

# Mounting and Startup Instructions

## Important information - Be sure to read and follow

The prerequisites for a perfect and safe operation of the alarm indicator unit are proper transport, storage and mounting, professional installation and startup, operation as intended and careful maintenance.

These tasks may be performed only by persons possessing the respective necessary technical knowledge and qualifications.

The relevant safety regulations for the setup and operation of electrical equipment must be observed.

Please contact the manufacturer if the information included in these instructions is not adequate in any way.

## 1 Mounting

The OAA-100.A1 is intended for wall mounting; it can be mounted to the wall using a mounting frame. The max. ambient temperature of the OAA-100.A1 at the installation site may not be exceeded (heating through sun exposure, etc.).

## 2 Electrical connection

The operating voltage specified on the OAA-100.A1 must match that of the system.

Make the electrical connection according to the connection diagram of the OAA-100.A1; the wire gauge of the line supply must hereby be at least 0.5 sq.mm, the cross-section of the outputs is to be dimensions according to the load. The max. cross-section of a single strand may not exceed 2.5 sq.mm and 1.5 sq.mm for fine strands.

Connect the protective ground before making any other connections!

When installing the sensor line in close proximity of power currents, the use of a shielded cable can reduce interferences through coupling.

The max. line length between sensor and OAA-100.A1 of approx. 1000 m (at a line resistance of 508/km) may not be exceeded.

According to EN 61010-1, the OAA-100.A1 must be protected with fuses via the facility installation; furthermore, an all-pole cut-off in the facility installation shall be provided which must be accessible near the OAAs at disconnect device for the same.

When used as overflow cut-out device/leak detector this disconnect device may be operated only by authorized persons; monitoring may not be permanently deactivated.

## 3 Startup

The function settings described below require the device to be opened; because live internal wires may be touched this procedure may be carried out only while the device is without power.

Before startup, the desired device function must be set on the coding switch located on the device's printed circuit board (delivery state according to the note on the bill of delivery).

For this purpose, the front panel of the housing must be folded forward after removing the 4 Phillips screws on the front.

## OPERATION OAA-100.A1

**Take care not to damage the cables connected to the front panel during this procedure.**

(The proper functioning of the connection can be checked in conjunction with the self-test).

Set the desired function with the help of an electronics screwdriver on the coding switch.

Carefully close the housing again after making these settings since possibly entering humidity may destroy the unit or present a hazard to the operating personnel.

After the electrical connection has been made and operating voltage applied, the OA-100.A1 cycles through a self-test which addresses the individual operating mode in sequence.

After the self-test the OAA-100.A1 returns to the operating mode; this is indicated by the LEDs on the front panel.

## 4 Display elements/controls

green "Operation" LED	lit	Ready to operate
	dim	Line voltage failure / device fault
	flashing	Test cycle. In operating mode with line monitoring Line fault
red "Alarm I" LED	lit	Output relay I, horn output relay and lamp output relay. In neutral position (= alarm position: = contact position shown)
	dim	Output relay I picked up
	flashing	Output relay I and lamp output relay in neutral position Horn output relay acknowledged (picked up)
red "Alarm II" LED	lit	Output relay II, horn output relay and lamp output relay. In neutral position (= alarm position: = contact position shown)
	dim:	Output relay II picked up
	flashing:	Output relay II and lamp output relay in neutral position Horn output relay acknowledged (picked up)
"Test" pushbutton	actuated	Triggers self-test in ready to operate status. Triggers the acoustic alarm again if already acknowledged.
"Quit" pushbutton	actuated	Acknowledges the acoustic alarm, (acknowledges the stored alarm)

## 5 Function check

The function check of the OAA can be triggered via the "Test" button on the front of the device if the unit is in the ready state.

A function check should be done on a regular basis, with overflow cut-outs, for example, before filling the tank to be monitored.

This function check does not absolve from a function check possibly prescribed for the respective signal transmitter/level sensor.

## 6 Maintenance/Cleaning

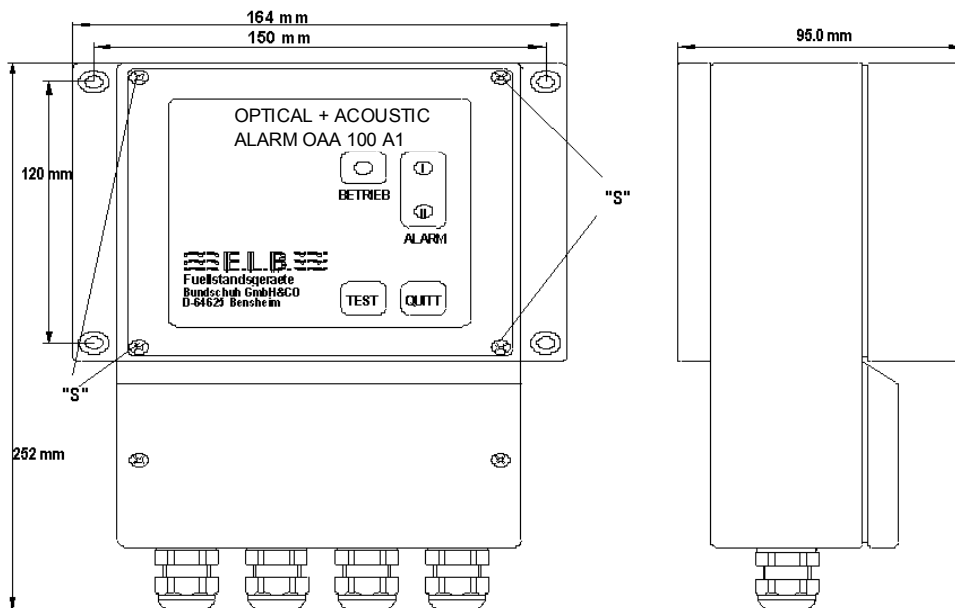
The OAA-100.A1 does not require special maintenance beyond the general inspection/function check of the electrical equipment. The closed device can be cleaned with a moist cloth or rag.

## 7 Technical data

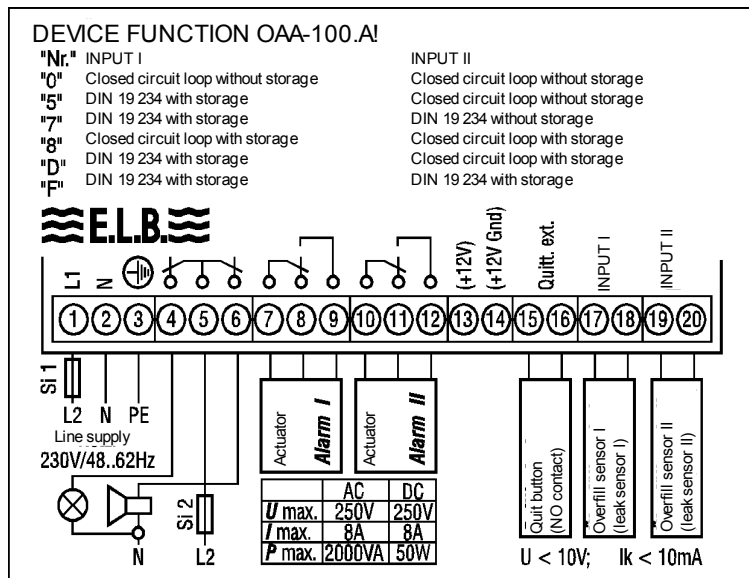
Device data	
<b>Control circuit(s)</b>	
Open-circuit voltage	Max 10 V DC
Short circuit current	Max 10 mA
Switching delay	approx. 0.5 s
<b>Line supply</b>	
Rated operating voltage	See device label
Rated frequency	48...62 Hz
Power consumption	Max 2 VA/W
<b>Switching output</b>	
Switching voltage	Max 250 V
Switching current	Max 8 A
Switching power	Max 2000 VA Max 50 W
Dimensions W x H x D	164 x 252 x 95 mm
Weight	approx. 0.8 kg
Operating temperature	-20...60 °C
Storage temperature	-30...80 °C

Technical safety data	
<b>Protection type (DIN 40050):</b>	
Housing	IP 65
Protection class:	I
Overvoltage category	II
Radio interference suppression EN 55011	Limiting value class B
Resistance to jamming	DIN EN 61326

## 8 Ground



## 9 Connection diagram/device function/function description



The OAA-100.A1 with one/two level sensors forms an "overflow alarm chain" which selects optical and acoustic alarm sensors to be installed externally. In the operating mode "Interface per DIN 19 234" the output contacts switch to their alarm position (neutral position) when the sensors connected to input I/II indicate an alarm.

This is indicated on the device by a red "ALARM" LED. The acoustic alarm can be disabled by actuating the "Quit" button on the front or an external button on the "Quit ext." input. The red "Alarm" LEDs thereby switches to flashing. Furthermore, in the operating mode "Interface per DIN 19 234" line interruptions or line short circuits are captured which also lead to an alarm message. The red "Alarm" LEDs thereby switches to flashing. Furthermore, in the operating mode "Interface per DIN 19 234" line interruptions or

line short circuits are captured which also lead to an alarm message. The line error is hereby indicated in addition by the flashing "Ready" LED. In the operating mode with alarm storage a recorded alarm is stored after detection and continues to be reported after the alarm condition has been resolved until the alarm message is acknowledged by pressing the "Quit" button or at the Quit.ext. input.

If only an overfill cut-out/leak sensor shall be connected to an OAA-100.A1, a device function must be set with which input II works as "Closed circuit loop". A jumper between terminal 19 and 20 must now be put on the input terminals. As output, one potential-free changeover contact for the selection of, e.g. actuators, is available each in addition which works with the same function as the "lamp" contact. Furthermore, an external acoustic/optical signal device can be connected. All output contacts are operated in static current operation; the position shown above corresponds to the neutral position of the contacts without operating voltage (or the alarm position, resp.).