



CONVENTIONAL SOUNDER-BEACON SAB-6101/SAB-6106/ SAB-6102

Overview

Conventional SAB6101 / SAB-6106 / SAB-6102 sounder-beacons are designed for an optical and acoustic (tone – SAB-6101, SAB-6102 or voice – SAB-6106) fire signalling. They have the ability to synchronize emitted acoustic and optical signals within a group of signalling devices operating in one acoustic and optical area. It is also possible to mute them an additional button. They are designed to work with all fire alarm control panels, ensuring the appropriate supply voltage at their outputs.

Principle of operation

When the supply voltage SAB-6101 / SAB-6106 is connected to the sounder terminals, the microprocessor monitoring the operation of the element checks the correct operation of its basic circuits. If any irregularities are found at this stage, the element will enter the safe mode operation.

This state is indicated by cyclical series of red LEDs flashes located on the sounder enclosure. These diodes can be used during maintenance of the sounder as the number of flashes in the cycle defines the type of fault. Working in a safe mode, the sounder can start a default fire alarming as well.

When the initial self-check sounder procedure passes, SAB-6101 / SAB-6106 will enter the alarm state and will play the warning sequence selected during the configuration and will flash cyclically with red LEDs while supervising the state of the synchronization line to keep synchronization with other sounders in the area.

The SAB-6106 sounder sequence will consist of a warning signal, silence, voice prompt and silence. It is possible to choose one out of 16 standard warning sequences and it is also possible to individually program own sequences using dedicated software. If the voice message is not programmed, the sequence will only consist of a warning signal. The SAB-6101 sounder cannot be programmed for voice warning sequences.

In the SAB-6101 / SAB-6106 sounders the selection of one of the three warning sequences played in the alarm is made by applying voltage to the appropriate power supply terminals. In addition, it is possible to choose one of three sound volume levels. In SAB-6102 sounders, applying voltage to any power supply terminal will activate the selected tone and optical signalling. The sounder operation mode is set by means of dip switches consisting of eight sections, used to select: the type of emitted tone (16 sound patterns), sound volume (4 levels), volume increase method (maximum or smoothly increasing) and sounders synchronization.

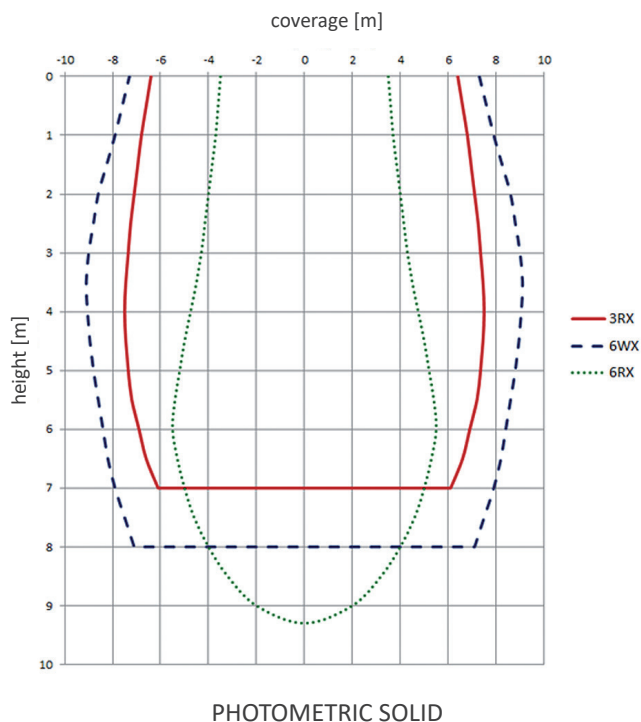
Design

The main part of the sounder is the piezoelectric transducer used to generate an acoustic signal and set of LED diodes with a lens placed on the head of the sounder. All elements are placed in an enclosure made of flame-retardant plastic.

The sounder is installed using G-40SK base, also made with flame-retardant plastic and delivered as a kit. The base has a terminal block with screwless terminals for connecting the control panel wires.

The terminal block has six terminals for connecting wires: two power lines, signal synchronization and silence button. Sounder beacons are available in the following versions:

| Type | Sound type | Installation height | Light colour | Enclosure colour |
|--------------|------------|---------------------|--------------|------------------|
| SAB-6101-3RR | tone | 3 m | red | red |
| SAB-6101-6RR | | 6 m | | |
| SAB-6101-6WR | | 6 m | white | white |
| SAB-6101-3RW | | 3 m | red | |
| SAB-6101-6RW | | 6 m | red | |
| SAB-6101-6WW | | 6 m | white | |
| SAB-6106-3RR | voice | 3 m | red | red |
| SAB-6106-6RR | | 6 m | | |
| SAB-6106-6WR | | 6 m | white | white |
| SAB-6106-3RW | | 3 m | red | |
| SAB-6106-6RW | | 6 m | red | |
| SAB-6106-6WW | | 6 m | white | |
| SAB-6102-3RR | tone | 3 m | red | red |
| SAB-6102-6RR | | 6 m | | |
| SAB-6102-6WR | | 6 m | white | white |
| SAB-6102-3RW | | 3 m | red | |
| SAB-6102-6RW | | 6 m | red | |
| SAB-6102-6WW | | 6 m | white | |



Technical data

Max number of alarm sequences:

| | |
|-------------------|---|
| SAB-6101/SAB-6106 | 3 |
| SAB-6102 | 1 |

Power supply:

| | |
|-------------------|----------------------|
| SAB-6101/SAB-6106 | from 9.6 V ÷ 30.0 V |
| SAB-6102 | from 16.0 V ÷ 32.5 V |

Current consumption:

| | |
|-------------------|----------------------------|
| SAB-6101/SAB-6106 | ≤ 280 mA (9.6 V ÷ 16.0 V) |
| | ≤ 170 mA (16.0 V ÷ 30.0 V) |
| SAB-6102 | < 130 mA |

| | |
|-------------------------------|---------------------|
| Flash frequency | 0,5 Hz |
| Flash time | 0,2 s |
| Sound level | up 105 dB |
| Operational temperature range | from -25°C to +55°C |
| IP rate | 21C |
| Dimensions (with base) | ∅ 115 x 94 mm |
| Weight | 0,26 kg |

Note

Voice messages are in Polish version only.

To change the language version, it is necessary use the dedicated application available on the POLON-ALFA SA website.

The CNBOP-PIB, Notified Body No. 1438, has issued for the product the certificate of constancy of performance confirming the possession of technical features / parameters required by EN 54-3:2001 + A1:2002 + A2:2006, EN 54-23:2010.

Possessed features / technical parameters exceeding the requirements of those listed standards and other product features / parameters given in this datasheet that are not specified by the mentioned above standards are confirmed by the Manufacturer. The product has an approval certificate issued by CNBOP-PIB.

The manufacturer has issued a declaration of performance for the product.