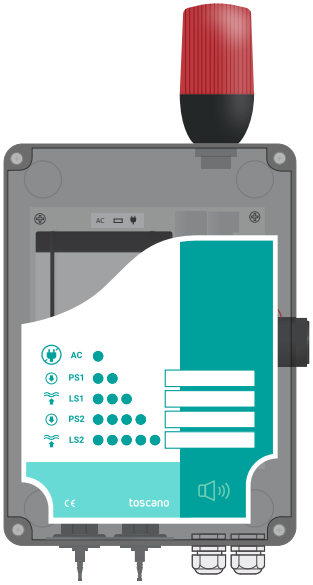
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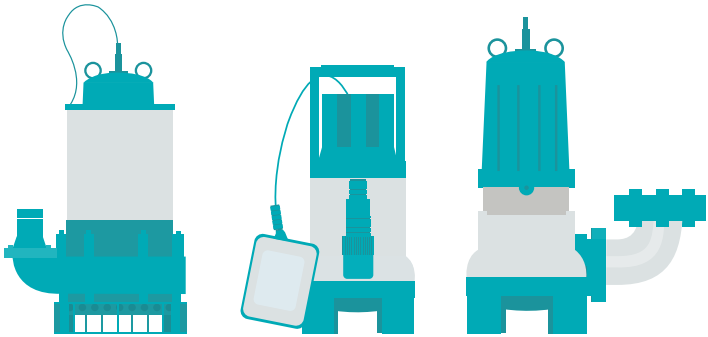
ALARM-BOX-ST

Ed. 4.26



ENGLISH (EN) User manual

Acoustic & luminous alarm panel for loss of pressure (pressure switches) or high/low level (float switches)



EN

Cod. 50024101. Ed. 4.26

CONTENT

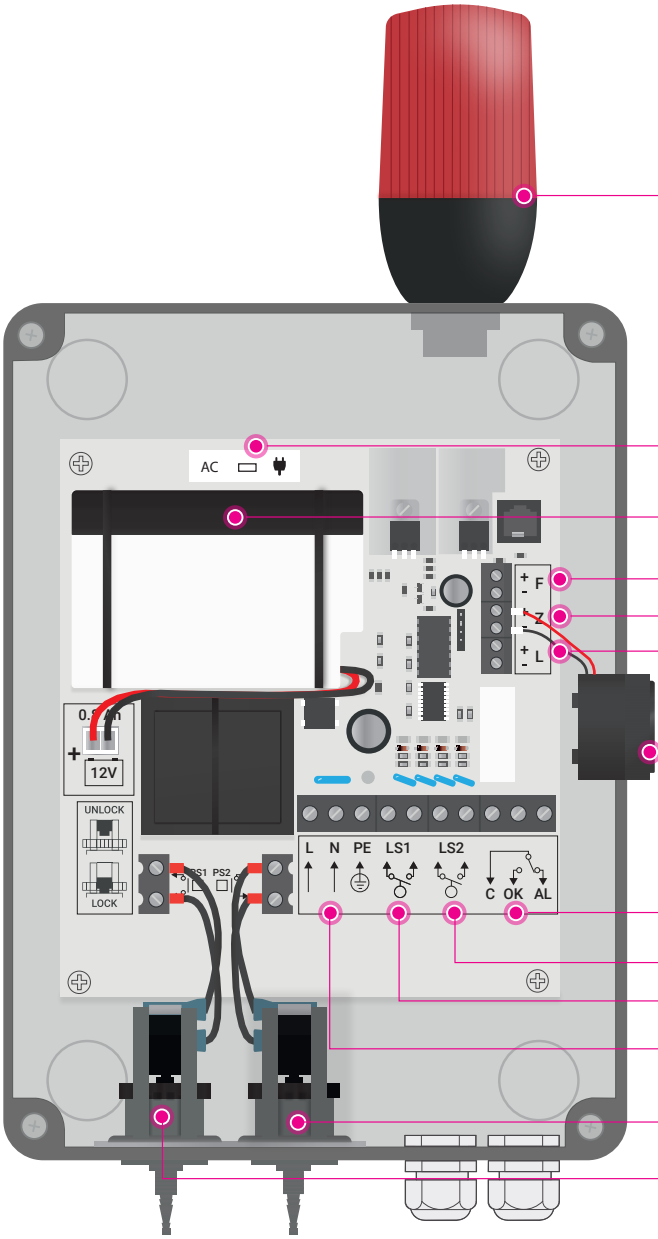
ENGLISH (EN)

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SAFETY WARNING

CAUTION! We recommend to follow all procedure and safety instructions approved in your area operating with equipment connected to the electrical power supply. Important safety information is detailed hereafter. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings. ⚠ **WARNING:** Before installing, operating, servicing, or testing this equipment, read and understand the contents of this manual. Improper operation, handling, or maintenance could result in death, serious personal injury, and equipment damage. ⚠ **WARNING:** This equipment is not designed to safeguard human lives. Follow all locally approved safety procedures and practices installing or operating this equipment. Failure doing so could result in death, serious personal injury, and equipment damage. ⚠ **WARNING:** Dangerous voltages. Contact with electrical current will cause serious personal injury or death. Follow all locally approved safety procedures when working near high voltage lines and equipment ⚠ **WARNING:** This equipment requires periodic inspection and maintenance to ensure proper operation. If not properly maintained, it may fail to operate properly. Incorrect operation could cause damage to the equipment and possibly result in personal injury. ⚠ **WARNING:** All connections must be made by a qualified person in charge. There is a risk of electric shock if this warning is not heeded. ⚠ **WARNING:** If the equipment is used or modified outside the manufacturer's specifications, Toscano disclaims all liability due to improper use. The interior of the equipment should only be handled by personnel of our technical service.

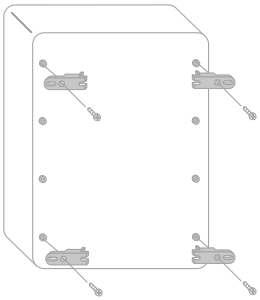
1. INTERNAL LAYOUT



- Red Beacon
- AC supply LED.
- Sealed lead battery 12 V 0.8 Ah
- Beacon connection 12 VDC
- Buzzer connection 12 VDC
- Optional AC pilot 12 VDC
- Buzzer 90 db
- Relay output (OK/ALARM)
- Level sensor 2 (LS2)
- Level sensor 1 (LS1)
- Power supply input 230 V 50/60 Hz
- Pressure switch 2 (PS2)
- Pressure switch 1 (PS1)

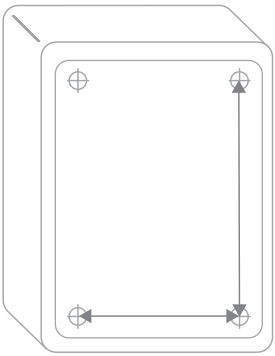
2. SETTING-UP (WALL MOUNTING)

Clamping brackets mounting



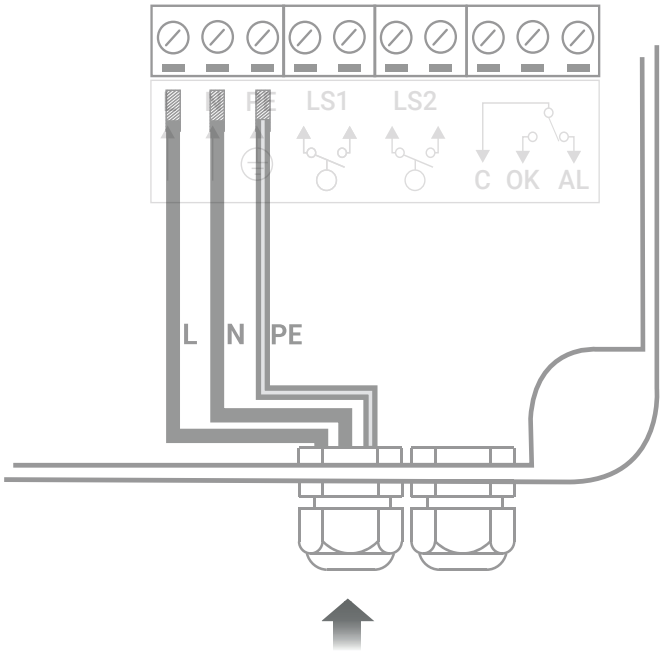
1. Place the fixing brackets in the anchor points established for this purpose.
2. Drill holes in the wall using the location where you have placed the fixing brackets.
3. Insert the screws to anchor the equipment by using the fixing brackets.

Direct wall mounting



Drill the wall and screw the equipment directly.

3. POWER CONNECTION

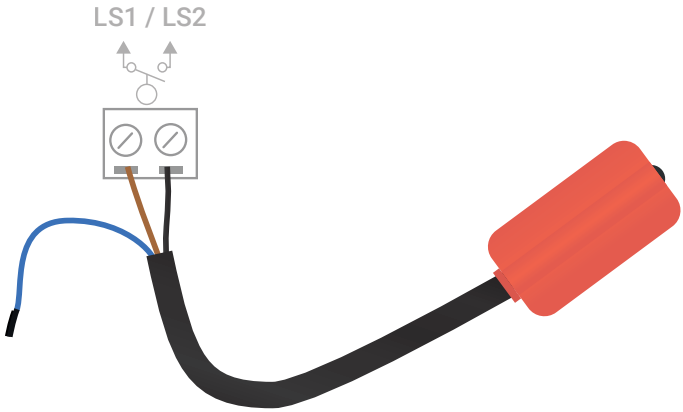


230 VAC

The unit must be only connected to power mains equipped with a short circuit fuse protection.

4. LEVEL CONTROL INPUTS

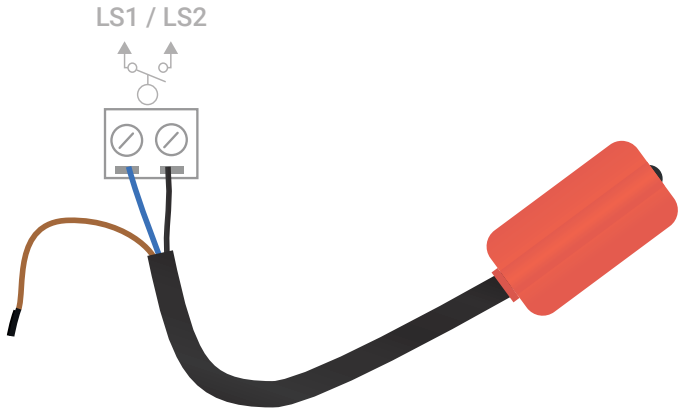
High level advice



- Usual colours

When the float switch goes up, the electrical contact closes between **BLACK** (common) and **BROWN** (n.c.). **BLUE** wire should be isolated.

Low level advice



- Usual colours

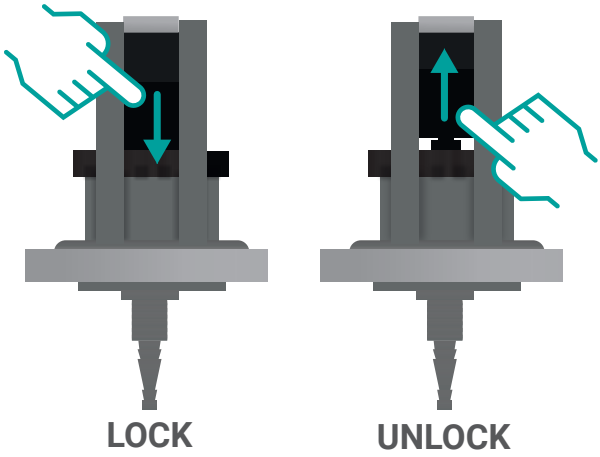
When the float switch goes down, the electrical contact closes between **BLACK** (common) and **BLUE** (n.o). **BROWN** (n.c.) wire should be isolated.

5. PRESSURE CONTROL

Connect a flexible rubber tube with an inner diameter of 3 to 4 mm (tube not included) to the nozzle of the pressure switches.

The activation pressure can be adjusted on the pressure switch.

ATTENTION: It is necessary to UNLOCK the adjusting wheel by raising the lock latch. After adjusting, it is recommended to lock the latch again.



To modify the pressure turn the wheel according to the labels on the side of the pressure switch.

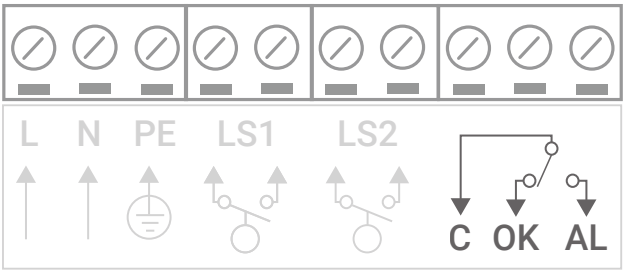
The pressure can be adjusted from 1.5 to 5.0 PSI (0.1 Bar to 0.35 Bar)

6. ALARM OUTPUT (C - OK - AL)

The connection of this output is optional.

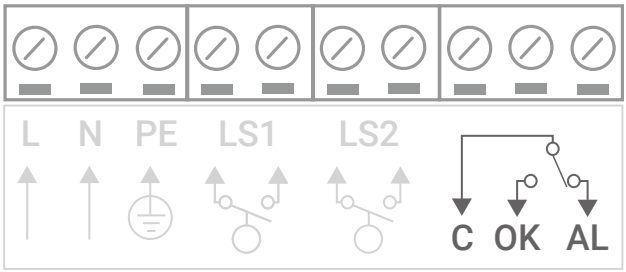
Additional signalization elements can be operated with this relay.

If everything is correct and supply power is present, the relay contacts are closed between Common (**C**) and **OK**.



The contact will be closed between the Common (**C**) and Alarm (**AL**) points in case of:

- Supply power loss
- Pressure switch activation
- Level sensor activation



7. OPERATION

Battery connection

The panel is shipped with the battery connector unplugged. Do not forget to connect the battery for a proper operation.

Alarm delay

Any problem must last for at least 15 seconds before the alarm trips. The alarm will be cleared when the problem is solved.

Beacon signals

Supply power loss	1 flash	AC ●
PS1 pressure loss	2 flashes	PS1 ● ●
LS1 activation	3 flashes	LS1 ● ● ●
PS2 pressure loss	4 flashes	PS2 ● ● ● ●
LS2 activation	5 flashes	LS2 ● ● ● ● ●

Several signals could be activated at the same time:

Example, with PS1 and LS1 ● ● ● ● ● ● ● ● ●

Buzzer signals

Supply power loss	1 beep	AC
PS1 pressure loss	2 beeps	PS1
LS1 activation	3 beeps	LS1
PS2 pressure loss	4 beeps	PS2
LS2 activation	5 beeps	LS2

Several problems could be activated at the same time:

Example, with PS1 and LS1

8. ADDITIONAL INFORMATION

Battery charge

The panel keeps the battery always charged.

If the battery if fully discharged, the panel may need several hours to charge it completely.

Deep discharge protection

The unit will protect the battery against a deep discharge that could damage it, disconnecting all alarms if the battery voltage is below 9 volts.

After the power supply returns, the full operation will be restored when the battery voltage reaches at least 10.5 volts.

In the event of a power supply failure, the unit keeps the clearance gauge and the fault buzzer operational for a period of 15 to 20 h.

Battery replacement

The battery capacity may decrease after several years' operation. The battery is easily replaceable with any other having the same specifications. There are two cuts on the mounting board to install new cable ties.

9. TECHNICAL CHARACTERISTICS

Supply voltage	230 VAC 50/ 60 Hz
Voltage on control sensors PS/LS	12 VDC
Activation pressure	1.5 to 5.0 PSI adjustable (0.1 Bar to 0.35 Bar)
Pressure switch connection	Rubber tube (Internal diam. 3 to 4 mm)
Alarm relay	300 W max.
IP protection grade	P65
Working temperature	-10 ºC to +40 ºC
Power consumption	9 W max.

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