

OPERATION & ASSEMBLY MANUAL

TACtouch

CONTROL PANEL TO THE TAC5/TAC6 CONTROLLER

050373 - 20220503

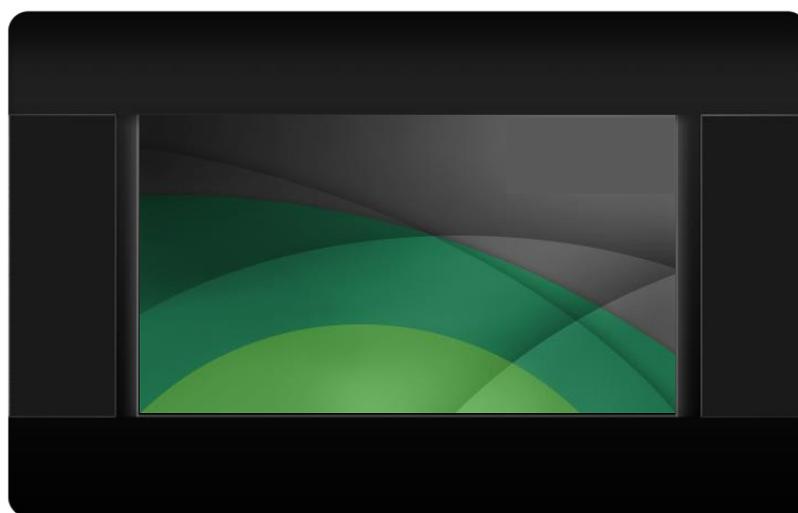


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1. Safety



Incorrect electrical connection between the control panel TACtouch and TAC5/TAC6 controller may result in damage to both



Assembly TACtouch has to be carried out by a qualified installer.



Use additional precautions in order to prevent the effects of controller malfunctions and software leading to loss of property and dangerous consequences.



Control panel TACtouch manual is a supplement for TAC5/TAC6 controller documentation.



User should read the manual thoroughly (we bear no responsibility for damages caused by non-observance of this manual).



Keep this manual for future reference.

2. Information about documentation

The control panel TACtouch manual is a supplement for the TAC5/TAC6 controller manual. In particular, except for this manual, the controller manual should also be observed. We are not responsible for any damages caused by failure to observe these instructions.

3. Storage of documentation

This assembly and operation manual, as well as any other applicable documentation, should be stored diligently, so that it was available at any time. In the case of moving or selling the device,

the attached documentation should be forwarded to the new user/owner.

4. Applied symbols

In this manual the following graphic symbols are used:



- useful information and tips.



- important information, failure to observe these can cause damage of property, threat for human and household animal death and life.

Caution: the symbols indicate important information, in order to make the manual more lucid. Yet, this does not exempt the user from the obligation to comply with requirements which are not marked with a graphic symbol!

5. WEEE 2012/19/UE DIRECTIVE

Purchased product is designed and made of materials of highest quality. The product meets the requirements of the **Directive 2012/19/EU of 4 July 2012 on waste electrical and electronic equipment (WEEE)**, according to which it is marked by the symbol of crossed-out wheeled bin (like below), meaning that product is subjected to separate collection.



Responsibilities after finishing a period of using product:

- dispose of the packaging and product at the end of their period of use in an appropriate recycling facility,
- do not dispose of the product with other unsorted waste,
- do not burn the product.

By adhering obligations of waste electrical and electronic equipment controlled disposal mentioned above, you avoid harmful effects on the environment and human health.

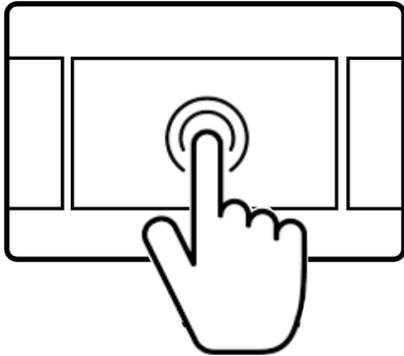
6. General information

The TACTouch control panel is designed to control the TAC5/TAC6 controller.

Panel can be used in a household or similar environments and in slightly industrialized buildings.

7. Operation of the panel

The device uses a screen with a touch panel.



Press corresponding symbols on the screen in order to select position from the menu.

Symbols:



- scrolling and setting the parameters.



- exit a chosen menu position or cancel a parameter setting.



- quick return back to the main screen.



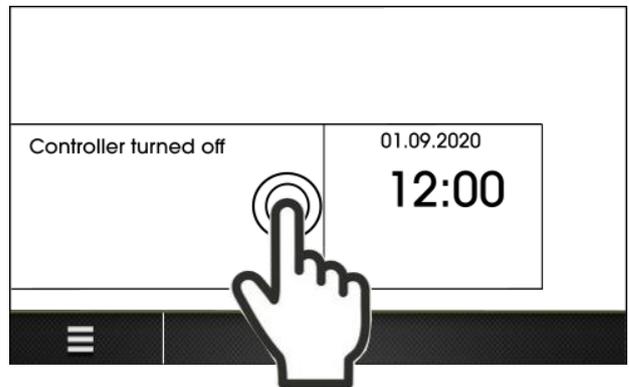
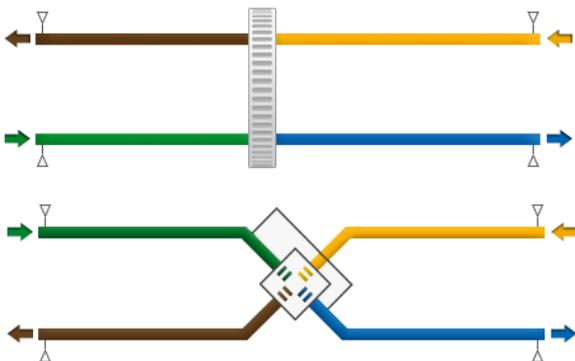
- menu information concerning the selected menu position.



- enter to the main menu.

Main screen:

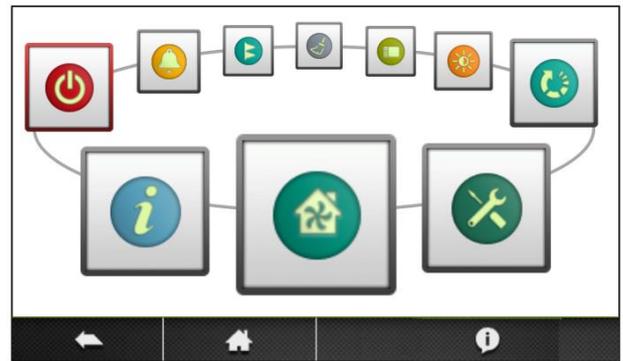
- if the heat exchanger is working main screen shows schematics with most important values like temperatures, speed of fans, date, actual time etc.



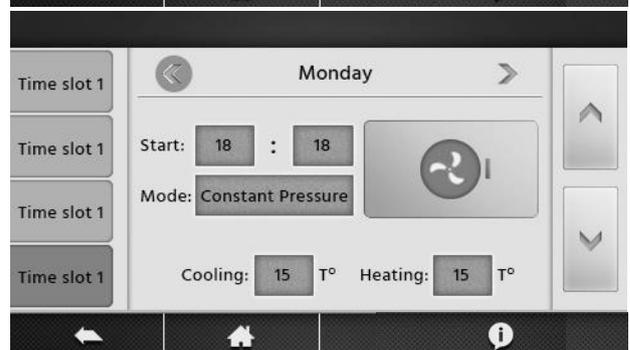
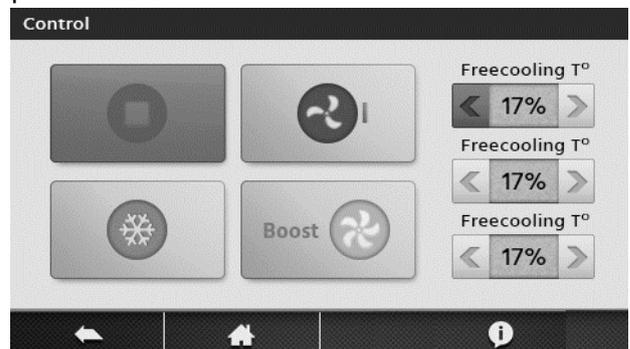
To start the controller, press anywhere on the screen with the words "Controller turned off", then appears the message "Active controller?". Confirm the message.

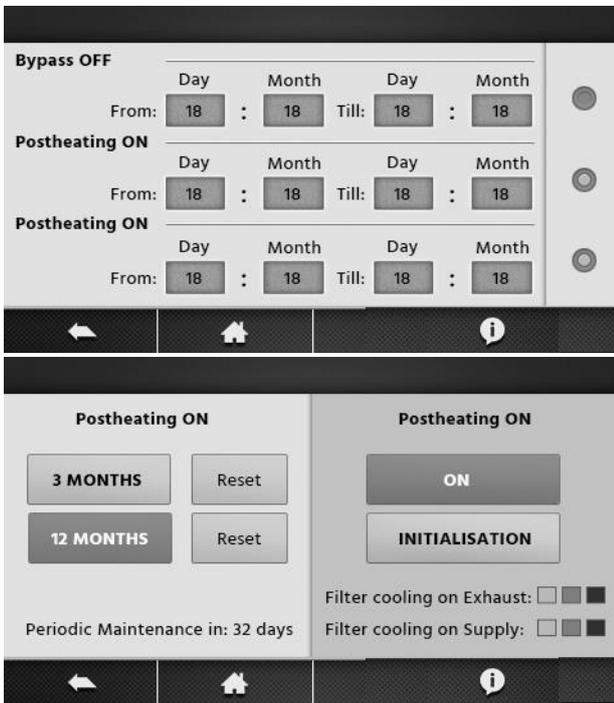
Main menu:

After pressing menu button panel shows the rotary menu.



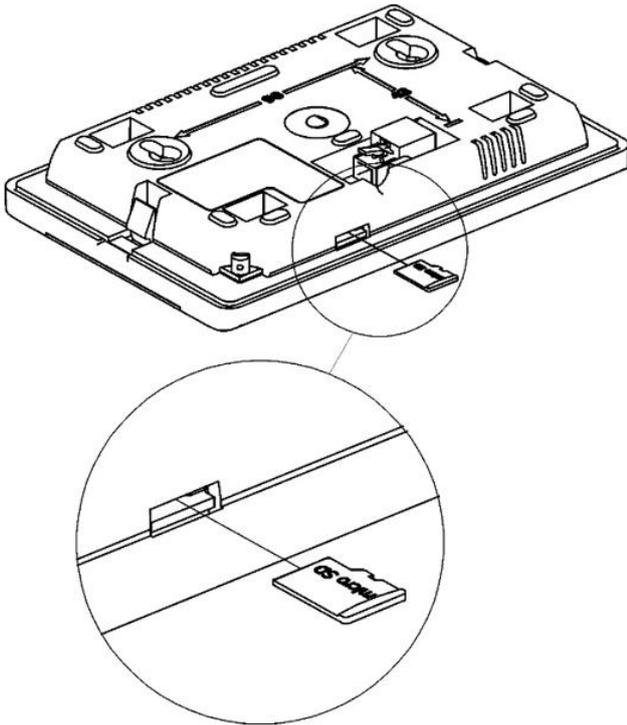
Below are examples screens with the parameters.





8. Software update

Possibility to update the control panel software via memory card microSDHC inserted in the slot in the panel interface.



Only micro SDHC (FAT32 files format, 32GB max.) type memory cards should be used.

In order to replace a program, the TAC5/TAC6 controller's electric power supply should be disconnected. Insert the memory card into the slot in the panel control. The card should contain

new software in a *.pfc format. New software should be copied directly to the memory card, not to a subfolder. Connect the electric power to the TAC5/TAC6 controller and open software



update from main menu and replace the program in the control panel.

9. ASSEMBLY

9.1 Technical data

| | |
|--|---|
| Power supply | 5..24 VDC |
| Consumed current at 12V supply voltage | 120 mA |
| Protection class | IP20 |
| Work/storage temperature | 0..50°C / 0..65°C |
| Relative humidity | 5...85%, without condensation |
| Display | Graphic, color 480x272pix with touch panel |
| Terminal | Ver.1: RJ11 |
| | Ver.2: Screw terminals. Cross-section: 0,2..1,5 mm ² |
| Dimensions | 96.8x148.8x14.5 mm |
| Weight | 0.2 kg |

9.2 Exploitation conditions

Control panel:

- do not expose the device to direct influence of atmospheric conditions (rain, sunlight) nor vibrations stronger than typical occurring during wheel transportation.
- do not use the device in vapor condensation conditions and protect it from water.
- storage and transportation temperature should not exceed the range of -15...+50°C.
- install the device only in dry residential room.

9.3 Assembly requirements

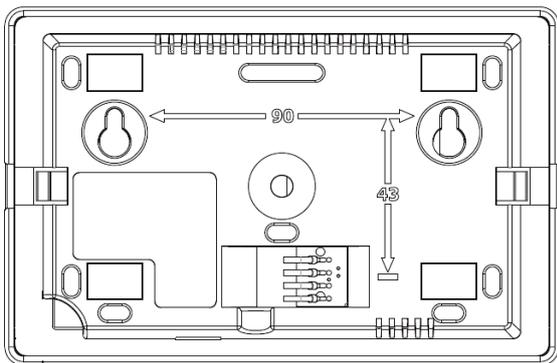
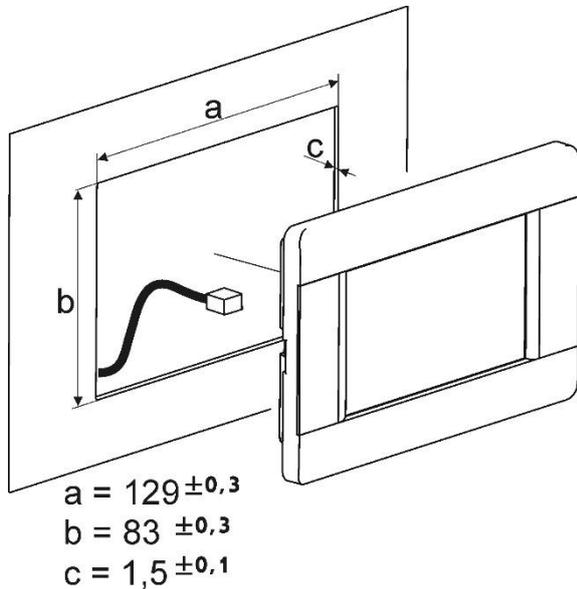
Recommendations:

- panel is intended for wall installation inside compartments.
- assemble the panel at a height of approx. 1.5 m above the floor.
- avoid highly insulated areas with poor air circulation, near heating devices.
- panel should be installed by a qualified installer.

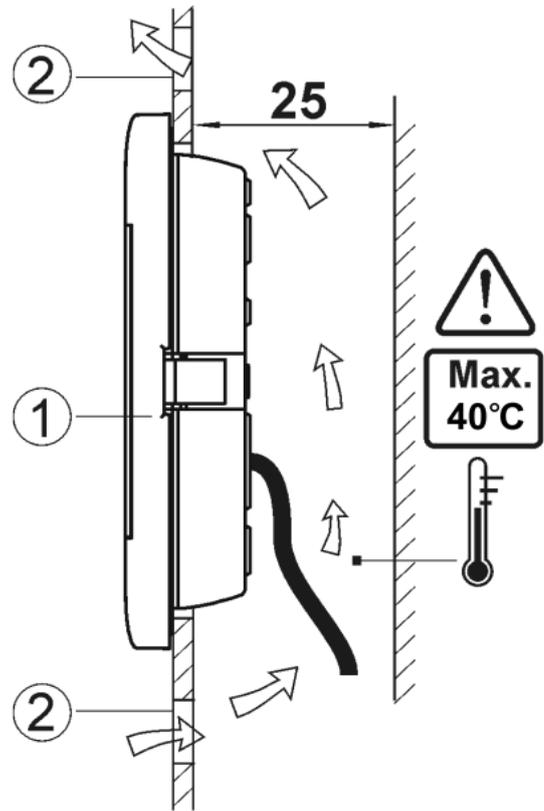
Manufacturer bears no responsibility for damages caused by non-observance of this manual.

9.4 Control panel installation

Possible methods of installation of the control panel on or in a wall. Drill a hole in the mounting plate acc. the below drawing or do it mounting the panel onto mounting screws with spacing indicated.



A proper air circulation should be provided through ventilation openings and proper panel housing, not to exceed a maximum temperature of 40°C ambient panel.



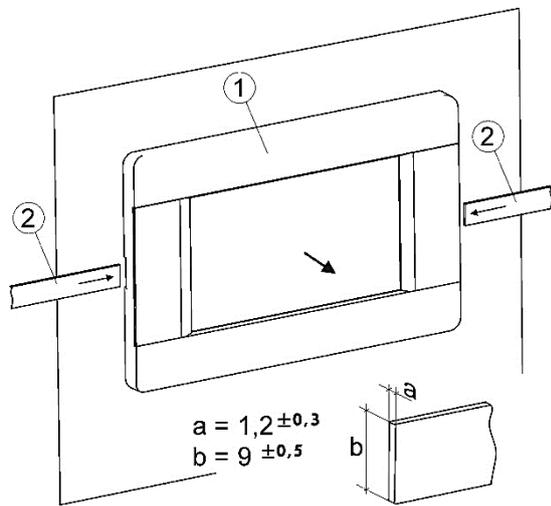
Control panel mounting requirements. 1 - control panel, 2 - vent holes to provide air circulation.



The holes may not cause downgrading of required IP rating. They are not required if permitted ambient temperature around the control panel is not exceeded.

- Disassembly of control panel

During panel de-installation (see fig. below), to remove the panel (1) from the casing, insert the flat elements (2) into gaps indicated in the figure. It will cause the casing clamps to open and allow you to remove the panel (1).



9.5 Connecting of the control panel



The control panel should be installed with the mains supply disconnected from the controller.



The cable poles must be connected properly, as wrong connection may lead to control panel and module damage.



When choosing the cable between the panel and the module, the rule is that the resistance of one conductor in the cable should not be greater than 8Ω and the total length of the conductor must not exceed 100 m. The longer the wire, the larger the wire cross section.

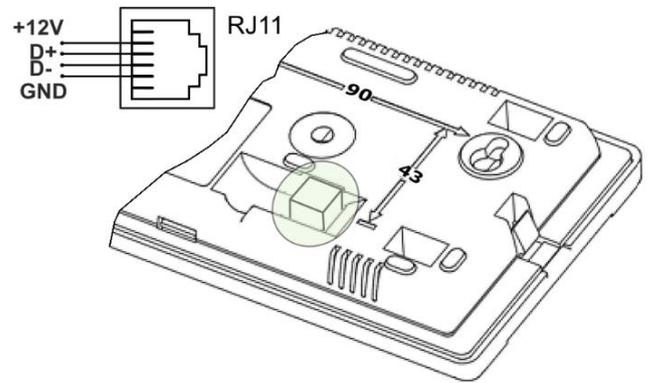
Examples of cable types for panel and module connection and their acceptable lengths:

- the cable YTLYp $4 \times 0.12 \text{ mm}^2$ (about resistance $155 \Omega/\text{km}$) the maximum length of 50m,
- the cable LiYY $4 \times 0.25 \text{ mm}^2$ (about resistance $155 \Omega/\text{km}$) the maximum length of 100 m.

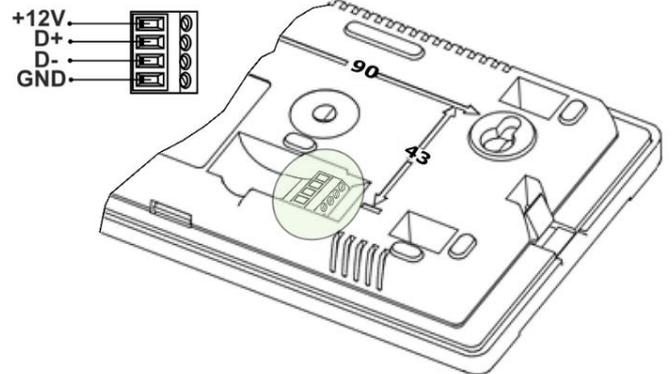
The panel can appear in two hardware versions.

Version 1:

Signal outputs in the connector, on the back wall of the panel casing.

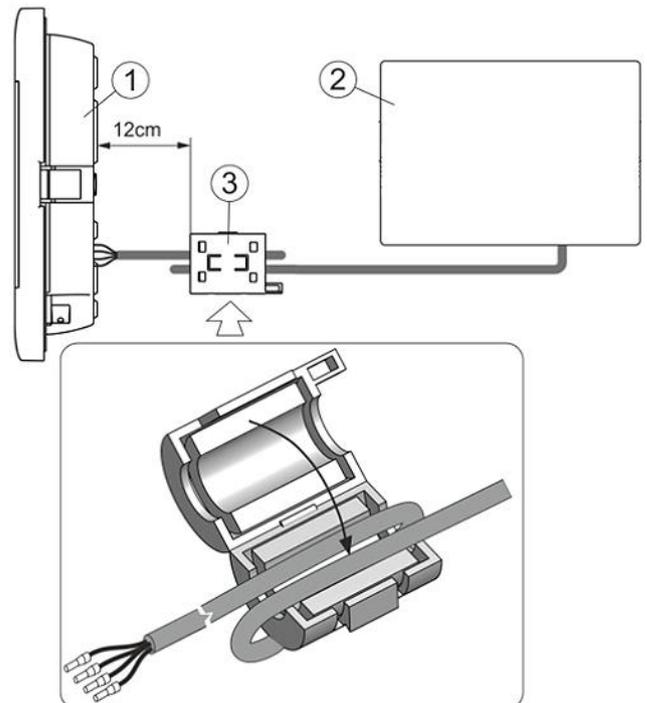


Version 2:



In addition, necessarily must insert the EMC filter, type ZCAT1518-0730 on the cable, as shown in the figure below. The EMC filter should be included with the controller.

The filter should be inserted on the cable, necessarily in the form of a cable loop between the control panel and the controller module at distance about 120 mm from the control panel connector.



Installation EMC filter: 1 - control panel, 2 - TAC5/TAC6 controller module, 3 - EMC filter (type ZCAT1518-073).

In order to provide appropriate cooperation of the cable with a terminal, the length of not insulated ending of the cable and bushing tip should be within a range of 8÷10 mm.



Wire protection: a) – proper, b) – improper.

In addition, EL2adapter_v2 adapter can be used to extension the panel connection to the module. The adapter provides a wire connection with an RJ-type plug with a 4-wire cable.



The adapter is available from the panel manufacturer.

9.6 Cleaning and maintenance procedures

The outer surface and maintenance of the control panel screen:



The device should be cleaned with a soft, dry cloth.



It is not allowed to clean the device with a flammable agent or substance (i.e. benzene or any kind of solvents) or a wet cloth. Such treatment can lead to malfunction of the device.

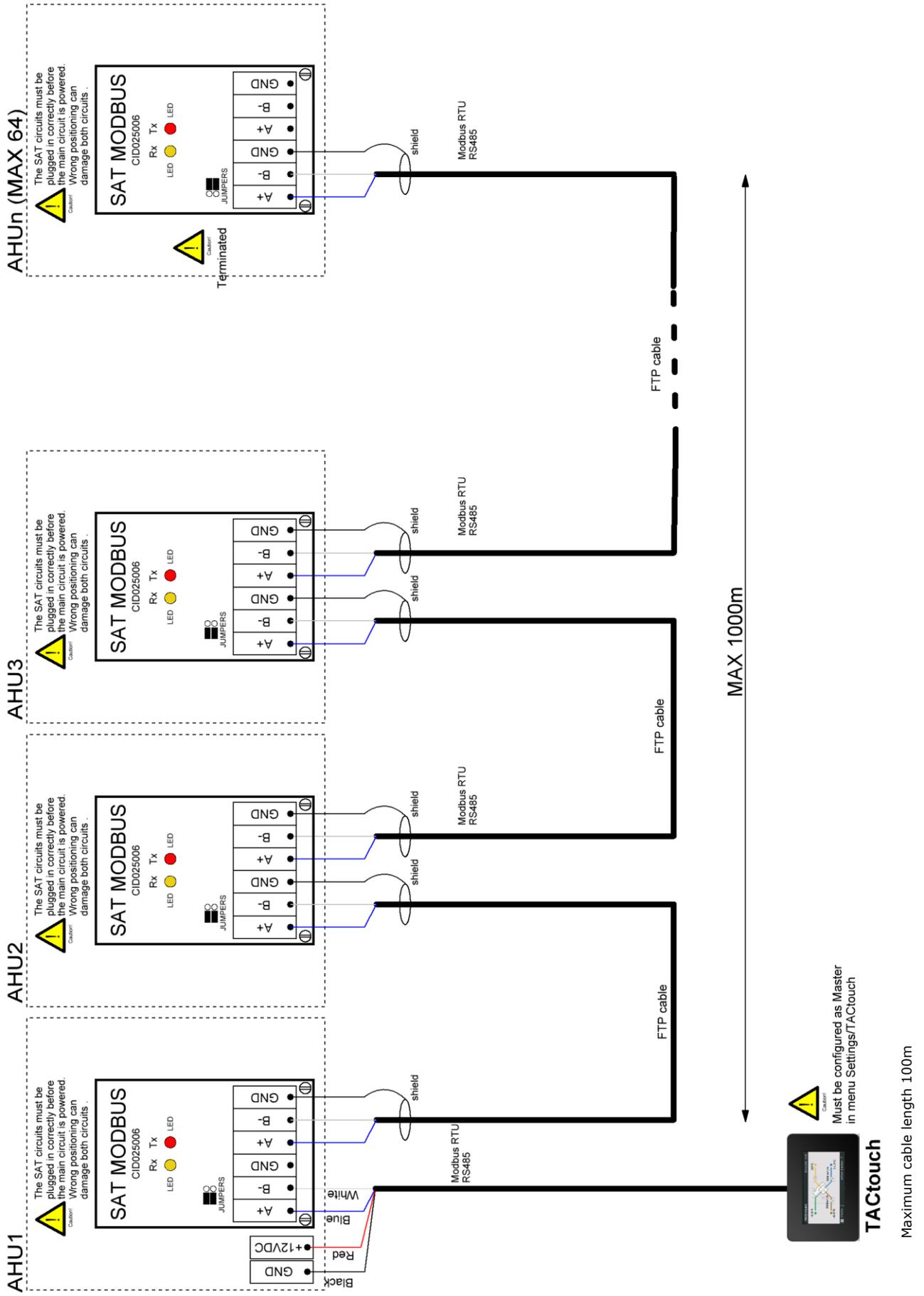


It is not allowed to scratch the screen with nails or other sharp objects. It can lead to scratches or damage of the device.

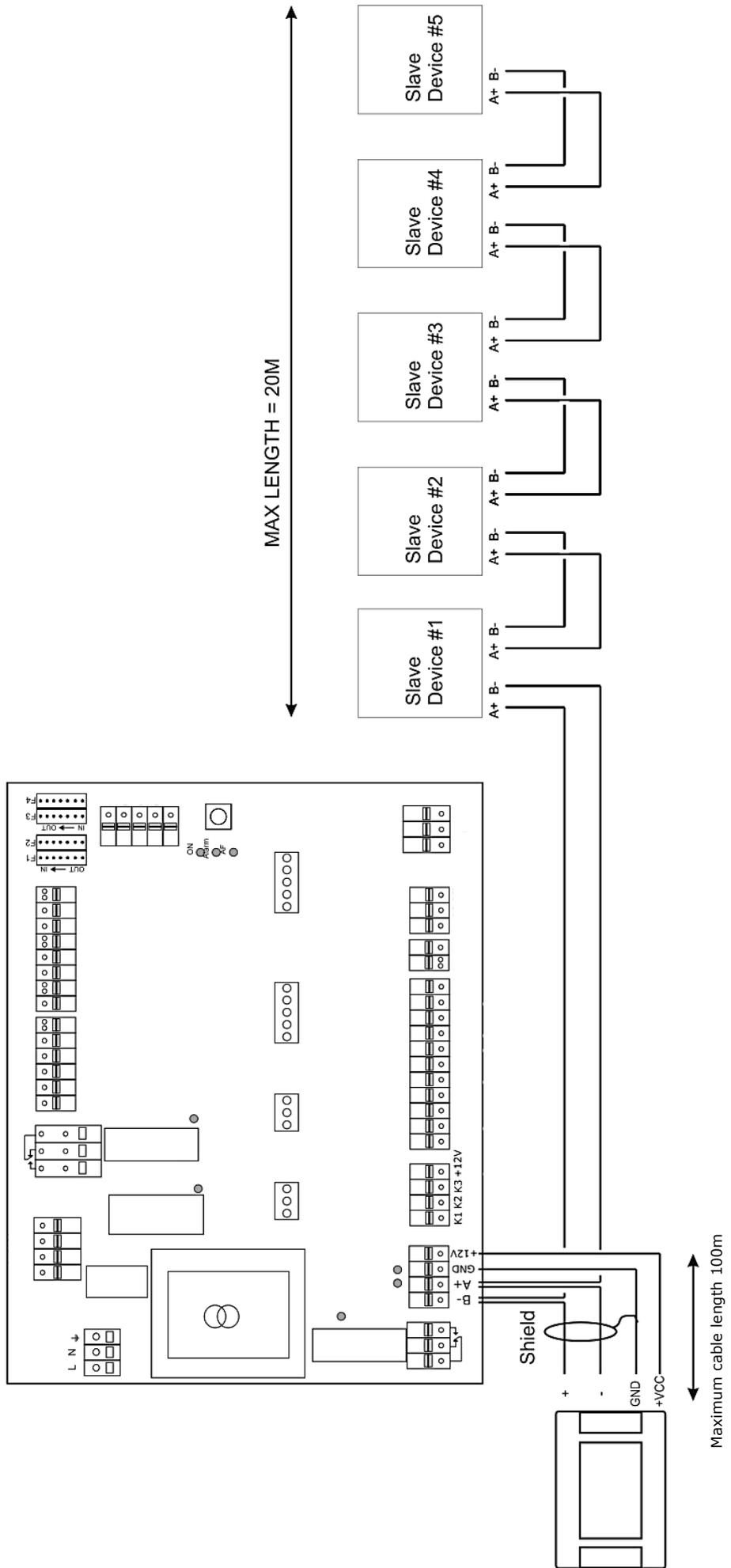


It is not allowed to clean the device by spraying water on it. If the water gets inside of the device it can cause a fire or lead to electrocution or damage the device.

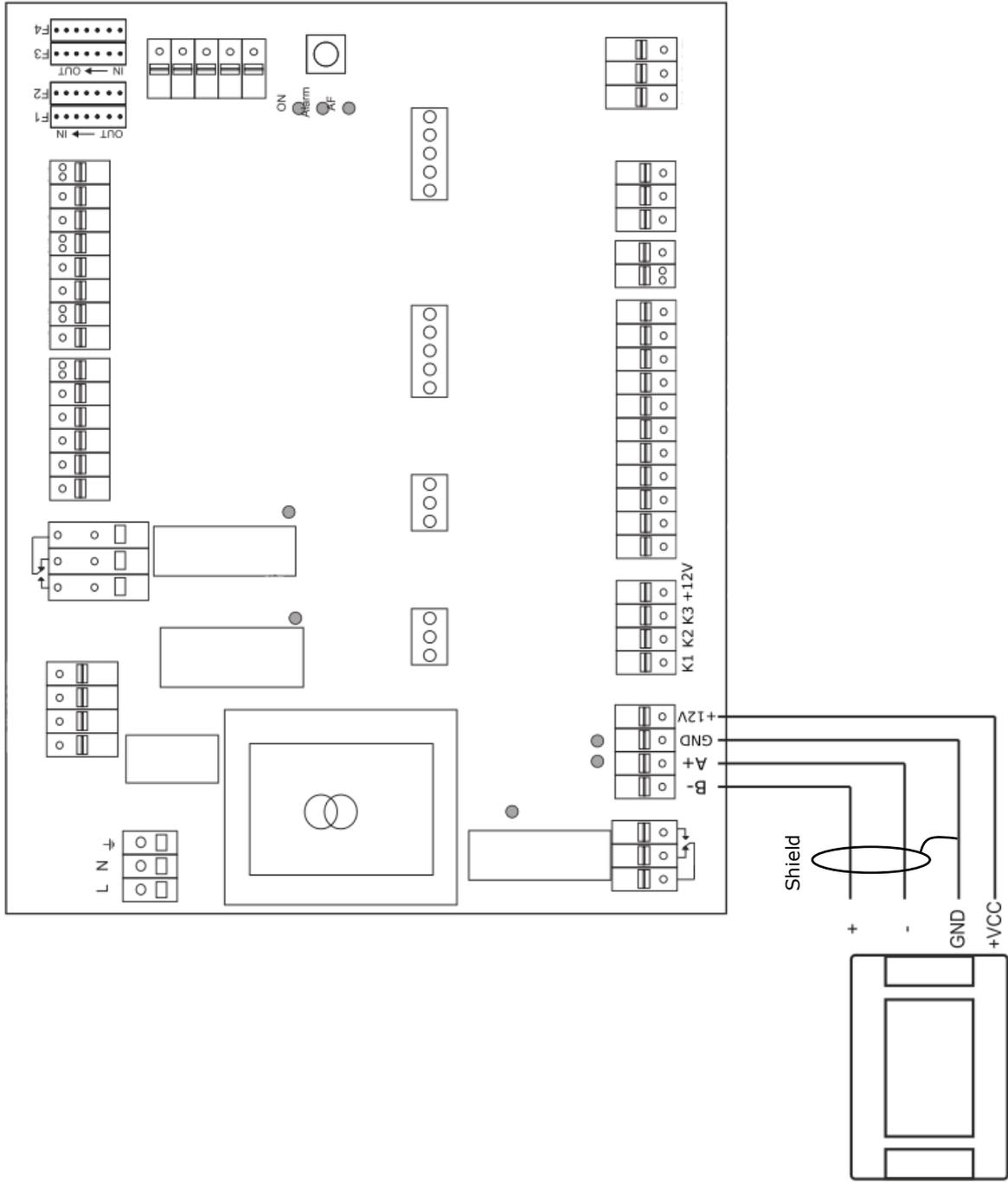
10. Connecting TACtouch control panel to the TAC5/TAC6 controller



TAC5/TAC6 modbus Master writing.

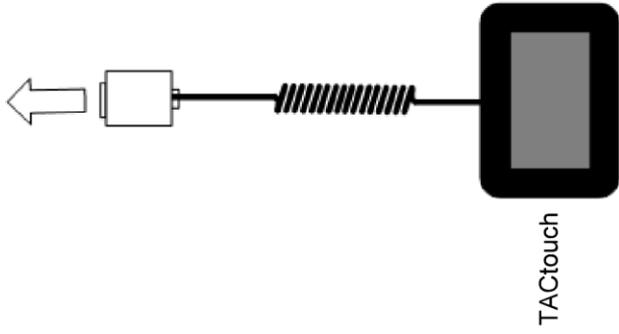
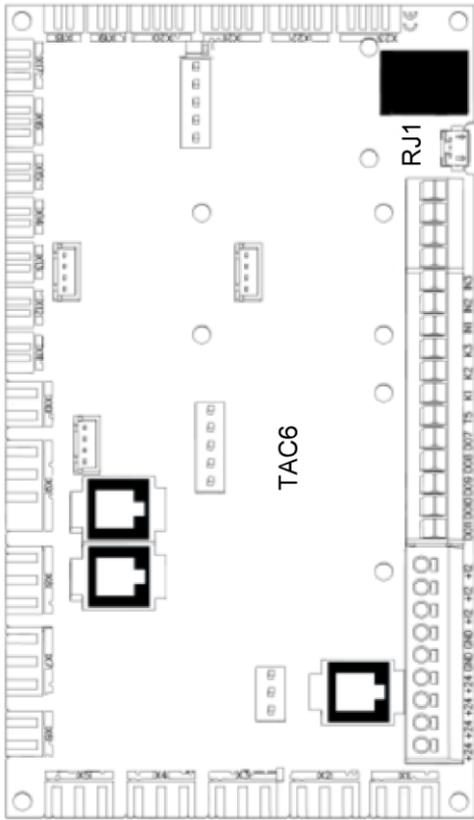


TAC5 Slave wiring star with other devices in daisy chain.



TAC5 Slave wiring.

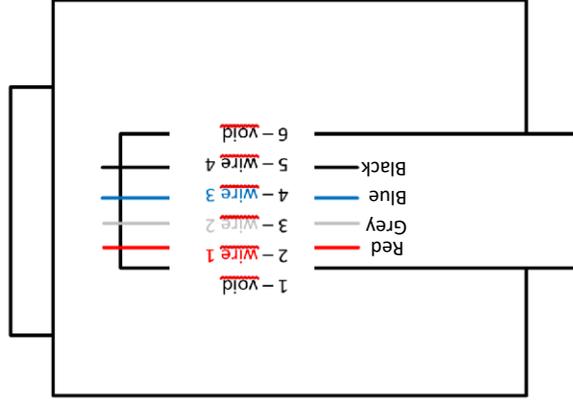
Maximum cable length 100m



Extender cable Wiring

In installation where an extender cable is necessary, this last one must conform to the RS-485 Standard with twisted pair conductors. The cable must be shielded.
 Conductor Area min 0.2 mm².
 The total length must not exceed 100 meters.
 2 pairs connected to RJ12 connectors at cable extremities, straight wired.

Pinout for each connector as in figure below (colors are indicative for the wires of the extender cable):



TAC6 wiring.

11.Licenses for Open Source software

Open Source Software used in the product.

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Change register:



The manufacturer reserves a right for making changes in construction and software without previous notice.

V1.1 – 08-2017 - change description in point 9.5

V1.2 – 09-2017 - only rename of the panel.

V1.3 – 09-2021 – change power supply in technical date.

