

# **UNIT ALARM** - User Manual

**ELECTRICAL PANEL FOR ALARM SIGNALS** 

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#### 1. INTRODUCTION

This manual must always accompany the relevant equipment and be conserved in an accessible location for consultation by qualified technicians assigned for operation and maintenance of the system.

The installer/user is strongly recommended to carefully read all instructions and information in this manual before using the product, in order to avoid damage or improper use of the unit, which would also render the warranty null and void.

Before operating the equipment, carefully read the manual and follow all instructions provided.

The information and instructions in this manual refer to the standard use of this product; in the event of special circumstances, functions or applications not described in this document, contact our service center for assistance.

If technical assistance or spare parts are required, when contacting the manufacturer always specify the identification code of the model and construction number as stated on the data plate.

Our service center is available for any requirement or clarification.

On receipt of the goods, inspect immediately to ensure that the equipment has not been damaged during transport. If defects are found, the client should promptly notify our retailer within 5 days of receiving the goods, or in the event of direct purchases, the producer service center.



**N.B.** the information provided in this manual is subject to modifications without notice. The manufacturer shall not be held liable for any damage caused in relation to the use of these instructions, as they are to be considered guideline only. Note that failure to observe the instructions provided in this manual may cause physical injury or damage to objects.

In any event all local and/or current legislation must be observed at all times.

#### 2. WARNINGS



The electrical panel must be used exclusively for the purpose and function as specified in design. Any other application or use is to be considered improper and therefore hazardous.

In the event of a fire in the place of installation or the surrounding area, avoid the use of water jets and use the appropriate extinguishing equipment and means (powder, foam, carbon dioxide).

Install the equipment far from heat sources and in a dry and sheltered location in observance of the stated protection rating (IP).

The installation of a safety device is recommended to protect the panel power line in compliance with current electrical standards.

The electrical panel must be connected by a qualified electrician in observance of the relevant electrical standards.

No parts of the panel must be disassembled without the official authorization of the producer: any tampering with or modifications to the unit will render all terms of the warranty null and void.

All installation and/or maintenance operations must be performed by a specialized technician who is fully aware of the relevant current safety standards.

Ensure the installation is connected to an efficient earthing system.

After making the electrical connection, check that all electrical panel settings are correct to avoid automatic start-up of the electric pump.

The producer declines all liability in the event of the following:

- Incorrect installation;
- Use by personnel not adequately trained in the correct use of the panel;
- Serious failure to perform scheduled maintenance;
- Use of non-original spare parts or parts not specific to the model;
- Unauthorized modifications or interventions;
- Partial or total failure to observe instructions.

#### 3. GENERAL DESCRIPTION

- Power supply 1 ~ 50/60Hz 230V±10%;
- 1 Normally open input for alarm control from voltage-free contacts (NO);
- 1 Normally closed input for alarm control from voltage-free contacts (NC);
- Acoustic alarm activation button;
- Acoustic alarm shutoff button:
- Internal selector for selection of automatic or manual alarm reset;
- Internal selector for activation of automatic siren shutoff timer;
- Trimmer for automatic shutdown delay setting;
- Internal sealed battery 12Vdc 1,2Ah;
- Green led: Power mains ON:
- Red alarm led;
- Red led indicating siren shut-off;
- Flashing red light 12Vdc (mod. UNIT ALARM 2);
- Acoustic alarm 90dB 12Vdc;
- Alarm output (NO-NC-COM resistive load 5A / 250V);
- Box in ABS, IP55;
- Ambient temperature: -5/+40 °C;
- Relative humidity 50% at 40 °C (condensate free).

#### 4. INSTALLATION

Ensure that the mains power supply specifications correspond to the voltage specified on the data plate of the electrical panel, then make the earthing connection before all other connections.

1~230V ± 10% 50/60Hz

The power line must be protected by a residual current circuit breaker.

Tighten the electrical cables on the relative terminals using a suitable tool correctly sized to avoid the risk of damage to the fixing screws. Take care if using an electric screwdriver.

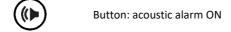
The UNIT ALARM electrical panel is designed for wall-mounting using screws and plugs in the predrilled holes at the corners of the enclosure, or by means of brackets when present.

### 5. LUMINOUS INDICATORS AND COMMANDS





Red led: acoustic alarm OFF







Manual alarm test button

#### 6. GENERAL OPERATION NOTES

The UNIT ALARM panel is a unit applicable on any system that requires alarm signals also in the event of a power failure.

When the 230V power supply is active, the led "Mains Power ON" lights up. In this condition, the battery inside the UNIT ALARM panel is kept charged automatically, with the charge controlled according to the battery level.

Periodic testing is recommended to ensure correct operation of the panel. This is performed by pressing and holding the **TEST** button to briefly activate the acoustic signal and (if present) the visual signal.

When the NC and NO inputs change status (NC opens and NO closes) the acoustic alarm trips, together (if present) with the visual alarm (flashing red light).

It is possible to set the UNIT ALARM so that the siren shuts off at the end of the alarm condition (ALARM RESTORE jumper wired in) or that the acoustic alarm continues until the operator intervenes, who may either press the RESET button or shut off only the buzzer and the flashing light signals by pressing the MUTE button, in which case the red led remains lit to indicate that the fault has not yet been eliminated.

An internal trimmer can be set within a range of 25 to 120 seconds (DELAY TIME trimmer) for programmed shutoff of the alarm signals, enabled by removing the ON/OFF TIMER jumper.

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#### 7. SETTINGS AND ADJUSTMENTS



**ALARM RESTORE** Jumper (for automatic reset) active: the acoustic alarm and flashing light (mod. UNIT ALARM 2) are deactivated when the cause of the alarm is eliminated.

If the jumper is not wired in, the alarm condition remains until it is manually reset by means of the **RESET button**.



**ON/OFF TIMER** Jumper (to disable the alarm timer) not active: the siren and flashing light (mod. UNIT ALARM 2) continue to operate until the alarm condition is eliminated.

If the jumper is wired in, the alarm condition remains until it is manually reset by means of the **RESET button**.



The **DELAY TIME** trimmer enables the user to set the duration (from 20" to 120") after which the acoustic and visual alarm signals are to be shut off (if the flashing light is installed) automatically.

In any event the siren can be shut off, together with the flashing light (mod. UNIT ALARM 2), by pressing MUTE.

To restore operation of the siren and flashing light, press ACTIVATE ACOUSTIC ALARM.

If the siren and flashing light are shut off manually by pressing **MUTE** but the alarm condition persists, the cumulative alarm output continues to indicate the fault.

#### 8. WIRING DIAGRAM



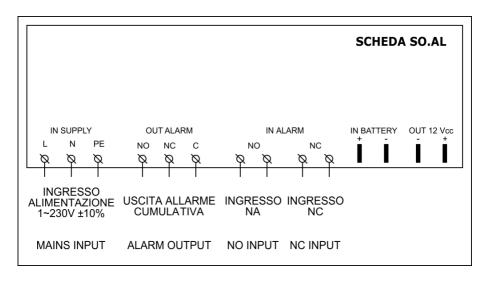
Make the earthing connection before all other connections.

Ensure that the mains voltage is suitable for panel with reference to the specifications on the data plate ( $1^{\sim}$  230V  $\pm 10\%$  50/60 Hz).



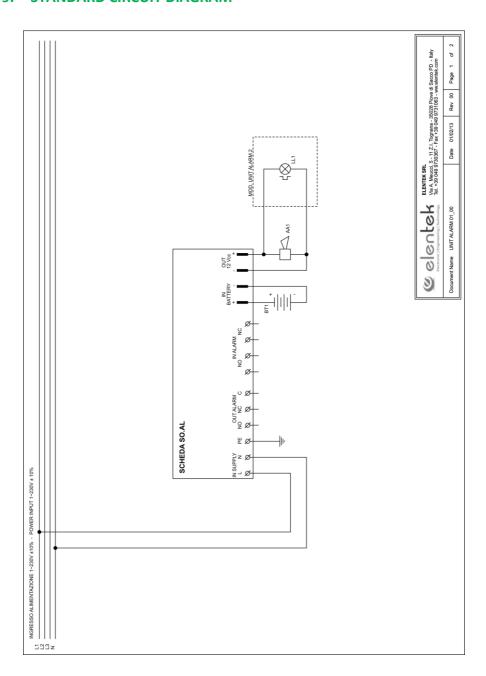
If visible, cables must be suitably protected. The power line must be protected with a residual current circuit breaker sized according to current electrical standards.

Connect the power cable to ther terminal board "IN SUPPLY" observing the positions L (line), N (neutral) and PE (earth).



The NO and NC terminals accept only voltage-free contacts, as alarm outputs from other panels, floats, pressure switches etc.

### 9. STANDARD CIRCUIT DIAGRAM



## 10. TROUBLESHOOTING

PROBLEM	CHECKS/SOLUTIONS
THE PANEL IS POWERED UP BUT NO ALARM SIGNALS ARE RECEIVED.	■ Ensure that the alarm input is connected correctly on the "ALARM IN" terminal board.
THE PANEL IS ALWAYS SET TO ALARM STATUS.	■ Ensure that a jumper is wired in on the alarm input "NC" if only the NO input is used.
THE FLASHING LIGHT DOES NOT WORK ON THE MODEL UNIT ALARM 2.	<ul> <li>Ensure correct connection of the terminal board under the flashing light.</li> <li>Ensure correct insertion of the bulb in the flashing light (if present).</li> </ul>
THE PANEL DOES NOT WORK DURING A POWER FAILURE.	Check the buffer battery connection (observe positive and negative poles).
NO LED LIGHTS UP ON THE CONTROL PANEL.	<ul> <li>Ensure that the FLAT connection with the board inside the panel is inserted correctly.</li> <li>On the panel input, check that the voltage 230V~ is present between the mains input terminals "L" and "N".</li> </ul>

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