Varioton Sounder EV 11

Loud signalling device for calling, warning and voice transmissions

- 7 different signals
- 3-tone chime
- Voice transmission
- External control of signals and voice transmission possible (remote control)
- Volume: 118 dB(A), adjustable
- Chime volume separately adjustable
- Aluminium, epoxy-coated housing
- Loudspeaker traversable
- Simple installation

Application

The EV 11 Varioton sounder is a loud, compact signalling device with good directivity. The materials used and the design of the device allow it to be used outdoors – even in difficult environmental conditions. Users can choose between seven different signals, a three-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 applied to the device constantly. The distance between the selector switch and an EV 11 device depends on the cross-section and quality of the control cable (see technical specifications).

Design

The device comprises a unit consisting of power supply, sound generator, amplifier and loudspeaker. The housing is made of seawater-proof aluminium with an epoxy-coated surface.
All external screws and the loudspeaker bracket are made of stainless steel. The electronics mounted in the IP 55 housing are protected against moisture by a special treatment. The signalling device is very easy to mount. To connect it, the hinged cover is opened wide or removed completely.
The pressure-chamber loudspeaker is rotatable and traversable.

All-purpose signalling device for outdoor use in a limestone works

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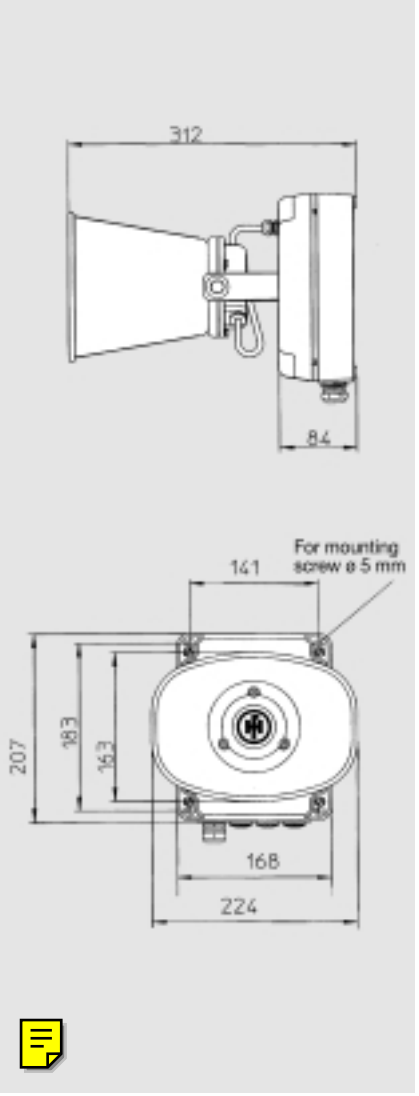
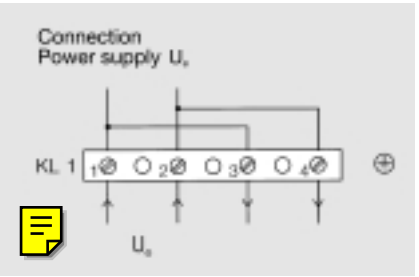
Technical specifications

Housing	Seawater-proof aluminium
Colour	Dark grey
Protection degree	IP 55 (IEC 529)
Protection class	I
Cable gland	2 x Pg 13.5 and 2 x Pg 13.5 blind plugs
Connection terminals	Cross section: 2.5 mm² single wire, 1.5 mm² fine wire The double terminals allow looping through to other devices.
Operating conditions	Indoors and outdoors
Operating position	Housing vertical, cable gland downwards
Operating mode	Continuous
Volume	Max. 118 dB(A), 1 m (Regarding volume specifications, please see the chapter “Technical Informations”.)
Loudspeaker	Dynamic pressure-chamber loudspeaker, weatherproof, aluminium, epoxycoated, rotatable and traversable
Control cable	Max. permissible loop resistance of the control cable: 500 Ω Permissible noise voltage: < 5 V
Temperature range	
Operation	-25° C to +50° C
Storage	-30° C to +70° C
Weight	Approx. 4 kg





Order information

Type	Name	Rated voltage U_e	Operation voltage range U_e	Current consumption	Fuse 5 x 20	Article no.
EV 11	Varioton Sounder	230 VAC 50–60 Hz	+6/-10 %	0.1 A	0.63 AT (time lag)	215 609 07
EV 11	Varioton Sounder	24 VAC/VDC	+-15 %/19–32 V	0.9 A/0.6 A	1.60 AT (time lag)	215 609 13
Accessories						
PM 660	Desktop microphone with PTT (Push to talk) key					122 640 01
RU 2001	Pre-amplifier					122 640 02

* other voltages on request

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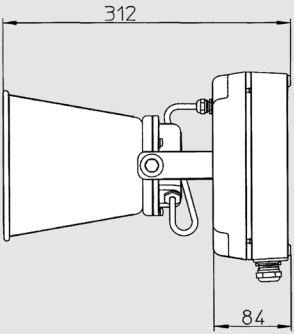
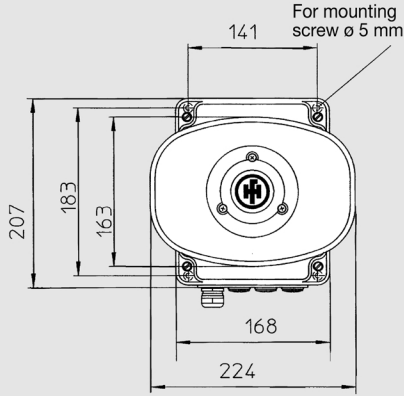
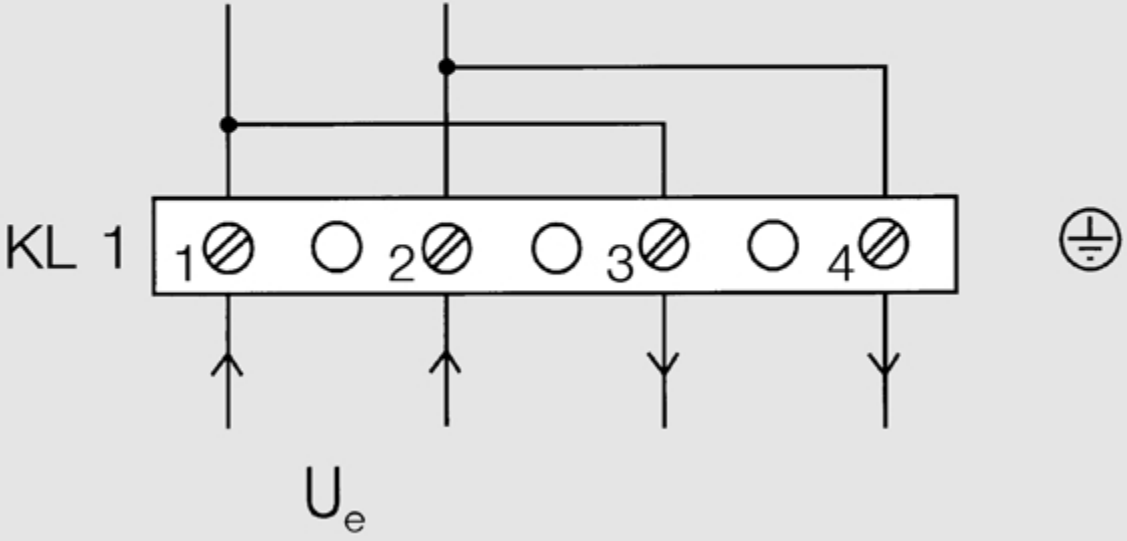

312
84


For mounting
screw ø 5 mm
141
207
183
163
168
224

Connection
Power supply U_e



Signals

Type	Signal	
Emerg. signal DIN 33404/3		1200/500 Hz Rate 1 Hz
Descending signal		800/500 Rate 0.7 Hz
Increasing signal		500/800 Hz Rate 0.7 Hz
Wail		450/650 Hz Rate 0.4...5 Hz
Hooter signal		720/0 Hz Rate 0.7 s on, 0.3 s off
Siren signal		270/550 Hz Rate 0.4...5 Hz
Contin. signal		300...1000 Hz
3-tone chime		660/550/440 Hz

Connections

The EV 11 signalling device can be activated by switching on the power supply or via a control cable. If it is wanted that the sounder emits only one signal and be switched on via the power supply, the corresponding bridge in the device must be placed between terminal 5.1 and the terminal for the desired signal (terminal 4.1 =“chime” to terminal 4.8 =“continuous signal”). When the power supply is switched on, the desired signal is emitted as long as the power supply is on.

If it is wanted that the signals be remote controllable, a corresponding multiwire control cable must be connected to terminals 4.1 through 5.2.

Activation of a signal requires connection of terminal 5.1 (supplies the control voltage of approx. 12 V) to the corresponding signal terminal via a potential-free contact. In this case the power supply to the signalling device must be continuously on.

The power supply is to be connected to the terminals 1.1 and 1.2. When using direct current, attention must be paid to correct polarity (+ to terminal 1.2). The protective earth conductor ⏚ must be connected to the relevant terminal.

Voice transmissions (PA)

In order to use the EV 11 signalling device for voice transmissions (public address), the LF line must be connected to terminals 2.1 and 2.2. This line has to be shielded to prevent interference.

If the control line is connected from terminal 5.1 to terminal 5.2 for voice transmission via a potential-free contact, the speech amplifier is activated (when the power supply is on) and the voice transmission is distributed by the loudspeaker. The corresponding LF-signal is generated by the microphone and driven by a pre-amplifier into the LF-input of the EV 11 sounder. Microphone and pre-amplifier are also contained in our product portfolio.

Adjustments

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

Chime
The volume of the chime can be adjusted with potentiometer P5.

Speech input level
The gain of the speech input amplifier is adjusted with potentiometer P6.
In its most sensitive position full volume is reached with an input level of 100 mV. In its least sensitive position, the level required is 1 V.
The LF input has an input resistance of approx. 5 kΩ.

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

Repetition rates
The cycle times for the siren signal (terminal 4.7) and wail (terminal 4.5) can be adjusted between 2.5 s and 200 ms (= 0.4 to 5 Hz) with potentiometer P3.

Wiring diagram