A – T6, seawater-resistant

Enclosure colours Red (RAL 3001)
Horn ABS, flame retardant

Mounting Stainless steel
Seal NBR O-ring seal

Cable entries 2 cable entries, equipped with:

1 x Exd M20 stopping plug, red

1 x dust cap M20, red



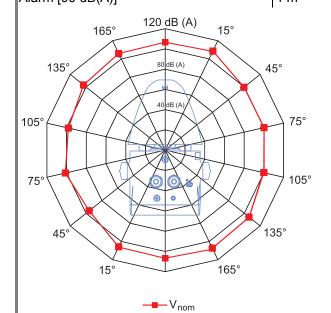
Technical data

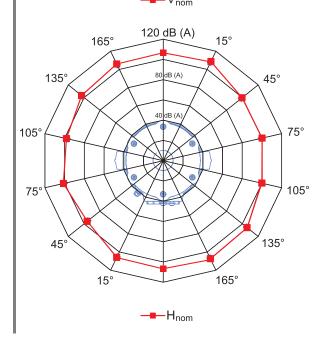
Acoustic data

Volume Calculated max. range

Pole diagram

≤ 110 dB(A) @ 1 m Inform [80 dB(A)] 15 m Warn [85 dB(A)] 8 m Alarm [90 dB(A)] 4 m





Mounting/installation

Connection type Connection terminals

PUSH-IN terminal Solid: max. 2.5 mm²

Scope of delivery

Finely stranded: max. 2.5 mm²

- Signalling device according to configuration
- L-bracket
- Dust caps

For further technical data, see r-stahl.com.



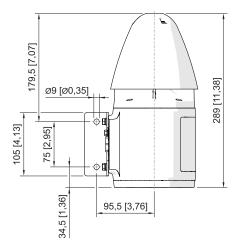
6 Transport and storage

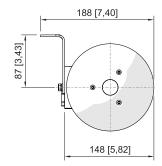
- Transport and store the device only in the original packaging.
- Store the device in a dry place (no condensation) free of vibrations.
- Do not drop the device.

7 Mounting and installation

7.1 Dimensions/fastening dimensions

Dimensional drawings (all dimensions in mm [inch]) – Subject to modifications







7.2 Mounting/dismounting, operating position



DANGER

Explosion hazard due to improper mounting!

Non-compliance results in severe or fatal injuries.

- Only operate the device if it is not damaged.
 If the thread is damaged, replace the device immediately.
- Only install the device in a clean and dry operating environment.
- Only mount the device on a wall or on a suitable surface.
- Carefully protect exposed joint surfaces from damage, dust and dirt.
- Install end flanges without applying force (without hammer and tool) in straight alignment.
- If necessary, fit core end sleeves gas-tight and using a suitable tool.



DANGER

Explosion hazard due to electrostatic discharge! Non-compliance results in severe or fatal injuries.

Do not use the device in strong charge-generating environments.

The following processes/activities should be avoided:

- Accidental friction
- Particle flows



DANGER

Explosion hazard due to open drilled holes, unused cable entries and cable glands!

Non-compliance results in severe or fatal injuries.

- Only use cable entries and stopping plugs that have been separately checked and certified in accordance with Directive 2014/34/EU (ATEX) and IECEx (CoC), and which technically correspond to the state of technology given in the certificate.
- The IP level of protection of the cable entries and stopping plugs must at least correspond to the IP level of protection of the device (see marking on the device).
- When selecting cable entries, observe the type of thread and thread size in the component documentation.
- Seal the thread with non-curing thread sealant in order to guarantee the IP66 degree of protection.
- Always close unused drilled holes, cable entries and cable glands using approved stopping plugs or plugs. Observe IEC/EN 60079-14 for this.
- Installation of the cable gland must be performed in accordance with the manufacturer's instructions.
- The cable entry temperature may exceed 70 °C.

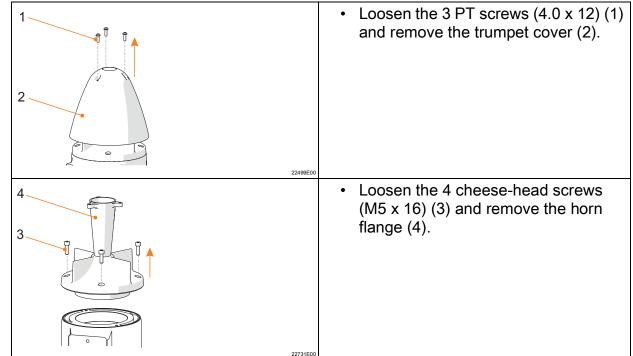
- Select a mounting location that is suitable for the signal effect of the device, as well as the required mounting and installation parameters (see "Technical data" chapter).
- Mount the device on a flat surface using the L-bracket and screw holes.
- Mount suitable approved electrical lines (see "Technical data" chapter) using a suitable flameproof cable entry.
- Close unused entries using certified, flameproof stopping plugs.

7.3 Installation

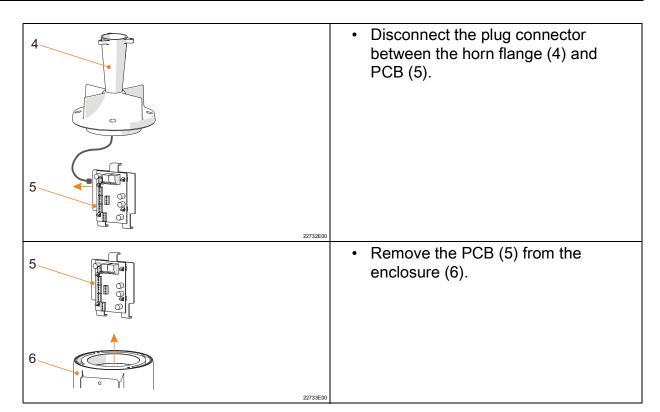
The electrical installation and configuration of the device is performed in the following sequence:

- Dismounting the device (see chapter 7.3.1)
- Electrical connections (see chapter 7.3.2)
- Configuration (see chapter 7.3.3)
- Mounting the device (see chapter 7.3.4)
- Mounting the earth connection (see chapter 7.3.5)

7.3.1 Dismounting the device







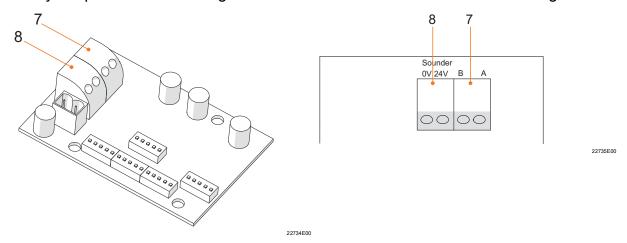
7.3.2 Electrical connections



DANGER

Explosion hazard due to insufficient protective measures! Non-compliance results in severe or fatal injuries.

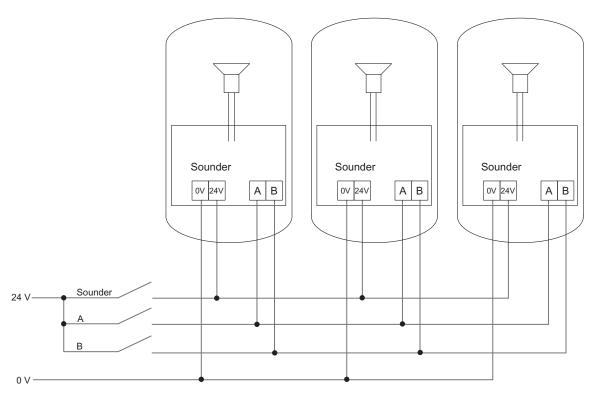
- Select suitable cables to ensure that the maximum permissible conductor temperatures are not exceeded.
- When using core end sleeves, attach them using a suitable tool.
- The conductor insulation must be touching the terminal.
- Do not damage the conductor (e.g. nicking) when stripping it.
- Finally, check the conductor to ensure that it is secure (fixed).
- Lay the pre-installed cabling in the intended electrical connections see figure.



- 7 Control (A/B signal)
- 8 Audible signal power supply



22736E00



Example: Connection diagram for combining multiple devices

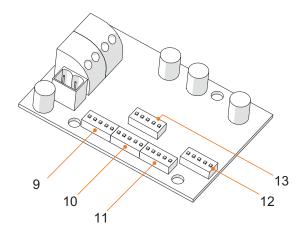
When doing so:

- Observe the maximum permissible single wire cross-sections for the connection terminals see "Technical data" chapter.
- Only such cable entries and stopping plugs may be installed that have been separately
 tested and certified according to Directive 2014/34/EU (ATEX) and IECEx (CoC);
 they must also comply technically with the standard version stated in the certificate.
- Use electrical lines with a minimum length of 3 m or a cable gland with compound.

7.3.3 Configuration

The configuration of the device is performed by adjusting the DIP switch on the PCB. The following general/audible configuration options are available:

Horn circuit board



| | DIP switch designation | Function |
|----|------------------------|------------------------------------|
| 9 | SW1 | Audible settings for sound level 1 |
| 10 | SW2 | Audible settings for sound level 2 |
| 11 | SW3 | Not equipped |
| 12 | SW4 | Not equipped |
| 13 | OPTIONS | General settings |

"OPTIONS" DIP switch

| 1 | 2 | 3 | 4 | 5 | |
|-----|-----|-----|-----|-----|---|
| | | | ON | ON | Sound volume reduced by up to 18 dB(A) |
| | | | ON | OFF | Sound volume reduced by up to 12 dB(A) |
| | | | OFF | ON | Sound volume reduced by up to 6 dB(A) |
| | | | OFF | OFF | Max. sound volume |
| | | ON | | | Reserved |
| | | OFF | | | Reserved |
| | ON | | | | SOUND LEVEL 3/4 ACTIVATION (control via A/B signal) |
| | OFF | | | | SOUND LEVEL 3/4 DEACTIVATION (control via A/B signal) |
| ON | | | | | RI ACTIVATION (active switching via B signal) |
| OFF | | | | | RI DEACTIVATION (active switching via B signal) |

Function of "OPTIONS" DIP switch in combination with control (A/B signal)

| General settings | | Control sig | gnal | Emitted sound | | |
|------------------|-----------------------------------|-------------|------|-------------------|-----------------|--|
| RI ACTIVATION | SOUND LEVELS 3/4 ACTIVATION | A | В | SOUND | Sound selection | |
| 0 | 0 | 0 | 0 | Sound 1 | SW1 | |
| 0 | 0 | 1 | 0 | Sound 2 | SW2 | |
| 0 | 0 | 0 | 1 | Sound 1 | SW1 | |
| 0 | 0 | 1 | 1 | Sound 2 | SW2 | |
| 0 | 1 | 0 | 0 | Sound 1 | SW1 | |
| 0 | 1 | 1 | 0 | Sound 2 | SW2 | |
| 0 | 1 | 0 | 1 | Sound 3 | SW1 | |
| 0 | 1 | 1 | 1 | Sound 4 | SW1 | |
| 1 | 0/1 | 0 | 0 | Sound deactivated | SW1 | |
| 1 | 0/1 | 1 | 0 | Sound deactivated | SW2 | |
| 1 | 0/1 | 0 | 1 | Sound 1 | SW1 | |
| 1 | 0/1 | 1 | 1 | Sound 2 | SW2 | |

Audible settings

| Sou- | | | | | | Fre- | Sound description | Special | Sound level | | | |
|------|----|----|-----|----|----|--------------------|-------------------|--|-------------------|-------------------|-------------------|-------------------|
| nd | SW | SW | SW | SW | SW | quency | | application | 1 | 2 | 3 | 4 |
| no. | | | x.3 | | | | | | Sou- nd no. | Sou- nd no. | Sou- nd no. | Sou- nd no. |
| 01 | 0 | 0 | 0 | 0 | 0 | 1000 Hz 800 Hz | 0.5s — | Changing sound UK BS5839-1 (fire alarm, level crossing) | 01 | SW2 | 05 | 11 |
| 02 | 1 | 0 | 0 | 0 | 0 | 3100 Hz 2500 Hz | | Safety alarm | 02 | SW2 | 04 | 11 |
| 03 | 0 | 1 | 0 | 0 | 0 | 1000 Hz 800 Hz | | Increased urgency, level crossing | 03 | SW2 | 05 | 11 |
| 04 | 1 | 1 | 0 | 0 | 0 | 3100 Hz 2500 Hz | | Security deterrent | 04 | SW2 | 02 | 11 |
| 05 | 0 | 0 | 1 | 0 | 0 | 554 Hz 440 Hz | | AFNOR (France) | 05 | SW2 | 01 | 14 |
| 06 | 1 | 0 | 1 | 0 | 0 | 470 Hz 430 Hz | | | 06 | SW2 | 01 | 11 |
| 07 | 0 | 1 | 1 | 0 | 0 | 00011 | | | 07 | SW2 | 28 | 11 |
| 08 | 1 | 1 | 1 | 0 | 0 | 3200 Hz 2500 Hz | 0.5s | | 80 | SW2 | 07 | 11 |
| 09 | 0 | 0 | 0 | 1 | 0 | 554 Hz 440 Hz | | Turn out (Sweden SS 031711) | 09 | SW2 | 01 | 11 |
| 10 | 1 | 0 | 0 | 1 | 0 | 700 Hz | | All clear, (Sweden, SS 031711) | 10 | SW2 | 01 | 11 |



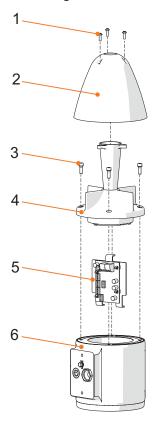
| | ou- SW1/SW2 | | | | Fre- | Sound description | Special | Sound level | | | | |
|------|-------------|-----|---|-----|------|-------------------|---|-----------------------|------|-------|------|------|
| , | SW | | | SW | SW | quency | | application | 1 | 2 | 3 | 4 |
| | | x.2 | | x.4 | | | | | Sou- | Sou- | Sou- | Sou- |
| | | | | | | | | | nd | nd | nd | nd |
| | | | | | | | | | no. | no. | no. | no. |
| 11 (| 0 | 1 | 0 | 1 | 0 | 1000 Hz | | | 11 | SW2 | 31 | 15 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 12 | 1 | 1 | 0 | 1 | 0 | 2040 Hz | | | 12 | SW2 | 01 | 11 |
| | | | | | | 1632 Hz | 0.5s ———————————————————————————————————— | | | | | |
| | | | | | | | | | | | | |
| 40 (| _ | • | 4 | 4 | • | 000011 | | | 40 | 0)4/0 | 0.4 | 4.4 |
| 13 | 0 | 0 | 1 | 1 | 0 | 2300 Hz | 22580E00 | | 13 | SW2 | 01 | 14 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 14 | 1 | 0 | 1 | 1 | 0 | 440 Hz | | | 14 | SW2 | 01 | 11 |
| ' | ' | 0 | ' | • | O | 770112 | 22580E00 | | ' - | OVVZ | 01 | ' ' |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 15 (| 0 | 1 | 1 | 1 | 0 | 1000 Hz | 4s | | 15 | SW2 | 31 | 11 |
| | | | | | | | 4s ———————————————————————————————————— | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 16 | 1 | 1 | 1 | 1 | 0 | 420 Hz | 1.25s | AS2220, | 16 | SW2 | 01 | 11 |
| | | | | | | | 1.258 22582E00 | AS1610, | | | | |
| | | | | | | | | AS1670 (Australia) | | | | |
| | | | | | | | | (/ tastrana) | | | | |
| 17 | 0 | 0 | 0 | 0 | 1 | 1000 Hz | 0.5s | | 17 | SW2 | 31 | 11 |
| | | | | | | | 22583E00 | | | | | |
| | | | | | | | | | | | | |
| 18 | 1 | ^ | 0 | 0 | 4 | 2500 H- | | | 10 | SW2 | 10 | 11 |
| 18 | 1 | 0 | U | U | 1 | 2500 Hz | 0.5s — 22584E00 | | 18 | 5002 | 10 | |
| | | | | | | | 22304E00 | | | | | |
| | | | | | | | | | | | | |
| 19 (| 0 | 1 | 0 | 0 | 1 | 2500 Hz | | | 19 | SW2 | 28 | 11 |
| | | | | | - | | 0.5s | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 20 | 1 | 1 | 0 | 0 | 1 | 700 Hz | 6s 12s 6s 22586E00 | Important | 20 | SW2 | 08 | 11 |
| | | | | | | | 6s 12s 6s 22586E00 | message | | | | |
| | | | | | | | | (Sweden) | | | | |
| | | | | | | | | | | | | |
| 21 (| 0 | 0 | 1 | 0 | 1 | 1000 Hz | 1s | | 21 | SW2 | 28 | 11 |
| | | | | | | | 22587E00 | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



| Sou- | SW | 1/SV | V2 | | | Fre- | Sound description | Special | Sound | d level | | |
|------|-----|------|-----|-----|-----|-------------------|---|-------------------|-------|---------|-----|------|
| nd | | | | SW | SW | quency | | application | 1 | 2 | 3 | 4 |
| no. | x.1 | x.2 | x.3 | x.4 | x.5 | | | | Sou- | Sou- | | Sou- |
| | | | | | | | | | | nd | nd | nd |
| | | | | | | | | | no. | | no. | no. |
| 22 | 1 | 0 | 1 | 0 | 1 | 700 Hz | | Air-raid alarm | 22 | SW2 | 01 | 11 |
| | | | | | | | 22588E00 | (Sweden) | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 23 | 0 | 1 | 1 | 0 | 1 | 700 Hz | | Local warning | 23 | SW2 | 22 | 11 |
| | | | | | | | 0.5s ———————————————————————————————————— | (Sweden) | | | | |
| | | | | | | | | , , | | | | |
| | | | | | | | | | | | | |
| 24 | 1 | 1 | 1 | 0 | 1 | 720 Hz | | Industrial | 24 | SW2 | NΒ | 11 |
| 24 | ' | ' | ' | | ' | 720112 | ├──────────────────────────────────── | | 24 | 3442 | 00 | ' ' |
| | | | | | | | 22500250 | (Germany) | | | | |
| | | | | | | | | ` , | | | | |
| 25 | 0 | 0 | 0 | 1 | 1 | 1400 Hz | _ | | 25 | SW2 | 22 | 11 |
| 23 | U | U | U | ' | ' | 1400112 | dB | | 23 | 3002 | 22 | 11 |
| | | | | | | | 22590E00 | | | | | |
| | | | | | | | | | | | | |
| 26 | 1 | 0 | 0 | 1 | 1 | 1200 Hz | | | 26 | SW2 | 07 | 11 |
| 20 | ' | U | U | ' | ' | 250 Hz | | | 20 | 3002 | 07 | 11 |
| | | | | | | 200 112 | 85ms ———————————————————————————————————— | | | | | |
| | | | | | | | | | | | | |
| 07 | _ | 4 | _ | 4 | 4 | 4000 11- | | | 07 | CVA/O | 24 | 4.5 |
| 27 | 0 | 1 | 0 | 1 | 1 | 1000 Hz 250 Hz | | | 27 | SW2 | 31 | 15 |
| | | | | | | 250 112 | -10s-+ | | | | | |
| | | | | | | | 1200200 | | | | | |
| 00 | 4 | 4 | _ | 4 | 4 | 4000 11 | | 100 0004 | 00 | 0)4/0 | 00 | 4.4 |
| 28 | 1 | 1 | 0 | 1 | 1 | 1000 Hz 800 Hz | | ISO 8201 (int. | 28 | SW2 | 80 | 11 |
| | | | | | | 000 HZ | 1.5s + 0.5s + 0.5s + 0.5s | evacuation | | | | |
| | | | | | | | 22594E00 | alarm) | | | | |
| | _ | _ | | | | | | | | | | |
| 29 | 0 | 0 | 1 | 1 | 1 | 1000 Hz | ///////////////s | | 29 | SW2 | 01 | 11 |
| | | | | | | 420 Hz | | | | | | |
| | | | | | | | 22595E00 | | | | | |
| | | | | | | | | | | | | |
| 30 | 1 | 0 | 1 | 1 | 1 | 1200 Hz | | Evacuation, | 30 | SW2 | 26 | 11 |
| | | | | | | 500 Hz | 4.5s ——— | Netherlands | | | | |
| | | | | | | | 22596E00 | | | | | |
| | | | | | | | | | | | | |
| 31 | 0 | 1 | 1 | 1 | 1 | 2500 Hz | | DIN 33404 | 31 | SW2 | 15 | 11 |
| | | | | | | 500 Hz | —1s— | fire alarm | | | | |
| | | | | | | | 22597E00 | (Germany) | | | | |
| | | | | | | | | | | | | |
| 32 | 1 | 1 | 1 | 1 | 1 | 1200 Hz | | | 32 | SW2 | 01 | 11 |
| | | | | | | 250 Hz | 0.8s | | | | | |
| | | | | | | | 22598E00 | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



7.3.4 Mounting the device



1 Screws

2 Horn cover

3 Cheese head screws

4 Horn flange

5 PCB

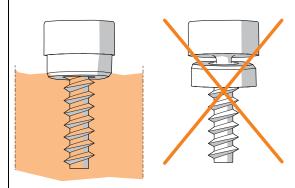
6 Enclosure



Screws and seals

The cheese-head screws are delivered with Nyltite seals.

- Before mounting, check the seals for damage.
- · Replace damaged seals.
- Use seals a maximum of 5 times.
- When using screws on a flat surface, note the seal on the screw head see figure.



157405

| 5 | Insert the PCB (5) into the enclosure (6). |
|------------|--|
| 6 | |
| 4 | Connect the plug connector between the horn flange (4) and PCB (5). |
| 5 | |
| 3 | Fit the horn flange (4) and mount using 4 cheese-head screws (M5 x 16) (3) (tightening torque 4 Nm). |
| 22739E00 | |
| | Fit the trumpet cover (2) and mount using 3 PT screws (4.0 x 12) (1) (tightening torque 0.4 Nm). |
| 2 22510E00 | |

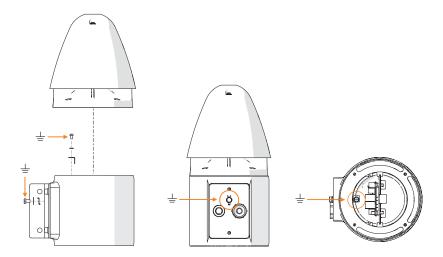


7.3.5 Mounting the earth connection

• Connect the internal earth connection as the primary connection point.



The external connection can be used as an additional equipotential bonding conductor, provided that it is permissible or required in accordance with local regulations or by the authorities.



8 Commissioning

8.1 Prerequisites



DANGER

Explosion hazard due to incorrect installation!

Non-compliance results in severe or fatal injuries.

- Check the device for proper installation before commissioning.
- Comply with national regulations.

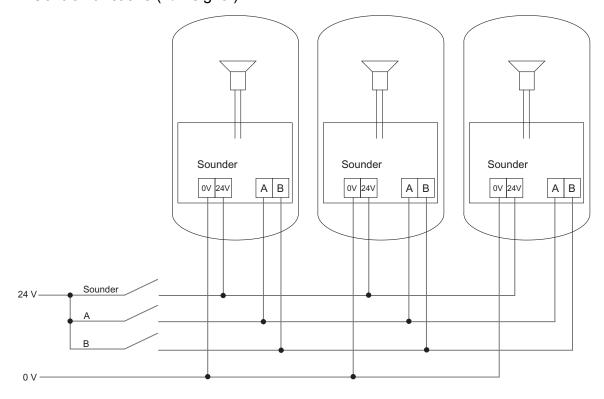
Before commissioning, make sure that:

- the device has been installed according to regulations.
- the line voltage and the rated operational voltage are consistent.
- the permissible cable diameter for the cable entries has been used.
- the cable entries and stopping plugs have been securely tightened.
- the electrical lines have been connected correctly.
- · the connection has been performed correctly.
- all screws and nuts are tightened in accordance with the regulations.
- · the connection chamber is clean.
- · the device is not damaged.
- · there are no foreign objects inside the device.
- · the device is closed according to regulations.

8.2 Testing

For commissioning, the line voltage must correspond to the rated operational voltage. When doing so, the following pre-configured functions can be tested, see figure:

- Audible signal
- Control functions (A/B signal)





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9 Operation

The device is used to warn and alert by means of

• an audible signal.

9.1 Troubleshooting

If the error cannot be eliminated using the specified procedures:

· Contact R. STAHL Schaltgeräte GmbH.

For rapid processing, have the following information ready:

- Type and serial number of the device
- Purchase information
- Error description
- Intended purpose (especially input/output circuit)

10 Maintenance, overhaul, repair

10.1 Maintenance and overhaul

- Consult the relevant national regulations to determine the type and extent of inspections.
- Tailor inspection intervals to the operating conditions.
- Perform maintenance and repair work in accordance with IEC 60079-17 and IEC 60079-19.



Observe the relevant national regulations in the country of use.

At a minimum, check the following points during maintenance on the device:

- · Whether the conductors are clamped securely
- · Whether the device has cracks or other visible signs of damage
- Whether the seals have aged or been damaged
- Compliance with the permissible temperatures (according to EN 60079)
- Whether the device is used as intended and functions properly

10.2 Repair



DANGER

Explosion hazard due to improper repair!

Non-compliance results in severe or fatal injuries.

 Repair work on the devices must be performed only by R.STAHL Schaltgeräte GmbH.

10.3 Returning the device

- Only return or package the devices after consulting R. STAHL! Contact the responsible representative from R. STAHL.
- R. STAHL's customer service is available to handle returns if repair or service is required.
- Contact customer service personally.

or

- Go to the r-stahl.com website.
- Under "Support" > "RMA" > select "RMA-REQUEST".
- · Fill out the form and send it.

You will automatically receive an RMA form via email.

Please print this file off.

 Send the device along with the RMA form in the packaging to R. STAHL Schaltgeräte GmbH (refer to chapter 1.1 for the address).

11 Cleaning

- Devices located in hazardous areas may only be cleaned with a damp cloth to avoid electrostatic charge.
- · When cleaning with a damp cloth, use water or mild, non-abrasive, non-scratching cleaning agents.
- Do not use abrasive cleaning agents or solvents.
- Never clean the device with a strong water jet, e.g. a pressure washer!

12 Disposal

- Observe national, local and statutory regulations regarding disposal.
- Separate materials for recycling.
- Ensure environmentally friendly disposal of all components according to statutory regulations.

13 Accessories and spare parts

NOTE

Malfunction or damage to the device due to the use of non-original components. Non-compliance may lead to material damage!

Use only original accessories and spare parts from R. STAHL Schaltgeräte GmbH.



For accessories and spare parts, see the data sheet on our homepage r-stahl.com.



EU-Konformitätserklärung

EU Declaration of Conformity Déclaration de Conformité UE



R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany

erklärt in alleiniger Verantwortung, declares in its sole responsibility, déclare sous sa seule responsabilité,

dass das Produkt:

that the product: que le produit: Akustische und optische Signalgeräte Audible and visual signalling devices Appareil de signalisation sonore et lumineux

Typ(en), type(s), type(s):

YL60/2, YA60/2, FL60/2

mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.

is in conformity with the requirements of the following directives and standards. est conforme aux exigences des directives et des normes suivantes.

| Richtlinie(n) / Directive(s) / Directive(s) | | Norm(en) / Standard(s) / Norme(s) |
|---|---|---|
| 2014/34/EU 2014/34/EU 2014/34/UE | ATEX-Richtlinie ATEX Directive Directive ATEX | EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014 |
| Kennzeichnung, marking, marquage: | | (Ex) II 2 G Ex db IIC T6/T4 Gb II 2 D Ex tb IIIC T 80 °C/T100 °C Db (€ 0158 |
| EU-Baumusterprüfbescheinigung: | | EPS 20 ATEX 1077 X |

EU Type Examination Certificate: (Bureau Veritas Consumer Products Services Germany GmbH, Attestation d'examen UE de type: Businesspark A96, 86842 Tuerkheim, Germany)

Produktnormen nach Niederspannungsrichtlinie: EN 60598-1:2015/ A1:2018

Product standards according to Low Voltage Directive:
Normes des produit pour la Directive Basse Tension:

EN 62471:2008

EN 50130-4:2011/ A1:2014

Waldenburg, 2021-06-11

Ort und Datum
Place and date
Lieu et date

2011/65/UE

i.V.

Dr. C. Chevalier

Directive RoHS

Vice President BU Lighting & Signalling

Vice-Président BU Eclairage & Appareils de signalisation

Vice Président global Quality Management Vice-Président globale Gestion de Qualité

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FO.DSM-E-328 Version: 2.0