

**Display module for forwarding and displaying calls, power supply 24 V d.c. SELV, complete with single base for semi-recessed installation on light walls, on boxes with 60 mm distance between centres or on 3-gang boxes.**

The device, installed inside the single room, is composed of the display module and the voice unit module. The display module enables sending and managing calls made by patients and/or by medical and paramedical personnel and displaying the data relating to the calls (room number, bed number, call level, events memory, etc.). The device, after a simple configuration, can be used either as a room module or as a supervisor module; it features 4 front buttons for assistance and emergency calls, presence, events list scrolling and 5 configurable inputs. The display module moreover enables connecting the landing light 02084 to signal nurse present, bathroom call and room call.

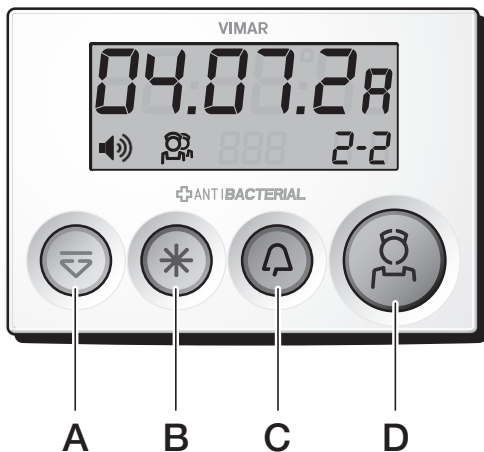
On stand-by (that is to say when no operations are carried out on the device), the display shows the current time both in on-line mode and VDE-0834 if the system contains a corridor display.

The antibacterial treatment ensures full hygiene thanks to the action of the silver ions (AG+), which prevent the formation and spread of germs, bacteria, viruses and fungi. To maintain the hygiene and effectiveness of its antibacterial action, clean the product regularly.

**CHARACTERISTICS.**

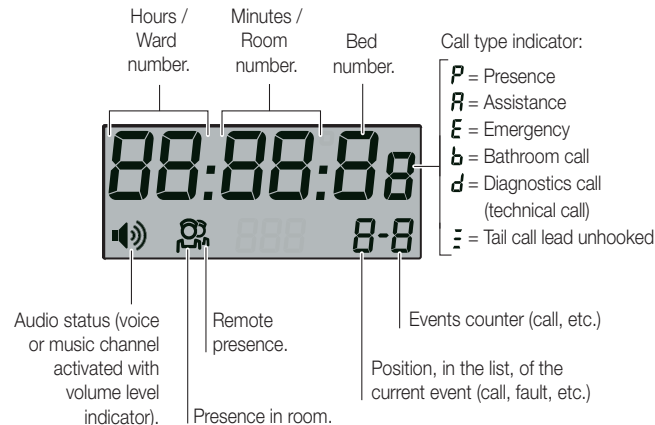
- Supply voltage: 24 V d.c. SELV ±20%
- Absorption: 70 mA.
- Lamp output absorption: 250 mA max
- LED output absorption: 250 mA max
- Tail call lead absorption: 3 x 30 mA (30 mA each).
- Operating temperature: +5 °C - +40 °C (indoor).

**FRONT VIEW.**



- **Push-button A:** Scrolling through events list (in the configuration phase: confirms operation).
- **Button B:** Emergency call
- **Button C:** Normal or assistance call (in the configuration phase: increase/decrease, yes/no).
- **Push-button D:** Nurse present (in the configuration phase: increase/decrease, yes/no).

**DISPLAY.**



**MAIN SCREENS**

- Rest  
Display of time supplied by central unit (provided by the PC indicates that on-line mode or display of corridor).
- Presence on or supervisor display (the time is given by the PC that indicates on-line mode or corridor display)
- Normal call from same room:  
• Ward 5 • Room 4
- Emergency call from same room:  
• Ward 5 • Room 4 • Bed 2
- Remote emergency call:  
• Ward 5 • Room 4 • Bed 2  
Position 2 in a list of five events.
- Remote presence display.  
Position 1 in a list of four events.
- Voice channel or music channel on with intermediate volume (at 23:11 hours).
- Rest  
(in the absence of PC).
- Presence inserted or control display  
(in the absence of PC).

**CONNECTIONS.**

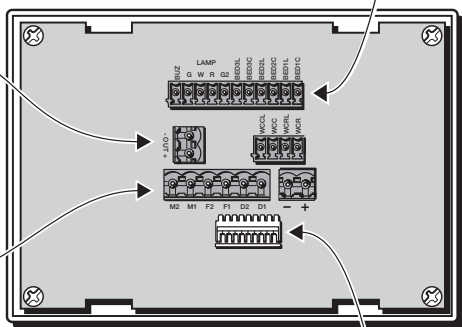
**POWER SUPPLY.**

**+ OUT (24 V d.c. SELV):** connection for common power supply elements of bedroom/bathroom call units (14501.AB, 14503.AB), bathroom reset (14504.AB) and outdoor lamp (02084)

**- :** negative connection for passive unit when required.

**BUS.**

**+, - :** Power supply 24 V d.c. SELV.  
**D1, D2 :** Data connection.  
**F1, F2 :** Voice connection.  
**M1, M2 :** Music speaker connection.



**INPUTS/OUTPUTS.**

- BUZ** : external buzzer piloting
- G** : outdoor lamp (nurse presence)
- W** : outdoor lamp (bed call)
- R** : outdoor lamp (room/bed call)
- G2** : outdoor lamp (emergency/diagnostics call)
- BED3L** : bed 3 reassurance LED
- BED3C** : bed 3 call (art. 14501.AB or 14342.AB or 14505.AB)
- BED2L** : bed 2 reassurance LED
- BED2C** : bed 2 call (art. 14501.AB or 14342.AB or 14505.AB)
- BED1L** : bed 1 reassurance LED
- BED1C** : bed 1 call (art. 14501.AB or 14342.AB or 14505.AB)
- WCCL** : bathroom reassurance LED
- WCC** : bathroom call (art. 14503.AB)
- WCRL** : bathroom reassurance LED
- WCR** : bathroom reset (art. 14504.AB)

**Note:** The communication terminal, via the inputs BED3C, BED2C, BED1C, WCC and WCR and by suitably configuring the management software, can be used in the following configurations:

**Traditional room**

- 3 bed calls, 1 bathroom call and 1 bathroom reset;
- 2 bed calls, 2 diagnostics calls and 1 bathroom reset;
- 2 bed calls, 2 diagnostics calls and 1 bathroom call;
- 4 bed calls and 1 bathroom call;
- 5 bed calls.

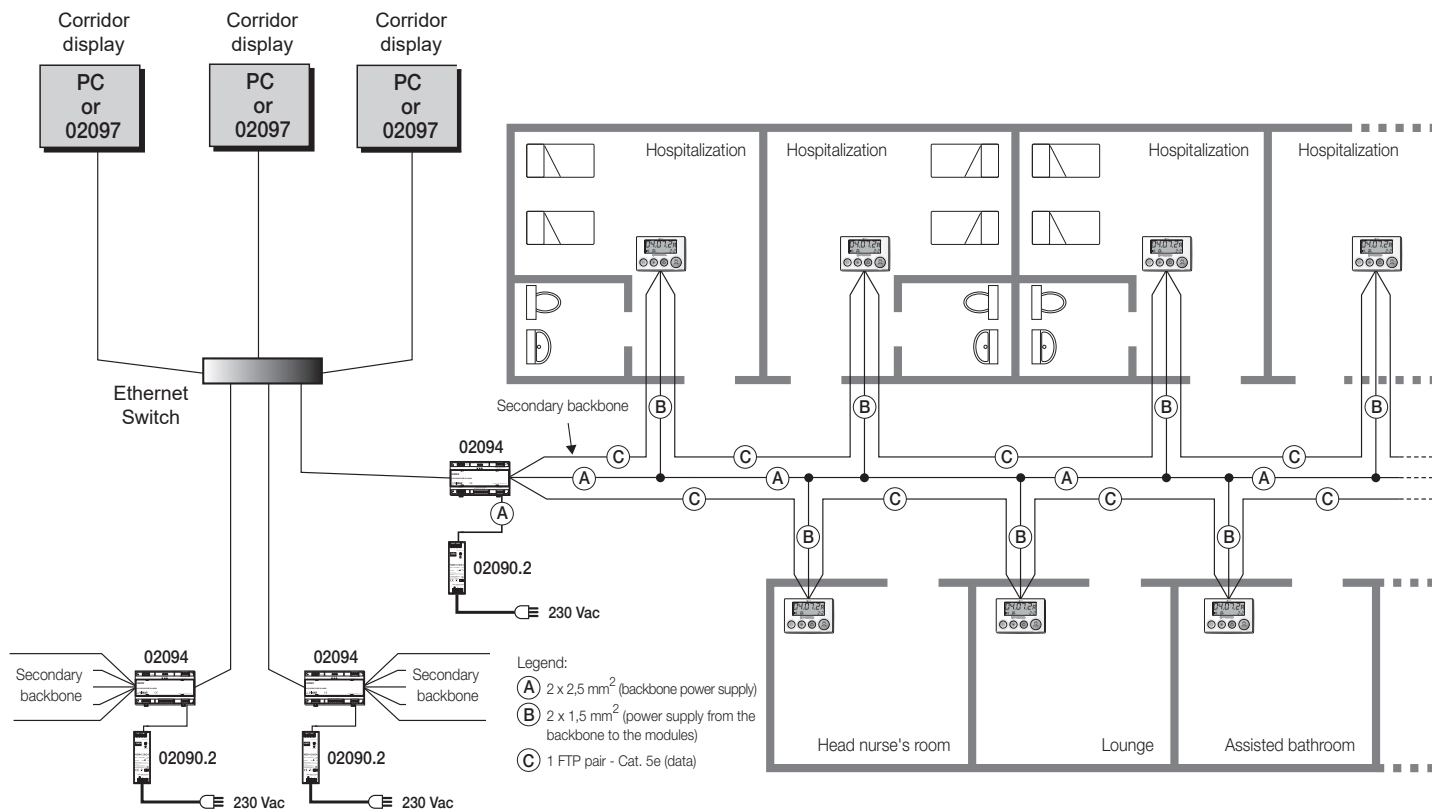
**Corridor bathroom**

- 4 cabins and one bathroom reset;
- 5 cabins.

The unshielded Cat 3 telephone cable can be used for connecting the buttons and lights.

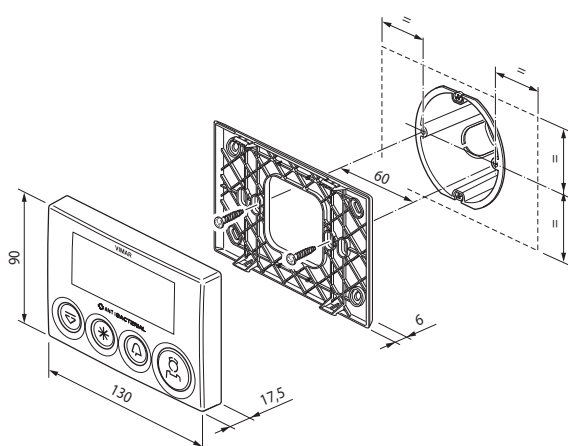
**Local BUS voice unit connection (display module).**

**JP2:** terminals for connection to voice unit module 02082.AB.

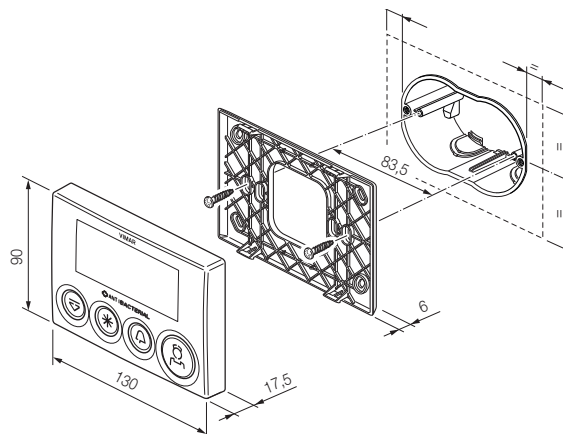


INSTALLATION ON LIGHT WALLS.

- INSTALLATION ON ROUND FLUSH-MOUNTING BOXES WITH FIXING CENTRE DISTANCE 60 mm.

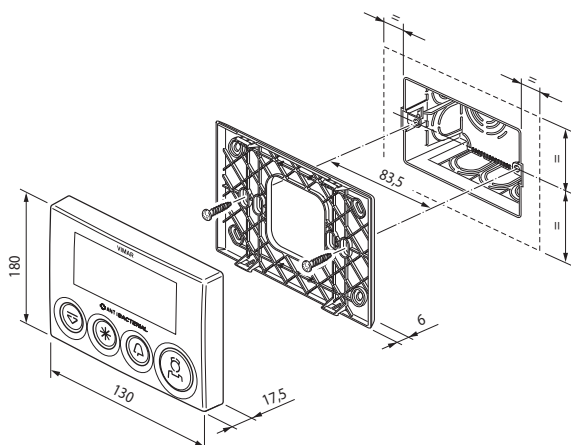


- INSTALLATION ON 3-MODULE FLUSH-MOUNTING BOXES.

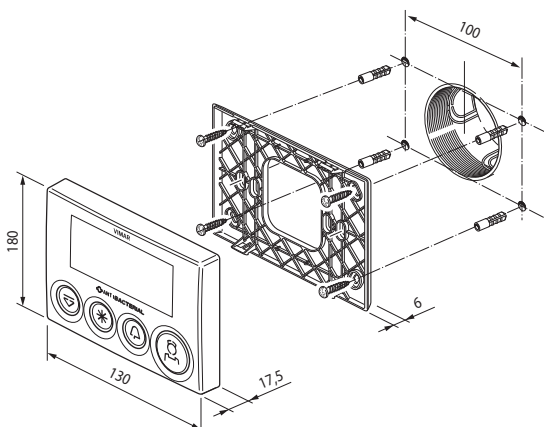


INSTALLATION ON BRICK WALLS.

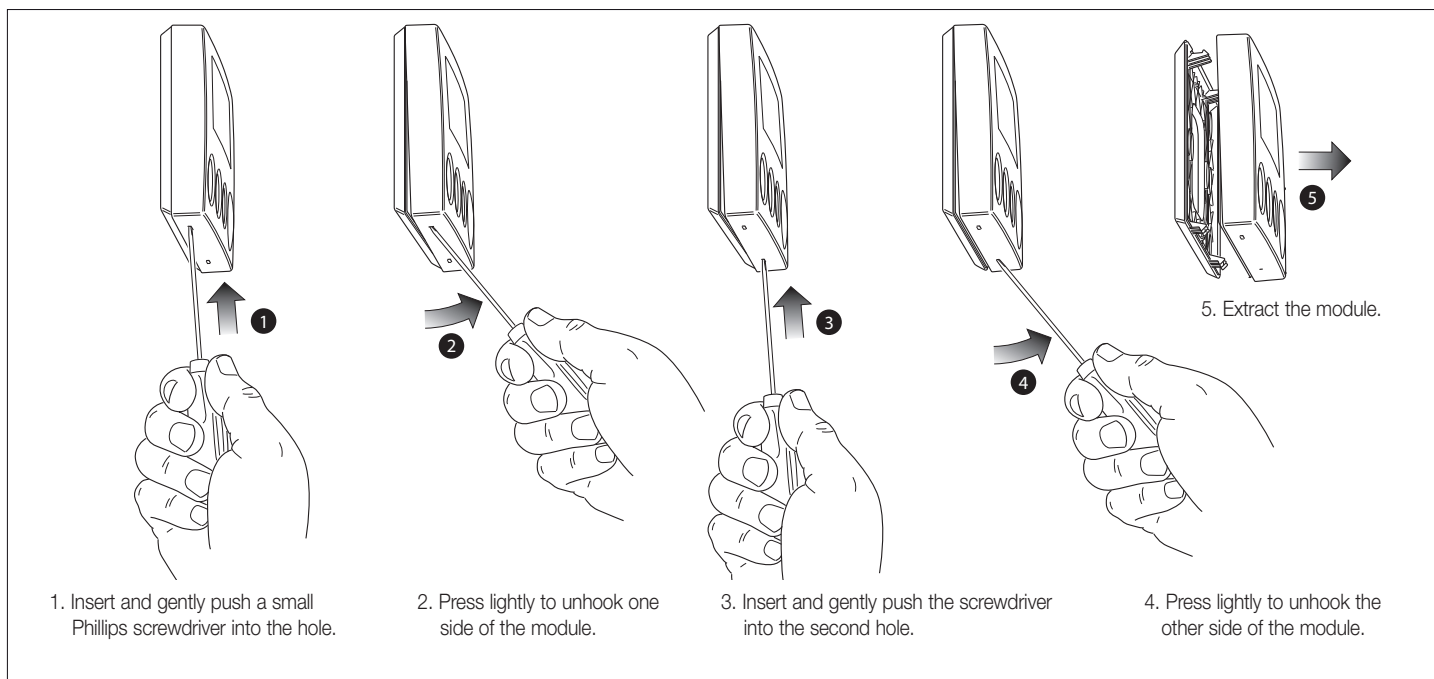
- INSTALLATION ON 3-MODULE RECTANGULAR FLUSH-MOUNTING BOX.



- INSTALLATION ON ROUND FLUSH-MOUNTING BOX AND BASE FIXING WITH PLUGS AT TOPS.



UNHOOKING THE DISPLAY MODULE



## OPERATION.

The display module is used to perform the following functions:

### Call.

The call can be made:

- by pressing the red button (A) (C) for a room call;
- using the button or the tail call lead installed in the bed unit (accidentally unhooking the tail call lead produces a call with a fault signal);
- with a ceiling pull;
- generated by a change in status of a diagnostics input (for example from electro-medical equipment that detects a fault or a serious condition of the patient).

### Presence indicator.

Personnel entering the room after a call or for a simple check, signal their presence by pressing the green button (D) on the display module or the reset button 14504.AB. All the rooms equipped with a display module that have the presence indicator on will receive calls from the other rooms in the ward and the personnel will be able to perform the required assistance promptly.

### Answering calls.

Whenever a call comes from rooms in the ward **the personnel enter the room and signal their presence by pressing the green button (D)**.

### IMPORTANT:

Calls in on-line mode can be made in four different types of level according to the critical level of the situation:

- **Normal:** in conditions of rest press the red call button (A) (C) or 14501.AB or the call lead connected to 14342.AB or 14503.AB (bathroom call).
- **Assistance:** with personnel present in the room (arriving after a Normal call and that press the green presence indicator button (D) the red button (A) (C) or 14501.AB or the call lead connected to 14342.AB or bathroom call 14503.AB is pressed.
- **Emergency:** with personnel present in the room (therefore after pressing the button (D) the dark blue button (B) is pressed and it is kept pressed for approximately 3 s; this type of call is made in situations of extreme seriousness that require immediate medical assistance.

An emergency call can also be generated in the following ways:

- Button 14501.AB (3 sec) with presence previously inserted (button (D));
- Tail call lead button call lead connected to 14342.AB (3 sec) with presence previously inserted (button (D));
- Ceiling pull; 14503.AB (3 sec) with presence previously inserted button 14504.AB.

The LEDs of the buttons that generate the emergency call flash.

- **Diagnostics:** if a diagnostic input changes state, the system produces a technical alarm (anomaly or critical situation of a patient). The different call levels and the Diagnostics function are available both on-line and in VDE-0834.

## CONFIGURATION.

When first switched on the device must be configured manually, in following the configuration can be easily modified through the program Call-way dedicated or manually. The configuration procedure allows the inclusion of the parameters needed to smooth operation.

### MANUAL CONFIGURATION.

To carry out this type of activation it is necessary to connect the display module 02081.AB.

With the display in resting conditions (in the absence of calls, presence, voice, etc.), press for more than 3 s the blue button (B) until the flashing of the respective blue led; then, while holding down the blue button (B) press for more than 3 s the yellow button (A) until the terminal enter the configuration phase and the display shows the firmware revision for 3 s.

For example:



where 05 and 'day, 02 month, 14 the last two digits of the year 01 and the firmware version.

Using the green (D) and red (A) (C) buttons, set the ward number between 01 to 99 (button (A) (C) = decreases, button (D) = increases) and confirm by pressing the yellow button (A).

When pressed, the buttons increase / decrease rapidly the number of department.



Using the green (D) and red (A) (C) buttons, set the room number between 01 to 99 and between B0 to B9 (button (A) (C) = decreases, button (D) = increases) and confirm by pressing the yellow button (A).

When pressed, the buttons increase/decrease rapidly the number of room.



If the room is configured between 1 and 99, the input configuration becomes by default: **Bed 1, Bed 2, Bed 3, Bathroom, Cancel Bathroom or Reset (depending on the following configurations).**

If the room is set up between B0 and B9, the input configuration becomes, by default: **Cabin 1, Cabin 2, Cabin 3, Cabin 4, Reset.**

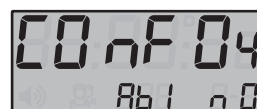
Using the green (D) and red (A) (C) buttons, set whether the terminal is for control (button (A) (C) = no, button (D) = yes) and confirm by pressing the yellow button (A).



Using the green (D) and red (A) (C) buttons, to set the inputs mode (NO, NC and disabled):

- by repeatedly pressing the button (A) (C) are selected cyclically inputs Ab1, Ab2, Ab3, Ab4, Ab5;
- by repeatedly pressing the button (D) are selected cyclically mode NO, NC and -- (disabled).

Finally, confirm by pressing the yellow button (A).



Using the green (D) and red (A) (C) buttons, whether or not to report a fault on the inputs (enable/disable detection release tail call).



- pressing button (A) (C) will change the display:



- by repeatedly pressing the button (A) (C) are selected cyclically inputs In1, In2, In3, In4, In5.

- pressing button (D) toggles between SI (YES) and no (SI = ignores release tail call, no = not ignore release tail call)

Finally, confirm by pressing the yellow button (A).

Using the green (D) and red (A) (C) buttons, whether or not to report a fault on the lamps (enable/disable detection fault lamp).



- pressing button (A) (C) will change the display:



- by repeatedly pressing the button (C) are selected cyclically lamps LP1, LP2, LP3, LP4.

- pressing button (D) toggles between SI (YES) and no (SI → ignores fault lamp, no → not ignore fault lamp).

Finally, confirm by pressing the yellow button (A).

Use the green (D) and red (C) buttons to set whether to enable the "CANCEL BATHROOM" function (button (C) → no, button (D) → SI):



NOTE: If the room was set up between B0 and B9 this point is omitted.

■ By selecting **Anb=SI** the bathroom call can only be RESET with the cancel button (art. 14504.AB) connected to the WCR input of the display module of the communication terminal 02080.AB.

■ By selecting **Anb=NO** the bathroom call can be RESET either with the cancel button (art. 14504.AB) or with the green button (D) of the display module of the display module 02081.AB.

In its default setting, the CANCEL BATHROOM function is enabled.

Using the green (D) and red (C) buttons, set whether to enable the green button (D) (button (C) → not enabled, button (D) → enabled) and confirm by pressing the yellow button (A).



N.B. this point is omitted if the voice cancel bathroom setting it's SI; if you have enabled this option, it means that the green button (D) it's necessary to reset the call of Room and Bed and thus may NOT be disabled.

When the green button (D) is disabled, calls (room/bed and bathroom) are reset by means of the bathroom call cancelling button (art. 14504.AB) connected to the WCR input of the display module of the communication terminal 02080.AB.

Using the green (D) and red (C) buttons, to set the inputs mode (NO, NC and disabled): the volume of the voice mode VDE-0834 between 0 to 15 (button (C) → decreases, button (D) → increases) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, to set the communication mode of the audio by choosing between Push to talk Pt or Hand free HF (button (C) → Pt, button (D) → HF) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, set the end of the call after the voice communication (button (C) → no, button (D) → YES) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, to set if, in the event of a blackout, or not to enable the revival of their calls (button (C) → no, button (D) → SI) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, to set variable rhythm of the buzzer mode choosing between traditional tr and VDE Ud (button (C) → tr, button (D) → Ud) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, to set lamp operation mode choosing between VDE Ud and traditional tr (button (C) → tr, button (D) → Ud) and confirm by pressing the yellow button (A).



Using the green (D) and red (C) buttons, to set calls operation mode choosing between VDE Ud and traditional tr (button (C) → tr, button (D) → Ud) and confirm by pressing the yellow button (A).



Using the green (D) and red (C), push buttons, set whether to activate the "Tail call lead unhooked" signal (button (C) → SI, button (D) → no) and confirm by pressing the yellow button (A).



The configuration is now concluded and the display module is operative.

## INSTALLATION RULES.

Installation should be carried out by qualified staff in compliance with the current regulations regarding the installation of electrical equipment in the country where the products are installed.

**Recommended installation height: from 1.5 m to 1.7 m.**

## CONFORMITY.

EMC directive.

Standards EN 60950-1, EN 61000-6-1, EN 61000-6-3.

REACH (EU) Regulation no. 1907/2006 – Art.33. The product may contain traces of lead.



### WEEE - Information for users

If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life. The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one. Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400 m<sup>2</sup>, if they measure less than 25 cm. An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

