

## ELECTRONIC TOUCH PUSH-BUTTON WITH NAME TAG - 442TC88 "HIDDEN" INSTALLATION

### INTRODUCTION

The electronic button 442TC88 is a control with touch sensor built in and a lit area where a name tag can be applied (**usually used as a doorbell outside the door**). It can be used in systems with 230 Vca and in low voltage systems. There is a relay with monostable operation. It has leds to help identify the control in the dark and it is installed "hidden" on the back of the finishing plates.

### TECHNICAL SPECIFICATIONS

- Overall dimensions: 3 x System 44 "hidden" modules
- Protection degree: IP40
- Terminal board with 4 terminals accessible on the back
- Power supply voltage: 230 Vca 50 Hz
- Variation permitted:  $\pm 15\%$
- Max. absorption: 18 mA to 230 Vca
- Sensitive front area: the front of the apparatus near area A1 (see fig. 1)
- Relay output with 1 NO contact - monostable operation
- Type of load controllable in alternate current:
  - noninductive load ( $\cos\phi 1$ ): 8 A at 230 Vca - 6 A at 30 Vcc
  - inductive load ( $\cos\phi 0,6$ ): 3 A at 230 Vca
- Control: rest the finger lightly on the plate near the sensitive area A1 (see fig. 1)
- Front Led (L1) for locating in the dark (see fig. 1): when the hand approaches the led emits a brighter light.
- Sound signal for control identification confirm/contact closing time and to confirm entry/exit from the state of temporary inhibition (see PROGRAMMING paragraph)
- It is possible to set the sensitivity function of the device: at the touch of the plate or at a distance of 4mm from the plate itself (see PROGRAMMING paragraph)
- It is possible to set a timer for the exit contact (see PROGRAMMING paragraph)
- Temporary inhibition function to allow cleaning of the plate (see PLATE CLEANING paragraph)
- It is possible to regulate the light intensity of the name tag area (see paragraph LIT AREA)

### PROGRAMMING

There is a three-position Sw1 switch on the side (see fig. 1), to program the device. The switch position is read when the device has input. Therefore in order to activate programming it is necessary to remove input from the device itself.

#### Sound alarms

The sound alarm emitted for control identification confirm/contact closing time and to confirm the entry/exit from the state of temporary inhibition (plate cleaning) can be excluded by pressing the first switch:
 

- position ON: sound activated
- position OFF: sound excluded

#### Sensitivity

It is possible to set the sensitivity of the device, in other words the distance from the front of the plate where there is the identification of the control, acting on the second switch:

- position ON: identification at 4mm from the plate (maximum sensitivity)
- position OFF: identification at the touch of the plate (minimum sensitivity)

#### OutputTimer

It is possible to set a timer for the output contact by regulating the third switch:

- position ON: the contact remains closed for 2 seconds, regardless of the time the finger remains on the front of the device
- position OFF: the contact remains closed for the length of time the finger remains on the front of the device

### LIT AREA

The area A2 shown in fig. 1 is uniformly lit in white in order for the name written on the paper (supplied with the front plate) to be visible through the glass of the finishing plate. The name tag must be positioned between the device and the plate (see fig. 4). There is a potentiometer (Pt1) on the side of the device that allows regulating the light intensity (see fig. 1)

### PLATE CLEANING

In order to clean the front plate without continuously activating the output, it is possible to temporarily inhibit the operation of the device by placing a finger near area A1 (see fig. 1) for a time of 10 seconds: a 4-beep alarm indicates the activation of the state of inhibition. The state of inhibition is signalled by L1 flashing slowly (see fig. 1) and remains for a time of 15 seconds before returning automatically to ordinary operation. After that, a 4-beep alarm will indicate the deactivation of the state of inhibition. It is also possible to access temporary inhibition by removing and re-applying the plate when the device is connected.

### INSTALLATION

The switch must be installed fixed into the back of the finishing plates in rectangular boxes

### WEATHER CONDITIONS

Temperature and relative humidity of reference: 25 °C Rel. H 65%  
Operating environment temperature field: from -5 °C to +35 °C  
Maximum relative humidity: 90% at 35 °C  
Max altitude: 2000 m a.s.l.

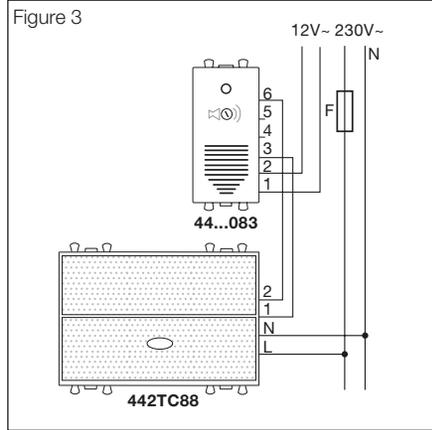
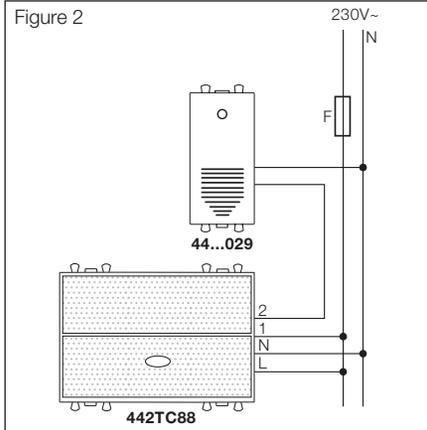
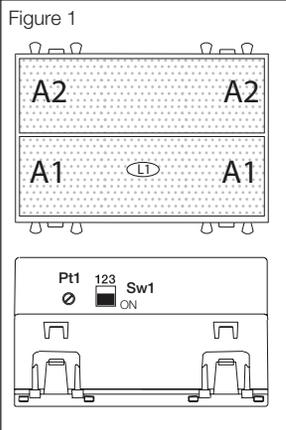
### NORMCOMPLIANCE

CEI EN 60669-2-1

### CONNECTIONDIAGRAMS

The circuit (L-N) must be protected against overloads by a rapid fuse with high break power as indicated in the diagrams below:

- 442TC88 in call systems at 230 Vac - ringing bell example 44...029 (figure 2);
- 442TC88 in call systems at 12 Vac - three tone bell example 44...083 (figure 3);



Legend  
F: fuse type F 1A H 250V~

Figure 4 Installation example

2503MG

Flush mounted boxes

44A03

S44 standard frame

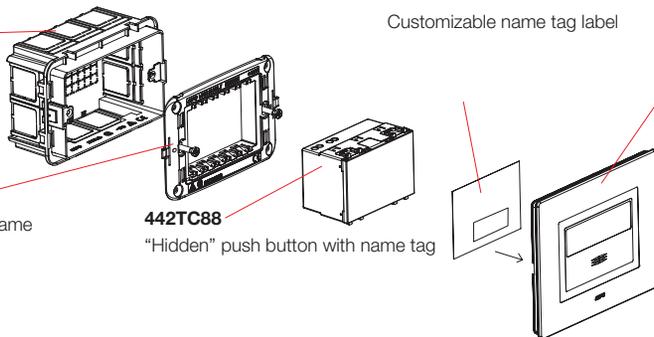
442TC88

"Hidden" push button with name tag

Customizable name tag label

44PVC88...

"Ave Touch" front plate for push button with name tag



C.541 - 00 - 210708

**IMPORTANT NOTES:**

- Products should be sold in their original packaging. Otherwise, the retailer and/or installer is obliged to follow, as well as to communicate to the user, the instructions for use which are supplied with the product and/or are published on the website [www.ave.it](http://www.ave.it) as well as in the current product catalog.
- AVE products are installation products
- Products must be installed by trained professionals in compliance with the installation regulations
- Once the product is unpacked, make sure that the appliance is undamaged. Do not use the appliance if there is any doubt, but contact a qualified technician
- Even before unpacking, the appliance should be handled with care and stored in a dry place at temperatures between  $-5^{\circ}\text{C}$  and  $+40^{\circ}\text{C}$
- Before carrying out any maintenance on the appliance, cut off the mains power
- Special attention should be paid to the preparation of the cable terminals to be inserted into the appliance terminals so as to maintain sufficient isolation distance between contacts
- When tightening the terminal screws, special care should be taken to avoid overheating which could start a fire or damage the cables.
- The product must be used in dry, dust-free areas
- Suitable products must be used in any other conditions
- There is a risk of electric shock or malfunction of the device if not handled properly.
- Install products and accessories according to the prescriptions in the catalogue and the instructions sheet and in compliance with specific standards and rules
- Warranty certificate for a specific product, which specifies the warranty period and conditions in accordance with local regulations, is issued by the seller at the moment of sale of product

**The manufacturer's warranty:** The 5 year warranty applies only to damaged or malfunctioning products caused by manufacturer's negligence, taking into account the rights and obligations prescribed by law (art. 1490, 1512 C.C., DL 24/2002, Directive 1999/44/CE, art. 1519 C.C.). The defect must be notified within 2 month from the date it was discovered. Five years are intended from the date of delivery of the product to the final customer.

