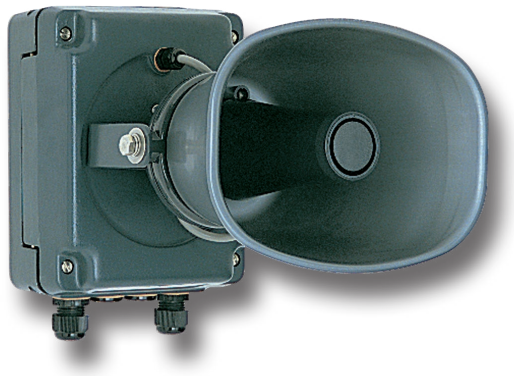
Varioton Sounder EV 11

High-volume signalling device for calling and warning purposes and for voice transmissions



Overview

The Varioton EV 11 is a, high-volume signalling device with good directivity. The choice of material and the design allow for outdoor applications even under difficult environmental conditions.

The user may choose between 7 different signal tones, a 3-tone chime and voice transmission.
The signal is set either directly on the device or externally via potential-free contacts. In the case of remote control the supply voltage is constantly applied to the device.
The distance between the selector switch and an EV 11 device depends on the cross-section and quality of the control cable (see specifications).

The device comprises a power supply unit, sound generator, an amplifier and sound transducer. The housing is made of seawater-resistant aluminium. The surface is painted with weatherproof varnish. All external screws as well as the loud-speaker bracket are made of stainless steel.

The signalling device is easy to install. It is connectied by fully opening or removing the hinged cover. The pressure-chamber loudspeaker can be rotated and swiveled.

Features

- 7 signal tones
- 3-tone chime
- Voice transmission
- External selection of tones and voice transmission (remote control)
- Volume: up to 118 dB(A), adjustable
- Chime can be adjusted separately
- Housing made of aluminium
- Loudspeaker can be swiveled
- Easy installation

Signal tones

The Varioton EV 11 Sounder is activated by connecting the power supply or via a control cable. If the sounder shall emit only one signal and be activated via power supply, the respective bridge must be placed between terminal 5.1 and the terminal for the desired tone (terminal 4.1 "chime" to terminal 4.8 "constant tone").
Turning on the power supply, the desired tone is then emitted as long as the voltage is applied.
If the signals shall be selected via remote control, a suitable multi-wire control cable must be connected to terminals 4.1 to 5.2.
A tone may be activated by connecting terminal 5.1 (supplies the control voltage of approx. 12 V) via a potential-free contact with the corresponding signal terminal (the supply voltage of the signalling device must also be activated).
The supply voltage must be connected to terminals 1.1 and 1.2. In case of a DC supply, the correct polarity (+ at terminal 1.2) must be observed. The protective earth must be connected to terminal ⏚.

Voice transmissions

For the transmission of voice messages with the EV 11 Sounder the microphone's LF line must be connected to terminals 2.1 and 2.2.
To prevent interferences, the LF line must be shielded. As soon as the supply voltage is applied and terminals 5.1 and 5.2 are connected, voice messages can be transmitted over the loudspeaker using the connected microphone which comprises a preamplifier compatible to the LF input.

Signal tones

Tone type	Signal	
Emergency signal DIN 33404/3		1200/500 Hz rate 1 Hz
Falling tone		800/500 Hz rate 0.7 Hz
Rising tone		500/800 Hz rate 0.7 Hz
Alternating tone		450/650 Hz rate 0.4 to 5 Hz
Hooter signal		720/0 Hz rate 0.7 s on, 0.3 s off
Siren signal		270/550 Hz rate 0.4 to 5 Hz
Constant tone		300 to 1000 Hz
3-tone chime		660/550/440 Hz

Setup information

Volume
The volume of all signals is adjusted with potentiometer P2.

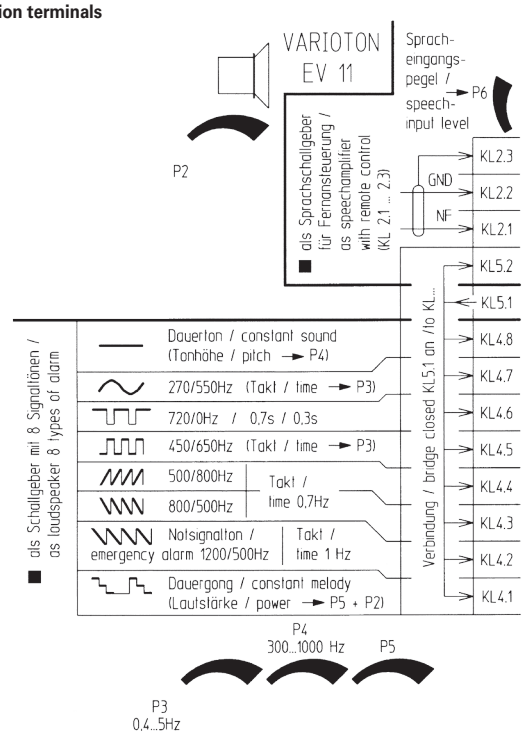
Chime
The volume for the chime can be adjusted using potentiometer P5.

Voice input level
The gain of the speech input amplifier is adjusted with potentiometer P6. Using the most sensitive setting, the full volume is reached with an input level of 100 mV while with the least sensitive setting a level of 1 V is required. The LF input has an input resistance of approx. 5 kΩ.

Pitch
The pitch of the continuous signal (switched on via terminal 4.8) can be adjusted with potentiometer P4.

Rates
The cycle times for the siren signal (terminal 4.7) and the alternating tone (terminal 4.5) can be set between 2.5 s and 200 ms (= 0.4 to 5 Hz) with potentiometer P3.

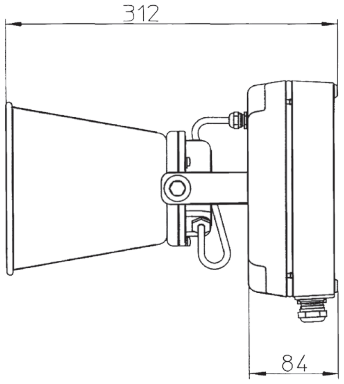
Connection terminals

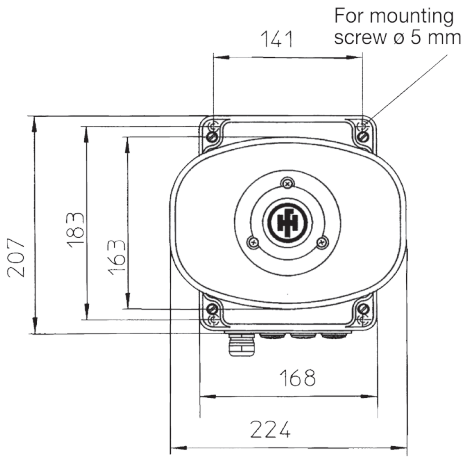


Specifications

Housing	seawater-resistant aluminium
Colour	Dark grey
Ingress protection	IP 55 according to IEC 60529
Protection class	I
Cable glands	2 x M20 und 2 x blind plug M20
Connection terminals	Terminal capacity: 2,5 mm^2 single-wire, 1,5 mm^2 fine-wire The double terminals allow for a loop-through to other devices.
Volume	Max. 118 dB(A), in 1 m distance
Loudspeaker	Dynamic pressure-chamber loudspeaker, weatherproof, aluminium, epoxy-coated, can be rotated and swiveled
Operating conditions	Indoors and outdoors
Control cables	Max. permissible loop resistance of the control cable: 500 Ω Permissible noise voltage: < 5 V
Operating position	Housing vertical, cable gland facing downwards
Operating mode	Continuous operation
Temperature range	
Operation	-25 °C to +50 °C
Storage	-30 °C to +70 °C
Weight	Approx. 4 kg

General arrangement drawing (all dimensions in mm)





Ordering data

Type	Designation	Input voltage	Tolerance	Current consumption	Fuse 20 x 50	Art. No.
EV 11	Varioton Sounder	230 VAC, 50-60 Hz	+6/-10 %	0.1 A	T 0.63/250 H	FHF 215 609 07
EV 11	Varioton Sounder	24 VAC/VDC	±15 %/19-32 V	0.9A/0.6 A	T 1.60/250 H	FHF 215 609 13

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