ECPAPE04

“Person in cold-room” alarm

Use and maintenance manual

READ AND KEEP

REL. 01-26
ENG

ELECTRICAL BOARDS FOR REFRIGERATING INSTALLATIONS

ENGLISH

CONTENTS

CHAPTER 1: INTRODUCTION

"PERSON IN COLD ROOM" ALARM KIT COMPONENTS 1.1

The PERSON IN COLD ROOM ALARM KIT consists of:

- 1 External visual/acoustic alarm control unit complete with buffer battery.
- 1 Emergency luminous button "person in cold room alarm".

PRODUCT IDENTIFICATION CODES 1.2

100APE04	Person in cold room alarm kit, consisting of control unit with acoustic / visual warning, comes complete with buffer battery and 1 luminous emergency in-room pushbutton (100APEPUL3).
100APEPUL3	Emergency luminous pushbutton "person in cold room alarm" (Type 3).
100APEBATT	Replacement buffer battery.

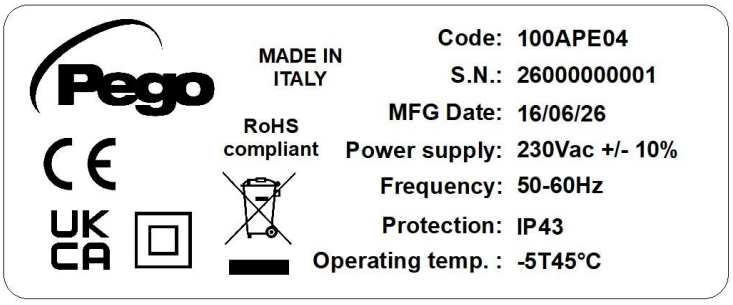
1.3 TECHNICAL CHARACTERISTICS

Mains power supply	230 Vac 50/60 Hz
Max consumption on mains power	4,6 W
Rated current	29mA
Buffer battery	12 V DC Ni-MH 1300 mAh Complete recharge time: 110 h Charging temperature: 0 - +45 °C
Operating autonomy	- Without 230 Vac power supply (running on charged buffer battery): 10h approx. - With 230 Vac power ON: unlimited
Out-of-room module	IP 43 protection rating Operating temperature: -5 - +45 °C
Acoustic characteristics on board buzzer	Type: piezoelectric Sound power: 100dB at 1m | 91dB at 3m
Visual warning on board light	Flashing red LED, 12 V DC
In-room emergency pushbutton	Lighting: red LED, 12 V DC NC contact Keypad with IP65 protection rating Operating temperature: -25 - +70 °C
Alarm relay	8A AC1 voltage-free contact, with N.O. and N.C. contact available.

1.4 IDENTIFICATION DATA

The unit described in this manual has, on its side, an ID plate showing all the relevant identification data:

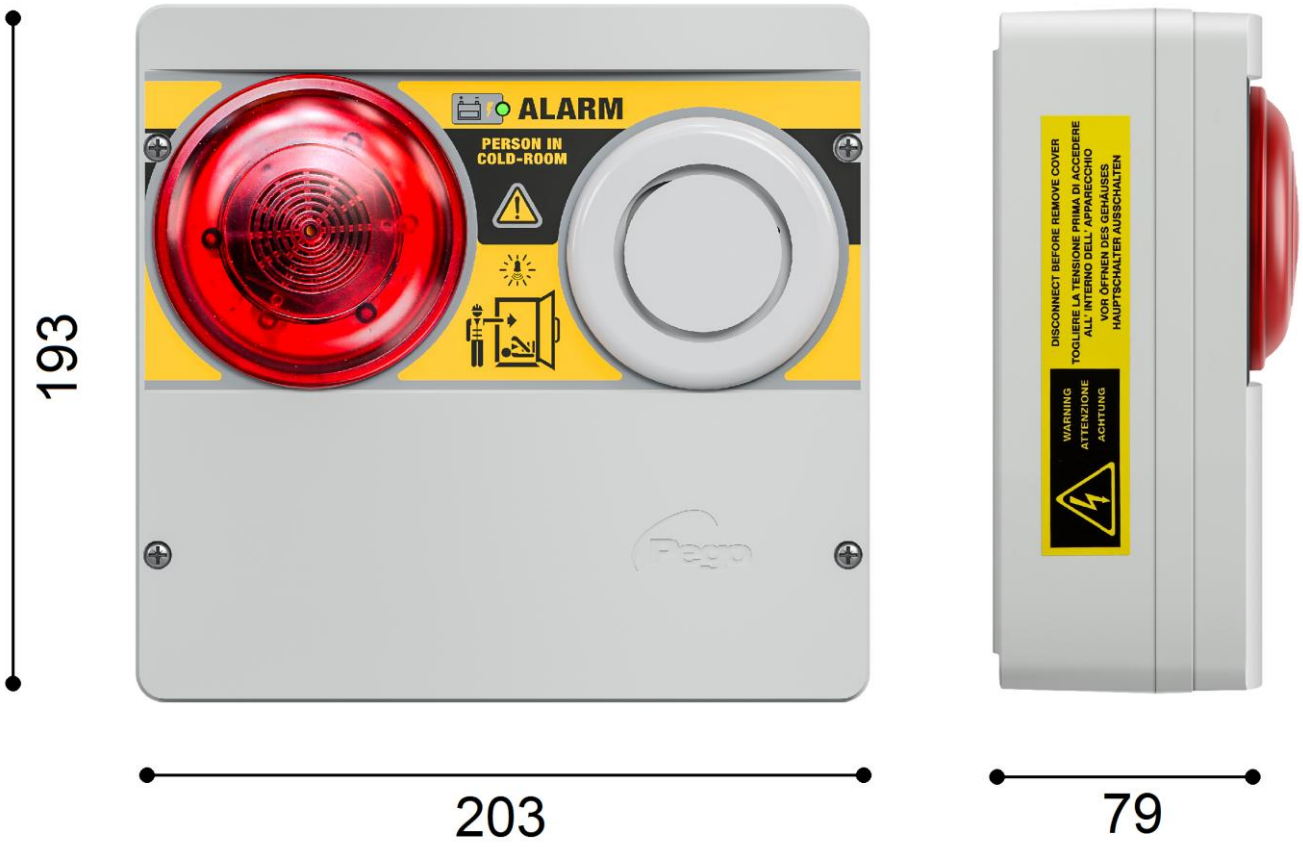
- Manufacturer's name
- Device code
- Serial number
- Date of production
- Supply voltage
- IP degree of protection
- Operating temperature



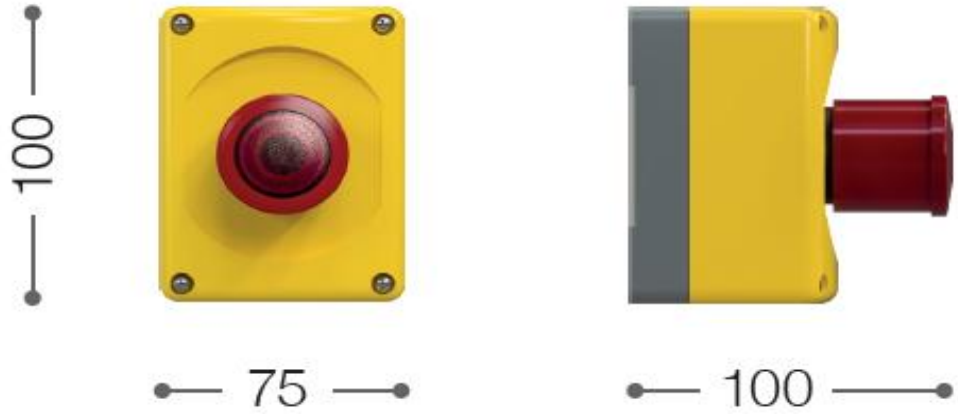
GENERAL WARNINGS FOR THE INSTALLER 1.5

1. Installation and maintenance of the appliance must be performed only by qualified personnel.
2. Install the appliance in locations that comply with the degree of protection and take care to keep the casing as intact as possible when drilling holes for cable glands and/or pipe glands.
3. This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
4. Do not expose the appliance or the battery to excessive temperatures.
5. Be aware of the risk of short-circuiting the terminals of the appliance or the battery due to metal objects.
6. Do not handle damaged or leaking Ni-MH batteries.
7. This appliance contains batteries that can only be replaced at the end of their life by qualified personnel.
8. If the appliance will be unused for an extended period, the batteries should be removed.
9. Means of disconnection from the power supply with contact separation of all poles must be incorporated into the fixed wiring in accordance with wiring regulations.
10. If the power cable is damaged, it must be replaced by qualified personnel to prevent any risk.
11. Avoid using multi-core cables containing conductors connected to inductive and power loads and signal conductors such as probes and digital inputs.
12. Avoid running power cables and signal cables in the same conduit.
13. Reduce the length of connection cables as much as possible, avoiding the wiring from spiraling, which could have harmful inductive effects on the electronics.
14. Provide a general protection fuse or circuit breaker upstream of the electronic control.
15. All conductors used in the wiring must be suitably sized to support the load they are intended to power.
16. Tighten the four screws securing the electrical panel with a torque no greater than 1 newton meter.

1.6 DIMENSIONS OF ALARM CONTROL UNIT



1.7 DIMENSIONS OF 100APEPUL3 EMERGENCY PUSHBUTTON UNIT



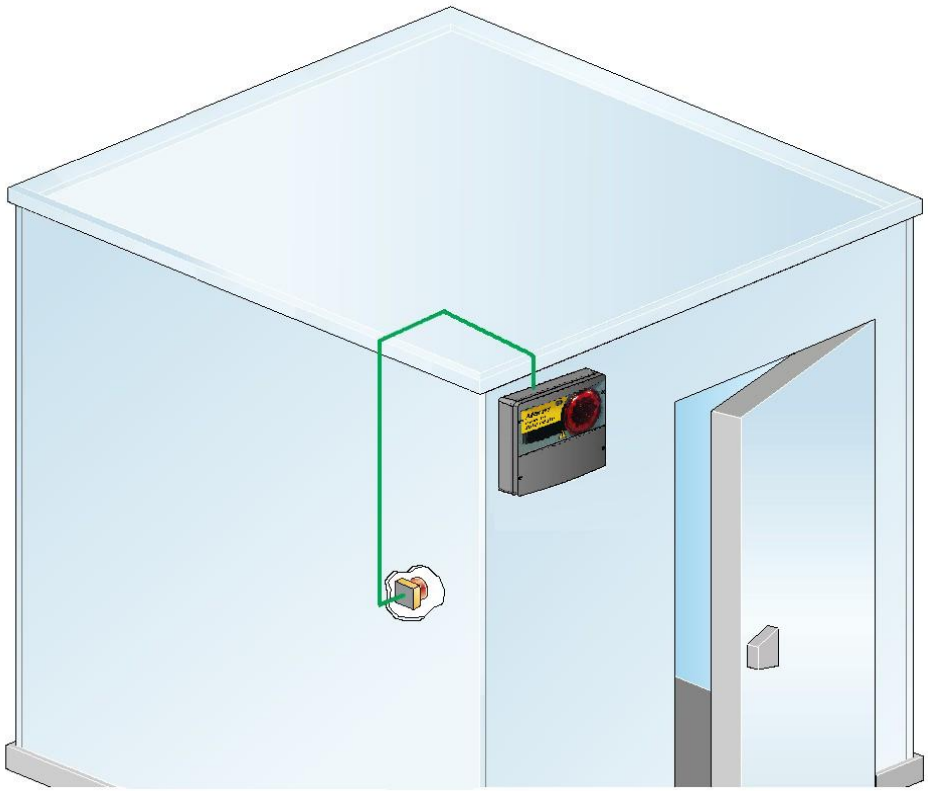
DESCRIPTION OF SYSTEM 1.8

The purpose of this safety system is to allow a person trapped inside the cold room to activate an acoustic/luminous alarm located outside the room and so request help.
The system has been designed to function even in the event of a temporary mains power failure: in this event the system is powered by a buffer battery housed in the external unit.
It conforms to the **UNI EN 378-1: 2016**, applicable to cold rooms at negative temperatures and with a volume greater than 10m^3.

The system consists of the following parts:

- **Emergency pushbutton to be fitted inside the cold room.**
  Consists of a luminous mushroom-type button with N.C. contact. The pushbutton is permanently lit by LEDs so that it can be located in the dark.
- **Acoustic/visual alarm control unit to be fitted outside the cold room.**
  It's equipped with a siren and a flashing light for alarm signalling and a buffer battery in case of blackout. There is also a voltage free contact (closed with active alarm) that can be used to activate additional devices such as, for example, a telephone dialer for remote alarm signalling or additional sirens.

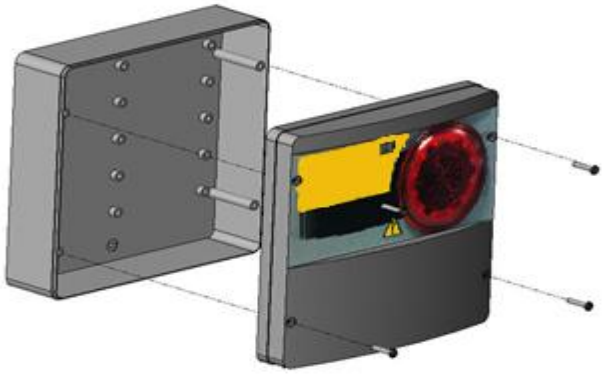
Connection between the two devices - consisting of a lead laid by the installer as per the wiring diagram - is ensured by the system safety logic. Should the lead be cut or disconnected the alarm will be activated immediately.



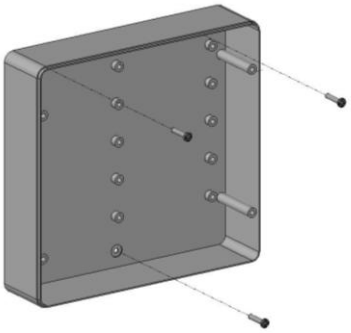
CHAPTER 2: INSTALLATION

2.1 INSTALLING THE EXTERNAL ALARM CONTROL UNIT

1. Unscrew the 4 locking screws on the front.



2. Use the three existing holes to fix the box back panel to the wall: use three screws of a length suitable for the thickness of the wall to which the panel will be attached. Fit a rubber washer (supplied) between each screw and the box backing.



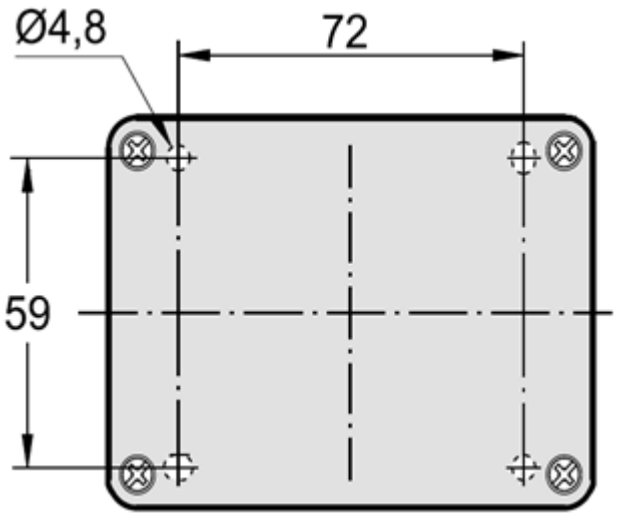
Make all electrical connections according to the diagram in chapter 2.4. To ensure reliable electrical connections and maintain the enclosure's degree of protection, we recommend using appropriate cable glands and/or conduit glands to seal all wiring. It is recommended to distribute the conductor routing within the enclosure as orderly as possible; in particular, keep power conductors separate from signal conductors. Use sealing ties if necessary.

3. Close the front panel, making sure that all the wires are inside the box and that the box seal sits in its seat properly.
Tighten the front panel using the 4 screws.

INSTALLING THE IN-ROOM EMERGENCY PUSHBUTTON 2.2

1. The in-room emergency pushbutton must be positioned inside the cold room so that it's always visible and easily reachable.
2. Unscrew the four locking screws on the front of the pushbutton.
3. Using the four pre-existing holes inside, fix the bottom of the pushbutton using four screws of adequate length in relation to the thickness of the fixing wall.

100APEPUL3



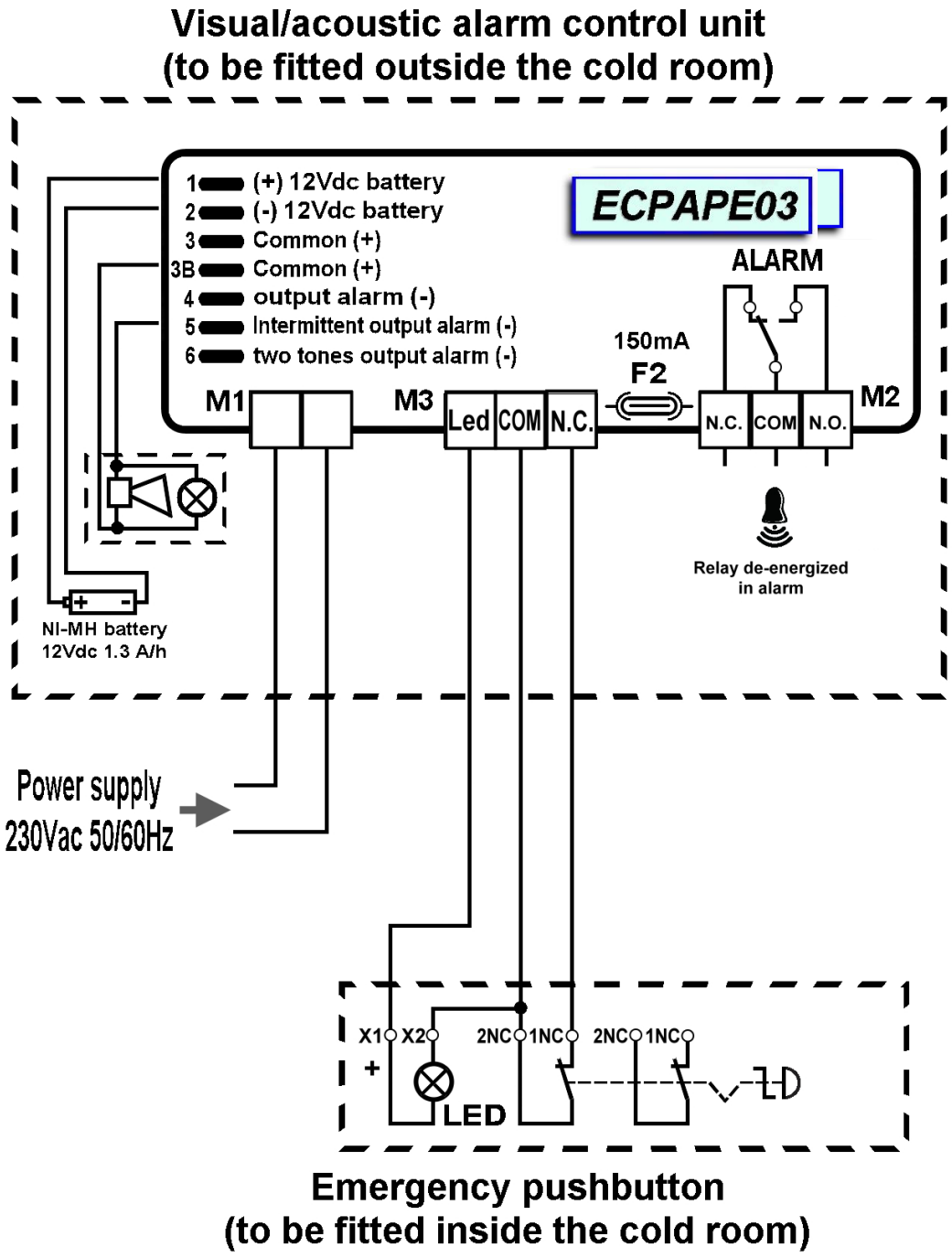
OPERATION AND MAINTENANCE 2.3

- Make the electrical connections as per the wiring diagram (Chap. 2.4).
- After initial connection it will take 110 hours to fully charge the battery.
- Press the luminous pushbutton installed inside the cold room to activate the acoustic and luminous warning devices on the external alarm control unit. The auxiliary relay contact closes.
- In the event of a 230Vac power failure, the buffer battery will intervene to keep the system active for the duration indicated in the technical characteristics.
- Reset the emergency switch inside the cold room to cancel the alarm.
- Periodically check that the buffer battery is working properly.
- If the battery is replaced, make sure it's disposed of properly at an authorised waste collection facility.
- If the alarm is activated with the emergency button not pressed, check the integrity of the cable and the connections between the button and the external control unit.

2.4 ELECTRICAL CONNECTIONS

Warning: The positive pole of the battery (Fastom with red wire) is initially disconnected to maintain the charge during product storage.
Once the in-room keypad connections have been made it is, therefore, necessary to connect this fastom to the connector marked (1) on the upper left side of the board as also indicated on the wiring diagram.

It's advisable to first connect the control unit to the relative emergency pushbutton and only then connect up the battery and the mains power. This will prevent activation of the alarm.



BATTERY REPLACEMENT 2.5

If it’s necessary to replace the battery, proceed as follows:

- Disconnect the power to the device using the main disconnect switch upstream of the panel.
- Unscrew the 4 screws securing the box and open the device.
- Disconnect the battery from the main board.
- Unscrew the 2 screws securing the metal battery holder and remove the damaged battery.
- Insert the new battery. **Note:** Batteries must be purchased from authorized retailers. Any other type of battery will automatically void the warranty.
- Reattach the metal battery holder to the bottom of the box.
- Connect the battery, observing the correct polarity (+ red wire, - black wire).
- Close the device by tightening the 4 corner screws.

2.6 WARRANTY TERMS

"PERSON IN COLD ROOM" ALARM KITS are covered by a 24-months warranty against all manufacturing defects as from the date indicated on the product ID code.

In case of defect the product must be appropriately packaged and sent to our production plant or to any authorized Service Center with the prior request of the Return Authorization Number.

Customers are entitled to have defective products repaired, spare parts and labor included. The costs and the risks of transport are at the total charge of the Customer.
Any warranty action does not extend or renew its expiration.

The Warranty does not cover:

- Damages resulting from tampering, impact or improper installation of the product and its accessories.
- Installation, use or maintenance that does not comply with the instructions provided with the product.
- Repair work carried out by unauthorized personnel.
- Damage due to natural phenomena such as lightning, natural disasters, etc...

In all these cases the costs for repair will be charged to the customer.
The intervention service in warranty can be refused when the equipment is modified or transformed.

Under no circumstances **Pego S.r.l.** will be liable for any loss of data and information, costs of goods or substitute services, damage to property, people or animals, loss of sales or earnings, business interruption, any direct, indirect, incidental, consequential, damaging, punitive, special or consequential damages, in any way whatsoever caused, whether they are contractual, extra contractual or due to negligence or other liability arising from the use of the product or its installation.

Malfunction caused by tampering, bumps, inadequate installation automatically declines the warranty. It is compulsory to observe all the instructions in this manual and the operating conditions of the product.

Pego S.r.l. disclaims any liability for possible inaccuracies contained in this manual if due to errors in printing or transcription.

Pego S.r.l. reserves the right to make changes to its products which it deems necessary or useful without affecting its essential characteristics.

Each new release of the PEGO product user manual replaces all the previous ones.

As far as not expressly indicated, is applicable the Law and in particular the art. 1512 C.C. (Italian Civil Code).
For any controversy it's elected and recognized by the parties the jurisdiction of the Court of Rovigo.

APPENDICES

EU DECLARATION OF CONFORMITY A.1

The declaration of conformity is available on our website. It can also be requested by emailing **tecnico@pego.it**, providing the serial number plate data.

INSTRUCTIONS FOR CORRECT DISPOSAL

Introduction:

This product is an Electrical and Electronic Equipment. When its disposal becomes necessary, it's classified as **Waste Electrical** and **Electronic Equipment** (**WEEE**).
This waste contains components that can be harmful to the environment and human health if not disposed of correctly. It's therefore essential to follow local and international regulations to ensure that its disposal occurs in a safe and responsible manner.

Responsible Disposal:

1. **Do not dispose of the product in municipal waste.**
   These devices may contain hazardous materials, such as heavy metals and chemicals, which could contaminate soil and water resources if not treated properly. Their disposal must occur through specific channels.

2. **Locate a WEEE collection center.**
   In many countries there are collection points dedicated to WEEE, such as recycling centers and ecological islands. These centers are equipped to safely treat and recycle electronic components. It's important to rely on these centers to ensure that the product is treated correctly.

3. **Check local disposal regulations.**
   Regulations for the treatment of WEEE may vary from country to country. It's essential to find out about local provisions regarding the recovery and recycling of Waste Electrical and Electronic Equipment. In many countries, there are specific regulations that require mandatory recycling or treatment of such waste in authorized facilities.

4. **Do not attempt to dismantle the electrical panel without proper preparation.**
   Although it may seem convenient to remove components for recovery, unauthorized dismantling operations may expose you to the risk of injury or improper handling of hazardous materials. Always rely on certified professionals to handle these operations.

5. **Electronic component and battery.**
   Some electrical panels with electronics may contain batteries or other components that require separate treatment. Batteries must be disposed of in accordance with specific directives for waste containing heavy metals and hazardous chemicals.

6. **Recycling and reuse.**
   The materials contained in electrical panels, such as metals, plastics and circuits, can be recycled and reused in new products. Correct disposal ensures that these resources are recovered, reducing their environmental impact and promoting the circular economy.

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